

Educational Master Plan

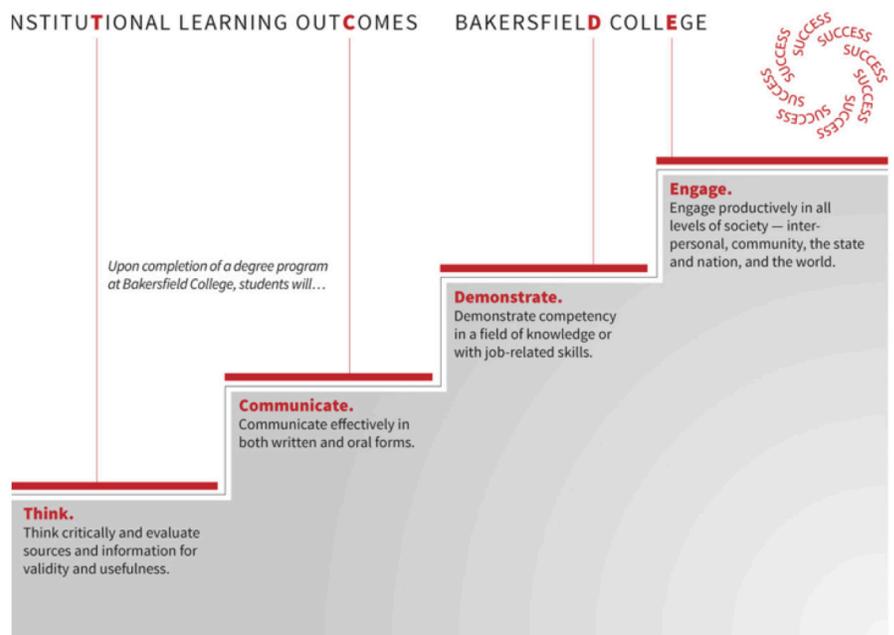
Vision 2020: Executive Summary



History, Overview and Leading Edge of the College

Bakersfield College has been serving students in Kern County since 1913. Last year BC served over 27,000 students.

How does Bakersfield College continue to meet the growing needs of a community characterized by many students that live within financial and educational resource gaps? How does the college maintain rigor yet address timely completion, valuing each student's goals and life challenges? The BC blueprint has been adjusted over the years and influenced by many forces. The role of this Plan is to describe, evaluate and focus that work. BC's Institutional Learning Outcomes (ILOs) represent over-riding competencies students should complete in the course of their learning at the college.



Funding at the college is strong and shows increasing restricted (categorical and grant) funding and reserves.

Category	2013-14	2014-15	2015-16	2016-17
Total GU001 Budget	\$68,122,615	\$74,983,068	\$83,600,477	\$92,452,895
Reserves	\$1,957,271	\$4,108,342	\$5,849,905	\$6,566,038
Restricted Funds	\$9,491,453	\$9,398,048	\$11,931,995	\$16,899,264

Categorical programs, which allow for innovation and implementation of new initiatives, have been increasing. These categorical programs are integrated into the college through strategic planning and are re-evaluated with an eye towards institutionalization. No grant or restricted funding source is just another initiative; rather, a strategic opportunity for college-wide rethinking of how BC approaches the work of student success. SSSP and Equity funding (over \$7.5 million this year) have influenced college activities, hiring, and institutional processes at BC, funding many new positions in student services.

The leading edge at Bakersfield College includes the newest and most innovative influences affecting the future of the college; factors such as facilities opportunities with statewide bonds¹ and local Measure J funding, as well as legislative changes that may increase Baccalaureate offerings. The Guided Pathways foundation represents a structure for evaluating and implementing these leading edge opportunities; institutional effectiveness practices of annual program review and evaluation of strategic directions provide integration of the many California initiatives and funding opportunities.

Guided Pathways Framework

By 2020 California will need more than 1 million additional workers with degrees. But there is a looming gap in completion of those degrees and transfer to four-year colleges in California, especially for historically under-

¹Statewide facilities bonds

<http://californiacommunitycolleges.cccco.edu/Portals/0/DocDownloads/PressReleases/NOV2016/PR-Election-FINAL.html>

represented student populations². The strategy to mitigate this gap lies in an institutional redesign beginning with clarifying and streamlining pathways which includes:

- assessing current pathways to degrees and transfer (e.g. ADTs, C-ID, new paths)
- identification of institutional barriers for student progress (e.g. registration, financial aid)
- alignment of expectations (among K-12, Community Colleges and transfer institutions)
- clarification of pathway components (enrollment management and cross disciplinary discussions)

Why the need for pathways?

Historically, two thirds of Bakersfield College's students have not completed a degree or transfer. Of the more than 27,000 students at BC, 21.9% were from areas of high poverty; a rate that has increased from 18.1% in 2007 (California rate 15.3%). Kern County educational attainment is low, only 15.2%; less than half of the statewide figure (15.2% vs. 31%). This formula of low education and high poverty is responsible for low employment rates and lack of regional economic resiliency³.

While the rest of California has slightly improved in educational attainment, the central valley and Kern County has been losing ground. Bakersfield College Guided Pathways System (GPS) will redesign institutional policies, practices, systems and culture with the goal of increasing student completion, while decreasing time and cost to completion through high touch, high tech strategies. It will require very heavy lifting, purposefully not superimposing additional initiatives, but rather transforming current policies and practices creating a manageable framework for current initiatives.

