

# PERKINS IV Core Indicators of Performance by Vocational TOP Code

Indicators for 2013-2014 Fiscal Year Planning
Data from 2010-2011 Cohort with 2011-2012 Outcomes
Summary by College for: BAKERSFIELD - KERN

Performance Rate Less Than Goal is Shaded

**Total Count is 10 or Greater** 

Total Count is Less Than 10

		TOP Code	Core 1 Skill Attainment	Core 2 Completion	Core 3 Persistence	Core 4 Employment	Core 5a NT Participation	Core 5b NT Completion
Performance Goal ( 2010- 2011)		88.83	82.15	85.80	80.76	18.28	21.95	
01		AGRICULTURE AND NATURAL RESOURCES	94.94	77.55	88.33	72.00	53.52	50.57
	0101	AGRICULTURE TECHNOLOGY AND SCIENCES, GENERAL	100.00	100.00	100.00		0.00	0.00
	0102	ANIMAL SCIENCE	94.34	78.57	89.62	82.35	71.70	70.27
	0103	PLANT SCIENCE	100.00	70.00	87.50	100.00	41.67	36.36
	0109	HORTICULTURE	97.22	100.00	97.22	100.00	44.44	44.44
	0112	AGRICULTURE BUSINESS, SALES, AND SERVICE	87.50	100.00	87.50	100.00	37.50	0.00
	0114	FORESTRY	95.00	74.29	83.75	50.00	38.75	37.04
	0115	NATURAL RESOURCES	50.00	0.00	50.00	0.00	100.00	
02		ARCHITECTURE AND RELATED TECHNOLOGIES	97.87	92.00	91.30	78.57	14.89	16.00
	0201	ARCHITECTURE AND ARCHITECTURAL TECHNOLOGY	97.87	92.00	91.30	78.57	14.89	16.00
05		BUSINESS AND MANAGEMENT	80.00	87.06	88.04	73.91	51.02	48.72
	0501	BUSINESS AND COMMERCE, GENERAL	90.54	74.07	86.49	80.95	70.27	77.27
	0502	ACCOUNTING	97.44	90.00	88.46	62.50	38.46	36.36
	0505	BUSINESS ADMINISTRATION	35.21	100.00	92.54	82.22	50.70	52.17
	0506	BUSINESS MANAGEMENT	85.71	0.00	85.71	33.33	61.90	50.00
	0509	MARKETING AND DISTRIBUTION	92.00	80.00	92.00	80.00	78.95	75.00
	0511	REAL ESTATE	96.67	22.22	70.00	66.67		
	0514	OFFICE TECHNOLOGY/OFFICE COMPUTER APPLICATIONS	83.87	100.00	96.77	62.50	12.90	20.00
06		MEDIA AND COMMUNICATIONS	90.63	84.21	90.32	71.43		
	0602	JOURNALISM	92.00	78.57	92.00	33.33		
	0614	DIGITAL MEDIA	85.71	100.00	83.33	100.00		
07		INFORMATION TECHNOLOGY	94.64	93.33	92.86	71.43	17.31	17.65
	0701	INFORMATION TECHNOLOGY, GENERAL	100.00	100.00	100.00		100.00	100.00

