



# 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

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# 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.<sup>1</sup>

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.

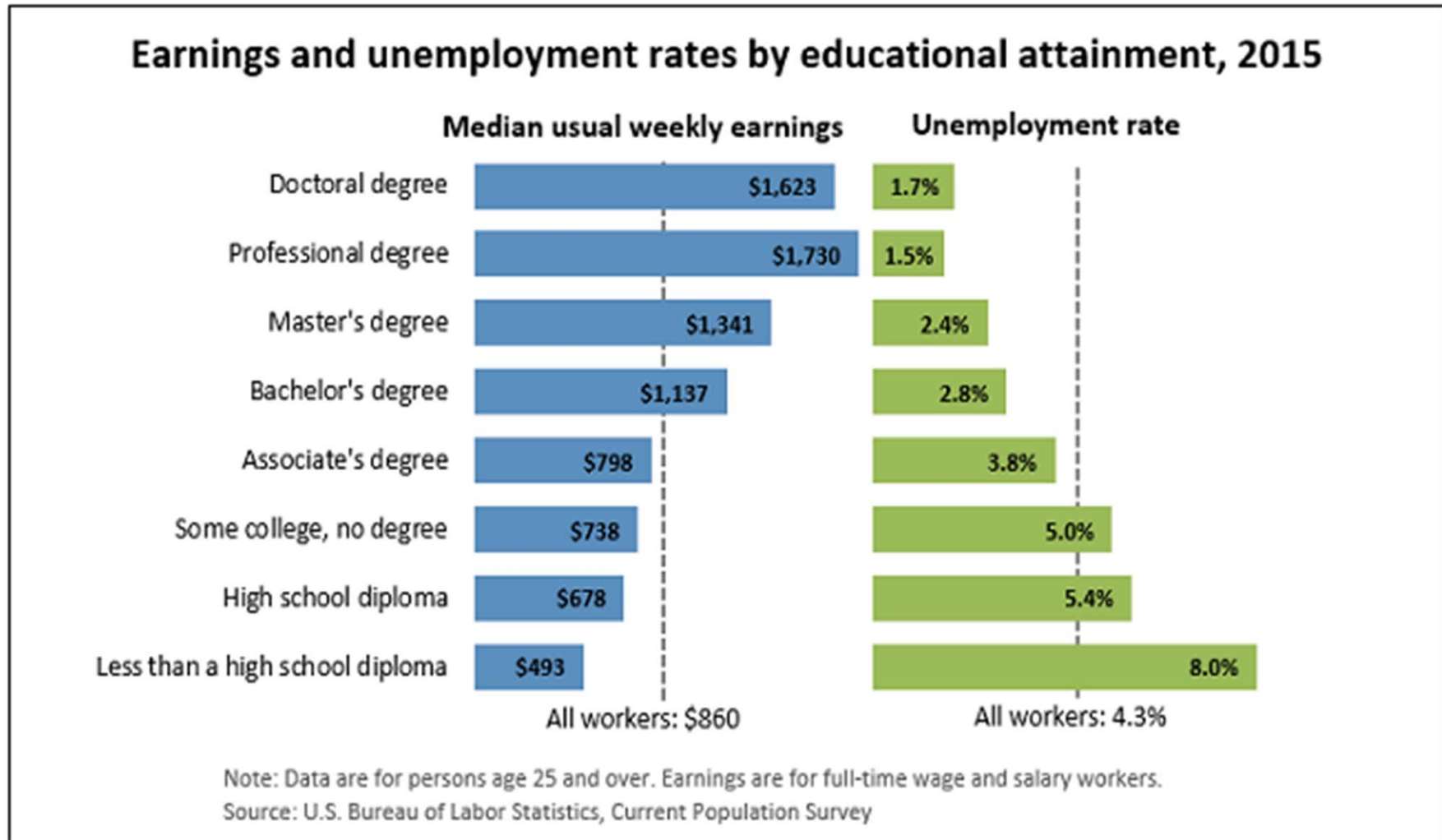
Many new and replacement jobs, particularly those in the career technical fields, also have high job multiplier values that create other jobs that support or contribute to the productivity and vitality of these related industries. For example, the occupations in the biochemical fields have a particularly 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.

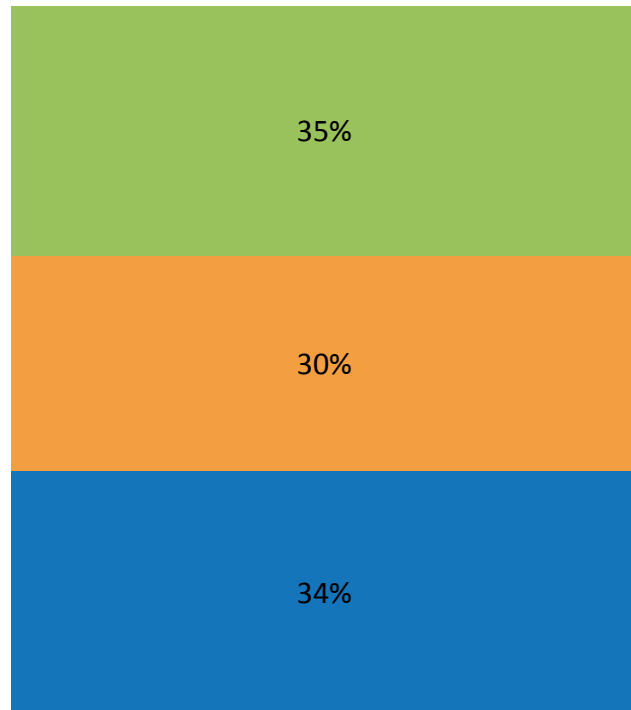
Partnerships with corporate and private industry that offer students internships and/or apprenticeships will be even more critical to the successful preparation and employment of students than ever before, particularly in the rapidly changing and growing technical fields. Short-term certificates and 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.



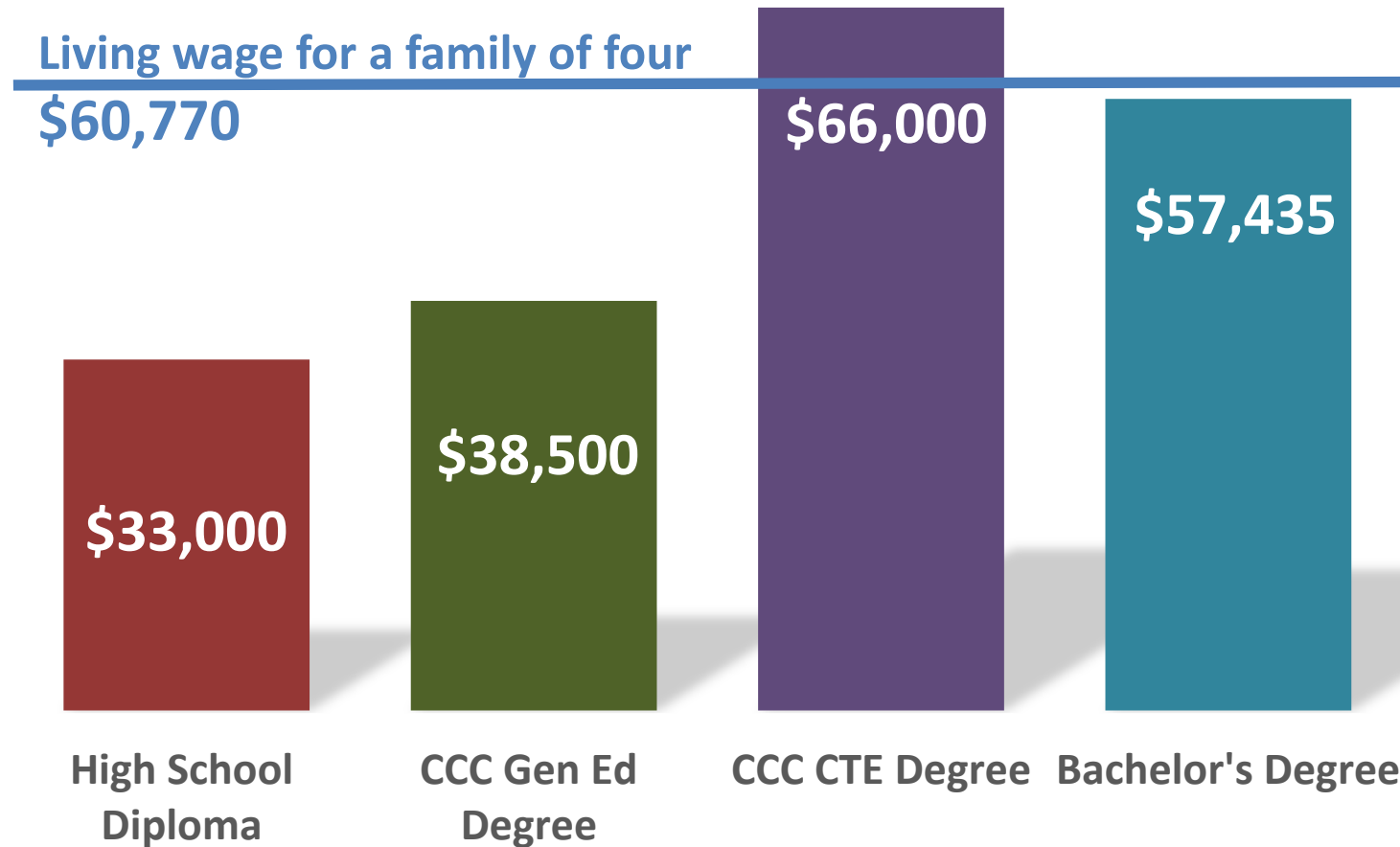
The median hourly wage for these workers is **\$20.20** versus the San Diego median hourly living wage of \$13.09.

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

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

# Earning Comparisons in California



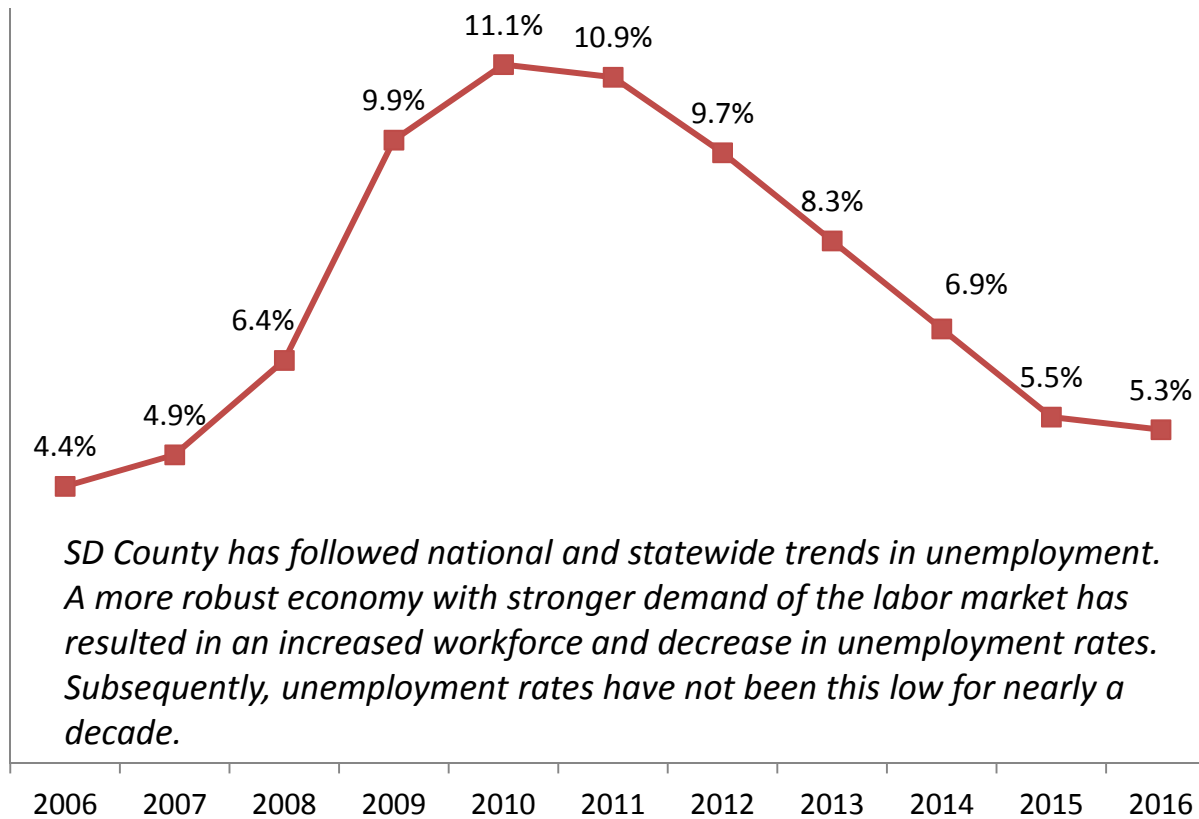
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Source: NCHEMS Information Center and California Community Colleges Chancellor's Office



# San Diego County Employment

**San Diego County Unemployment Rate**

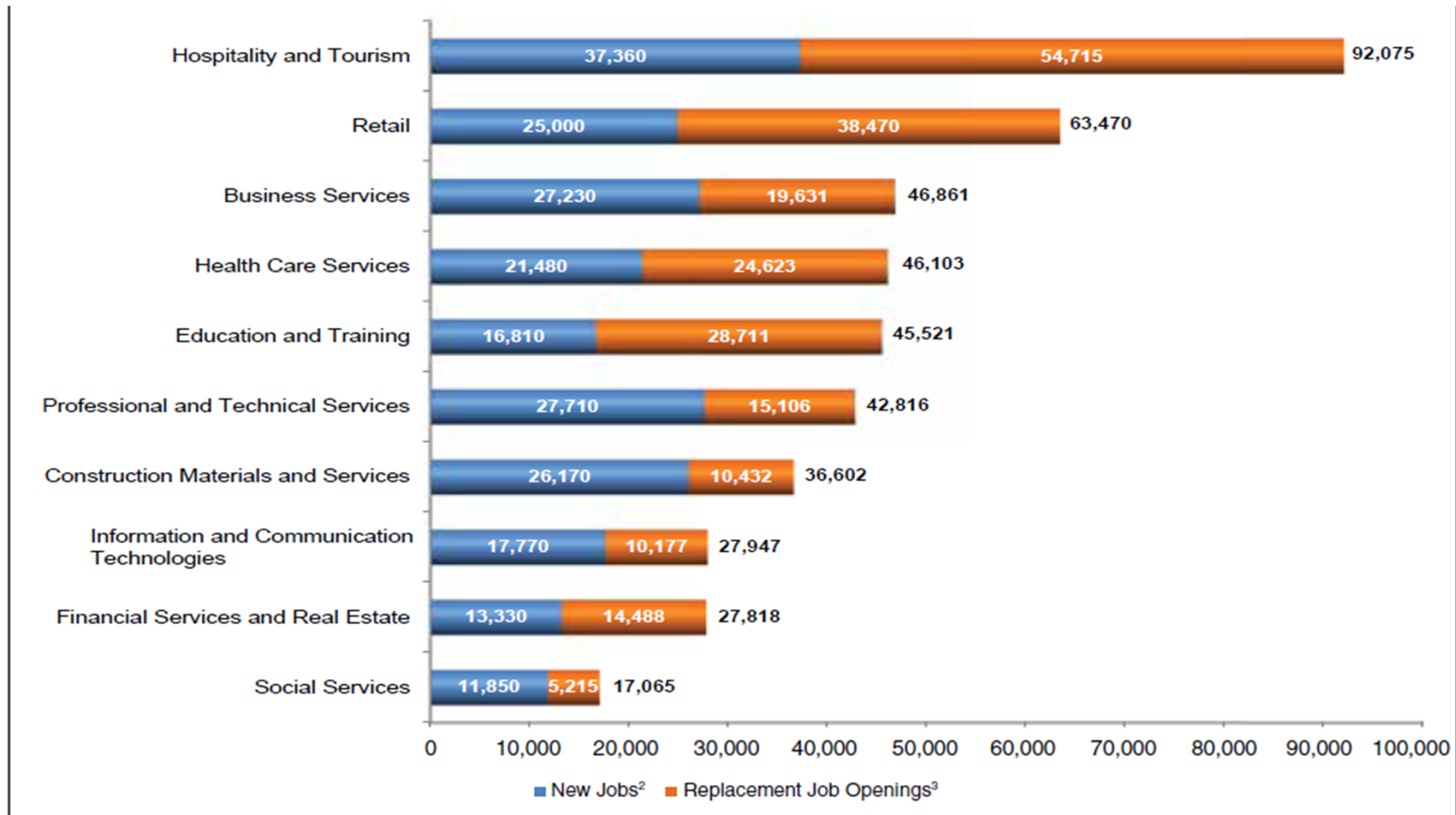


*SD County has followed national and statewide trends in unemployment. A more robust economy with stronger demand of the labor market has resulted in an increased workforce and decrease in unemployment rates. Subsequently, unemployment rates have not been this low for nearly a decade.*