The Problems GPS Will Seek to Solve: A Student and an Institutional Perspective

I. Preparing students for college while in high school:

BC serves 41 feeder high schools, working with the local high schools; the GPS work includes the following:

1. 4th year High School Coursework - English and Math alignment and requirements
2. Multiple Measures-Providing High School students with credit for past work
3. Dual Enrollment- An important access point for under-served students

II. Choosing a path in college:

From a student's perspective, the 72 BC degree options are paralyzing. The meta-major work will enable faculty to do the necessary curricular work to:

1. engage in the cross-discipline discussions to clarify the General Education courses needed in the programs and
2. clarify the skills needed to align with upper division courses and eventual careers.

GPS guarantees a coaching team to help students complete their Ed plan by using career data to update that plan. Without a plan, excess units accrue as students search for direction, for instance, at BC students take an average 85 units to get a 60-unit degree, which represents 25 excess units per degree completer (remember

²Patricia Gándara, UCLA and Marcela Cuellar, UC Davis (July 2016) *The BACCALAUREATE IN CALIFORNIA: CURRENT CHALLENGES & FUTURE PROSPECTS* Civil Rights Project/Proyecto Derechos Civiles

<https://www.civilrightsproject.ucla.edu/research/college-access/underrepresented-students/the-baccalaureate-in-the-california-community-college-current-challenges-future-prospects/CA-CC-BA-report-070616.pdf>

³Bakersfield College has been tracking Educational Attainment and salaries for some years through the work and writing of Professor Nick Strobel (Astronomy), Professor Oliver Rosales (History), and through our Equity work.

this is not a large percentage of students). In 2014-15 this totaled \$1,048,800 in excess tuition at BC, potential crippling debt for students and wasted taxpayer dollars. When this impact is factored into the large number of students that never complete, this leaves students with: units, financial aid debt and no certificate, degree or transfer; the importance of pathway clarity becomes apparent. Historically California has not graduated adequate numbers of degree completers further intensifying disproportionate impact, inequitable educational outcomes and social mobility.⁴ Statewide, at 113 CCC's, completion (certificate, degree or transfer) is a reality for less than half (47.1%); the CCC system serves the majority of under-represented, first generation and socioeconomically disadvantaged students.

III. Staying on the path and completing college:

As students transition from high school to college, they report a large gap in their knowledge about expectations, resources for success and academic skills. Beginning Spring 2017 Summer Bridge will become the default option for all incoming first-year students. The GPS framework includes development of nine Learning and Career Pathways (meta-majors) for clarity and streamlining of instructional and curricular paths. Each meta-major and affinity group will be surrounded by a completion coaching community.

Technology like MyPath and Starfish⁵ will integrate degree planning and early alert advising of students. Campus Logic software will track student financial aid. AccuSQL, Alex, Plato, and Canvas will provide data on students' academic progress. The high-touch approach of these completion coaching communities combined with the power of high-tech data analytics to monitor progress and target student communication, will result in each of our 30,000 students being carefully advised on their individual path to degree completion.

Additionally, Bakersfield College will implement a degree audit and conferral process similar to Project Win-Win model to assure students receive degrees and certificates when earned.

Important information about pathways exists on the Presidents website⁶, on the official BC Guided Pathways website for AACC⁷, in the GPS article⁸ and at the Pathways Institute's professional development website⁹ (Additional information and visuals for GPS are in the appendix).

Significant External Scan Findings

Several broad trends characterize higher education policy; these trends are summarized in Appendix A.1 and include:

1. Accessing higher education^{10,11}
2. Increasing successful program completion¹²

⁴Gándara, P. and Cuellar, M. (July 2016) The BACCALAUREATE IN CALIFORNIA: CURRENT CHALLENGES & FUTURE PROSPECTS Civil Rights Project/Proyecto Derechos Civiles <https://www.civilrightsproject.ucla.edu/research/college-access/underrepresented-students/the-baccalaureate-in-the-california-community-college-current-challenges-future-prospects/CA-CC-BA-report-070616.pdf>

⁵CCCCO Educational Portal Initiative (EPI) applications <https://cccdplan.org/about>

⁶President's website <https://www.bakersfieldcollege.edu/president/aacc-guided-pathways> In addition

⁷BC Guided Pathways AACC <https://www.bakersfieldcollege.edu/president/aacc-guided-pathways>

⁸GPS article <https://committees.kccd.edu/sites/committees.kccd.edu/files/H.%20Pathways-Model%20NS.pdf>

⁹BC Pathways Institute <https://www.bakersfieldcollege.edu/employees/professional-development/pathways-institutes>

¹⁰Mind the Gap: Delivering on California's Promise for Higher Education. California Competes, December 2015.

¹¹Johnson, Hans, et. al. Addressing California's Skills Gap. Public Policy Institute of California, April 2016

¹²California Community Colleges Student Success Task Force. Advancing Student Success in the California Community Colleges. January 2012

3. Doing what matters for the state economy.¹³
4. Stretching the community college system to reach more vulnerable citizens.
5. Redesigning community colleges to provide more guided pathways for students.¹⁴

Seven industrial clusters were identified as economic drivers. An industry cluster has common needs for talent, technology, and infrastructure (see Appendix B.1). Kern is the leading petroleum production and processing county in California and is now the state’s largest single wind energy source.¹⁵ The San Joaquin Valley accounts for 70 percent of the state’s agriculture output. Appendix A.2 covers 36 years of average employment and unemployment and it is important to note that each year the Kern County unemployment rate has exceeded the state rate.

