



Environmental Scan Primer

2011/12 to 2015/16

September 2016



SDCCD Office of Institutional Research and Planning

Overview

- Labor Market/Workforce Trends
- Competitive Landscape
- Demographic Trends
- Enrollment Trends
- Student Success Outcome Trends
- Education and Public Policy Trends
- Technology Trends

Top 10 Planning Questions

1. **ACCESS.** Which populations/subpopulations does the District serve, and which are not being served equitably?
2. **ENROLLMENT.** What are the key drivers of enrollment and how can these be influenced for growth?
3. **STUDENT ED GOAL.** Which existing programs respond to the greatest and least demand for meeting student educational goals, and which programs need to be developed?
4. **LABOR MARKET.** Which existing programs respond to the greatest and least labor market demands, and which need to be developed?
5. **SUPPORT SERVICES.** Which existing support services are vital for student success and which need to be added?
6. **DATA & INFORMATION.** What critical internal and external data are needed in order to assess, sustain, and grow programs and services?
7. **ORGANIZATIONAL STRUCTURE.** What type of organizational structure (technology, staffing, marketing, and outreach) is needed in order to sustain institutional effectiveness and vitality?
8. **PARTNERSHIPS.** Which educational, business and community partnerships are necessary in order to create learning opportunities and expected outcomes for students?
9. **STUDENT SUCCESS.** Which success and retention strategies and practices best support student success equitably (transfer, completion, and employment)?
10. **INTEGRATED PLANNING.** How can the District and colleges best integrate planning and budget decisions?

Labor Market/Workforce Trends

SDCCD Office of Institutional Research and Planning

Analysis & Implications

Economic projections point to approximately 55 million job openings in the U.S. through 2020, while baby boomer retirements (31 million) will outnumber new job creation (24 million). Thirty-five percent of the job openings will require at least a bachelor degree, 30% of the job openings will require some college or an associate degree, and 34% of the job openings will not require education beyond high school.¹

The largest job gains in California reported in January 2016 were in the Education, Health Services, and the Leisure and Hospitality industries. The San Diego region has been slowly recovering from the “Great Recession” since 2014 with unemployment rates in 2016 the lowest in nearly a decade. The acceleration of new jobs and replacement jobs in major industry sectors has spurred this growth, particularly in the fields of Advanced Manufacturing, Healthcare, and Information and Communication Technologies. These industries comprise 50% of the regions job postings, and are expected to grow 10% over the next five years. Additionally, because San Diego County is a high-wage service economy many new jobs and replacement job openings will also stem from service industries. The largest job gains will continue to be in Leisure and Hospitality, Healthcare, and Education. Although advances in technology and automation have created entirely new occupations, other professions have experienced sharp declines.

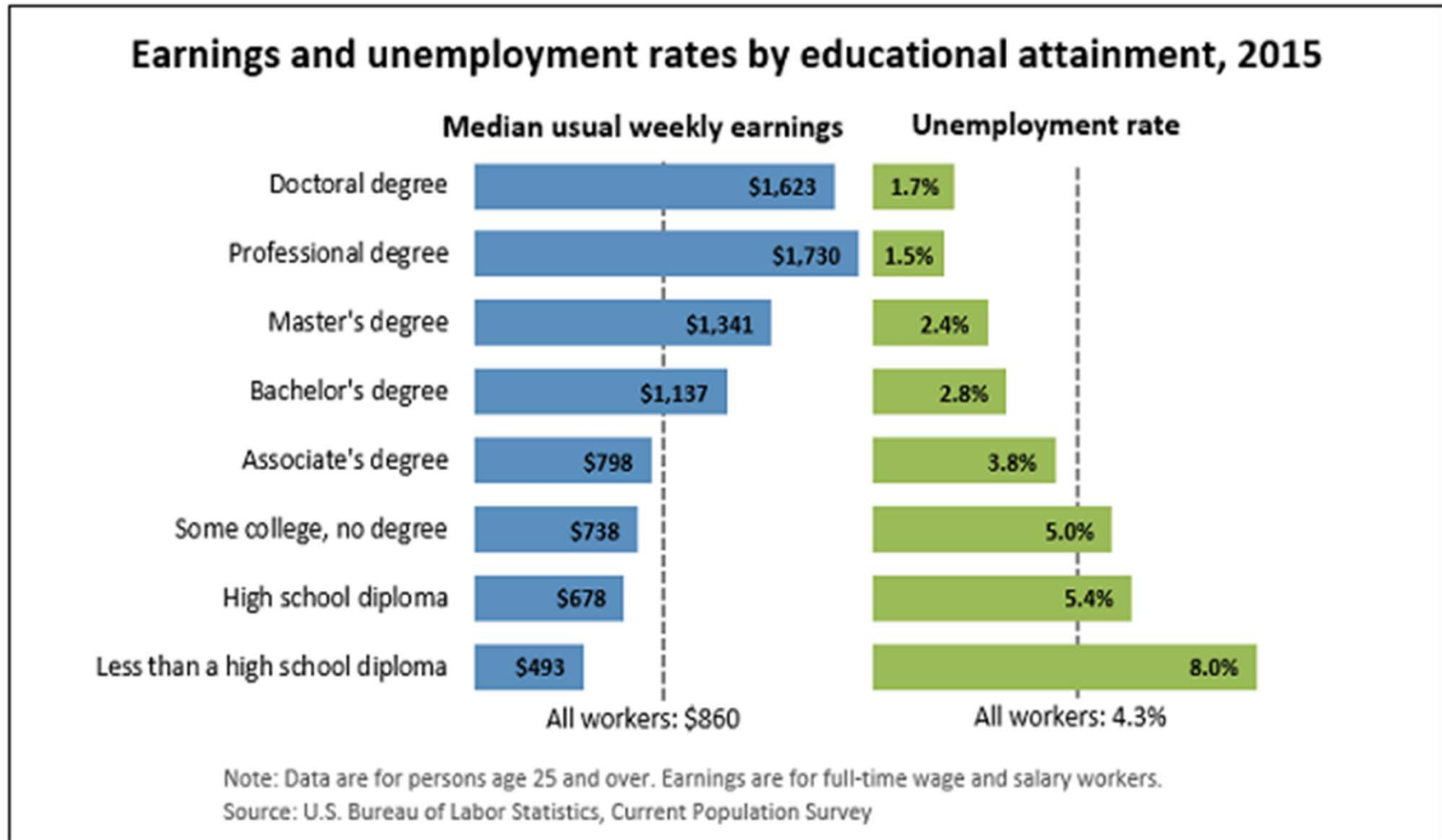
Many new and replacement jobs, particularly those in the career technical fields, also have high job multiplier values that create other jobs that support or contribute to the productivity and vitality of these related industries. For example, the occupations in the biochemical fields have a particularly high job multiplier quotient (4.8), and is expected to increase by 7% by 2020. The aircraft structure field is another occupational area with a relatively high job multiplier quotient (3.37) and is expected to increase by 30% by 2020.

Individuals with higher educational attainment have proven more resilient during economic downturns and those with an associate degree or higher experience unemployment rates below the national average. Although many of the higher paying jobs require a bachelor degree or higher, the job market for those with an associate degree or postsecondary certificate is growing in many industries. Employers will continue to hire more college-educated workers for positions that were previously held by high school graduates. As the share of high-skilled jobs increases, the demand for college-educated employees will continue to grow. The demand for middle-skills jobs (jobs that require some college, but less than a bachelor degree) in San Diego County represents approximately 37% of all jobs in the region and is expected to increase by about 4% with more than 20,000 job openings expected over the next several years. Consequently, job training received through higher education has become an imperative in order to meet the current and future demands of the job market.

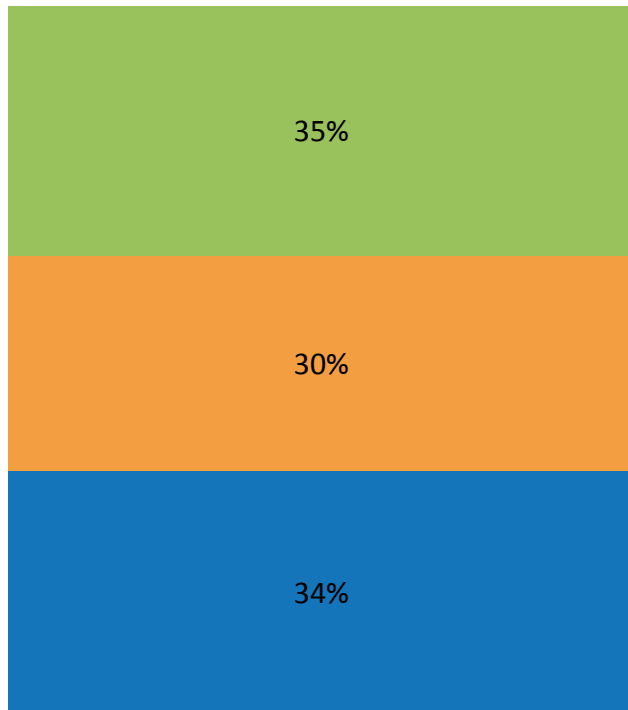
Partnerships with corporate and private industry that offer students internships and/or apprenticeships will be even more critical to the successful preparation and employment of students than ever before, particularly in the rapidly changing and growing technical fields. Short-term certificates and the recognition of the needs of Skills Builders will also become a more important component of job and workforce training and preparation.

1. Carnevale, A.P., Smith, N., and Stohl, J. (2013, June). Recovery: Projections of Jobs and Education Requirements Through 2020. Georgetown University Public Policy Institute Center on Education & the Workforce

Earnings & Employment by Education



California Job Openings by Education



1.9 million job openings between 2015-2025 will require some college or an associate degree

Data source: Georgetown University Center on Education and the Workforce, "Recover: Job Growth and Education Requirements Through 2020," State Report, June 2013. Analysis: Collaborative Economics

■ HS Diploma or less ■ Some college or Associate's degree ■ Bachelor's degree or higher

WHY FOCUS ON MIDDLE-SKILL JOBS IN SAN DIEGO COUNTY?

Middle-skill occupations represent **37%** of all jobs in the San Diego region.



Middle-skill jobs are expected to grow **4%**.



603,535 San Diegans are employed in middle-skill jobs.



20,565+ middle-skill jobs openings are projected to be available every year through 2019.



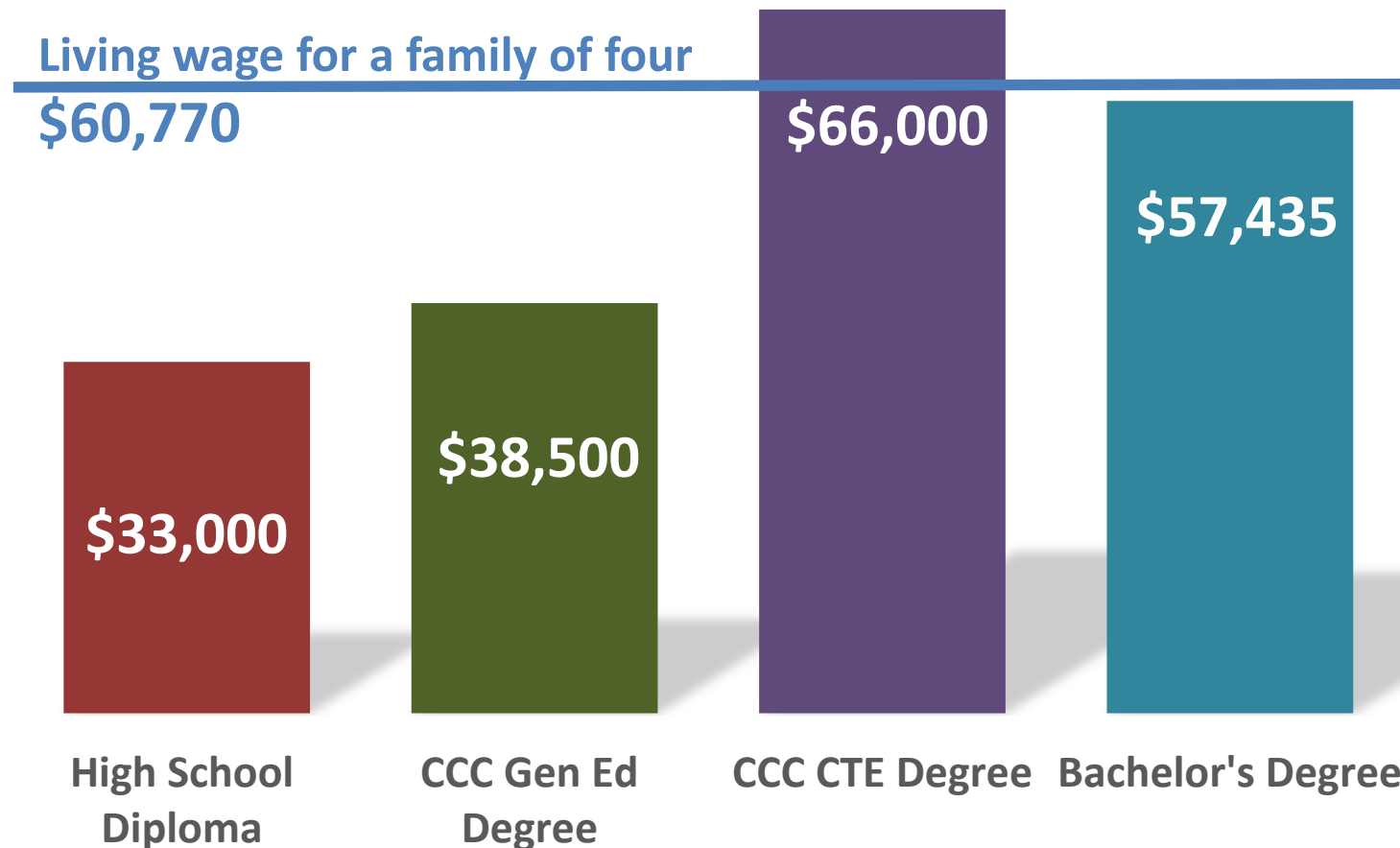
The median hourly wage for these workers is **\$20.20** versus the San Diego median hourly living wage of \$13.09.

California's job growth in 2015 posted year-over-year gains in 10 of 11 major industries.

SDCCD Office of Institutional Research and Planning

Source: San Diego Workforce Partnership, "San Diego County Middle-Skill Jobs Gaps and Opportunities", November 2015

Earning Comparisons in California

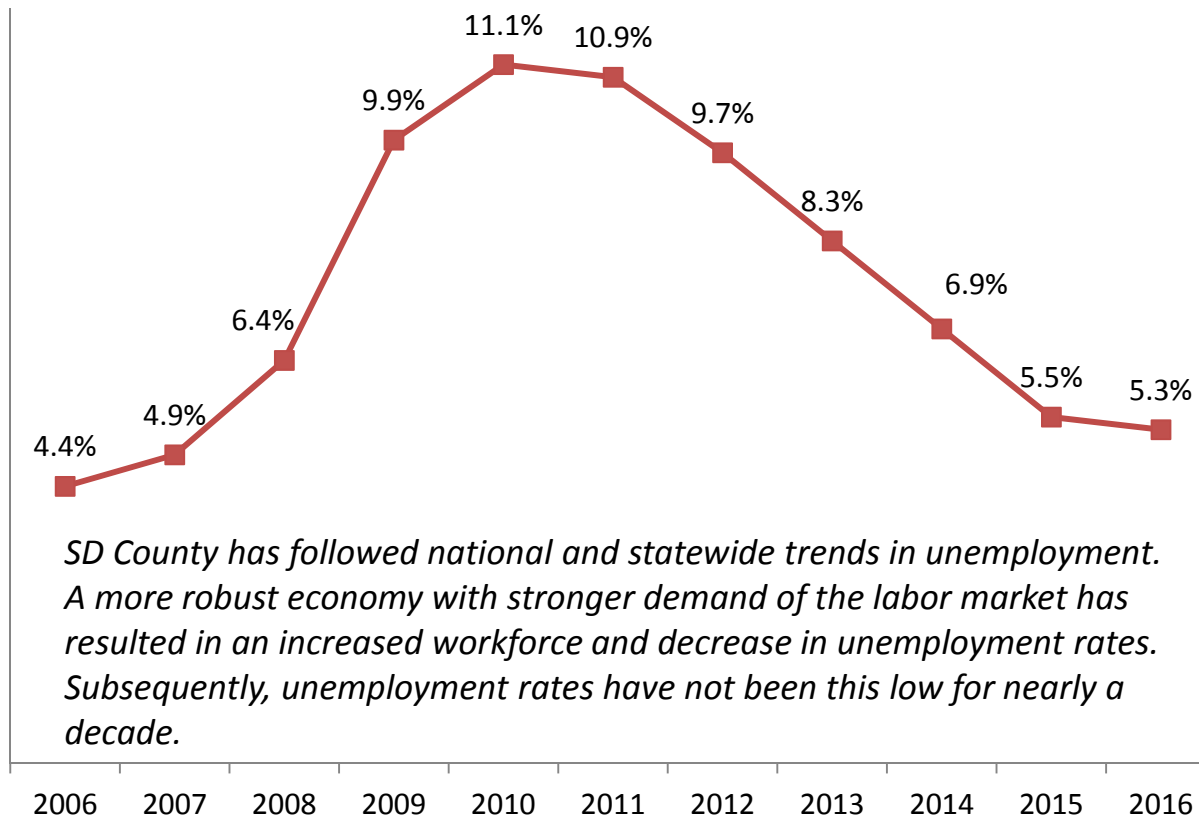


SDCCD Office of Institutional Research and Planning

Source: NCHEMS Information Center and California Community Colleges Chancellor's Office

San Diego County Employment

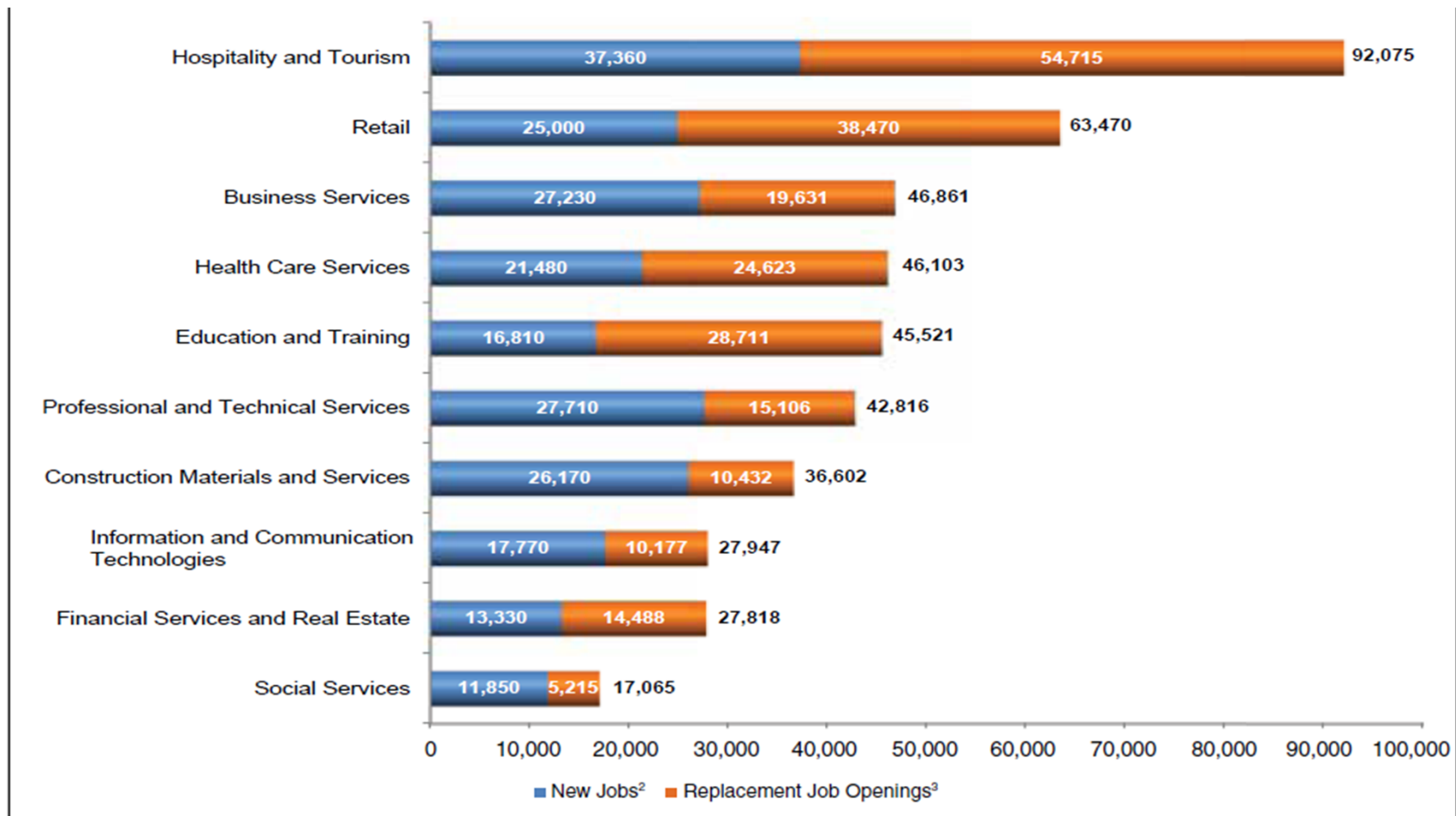
San Diego County Unemployment Rate



| Year | Labor Force | Unemployment | UR |
|------|-------------|--------------|-------|
| 2006 | 1,499,200 | 65,700 | 4.4% |
| 2007 | 1,525,600 | 74,800 | 4.9% |
| 2008 | 1,560,600 | 100,600 | 6.4% |
| 2009 | 1,561,600 | 155,400 | 9.9% |
| 2010 | 1,529,300 | 169,400 | 11.1% |
| 2011 | 1,528,400 | 166,300 | 10.9% |
| 2012 | 1,550,700 | 151,000 | 9.7% |
| 2013 | 1,557,200 | 128,600 | 8.3% |
| 2014 | 1,558,700 | 107,100 | 6.9% |
| 2015 | 1,575,200 | 87,200 | 5.5% |
| 2016 | 1,596,300 | 84,500 | 5.3% |

Note. Data are as of July of each year for San Diego County and based on historical civilian non-farming labor force.

Top Industry Clusters in San Diego



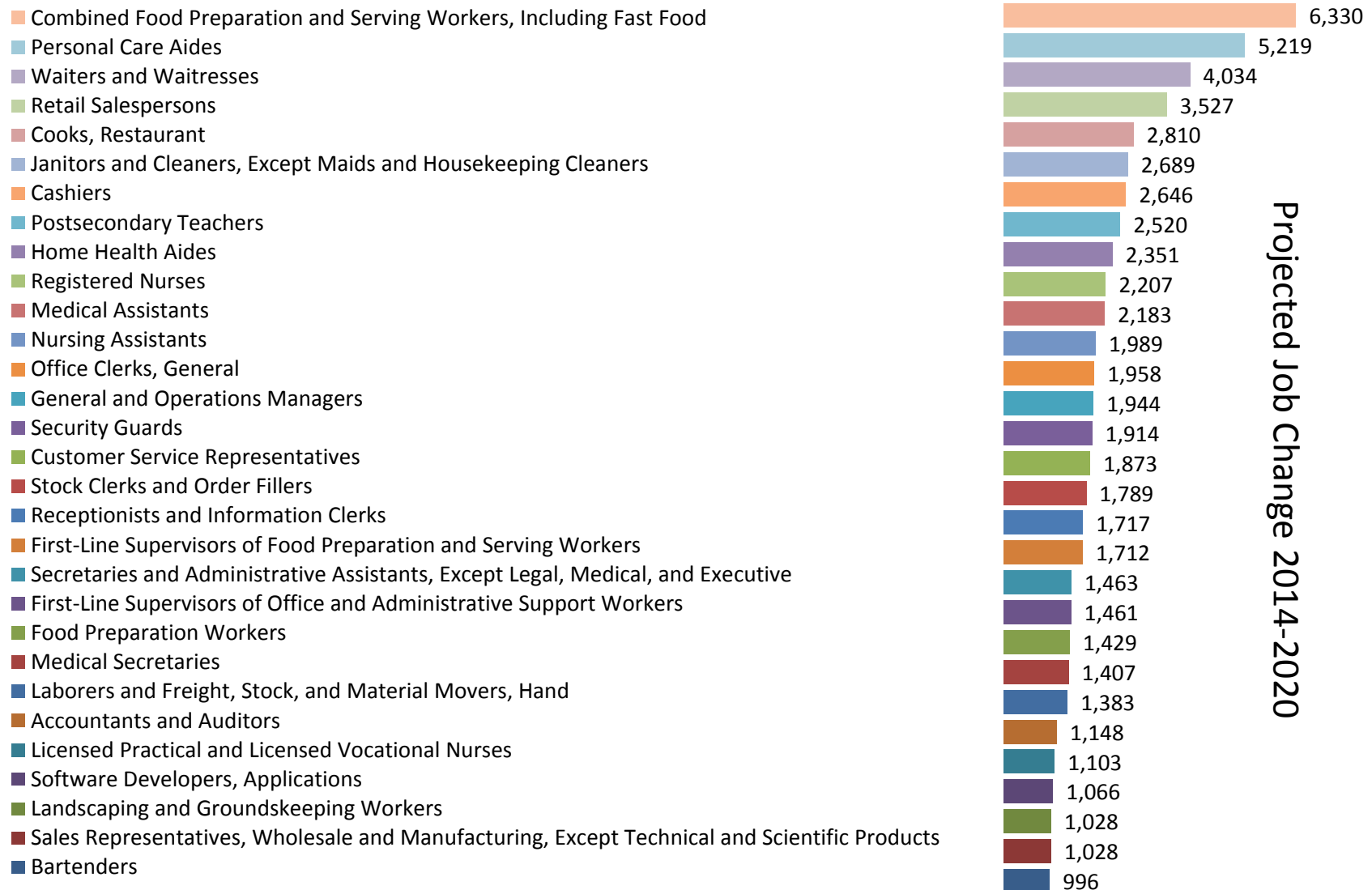
Source: California Employment Development Department, *Projections of Employment 2012-2022*. Industry and occupational employment projections for 2012-2022 in this report may not be directly comparable to the published 2012-2022 employment projections available online at www.labormarketinfo.edd.ca.gov.

¹ Total job openings are the sum of new jobs and replacement job openings.

² New jobs are only openings due to growth and do not include job declines. If an occupation's employment change is negative, there is no job growth and new jobs are set to zero.

³ Replacement job openings estimate the number of job openings created when workers retire or permanently leave an occupation and need to be replaced.

