# **Education**

# **Section Highlights**

Children under 12 for whom there is 1 out of 5
3rd Graders Proficient in English Language Arts/Literacy
3rd Graders Proficient in Mathematics 38%
High School Dropouts 1 in 10 Students
Student Readiness for College Highest in 20 Years
5-Year Growth in STEM-Related Degrees

### **A Success Story**

The ability to interact effectively and harmoniously with others is critical for workers in the 21st century economy. One way the San Bernardino County Superintendent of Schools is addressing this need is through the first-ever countywide Soft Skills Boot Camps. More than 100 high school students across San Bernardino County attended these two-day sessions in Apple Valley and Rancho Cucamonga in August 2017. Students picked up tips about effective communication, worked as team players, learned about ethical decision-making, and took part in mock interviews. The benefits are spreading beyond the students attending. After participating, one senior commented, "When you return to your school, you can help others who are struggling in these areas."

### Child Care Slots Available for only One out of Five Children

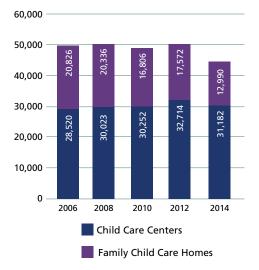
Research on school readiness and children's brain development confirms the importance of high quality early education and care programs for children's future success in school and life. In addition, affordable child care is essential for working families to maintain economic self-sufficiency. Early care and education has been shown to be an efficient and effective investment for economic and workforce development, with an estimated return of \$7 for every \$1 invested.¹ This indicator measures child care availability by tracking the supply and demand of licensed child care spaces and the availability of subsidies for low-income families.

### How is San Bernardino County Doing?

Between 2012 and 2014, there was a decrease in the number of spaces available at licensed child care facilities in San Bernardino County:

- There was a 5% decrease in the number of spaces at licensed child care centers (center-based) and a 26% decrease in the number of spaces at licensed family child care homes (home-based).
- The long-term trend is mixed. Between 2006 and 2014, there was a 9% increase in the number of licensed center-based spaces, but a 38% decrease in the number of licensed home-based spaces.
- The need far outpaces supply. There are enough licensed child care spaces for only 19% of children ages 12 and younger with parents in the labor force.
- This is the lowest rate among neighboring counties, except Riverside County (13%), and lower than the California average of 25%.
- In 2016, there were 21,973 children ages 12 and younger who received federal or state subsidized child care in San Bernardino County, with an additional 8,659 children on the waitlist for subsidized care.

### Number of Licensed Child Care Spaces San Bernardino County, 2006-2014



Source: The California Child Care Portfolio, California Child Care Resource and Referral Network (www.rrnetwork.org/)

#### Availability of Child Care for Potential Demand County Comparison, 2014

County	Percent
San Diego	31%
California	25%
Orange	26%
Los Angeles	25%
San Bernardino	19%
Riverside	13%

Source: The California Child Care Portfolio, California Child Care Resource and Referral Network (www.rrnetwork.org/)

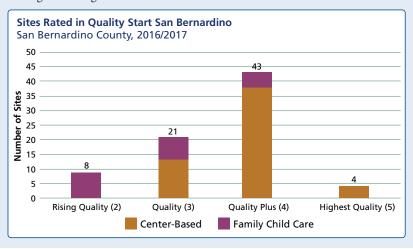
### **Quality Start San Bernardino**

California has developed the CA-QRIS (California-Quality Rating & Improvement System) Framework that sets standards of quality for licensed child care programs. Across California, counties are using these standards to increase the quality of early learning programs for thousands of children.

Quality Start San Bernardino County (QSSB) is a partnership of early learning partners, educators, and champions who are working together to increase the quality of local early learning programs for San Bernardino County's youngest children through the development of a QRIS. Quality Start San Bernardino Partners include:

- First 5 San Bernardino
- San Bernardino County Superintendent of Schools
- Child Care Resource Center
- California State University, San Bernardino
- County of San Bernardino Preschool Services

QSSB providers, who are rated, receive a rating of 1 (Emerging Quality) to 5 (Highest Quality). Sites that are not rated receive quality improvement services until such time that they can be rated. In 2017, there were 117 sites participating in QRIS in San Bernardino County. Of those, 76 sites received a quality rating and another 39 received quality improvement services. Participating sites are rated every two years and receive support and incentives to gain and maintain the highest ratings.