The Kern County Economic Development Corporation has targeted five industries to promote further economic development: (1) aerospace and defense; (2) energy and natural resources; (3) health care services; (4) transportation, logistics, and advanced manufacturing; and (5) value-added agriculture. Additional information about the targeted industries is found in Appendix B.2

55% of service area residents have a high school diploma or less. Students who are the first generation in the family to attend college face a very daunting task, lacking familiarity with the higher education system and few role models to provide advice. These factors stand as impediments for a large share of prospective college students.¹⁶

Over a fourteen-year period of time, 1996 to 2010, the College annually enrolled 50 or more recent graduates from 15 high schools and 10 to 49 students from five additional high schools. From fall 2011 to 2015 the average yield rates by district are shown in Appendix B.4. These numbers represented a yield of only 23% of the graduates from feeder high school graduates to BC in fall 2015.

Bakersfield College Fall Term Unduplicated Student Headcount

Fall Term Distinct Head Counts						Absolute		Annual	
2011	2012	2013	2014	2015	2016	Average	Change	% Change	% Change
17,157	17,040	17,408	18,321	19,929	21,995	18,635	4,798	28.2%	5.6%

Source: California Community Colleges Chancellor’s Office Data Mart; analysis by Cambridge West Partnership, LLC.

Significant Internal Scan Findings

From fall 2011 to fall 2016 the Full-time Equivalent Students (FTES) produced at the College increased by 1,390 FTES, an increase of 24%. Neighboring California community districts throughout the Central Valley, except for Fresno City College, experienced a decline in annual FTES after 2010-11(Appendix C.1 and trends by locations in C.2). The majority of students who enrolled fall 2012-2015 selected Bachelor’s degree, either without or after completing an associate degree as their educational goal. 66% of those who attended are under 24 years of age; the group that has grown the most is recent high school graduates.

As of spring 2017 BC had twenty-seven Associate Degrees for Transfer (AD-T) and another three proposals

¹³California Community College System Board of Governors. Task Force on Workforce, Job Creation, and a Strong Economy: Report and Recommendations. November 2015

¹⁴Bailey, Thomas R. et. al. Redesigning America’s Community Colleges: A Clearer Path to Student Success. Harvard University Press, 2015.

¹⁵California Partnership for the San Joaquin Valley. Regional Industry Cluster Analysis and Action Plan. September 2012.

¹⁶Johnson, Hans and Sengupta, Ria. Closing the Gap: Meeting California’s Need for College Graduates. Public Policy Institute of California. April 2009.

submitted for approval. Some 334 courses were identified in those twenty-seven transfer degrees as required or named as restricted electives. These courses must be offered at least once in a two-year cycle. Most courses were identified in only one transfer degree program; however, a limited number of courses were identified in more. MATH B22, Elementary Probability and Statistics or PSYC B5 Elementary Statistics for the Behavioral and Social Sciences, was named in nine AD-Ts (Appendix C.3). 1662 sections were offered in fall 2015 representing 478 different courses. 36 of these courses or 7.5% accounted for over 50% of the enrollments. There were over 4000 enrollments in each of the ACDV, MATH and ENGL disciplines. CTE offered the widest range of different courses. 7% of the sections offered were online, a growing percentage.

An analysis of the instructional periods used in the fall 2015 schedule indicated that there were six primary instructional periods related to the common two-days-a-week scheduling pattern (starting before 4:30 pm). There were a number of classes that were scheduled at starting and ending times or day patterns conflicting with primary periods. Potential conflict may relate to differences in contact time, different units or combinations of lecture and laboratory modes of instruction. The tables in Appendix C.3 illustrate the fall 2015 term patterns and possible conflicts for classes scheduled to last the entire semester.

Scheduling classes at a large, complex institution such as Bakersfield College is a significant juggling act to balance facilities, faculty, weeks-duration, days, and time slots. It is particularly challenging to orchestrate coordinated time periods for classes with different numbers of contact hours and classes that run for different numbers of weeks.

One-fourth of the multi-day pattern of class meetings did not conform to the dominant instructional periods and 104 classes were scheduled to meet only one-day a week during the prime morning hours. These instructional patterns can create potential conflicts in the efficient use of instructional space and block students from enrolling in classes needed to accomplish educational goals in a timely manner. The general time of day when students attended and the units in which they enrolled are summarized in Appendix F.

The most popular meta-majors are Health Sciences; Science, Technology, Engineering, and Math; and Social and Behavioral Sciences and Human Services. The disaggregation of students by ethnicities across the meta-majors is found in Appendix C.4.

From academic years 2012-13 to 2014-15 there has been an increase in the numbers of degrees and certificates awarded to Asian, Hispanic, and students who declared two or more races as their identity. Because they constitute the majority of students at the College, the Hispanic group has received between 50% and 58% of the awards in each of those academic years. However, when the proportion of awards is compared to the proportion of students by ethnic group, the Hispanic student group is under represented. Additional details are in Appendix D.1.

Future issues to consider from the internal scan include:

- Analyze class start and end patterns if different from primary instructional periods to determine costs and benefits.
- Evaluate trend of increasing day classes (classes starting before 4:30 pm) at the expense of evening offerings from 2011 to 2015.
- Examine reasons why the majority of BC students attend part time (fewer than 12 units) to rule out institutional barriers, enrollment management issues or other unintended obstacles to completion.
- Analyze scheduling conflicts within pathways.
- Consider scheduling innovations such as Reg365 light of pathway needs to reduce time to completion

Institutional Effectiveness

The mission of the California Community College System has evolved and expanded over time in response to the changing needs of students, communities and the state. The Colleges provide:

- **Associate degrees and certificates** shown to increase earnings and enable students to move forward in their professional development
- **Transfer** education to public and private colleges and universities;
- **Basic skills and English language proficiency** for increasing numbers of students;
- **Economic and workforce development** to meet the ever-increasing demands of career-oriented young people, adult learners and incumbent workers; and
- With adequate funding, lifelong learning and educational opportunities for all Californians.