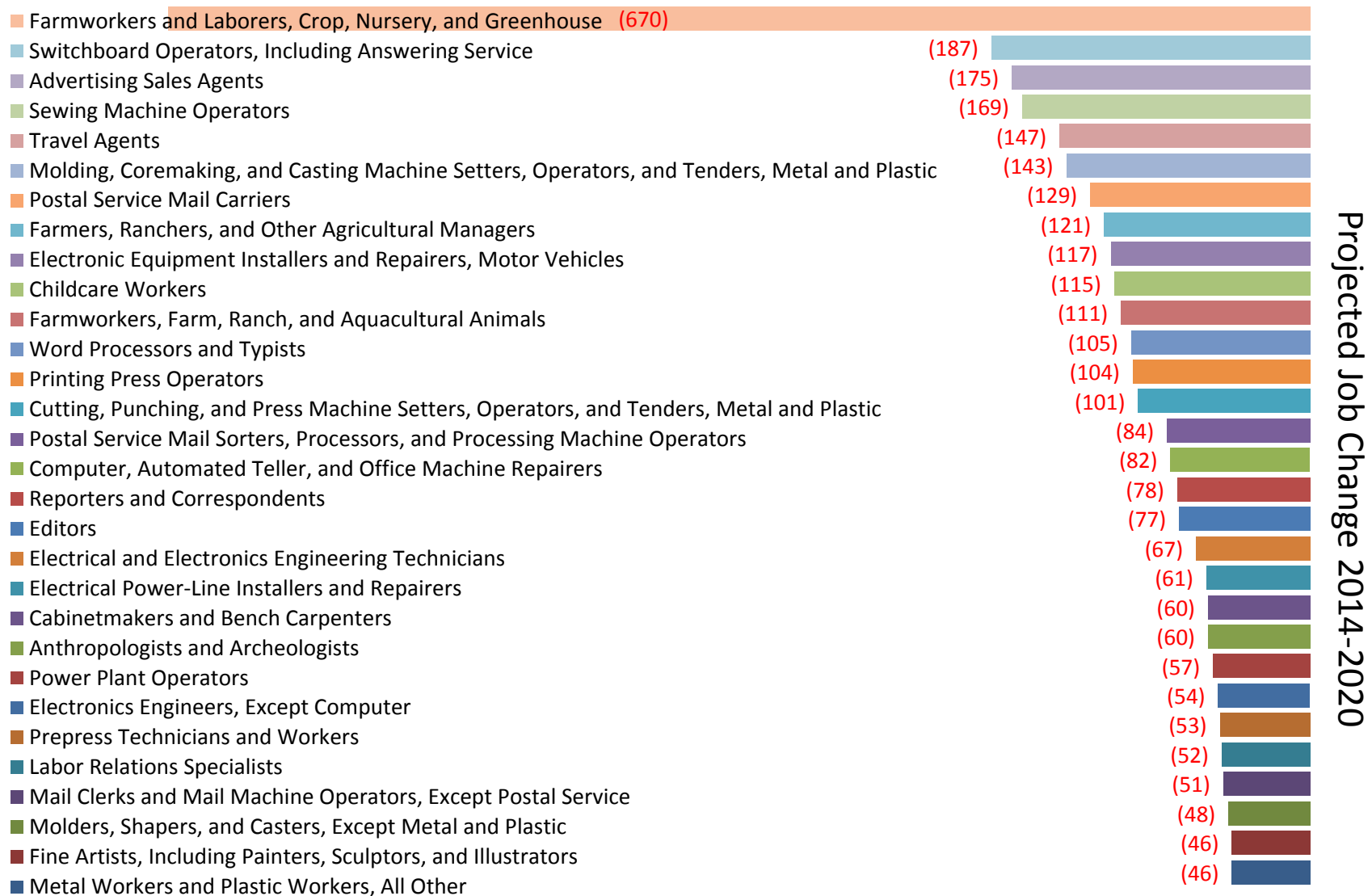
Fastest Growing Occupations: San Diego County



SDCCD Office of Institutional Research and Planning

Source: EDD Labor Market Information Division

Slowest Growing Occupations: San Diego County



SDCCD Office of Institutional Research and Planning

Source: EDD Labor Market Information Division

Highest Occupation Location Quotient

| Occupation | 2014 LQ | 2020 LQ | Change LQ |
|---|---------|---------|-----------|
| Layout Workers, Metal and Plastic | 8.1 | 8.58 | 6% |
| Computer Hardware Engineers | 4.97 | 4.56 | -8% |
| Biochemists and Biophysicists | 4.18 | 4.48 | 7% |
| Microbiologists | 4.21 | 4.06 | -4% |
| Biological Technicians | 3.91 | 3.81 | -3% |
| Manicurists and Pedicurists | 3.73 | 3.65 | -2% |
| Medical Scientists, Except Epidemiologists | 3.41 | 3.54 | 4% |
| Aircraft Structure, Surfaces, Rigging, and Systems Assemblers | 2.59 | 3.37 | 30% |
| Zoologists and Wildlife Biologists | 3.37 | 3.35 | -1% |
| Tapers | 2.63 | 3.35 | 28% |
| Biological Scientists, All Other | 3.34 | 3.32 | -1% |
| Biomedical Engineers | 3.1 | 3.25 | 5% |
| Fine Artists, Including Painters, Sculptors, and Illustrators | 3.85 | 3.13 | -19% |
| Education, Training, and Library Workers, All Other | 3.24 | 3.12 | -4% |
| Electronics Engineers, Except Computer | 3.25 | 3.09 | -5% |
| Mathematicians | 2.91 | 2.85 | -2% |
| Office and Administrative Support Workers, All Other | 2.91 | 2.76 | -5% |
| Therapists, All Other | 3.08 | 2.75 | -11% |
| Electrical and Electronics Drafters | 2.8 | 2.73 | -3% |
| Computer and Information Research Scientists | 2.88 | 2.72 | -5% |

San Diego/Imperial Region Skills Builders

| Sector | Number of Skills-Builders | Number of Completers * |
|---|---------------------------|------------------------|
| Public Safety & Protective Service | 2,382 | 658 |
| Small Business | 1,845 | 1,823 |
| Information & Communication Digital Media | 1,227 | 594 |
| Health | 912 | 1,096 |
| Advanced Manufacturing & Advanced Technology | 727 | 736 |
| Retail / Hospitality / Tourism | 385 | 415 |
| Agriculture, Water & Environmental Technologies | 351 | 204 |
| Advanced Transportation & Renewable Energy | 238 | 216 |
| Energy (Efficiency) & Utilities | 59 | 138 |
| Life Sciences / Biotechnology | 43 | 39 |
| Global Trade & Logistics | 17 | 16 |

Skills Builders are a vital component of the workforce in San Diego County. In fact, in some industry sectors the number of Skills Builders that are employed is actually greater than the number of those with degrees or certificates.

Note. Completers include students who receive associate degrees, or Chancellor's Office approved credit certificates.

Competitive Landscape

SDCCD Office of Institutional Research and Planning

Analysis & Implications

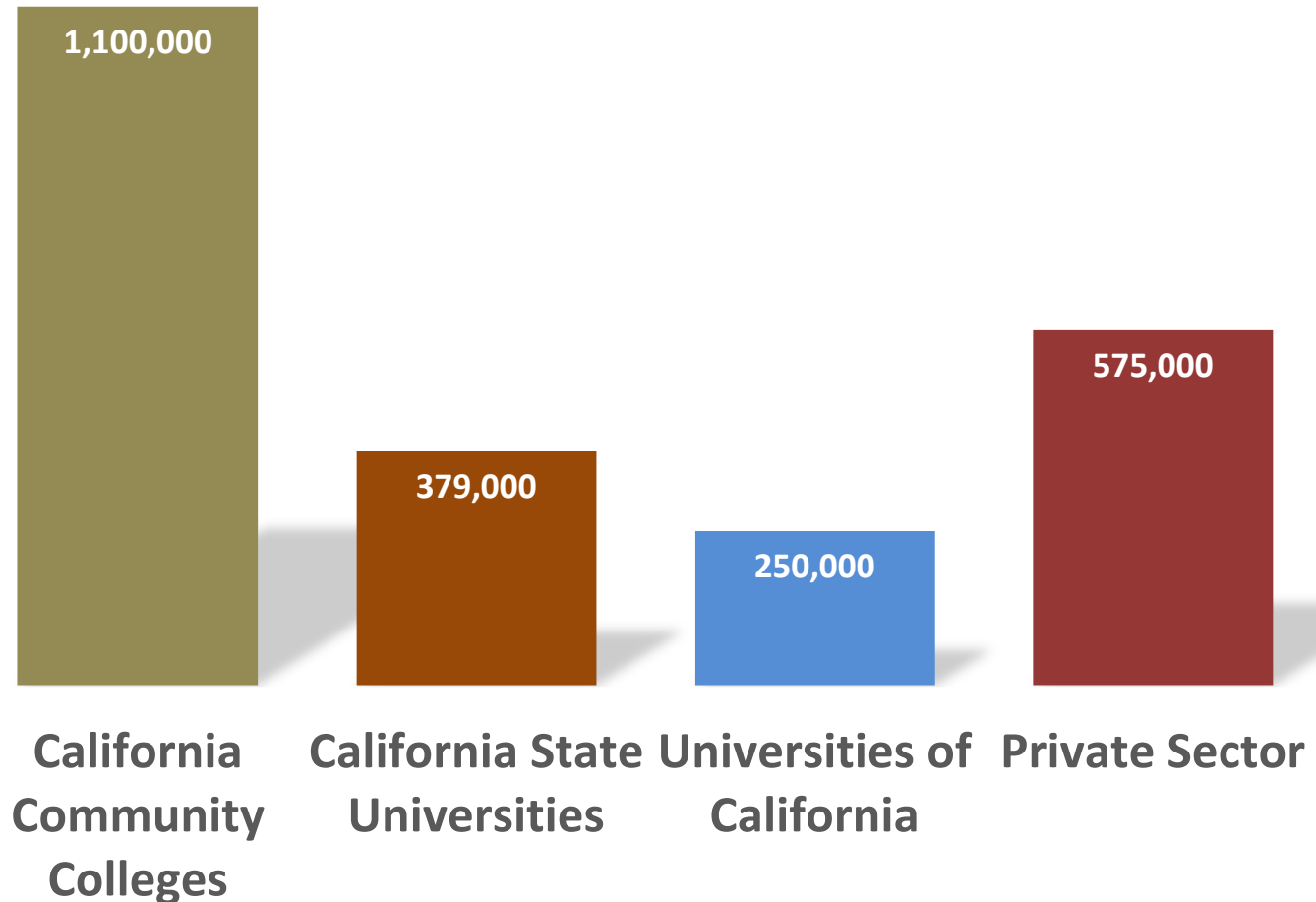
Over the last five years, there has been an increasing number of students enrolled at an SDCCD college who reside outside of the District's service area. Since 2011, there has been a 3% change, from 30% of SDCCD students living outside of the service area to 33%. This is due in part to the increased number of online sections offered; 31% more online sections offered in 2015/16 than in 2011/12, compared to 6% more on-campus sections during this same timeframe. The percentage of these online students that live outside of the SDCCD service area has increased from 39% in Fall 2011 to 43% in Fall 2016. Students are increasingly mobile as a result of the use of technological advances that allows them to choose courses and programs from a much broader range of colleges and institutions. Consequently, the competitive landscape has shifted dramatically.

Although the top selected majors that students identify has not changed much over the past five to ten years, the number of colleges in the San Diego/Imperial region that offer these majors has changed. There are many degree and certificate programs that are duplicated by multiple colleges in the region causing high saturation of programs offered in some areas. As a result, the colleges individually may be struggling with declining enrollments and producing fewer completers in these highly saturated majors. For example, although Administration of Justice continues to be a top selected major, there are six credit colleges out of nine in the region that offer eight different degrees in this major (i.e., A.S. and ADTs). Business Administration, Child Development, and Psychology are other majors that are top selected and offered at seven or more colleges in the region totaling ten or more degrees each. Many certificate granting programs are similarly saturated in the region. For example, an Accounting certificate of 60 units or more is offered at six colleges in the San Diego/Imperial region, and Child Development, and Office Technology at seven colleges. The 30-59 unit certificates in these same program areas are also saturated by competing programs at colleges in the region. For example, Real Estate in this certificate category is offered at six of the colleges in the region and Office Technology/Office Computer Applications at eight colleges.

Although enrollments in Real Estate and Information Technology courses have grown significantly over the past five years (38% and 37% respectively), other programs that are highly saturated in the region do not show the same level of growth. For example, Administration of Justice shows an 11% decrease over the past five years, and Office Technology/Office Computer Applications shows a 29% decrease in enrollment.

A program's competitive advantage can be maintained by its unique curriculum offering, as well as by the level of demand in the industry. Industry and four year university partnerships and the overall reputation of the program become vital components of a thriving program. With so many options available to students and the increased mobility and accessibility of courses and programs, the colleges must take into consideration more than ever the demand for programs in all areas.

Enrollment by Segment



SDCCD Office of Institutional Research and Planning

Source: Legislative Analyst's Office 2015-16 Budget: Higher Education Analysis

2015/16 Top Selected Majors

Degrees

| |
|---|
| Administration of Justice for Transfer |
| Biology - Allied Health |
| Business Administration |
| Business Administration for Transfer |
| Child Development |
| Communications for Transfer |
| Fire Protection Technology-Fire Technology |
| History for Transfer |
| Kinesiology for Transfer |
| Liberal Arts and Sciences: Business Studies |
| Liberal Arts and Sciences: Language Arts and Humanities |
| Liberal Arts and Sciences: Social and Behavioral Sciences |
| Liberal Arts and Sciences-Kinesiology and Nutrition |
| Liberal Arts and Science-Social Sciences |
| Mathematics Studies |
| Nursing Education: LVN to RN |
| Nursing Education: LVN to RN Licensure |
| Nursing Education: Registered Nurse Generic |
| Political Science for Transfer |
| Psychology for Transfer |
| Social and Behavioral Sciences |
| Sociology for Transfer |

Certificates

| |
|--|
| Accounting |
| Automotive Chassis |
| Automotive Electrical |
| Automotive Engine Performance |
| Automotive Transmission |
| Aviation Maintenance Technology-Airframe |
| Aviation Maintenance Technology-Powerplant |
| Behavioral Sciences-Alcohol and Other Drug Studies |
| Building Trades-Electrical |
| Business Administration |
| Child Development-Associate Teacher |
| Child Development-Teacher |
| Cosmetology |
| Culinary Arts/Culinary Management in Hospitality |
| Dental Assisting |
| Electricity |
| Esthetician |
| Fire Protection Technology-Fire Technology |
| Fitness Specialist |
| Mental Health Work |

SDICCCA Market Saturation: Degrees

| TOP | Program | No. of Degrees Offered | No. of Colleges Offering Degrees | TOP | Program | No. of Degrees Offered | No. of Colleges Offering Degrees |
|--------|---|------------------------|----------------------------------|--------|--|------------------------|----------------------------------|
| 050200 | Accounting | 9 | 7 | 490300 | Humanities | 7 | 7 |
| 210500 | Administration of Justice | 8 | 6 | 490310 | Humanities and Fine Arts | 7 | 7 |
| 100200 | Art | 8 | 8 | 490100 | Liberal Arts and Sciences, General | 13 | 9 |
| 094800 | Automotive Technology | 8 | 6 | 490120 | Liberal Studies | 8 | 7 |
| 490200 | Biological and Physical Sciences (and Mathematics) | 12 | 8 | 170100 | Mathematics, General | 12 | 9 |
| 040100 | Biology, General | 13 | 9 | 100400 | Music | 9 | 9 |
| 050500 | Business Administration | 14 | 9 | 051400 | Office Technology/Office Computer Applications | 13 | 9 |
| 050600 | Business Management | 11 | 8 | 083500 | Physical Education | 11 | 9 |
| 190500 | Chemistry, General | 9 | 8 | 190200 | Physics, General | 8 | 7 |
| 130500 | Child Development/Early Care and Education | 13 | 8 | 200100 | Psychology, General | 10 | 7 |
| 070200 | Computer Information Systems | 8 | 6 | 051100 | Real Estate | 7 | 6 |
| 100800 | Dance | 6 | 6 | 123010 | Registered Nursing | 8 | 6 |
| 100700 | Dramatic Arts | 6 | 6 | 220100 | Social Sciences, General | 8 | 6 |
| 090100 | Engineering, General (requires Calculus) (Transfer) | 9 | 7 | 110500 | Spanish | 7 | 7 |
| 150100 | English | 9 | 9 | 150600 | Speech Communication | 9 | 9 |
| 110200 | French | 7 | 7 | 490110 | Transfer Studies | 12 | 8 |
| 220500 | History | 8 | 7 | | | | |

SDCCD Office of Institutional Research and Planning

Source: CCCC Datamart

SDICCCA Market Saturation: ADTs

| TOP | Programs | No. of Degrees Offered | No. of Colleges Offering Degrees |
|--------|---------------------------|------------------------|----------------------------------|
| 210500 | Administration of Justice | 6 | 6 |
| 220200 | Anthropology | 5 | 5 |
| 100200 | Art | 6 | 6 |
| 050500 | Business Administration | 9 | 9 |
| 150100 | English | 8 | 8 |
| 220500 | History | 8 | 8 |
| 170100 | Mathematics, General | 9 | 9 |
| 190200 | Physics, General | 6 | 6 |
| 220700 | Political Science | 7 | 7 |
| 200100 | Psychology, General | 7 | 7 |
| 220800 | Sociology | 8 | 8 |
| 150600 | Speech Communication | 7 | 7 |

SDICCCA Market Saturation: Certificates

18<30 Units

| TOP | Program | No. of Certificates Offered | No. of Colleges Offering Certificates |
|--------|--|-----------------------------|---------------------------------------|
| 50200 | Accounting | 5 | 5 |
| 210500 | Administration of Justice | 4 | 4 |
| 94800 | Automotive Technology | 5 | 5 |
| 50600 | Business Management | 4 | 4 |
| 130500 | Child Development/Early Care and Education | 5 | 5 |
| 95300 | Drafting Technology | 4 | 4 |
| 83520 | Fitness Trainer | 5 | 5 |
| 51410 | Legal Office Technology | 4 | 4 |
| 51400 | Office Technology/Office Computer Applications | 8 | 8 |
| 51100 | Real Estate | 6 | 6 |

* None of the SDCCD colleges have awarded certificates in this program in the past ten years.

30<60 Units

| TOP | Certificate 30-59 Unit Program | No. of Certificates Offered | No. of Colleges Offering Certificates |
|--------|--|-----------------------------|---------------------------------------|
| 50200 | Accounting | 6 | 6 |
| 20100 | Architecture and Architectural Technology | 4 | 4 |
| 50500 | Business Administration | 5 | 5 |
| 50600 | Business Management | 5 | 5 |
| 130500 | Child Development/Education | 7 | 7 |
| 70200 | Computer Information Systems | 4 | 4 |
| 70810 | Computer Networking* | 5 | 5 |
| 130630 | Culinary Arts | 4 | 4 |
| 83520 | Fitness Trainer | 4 | 4 |
| 61410 | Multimedia | 4 | 4 |
| 51400 | Office Technology/Office Computer Applications | 7 | 7 |
| 140200 | Paralegal | 4 | 4 |
| 50650 | Retail Operations/Management | 4 | 4 |
| 490110 | Transfer Studies | 8 | 8 |
| 61430 | Website Design & Development | 4 | 4 |

SDICCCA Market Saturation: Certificates

6<18 Units

| TOP | Program | No. of Certificates Offered | No. of Colleges Offering Certificates |
|--------|--|-----------------------------|---------------------------------------|
| 050200 | Accounting | 5 | 5 |
| 094800 | Automotive Technology | 4 | 4 |
| 050600 | Business Management | 6 | 6 |
| 130500 | Child Development/Early Care and Education | 9 | 9 |
| 070810 | Computer Networking | 5 | 5 |
| 070710 | Computer Programming | 4 | 4 |
| 103000 | Graphic Art and Design* | 4 | 4 |
| 061410 | Multimedia | 4 | 4 |
| 100400 | Music | 4 | 4 |
| 051400 | Office Technology/Office Computer Applications | 9 | 9 |
| 051100 | Real Estate | 4 | 4 |
| 070210 | Software Applications | 4 | 4 |
| 061430 | Website Design and Development* | 5 | 5 |

12<18 Units

| TOP | Program | No. of Certificates Offered | No. of Colleges Offering Certificates |
|--------|---|-----------------------------|---------------------------------------|
| 094800 | Automotive Technology | 2 | 2 |
| 043000 | Biotechnology and Biomedical Technology | 2 | 2 |
| 070210 | Software Applications* | 2 | 2 |

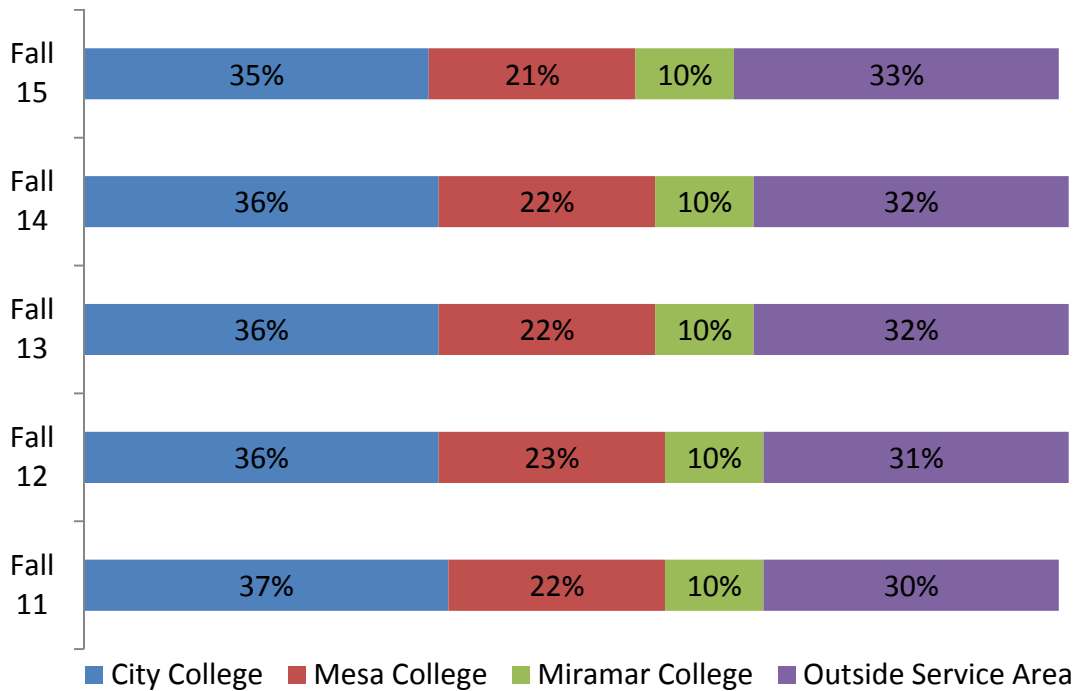
*None of the SDCCD colleges have awarded certificates in this program in the past ten years.

SDCCD Programs w/the Fewest Degrees Awarded: 2011-2015

| | | | |
|--------|---|--------|---|
| 210440 | Alcohol and Controlled Substances | 110900 | Latin |
| 040100 | Biology, General | 050900 | Marketing and Distribution |
| 043000 | Biotechnology and Biomedical Technology | 170100 | Mathematics, General |
| 190500 | Chemistry, General | 051420 | Medical Office Technology |
| 100500 | Commercial Music | 150900 | Philosophy |
| 061220 | Film Production | 190200 | Physics, General |
| 191400 | Geology | 200100 | Psychology, General |
| 130900 | Gerontology | 100220 | Sculpture |
| 490100 | Liberal Arts and Sciences, General | 085000 | Sign Language |
| 061410 | Multimedia | 085010 | Sign Language Interpreting |
| 094740 | Railroad and Light Rail Operations | 010210 | Veterinary Technician (Licensed) |
| 051100 | Real Estate | 111720 | Vietnamese |
| 050650 | Retail Store Operations and Management | 100900 | Applied Design |
| 220800 | Sociology | 040100 | Biology, General |
| 095360 | Technical Illustration | 043000 | Biotechnology and Biomedical Technology |
| 050200 | Accounting | 050500 | Business Administration |
| 040100 | Biology, General | 190500 | Chemistry, General |
| 100230 | Ceramics | 130500 | Child Development/Early Care and Education |
| 130500 | Child Development/Early Care and Education | 210510 | Corrections |
| 130630 | Culinary Arts | 090100 | Engineering, General (requires Calculus) (Transfer) |
| 090100 | Engineering, General (requires Calculus) (Transfer) | 490330 | Humanities and Social Sciences |
| 130320 | Fashion Merchandising | 170100 | Mathematics, General |
| 100100 | Fine Arts, General | 219900 | Other Public and Protective Services |
| 220610 | Geographic Information Systems | 083500 | Physical Education |
| 110300 | German | 200100 | Psychology, General |
| 103000 | Graphic Art and Design | 490110 | Transfer Studies |
| 095500 | Laboratory Science Technology | | |

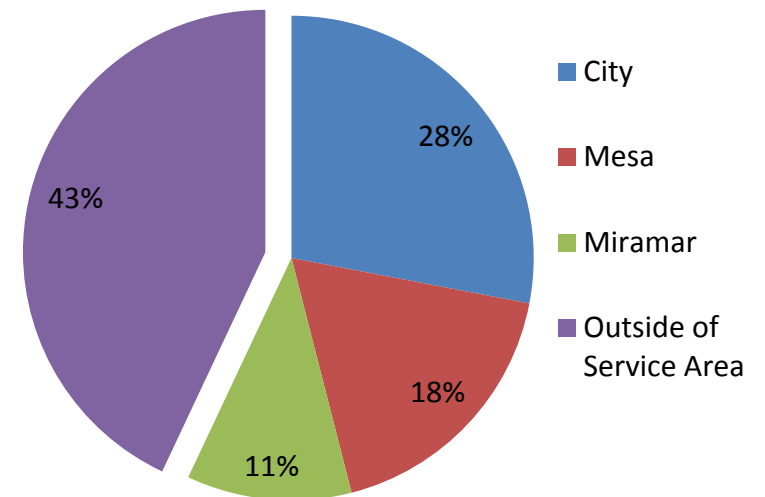
Enrollment by Service Area of Residence

All Students



An increasing number of students at the credit colleges reside outside of the SDCCD service area, particularly at Miramar College where on average 26% are from the college's service area compared to 47% at City and 29% at Mesa.

Fall 2016 Online Students



The percentage of online students who reside outside of the service area is even higher than the overall percentage, and has increased from 39% to 43% in just five years.