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



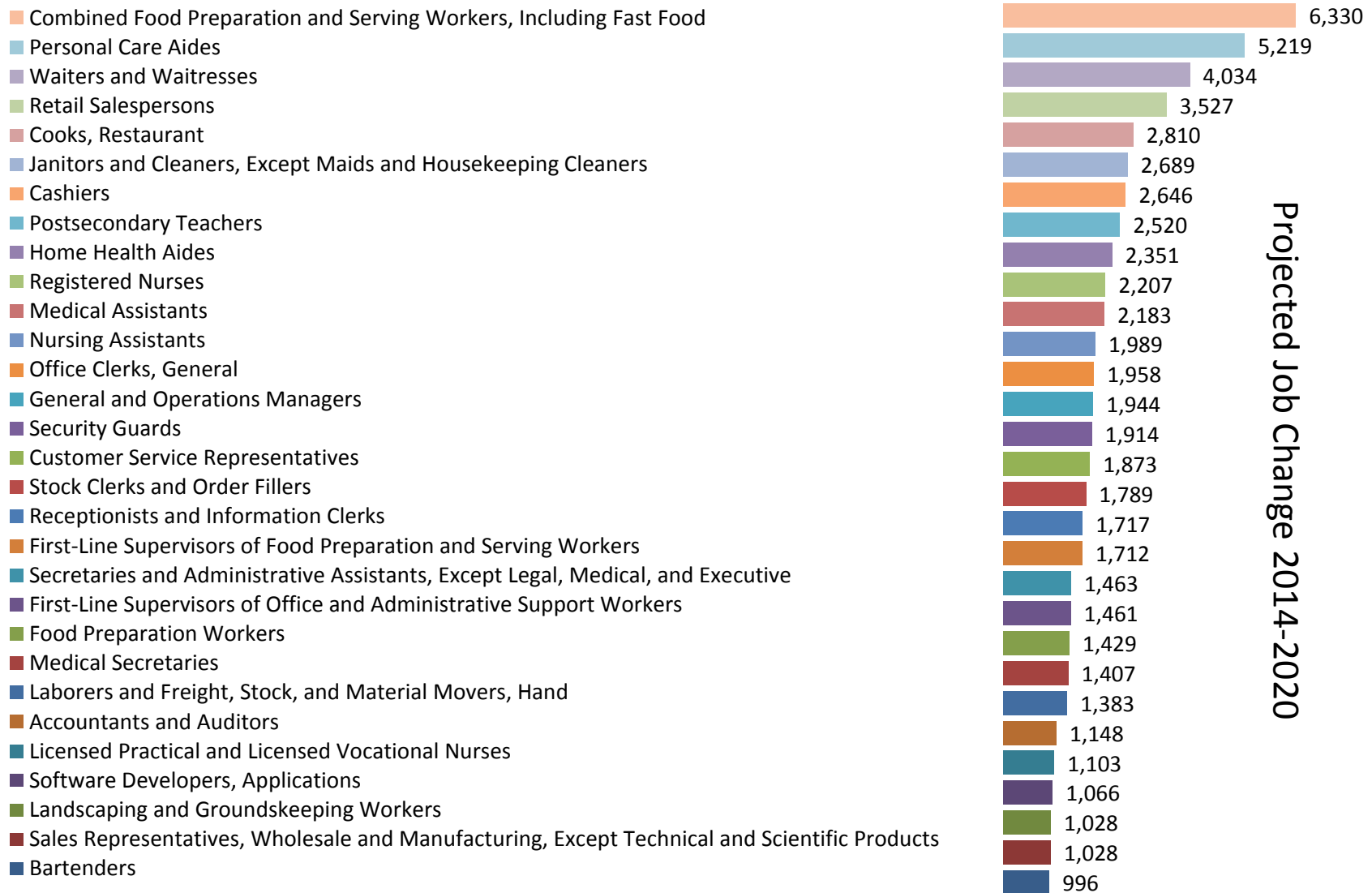
Source: California Employment Development Department, *Projections of Employment 2012-2022*. Industry and occupational employment projections for 2012-2022 in this report may not be directly comparable to the published 2012-2022 employment projections available online at [www.labormarketinfo.edd.ca.gov](http://www.labormarketinfo.edd.ca.gov).

<sup>1</sup> Total job openings are the sum of new jobs and replacement job openings.

<sup>2</sup> 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.

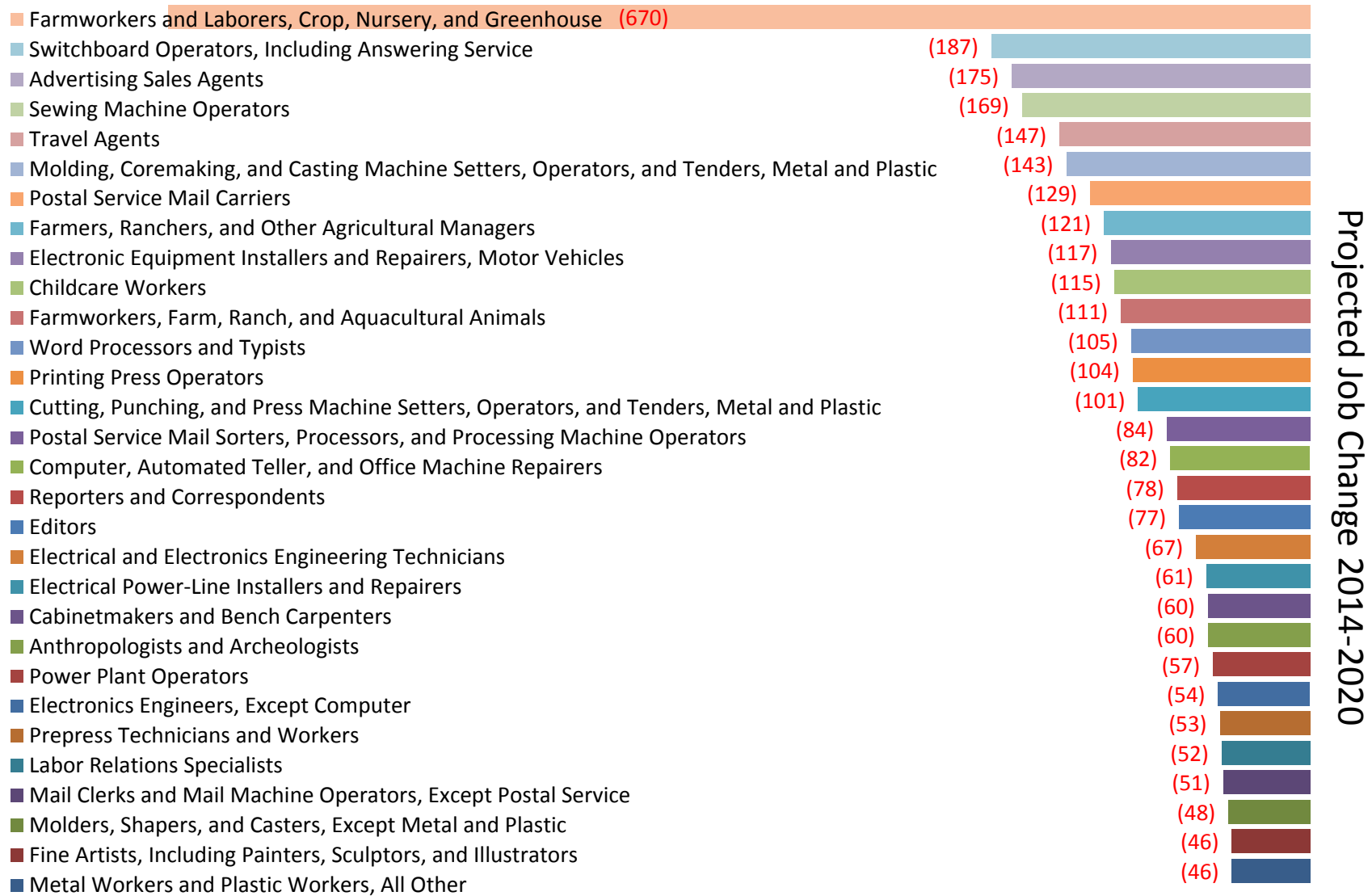
<sup>3</sup> Replacement job openings estimate the number of job openings created when workers retire or permanently leave an occupation and need to be replaced.

# Fastest Growing Occupations: San Diego County



Projected Job Change 2014-2020

# Slowest Growing Occupations: San Diego County



# 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

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# 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.

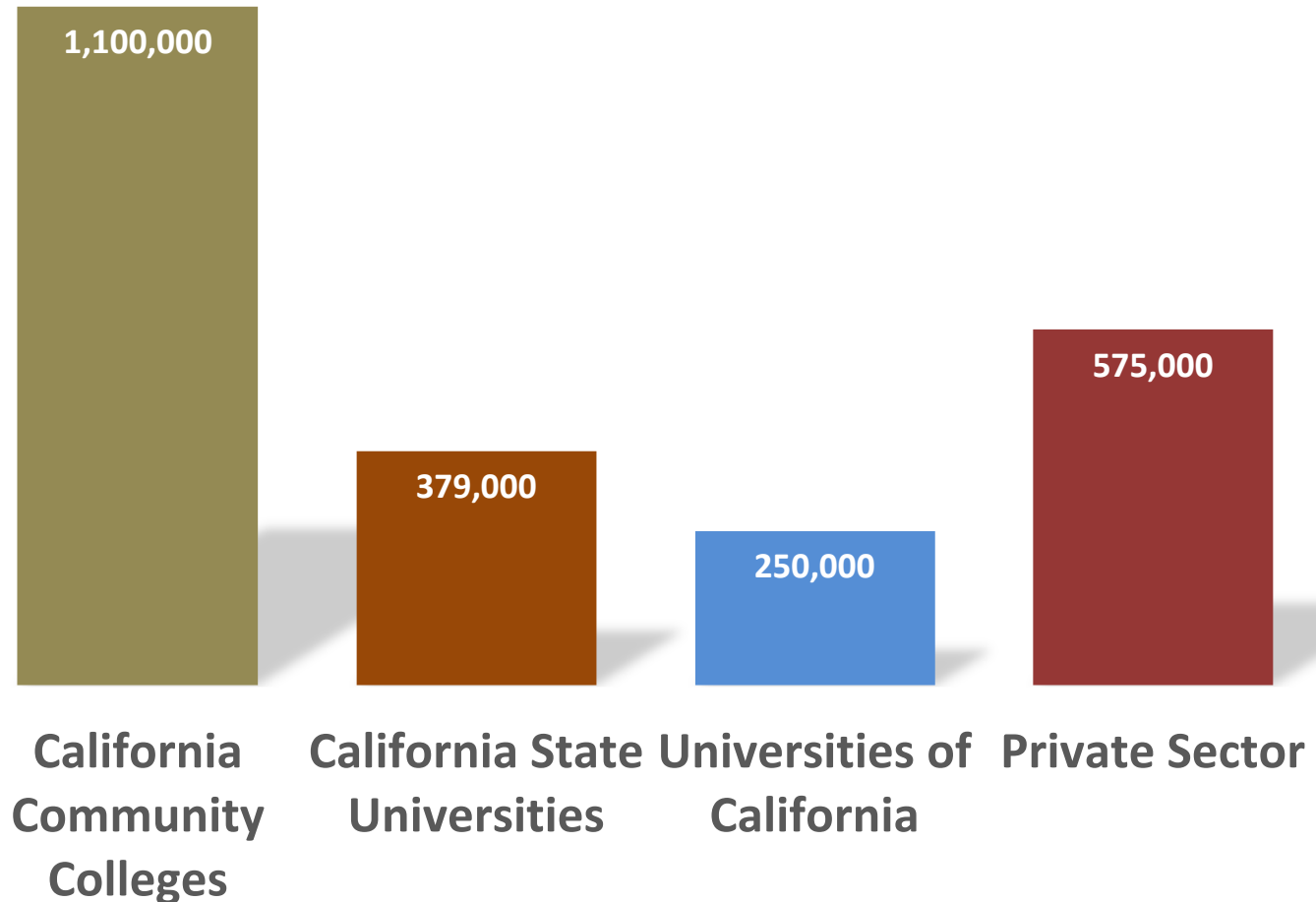
Although the top selected majors that students identify has not changed much over the past five to ten years, the number of colleges in the San Diego/Imperial region that offer these majors has changed. There are many degree and certificate programs that are duplicated by multiple colleges in the region 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



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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				

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Source: CCCCC 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

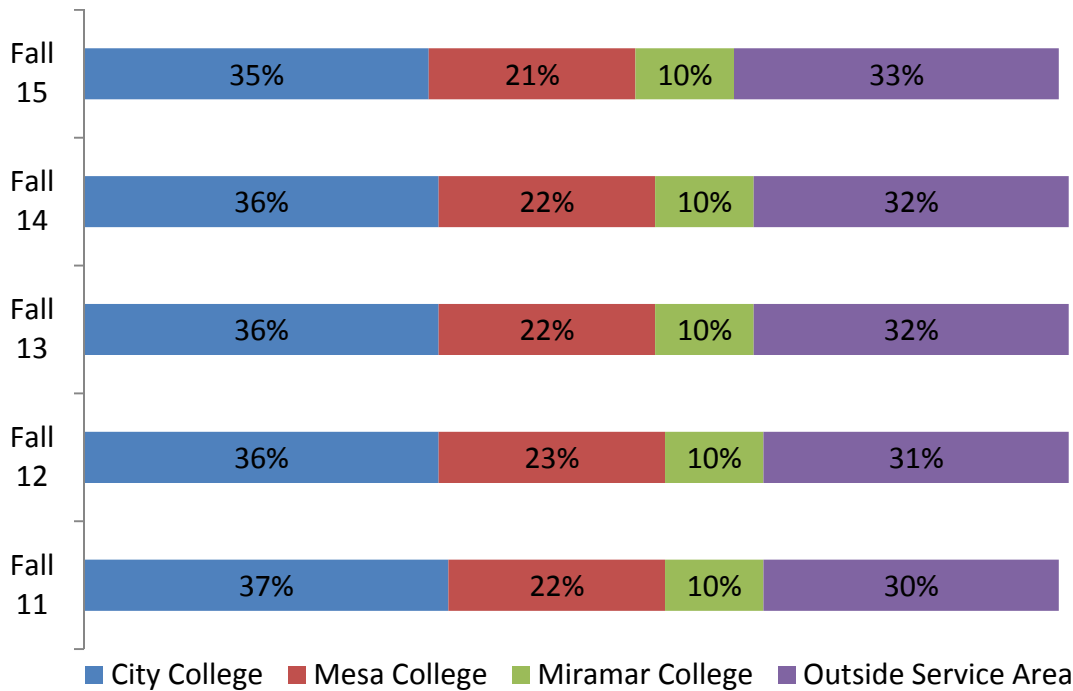
\*None of the SDCCD colleges have awarded certificates in this program in the past ten years.

# 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		

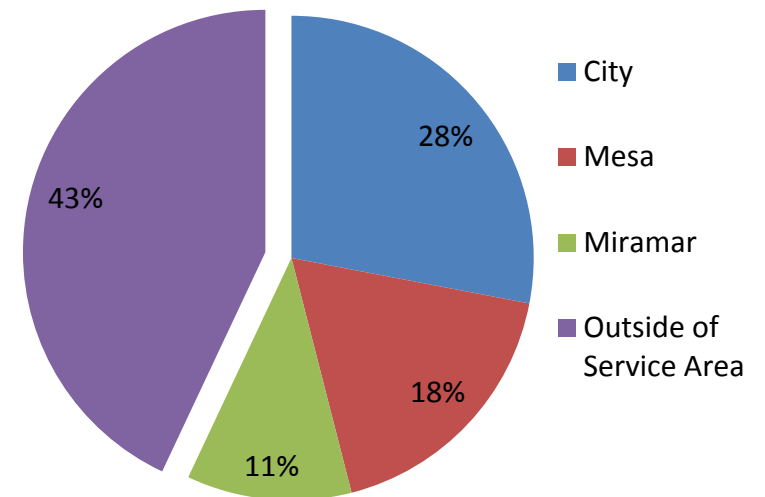
# Enrollment by Service Area of Residence

## 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.<sup>1</sup>

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. <sup>2</sup> 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. <sup>3</sup>

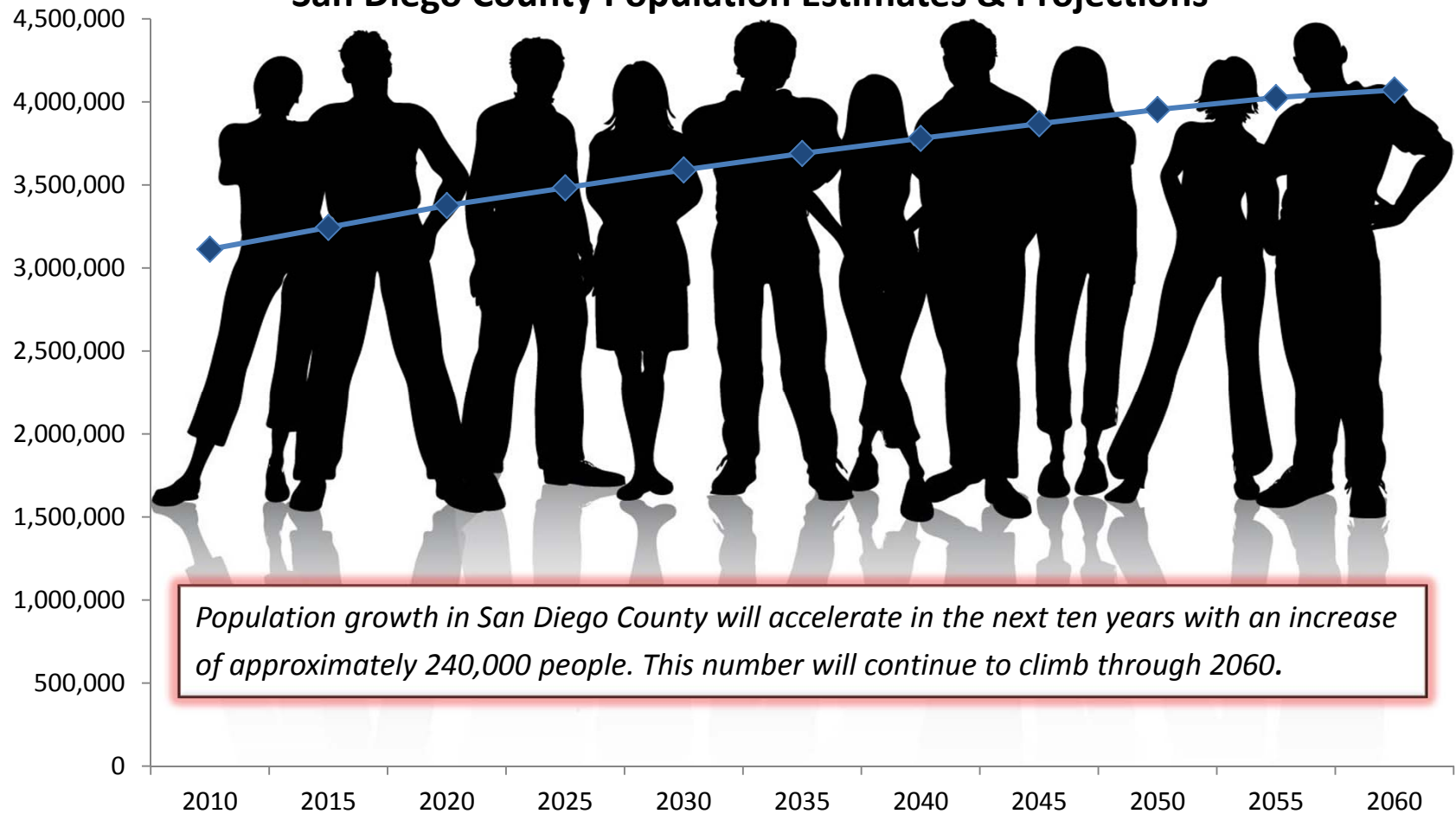
San Diego County is an ethnically diverse and culturally rich region that will experience substantial population growth over the next ten years. Significant changes within the region's underlying demographic profile will largely influence education planning and workforce development. The Latino population 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