<sup>&</sup>lt;sup>1</sup>National Institute for Early Childhood Education Research (http://nieer.org)

### College Degrees Continue to Rise

A high school diploma or college degree opens many career opportunities that are typically closed to those without these achievements. Beyond the personal benefits of increased educational attainment, the education level of residents is evidence of the quality and diversity of the labor pool – an important factor for businesses looking to locate or expand in the region. Educational attainment is measured by tracking the high school dropout rate and the proportion of residents over age 25 with a high school diploma or Bachelor's degree.

### How is San Bernardino County Doing?

The proportion of college and high school graduates has increased over the past 10 years:

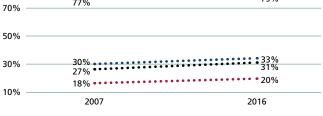
- Between 2007 and 2016, the proportion of residents over the age of 25 with a Bachelor's degree or higher rose from 18% to 20%.
- At 20%, San Bernardino County is below the state (33%) and nation (31%) for college graduates.
- Between 2007 and 2016, the proportion of residents over age 25 who are high school graduates rose from 77% to 79%.
- At 79%, San Bernardino County falls below state and national averages (82% and 88%, respectively) for residents over age 25 with a high school diploma.

The high school dropout rate continues to fall:

- 10.1% of San Bernardino County students in the class of 2015/16 dropped out before graduating, compared to 13.3% of the class of 2011/12 five years before.
- The 2015/16 dropout rate is virtually the same as the statewide dropout rate of 10.0%.
- Dropout rates vary by race/ethnicity, with African American students and students of two or more races posting the highest dropout rates in 2015/16, and Asian students posting the lowest.
- Nearly all race and ethnic groups have witnessed decreasing dropout rates over the past five years.

#### Percentage Over Age 25 Earning High School Diploma (or Higher) and Bachelor's Degree (or Higher) San Bernardino County, 2007 and 2016





#### High School Graduate or Higher: San Bernardino County

· · · San Bernardino County California

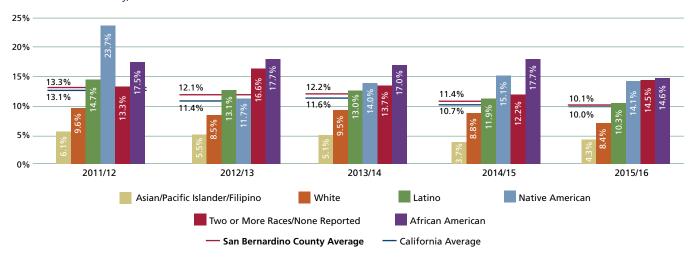
••• California

Bachelor's Degree or Higher:

- United States ••• United States

Source: U.S. Census Bureau, American Community Survey, 1-Year Estimates, 2007 and 2016 (DP02) (http://factfinder.census.gov/)

#### **Dropout Rate by Race/Ethnicity** San Bernardino County, 2012-2016



Source: California Department of Education, DataQuest (http://data1.cde.ca.gov/dataquest/)

# Slightly More Third Graders Meet Academic Standards

Research shows that children who are not proficient readers by the end of third grade are four times more likely to leave school without a diploma than proficient readers, and more likely to engage in criminal activity, impacting public safety. In addition, basic math skills are necessary in order to navigate through life, and competence in math is associated with readiness for the workplace and higher future earnings. This indicator measures third grade scores for English language arts/literacy (ELA/literacy) and mathematics using the California Assessment of Student Performance and Progress (CAASPP) assessment results. The CAASPP assessment is a computer-adaptive, end-of-year academic performance test that is aligned with California's Common Core State Standards.