Demographic Trends

SDCCD Office of Institutional Research and Planning

Analysis & Implications

Millennials, or America's youth born between 1982 and 2000, now number 83.1 million and represent more than one quarter of the nation's population. Their size exceeds that of the 75.4 million baby boomers, according to new U.S. Census Bureau estimates released in 2015. Overall, millennials are more diverse than the generations that preceded them, with 44% being part of a minority race or ethnic group (that is, a group other than non-Hispanic, single-race White). Even more diverse than millennials are the youngest Americans: those younger than 5 years old. In 2014, this group became majority-minority for the first time, with 50% being part of a minority race or ethnic group. Reflecting these younger age groups, the population as a whole has become more racially and ethnically diverse in just the last decade, with the percentage of minority groups climbing from 33% in 2004 to 37.9 percent in 2014.¹

California continued to experience moderate population growth in 2014/15 (1%). As of mid-2014, there were an estimated 38.5 million people residing in California. The population is projected to increase to 38.9 million by July 2015 and 39.2 million by July 2016, reflecting short-term growth rates of 1% in 2015 and 2016. Over the next five years, the state will average growth of 351,000 residents annually. Late in 2018, California's population will hit 40 million and by July 2019, the state will grow to 40.3 million, a five-year growth rate of 4.6 percent. Although fertility rates have declined since 2007, natural increase (births minus deaths) will account for most of the growth during this time. Currently, nearly 9.2 million Californians are less than 18 years old. California has a younger population than the remainder of the United States, with a slightly higher percentage of the population younger than 18 years old, a lower percentage 65 and older, and a younger median age. A key cohort for California's future is comprised of those born as part of the "baby echo," generally born to one or both parents from the baby boom. The largest five-year cohort in California and in the U.S. is the 20 to 24 year-old age group. As the baby boomers reach retirement, economic opportunities for these young adults will increase. ² California had the largest Hispanic population of any state in 2014 (15.0 million). More than 3.2 million children, or 40% of all children under the age of 18 in California, are in working low-income families. Compared to the national proportion (20%), California households (43%) are twice as likely to speak a language other than English. Compared to the national proportion (20%), California households (43%) are twice as likely to speak a language other than English. ³

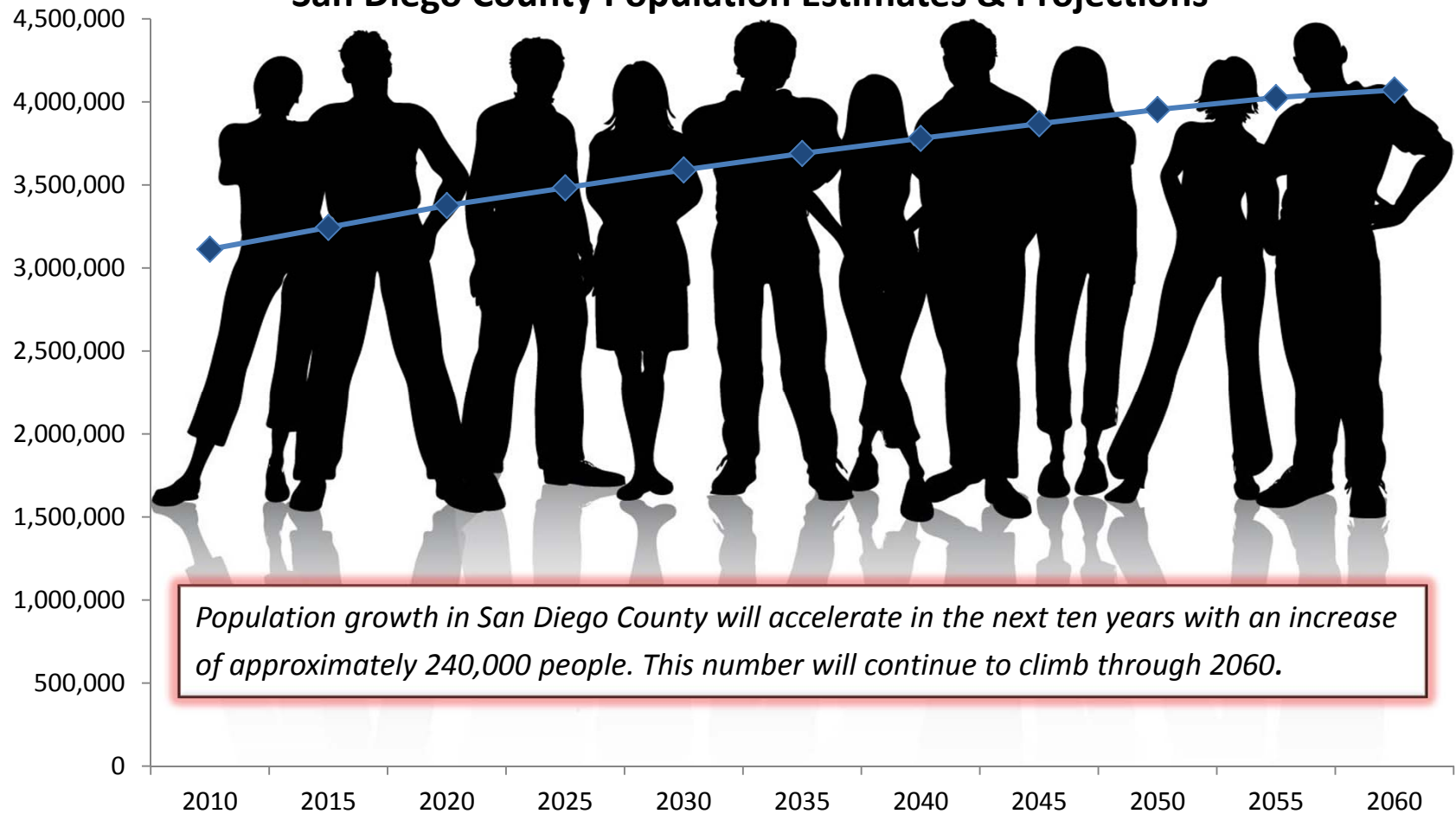
San Diego County is an ethnically diverse and culturally rich region that will experience substantial population growth over the next ten years. Significant changes within the region's underlying demographic profile will largely influence education planning and workforce development. The Latino population is projected to see the greatest expansion, becoming San Diego County's largest ethnic group by 2050. The number of residents age 65 and older is expected to double within the same time period, leading to an older age profile in the region. As the county's population grows in size and diversity, SDCCD will serve as a gateway to educational opportunity for residents of all economic, social, and ethnic backgrounds. SDCCD student demographics will likely follow county trends with respect to age and ethnicity, signifying a greater number of older adult learners and a growing Latino population. Educational attainment has a much greater impact on economic opportunities than it had in previous decades. With Latinos representing the largest ethnic group at SDCCD and on the verge of becoming the largest single population group in the county, patterns of economic disparity become a major concern in the sustainability of educational and economic competitiveness. Improved access to student services including financial aid and DSPS will enhance student outcomes by reducing barriers to success and allowing students to focus on the achievement of their educational goals. Eligibility criteria for many of these services is evolving, as in the case of the Board of Governors (BOG) Fee Waiver that now requires satisfactory academic progress for renewal. To increase student awareness of these ongoing changes, communication and outreach remain a primary focus in keeping students informed and involved. SDCCD will continue to expand and improve existing programs to enhance students' access and participation in student services.

SDCCD Office of Institutional Research and Planning

1. US Census, American Factfinder 2. Governor's Budget Summary 2015-16 3. US Census State and County Quick Facts

Population Projections

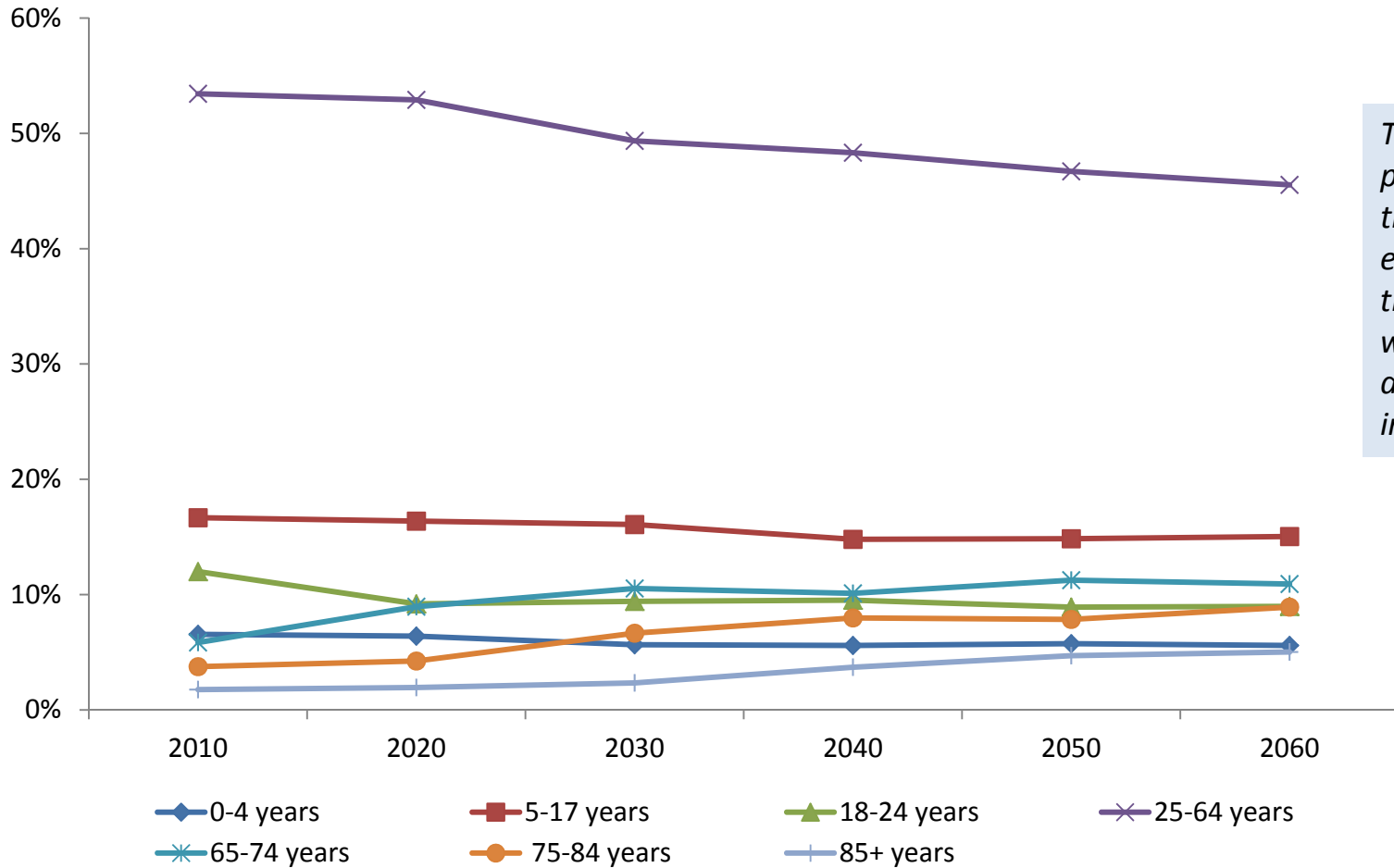
San Diego County Population Estimates & Projections



SDCCD Office of Institutional Research and Planning

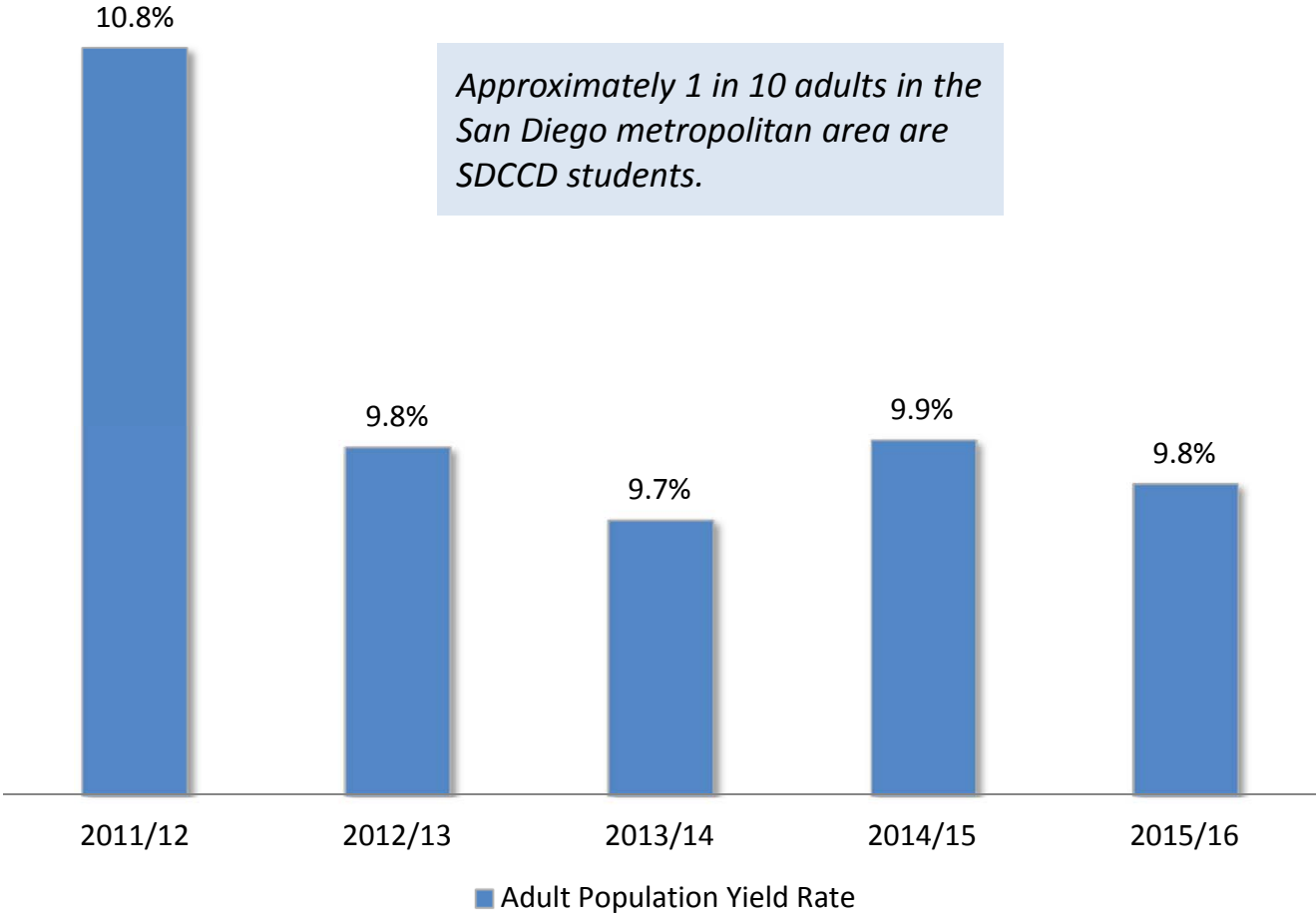
Source: California Department of Finance

SD County Population Projections: Age



The proportion of the population between the ages 18 and 24 is expected to decline in the next five years, while those age 65 and older will increase.

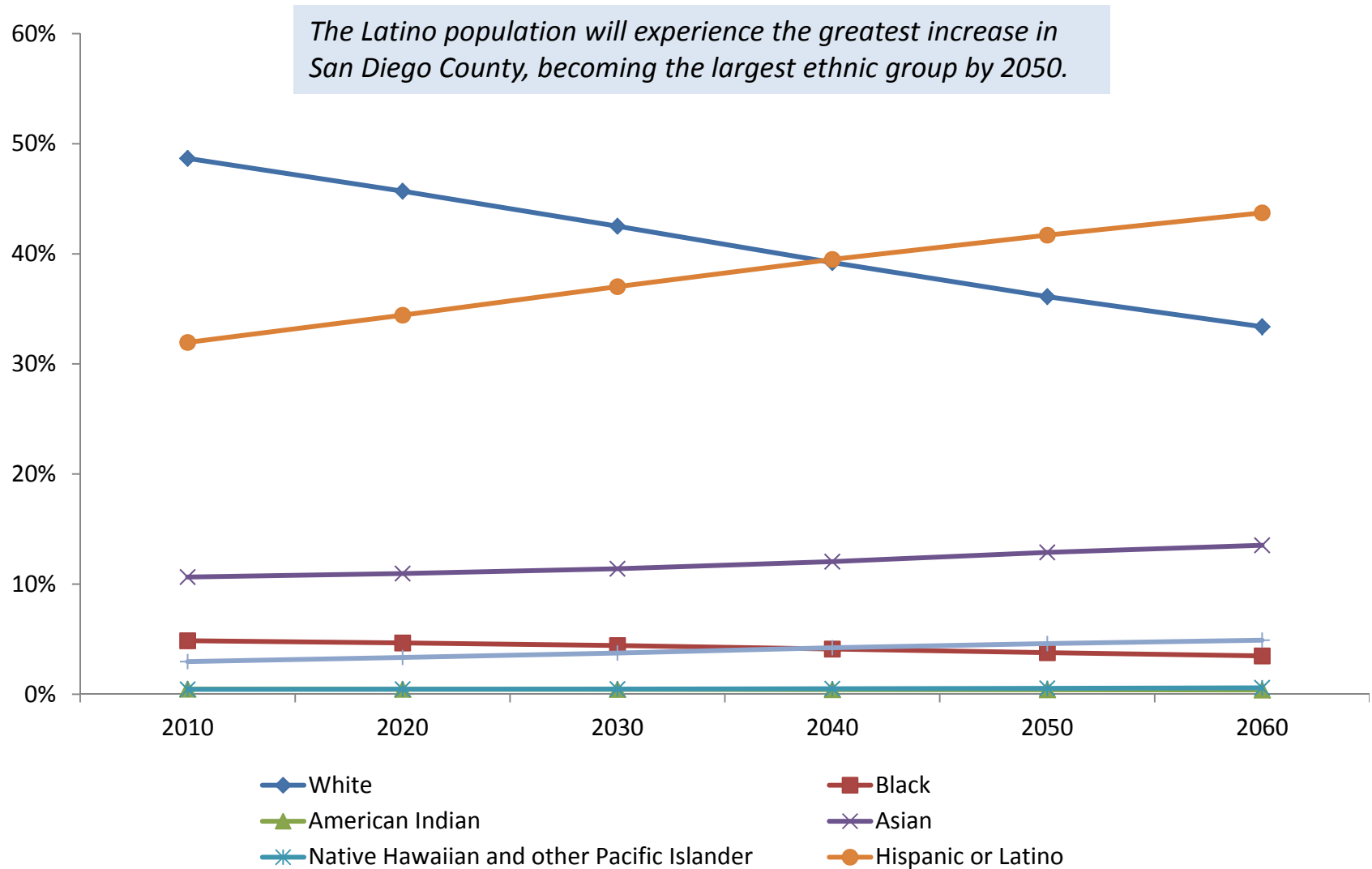
Adult Population Yield Rates



| | SDCCD Headcount per 1,000 Residents |
|---------|-------------------------------------|
| 2011/12 | 108 |
| 2012/13 | 98 |
| 2013/14 | 96 |
| 2014/15 | 98 |
| 2015/16 | 97 |

Note. Yield rates are based on SDCCD annual headcount per 1,000 adult residents in the San Diego Metropolitan area.

SD County Population Projections: Ethnicity

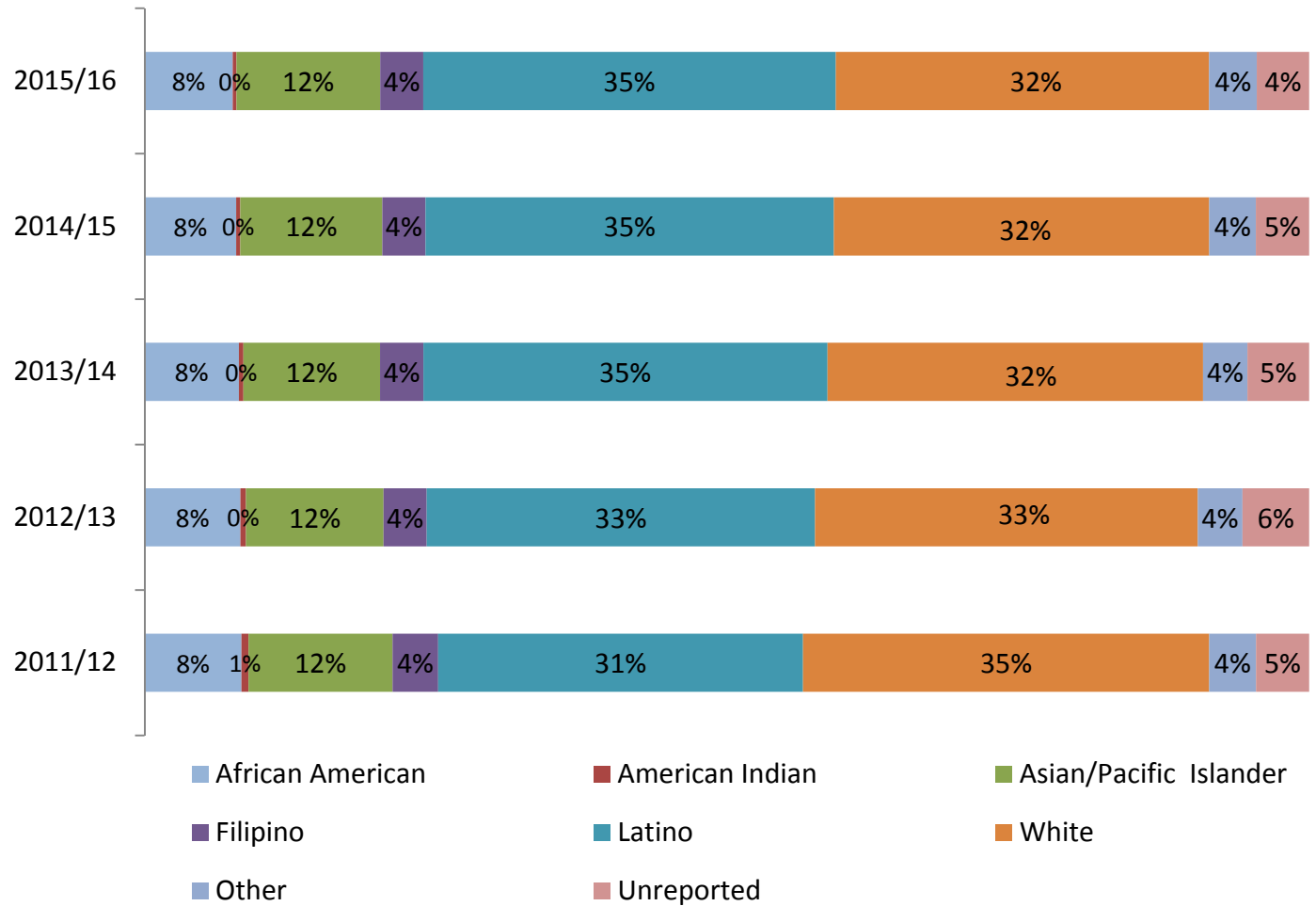


SDCCD Office of Institutional Research and Planning

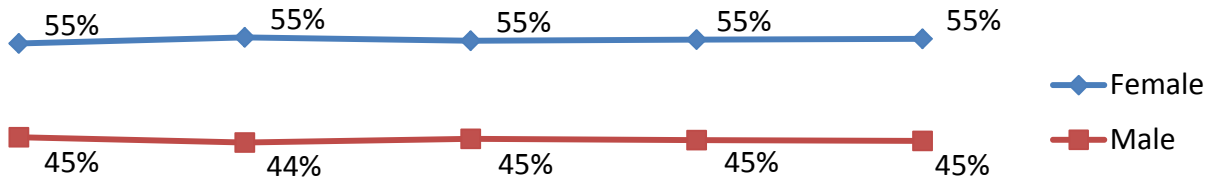
Source: SANDAG

SDCCD Students: Ethnicity

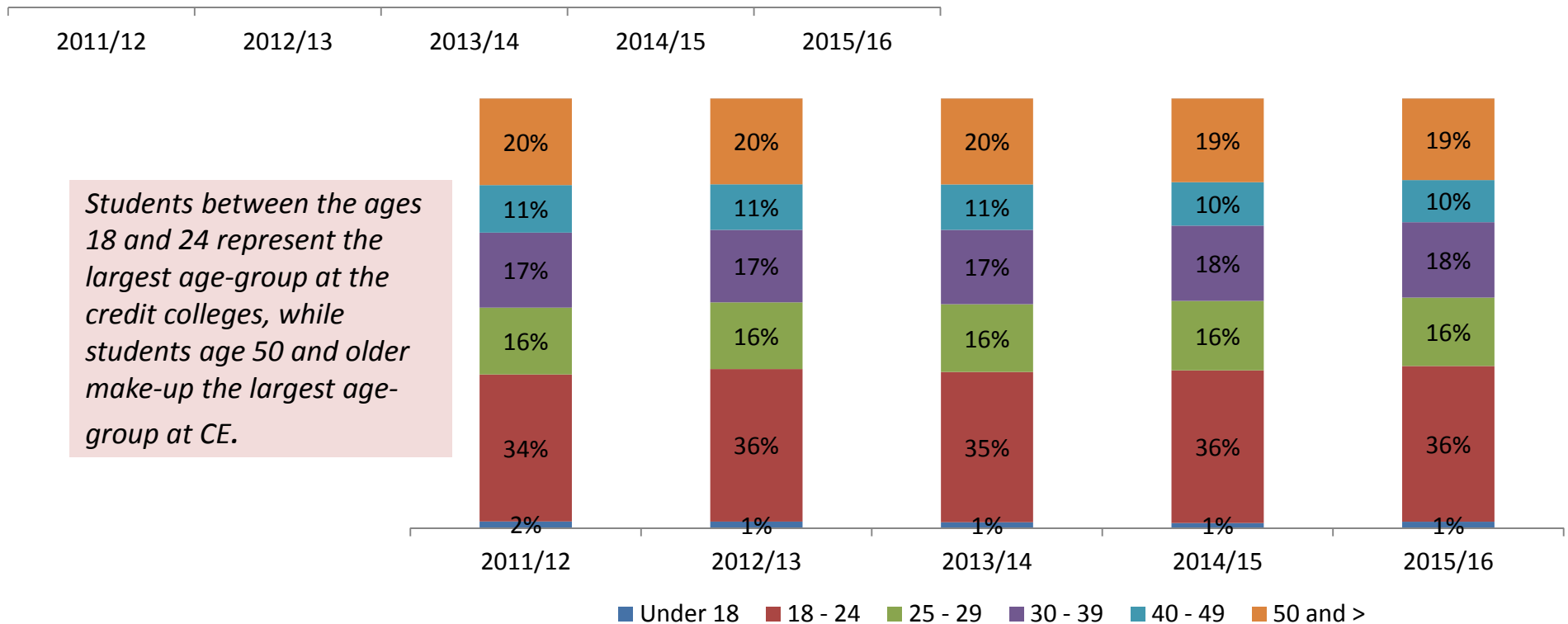
The Latino student population has grown the most over the last five years, and represents the largest ethnic-group districtwide.



SDCCD Students: Gender & Age



Historically, the female student population at SDCCD has been larger proportionally than the male student population.

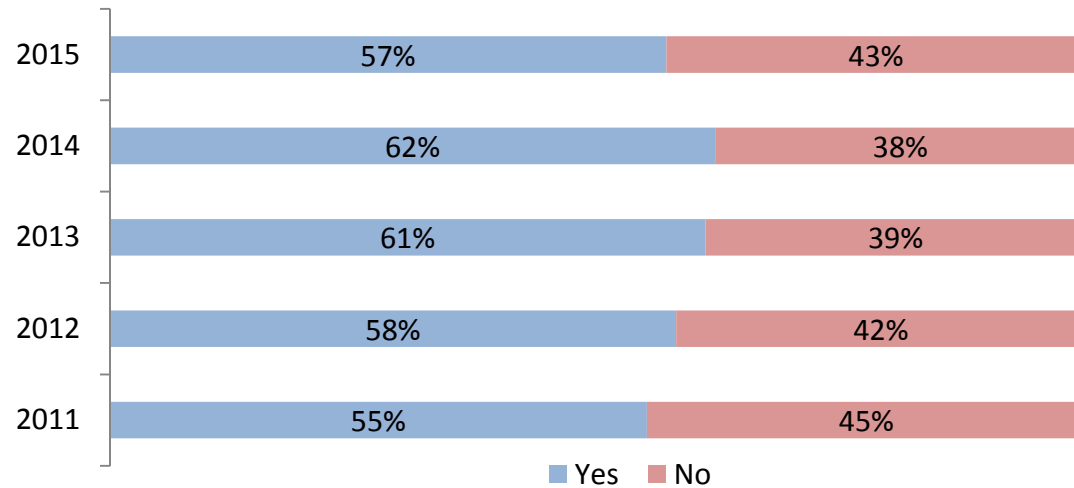


Students between the ages 18 and 24 represent the largest age-group at the credit colleges, while students age 50 and older make-up the largest age-group at CE.