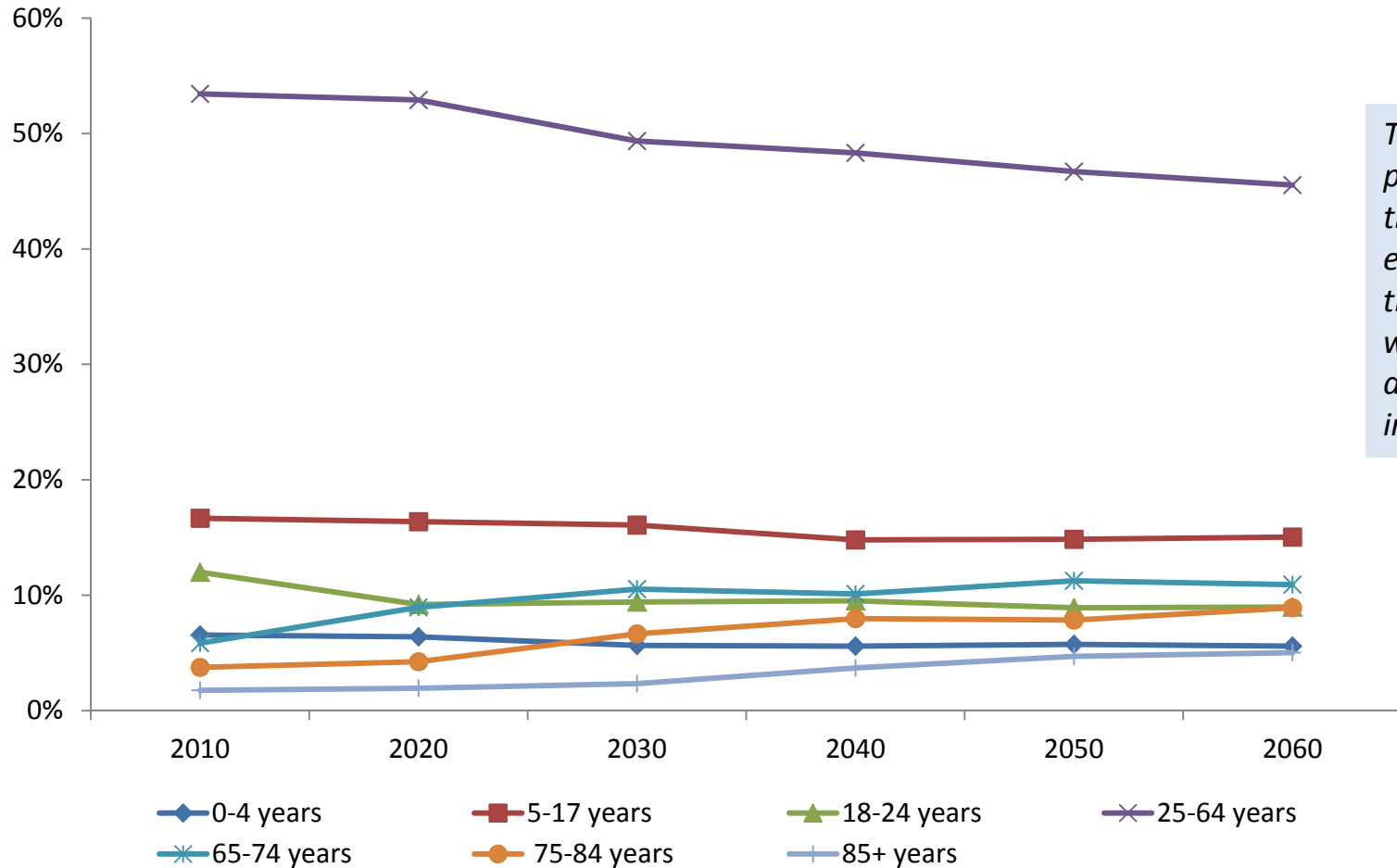


*Population growth in San Diego County will accelerate in the next ten years with an increase of approximately 240,000 people. This number will continue to climb through 2060.*

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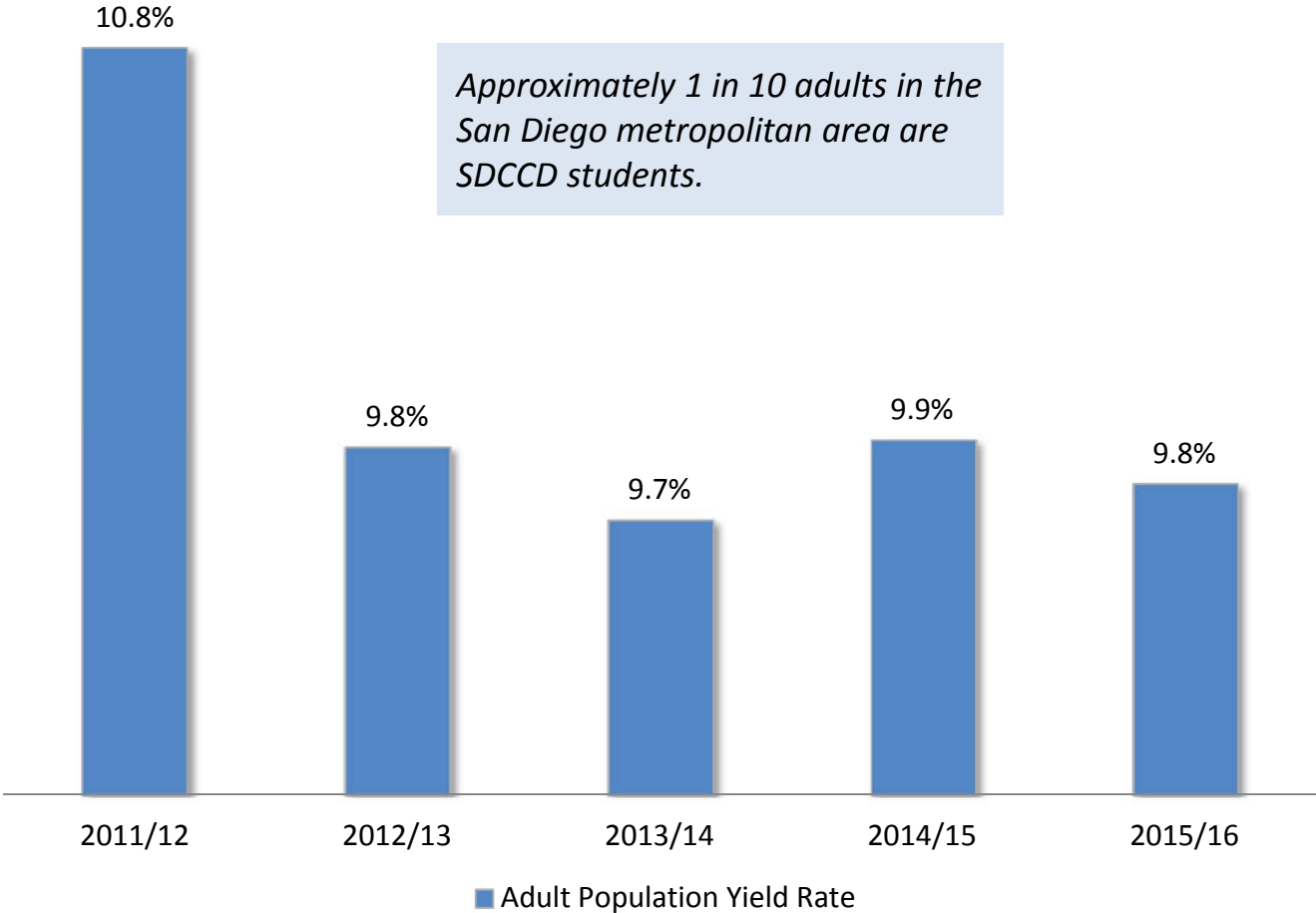
Source: California Department of Finance