TOP Code		Core 1 Skill Attainment	Core 2 Completion	Core 3 Persistence	Core 4 Employment	Core 5a NT Participation	Core 5b NT Completion	
	Perform	nance Goal ( 2010- 2011)	88.83	82.15	85.80	80.76	18.28	21.95
	0702	COMPUTER INFORMATION SYSTEMS	92.86	90.00	89.29	66.67	28.57	18.18
	0707	COMPUTER SOFTWARE DEVELOPMENT	100.00	100.00	100.00		0.00	0.00
	0708	COMPUTER INFRASTRUCTURE AND SUPPORT	93.75	100.00	100.00		0.00	0.00
	0709	WORLD WIDE WEB ADMINISTRATION	100.00	100.00	75.00	100.00		
09		ENGINEERING AND INDUSTRIAL TECHNOLOGIES	87.89	72.50	80.41	81.72	4.59	7.79
	0934	ELECTRONICS AND ELECTRIC TECHNOLOGY	94.12	85.00	85.11	93.75	0.00	0.00
	0946	ENVIRONMENTAL CONTROL TECHNOLOGY (HVAC)	100.00		100.00		0.00	
	0947	DIESEL TECHNOLOGY	85.71	100.00	100.00	100.00	7.14	0.00
	0948	AUTOMOTIVE TECHNOLOGY	82.88	62.07	86.49	59.09	4.50	5.00
	0952	CONSTRUCTION CRAFTS TECHNOLOGY	97.89	41.94	76.60	88.89	2.82	15.38
	0953	DRAFTING TECHNOLOGY	100.00	92.86	79.49	100.00	12.50	14.29
	0956	MANUFACTURING AND INDUSTRIAL TECHNOLOGY	78.80	79.61	77.27	79.38	5.43	8.24
	0958	WATER AND WASTEWATER TECHNOLOGY	100.00	0.00	50.00	100.00	0.00	
10		FINE AND APPLIED ARTS	96.77	96.15	88.52	66.67	51.61	53.57
	1012	APPLIED PHOTOGRAPHY	94.12	100.00	94.12	100.00	52.94	60.00
	1030	GRAPHIC ART AND DESIGN	97.78	95.24	86.36	63.64	51.11	52.17
12		HEALTH	69.23	99.59	77.22	87.60	14.03	13.89
	1225	RADIOLOGIC TECHNOLOGY	100.00	100.00	68.57	100.00		
	1230	NURSING	77.83	99.72	82.38	87.35	14.03	13.89
	1250	EMERGENCY MEDICAL SERVICES	12.36	98.86	60.23	83.75		
	1260	HEALTH PROFESSIONS, TRANSFER CORE CURRICULUM	73.33	100.00	57.14	100.00		
13		FAMILY AND CONSUMER SCIENCES	89.04	83.57	90.85	72.53	17.27	13.23
	1305	CHILD DEVELOPMENT/EARLY CARE AND EDUCATION	88.47	85.33	90.14	74.10	5.37	7.62
	1306	NUTRITION, FOODS, AND CULINARY ARTS	90.11	80.31	91.81	69.05	34.18	23.48
	1307	HOSPITALITY	0.00	100.00	100.00	0.00		
21		PUBLIC AND PROTECTIVE SERVICES	94.01	74.89	89.96	69.19	15.72	32.35
	2104	HUMAN SERVICES	19.35	100.00	75.86	75.00		
	2105	ADMINISTRATION OF JUSTICE	93.62	79.31	89.33	82.54	48.02	49.51
	2133	FIRE TECHNOLOGY	97.23	57.53	90.78	58.43	1.71	5.97
49		INTERDISCIPLINARY STUDIES	97.14	60.00	82.86	87.50		
	4930	GENERAL STUDIES	97.14	60.00	82.86	87.50		

#### **Table Definitions and Source**

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Core 1 - Skill Attainment, GPA 2.0 & Above: 88.83% Performance Goal - (2010-2011)
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- Core 2 Completions, Certificates, Degrees and Transfer Ready: 82.15% Performance Goal (2010-2011)
- Core 3 Persistance in Higher Education: 85.80% Performance Goal (2010-2011)
- Core 4 Employment: 80.76% Performance Goal (2010-2011)
- Core 5 Training Leading to Non-traditional Employment: Greater than 18.28% Participation & 21.95% Completion (2010-2011)

Source: CCCCO MIS Database, EDD Base Wage File, CSU Chancellor's Office, UC Office of the President, 2000 Census, Student Loan Clearing House

Bakersfield College programs at the four digit TOP Code level that have Core Indicator gaps greater than 10%. Gaps are the difference between the result of each indicator measure and the performance goal. Those measures with fewer than 10 (student) concentrators are excluded.