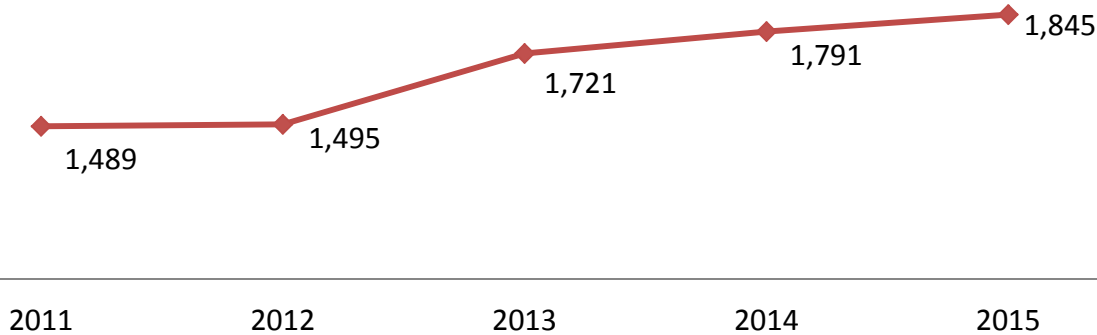
SDCCCD Students: Financial Aid & DSPS

Recent changes in Financial Aid requirements have impacted the number of students who qualify for assistance.

Financial Aid Recipients



DSPS Students



Improved DSPS assessments and legislative expansion in the scope of disability categories have increased access and participation in disability support services and programs.

Access and Equity Gaps

| | Fall 2015 Students | San Diego Metro | Point Gap Index |
|--------|--------------------|-----------------|-----------------|
| Female | 56% | 50% | 6% |
| Male | 44% | 50% | -6% |

| | Fall 2015 Students | San Diego Metro | Point Gap Index |
|------------------------|--------------------|-----------------|-----------------|
| African American | 7% | 6% | 1% |
| American Indian | 0% | 0% | 0% |
| Asian/Pacific Islander | 13% | 10% | 3% |
| Filipino | 4% | 6% | -2% |
| Latino | 36% | 30% | 6% |
| White | 32% | 43% | -11% |
| Other Race | 4% | 2% | 2% |
| Unreported | 4% | 3% | 1% |

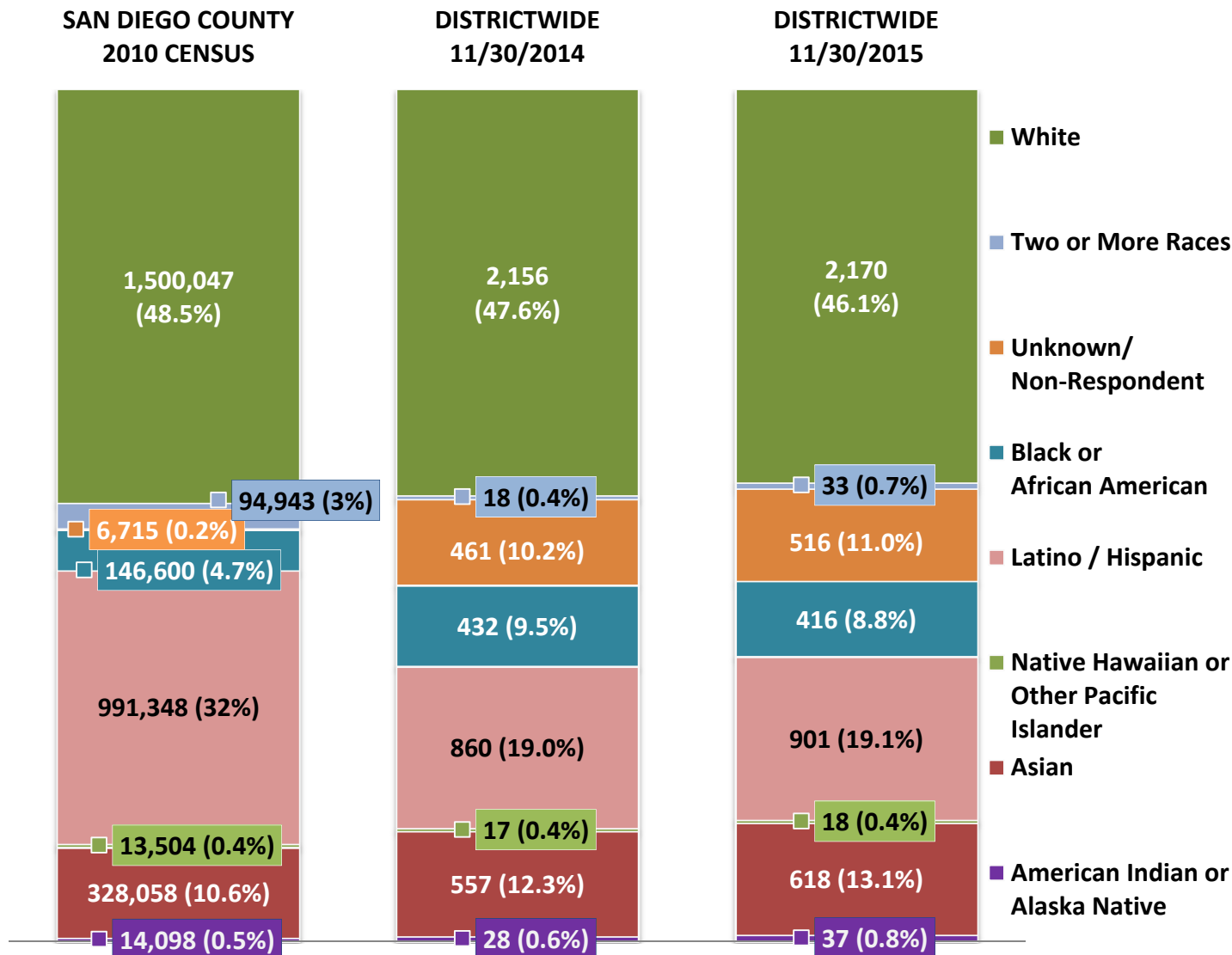
| | Fall 2015 Students | San Diego Metro | Point Gap Index |
|-------------|--------------------|-----------------|-----------------|
| Veteran | 12% | 10% | 2% |
| Not Veteran | 88% | 90% | -2% |

SDCCD students represent the service area in some demographic categories, but show a higher ratio of female and younger adults than the service area, and a greater proportion of African Americans, Asian/Pacific Islanders, and Latinos. The veteran population is also well represented at SDCCD as is the economically disadvantaged population.

| | Fall 2015 Students | San Diego Metro | Point Gap Index |
|----------|--------------------|-----------------|-----------------|
| Under 18 | 2% | 21% | -19% |
| 18 - 24 | 40% | 11% | 29% |
| 25 - 29 | 15% | 9% | 6% |
| 30 - 39 | 16% | 16% | 0% |
| 40 - 49 | 9% | 13% | -4% |
| 50 and > | 18% | 29% | -11% |

| | Fall 2013 Students | San Diego Metro | Point Gap Index |
|--------------------------------|--------------------|-----------------|-----------------|
| Economically Disadvantaged | 43% | 15% | 28% |
| Not Economically Disadvantaged | 57% | 85% | -28% |

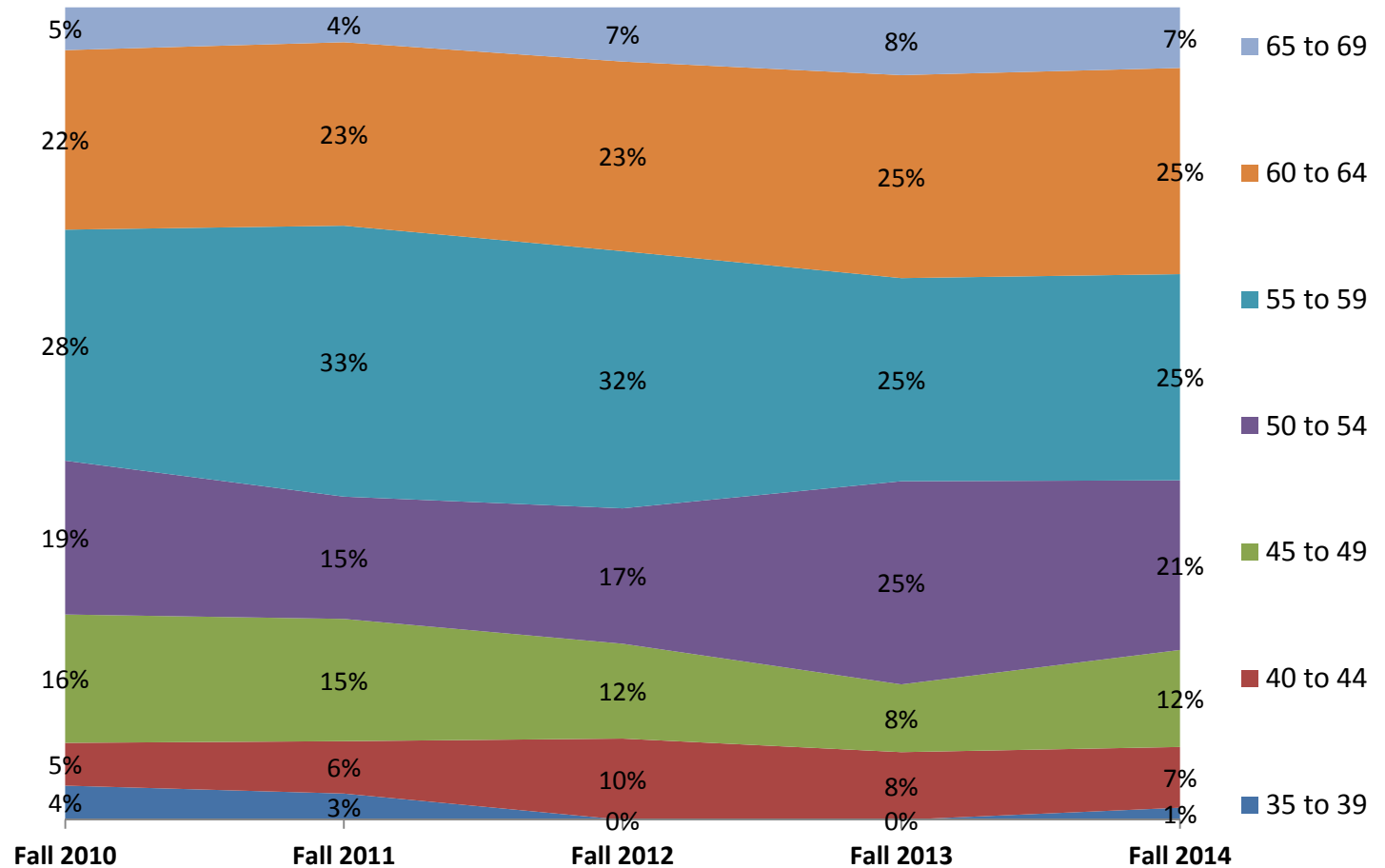
SD County & SDCCD Employees: Ethnicity



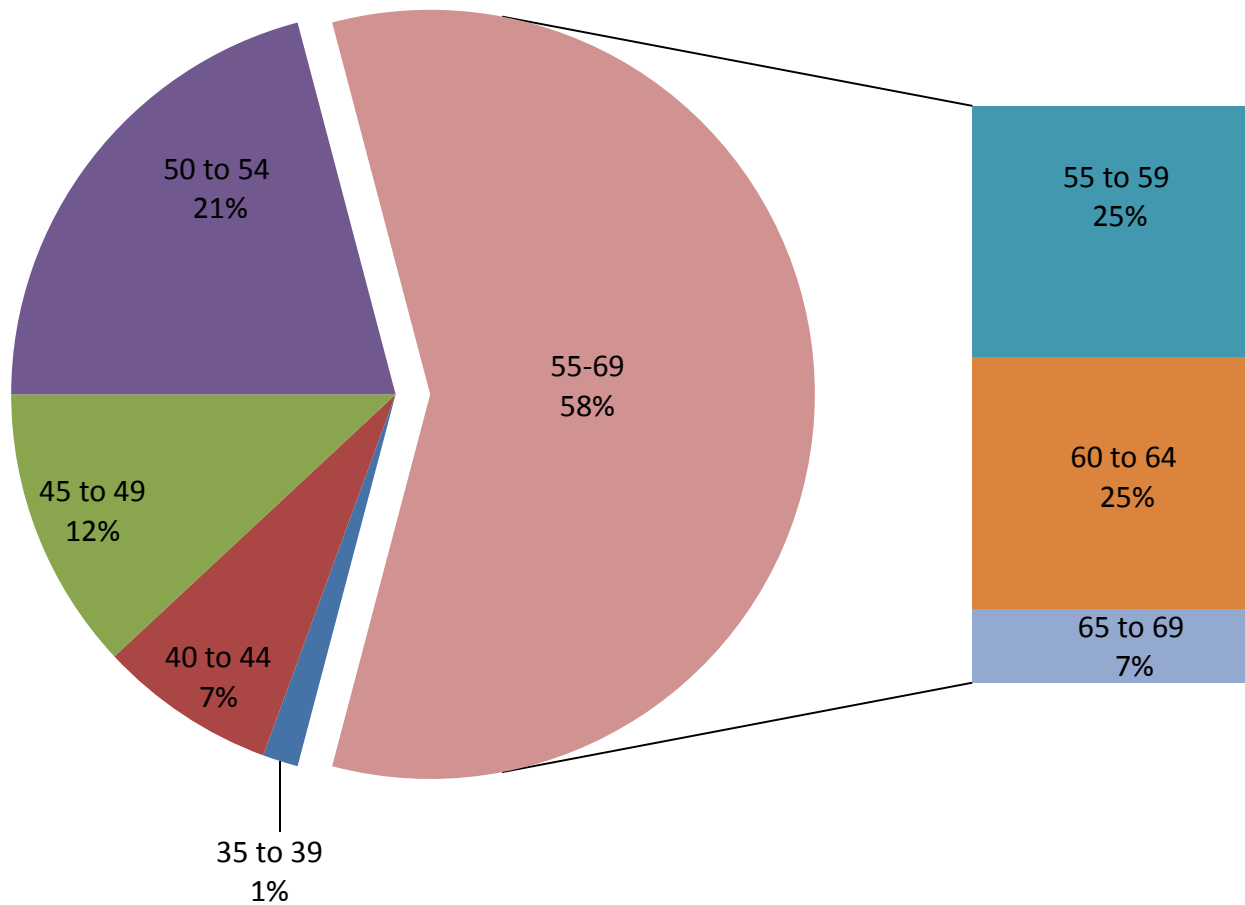
The ethnic composition of SDCCD employees is representative of San Diego County with the exception of the Latino/Hispanic population which is less than the regional proportion.

SDCCCD Administrative Managers: Age Trends

Approximately 57% of all administrative managers are between the ages of 55 and 69 at SDCCCD, and nearly one third are facing retirement.



SDCCD Administrative Managers: Age Trends



SDCCD Office of Institutional Research and Planning

Source: SDCCD Information System

Enrollment Trends

SDCCD Office of Institutional Research and Planning

Analysis & Implications

Diversity and shifts in demographics will continue to be a key determinant in planning for the future in California community colleges. Programs that lead to employability, as well as support services that focus on retention and success, and partnerships that engage community and business will continue to be vitally important to the successful completion of low-income students of color. In addition, the growing number of millennials will require deeper evaluation of the program offerings, and how and when classes and services are offered. Technology will continue to increase in importance in order to attract and retain millennials, and to ensure that students are prepared for the demands of the job market. Classes, and scheduling options, as well as services and support for students will be vitally important in order to accommodate diverse needs of students and the community. Fundamental to this will be accessible pathways that lead to degrees and certificates.

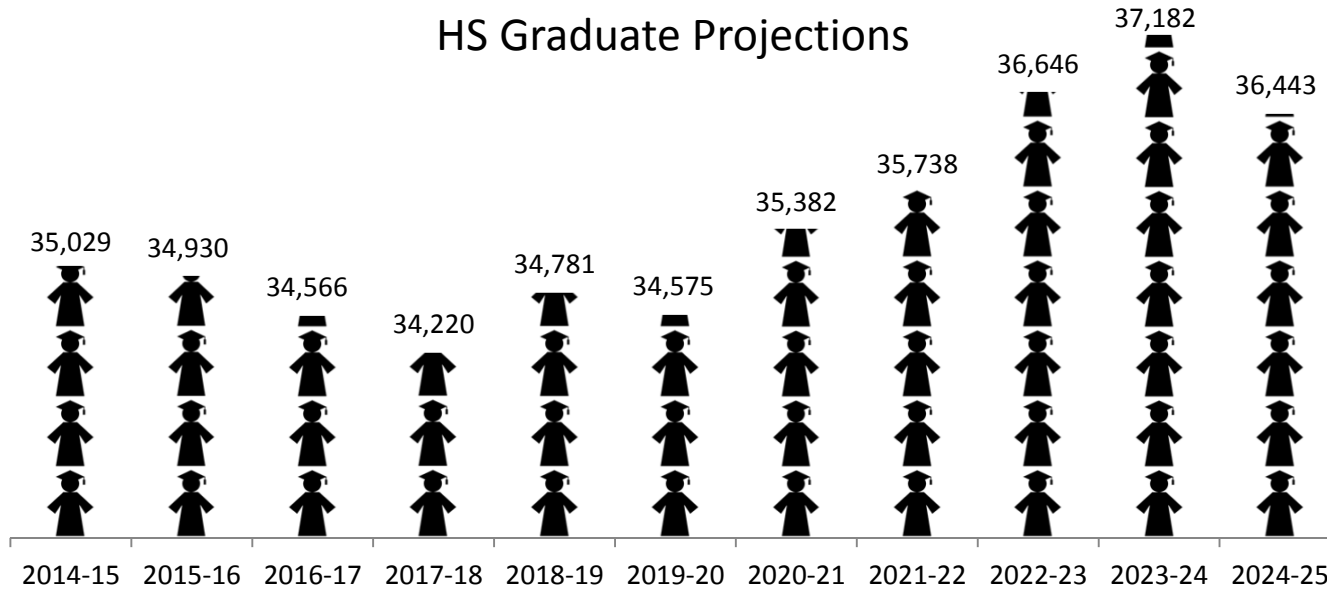
Community colleges in California experienced protracted budget cuts and reductions during the most recent recession. Enrollments at most colleges were impacted during this time while state support rapidly declined, forcing colleges to reduce their class offerings, and vital support services. Fortunately, the economy has improved since about 2014, and the job market is bouncing back. However, as we have seen historically, when the job market is strong and the economy robust, enrollments in colleges typically decline. In spite of restoration funds put back into college budgets by the state, and new monies from several new initiatives, enrollments have been overall flat or declining. To compound this decline, the local area high school pipeline is shrinking as the number of graduates is projected to continue to decrease for another three to five years.

Although class sections have been restored in many program areas at SDCCD, enrollments have only just started to recover. The impact of the extended class reductions along with an improved job market have resulted in a slow enrollment recovery and relatively little growth in most programs. There are many things that the colleges are doing and can be doing to help grow their programs strategically and manage enrollments, including:

- Offering relevant courses and programs that meet the market demand for skilled workers in targeted industries and fields by closely examining and tracking labor market trends in the region.
- Implementing programs, courses, and support services that close equity gaps of underrepresented minority populations. In addition, scheduling classes at days and times that are convenient to the targeted student populations (e.g., working professionals, older students, single-parents), and that will allow students to complete their programs in reasonable amount of time.
- Making pathways to degrees, certificates, and transfer clear, and accessible to all via education planning with counselors or advisors, and technologies for students to help them manage their academic and career pathways.
- Providing effective outreach, retention, and success strategies that are sustainable, scalable and wide-reaching (e.g., learning communities, early alert, and accelerated learning course and program options).
- Administering accurate English and math placement protocols so that students may begin at transfer level rather than being placed inappropriately at basic skills are both excellent enrollment management strategies as well.
- Offering programs that are competitive within the region rather than programs that are offered at numerous regional colleges, and/or within low-growth fields and industries.
- Ensuring there is curricular cohesion across the colleges to accommodate the student swirl.
- Offering a suitable mix of on campus and online course section offerings. Articulating course and program offerings with Continuing Education that will widen the pipeline from non-credit to credit.

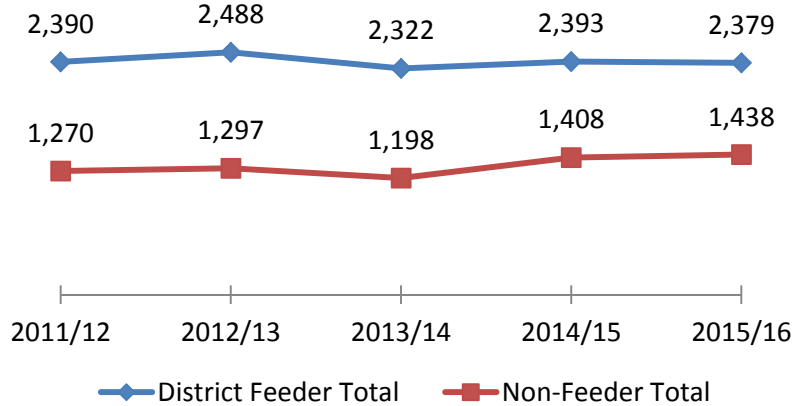
San Diego High School Pipeline

HS Graduate Projections

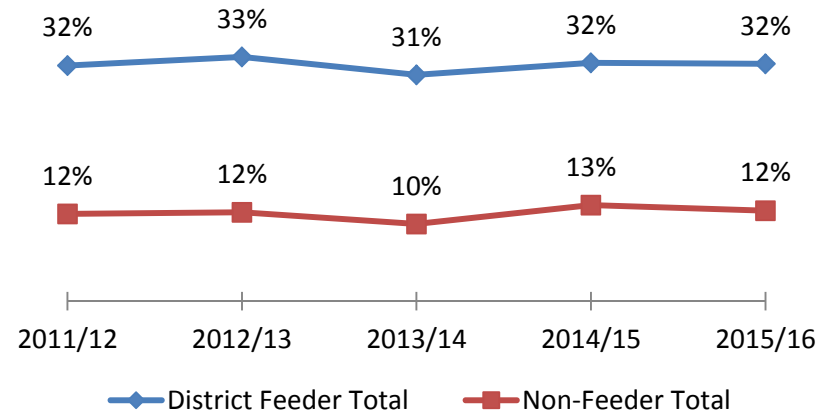


The CA Dept. of Finance projects a shrinking pipeline of high school graduates over the next 3-5 years in the San Diego region.

HS Graduate Headcount



HS Graduate Participation Rates



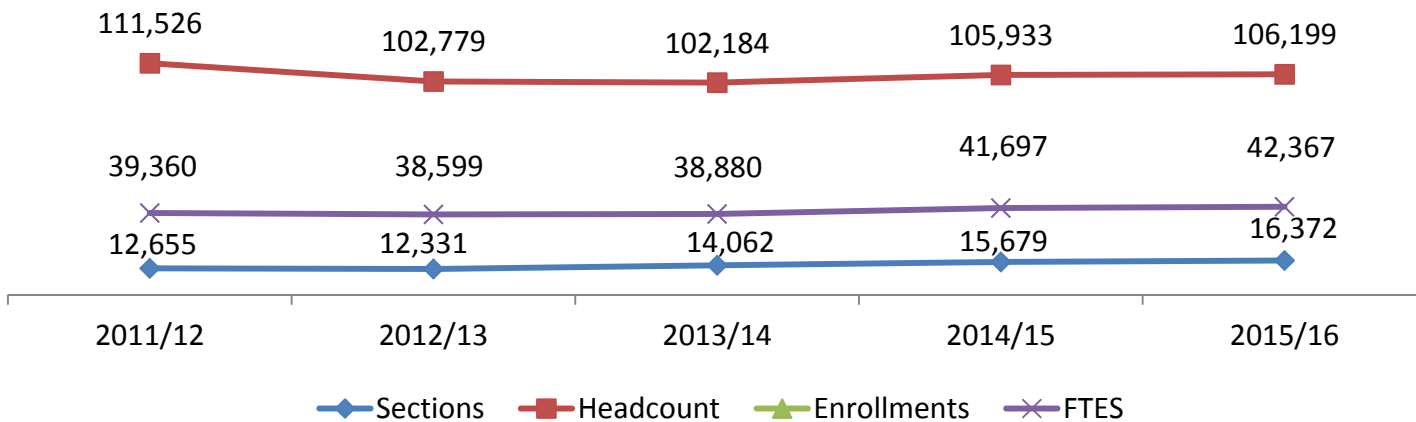
SDCCD Office of Institutional Research and Planning

Source: California Department of Finance and SDCCD Information System

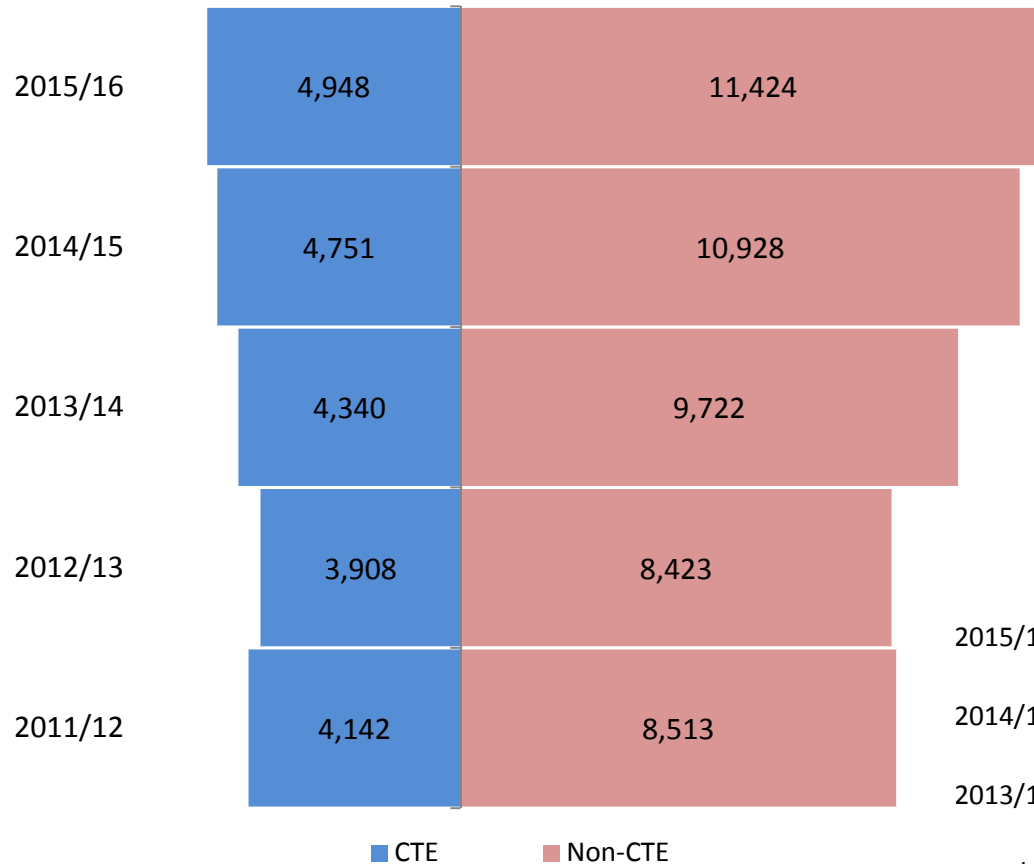
Enrollment Dashboard



During the protracted budget reduction years of 2010/11-2012/13, the District was forced to reduce nearly 2,000 sections resulting in decreases across enrollment, headcount, and FTES during these years, and the recovery years 2013/14-2014/15.