# 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.*

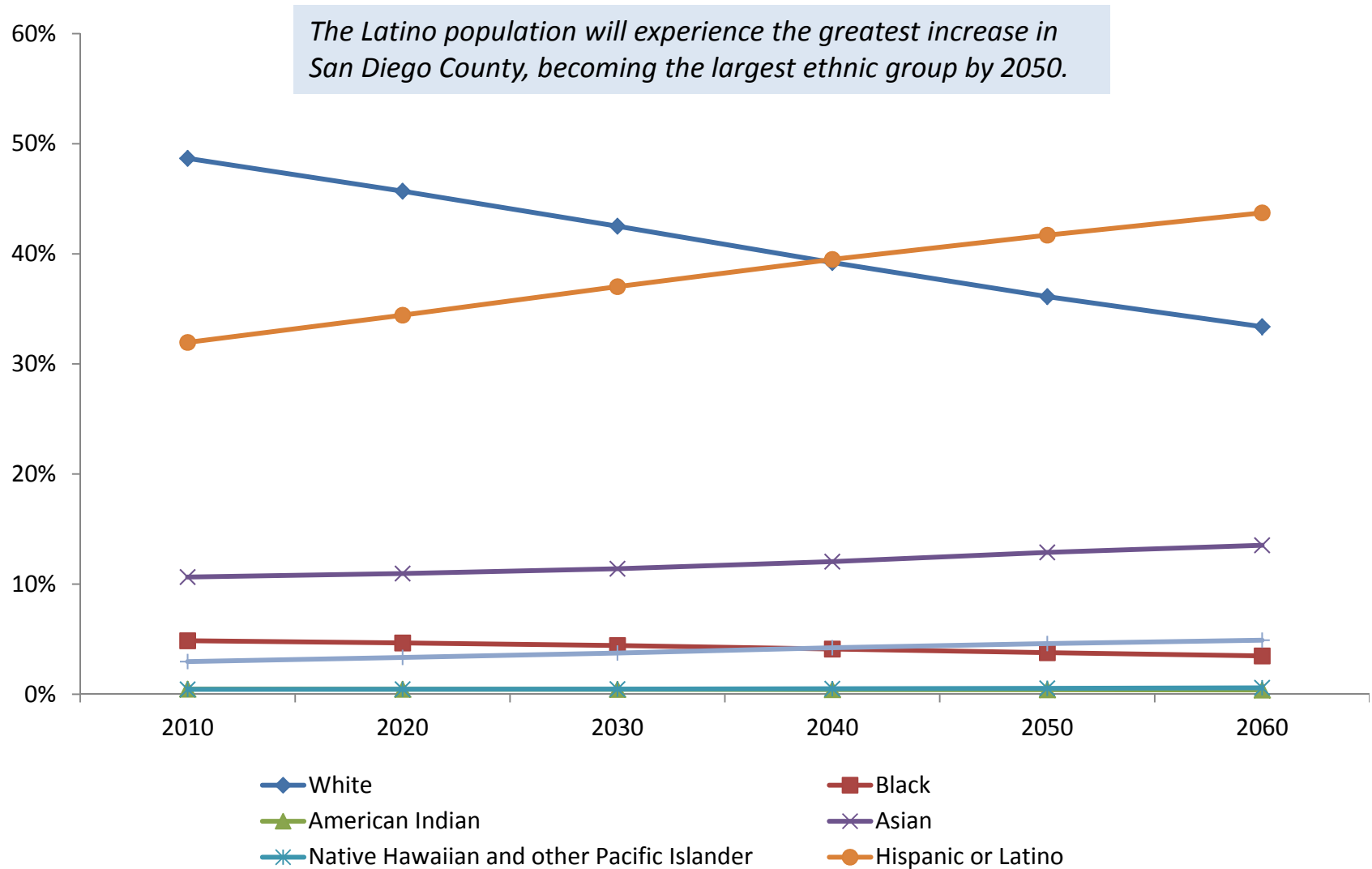
# Adult Population Yield Rates



	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

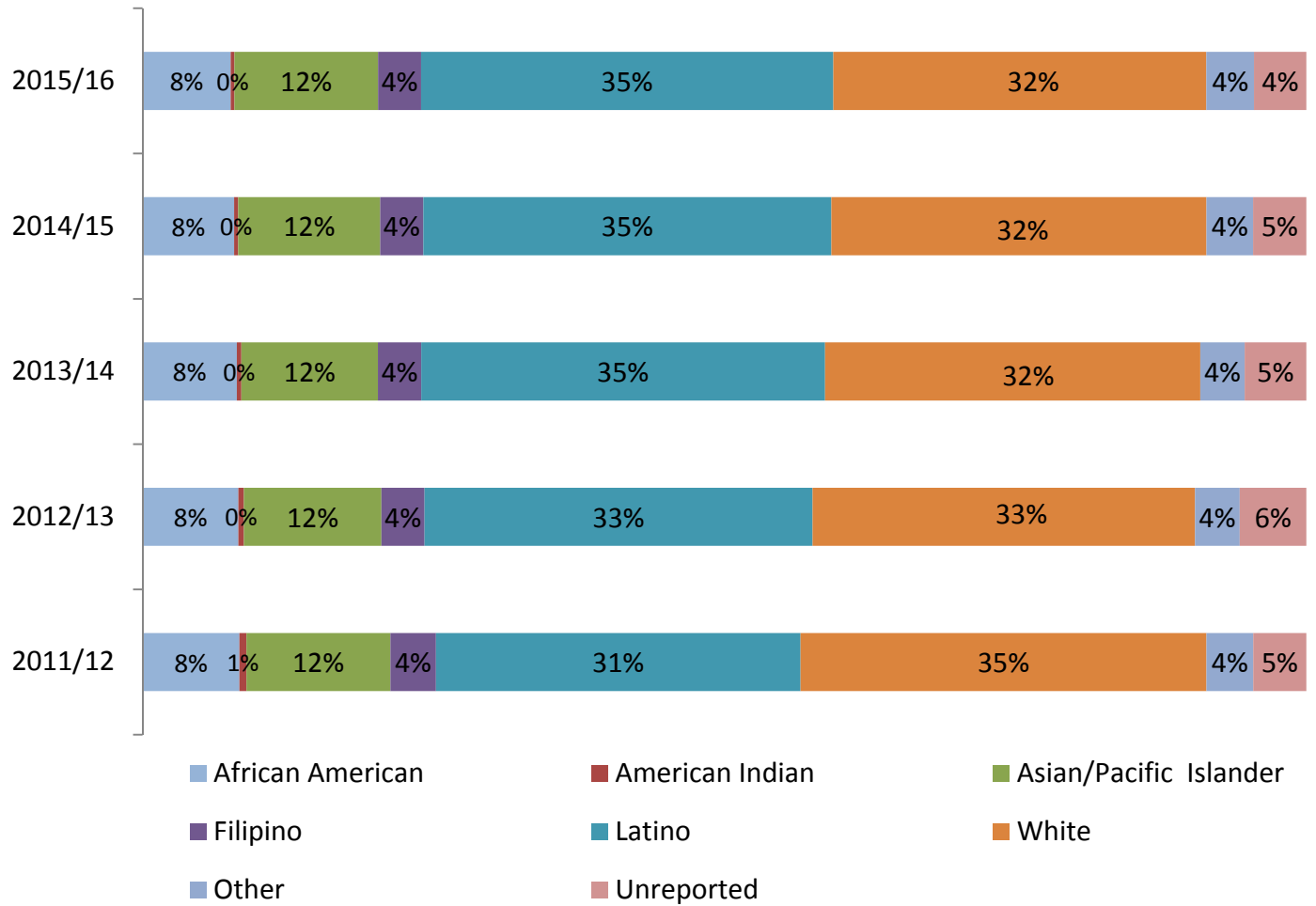


**SDCCD Office of Institutional Research and Planning**

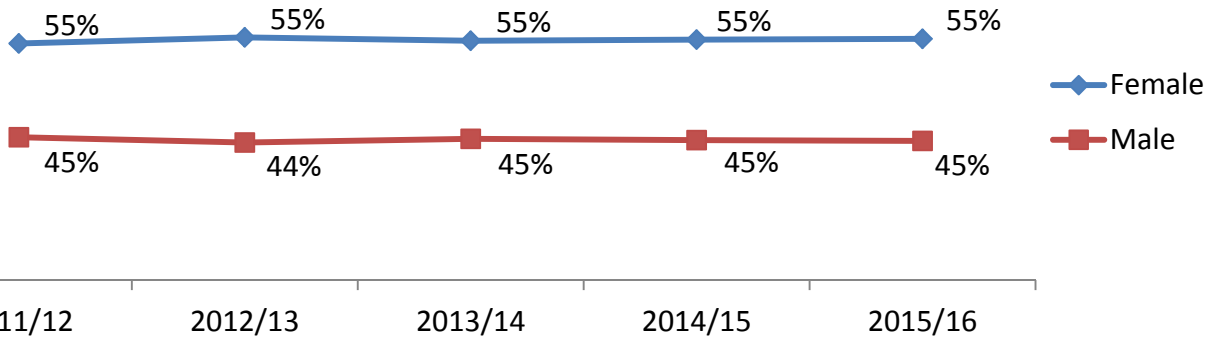
Source: SANDAG

# SDCCD Students: Ethnicity

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

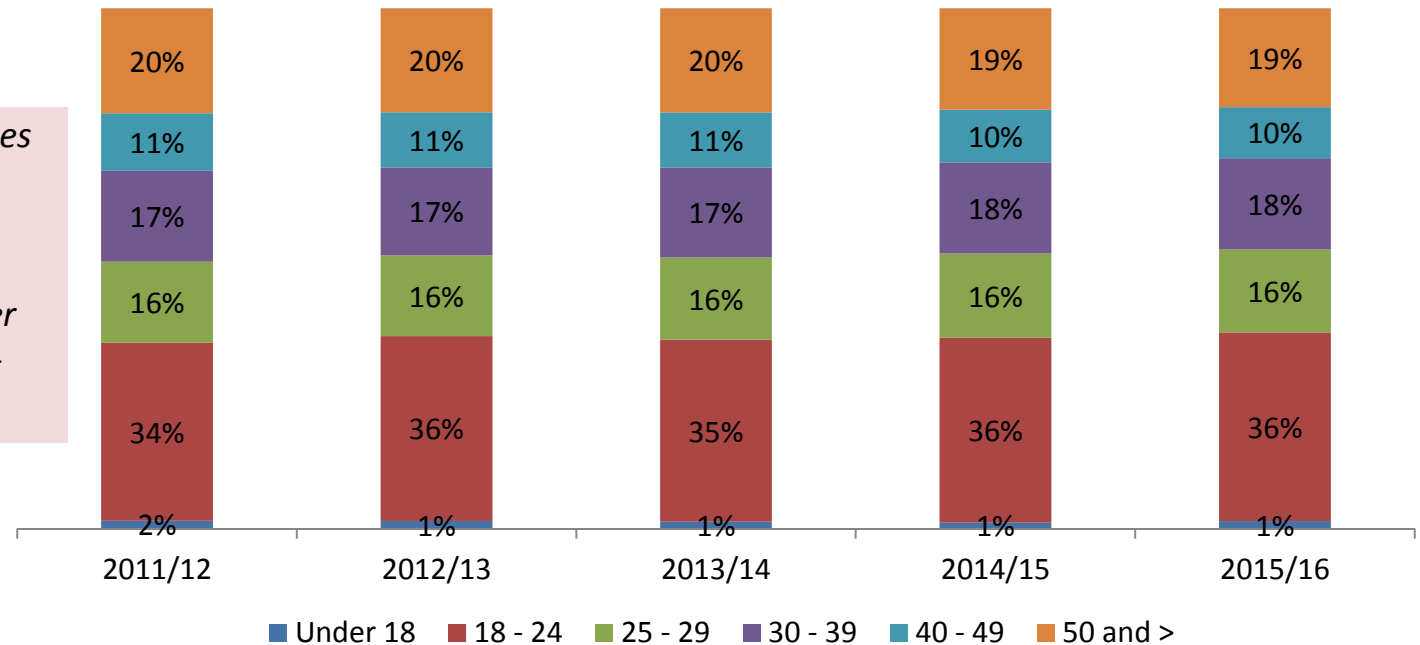


# SDCCD Students: Gender & Age



*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.*

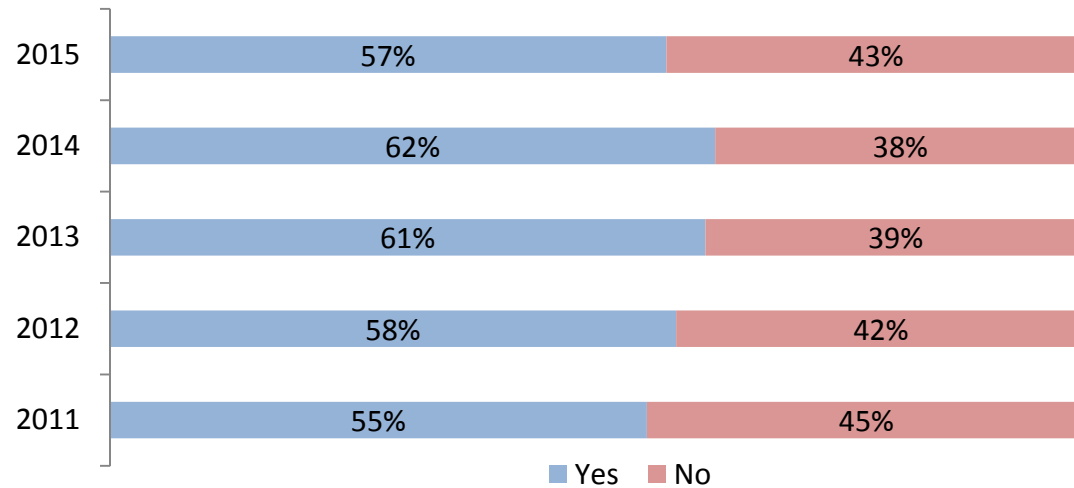




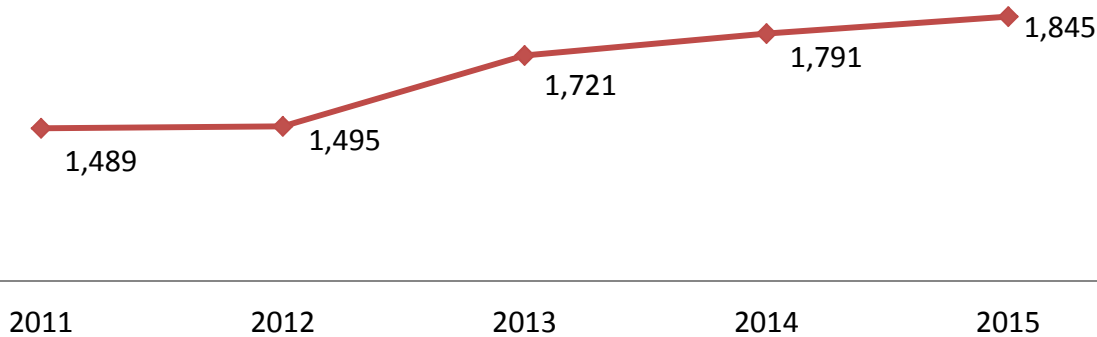
# SDCCCD Students: Financial Aid & DSPS

*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%

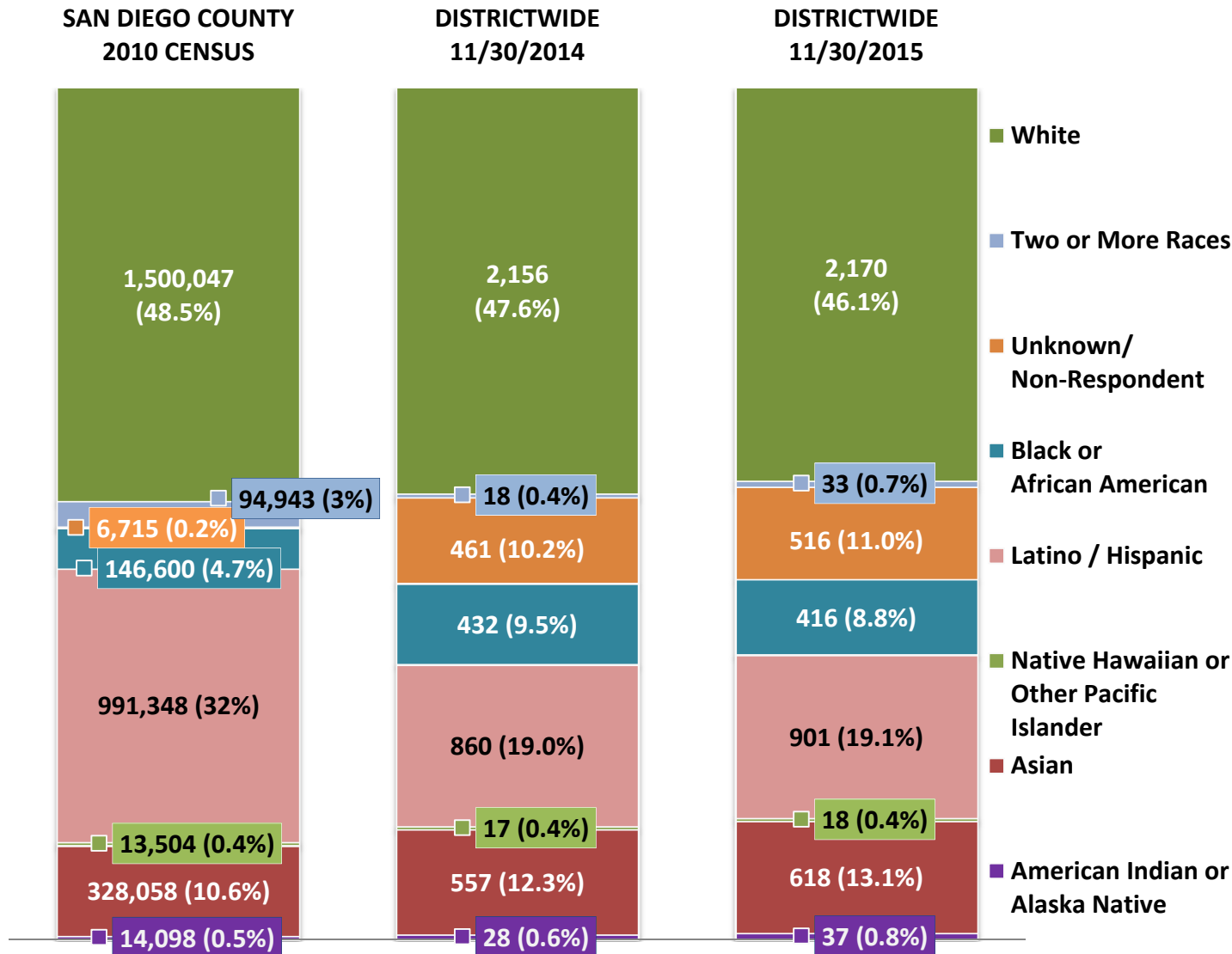
	Fall 2015 Students	San Diego Metro	Point Gap Index
Veteran	12%	10%	2%
Not Veteran	88%	90%	-2%

*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%

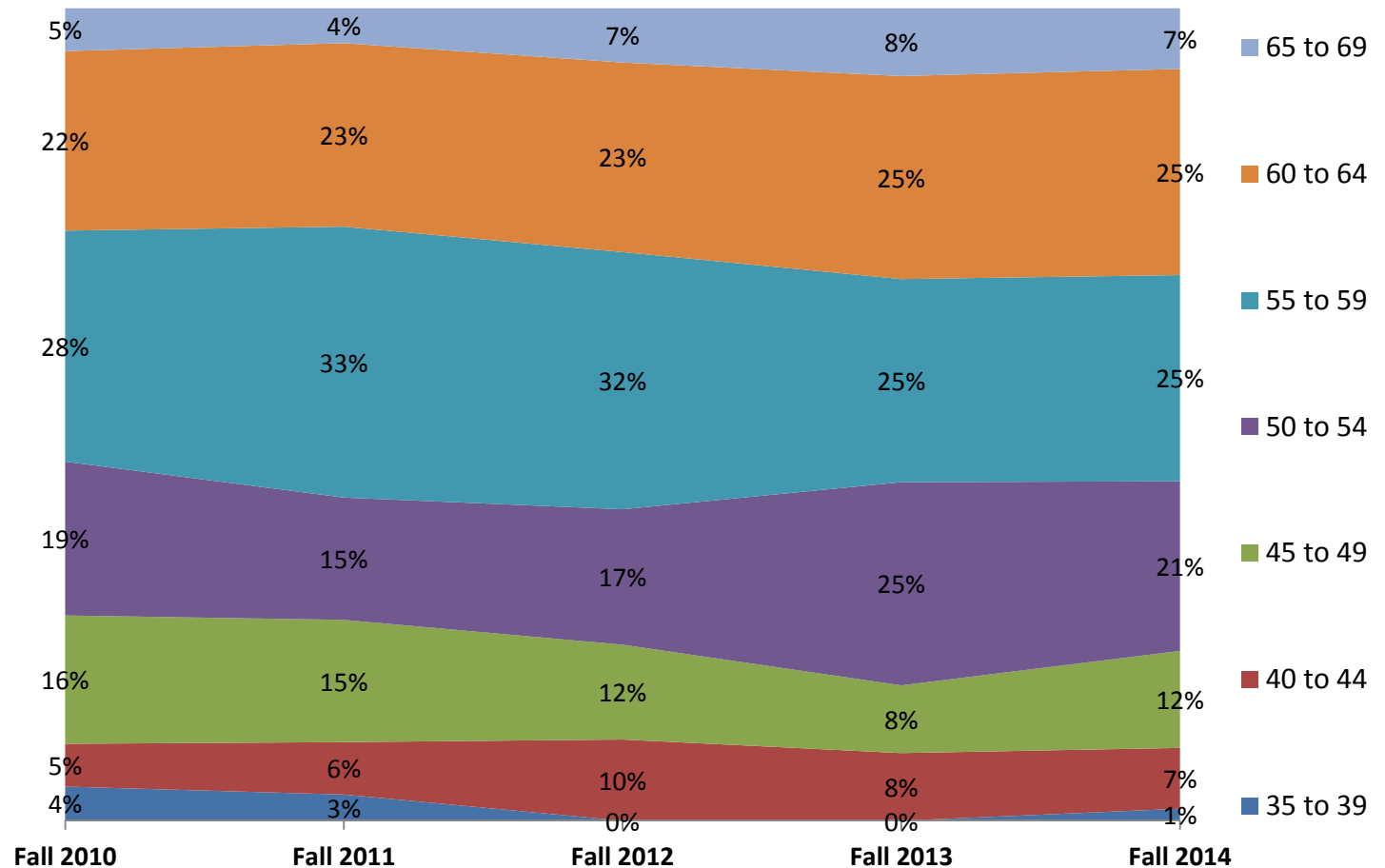
# SD County & SDCCD Employees: Ethnicity



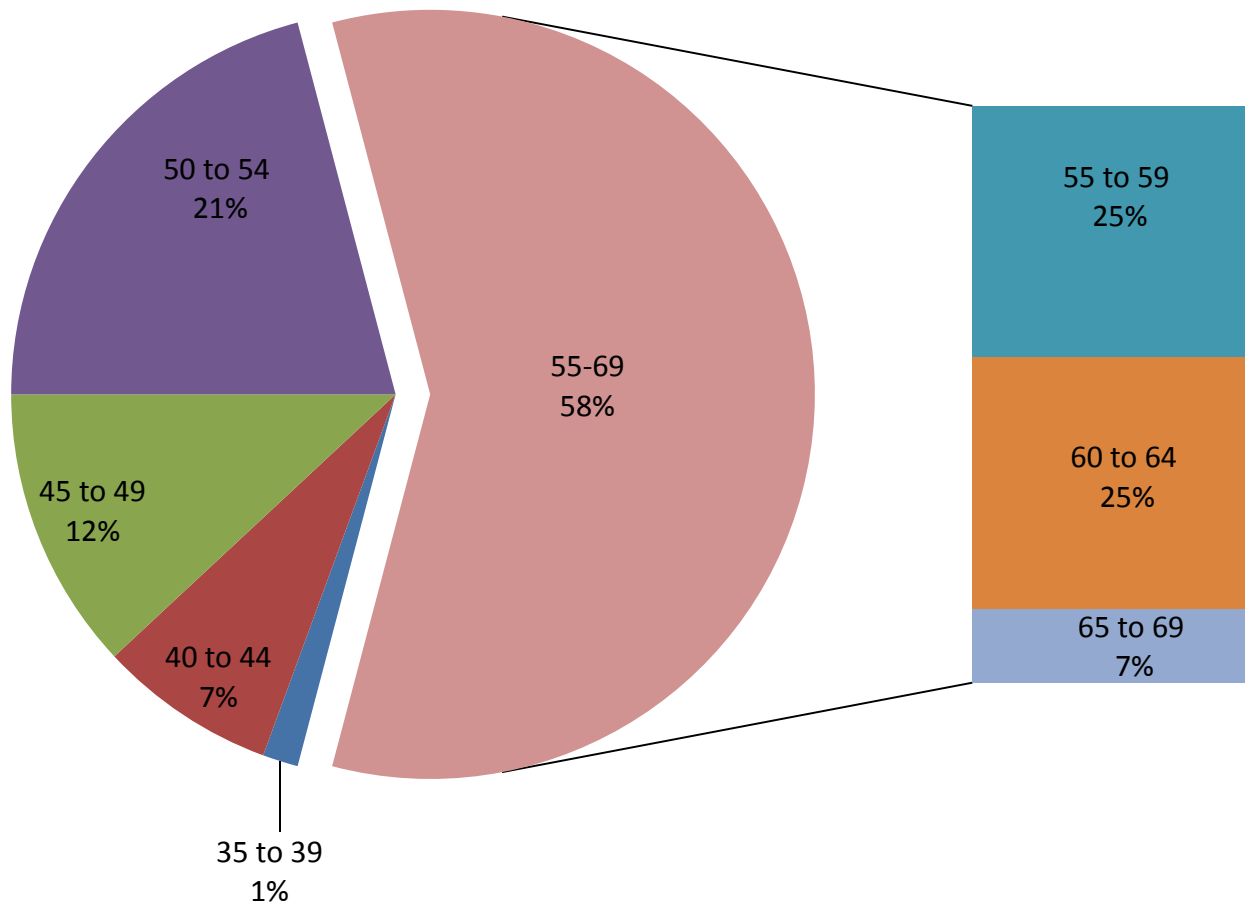
*The ethnic composition of SDCCD employees is representative of San Diego County with the exception of the Latino/Hispanic population which is less than the regional proportion.*

# SDCCD Administrative Managers: Age Trends

*Approximately 57% of all administrative managers are between the ages of 55 and 69 at SDCCD, 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.