#### **Gap List:**

- Core 1 Skill Attainment GPA ≥ 2.0 (Six programs)
  - o TOP code 0505 Business Administration [-53.62]
  - o TOP code 0956 Manufacturing and Industrial Technology [-10.03]
  - o TOP code 1230 Nursing [-11.00]
  - o TOP code 1250 Emergency Medical Services [-76.47]
  - o TOP code 1260 Health Professions, Transfer Core Curriculum [-15.50]
  - o TOP code 2104 Human Services [-69.48]
- Core 2 Completion (Five programs)
  - o TOP code 0103 Plant Science [-12.15]
  - o TOP code 0948 Automotive Technology [-20.08]
  - TOP code 0952 Construction Crafts Technology [-40.12]
  - o TOP code 2133 Fire Technology [-24.62]
  - o TOP code 4930 General Studies [-22.15]
- Core 3 Persistence (Six programs)
  - o TOP code 0511 Real Estate [-15.80]
  - o TOP code 0952 Construction Crafts Technology [-9.20]
  - TOP code 1225 Radiologic Technology [-17.23]
  - o TOP code 1250 Emergency Medical Services [-25.57]
  - o TOP code 1260 Health Professions, Transfer Core Curriculum [-28.66]
  - o TOP code 2104 Human Services [-9.94]

- Core 4 Employment (Six programs)
  - o TOP code 0114 Forestry [-30.76]
  - o TOP code 0502 Accounting [-18.26]
  - o TOP code 0948 Automotive Technology [-21.67]
  - o TOP code 1030 Graphic Art and Design [-17.12]
  - o TOP code 1306 Nutrition, Foods, and Culinary Arts [-11.71]
  - o TOP code 2133 Fire Technology [-22.33]
- Core 5a Non-Traditional Gender Participation (Twelve programs)
  - o TOP code 0201 Architecture and Architectural Technology [-3.39]
  - o TOP code 0514 Office Technology/Office Computer Applications [-5.38]
  - o TOP code 0708 Computer Infrastructure and Support [-18.29]
  - o TOP code 0934 Electronics and Electric Technology [-18.29]
  - o TOP code 0947 Diesel Technology [-11.14]
  - o TOP code 0948 Automotive Technology [-13.78]
  - o TOP code 0952 Construction crafts Technology [-15.46]
  - o TOP code 0953 Drafting Technology [-5.78]
  - o Top Code 0956 Manufacturing and Industrial Technology [-12.85]
  - o TOP code 1230 Nursing [-4.25]
  - o TOP code 1305 Child Development/ Early Care and Education [-12.91]
  - o TOP code 2133 Fire Technology [-16.57]
- Core 5b Non-Traditional Gender Completion (Nine programs)
  - o TOP code 0201 Architecture and Architectural Technology [-5.95]
  - o TOP code 0702 Computer Information Systems [-3.77]
  - o TOP code 0948 Automotive Technology [-16.95]
  - o TOP code 0952 Construction Crafts Technology [-6.57]
  - o TOP code 0953 Drafting Technology [-7.66]
  - o TOP code 0956 Manufacturing and Industrial Technology [-13.71]
  - o TOP code 1230 Nursing [-8.06]
  - o TOP code 1305 Child Development/ Early Care and Education [-14.33]
  - o TOP code 2133 fire Technology [-15.98]

#### **Summary of 2013-2014 Fiscal Planning Year Core Indicator Measures**

#### Overview of Core Indicator measures (% rounded)

In the 2013-2014 planning year data, Bakersfield College had a total of 43 four digit TOP Code programs. Each TOP Code program has 6 core indicator measures, which result in a total of 258 individual indicator measures. Of the 258 measures, 10.5% (27) had no data and 26.7% (69) had fewer than ten student concentrators and were not used for evaluation. Of the 43 TOP Code programs, 58.1% (25) were reported on the gap list (having a gap of greater than 10% difference between the program's result and the annual goal) and 39.5% (17) had greater than 10 student concentrators in all 6 core indicator measure areas.