### How is San Bernardino County Doing?

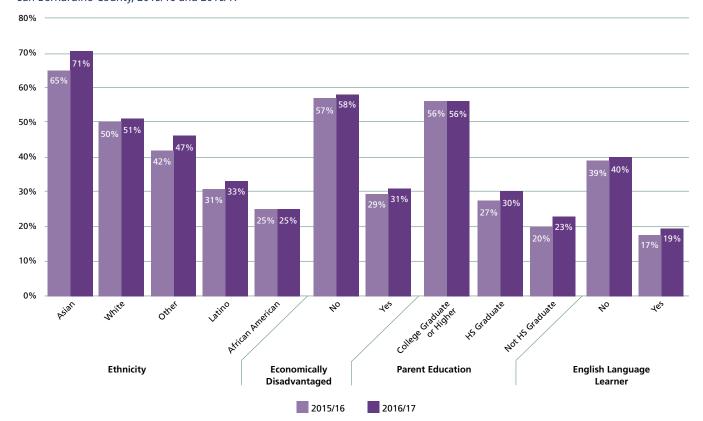
In 2017, nearly four out of 10 third graders in San Bernardino County met or exceeded ELA/literacy standards:

- Overall, 38% of third graders in the county met or exceeded standards for ELA/literacy in 2017, a slight improvement from 37% in 2016.
- San Bernardino County's third grade student performance is lower than the statewide average (44% of students met or exceeded ELA/literacy standards) and all counties compared including San Diego (52%), Orange (51%), Los Angeles (43%) and Riverside (42%).

Third grade academic performance varies across a range of characteristics:

- For example, 71% of Asian students met or exceeded standards, compared to 51% of White students, 33% of Latino students, and 25% of African American students.
- Nearly one-third (31%) of economically disadvantaged students met or exceeded ELA/literacy standards, compared to 58% of those students not economically disadvantaged.<sup>3</sup>
- For children whose parents were not high school graduates, only 23% met or exceeded standards.
- Just 19% of third graders classified as English Learners met or exceeded ELA/literacy standards.

### Percentage of Third Graders Meeting or Exceeding English Language Arts / Literacy Standards San Bernardino County, 2015/16 and 2016/17



Note: Asian includes Asian, Native Hawaiian, Pacific Islander and Filipino. Other includes two or more races and American Indian or Alaska Native.

Source: California Department of Education, DataQuest

<sup>1</sup> Hernandez DJ. "Double Jeopardy: How Third-Grade reading skills and Poverty Influence High School Graduation." The Annie E. Casey Foundation (2012).

<sup>&</sup>lt;sup>2</sup> Child Trends. (2012). Mathematics proficiency (http://www.childtrends.org/?indicators=mathematics-proficiency)

Economically disadvantaged students include students eligible for the free and reduced priced meal program, foster youth, homeless students, migrant students, and students for whom neither parent is a high school graduate.

Slightly more third graders in San Bernardino County met or exceeded mathematics standards:

- 38% of third graders in the county met or exceeded standards for mathematics, up from 36% in 2016.
- This is lower than the California average (47% of students met or exceeded math standards) and all counties compared, including Orange (56%), San Diego (54%), Los Angeles (47%) and Riverside (43%).

Third grade math performance also varies by sub-group:

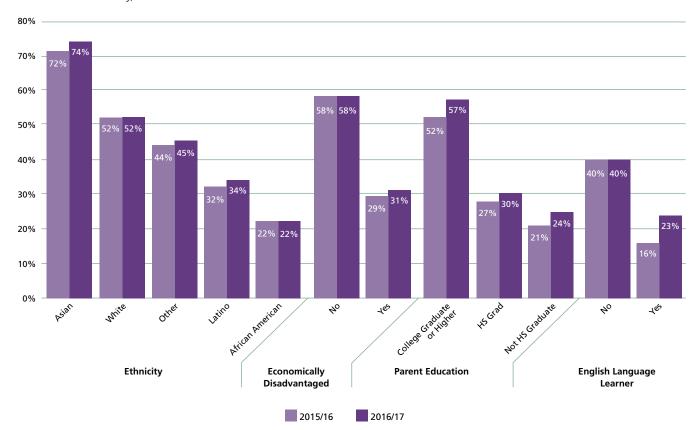
- 74% of Asian students met or exceeded math standards, compared to 52% of White students, 34% of Latino students and 22% of African American students.
- For children whose parents were not high school graduates, 24% met or exceeded standards.
- Nearly one-third (31%) of students who are economically disadvantaged met or exceeded math standards, compared to 58% of those students not economically disadvantaged.
- Only 23% of students who are classified as English Learners met or exceeded math standards.