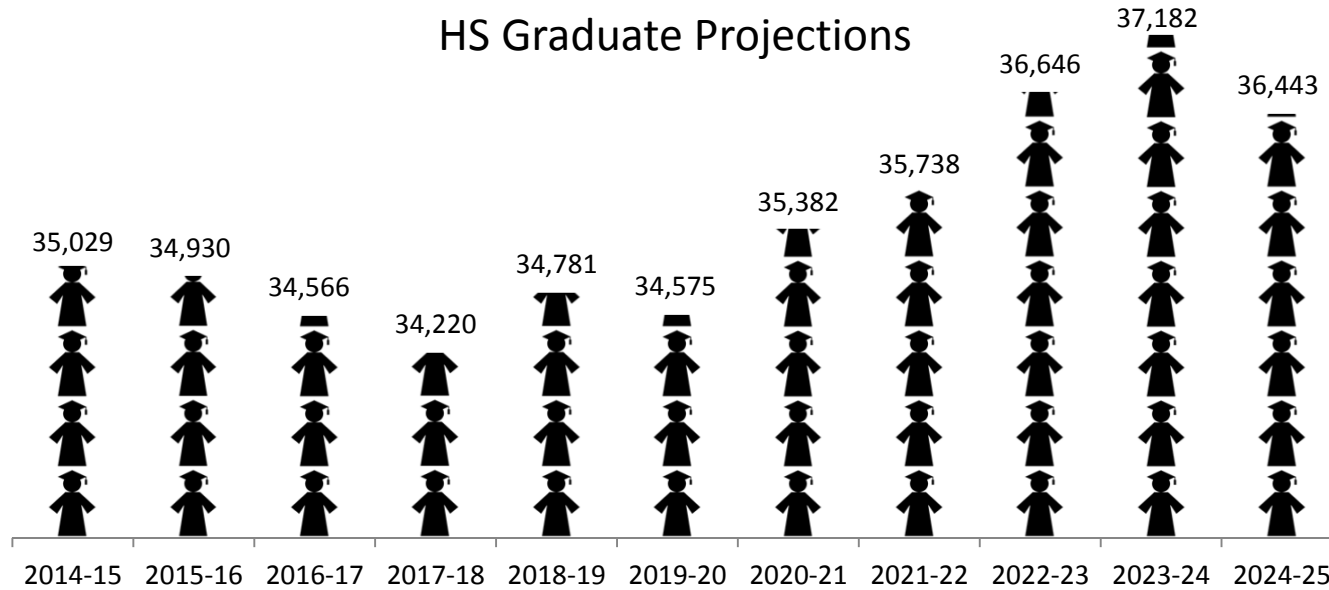
Community colleges in California experienced protracted budget cuts and reductions during the most recent recession. Enrollments at most colleges were impacted during this time while state support rapidly declined, forcing colleges to reduce their class offerings, and vital support services. Fortunately, 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.

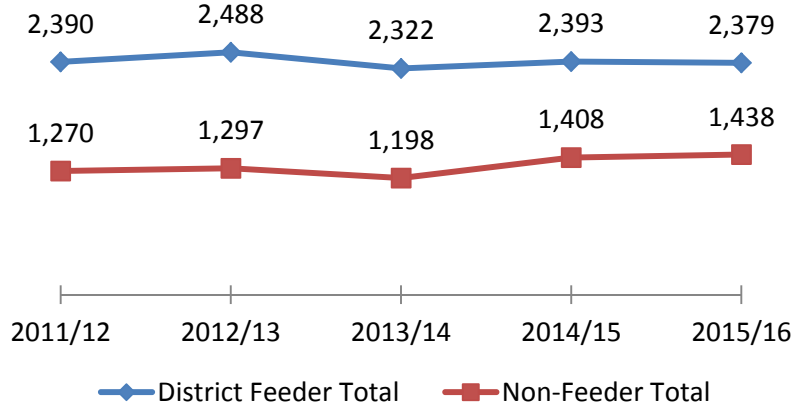
# San Diego High School Pipeline

## HS Graduate Projections

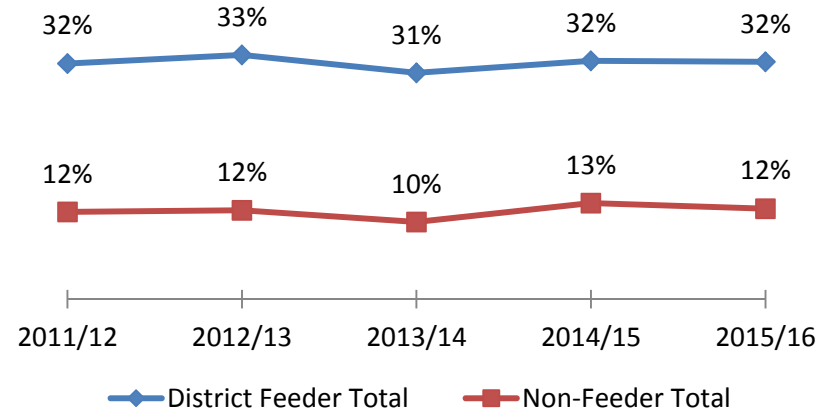


*The CA Dept. of Finance projects a shrinking pipeline of high school graduates over the next 3-5 years in the San Diego region.*

## HS Graduate Headcount



## HS Graduate Participation Rates

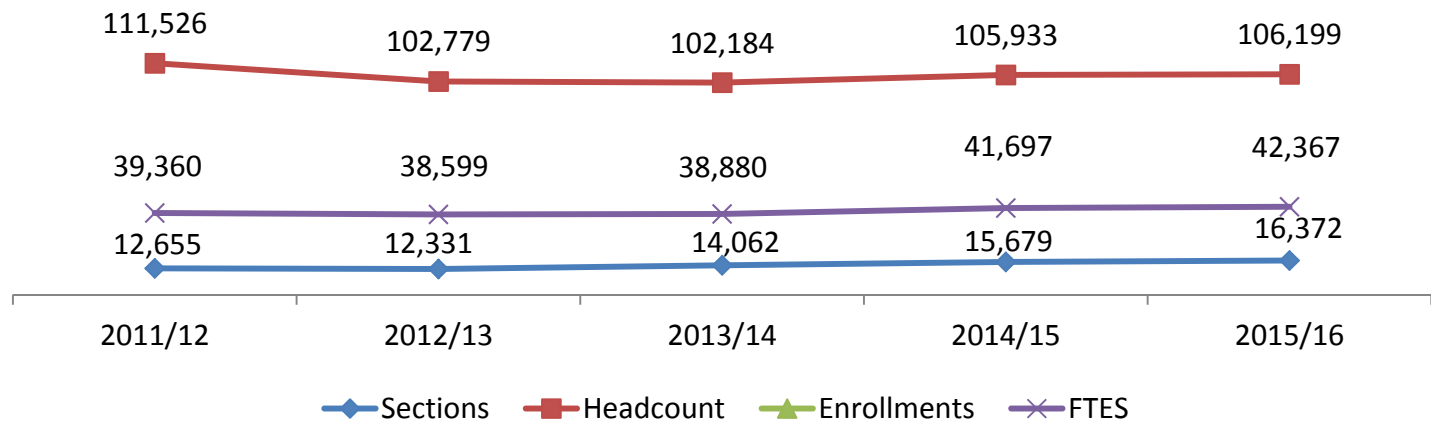




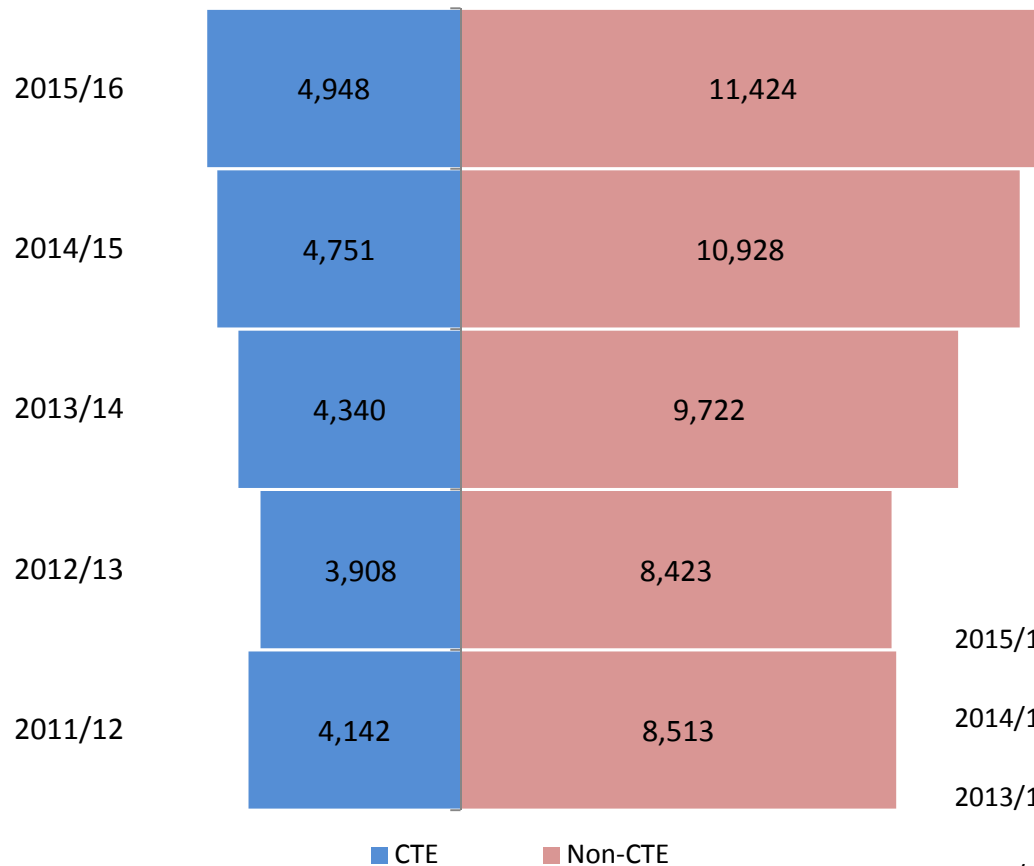
# Enrollment Dashboard



*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.*

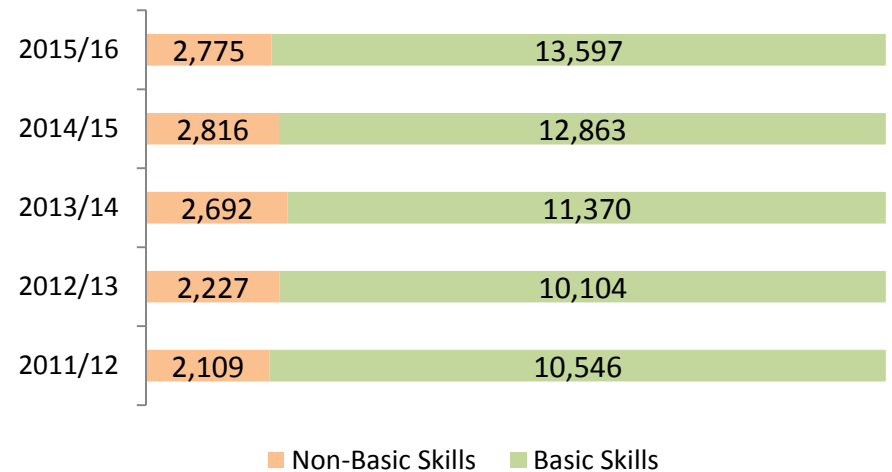


# Sections Offered

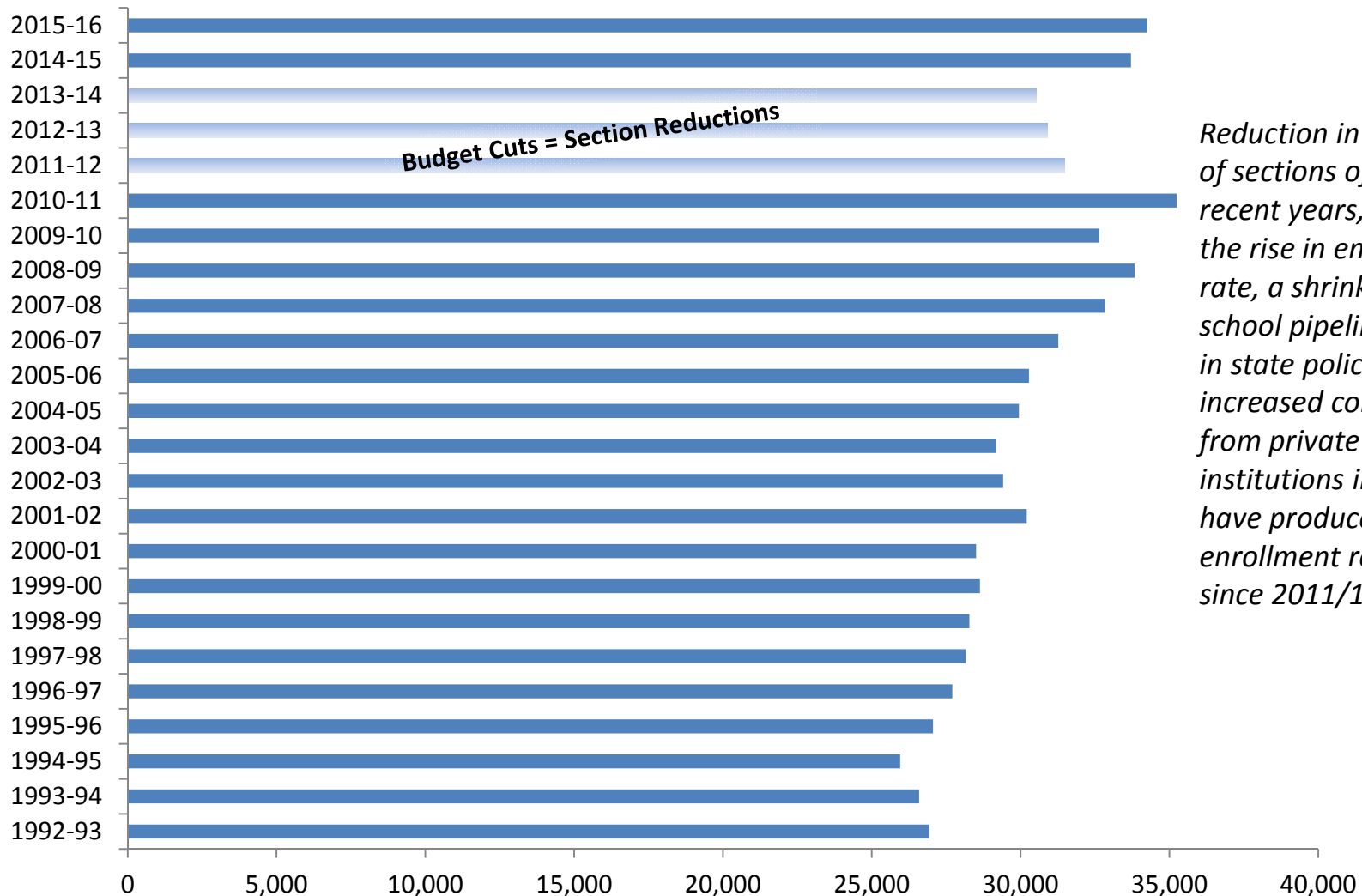


*On average, 31% of the sections offered districtwide are CTE. However the trend has decreased from 33% in 2011/12 to 30% in 2015/16.*