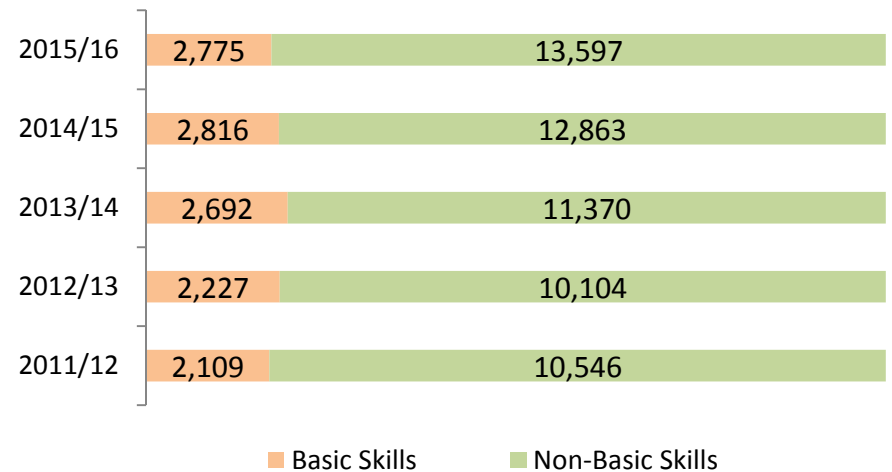


Sections Offered

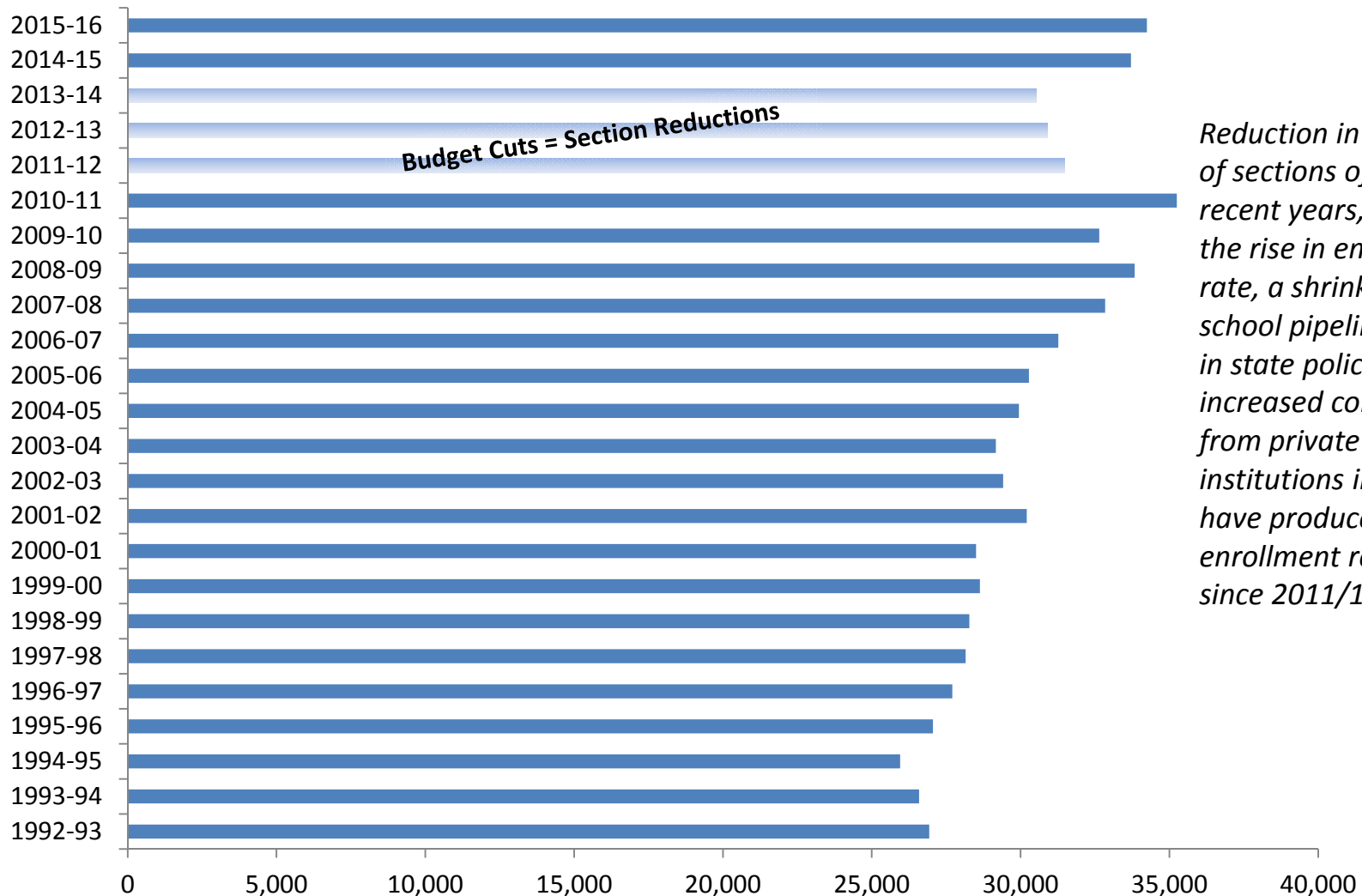


On average, 31% of the sections offered districtwide are CTE. However the trend has decreased from 33% in 2011/12 to 30% in 2015/16.

The percentage of basic skills sections has remained between 17%-19% of the total sections offered at the credit colleges.

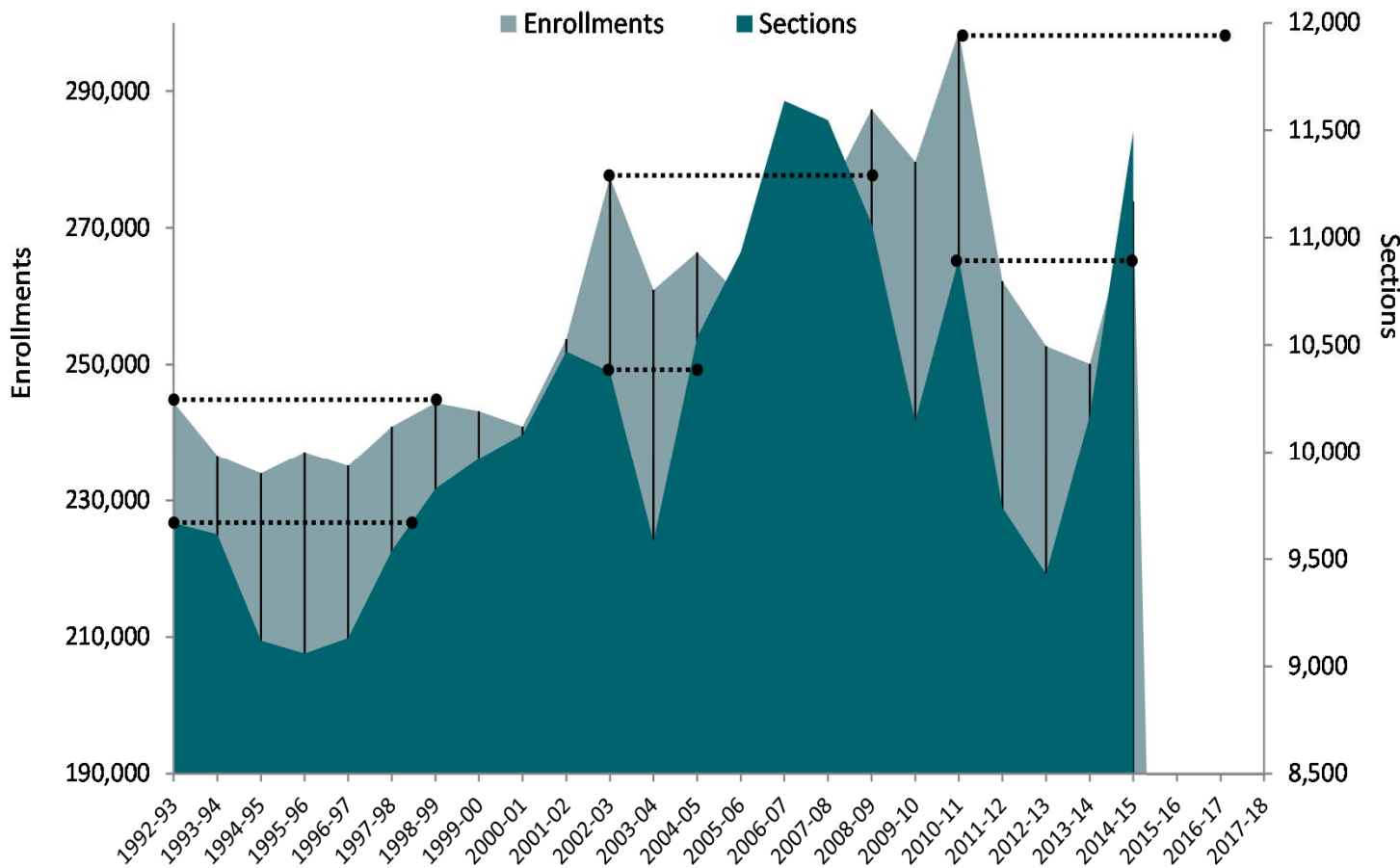


FTES Historical Trends



Reduction in the number of sections offered in recent years, along with the rise in employment rate, a shrinking high school pipeline, changes in state policies, and increased competition from private and other institutions in the region have produced slow enrollment recovery since 2011/12.

Section and Enrollment Cycle



There is a one to three year lag between full restoration of sections and enrollments. In other words, the pace at which enrollments recover is slower than the pace at which sections are restored, and the greater the magnitude of the section reductions, the longer the recovery period.

Enrollment, Capacity & Fill Rates

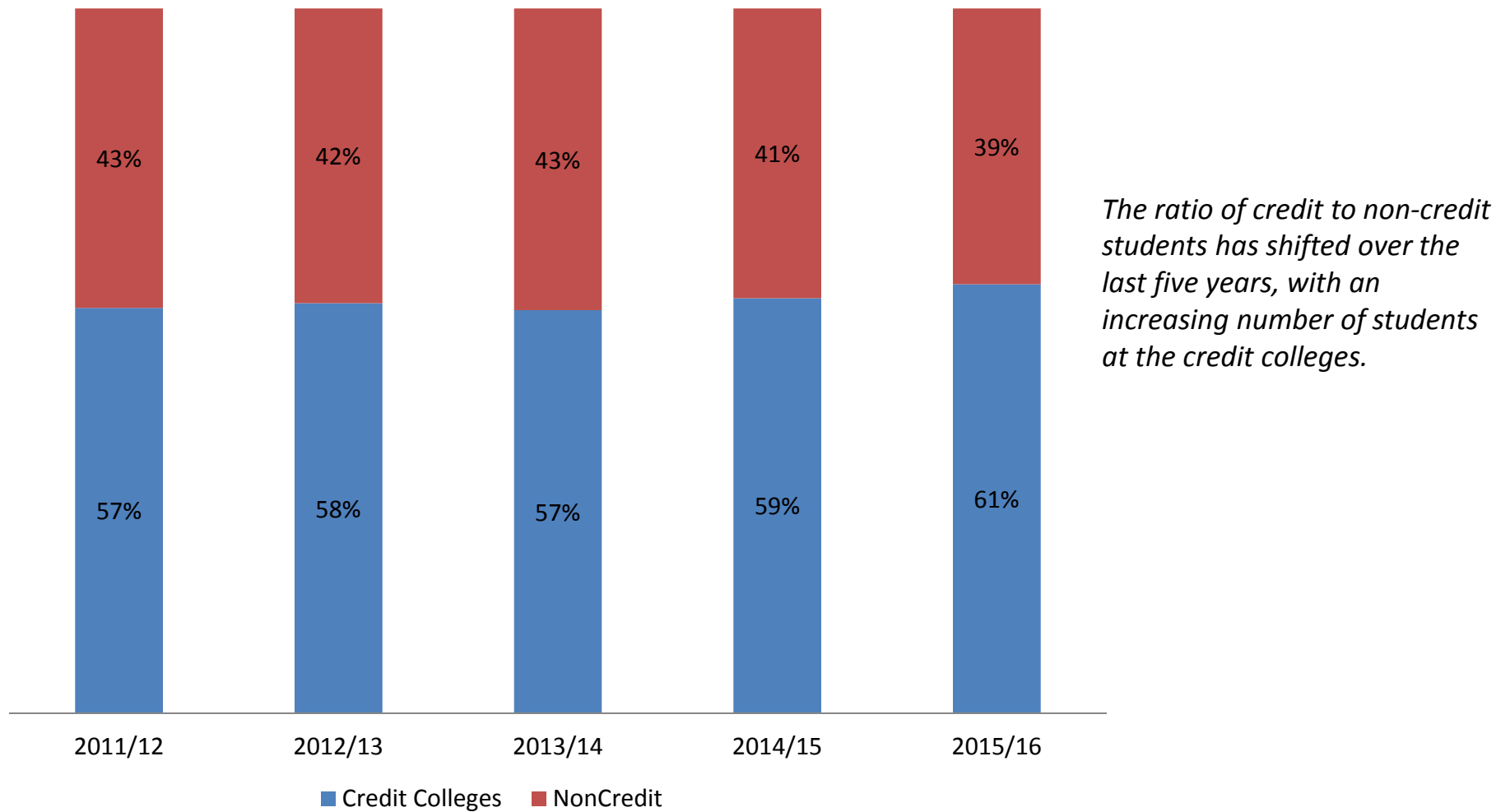
| | Summer 11 | | | Summer 12 | | | Summer 13 | | | Summer 14 | | | Summer 15 | | |
|----------------------|------------|----------|-----------|------------|----------|-----------|------------|----------|-----------|------------|----------|-----------|------------|----------|-----------|
| | Enrollment | Capacity | Fill Rate | Enrollment | Capacity | Fill Rate | Enrollment | Capacity | Fill Rate | Enrollment | Capacity | Fill Rate | Enrollment | Capacity | Fill Rate |
| City College/ECC | 1,558 | 208 | 82% | 2,045 | 0 | | 1,703 | 33 | 44% | 9,005 | 10315 | 79% | 9,696 | 12305 | 77% |
| Mesa College | 751 | 70 | 100% | 787 | 54 | 89% | 812 | 73 | 86% | 11849 | 15529 | 76% | 14586 | 19101 | 76% |
| Miramar College | 1,497 | 2,868 | 87% | 755 | 2,806 | 68% | 590 | 1,955 | 90% | 5,579 | 7,518 | 86% | 6,070 | 8,257 | 83% |
| All Colleges | 3,806 | 3,146 | 87% | 3,587 | 2,860 | 70% | 3,105 | 2,061 | 81% | 26,433 | 33,362 | 79% | 30,352 | 39,663 | 77% |
| Continuing Education | 22,818 | N/A | N/A | 21,063 | N/A | N/A | 42,403 | N/A | N/A | 42,629 | N/A | N/A | 44,580 | N/A | N/A |

| | Fall 11 | | | Fall 12 | | | Fall 13 | | | Fall 14 | | | Fall 15 | | |
|----------------------|------------|----------|-----------|------------|----------|-----------|------------|----------|-----------|------------|----------|-----------|------------|----------|-----------|
| | Enrollment | Capacity | Fill Rate | Enrollment | Capacity | Fill Rate | Enrollment | Capacity | Fill Rate | Enrollment | Capacity | Fill Rate | Enrollment | Capacity | Fill Rate |
| City College/ECC | 42,078 | 47,842 | 87% | 39,421 | 42,954 | 91% | 38,878 | 45,003 | 86% | 38,466 | 46,436 | 82% | 38,780 | 46,875 | 81% |
| Mesa College | 63,315 | 64,601 | 95% | 61,825 | 63,585 | 94% | 62,396 | 67,966 | 89% | 59,328 | 66,621 | 87% | 59,187 | 68,122 | 85% |
| Miramar College | 26,584 | 26,662 | 99% | 24,684 | 24,696 | 99% | 25,568 | 26,579 | 95% | 25,819 | 28,122 | 91% | 27,664 | 30,784 | 89% |
| All Colleges | 131,977 | 139,105 | 93% | 125,930 | 131,235 | 94% | 126,842 | 139,548 | 89% | 123,613 | 141,179 | 86% | 125,631 | 145,781 | 85% |
| Continuing Education | 45,211 | N/A | N/A | 42,580 | N/A | N/A | 42,082 | N/A | N/A | 44,190 | N/A | N/A | 42,401 | N/A | N/A |

| | Spring 12 | | | Spring 13 | | | Spring 14 | | | Spring 15 | | | Spring 16 | | |
|----------------------|------------|----------|-----------|------------|----------|-----------|------------|----------|-----------|------------|----------|-----------|------------|----------|-----------|
| | Enrollment | Capacity | Fill Rate | Enrollment | Capacity | Fill Rate | Enrollment | Capacity | Fill Rate | Enrollment | Capacity | Fill Rate | Enrollment | Capacity | Fill Rate |
| City College/ECC | 39,380 | 45,698 | 86% | 38,258 | 43,611 | 87% | 38,340 | 46,811 | 81% | 37,948 | 46,050 | 81% | 38,118 | 47,759 | 78% |
| Mesa College | 63,923 | 68,087 | 91% | 63,448 | 69,259 | 88% | 60,585 | 68,649 | 86% | 59,820 | 70,941 | 82% | 57,868 | 71,706 | 79% |
| Miramar College | 27,836 | 28,728 | 96% | 25,731 | 26,840 | 96% | 25,387 | 27,512 | 91% | 27,551 | 31,337 | 88% | 29,245 | 34,842 | 84% |
| All Colleges | 131,139 | 142,513 | 90% | 127,437 | 139,710 | 89% | 124,312 | 142,972 | 85% | 125,319 | 148,328 | 83% | 125,231 | 154,307 | 80% |
| Continuing Education | 45,246 | N/A | N/A | 42,718 | N/A | N/A | 43,647 | N/A | N/A | 45,092 | N/A | N/A | 43,652 | N/A | N/A |

Fill Rates have steadily declined as a result of increased capacity (added seats) and enrollments that are not increasing at the same rate as capacity.

Credit and Non-Credit Headcount



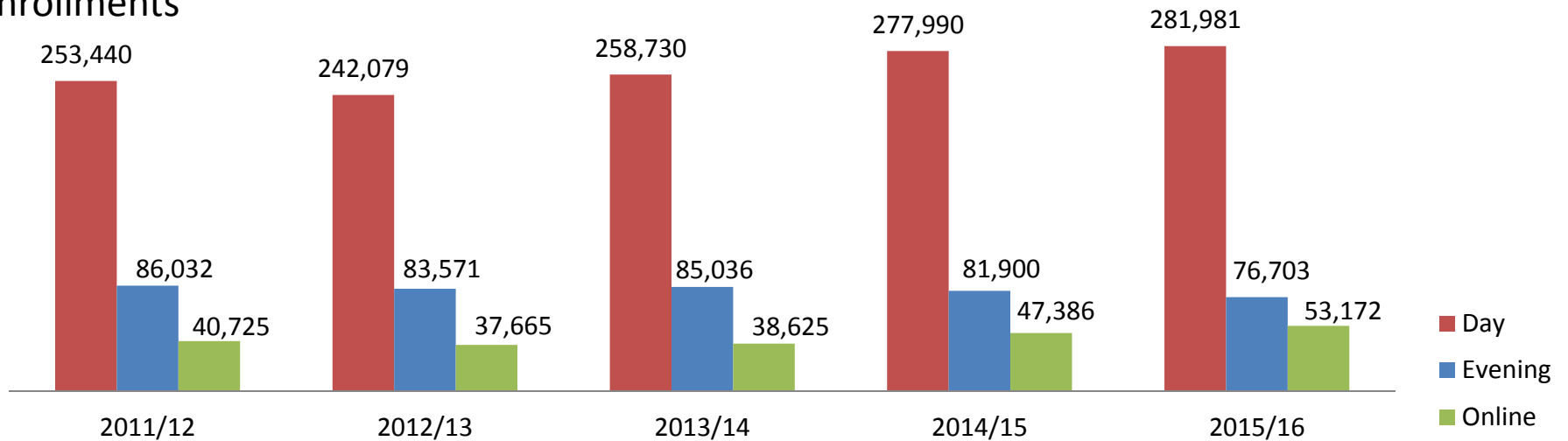
SDCCD Office of Institutional Research and Planning

Source: SDCCD Information System

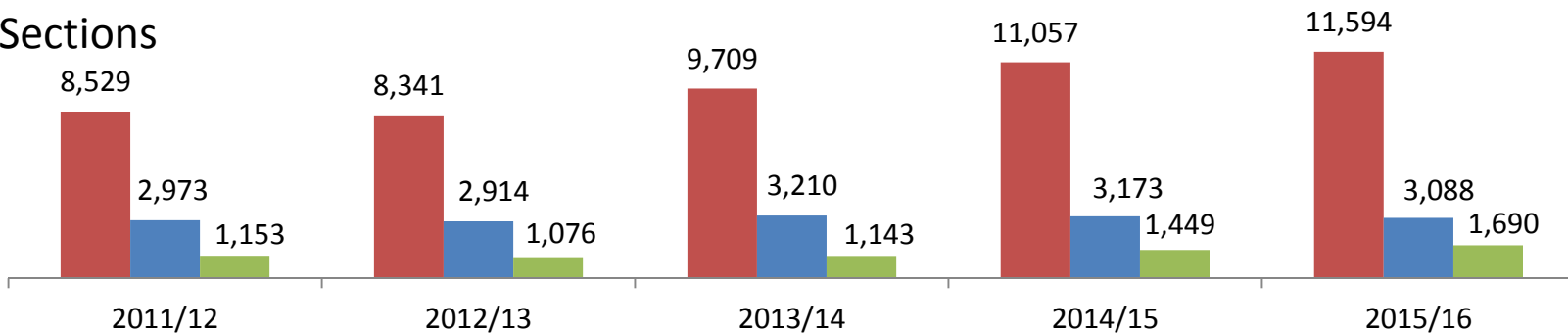
Enrollment & Sections

Day and online class offerings have increased over the last two years (19% and 48%, respectively), while evening class offerings have decreased by approximately 4%. Consequently, enrollments have followed a similar pattern.

Enrollments



Sections

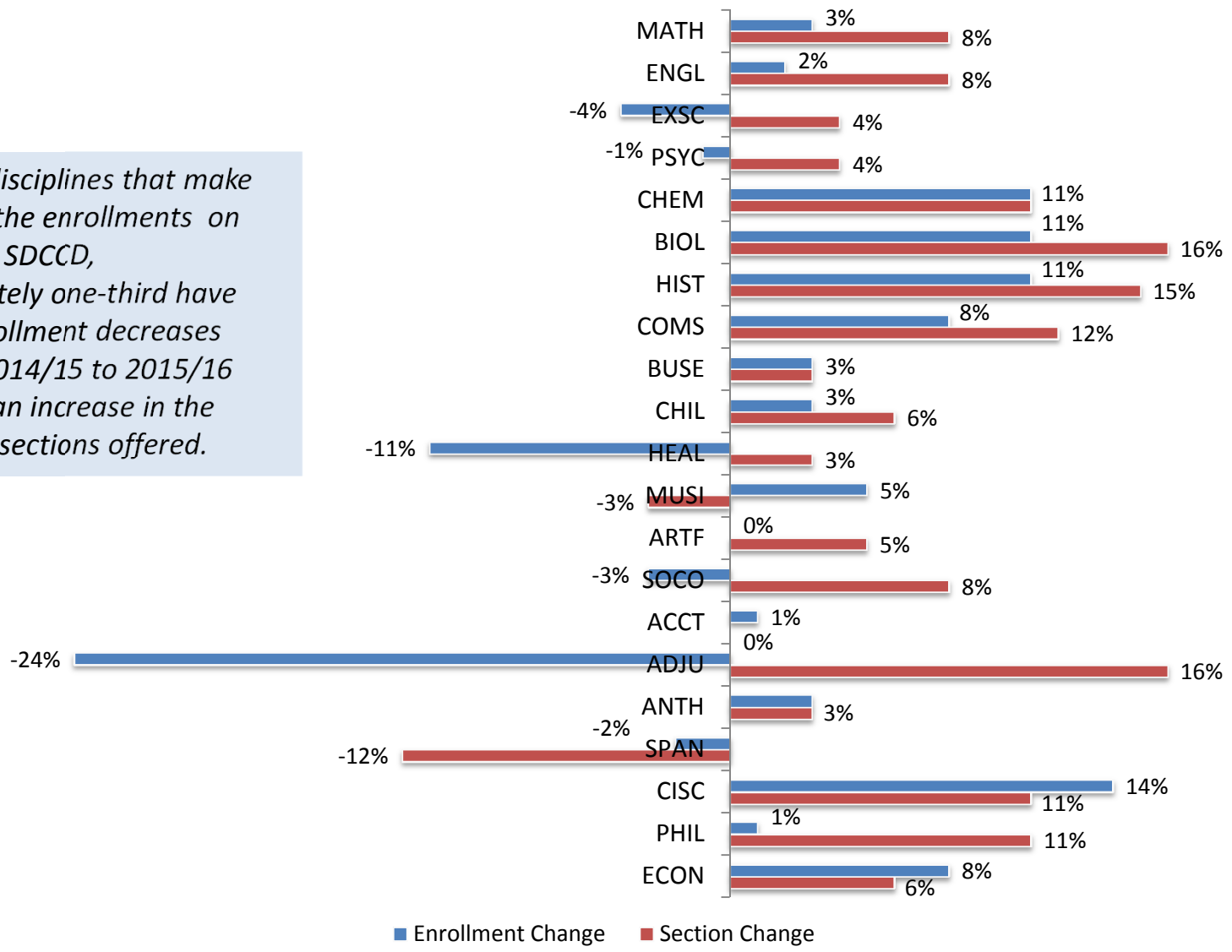


SDCCD Office of Institutional Research and Planning

Source: SDCCD Information System

Top Enrolled Subjects: Percent Changes 2014-2016

Of the 21 disciplines that make up 70% of the enrollments on average at SDCCD, approximately one-third have shown enrollment decreases between 2014/15 to 2015/16 even with an increase in the number of sections offered.



Greatest Enrollment Growth by Subjects

| TOP Code | TOP Label | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | Five Year Difference |
|----------|--|---------|---------|---------|---------|---------|----------------------|
| 150100 | English* | 18,403 | 18,596 | 19,852 | 22,382 | 23,473 | 5,070 |
| 190500 | Chemistry, General* | 9,064 | 8,705 | 9,244 | 10,717 | 11,863 | 2,799 |
| 152000 | Reading* | 1,309 | 1,277 | 3,501 | 3,993 | 3,518 | 2,209 |
| 150600 | Speech Communication* | 6,256 | 6,168 | 6,630 | 7,421 | 8,003 | 1,747 |
| 040100 | Biology, General | 8,439 | 8,044 | 8,067 | 8,868 | 9,913 | 1,474 |
| 130600 | Nutrition, Foods, and Culinary Arts* | 2,160 | 2,089 | 2,253 | 2,846 | 3,356 | 1,196 |
| 130500 | Child Development/Early Care and Education | 4,984 | 4,897 | 4,954 | 5,821 | 5,918 | 934 |
| 220400 | Economics | 3,494 | 3,638 | 3,647 | 4,074 | 4,285 | 791 |
| 070100 | Information Technology, General* | 2,035 | 2,022 | 2,063 | 2,502 | 2,791 | 756 |
| 190200 | Physics, General* | 1,952 | 2,000 | 2,122 | 2,311 | 2,650 | 698 |
| 083550 | Intercollegiate Athletics* | 801 | 788 | 1,005 | 1,341 | 1,436 | 635 |
| 061430 | Website Design and Development* | 217 | 700 | 688 | 752 | 821 | 604 |
| 220200 | Anthropology | 4,460 | 4,468 | 4,751 | 4,971 | 5,013 | 553 |
| 051100 | Real Estate* | 1,335 | 1,293 | 1,273 | 1,756 | 1,844 | 509 |
| 210550 | Police Academy* | 1,602 | 1,458 | 1,773 | 2,001 | 2,106 | 504 |
| 100700 | Dramatic Arts* | 1,551 | 1,641 | 1,649 | 1,973 | 2,010 | 459 |
| 125000 | Emergency Medical Services* | 959 | 962 | 950 | 1,105 | 1,409 | 450 |
| 170200 | Mathematics Skills* | 1,674 | 1,496 | 1,421 | 1,829 | 2,095 | 421 |

**Also fastest growing subject.*

Note. Subjects with more than 100 enrollments per term were used for this analysis.