#### **School Readiness and Future Success**

Preparing young children for school is crucial to ensuring they have a head start to life-long learning. Exercising the brains of babies in the first years of life significantly impacts children's development. Being "school ready" means a child is ready to enter a social environment that is primarily focused on education that challenges cognitive, social, emotional and motor development. The quality of children's early life experiences can be affected by inequalities in a child's background. For example, research has shown that by age three, children from lower-income families hear roughly 30 million fewer words than their more affluent peers and that a high correlation exists between vocabulary size at age three and language test scores at age nine and 10 in areas of vocabulary, listening, syntax, and reading comprehension.<sup>1</sup> A system that supports a quality early learning experience for children from birth through age five is the key to shifting the future generation.

<sup>1</sup> Hart, B. Risley, T. Meaningful Difference in the Everyday Experiences of Young American Children (1995). Paul H. Brookes Publishing Co.

#### Percentage of Third Graders Meeting or Exceeding Math Standards San Bernardino County, 2015/16 and 2016/17



Note: Asian includes Asian, Native Hawaiian, Pacific Islander and Filipino. Other includes two or more races and American Indian or Alaska Native.

Source: California Department of Education, DataQuest

### More Students are College Ready

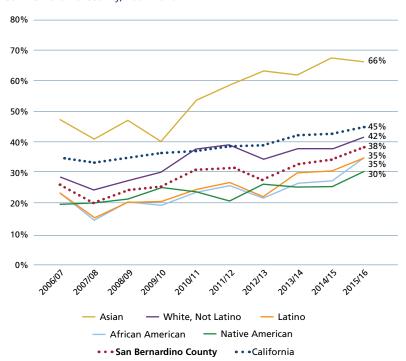
A college education is important for many jobs and can lead to increased earning power, better health, a stronger workforce, and societal benefits. On average, earnings rise in step with education levels, resulting in benefits to the individual through increased personal income and discretionary spending, and to the community through increased tax receipts. Voter participation is associated with higher levels of education, as is participation in exercise, volunteerism and activities that support the community. A college education supplies students with the varied skills needed to boost the local economy, be prepared to compete in the global economy, and have a solid foundation for future academic and career pursuits. Progress towards increased college preparedness is measured by the number of public high school graduates who have fulfilled minimum course requirements to be eligible for admission to University of California (UC) or California State University (CSU) campuses. Also measured are average SAT scores among high schools students and 11th grade performance on English language arts and math assessments.<sup>2</sup>

### How is San Bernardino County Doing?

The UC/CSU eligibility rate continues to improve, reaching the highest level in over 20 years of tracking:

- 38% of San Bernardino County seniors graduating in 2015/16 did so having completed the necessary coursework to be eligible for a UC or CSU campus.
- This rate of UC/CSI eligibility is 12 percentage points higher than 10 years ago.
- San Bernardino County's rate of eligibility is lower than the statewide average of 45%; however, over the past 10 years, the gap is generally narrowing, despite annual fluctuations.
- Students of all race and ethnic backgrounds have improved eligibility over the past 10 years.

#### Percentage of High School Graduates Eligible for UC/CSU by Race/Ethnicity San Bernardino County, 2007-2016



Note: "Asian" includes students identified as Asian, Pacific Islander and Filipino, "Other" includes students identified as two or more races or no race/ethnicity reported.

Source: California Department of Education, DataQuest (http://data1.cde.ca.gov/dataquest/)

### Measuring and Improving College Readiness

California's math and English language arts/literacy assessments taken by 11th grade students are designed to give high school students an early indication of college readiness and to avoid incoming college students' need for remediation.