#### Core 1 Skill Attainment GPA ≥ 2.0 (88.83%) (% rounded)

Core 1 results had a net increase of one in the number of programs with gaps greater than 10%. Three programs were removed from the gap list due to improved scores. Business Management improved to having less than a 10% gap, while Drafting Technology, and Applied Photography both exceeded this year's performance goal. Three new areas: Manufacturing/Industrial Technology, Nursing, and Health Professions/Transfer Core Curriculum fell between 10.0% and 15.5% percent points from last year's results. Business Administration improved from the previous year by 17.0% percent points.

#### Core 2 Completions, Certificates, Degrees and Transfer Ready (82.15%) (% rounded)

Core 2 results had a net decrease of one in the number of programs with gaps greater than 10%. Electronics/Electronic Technology was removed from the gap list due to an improvement of 25.0% percent points from the previous years' results. Diesel Technology improved to a 100% performance measure this year but was excluded from reporting due to having less than 10 students. Of the four remaining programs, three had improvements over the previous years' performance of 3.2% to 35.7% percent points. One program, Construction Technology had a decrease of 21.3% percent points.

#### Core 3 Persistance in Higher Education (85.80%) (% rounded)

Core 3 results had a net increase of three programs with gaps greater than 10%. Diesel Technology was removed from the reporting list due to a 100% indicator measurement, an increase of 50.0% percent points from the previous year. Of the two remaining programs reported on both this year and the previous years' gap lists, Construction Technology, and Radiologic Technology had slight increases of 2.1% and 4.7% percent points. Emergency Medical Services (EMS) and Health Professionals/Transfer Core Curriculum both had results below the performance goal in the previous year, but were not previously included on the gap list until this year due to an increase in the number of students in the programs. Human Services performance fell 9.4% percent points from the previous year and was added to the gap list.

### Core 4 Employment (80.76%) (% rounded)

Core 4 results had a net a decrease of one program with a gap greater than 10%. Office Technology was excluded from the gap list due to having less than ten students. Animal Science, Business/Commerce, and Child Development/Early Care/Education were removed from the gap list due to improvements of

3.5% to 13.1% percent points. Automotive Technology had an indicator measure better than the performance goal last year data but fell 22.4% percent points this year and was added to the current gap list. Graphic Art/Design, and Fire Technology both previously had results less than the performance goal but not greater than 10%. Of the three remaining programs that were on the current years' and previous years' gap list; Forestry, and Nutrition/Foods/Culinary Arts improved by 5.0% and 1.6% percent points, while Accounting fell 9.95% percent points.

#### Core 5a Non-Traditional Gender Participation – Participation (18.28%) (% rounded)

Core 5a results had a net increase of two programs with gaps greater than 10% this year. The two new programs added to the current gap list are Architecture/Architectural Technology, and Nursing due to slight drops of 2.1% and 1.8% percent points from the previous year's measures. Of the ten programs remaining, all were reported on the previous years' gap list. Of those ten; one program had no improvement, four programs fell between 0.7% and 5.0% percent points and five programs improved by 0.4% and 6.8% percent points.

#### Core 5b Non-Traditional Gender Participation – Completion (21.95%) (% rounded)

Core 5b results had a net decrease of one program with a gap greater than 10% this year. Of the two programs that were removed from the gap list; Agriculture Business/Sales/Service was excluded due to having less than ten students, while Office Technology/Office Computer Applications was due to an improvement of 20.0% percent points. Architecture/Architectural Technology was newly added to the gap list due to a 5.1% percent point decrease in its indicator measure. Of the eight programs on both gap lists; five programs had improvements between 1.9% and 11.5% percent points and three fell between 1.7% and 2.8% percent points.