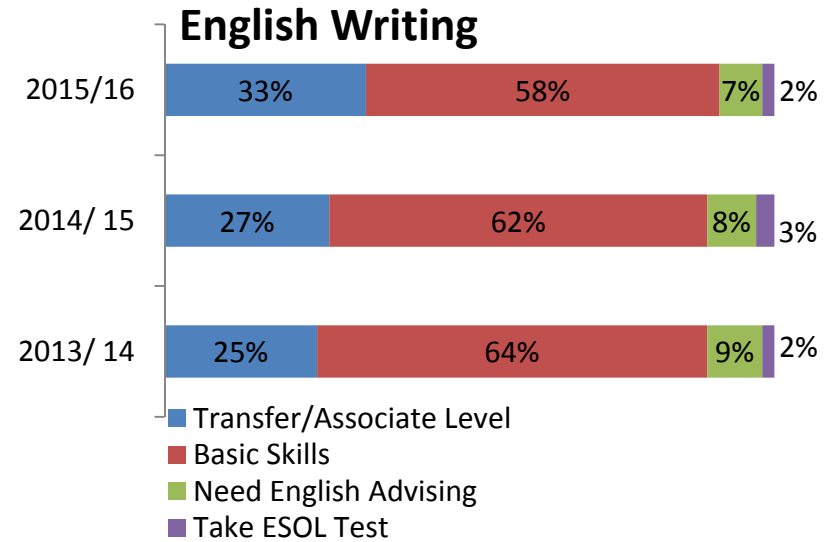
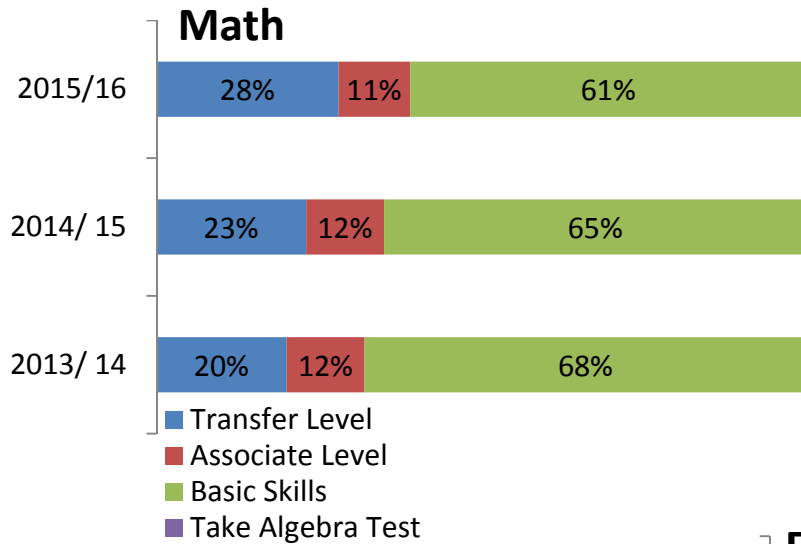
Fastest Enrollment Growth by Subjects

| TOP Code | TOP Label | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | Five Year % Change |
|----------|--------------------------------------|---------|---------|---------|---------|---------|--------------------|
| 061430 | Website Design and Development* | 217 | 700 | 688 | 752 | 821 | 278% |
| 152000 | Reading* | 1,309 | 1,277 | 3,501 | 3,993 | 3,518 | 169% |
| 083550 | Intercollegiate Athletics* | 801 | 788 | 1,005 | 1,341 | 1,436 | 79% |
| 130600 | Nutrition, Foods, and Culinary Arts* | 2,160 | 2,089 | 2,253 | 2,846 | 3,356 | 55% |
| 125000 | Emergency Medical Services* | 959 | 962 | 950 | 1,105 | 1,409 | 47% |
| 051100 | Real Estate* | 1,335 | 1,293 | 1,273 | 1,756 | 1,844 | 38% |
| 070100 | Information Technology, General* | 2,035 | 2,022 | 2,063 | 2,502 | 2,791 | 37% |
| 190200 | Physics, General * | 1,952 | 2,000 | 2,122 | 2,311 | 2,650 | 36% |
| 210400 | Human Services | 448 | 472 | 497 | 658 | 593 | 32% |
| 210550 | Police Academy* | 1,602 | 1,458 | 1,773 | 2,001 | 2,106 | 31% |
| 190500 | Chemistry, General* | 9,064 | 8,705 | 9,244 | 10,717 | 11,863 | 31% |
| 100700 | Dramatic Arts* | 1,551 | 1,641 | 1,649 | 1,973 | 2,010 | 30% |
| 103000 | Graphic Art and Design | 681 | 653 | 687 | 835 | 882 | 30% |
| 150600 | Speech Communication* | 6,256 | 6,168 | 6,630 | 7,421 | 8,003 | 28% |
| 150100 | English* | 18,403 | 18,596 | 19,852 | 22,382 | 23,473 | 28% |
| 170200 | Mathematics Skills* | 1,674 | 1,496 | 1,421 | 1,829 | 2,095 | 25% |

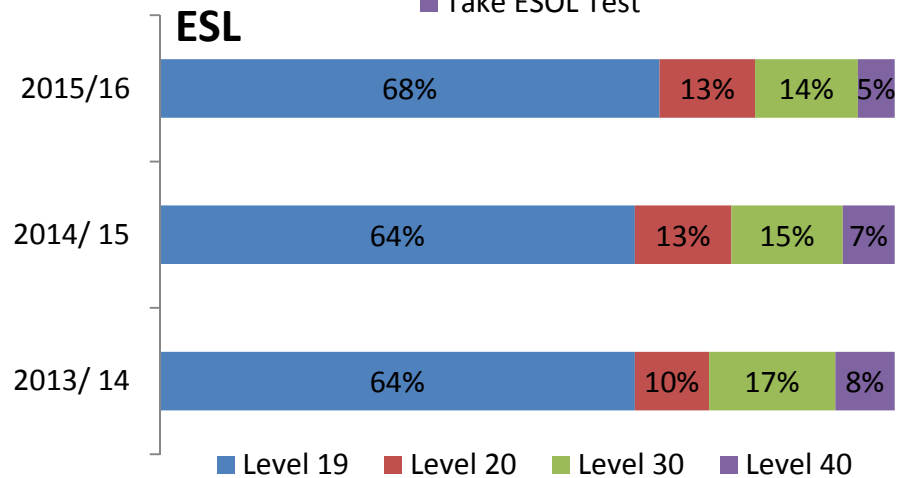
**Also greatest growing subject.*

Note. Subjects with more than 100 enrollments per term were used for this analysis.

Student Placement



The percentage of first-time to college high school graduates who place at transfer level or college level math and English, has increased over the last three years.



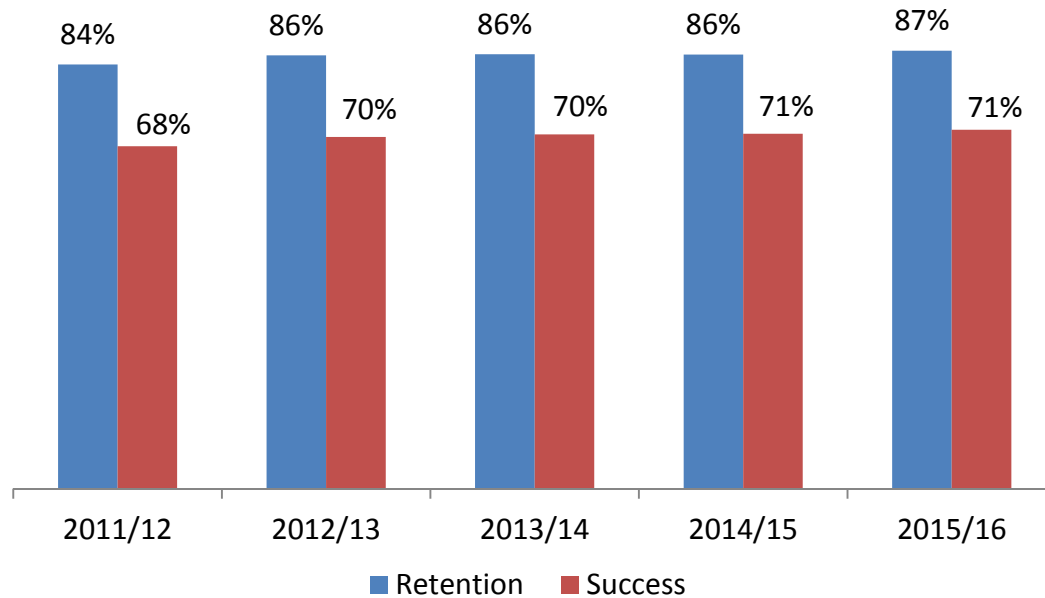
Student Success Outcome Trends

SDCCD Office of Institutional Research and Planning

Analysis & Implications

Improving educational outcomes and workforce preparedness for our students is an ongoing effort at SDCCD. Successful course completion and retention rates have trended upward over the last five years, indicating more students are completing classes and are better prepared for future coursework. Persistence rates have also increased, suggesting more students are progressing towards their educational goal, and reducing their time to completion. Students have shown signs of improvement in basic skills math and English progression to transfer level as well, indicating that the placement protocols and the basic skills pathways to college level coursework have improved. Success indicators for basic skills have also shown promising results, however ethnic disparities are still evident across student outcomes. Equitable access for underrepresented economic, social, and ethnic subgroups remains a driving force in student success and outcomes planning. Projections from the National Center for Higher Education Management Systems (NCHEMS) indicate that California is at risk of losing its economic competitiveness due to an insufficient supply of highly skilled workers. This has led to a concerted effort to increase levels of educational attainment at the community college level. Several state initiatives have made a positive impact on advancing student success in the California Community Colleges. The development and implementation of a common assessment tool will improve accuracy of student placement and ultimately benefit students in completing their pathways to success. The Student Success and Support Program (SSSP) initiative will positively impact students' matriculation, with more directed pathways as a result of required educational plans. The definition of student success was expanded so students who complete career technical education (CTE) coursework for the purpose of maintaining or enhancing professional skill sets are now captured through the Skills Builder metric. Identifying the wage gains of CTE students who were previously identified as non-completers has led to more accurate reporting and a better alignment of student outcomes with educational goals.

Retention and Success: Ethnicity

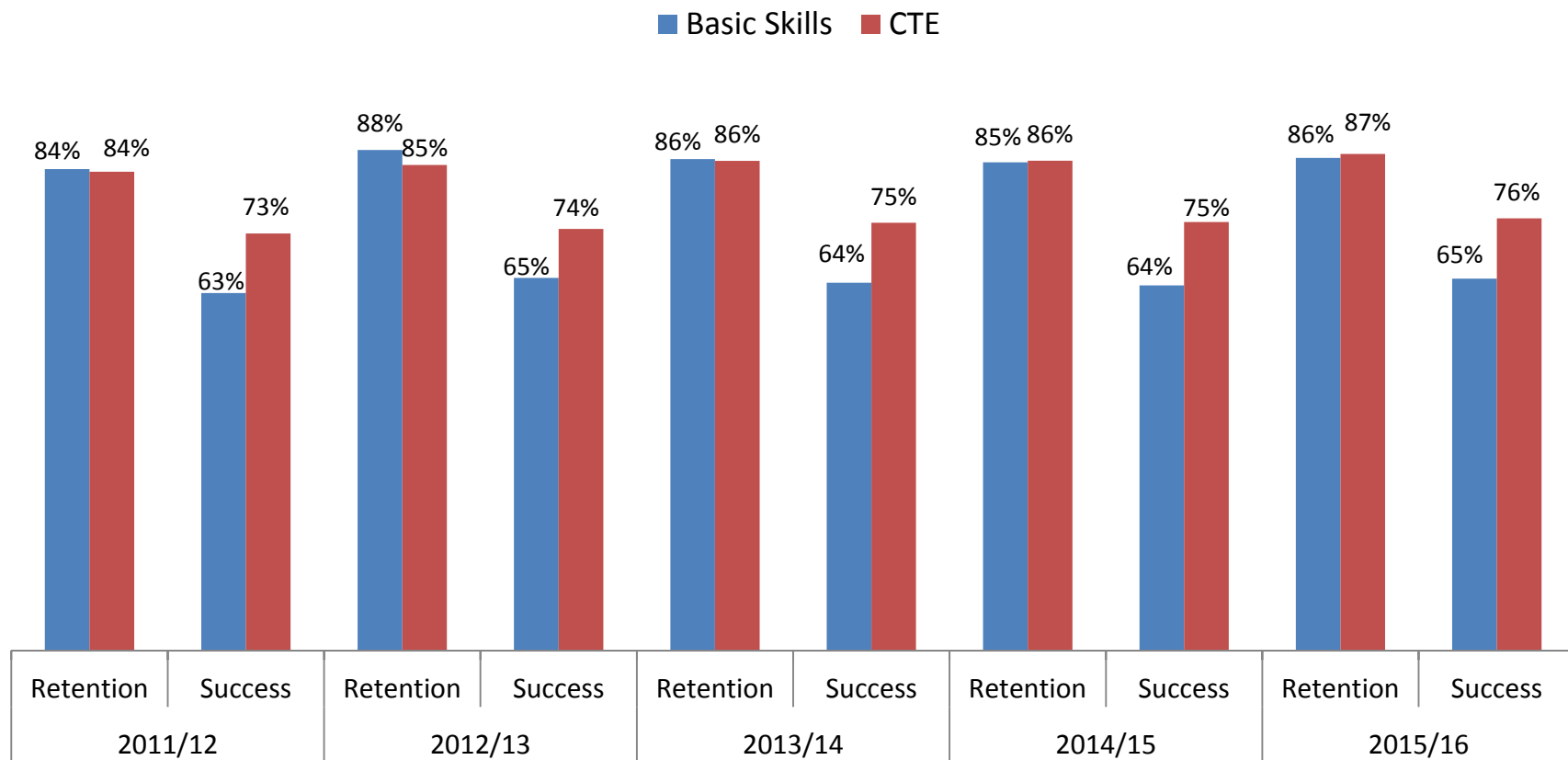


The five year average success rate for all colleges is 70%. Latino and African American students have consistently shown less than 80% of the highest group success rate, and thus considered disproportionately impacted.

The five year average retention rate for all colleges is 86%.

| | 2011/12 | | 2012/13 | | 2013/14 | | 2014/15 | | 2015/16 | |
|------------------------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|
| | Retention | Success | Retention | Success | Retention | Success | Retention | Success | Retention | Success |
| African American | 80% | 56% | 84% | 61% | 83% | 61% | 84% | 63% | 84% | 62% |
| American Indian | 83% | 66% | 86% | 69% | 84% | 72% | 87% | 69% | 86% | 70% |
| Asian/Pacific Islander | 86% | 74% | 88% | 76% | 88% | 77% | 88% | 78% | 89% | 78% |
| Filipino | 86% | 71% | 88% | 73% | 88% | 74% | 88% | 74% | 88% | 74% |
| Latino | 84% | 63% | 85% | 65% | 86% | 66% | 85% | 66% | 86% | 66% |
| Other | 84% | 66% | 85% | 69% | 85% | 68% | 85% | 67% | 87% | 71% |
| Unreported | 84% | 70% | 87% | 73% | 87% | 71% | 88% | 72% | 88% | 75% |
| White | 86% | 74% | 87% | 75% | 87% | 76% | 88% | 76% | 88% | 77% |

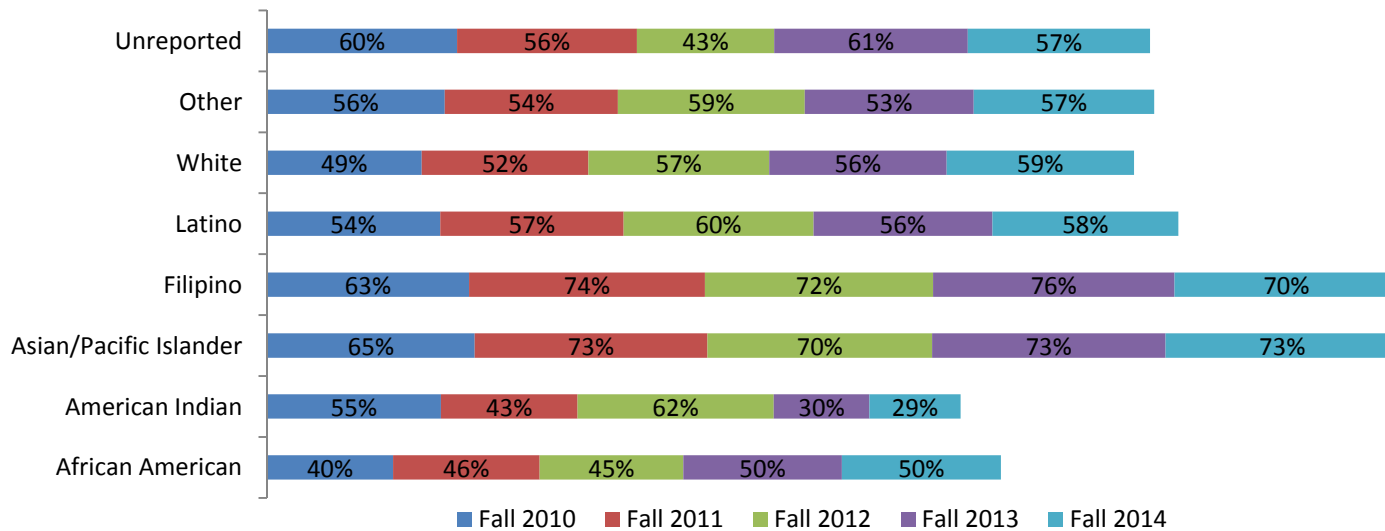
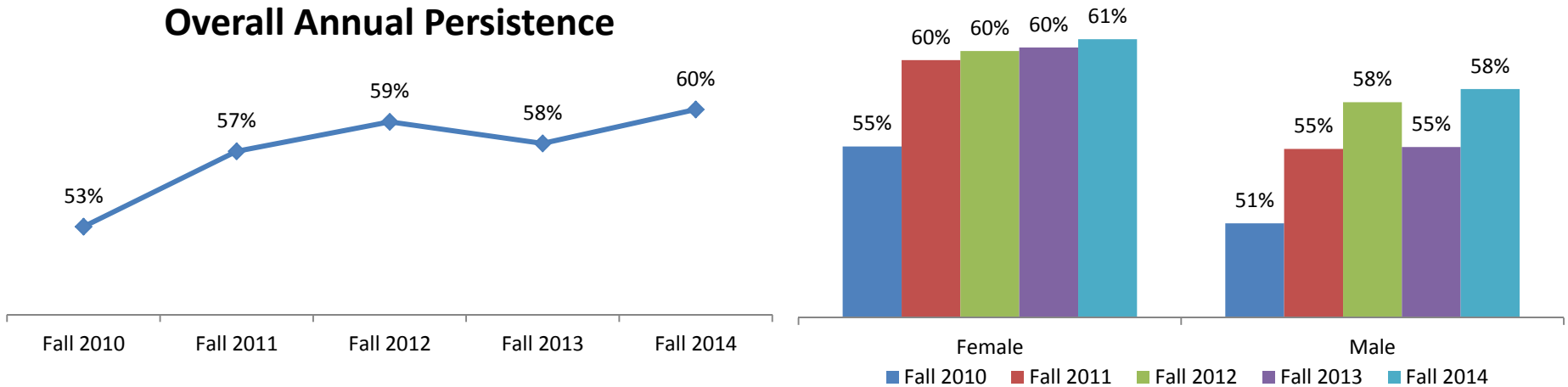
Retention and Success: Program Type



Overall successful course completion rates in both basic skills and CTE classes have steadily increased over the past five years.

Annual Persistence

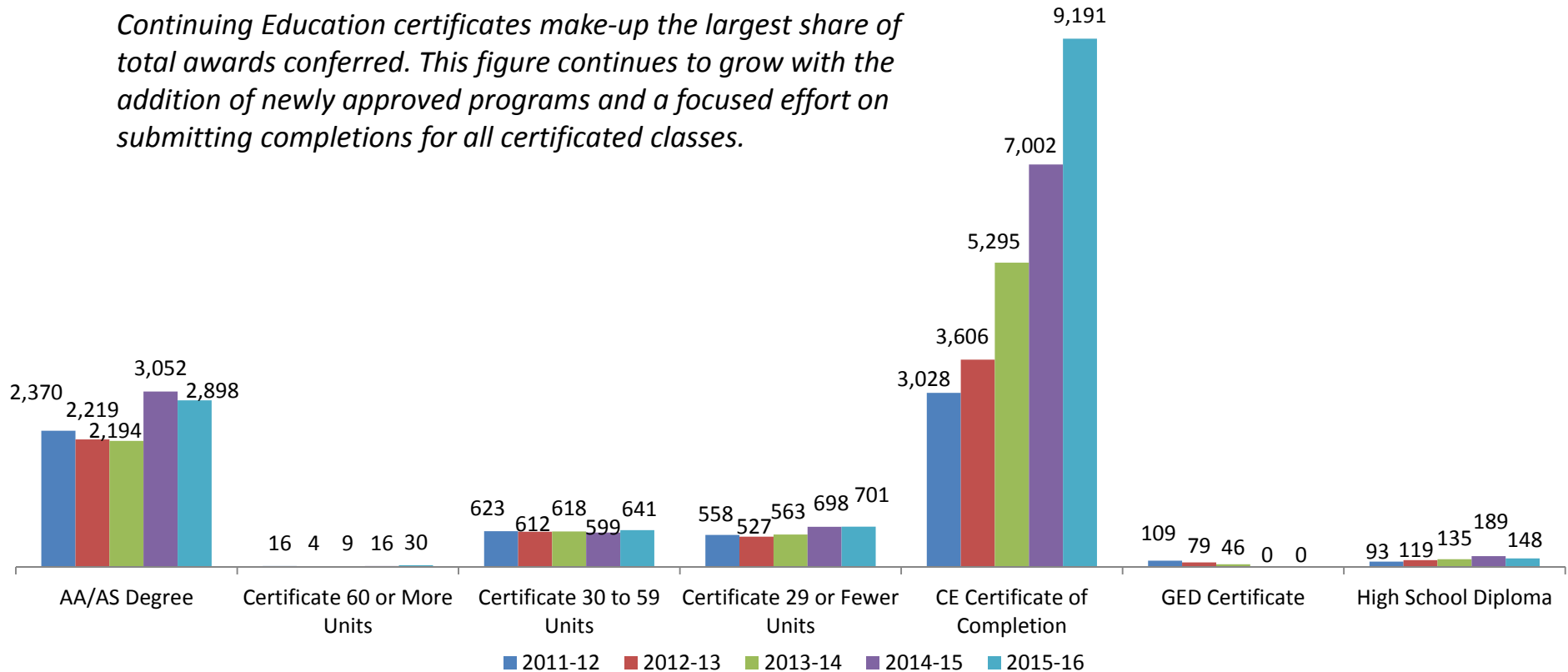
Overall Annual Persistence



Persistence rates have steadily climbed over the last five years with African American and White students showing the greatest percentage increase (10% each).

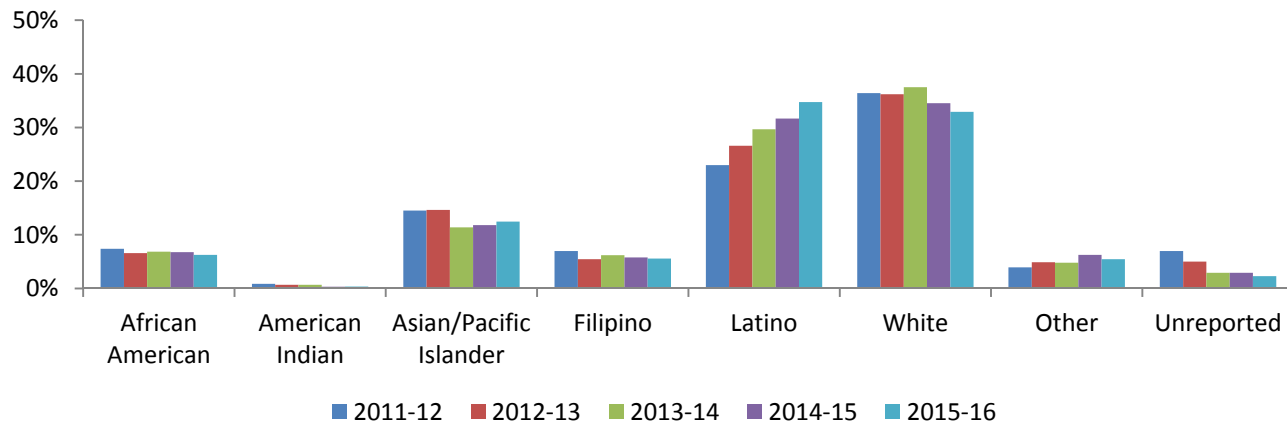
Overall SDCCCD Awards Conferred

Continuing Education certificates make-up the largest share of total awards conferred. This figure continues to grow with the addition of newly approved programs and a focused effort on submitting completions for all certificated classes.



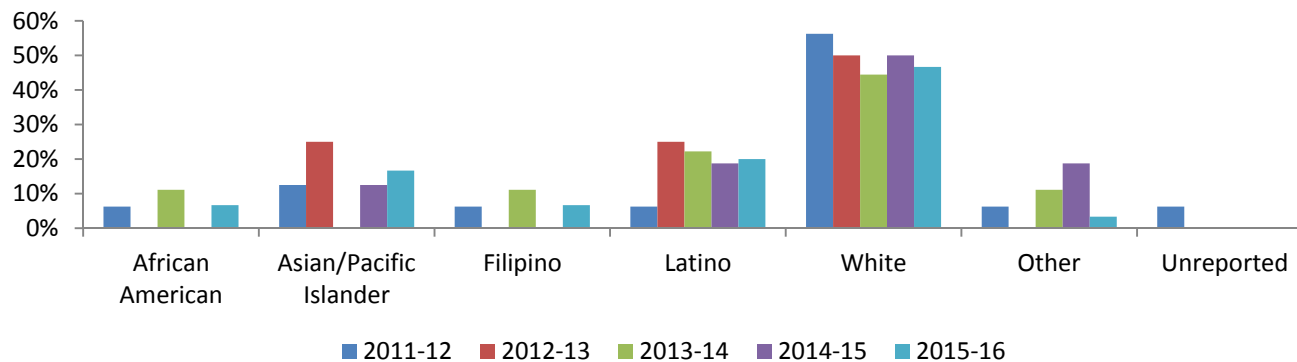
SDCCD Awards Conferred: Ethnicity

AA/AS Degrees



Latino students have had the greatest year-over-year percentage increase in associate degrees conferred, and as of 2015/16 received the largest share of associate degrees districtwide.