The California Community College vision presents the preferred future of the Colleges: California's Community Colleges provide upward social and economic mobility through a commitment to open access and student success by delivering high quality, affordable and comprehensive higher education.

This document will cover the missions of the California Community Colleges: Basic Skills and English Language Proficiency, Transfer, and Economic and Workforce Development -Career Technical Education (CTE) and BC's Rural Initiatives. BC data regarding the mission and strategic directions has been reported through the Renegade Scorecard.

Institutional Effectiveness Interventions

Work over the last three years focusing on increasing institutional effectiveness, while driven by a flurry of initiatives and funding sources, has been organized by the Guided Pathway Framework. A summary of that work is in the table below.

	Area of Focus	Summary of Work	Work Needed
Clarify Pathways	Pathways Clarification for Completion	DegreeWorks, SEP review, New Programs, Learning and Career Pathway Completion Teams	Train Faculty and Students in DegreeWorks Consider MyPATH Implement Coaching Teams
	Associate Degrees for Transfer (ADT) and C-ID work	From 3 to 27 ADTs From 68 to 164 C-ID courses	Continue to review and submit as templates and course updates occur Future ADT will require C-ID courses
	New Catalog and Website	Work on updating all programs, courses, prerequisites has occurred, new phase 1 catalog Spring 2017	Need Phase 1 Webpage Summer 2017 Phase 2 Catalog Fall 2017 Phase 2 Web Spring/Summer 2018

	Area of Focus	Summary of Work	Work Needed
Getting on the Path	Re-designed Matriculation	Occurs at the high school began with 8 now 41 or more	Coordination to get students into summer bridge Training for CAI
	Multiple Measures Placement	Gradual Implementation of Accuplacer, BC Multiple Measures, Adoption of Statewide measures	Implement Common Assessment Exam, Refine Multiple Measures automated and counselor review process, Finalize AP and other MMs
	Remedial Education and Accelerated Coursework	Pathways accelerated and reduced in levels in Math, English and Reading. Summer bridge successful implementation	Evaluation of various support services and success in courses Expansion of Summer Bridge as default
	Dual Enrollment	Increased from 4 high schools to 144 Sections, enrollment of 2528 283.67 FTES in spring 2017	Need to guarantee curricular alignment, organize courses better, design interactions with HS and BC faculty
Staying on the Path	Student Success Lab	Rewrote curriculum to serve those testing below placement. Created personalized modules for all course levels for independent work.	Evaluate success and adjust needs by collaborating with faculty. Develop contextualized learning activities.
	Supplemental Instruction	SI began in Spring 2014 with 7 embedded SI leaders and has grown to nearly 100. Uses group study.	Continue to monitor and adjust for success. Determine organization, facilities and support.
	Tutoring	Has provided historical one-on-one support	Continue to evaluate and provide support.
	Writing Center	Grown in support, has full-time staff to manage. Expanded to Delano.	Expand role in General Education courses. Coordinate with pathways model.
	Extend the Class	Piloted with Math and English. Good success.	Consider expanding to General Education courses with low success rates.
	Math Lab	Redesigned curriculum, staffing increased and collaboration with ACDV	Consider other software options and evaluate current work and success. Consider move to noncredit.

Basic Skills and English Language Proficiency

Connecting with Students Early and Often –School Relations and Outreach

In 2013 Bakersfield College began two significant institution-transforming strategies related to the second pillar of Guided Pathways:

- Outreach and School Relations department was created
- Equity and SSSP initiatives created both funding and data to be early adopters of multiple measures placement

The Outreach and School Relations Department works directly with more than 41 service-area high schools providing all core matriculation services (Orientation, Assessment, Counseling/ Advising and an Abbreviated Educational Plan) to seniors **at their high schools**. Strong partnerships have produced improvement in both quality and quantity of students who are fully matriculated prior to the start of the new academic year. Significantly, high school staff helps with each of the matriculation steps, train as assessment proctors and provide venues for this work. SSSP funding created the ability to hire more counselors and educational advisers. Completion of matriculation steps contributes to ultimate student success These factors produced a 14% FTES increase and a 13.3% in Headcount to 27,627 2015-16.¹⁷



Bakersfield College ¹⁸	Fall 2014 Service Received	Fall 2015 Service Received	Fall 2016 Service Received	Change Fall 2014-Fall 2016
Totals	22,488	34,855	37,114	65%
Academic/Progress Probation Services	348	887	1,039	199%
Counseling/Advisement Services	8,158	10,783	12,594	54%
Education Plan Services	4,837	6,600	6,552	35%
Initial Assessment Services Placement	1,743	2,312	2,163	24%
Initial Orientation Services	1,891	4,928	4,773	152%
Other Services	5,511	9,345	9,993	81%

Welcome Center

Once students come to the campus, the Welcome Center is the hub for all new and continuing students and visitors. It provides a one-stop location for information regarding Student Services, Admissions & Records, Counseling, Assessment, Financial Aid, and general questions. Laptops are available to apply to the college, register for classes, check holds, print class schedules, and much more. Campus Tours are conducted by Student Ambassadors. Institutional changes have guaranteed that BC goes the extra mile to engage students and help them get on the path of completing college.