Bakersfield College special populations from programs at the four digit TOP Code level that have a gap greater than 10%. Special populations include: economically disadvantaged, disabled, non-traditional and female students. Gaps are the difference between the program indicator measure and the performance goal. Those measures with fewer than 10 (student) concentrators are excluded.

#### Core 1 Skill Attainment GPA ≥ 2.0 (88.83%) (% rounded)

#### • Female

- o TOP code 0505 Business Administration [-47.16]
- TOP code 0956 Manufacturing and industrial Technology [-18.83]
- o TOP code 1230 Nursing [-10.47]
- o TOP code 1250 Emergency Medical Services [-80.13]
- o TOP code 1260 Health Professions, Transfer Core Curriculum[-15.50]
- o TOP code 2104 Human Services [-69.60]

#### Non-traditional

- TOP code 0505 Business Administration [-47.16]
- o TOP code 0956 Manufacturing and industrial Technology [-18.83]
- o TOP code 1230 Nursing [-14.64]

#### • Economically disadvantaged

- TOP code 0505 Business Administration [-44.39]
- o TOP code 0956 Manufacturing and industrial Technology [-11.77]
- o TOP code 1230 Nursing [-15.04]
- o TOP code 1250 Emergency Medical Services [-76.63]
- o TOP code 2104 Human Services [-63.83]

#### • Students with Disabilities

o TOP code 1230 Nursing [-16.42]

# **Summary of 2013-2014 Fiscal Planning Year Special Populations Core 1 Indicator Measure**

#### Core 1 Skill Attainment GPA ≥ 2.0 (88.83%) Subset Populations (% rounded)

Female student concentrators had a net increase of four programs with a gap greater than 10% in the 2013-14 fiscal planning year data compared to the previous year. Business Administration while still not achieving the current year's goal, improved by 26.9% percent points. Human Services fell 8.9% percent points from the previous year. Emergency Medical Services (EMS), and Health Professions/Transfer Core Curriculum both increased the number of female students in their programs this year but those students did not meet the skill attainment performance goal. Manufacturing/Industrial Technology, and Nursing fell 18.8% and 10.5% percent points from the previous years' skill attainment measure.

Non-traditional student concentrators had a net increase of two programs with a gap greater than 10% this year. Business Administration, while still not achieving the current year's performance goal improved by 18.3% percent points from last years' skill attainment measure. Manufacturing/Industrial Technology, and Nursing fell 18.8% and 14.6% percent points from the previous years' skill attainment measure.

Economically disadvantaged student concentrators had a net increase of two programs with a gap greater than 10% this year. Business Administration, while still below the goal performance improved by 21.2% percent points compared to last years' skill attainment measure. Drafting Technology achieved 100% student skill attainment, an improvement of 29.6% percent points. Emergency Medical Services (EMS), previously excluded due to having too few students, was included on the current gap list with a skill attainment measure 76.6% percent points below the performance goal. Manufacturing/Industrial Technology, and Nursing were newly added programs due to a drop in performance of 11.8% and 15.0% percent points. Human Services fell 4.0% percent points below last years' skill attainment measure.

Finally, the students with disabilities gap list has one program, Nursing. Nursing was added to the gap list due to a 20.5% percent point drop in skill attainment performance compared to the previous year, a 16.4% percent points below the current performance goal.

## Labor Market Data - High Growth and/or Medium to High Wage Jobs

EMSI data shows occupations with the greatest number of openings and fastest growing occupations in the Bakersfield College labor market area (Kern County). These summary data show programs (by 6-Digit SOC Occupations) that are offered at Bakersfield College, programs offered within the district, and those that are not offered. When reviewing the tables below note that the column "Change" indicates the number of new job openings between 2012 and 2013 jobs. The column "Annual Openings" includes the number of jobs in "Change" plus any retirements and other terminations that require a replacement in that occupation.