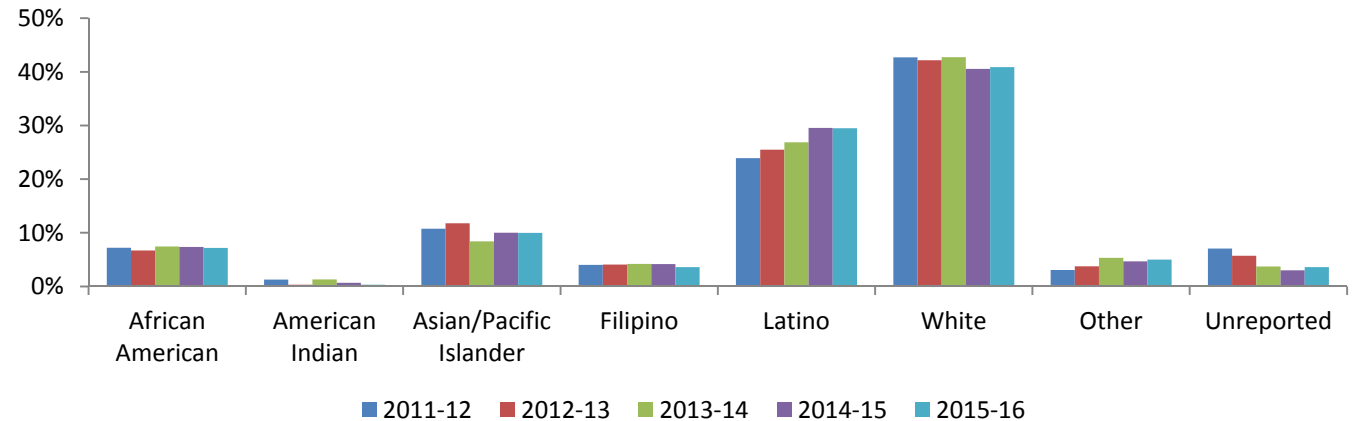
Certificates 60+ Units



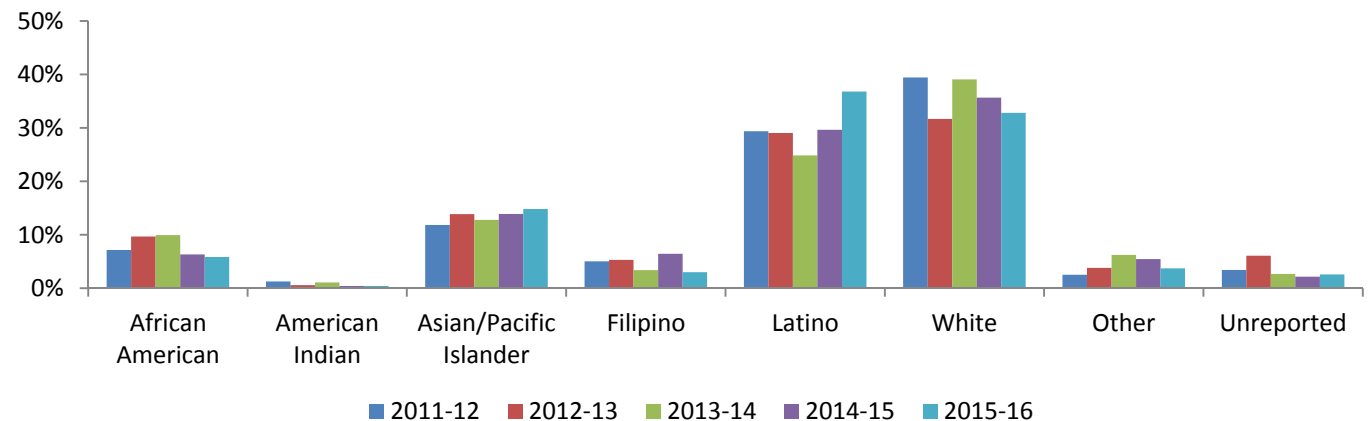
SDCCD Awards Conferred: Ethnicity

White students received the greatest share of Continuing Education certificates below 60 units, while Latino and Asian students had the greatest percentage increase over the last five years.

Certificates 30 to 59 Units

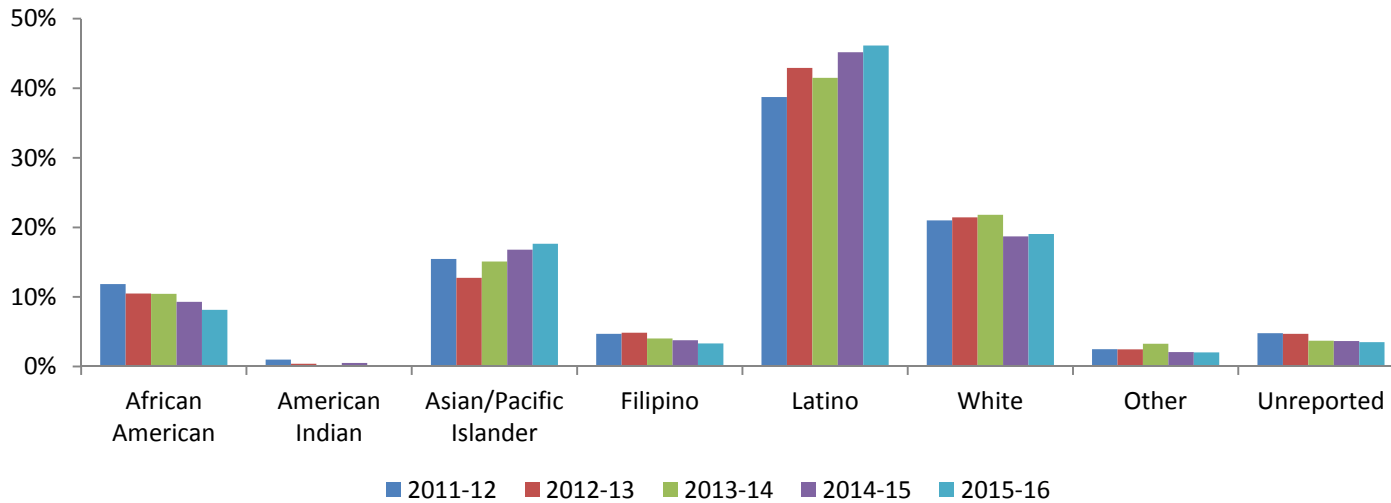


Certificates 29 or Fewer Units



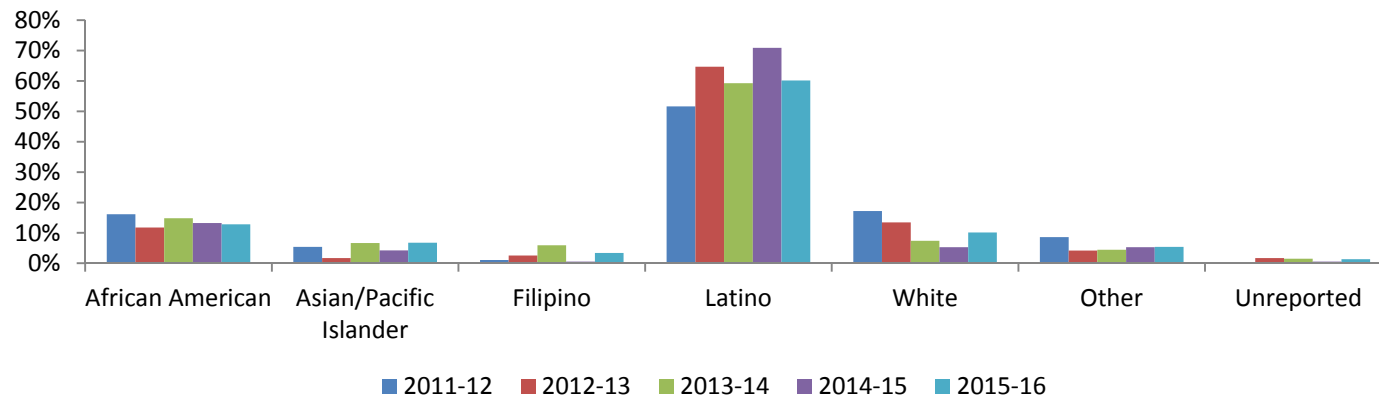
SDCCD Awards Conferred: Ethnicity

CE Certificate of Completion



Latino students continue to receive the greatest share of Continuing Education certificates of completion and high school diplomas.

High School Diploma

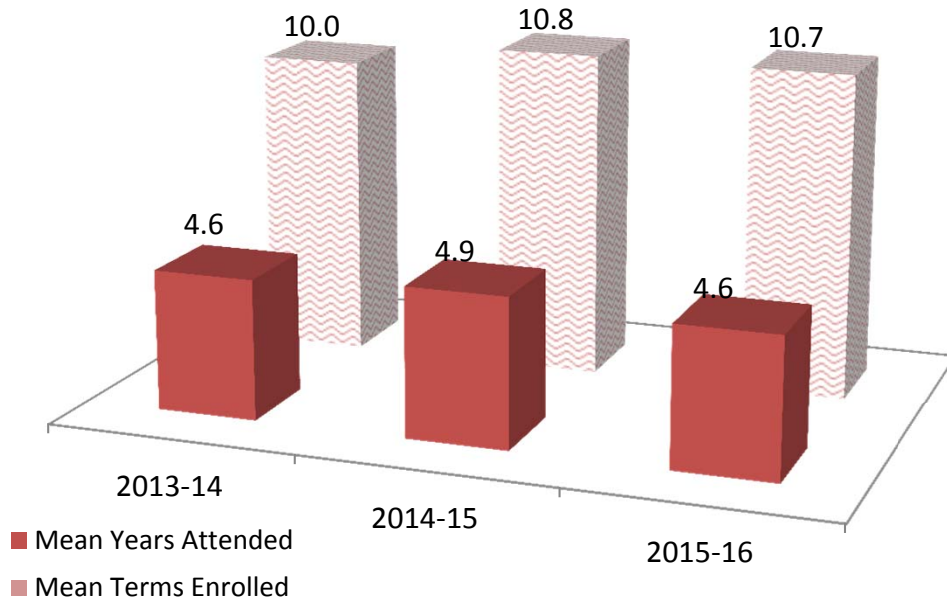


SDCCD Office of Institutional Research and Planning

Source: SDCCD Information System

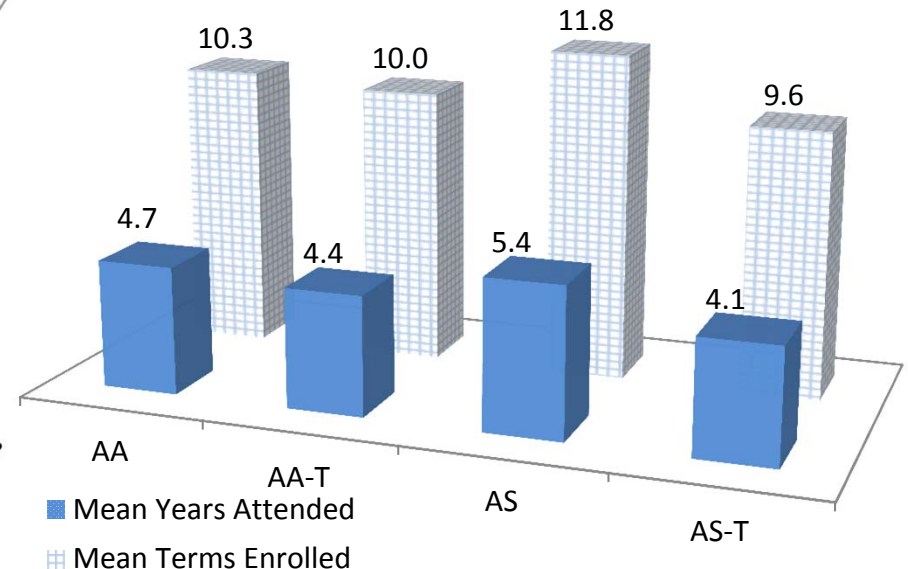
Time to Degree: Overall & ADT

Average Years Attended/Terms Enrolled



The average time it takes a student to complete a degree at an SDCCD college is 10.5 terms over 4.7 years (130% of normal time to degree).

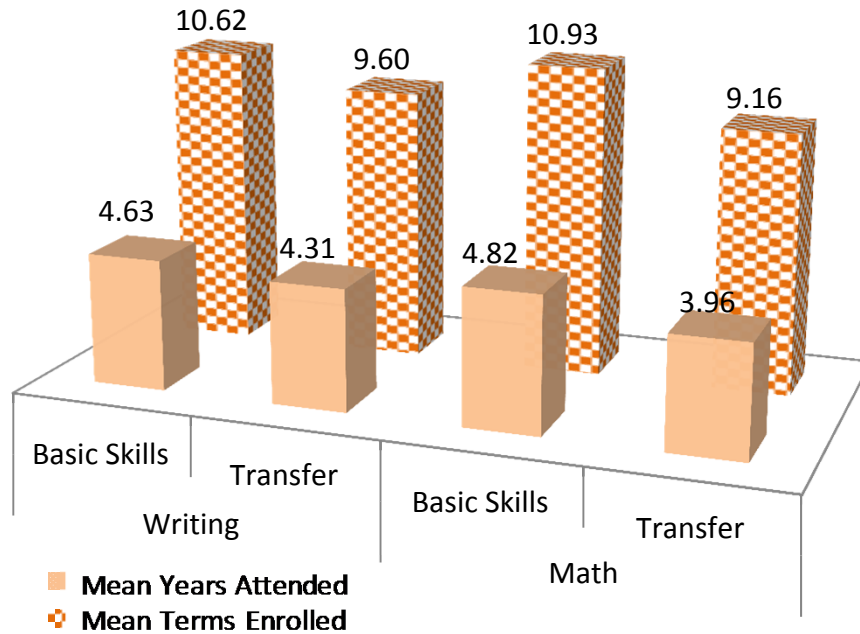
AA/AS Compared to ADT Completion



On average it takes about one year or two terms longer to complete an AS degree than AA degree, but nearly 1.5 years less or two terms less to complete an ADT.

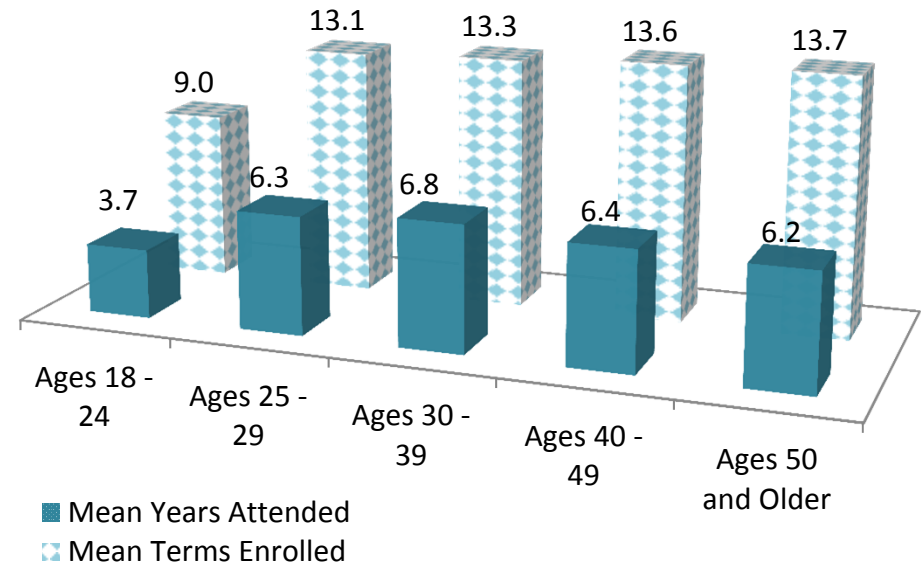
Time to Degree: Placement & Age

Average Time to Degree by Initial Placement



On average, a student placing into basic skills math takes about a year or two terms longer to complete a degree than a student placing in transfer level math.

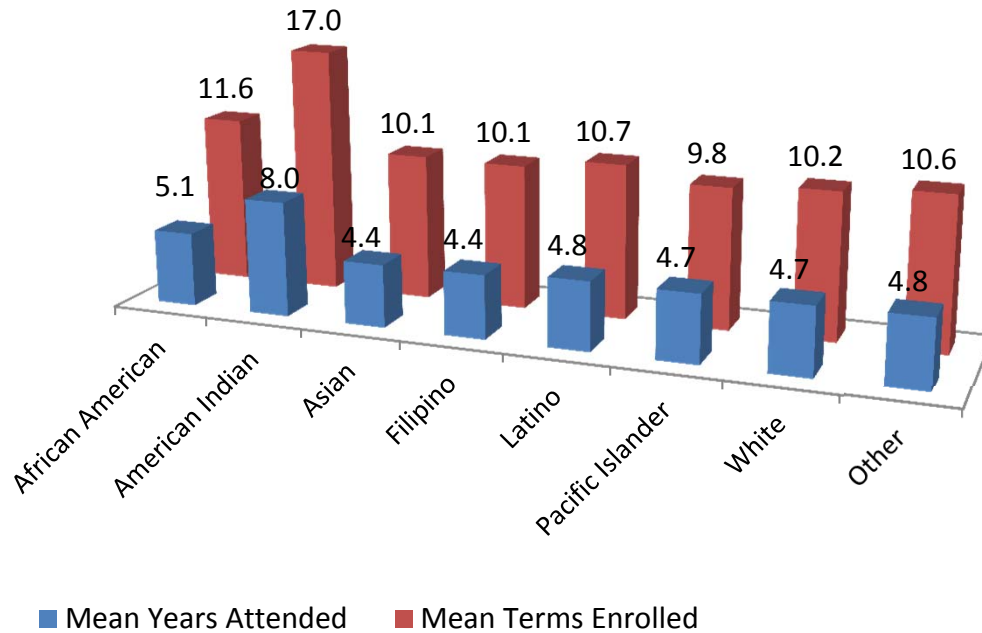
Average Time to Degree by Age



The older a student is, the more terms enrolled it takes to complete a degree, and students 18-24 are likely to complete their degree in half the time it takes older students.

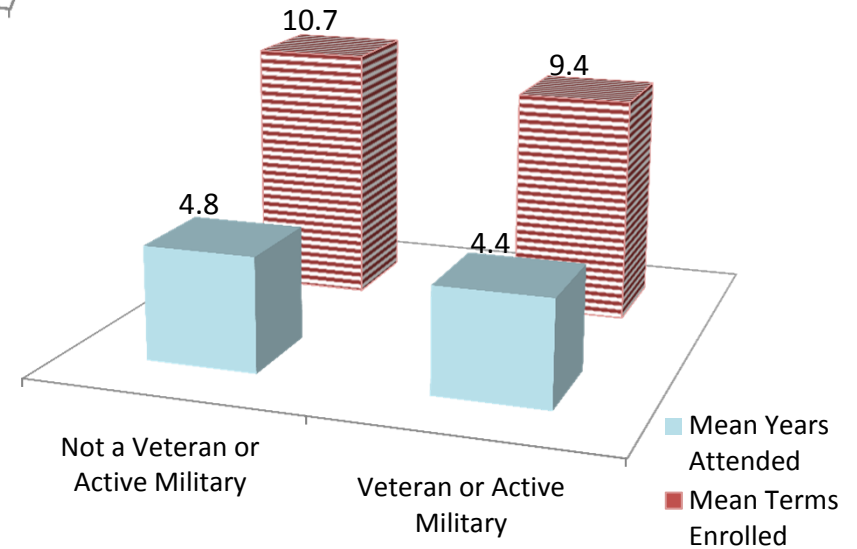
Time to Degree: Ethnicity & Veteran

Average Time to Degree by Ethnicity



Latino, African American, and American Indian students take longer average time to complete degrees than other ethnic groups of students.

Average Time to Degree by Veteran Status



On average, veteran and active military students take about one semester less time to complete a degree than non veteran/active military students.

Time to Degree: Equity Gaps

| Age Groups | Count of Degrees | Mean Years Attended | Point Gap Index | Mean Terms Enrolled | Point Gap Index |
|-------------------|------------------|---------------------|-----------------|---------------------|-----------------|
| Ages 18 - 24 | 2,028 | 3.7 | 0.0 | 9.0 | 0.0 |
| Ages 25 - 29 | 767 | 6.3 | 2.6 | 13.1 | 4.1 |
| Ages 30 - 39 | 353 | 6.8 | 3.1 | 13.3 | 4.3 |
| Ages 40 - 49 | 82 | 6.4 | 2.7 | 13.6 | 4.7 |
| Ages 50 and Older | 57 | 6.2 | 2.5 | 13.7 | 4.8 |

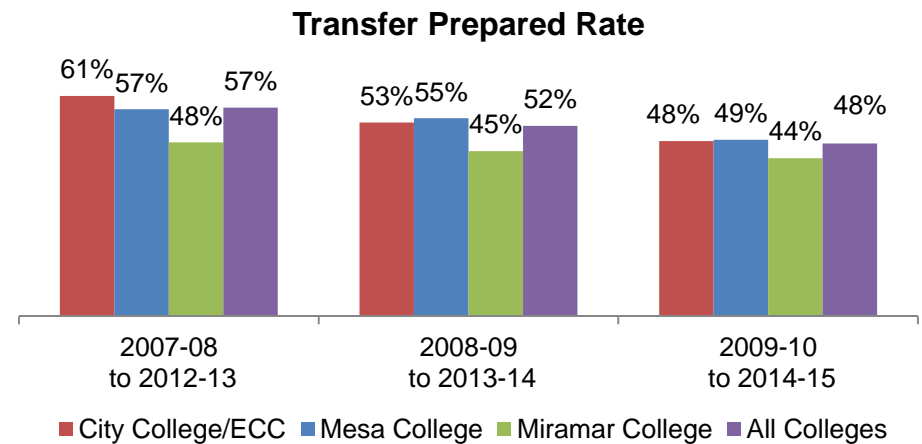
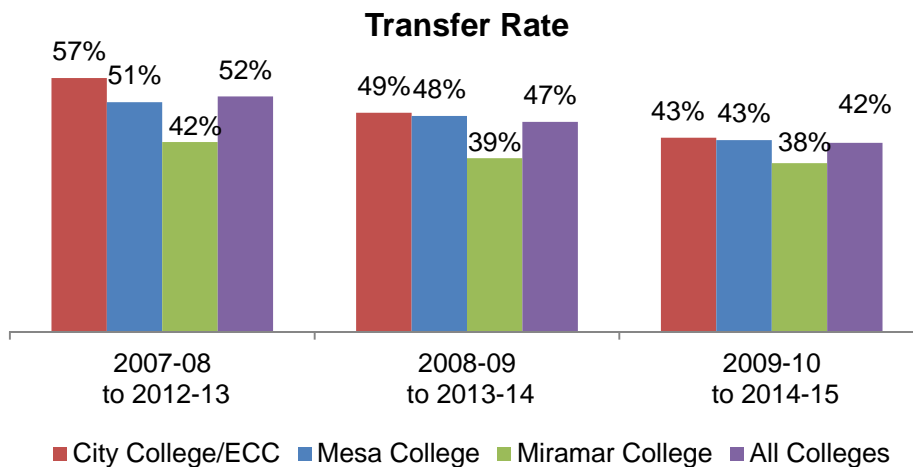
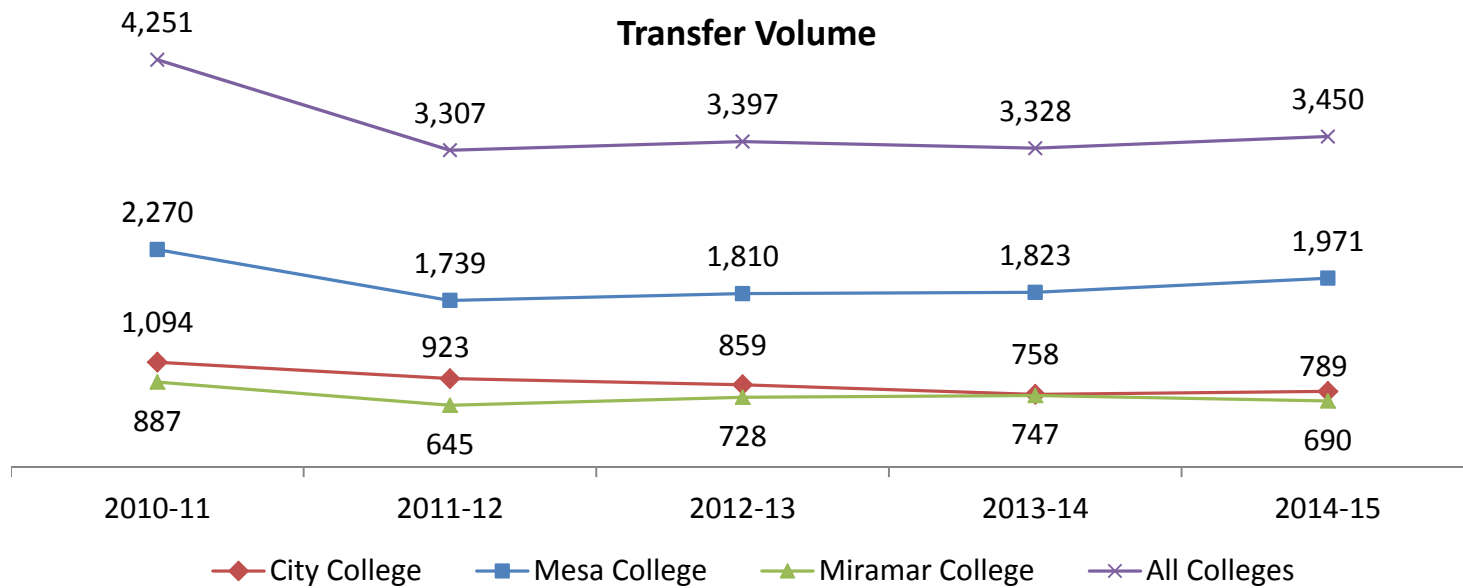
The older a student is the longer it takes to complete a degree. On average, students between 18-24 years old complete degrees in about half the time it takes other, older students.

African American students on average take approximately one year, or two terms longer than most of the other student groups to complete a degree. Latino students take about half a year or nearly two terms longer.