¹⁷CCCCO Datamart http://datamart.cccco.edu/Students/Student_Term_Annual_Count.aspx

¹⁸CCCCO Datamart; Matriculation Services Summary Report

http://datamart.cccco.edu/Services/Student_Success.aspx accessed 3/12/2017

Basic Skills Redesign 2014 to 2017

The 2017 developmental education at Bakersfield College does not resemble the coursework or success data of 2014 and data in the previous Educational Master Plan. BC re-engineered developmental education the way students are placed into coursework, the coursework delivery, and the support for students in basic skills education.

Placement and Coursework Innovations

In 2014 through the MIH (Making it Happen) initiative the academic development chair and colleagues redesigned ACDV B55 First-Year Student Success a half unit course that introduces BC's academic, social, and physical environments and promotes personal development. Summer Bridge has grown from 3 sections and 95 students to 18 sections and 467 students; the goal is to have Summer Bridge the default option for all entering freshman.

Implementation of multiple measures for placement has morphed over the last three years and currently follows the placement patterns validated by the multiple measures workgroup at the CCCC. This has significantly shifted students into college level courses.

	Before 2013-14	Current
Transfer-Level Reading	60%	65%
English	29%	54%
Math Intermediate Algebra and higher	13%	40%
Transfer Math	Transfer Math 3%	29%

In 2016 multiple measures placement resulted in some students moving up one, two, three or four levels, which must lead to a question about the reliability of a single test as a measure. The additional innovation of accelerated coursework in Reading, English and Math saves additional time and money. Academic Development, English, and Math have redesigned nearly every pre-collegiate course offered through acceleration, compression or curricular redesign of levels. The English for Multilingual Students faculty members are developing two non-credit certificates. One is at the intermediate level; the other is at the advanced level.

Student Success in Remedial Education

Placing students in higher levels has an indelible effect on the basic skills pathway. An external analysis conducted to examine the overall basic skill pathway success by Dr. Peter Riley Bahr indicated that prior to 2013; the problem within basic skills was not course success but rather loss of students as they progressed through the levels. (See Peter Bahr report 2016). It should be noted that the success rate in transfer coursework has remained stable at 69% but that work includes 13,058 additional enrollments in 2015-16 over the number in 2013-14 and an additional 9120 successful course completions.¹⁹ Student success in remedial education and in completion of gateway math and English courses has steadily improved over the last 3 years.

Visioning the Future of Pre-Collegiate Programs

The College intends to do more to prepare students for college while they are still in high school. To further the state priorities for curricular redesign and alignment, improving student progression and completion, including using prior learning and experience, and expanding financial aid, the College proposes to do the following with its partners:

1. Expand the use of multiple measures to inform course placements.

¹⁹CCCCO Datamart Transfer outcomes http://datamart.cccc.edu/Outcomes/Course_Ret_Success.aspx

2. Increase the numbers of high school students who complete the CSU Expository Reading and Writing course (ERWC).
3. Create a homegrown math course similar to the ERWC
4. Continue to expand dual enrollment opportunities.
5. Incorporate Free Application Federal Student Aid (FAFSA) completion at the HS

Transfer

Transfer is a fundamental part of the Bakersfield College mission and the Pathways initiative. The college has worked hard to guarantee transfer through C_ID curriculum approval and development of ADT's or transfer degrees with a guarantee.

Associate Degrees for Transfer

The Bakersfield College faculty members have aggressively developed ADT's: 27 have been approved by the Chancellor's Office and 3 more are awaiting approval. In order to create AD-Ts within the 60 unit load, many departments had to re-write curriculum. ENGL B1A, MATH B22 (Statistics), and PSYC B5 (Behavioral Statistics), key gateway courses, were each decreased by a unit. Additionally, a statistics pathway for non-STEM majors has been introduced with promising success results taking students from Algebra I (one level below transfer) through college level statistics. Other general education courses such as Spanish have decreased units to facilitate completion. The number of students completing associate degrees for transfer has increased from 31 in 2012-13 to 422 in 2015-16. Additionally, the faculty members have scaled up the numbers of courses that qualify for a course identification number (C-ID) from 68 to 164 by 2016-17.

Science, Technology, Engineering and Math (STEM), and ASEM Transfer Initiatives

The College has moved on several fronts to promote student interest and success in the key STEM disciplines of biology, chemistry, physics, engineering, math, physical science, and computer science.

In fall 2016 the College opened the new \$1.6 million Aera STEM Success Center supported by a \$500,000 donation from Aera Energy Corporation. Center staff members collaborate with the Math, Engineering, Science Achievement (MESA) program for first generation and economically disadvantaged students who are majoring in the STEM disciplines and seek to transfer.

Collaboration with Project Lead the Way, KHSD, and CSUB

To further encourage prospective college students to consider STEM fields of study, the College has sponsored summer STEM camps for middle and high school age students in collaboration with Project Lead the Way.

Recently the College and CSUB science faculty members collaborated on an NSF grant to support the University's electrical power engineering program.

Pre-Law Transfer Pathway

One of 24 community colleges with an MOU to create a relationship with six California law schools: University of Southern California, University of San Francisco, Santa Clara University, Loyola Marymount University, U.C. Davis, and U.C. Irvine, BC has created a student club, pre-law society, and a pre-law advisory council comprised of 12 legal professionals in the Bakersfield and Delano area to help support the program.