### 2016 Snapshot

- 93% of San Bernardino County juniors took the literacy and math assessments.
- In literacy, 20% of San Bernardino County students were deemed college ready and 33% were conditionally ready (i.e., the student can take identified coursework in their senior year of high school that, following completion, will deem them college ready). Statewide, 26% of students were college ready in English and 33% were conditionally ready.
- In math, 8% of San Bernardino County students were deemed college ready and 17% were conditionally ready. Statewide, 13% of students were college ready in math and 20% were conditionally ready.

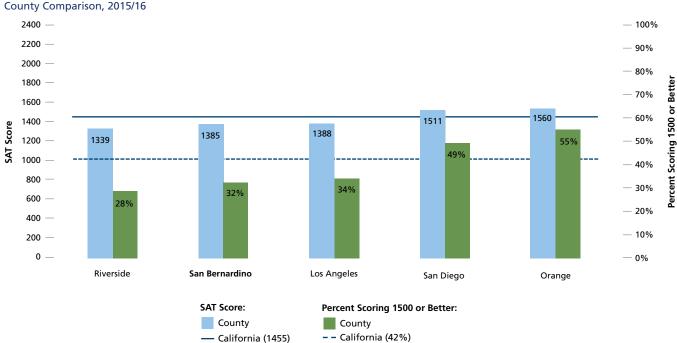
Sources: San Bernardino County Superintendent of Schooks; California Department of Education, California Assessment of Student Performance and Progress

<sup>&</sup>lt;sup>1</sup> College Board, *Education Pays*, 2013 (http://trends.collegeboard.org/education-pays)
<sup>2</sup> In 2013/14, the California Department of Education's SAT data release was amended to encompass grades 9-12, whereas previous reporting was based on grade 12 only. As a result, only two years of data are available.

Average SAT scores dipped in 2015/16:

- At 1385, San Bernardino County's average SAT score exceeded Riverside County's average score (1339) but was lower than California average (1455).
- This marks a decline from the prior year's average score of 1401.
- School districts in San Bernardino County are more evenly matched in terms of average SAT performance than all other Southern California counties compared, some of which experience vast differentials in scores among districts.

### Average SAT Scores and Percent Scoring 1500 or Better



Note: The highest score possible is 2400.

 $Source: \ California\ Department\ of\ Education,\ Data Quest\ (bttp://data1.cde.ca.gov/dataquest/)$ 

### **AVID: Empowering Every Student's Potential**

The Advancement Via Individual Determination (AVID) college readiness system has a mission to close the achievement gap by preparing all students for college readiness and success in a global society.

Since the California budget eliminated AVID funding in 2012/13, San Bernardino County, along with Riverside, Inyo and Mono counties (the RIMS region), has funded the program locally to keep it thriving and growing in the region. In an effort to plant the seed for college aspirations early, the AVID college readiness system is increasing dramatically at the elementary levels across the region.

#### 2016/17 AVID Snapshot

In 2016/17, a total of 46,312 students countywide took AVID classes during the academic year. Of the 2,470 AVID seniors graduating in 2017, 98% graduated from high school and 96% successfully completed A-G course requirements (courses that count toward eligibility for CSU/UC schools). In addition, 88% were accepted to a four-year college or university, and 98% planned to attend a two- or four-year college for 2017/18.

Source: San Bernardino County Superintendent of Schools

### Career-Tech High School Student Placement Continues to Grow

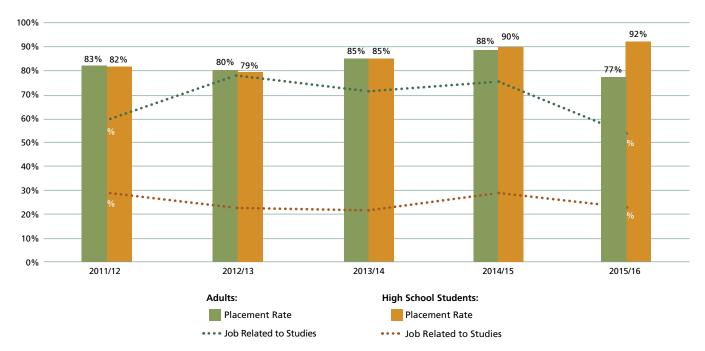
Career technical education (CTE) integrates academic and technical skills, supporting both educational goals and economic development. It offers students research-based, relevant curricula developed expressly for success in college and careers. For those reentering the workforce, changing careers, or needing on-the-job skill upgrades, CTE provides applicable skill-sets and increased career opportunities. This indicator aggregates and reports CTE data from the three Regional Occupational Programs (ROP) and five community college districts in San Bernardino County.