Top Ten Occupations with the Greatest Number of Annual Openings in the BC Labor Market Area

Occupation	2012 Jobs	2013 Jobs	Change	% Change	Annual Openings
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	36,313	36,459	146	0%	1,319
Cashiers	7,879	8,106	227	3%	593
Childcare Workers	7,636	7,854	218	3%	459
Combined Food Preparation and Serving Workers, Including Fast Food	6,447	6,720	273	4%	453
Heavy and Tractor-Trailer Truck Drivers	7,829	8,114	285	4%	441
Retail Salespersons	7,091	7,303	212	3%	423
Real Estate Sales Agents	5,496	5,703	207	4%	330
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	5,657	5,878	221	4%	328
Waiters and Waitresses	3,409	3,519	110	3%	281
Office Clerks, General	6,571	6,731	160	2%	278

Note: Six Digit SOC Occupation sorted by Annual Openings. Source: EMSI – Dataset Version 2013.1

Top Ten Occupations with the Greatest Rate of Growth (with Jobs ≥ 20) in the BC Labor Market Area

Occupation	2012 Jobs	2013 Jobs	Change	% Change	Annual Openings
Chemical Technicians	64	71	7	11%	7
Cargo and Freight Agents	89	98	9	10%	12
HelpersExtraction Workers	312	343	31	10%	38
Food Cooking Machine Operators and Tenders	43	47	4	9%	5
Personal Financial Advisors	1,754	1,916	162	9%	182
Physical Therapist Assistants	45	49	4	9%	5
Physical Therapist Aides	138	149	11	8%	13
Pipelayers	228	246	18	8%	25
Securities, Commodities, and Financial Services Sales Agents	1,205	1,300	95	8%	129
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	66	71	5	8%	6

Note: Six Digit SOC Occupation sorted by % Change. Source: EMSI – Dataset Version 2013.1

Top Ten Occupations with the Highest Average Hourly Wage (Requiring an Associate's Degree or Less and Jobs  $\geq$  10) in the BC Labor Market Area

Occupation	2012 Jobs	2013 Jobs	Annual Openings	Avg. Hourly Earnings	Education Level
Radiation Therapists	12	13	1	\$50.21	Associate's degree
Nuclear Medicine Technologists	22	23	1	\$49.41	Associate's degree
First-Line Supervisors of Police and Detectives	71	73	4	\$47.64	Work experience in a related occupation
First-Line Supervisors of Correctional Officers	202	205	10	\$45.76	Work experience in a related occupation
Elevator Installers and Repairers	17	18	1	\$44.53	Long-term on-the- job training
Dental Hygienists	333	345	19	\$43.51	Associate's degree
Registered Nurses	4,285	4,450	243	\$41.79	Associate's degree
First-Line Supervisors of Fire Fighting and Prevention Workers	15	16	2	\$41.73	Postsecondary non-degree award
Firefighters	680	692	31	\$40.55	Postsecondary non-degree award
Electrical Power-Line Installers and Repairers	351	347	14	\$40.32	Long-term on-the- job training

Note: Six Digit SOC Occupation sorted by Average Hourly Earnings. Source: EMSI – Dataset Version 2013.1

### Demographic data on the BC Service Area

2013 demographic data provided by Economic Modeling Services Intl. (EMSI) for the BC service area estimates the population to be 618,500. Of those, 53% are Hispanic and 40.3% are Female. BC service areas' number one Two Digit CIP Code educational completions were in Health Professions and related programs in 2011 (EMSI). The 2007-2011 American Community Survey (ACS) 5-year rolling average estimate for Kern County residents living below the poverty line was 21.4% in 2012. The ACS also estimates of those residents 25 years or older: 23.2% have attended some college, 6.9% received an associate's degree, and 14.6% received a bachelor's, graduate or professional degree in 2012.