Transfer Center and Articulation

The Transfer Center provides support for prospective transfer students through direct counseling, educational planning, application workshops, university on-site admission events, in-class presentations, the collaborative

BC/CSUB Satellite Transfer Center, and multiple Transfer Day events throughout the year. A partnership agreement was signed with the California Health Sciences University to guarantee 10 seats every year for Bakersfield College graduates.

Several campuses of the University of California (Berkeley, UCLA, Davis, and Irvine) are using grant funds to identify and recruit students from rural community colleges such as Bakersfield College. One admissions representative from UCLA comes monthly to Bakersfield College. Once the program is established, students and counselors at the College will be taken on a field trip to UCLA.

Visioning the Future for Transfer

The Pathways implementation has stimulated BC to conduct research on the transfer process to CSUs, which should be seamless as a result of the SB1440 legislation. BC has begun a series of meetings with CSUB.

Kern Promise

In fall 2016 the College launched a pilot effort, the Bakersfield Renegade Promise, which is a commitment to help students complete their Associate Degree for Transfer (AD-T) within two instructional years through structured support and priority access to courses.

The College will expand to the Bakersfield Transfer Promise with the awarding of a \$750,000 grant from the California Community Colleges Chancellor's Office.

Future Science, Technology, Engineering, Math (STEM)

Faculty and instructional administrators are developing a pathway in engineering based on the State Engineering Model Curriculum. The associate degree will likely specify a core of engineering courses and a limited general education pattern. Mechanical engineering has been identified as the greatest current local need.

Science faculty members are exploring options to develop at least one new specialized science associate degree or certificate. Three showcase labs for biology, geology, and a 3D computational computer lab have been planned for a new science building.

Transfer Center

The Transfer Center would like to be able to host master's degree students in school counseling from Fresno Pacific University, CSUB, National University, and Point Loma Nazarene University to work as interns at the Transfer Center.

Transfer Work for the Future

- Collaboration with CSU
- Increase Hispanic rate of transfer
- Build connections with Historically Black Colleges and Universities (HBCUs)
- Develop opportunities with local Pharmacy University in Fresno
- Explore UC Pathways for alignment
- Continue to develop ADTs as needed

Career and Technical Education (CTE)

Bakersfield College has a distinguished CTE tradition of preparing students for immediate employment . The

College has a system of reviewing relevant data to determine which programs to enhance, revitalize, or develop new programs. Factors in making decisions include program outcomes, core indicators, local, regional and state employment data and job market trends. The current focus is on building and enhancing programs that will provide a sustainable living wage for program graduates.

Regionally, Bakersfield College students earn more than half of the awards in radiologic technology, manufacturing, and EMS and also garner a high percentage of awards in architecture (71%), nutrition (75%), drafting (78%), and constructions crafts (89%). More than 40% of the BC skills builder students are in architecture, drafting, fire technology, and nutrition. Nearly all CTE program areas exceed the college's average success rate of 66% for instance: Nursing (89%); Health professions (89%); Human services (90% compared to 64% in the region); EMS (10 percentage points higher than the regional average).²⁰

The College's Career and Technical Education programs are organized into nine meta- majors that cover California's 15 industry sectors. Focusing on a seamless pathway that utilizes articulation, dual enrollment, and concurrent enrollment, the college and its partners are creating opportunities for high school students to earn college credit for certificates and degrees that lead to high wage employment.

Within the Guided Pathways Initiative, the CTE area is focusing on:

1. Clarifying CTE academic pathways to prepare students for college while in high school: Strengthening the collaborative relationship with local high schools to facilitate successful dual enrollment and articulation activities.
2. Helping student chose a path in college: Increased visibility of CTE programs during recruitment events with an emphasis on Career Advising and Orientation.
3. Encouraging students to stay on the path and completing college: Increased interventions and targeted advising from CTE completion coaches.
4. Promulgating effective learning: Continued development of an assessment culture communicating course, program and institutional assessment. CTE programs have been enhanced with categorical funding from Perkins, CTE Enhancement, CCPT I and II, C6, Strong Workforce, Baccalaureate startup funds, industry donations, and general funds commitments.

Visioning the Future for Career and Technical Education

Agriculture, Nutrition, and Culinary

The Plant Science ADT was approved March 2017 by the CCCCCO and two more ADT's in the agriculture are pending approval. Potential growth areas include agricultural education and pest control advisor certification. Nutrition and Culinary faculty members are exploring opportunities to expand the existing programs with a possible addition of hospitality.

Health Sciences

The recently approved the Public Health Sciences AS-T degree recently won an innovation award. New programs include an AS degree in Health Information Technology, a community Health Care Worker/Patient Navigator COA, and an Athletic Trainer/Coaching COA under Kinesiology program. Future programs in may include medical lab technician and respiratory therapy.

Public Safety and Emergency Management

The new Paramedic AS degree/Certificate of Achievement (COA) will serve community needs and the California Ambulance Association is interested in the College offering the paramedic program online. The paramedic certificate may link to the fire technology program providing greater employment opportunities for graduates.

²⁰Bakersfield College, State of the College 2016-17. Slide presentation January 2017.

The emergency medical responder academy provides instruction one level below EMT. The Bakersfield Police Department is returning the basic academy instruction to the College and potentially in-service training as well.

Industrial and Transportation Technology

Bakersfield College is one of 15 CCCs in a pilot program to offer a baccalaureate degree; BC's baccalaureate is in Industrial Automation which focuses on electronics and computer technology and prepares students for management positions in industry sectors, including petroleum, agriculture and manufacturing. The Automotive and Construction Technology areas are implementing major curricular redesigns to streamline pathways and will also evaluate the need for and potential construction of an annex building for Industrial Technology at the main campus. New programs being developed include an AS degree/COAs in Occupational Safety and Risk Management, HVAC and Biomedical Electronics programs. Delano will expand welding, fabrication and electronics programs.