#### How is San Bernardino County Doing?

ROP student placement increased:1

- In 2015/16, 92% of high school seniors completing ROP education continued their education, found a job, or joined the military an increase from a placement rate of 90% the prior year.
- The placement rate among adult ROP completers was 77% in 2015/16, a decline from 88% in 2014/15.
- Among students entering the job market, 22% of high school ROP students in 2015/16 found a job related to their course of study, compared to 54% of adults.
- Nearly three-quarters of high school students (70%) continued their education after completing their studies in 2015/16, compared
  to 43% of adults.
- These differences in placement among high school students and adults are to be expected. High school students are still exploring
  career options and may take a variety of CTE courses or continue on to college. Adults are further along in their careers and are
  more likely to take targeted courses that apply to their intended occupation.

## Regional Occupational Programs Placement Rates and Relatedness to Course of Study San Bernardino County, 2012-2016



Note: Countywide secondary student placement rate data from 2015/16 do not include Baldy View ROP and data from 2014/15 do not include all Baldy View ROP high schools.

Sources: California Department of Education; San Bernardino County Superintendent of Schools, Baldy View and Colton-Redlands-Yucaipa Regional Occupational Programs

<sup>&</sup>lt;sup>1</sup> Countywide secondary student placement rate data from 2015/16 do not include Baldy View ROP and data from 2014/15 do not include all Baldy View ROP high schools.

Work-based learning opportunities have increased for ROP students:

- In the past three years, signed agreements with business partners to provide work-based learning opportunities have increased 207%.
- A total of 1,461 students participated in ROP "community classroom" learning in 2016/17.

207%

Growth in ROP work-based business partnerships (2014/15 – 2016/17)

1,461

ROP students participating in community classroom learning (2016/17)

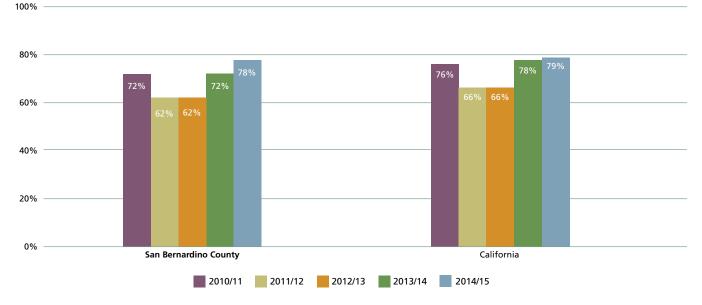
Sources: San Bernardino County Superintendent of Schools, Baldy View and Colton-Redlands-Yucaipa Regional Occupational Programs

Community college CTE student placement rebounded:

- Within a year of completing their course of study in 2014/15, 78% of graduates were placed (pursued further education, found a job, or joined the military).
- This placement rate is just under the statewide average of 79%.
- San Bernardino County community colleges awarded CTE students 3,555 industry-recognized credentials, certificates or degrees (or the student was "transfer ready") in 2014/15. Over the past 10 years, the number of awards has not changed substantially.

#### **Community College Placement Rates**

San Bernardino County and California, 2011-2015



Note: Data from 2013/14 have been revised by the data source since previously presented.

Source: California Community Colleges, Chancellor's Office (https://misweb.ccco.edu/perkins/main.aspx)

Post-Secondary Education: Universities, Colleges, and Career Training San Bernardino County offers residents many opportunities for college and post-secondary career training, serving the educational needs of the county and developing a strong workforce. Within San Bernardino County, major universities and colleges include University of Redlands, California State University/San Bernardino, Loma Linda University, and University of La Verne College of Law. Community Colleges in the county include Barstow, Chaffey, Copper Mountain, Crafton Hills, Palo Verde Community College/Needles Campus, San Bernardino Valley, and Victor Valley. In addition, there are several private career and technical educational institutions that offer career-focused certificates and degrees.