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

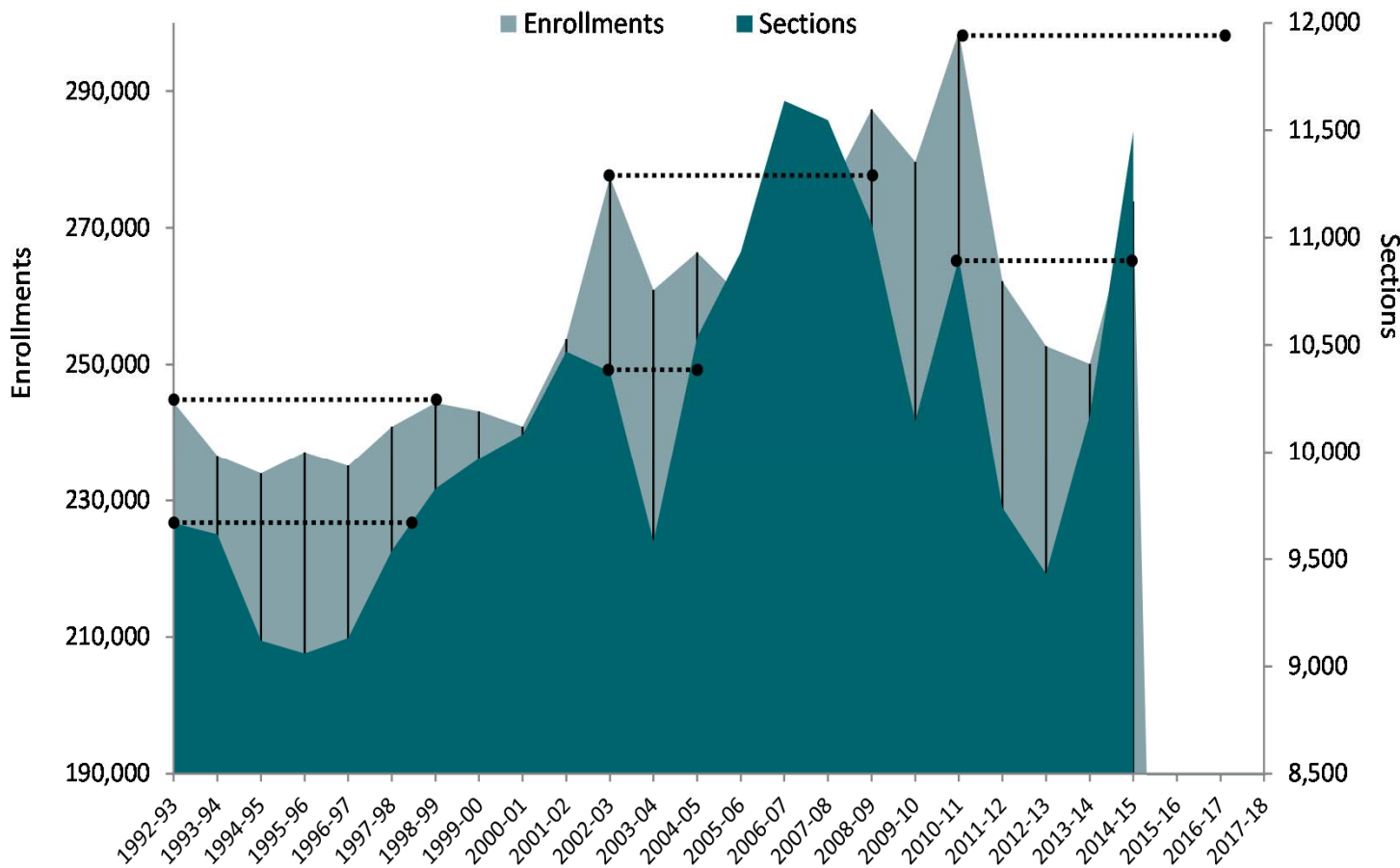


# FTES Historical Trends



*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

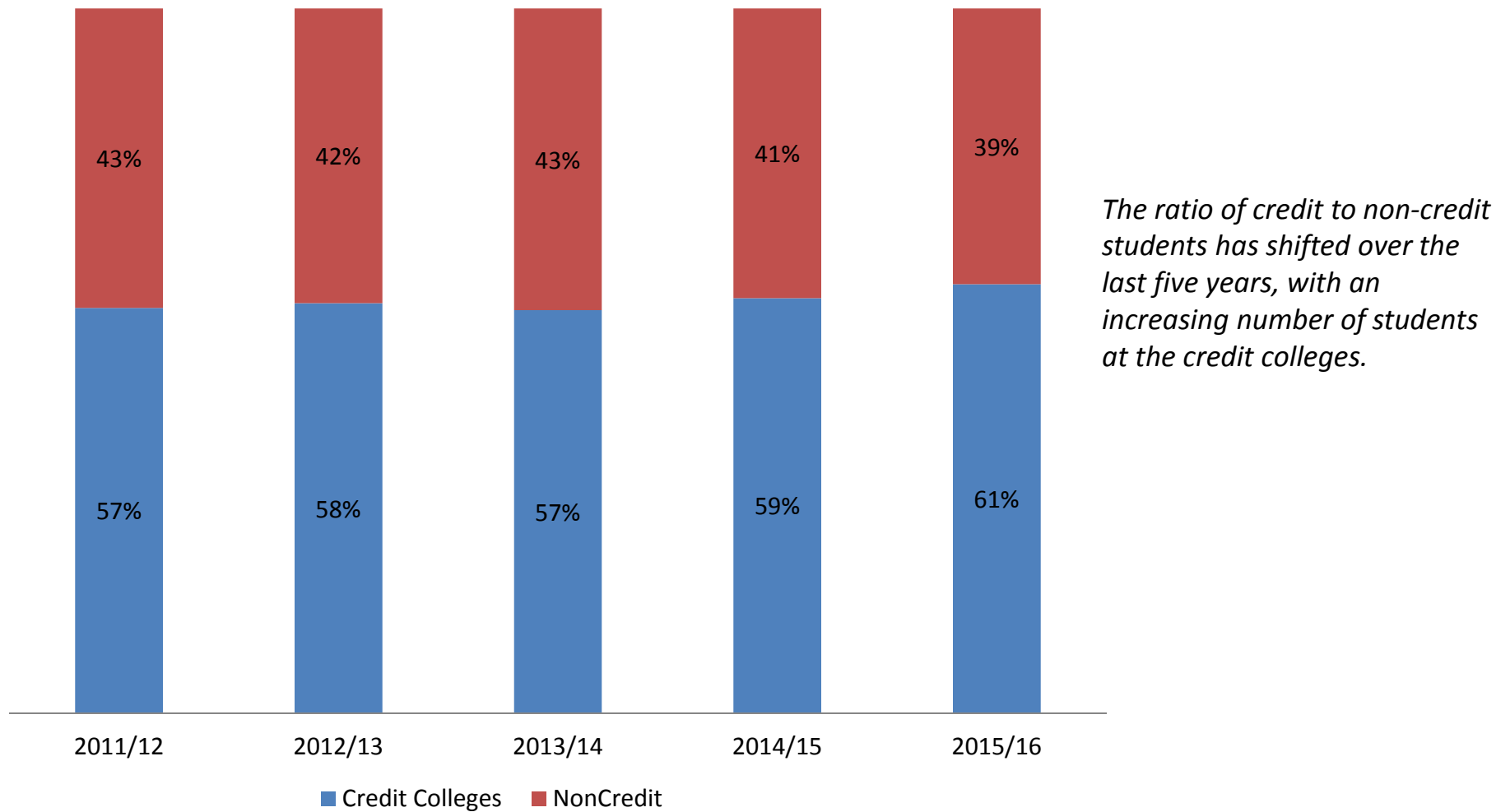
	Summer 11			Summer 12			Summer 13			Summer 14			Summer 15		
	Enrollment	Capacity	Fill Rate	Enrollment	Capacity	Fill Rate	Enrollment	Capacity	Fill Rate	Enrollment	Capacity	Fill Rate	Enrollment	Capacity	Fill Rate
City College/ECC	1,558	208	82%	2,045	0		1,703	33	44%	9,005	10315	79%	9,696	12305	77%
Mesa 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



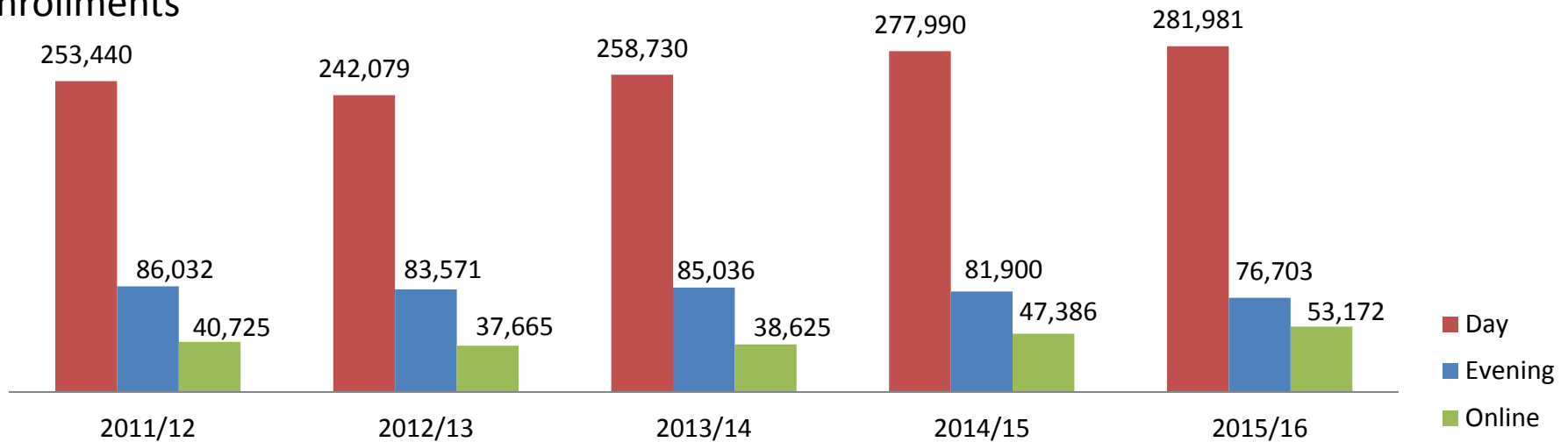
**SDCCD Office of Institutional Research and Planning**

Source: SDCCD Information System

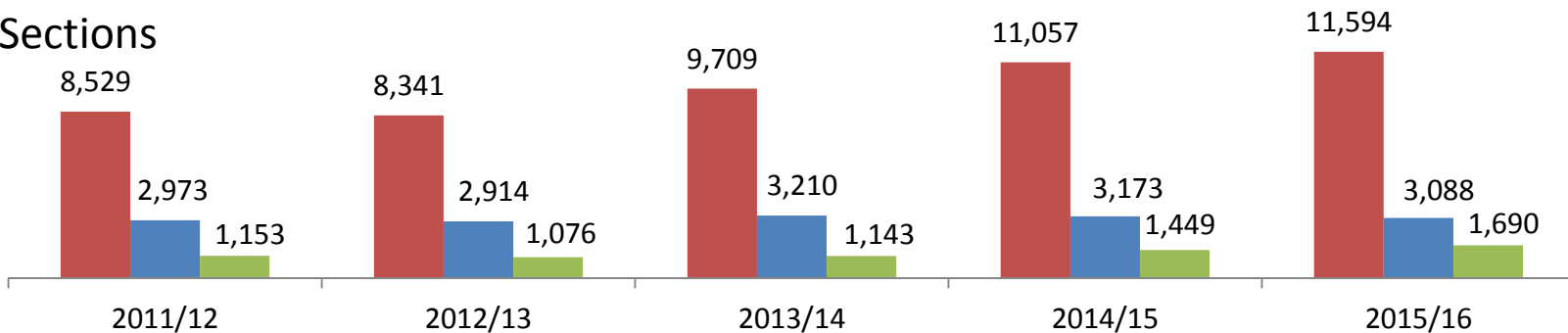
# Enrollment & Sections

*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

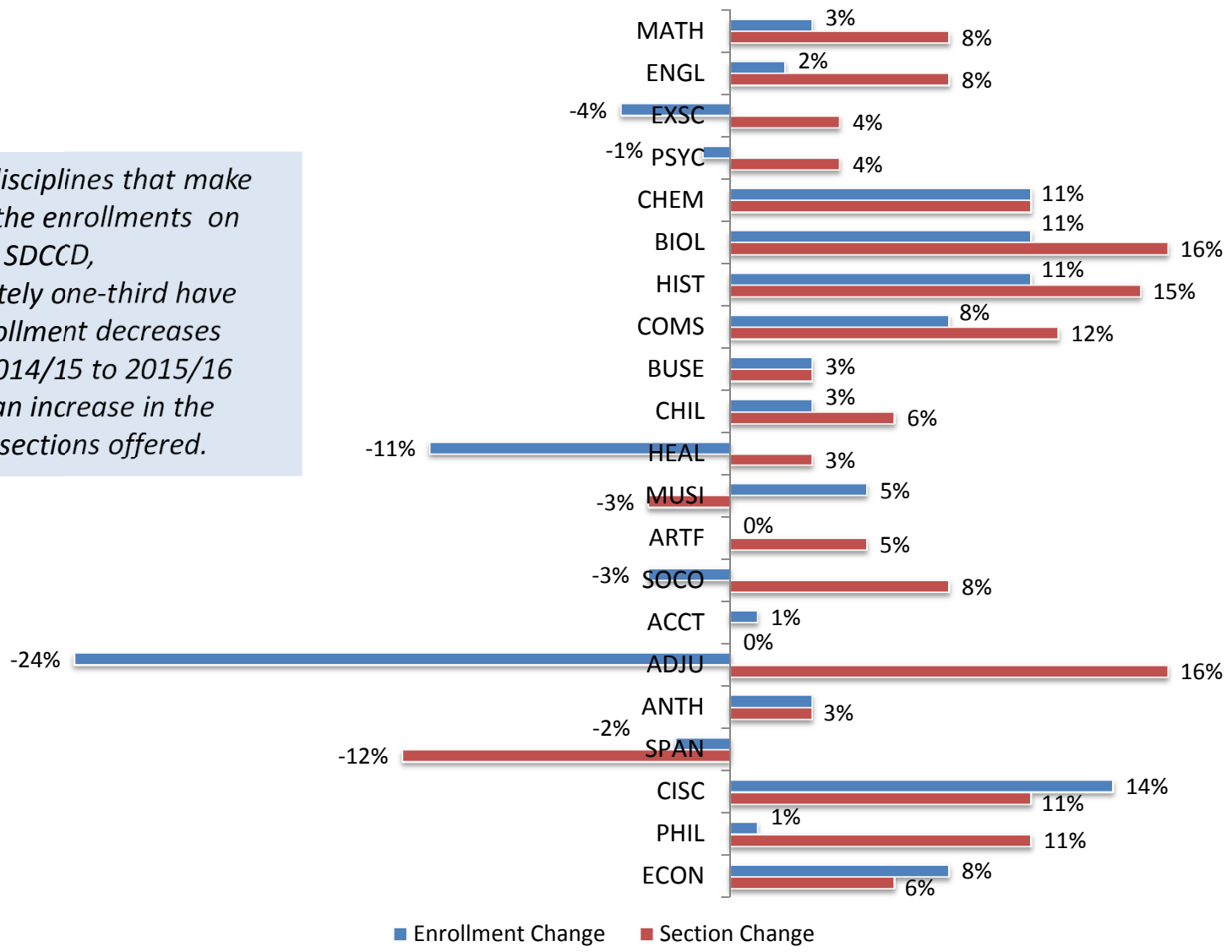


**SDCCD Office of Institutional Research and Planning**

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.

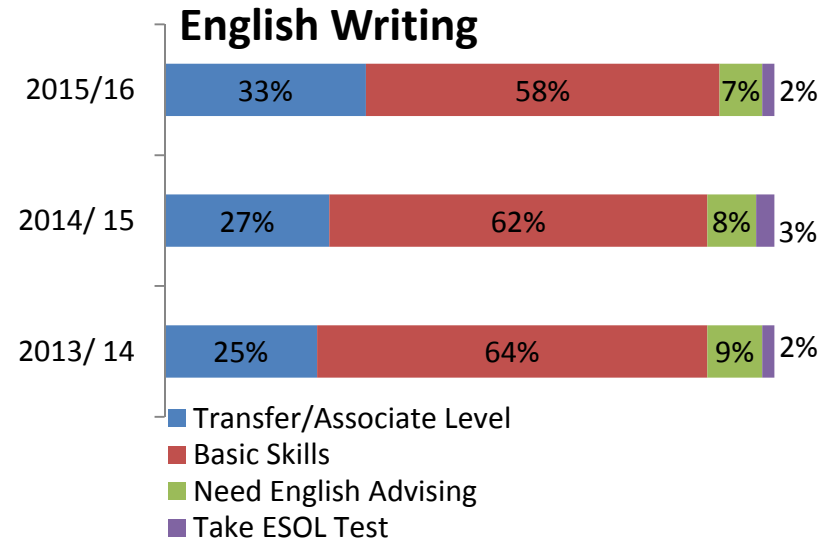
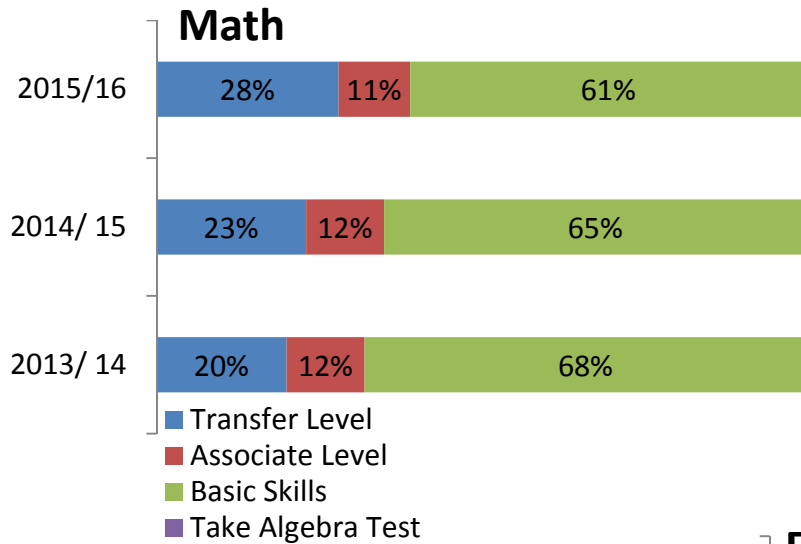
# Fastest Enrollment Growth by Subjects