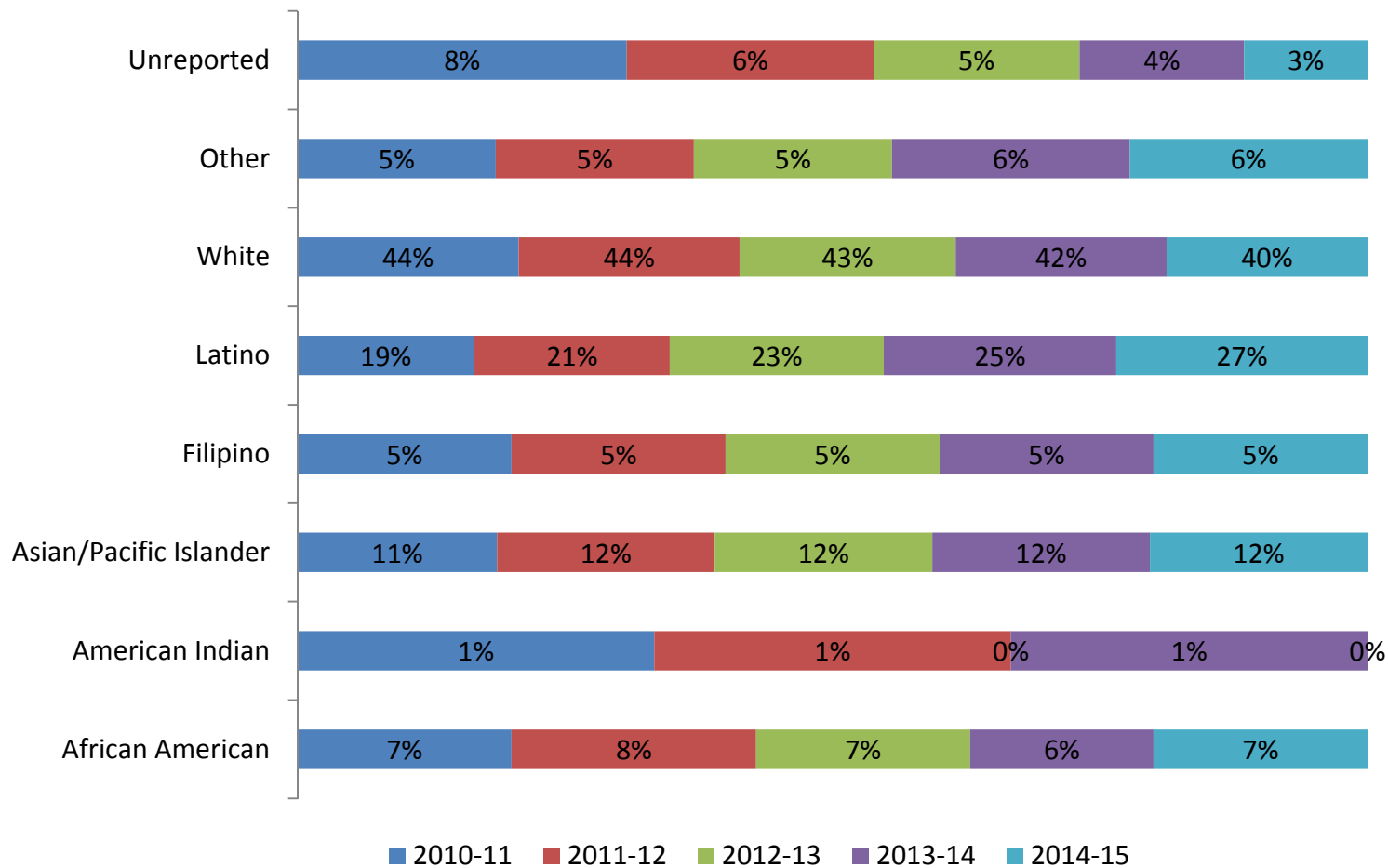
| Ethnicity | Count of Degrees | Mean Years Attended | Point Gap Index | Mean Terms Enrolled | Point Gap Index |
|------------------|------------------|---------------------|-----------------|---------------------|-----------------|
| African American | 215 | 5.1 | 0.8 | 11.6 | 1.6 |
| American Indian | 4 | 8.0 | 3.6 | 17.0 | 6.9 |
| Asian | 501 | 4.4 | 0.0 | 10.2 | 0.1 |
| Filipino | 227 | 4.4 | 0.1 | 10.1 | 0.0 |
| Latino | 1,189 | 4.8 | 0.4 | 10.7 | 0.7 |
| Pacific Islander | 16 | 4.7 | 0.4 | 9.8 | -0.3 |
| White | 873 | 4.7 | 0.4 | 10.2 | 0.1 |
| Other | 170 | 4.8 | 0.4 | 10.6 | 0.6 |
| Unreported | 92 | 6.2 | 1.8 | 13.4 | 3.3 |

Overall Transfer

Transfer volume showed positive gains at City and Mesa College between 2013-14 and 2014-15, however transfer volume at Miramar College dropped within the same time period. The overall transfer rate for full-time, degree-seeking students has declined 10% compared to the previous cohort.



Transfer Volume

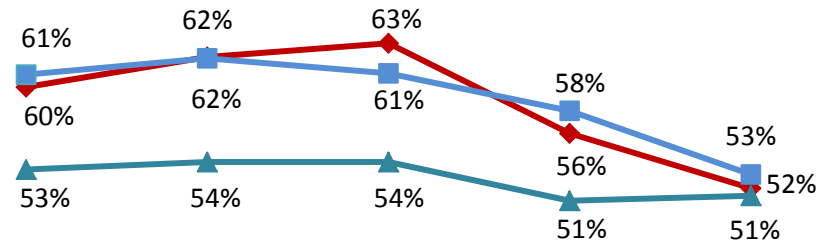
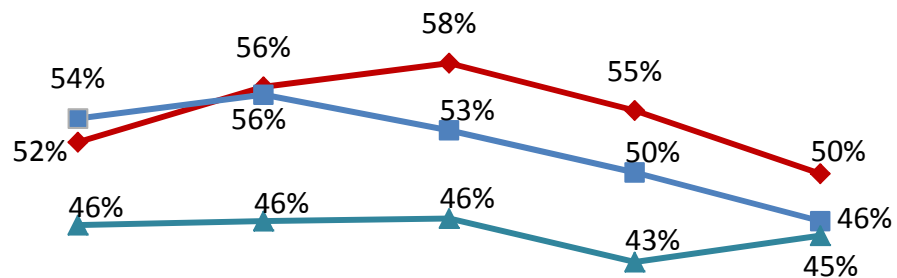


Latino students displayed the greatest increase in transfer volume in the last five years, while White students displayed the highest average transfer volume.

Student Success Scorecard Indicators

Basic Skills Improvement Rate: The percentage of credit students tracked for six years who first enrolled in a course below transfer level in English, math, and/or ESL and completed a college-level course in the same discipline.

Completion Rate: The percentage of degree, certificate and/or transfer-seeking students who attempted any math or English in the first three years, tracked for six years through 2014-15 who completed a degree, certificate or transfer-related outcomes.



2005-06 2006-07 2007-08 2008-09 2009-10

◆ City College ■ Mesa College ▲ Miramar College

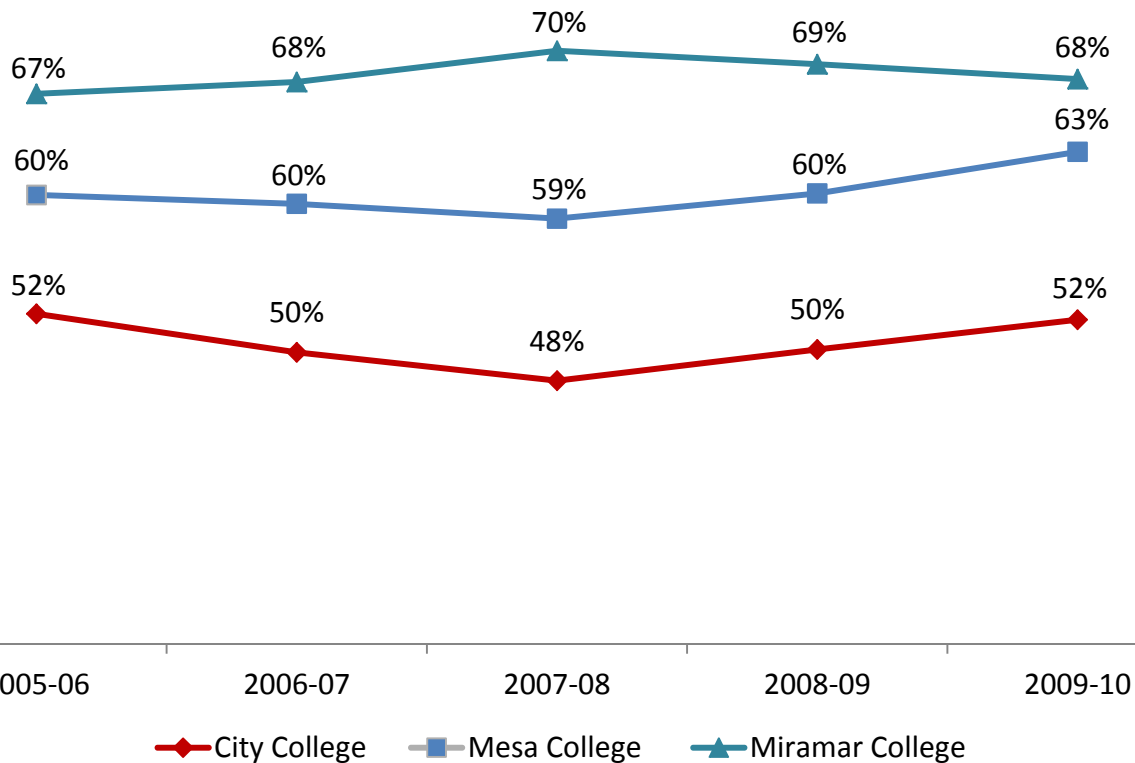
2005-06 2006-07 2007-08 2008-09 2009-10

◆ City College ■ Mesa College ▲ Miramar College

The Basic Skills Improvement Rate at the credit colleges is trending downward but still above the statewide average. The Completion Rate for the credit colleges has also trended downward in recent years.

Student Success Scorecard Indicators

30 Units Completion Rate: The percentage of degree, certificate and/or transfer-seeking students tracked for six years through 2014-15 who achieved at least 30 units.

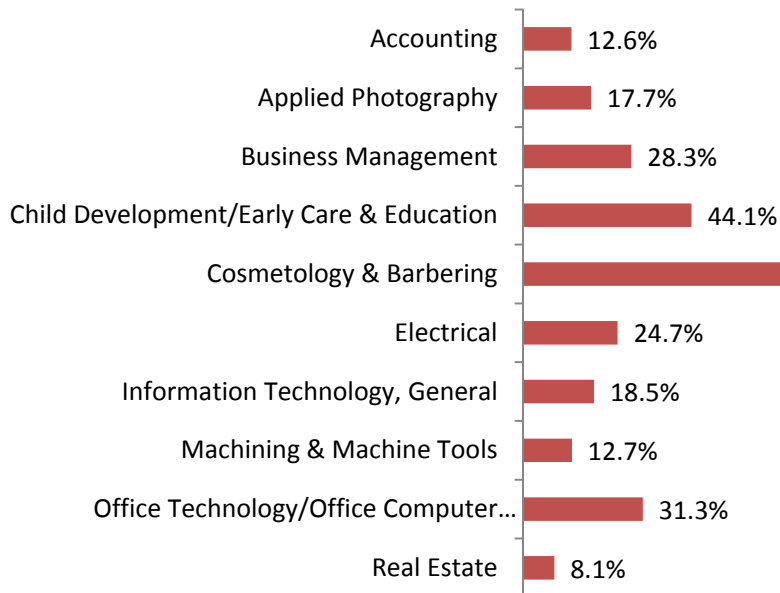


The 30 Units Completion Rate is trending upward for students at City and Mesa Colleges, while the rate at Miramar College remains steady.

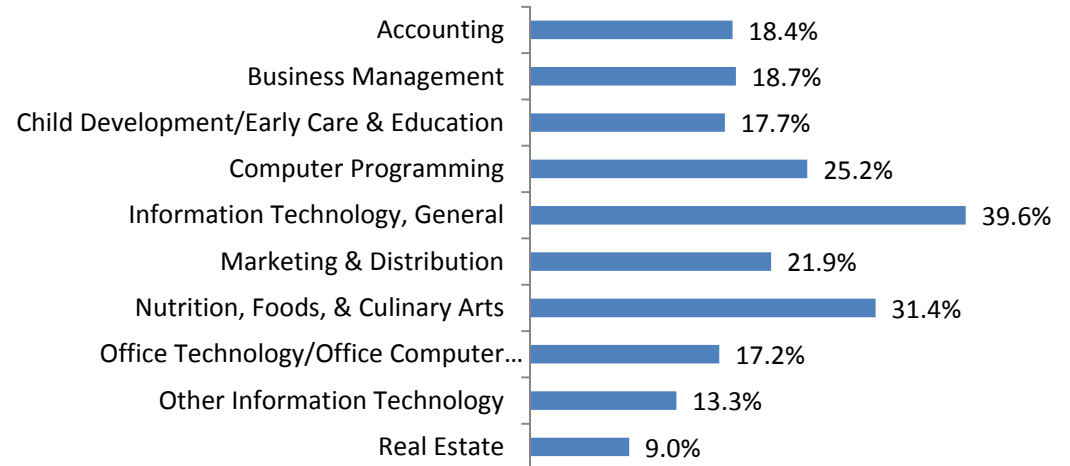
Scorecard: Skills Builder Median Wage Gain

The greatest median wage gain were students who took child development/early care and education, cosmetology & barbering, office technology/office computer applications, information technology, nutrition, foods, & culinary arts, accounting, and police academy.

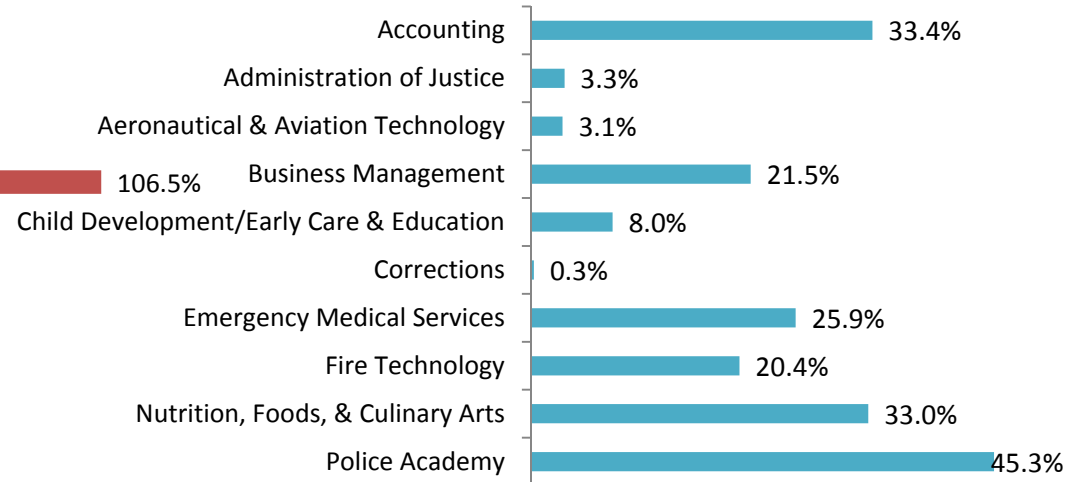
City College



Mesa College



Miramar College



Education and Public Policy Trends

SDCCD Office of Institutional Research and Planning

Analysis & Implications

The launch of President Obama's College Completion Challenge in August 2010, which called for an increase in the number of degrees and certificates awarded by community colleges by 50% by 2020, has brought with it increased accountability. Colleges are required more than ever before to report on student completion and other outcomes that will help to inform national and state policy decisions. For example, in April 2013, the California Community Colleges joined other states to release a "Student Success Scorecard" provided by AB1456 that provides transfer and degree or certificate completion, along with other indicators of success (i.e., persistence, remedial English, math and ESL improvement rates). Each measure is reported by overall, college-prepared and unprepared cohorts, and disaggregated by ethnicity, gender, and age. The report also includes "momentum points," such as the percentage of students who complete 30+ units. The Student Success Scorecard is one of several new and growing accountability mandates from the California legislation.

Numerous other California statewide initiatives have been launched in an effort to improve completion and close equity gaps. The Associate Degrees for Transfer (ADTs) are community college degrees that are designed to provide clear pathways to a California State University baccalaureate degree through guaranteed admission and priority registration with junior standing at a CSU. California community colleges began implementing these new degrees in 2012/13, and reported, 1,730 Associate of Science for Transfer and 3,571 Associate of Arts for Transfer degrees were awarded to California community college students. While 22 states have been offering baccalaureate degrees at their community colleges for some time, leaders in the California community colleges recently endorsed and enacted a bill to pilot baccalaureate degrees at 15 community colleges in California over the next eight years. If successful, the baccalaureate may extend to other colleges in the system.

Recent eligibility requirements for financial aid have impacted the decline in enrollments, particularly among low-income students. These factors have combined to create critical challenges in the way colleges are offering programs and classes, and the types of degrees and certificates offered. Even as the state has begun to provide budget for growth, it is clear that a return to the days of "if we build it, they will come", are long gone. Students and our communities are demanding more technical skills, at a faster rate of delivery, and flexibility. Moreover, community colleges in California are for the first time facing a state funding model based on performance. The new SSSP puts California community colleges in the middle of the national accountability movement, requiring evidence of service and performance for funding. Legislators will continue to demand measurable outcomes, particularly those that lead to transfer and employment, as seen in the Student Success Scorecard, the ACCJC accreditation standards, and the Institutional Effectiveness Partnership Initiative. It will be vitally important to continue to find ways in which to increase degree, and certificate completions, as well as transfers. Employment of Skills Builders (those students who return to college to improve skills for employment but may not be seeking a degree or certificate) is a growing segment of the community college population, and new grants and initiatives are focusing on increasing the success and employment of these students.

Legislation, Grants & Initiatives

- Accountability Measures: IEPI Benchmarking, Student Success Scorecard, New Accreditation standards, SSSP performance-based reporting
- Adult Education Consortium/ABEG (AB86/104)
- Associate Degrees for Transfer (ADTs)
- Baccalaureate Degree Pilot Program (SB850)
- Basic Skills and Student Outcomes Transformation Program Grant
- California Career Pathways Trust (CCPT-AB86)
- Common Assessment Initiative (CAI) and MMAP
- Education Pathways Initiative (SB1425)
- Educational Planning Initiative (EPI)
- Online Education Initiative (OIE)
- Strong Workforce Program Initiative
- Student Success Act (SB1456):
 - Student Success Services and Programs (SSSP)
 - Student Equity Plan (SB860)
 - Institutional Effectiveness Partnership Initiative (IEPI)

Technology Trends

SDCCD Office of Institutional Research and Planning

Analysis & Implications

Responding to the demand for more distance education and mobility, community colleges are offering more and more courses and programs online. The ability to take college courses online makes access to higher education possible for many more students than ever before. The hallmark of online education is the flexibility it affords students who need to coordinate their studies with their work and personal obligations. For example, a student with a full-time job can access an online course before or after work or on days off. Stay-at-home parents can participate in online classes before the children get up, while they are at school, and after they go to bed at night. Students who live in geographically remote areas can attend college without having to relocate or travel great distances. The popularity of distance learning guarantees that the trend toward more online course offerings will continue.

In higher education, the term *student swirl* has historically referred to the practice of students enrolling at multiple colleges in order to complete their education goal. The term was coined back in 1990 by administrators at Maricopa Community College, but the practice has only gained momentum with increased access to online and distance learning opportunities. The ability for students to more easily access multiple institutions via the online learning platform lends itself to student swirl. Students now have more options. In short, the path to the degree is no longer linear or uniform in the traditional sense, nor does it need to be. In addition, the time it takes to complete a degree or certificate could be accelerated as a result of online learning pathways. Schools are also exploring badging and micro-credentialing or stackable certificates as ways to mark progress toward an academic goal, especially in the domain of competency-based education.

National Technology Trends

1. Eighty-five percent of U.S. college students use Facebook.
2. Ninety-four percent of U.S. teenagers send email over the Internet, and nearly three out of four use some form of social networking site.
3. At least 136 U.S. universities has an education channel on YouTube.
4. A college student freed himself from an Egyptian jail using his cell phone to post a one-word blog on Twitter.
5. Ninety-seven percent of U.S. college students own a cell phone, and 79% own a mobile computer.
6. The adoption of hybrid and other online learning models is expanding across all venues of higher education, including institutions that have traditionally valued intimate, face-to-face learning. Higher education's "affair" with the MOOC, though now waning, has had one lasting impact. It has greatly accelerated the migration of higher education into online education.
7. Analysis of ever-increasing amounts of data and the increased influence those analyses have in the conduct of higher education. This use of "big data" affords much more nuanced and timely insights into all kinds of learning processes. It enables the creation of custom reports tailored to specific learning contexts, ranging from institutional dashboards to personalized assistance for learners. It provides the basis for measuring progress toward institutional strategic goals. Equally important, analytics enables interventions in nearly real time.
8. Seventy-one percent of students used OER in 2013 (up from 25% in 2010) and 54% said that open resources are extremely important. The ever-growing abundance of ancillary content relevant to education (e.g., iTunes U, MOOCs, and repositories such as OpenStax CNX) enables students to skip the purchase of core textbooks altogether and instead seek basic explanations of content from these open resources. The course textbook is no longer a requirement but, rather, an option.

National Technology Trends

1. **CHOICE.** Technology is increasingly being used to personalize learning and give students more choice over what and how they learn and at what pace, preparing them to organize and direct their own learning for the rest of their lives.
2. **PHYSICAL SPACE.** Technology has allowed us to rethink the design of physical learning spaces to accommodate new and expanded relationships among learners, teachers, peers, and mentors.
3. **DIGITAL USE DIVIDE.** A digital use divide separates many students who use technology in ways that transform their learning from those who use the tools to complete the same activities but now with an electronic device (e.g., digital worksheets, online multiple-choice tests).
4. **ENROLLMENT GROWTH.** eLearning enrollments have accounted for nearly all student enrollment growth at community colleges during the past eleven years.
5. **PROGRAM QUALITY.** eLearning administrators have shifted from simply offering their students some online courses, to a concerted commitment to enhancing the overall quality and integrity of the college's online program. The need to raise online course and program quality has encouraged college administrators to offer professional development and training to faculty and staff, address the issue of student readiness, and improve student assessment, retention and completion rates.

National Technology Trends

6. **ORIENTATION.** Orientation and student preparedness has led the pack as the number-one challenge eLearning administrators face with regard to students, despite 10 years of growth and evolution in online instruction. Community colleges face special challenges due to their commitment to serving under-represented populations and students who are on the wrong side of the digital divide. There is also an absence of online learning at the K-12 level to help new students.
7. **GENDER GAP.** Women have dominated online enrollment, representing more than two-thirds of the total number of distance learning students. Online education has opened the door to women seeking a college education. Survey data indicates a gradual move towards gender parity among students moving from a 70%-30% split in 2004 to a 61%-39% split in 2015.
8. **NONTRADITIONAL LEARNERS.** A greater number of nontraditional students take eLearning courses—48%—which is higher than the average percentage of nontraditional students enrolled in on-campus courses. Online education appeals to older students who are working and appreciate a flexible educational environment.

Sources:

Office of Educational Technology, U.S. Department of Education, 2016 National Education Technology Plan, Future Ready Learning: Reimagining the Role of Technology in Education

Lokken, Fred. Instructional Technology Council, 2015 Distance Education Survey Results, Trends in eLearning: Tracking the Impact of eLearning at Community Colleges

Statewide Technology Trends

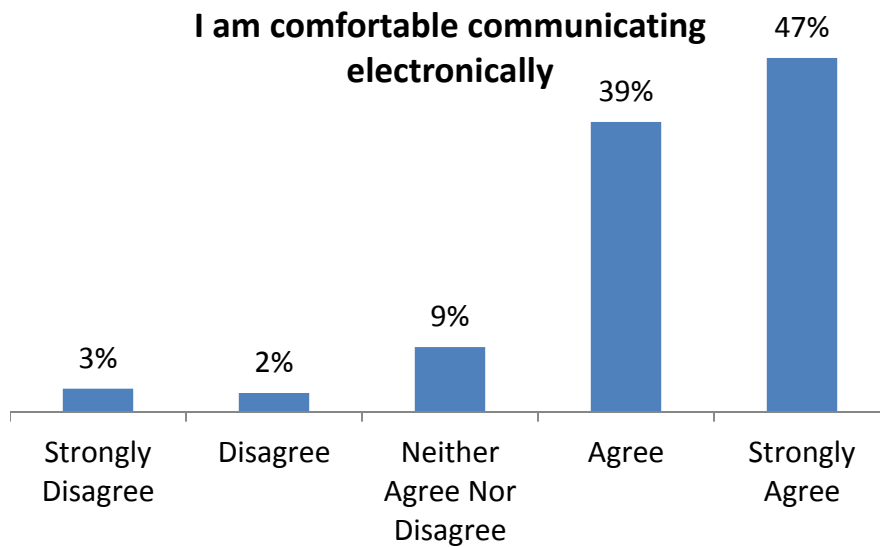
9. **ENROLLMENT.** California community colleges offer more online credit courses than any other public higher education institution in the country. In 2012, online enrollment in the CCC represented 11% of total enrollments.
10. **ETHNICITY GAP.** Online enrollment is increasing for each of the largest ethnic groups. However, less so for Latino students (8%) compared to other groups (10% to 13%). This disparity is in part a reflection of the digital divide, with Latinos less likely than other groups to have broadband access at home.
11. **GENDER GAP.** Men are less likely than women to take online courses (9% compared to 13%). In fact, women compose the vast majority of online credit enrollment (62%).
12. **AGE GAP.** The widest participation gap in online enrollments is seen among the older, nontraditional-college going students (over 25 years old), who are much more likely to enroll in online courses. This is likely a reflection of the job and family demands that make online learning more convenient.
13. **SUCCESSFUL COMPLETION.** Course success rates are generally lower than in face-to-face course, and retention rates are substantially lower.

SDCCD DETA Survey Highlights

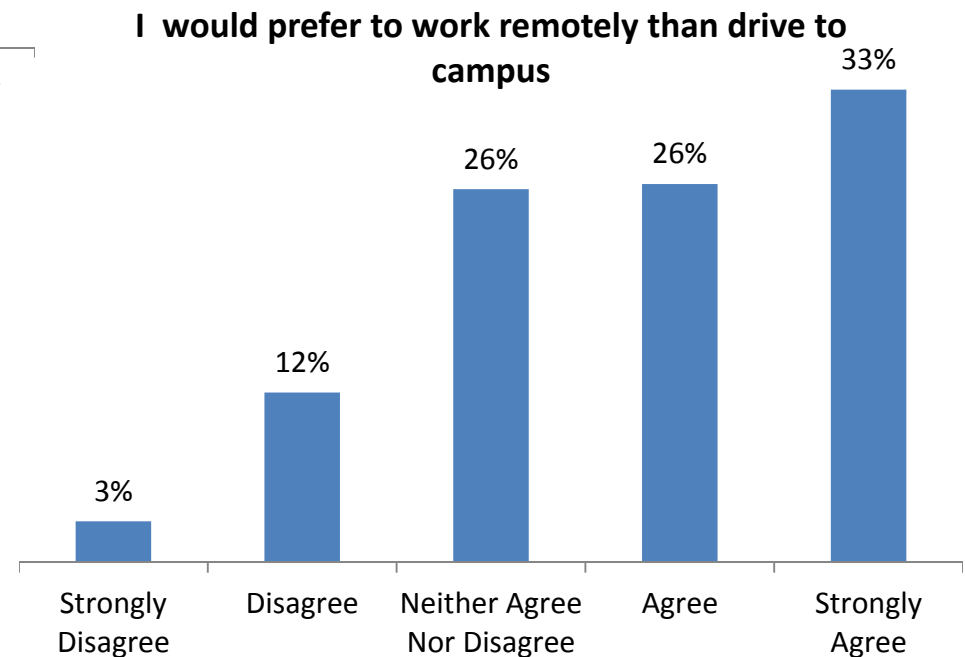
Why did you choose to take this course in the mode you did rather than as a completely traditional face-to-face course?

1. Fits with work schedule
2. Allows for family commitments
3. Course availability
4. Convenience and flexibility; no commute, work at own pace, manage time easier, no hassle with parking
5. Cost savings (e.g., no daycare, gas, etc.)

SDCCCD DETA Survey Highlights



The more strongly students believed that their learning experiences were active and collaborative, and the instructional materials had breadth, depth and currency, the more likely they were to perceive their experience in the online class helped them do better on exams and assignments.



SDCCCD DETA Survey Highlights

When using an electronic device, how often do you:

A significant and strong, positive relationship was found between how organized a student perceived the instructor and course to be and the students' perceived amount of learning ($r = 0.528$).

Course resources (e.g., relevant course tools and media, and current instructional materials) contributed to positive perceptions of the student's learning, that was also positively impacted by the incorporation of learning activities supporting active learning.