## STEM-Related Degrees on the Rise in all Disciplines

The technical and problem-solving skills learned though the STEM disciplines (Science, Technology, Engineering and Mathematics) are critical in our knowledge- and technology-driven economy. A technically skilled pool of local graduates reduces the need for employers to recruit workers from outside the county and can attract new high-tech jobs. This indicator measures the number of degrees awarded in STEM disciplines at colleges and universities in San Bernardino County, including Associate's, Bachelor's, and graduate degrees.<sup>1</sup>

### How is San Bernardino County Doing?

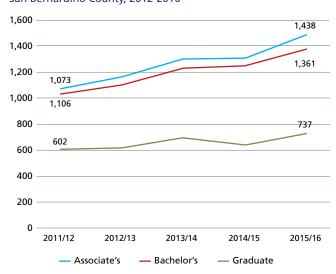
STEM-related degrees – including health and medical professions, which were newly added this year – accounted for approximately 26% of the total number of degrees awarded in 2015/16 by public and private universities and public community colleges in San Bernardino County:

- 1,361 STEM-related Associate's degrees were awarded in 2015/16, an increase of 27% over the past five years.
- The number of STEM-related Bachelor's degrees awarded (1,438 in 2015/16) grew 30% over the past five years.
- Meanwhile, the number of STEM-related graduate degrees granted (737 in 2015/16) grew 22%.
- Overall, STEM-related Associate's, Bachelor's and graduate degrees granted have grown 27% since 2011/12.
- Since 2011/12, all STEM-related fields experienced growth in degrees granted.

Private Trade Schools In addition to the degrees tallied in this indicator, private for-profit post-secondary institutions in San Bernardino County granted 225 tech-related Associate's degrees, 315 Bachelor's degrees, and 29 graduate degrees in 2015/16. Nearly half (46%) of all degrees granted at private, for-profit institutions in San Bernardino County in 2015/16 were tech-related, including health occupations.

Source: National Center for Education Statistics (http://nces.ed.gov)

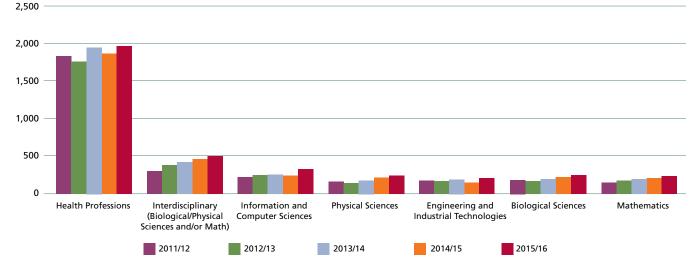
# STEM-Related Degrees Awarded by Type of Award San Bernardino County, 2012-2016



Note: Data have been revised to include health professions and should not be compared with STEM-related degree counts presented in previous Community Indicators Reports.

Sources: California State University, San Bernardino (http://ir.csusb.edu/), California Community Colleges Chancellor's Office (http://datamart.ccco.edu/Default.aspx); Loma Linda University; and National Center for Education Statistics (http://nces.ed.gov/)

### Tech-Related Degrees Awarded by Subject San Bernardino County, 2012-2016



Note: Interdisciplinary and Engineering and Industrial Technology awards are comprised exclusively of Associate's degrees; the four-year universities in San Bernardino County do not award degrees in interdisciplinary math and science or engineering.

Sources: California State University, San Bernardino (http://ir.csusb.edu/), California Community Colleges Chancellor's Office (http://datamart.ccco.edu/Default.aspx); Loma Linda University; and National Center for Education Statistics (http://nces.ed.gov/)

<sup>&</sup>lt;sup>1</sup>Tech-related degrees include the subjects of biological sciences, health or medical professions, physical sciences, mathematics, computer and information sciences, and engineering, environmental and industrial technologies. Health or medical professions were newly added to the totals for 2015/16 and retroactively to 2011/12. Universities included in the calculations: California State University, San Bernardino; University of Redlands; Loma Linda University; University of La Verne (San Bernardino County campuses only); and the six public community colleges in San Bernardino County.