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%

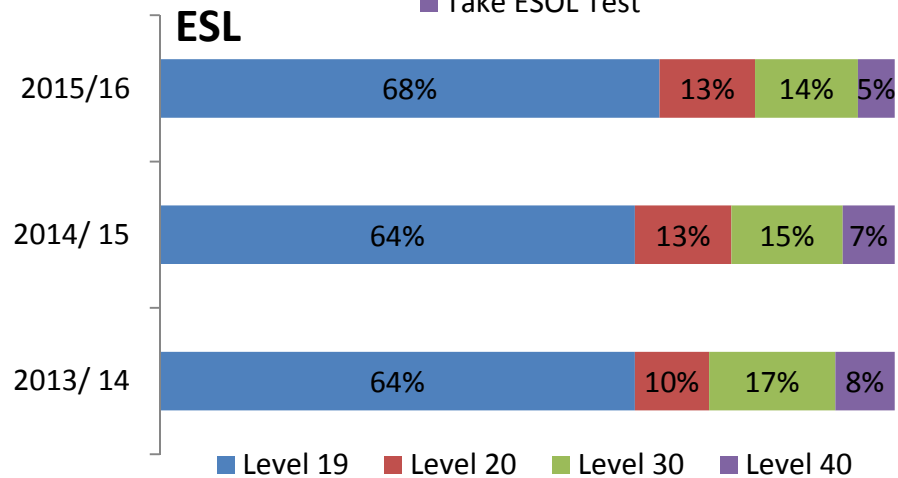
*\*Also greatest growing subject.*

*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.*



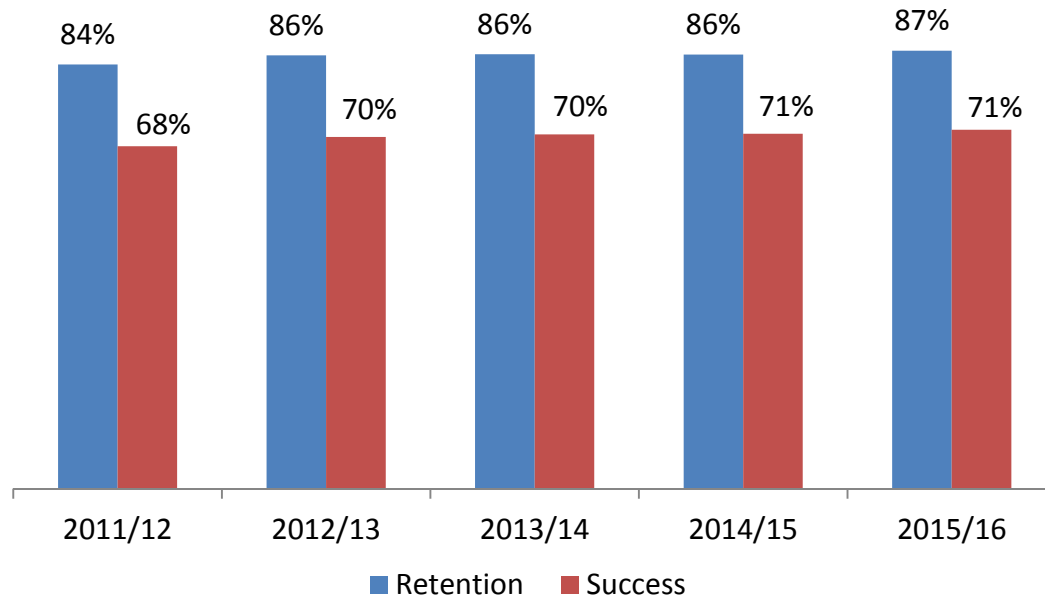
# Student Success Outcome Trends

**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

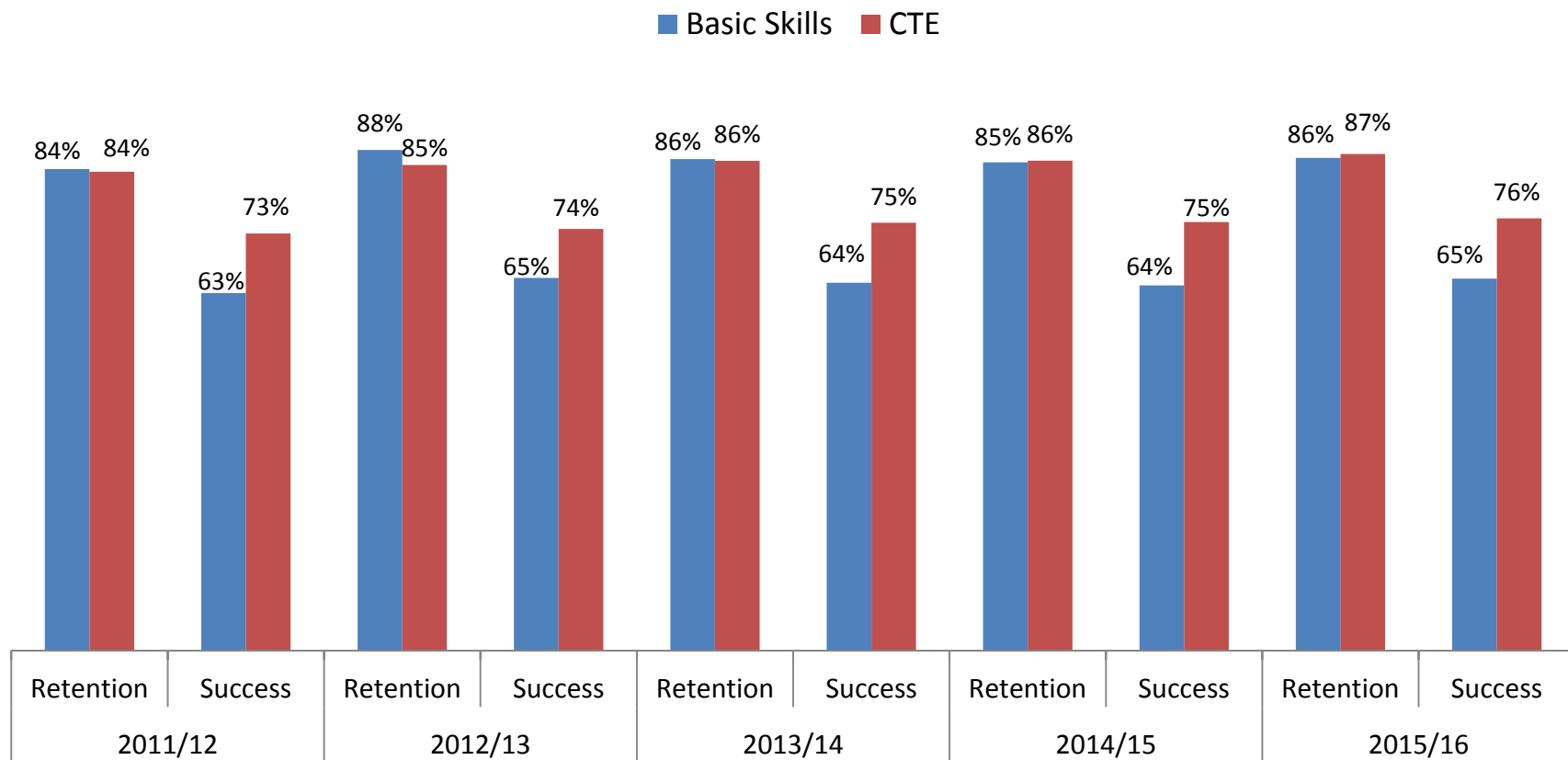


*The five year average success rate for all colleges is 70%. Latino and African American students have consistently shown less than 80% of the highest group success rate, and thus considered disproportionately impacted.*

*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%

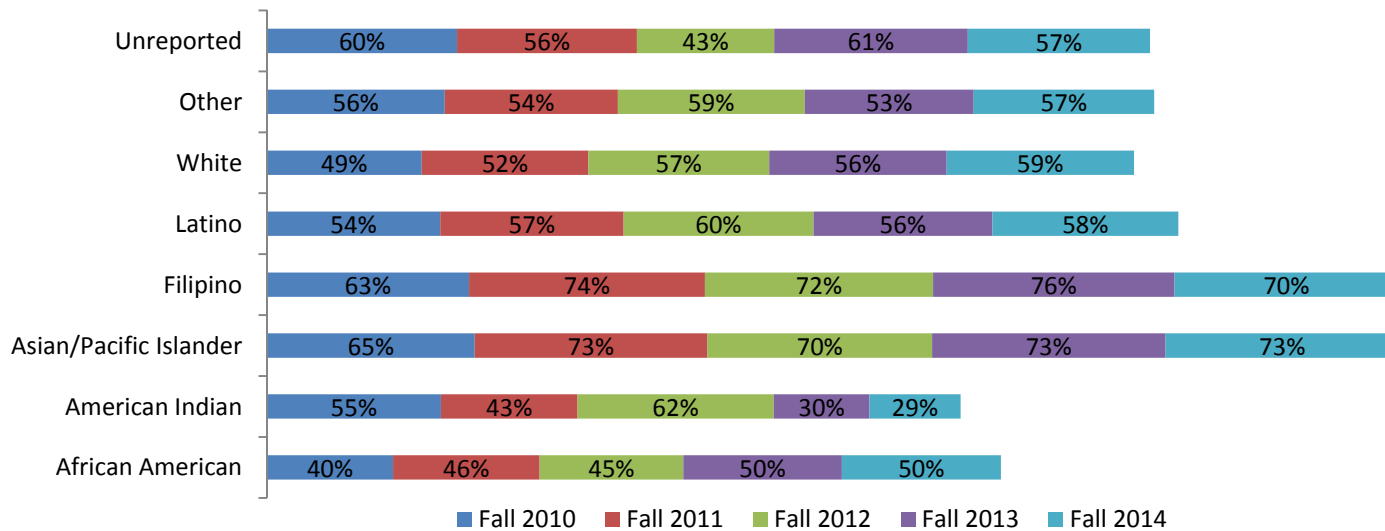
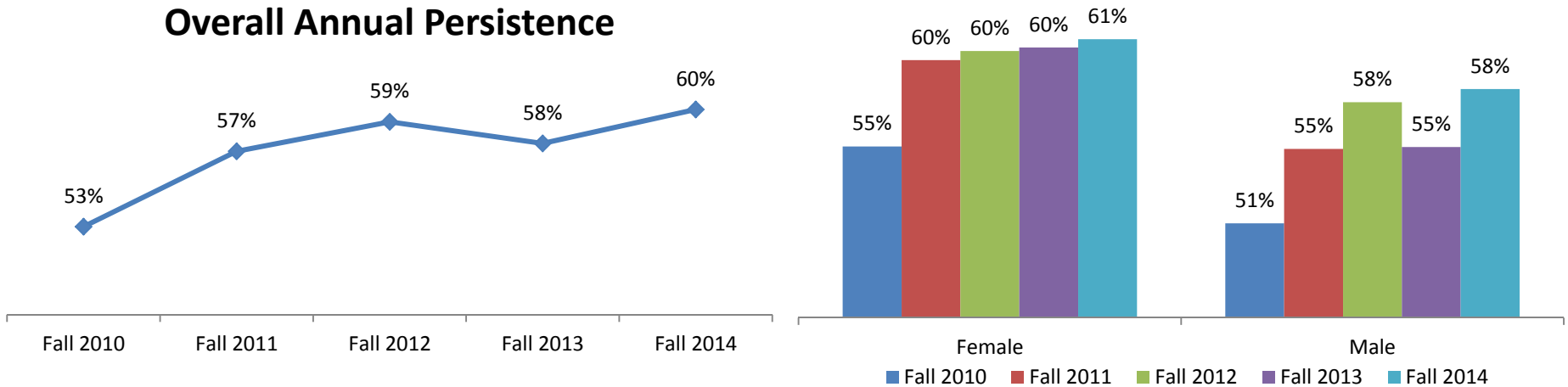
# Retention and Success: Program Type



*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

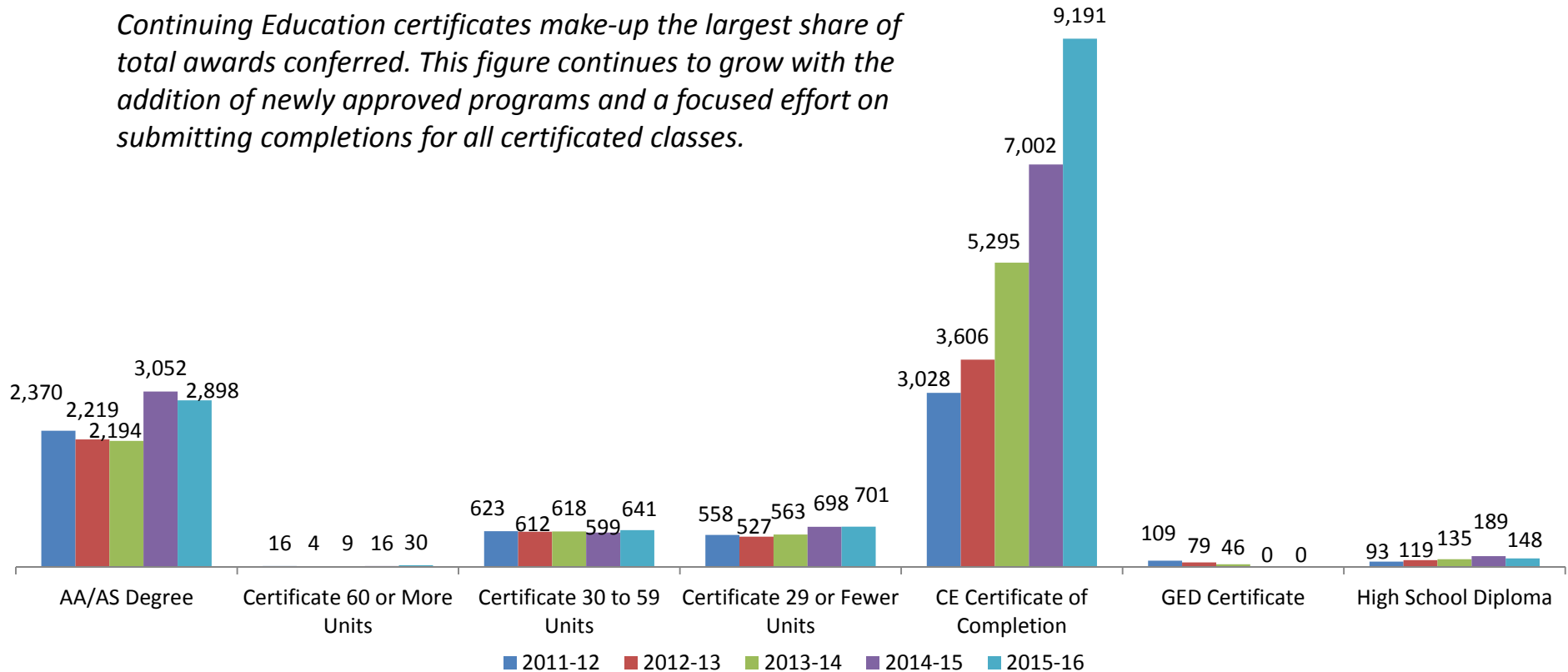


*Persistence rates have steadily climbed over the last five years with African American and White students showing the greatest percentage increase (10% each).*