Arts, Humanities, and Design

Both the American Sign Language and Spanish are developing interpreter certificates. COAs were approved for Commercial Music and Graphic Design.

Business

The Apple Corporation has expressed an interest in having a retail certificate developed for that industry. The logistics program will also be reinstated.

Science, Technology, Engineering, and Math (STEM)

Within the STEM pathway, the college expects to develop a Cyber Security program to address information security assurance. It will be aligned with industry certificates (A+, Net+, security +, and server +).

Social and Behavior Sciences and Human Services

The College is developing a substance abuse certificate of achievement program and will seek accreditation from the California Association for Alcohol and Drug Educators (CAADE).

Job Placement and Career Counseling

The college is planning comprehensive job placement center to integrate on-campus job placement and off-campus employment through work experience, internships, and employment. This center will also provide support services for students, industry training on resume building, interview techniques, and workplace soft skills.

Rural Development Initiatives

The College has launched a series of rural initiatives primarily career technical education but also some general education coursework, which has been targeted to the rural, isolated communities in the service area. These initiatives are also part of a Guided Pathways System (GPS) the College is implementing that requires a comprehensive change both at the College and in the community. Intensive and substantive work has been done with community partners, local high schools, industries, and four-year institutions. A well-connected network of organizations has a shared vision for economic development, workforce preparation, and education. (see Appendix R.1)

Promoting a College-Going Culture

To this end, BC is collaborating with community partners to equip more of the residents with marketable skills through a college education. Prime examples of effective strategies have been implemented since 2013.

- Dual Enrollment (Appendix R.4)
 - CCPT 1 – Wonderful - Plant Science, Agriculture Mechanics, Agriculture Business, and Logistics
 - CCPT 2 Rural Pathways
- California Endowment – Healthy Communities
- College Futures – Dual enrollment, Alignment in senior year
- 1+1+2 = Game Changer – Dual enrollment, BC and Bachelors for Arvin
- RIDE – Rural Initiative Distance Education
- Delano
- Adult Education
- Inmate Education

Technology Opportunities for the Future Plan

The College has a long history of using instructional technology through hybrid, interactive television classes, and online classes. The College Technology Plan (2014) strategic objectives articulate a commitment to support student services with technology, support instruction and learning through technology, and improve support for online education. The Plan addresses an updated student communications system for student success, infrastructure development, effective professional development for faculty and staff, and improved support for distance learning. Bakersfield College prides itself in providing innovative and leading technology to prepare students for the workforce or additional education. Technologies such as 3D printing, simulation mannequins in the nursing skills labs, computer-assisted drawing, and electronics labs provide students with hands-on opportunities and real-world experience. A key infrastructure goal is to provide complete wireless coverage to the 6 to 8,000 wireless devices connected daily. The Delano Campus has 100% wireless coverage, and the Panorama Campus has more than 65% wireless coverage with the goal of 100% wireless coverage supported by fall 2016 Measure J funds.

Matriculation and Student Services Support

Numerous programs to track and nudge students will be implemented in the next 3 years. Execution and integration of Starfish through the EPI initiative summer 2017 will be essential and require coordination with KCCD and the Banner team; training for users will be essential. Updating of the Degreeworks or alternative planning software will be essential. Campus logic to track financial aid will be another key technology need for student success.

Distance Education

College data indicate that one-fourth of the students in 2015-16 were enrolled in at least one distance education class. Those students who took some online courses were twice as likely to complete a degree or transfer.²¹ Details regarding the estimated credit FTES generated by each discipline 2011-12 to 2015-16 are found in Appendix TEC. In fall 2015 an Instructional Technologist was hired and in spring 2017 a Dean of Academic Technology.

The College has established an online technical support center for students enrolled in distance education classes. The Habits of Mind web resource is linked to the online education web page, as is a series of study skills resources. The College uses the Canvas Learning Management System (LMS) associated with the statewide Online Education Initiative (OEI). A pilot effort to use Canvas was launched in summer 2016 with full

²¹KCCD Institutional Research; Elements of Student Success

implementation in spring 2017. A working group has investigated using free Open Educational Resource (OER).

Supporting the Student Experience Through Technology

BC has embraced the use of technology to help provide support to students and to keep through integrated planning and advising using technology-mediated tools. The goal is to approach student support as a teaching function, touch students on a regular basis, and connect students to the information and services they need when they need them. Technology is used to track the students' attendance and activities in SI, the Writing Center, the Student Success lab and Tutoring.

Along with commercial products the College intends to use resources from the state Educational Planning Initiative, Online Education Initiative, and Open Educational Resources to provide online resources and intrusive messaging to students. A description of the commercial software products implemented or being evaluated is found in Appendix TEC.1.

Academic Technology Plan

A. Academic Technology Department

Bakersfield College has recently taken significant steps toward the advancement of academic technology in our work. These steps are coordinated within the Academic Technology (AT) Department, which is charged with strategic and instructional leadership of technology and professional development efforts on campus. The department includes the following components, coordinated by the Dean of Academic Technology:

1. **Distance Education** – AT is the primary point of contact for campus distance education efforts, including online classes and other distance education modalities, student support for online learning, professional development, and the development of tools for online instructors.
2. **Professional Development** – Professional Development (PD) operates under the umbrella of AT, to better facilitate the essential functions of technology learning within the context of technology initiatives across campus.
3. **Center for Professional Development** – The Center (CPD) will occupy the space currently allocated to the Faculty Development Lab (L160). Currently used as a space for faculty to access basic technology tools, this lab will be transformed in the summer of 2017 to a state-of-the-art learning space which will include a mobile device equipped, flexible learning space, interactive video capabilities with full lecture capture ability, as well as a maker space for faculty use. This will become the hub for faculty technology training and use on campus.
4. **Instructional Technology Staff** – The AT department is equipped with both faculty Instructional Technologists and classified Instructional Media Specialists who take on training and development roles to support campus wide and departmental technology initiatives.

B. Student Learning Technology

The support and development of the direct instructional tools for student learning is a primary focus of the AT Department. These efforts materialize in three major areas:

1. **Canvas Learning Management System (LMS)** – Canvas is the web-based learning platform for all online courses, and the platform of choice for online materials to support classes in all delivery modes. Additionally, this platform is a critical component in the college-wide assessment of disaggregated SLO data.
2. **Online Education Initiative (OEI)** – The state-sponsored OEI has provided California Community Colleges with numerous resources, including Canvas, at reduced or no cost. The College is engaged

with these, and will be focused on making participation in the OEI Course Exchange to BC courses and programs.

3. **Open Educational Resources (OER)** – The use of OER allows students to access high quality course materials at little or no cost, benefitting students who have financial challenges. There is a college-wide movement toward more significant OER use, heavily supported by the AT Department.

C. Student Support Technology

1. **Starfish** – The college currently uses DegreeWorks, which is a degree audit platform. We are in the process of moving to Starfish, which includes this functionality but also introduces communications to students and several other key student support services.
2. **Educational Planning Initiative (EPI)** – Under the EPI, Starfish is paired with an enterprise level online student portal that facilitates targeted messaging and communication that will significantly impact student success. The college is connected with this initiative, and evaluating the potential for these services to become a part of our student support ecosystem.
3. **Orientation for Online Students** – Combining resources from the OEI with action-based assessment of student technical abilities, our Orientation for Online Students helps students learn to be successful in their online classes, while making their assessment data available to their instructors so they are equipped to teach online.
4. **Online Tutoring** – Through the discounted services and platforms offered by the OEI, the college is implementing online tutoring for all students, expanding the reach and availability of our services to students.
5. **Financial Aid TV** – The Financial Aid Department releases short videos to share financial aid tips and information with our students, expanding the reach of FA communications.

D. Academic Support Technology

1. **eLumen** – This platform will provide the tools for managing our assessment, curriculum management and approval, and program review efforts. Implementation will be completed in Fall of 2017.
2. **AccuSQL** – This platform provides detailed data, tracking student usage of several student support services across campus, and enabling evaluation of those services on a disaggregated, by student basis.
3. **Data Platforms / Advanced Analytics** – As the College implements various platforms and services, we continue to be mindful of the bigger picture as it relates to data and analytics. The college will continue to move toward an integrated approach to the analysis and use of the many data streams in our environment.

E. Academic Technology Strategic Goals

1. **Increase Online Success and Retention** – The College will continue to strengthen our online courses, student support, instructor training and support with the goal of success and retention rates that surpass those in our traditional modes of delivery.
2. **Increase Institutional Capacity for Online Learning, Including Degrees** – The College will strategically pursue the addition of online classes and programs to increase access and meet the needs of our student population. Where beneficial, resources like the OEI Course Exchange will be leveraged to accomplish this goal.
3. **Strengthen Relationship and Responsiveness to Data Related to Online** – Data will be heavily employed in the support, revision and strengthening of our online classes and programs. This data will come from student success metrics, as well as detailed analysis of our online-available student support services.

Projections for Future Growth

Linking the Educational Master Plan's internal and external analysis to Weekly Student Contact Hours (WSCH) and space quantification completes the process of planning for future instructional capacity. It balances a comprehensive program of campus development with the current curriculum, instructional delivery modes, learning environment, and necessary support structures. The extent and direction of future curriculum development is uncertain, but the visions of future curriculum, the needs of the labor market, interests of prospective students, opportunities provided by the four-year transfer institutions, the College's mission, and priorities and financial resources of the College are all factors to be considered when charting the future direction of the College.

As a dynamic process, educational planning involves a mixture of methods and a variety of assessments. Looking to the future, a master plan must strive to:

- assure sufficient facilities to accommodate higher enrollment numbers;
- improve the teaching/learning environment;
- address new program development;
- integrate the latest technological innovations; and,
- provide adequate space configuration that permits flexible teaching methods.

As assessment of the current facilities includes the capacity of the facilities to meet instructional programmatic needs, it reviews the condition of facilities and it addresses their adequacy to provide for an effective learning environment. Two things result directly from this declaration. One is the need for a very detailed assessment of space needs for growth. Second is the opportunity to plan for facilities that may better serve the instructional and support services programs at the College. It is an opportunity for overall improvement of services at the College. Measure J and state bonds provide an opportunity for good planning and adequate facilities to meet Kern counties future.

The current comprehensive analysis of projected space needs, by major instructional area and discipline, can be found in Appendix Z.1 (main campus) and Appendix Z.2 (Weill Institute) of this EMP. The campus may also need renovations and adjustments to existing space to make areas more suitable for the delivery of services and instruction. The analysis takes into account the current and planned capital construction and applies the State's space standards to the projected WSCH