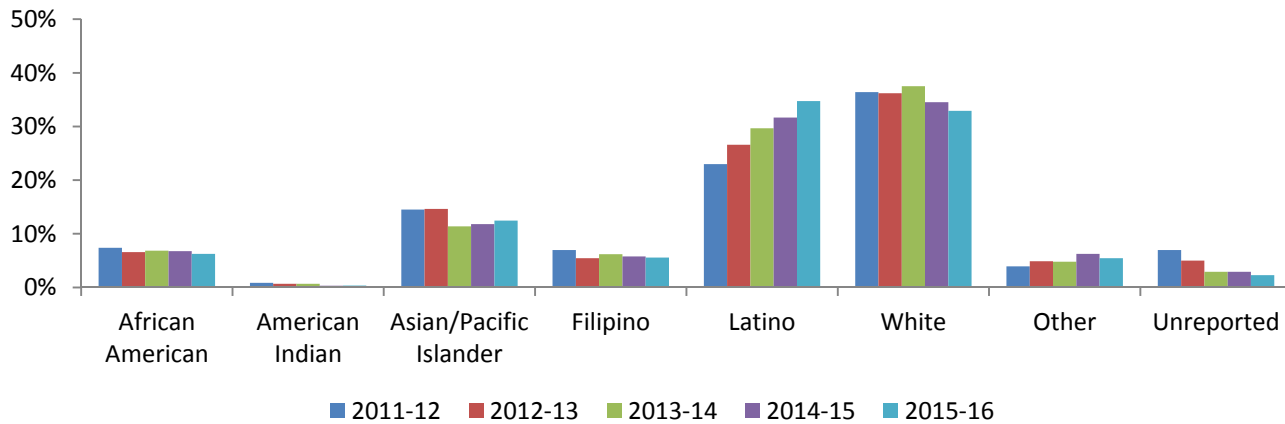
# Overall SDCCCD Awards Conferred

*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.*



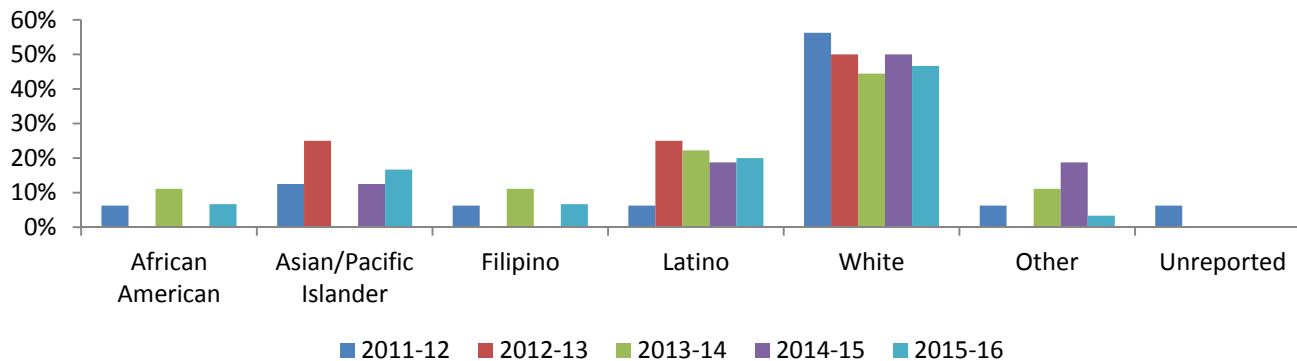
# SDCCD Awards Conferred: Ethnicity

## 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.*

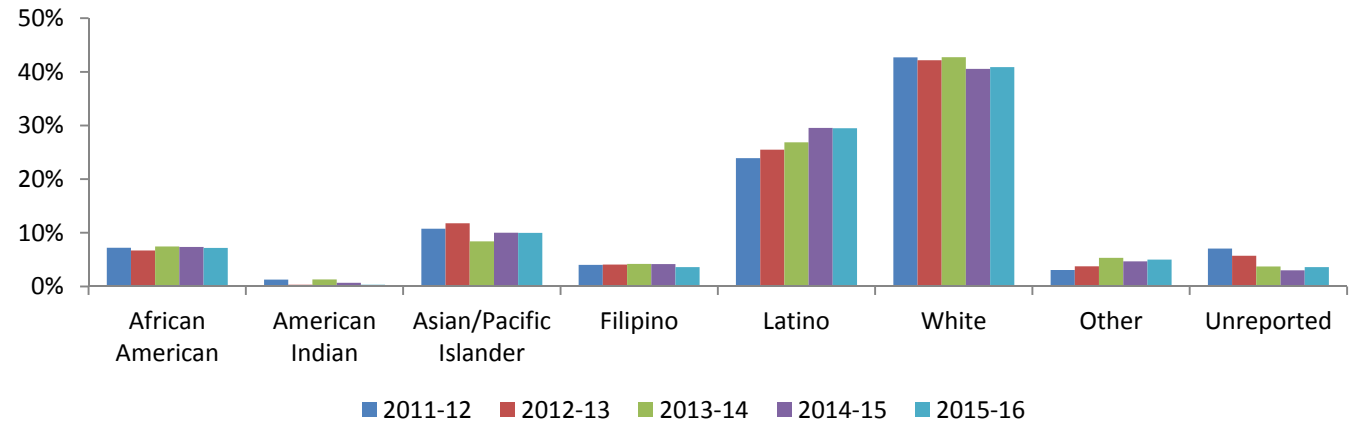
## Certificates 60+ Units



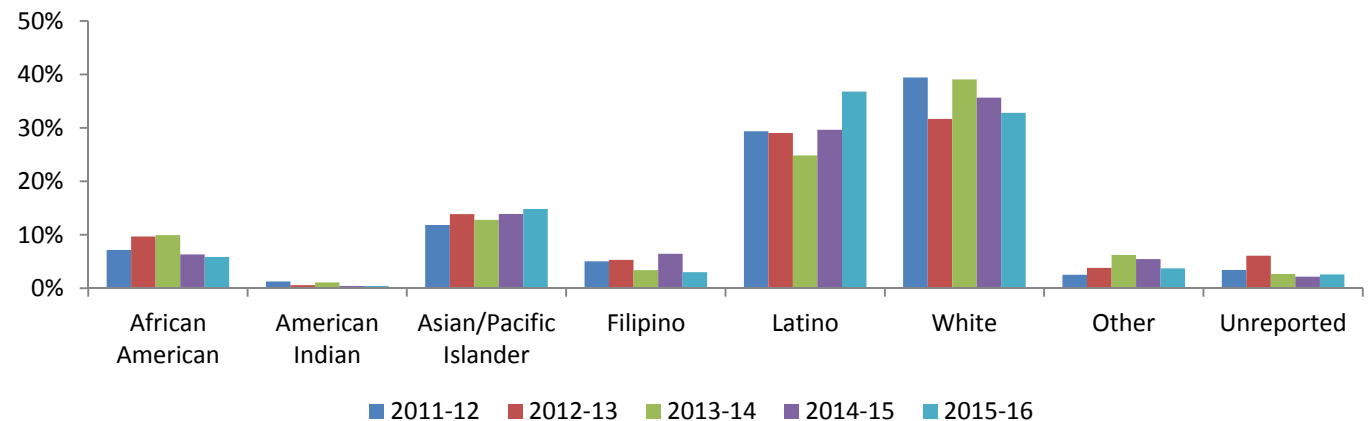
# SDCCD Awards Conferred: Ethnicity

*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

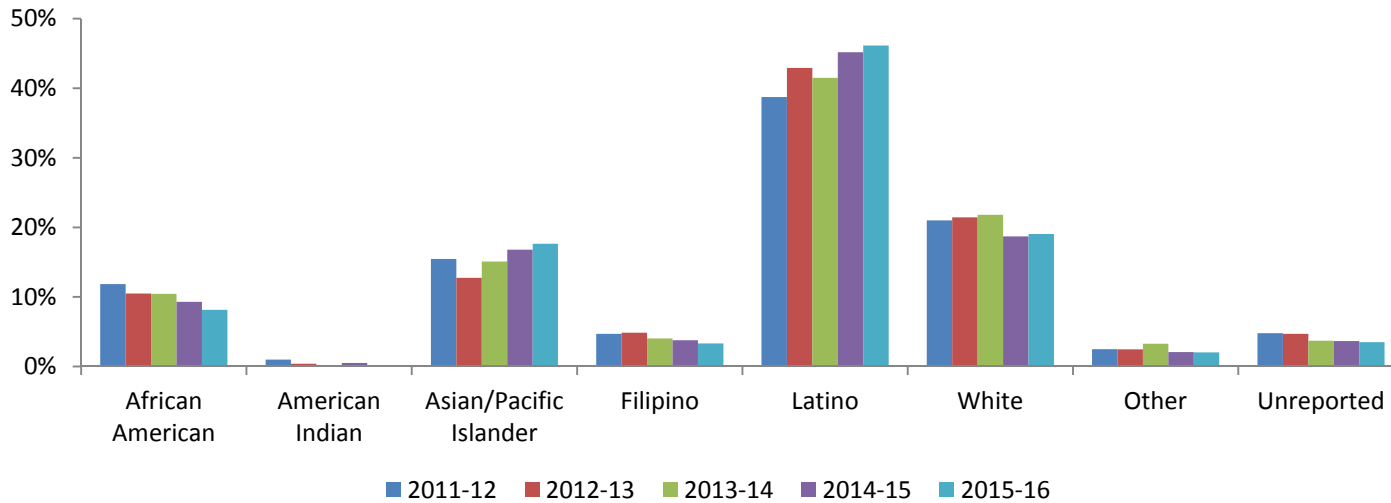


### Certificates 29 or Fewer Units



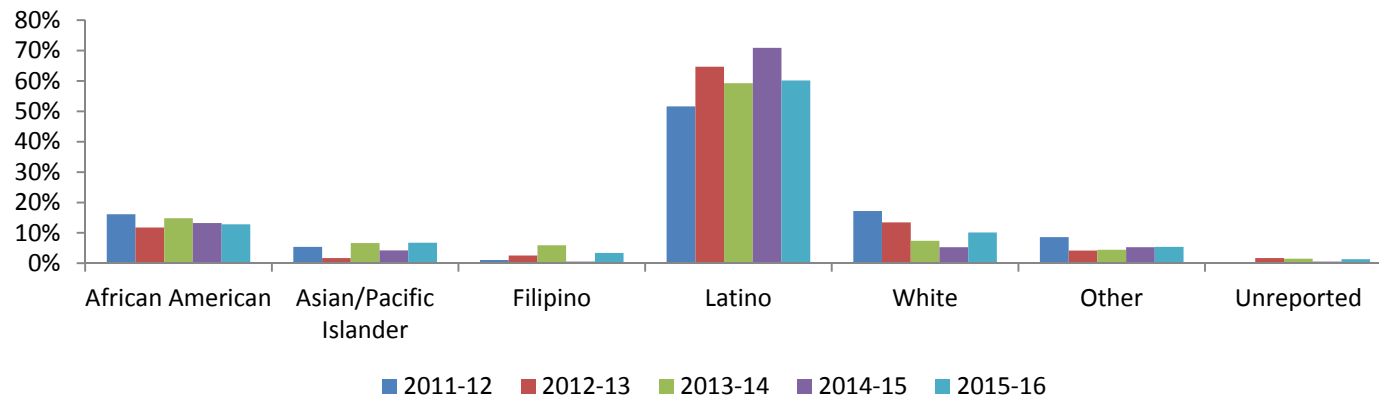
# SDCCD Awards Conferred: Ethnicity

## CE Certificate of Completion



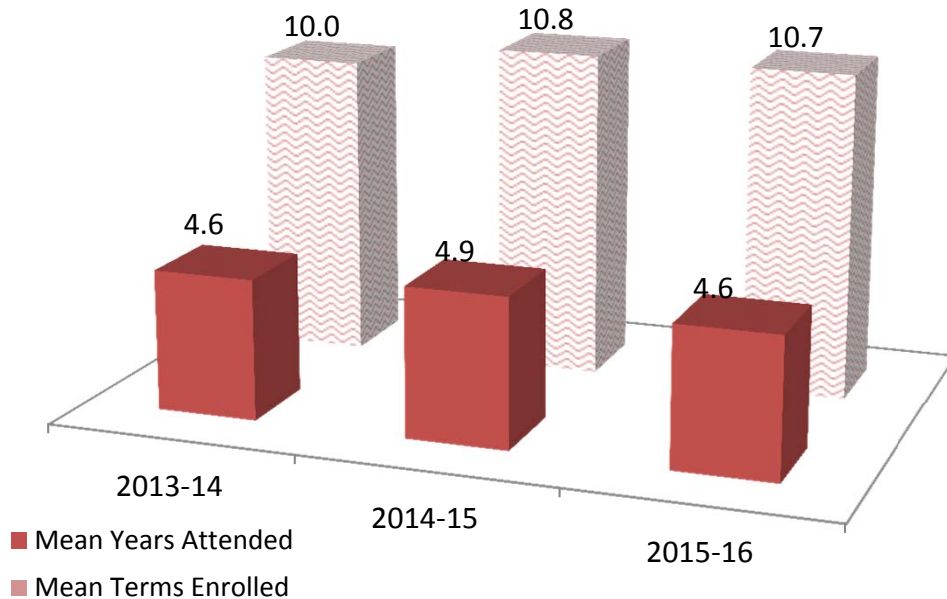
*Latino students continue to receive the greatest share of Continuing Education certificates of completion and high school diplomas.*

## High School Diploma



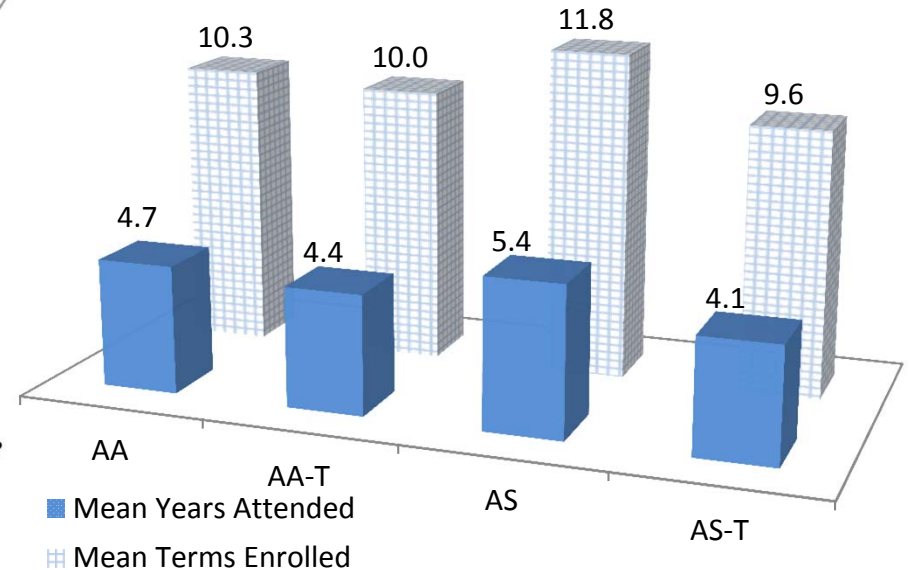
# Time to Degree: Overall & ADT

**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).*

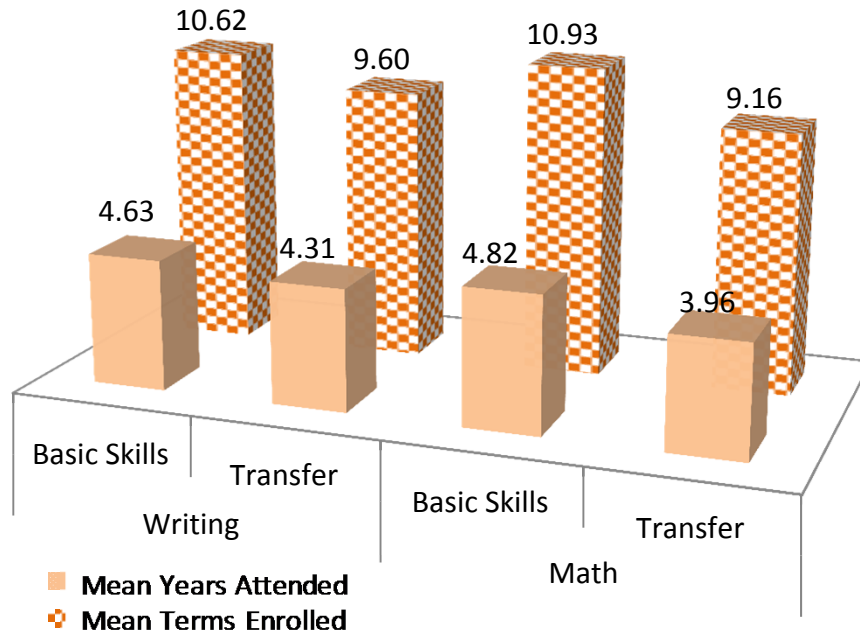
**AA/AS Compared to ADT Completion**



*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.*

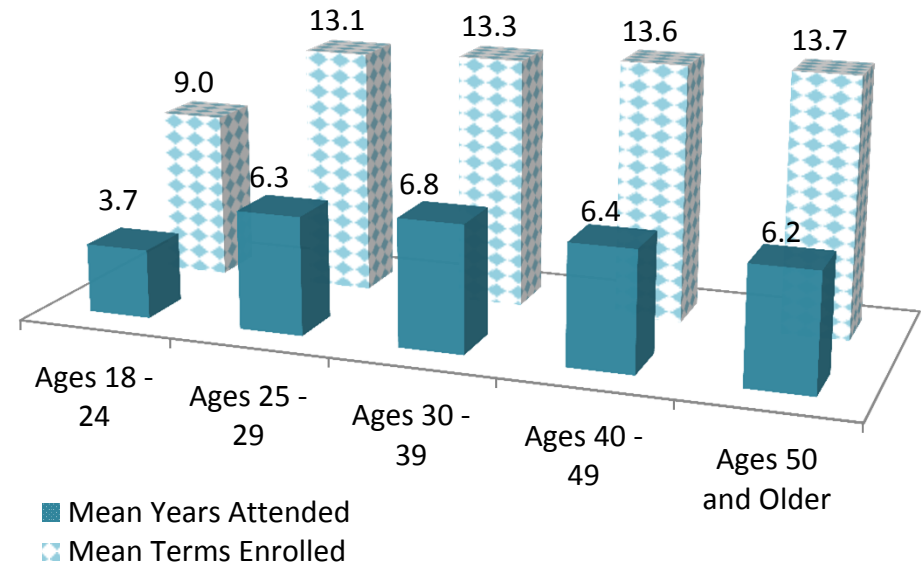
# Time to Degree: Placement & Age

**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.*

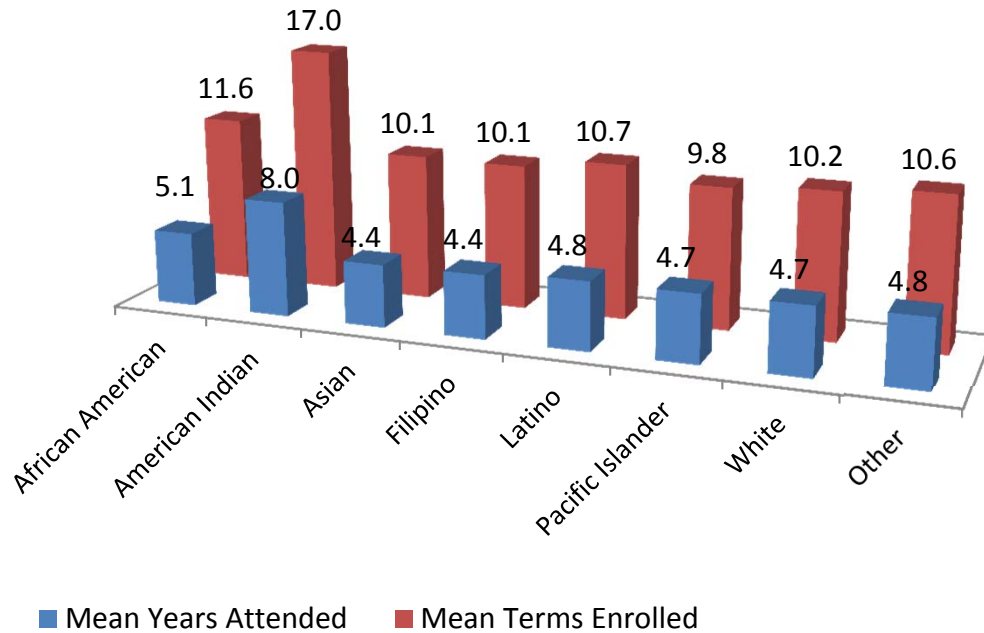
**Average Time to Degree by Age**



*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.*

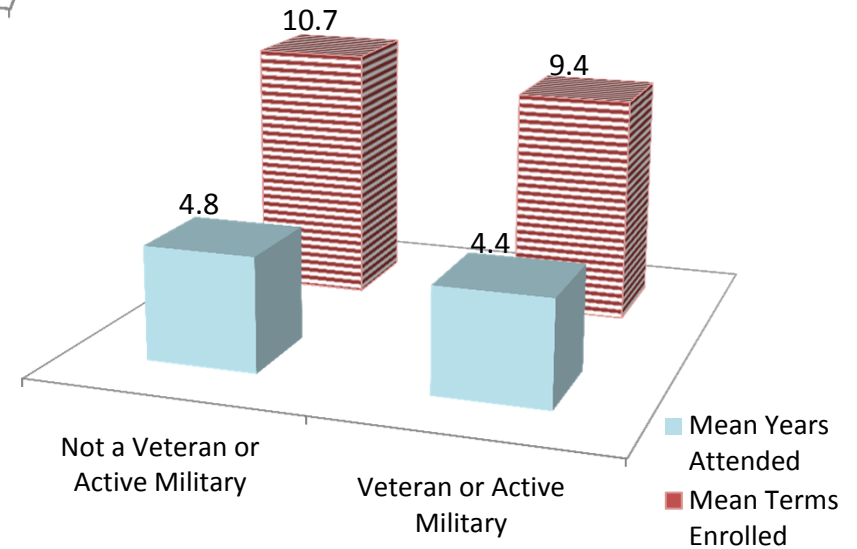
# Time to Degree: Ethnicity & Veteran

**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.*

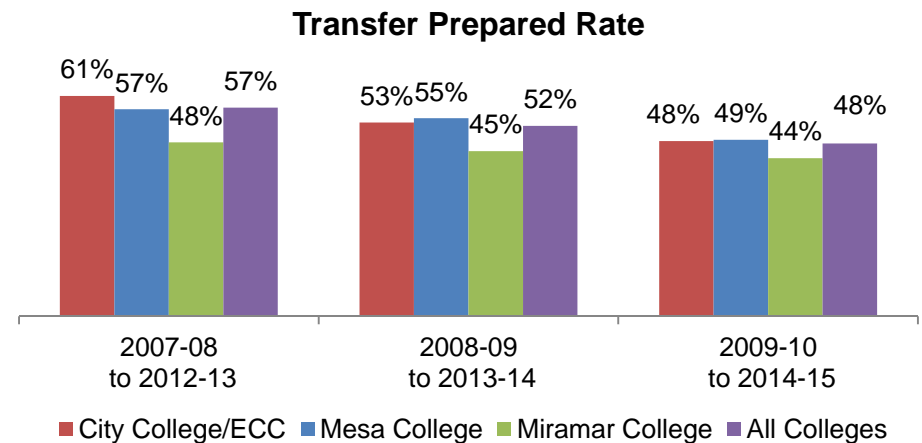
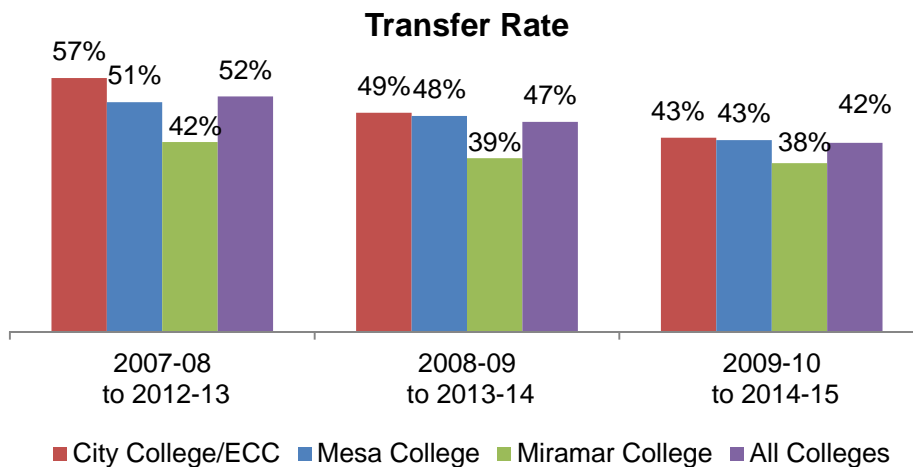
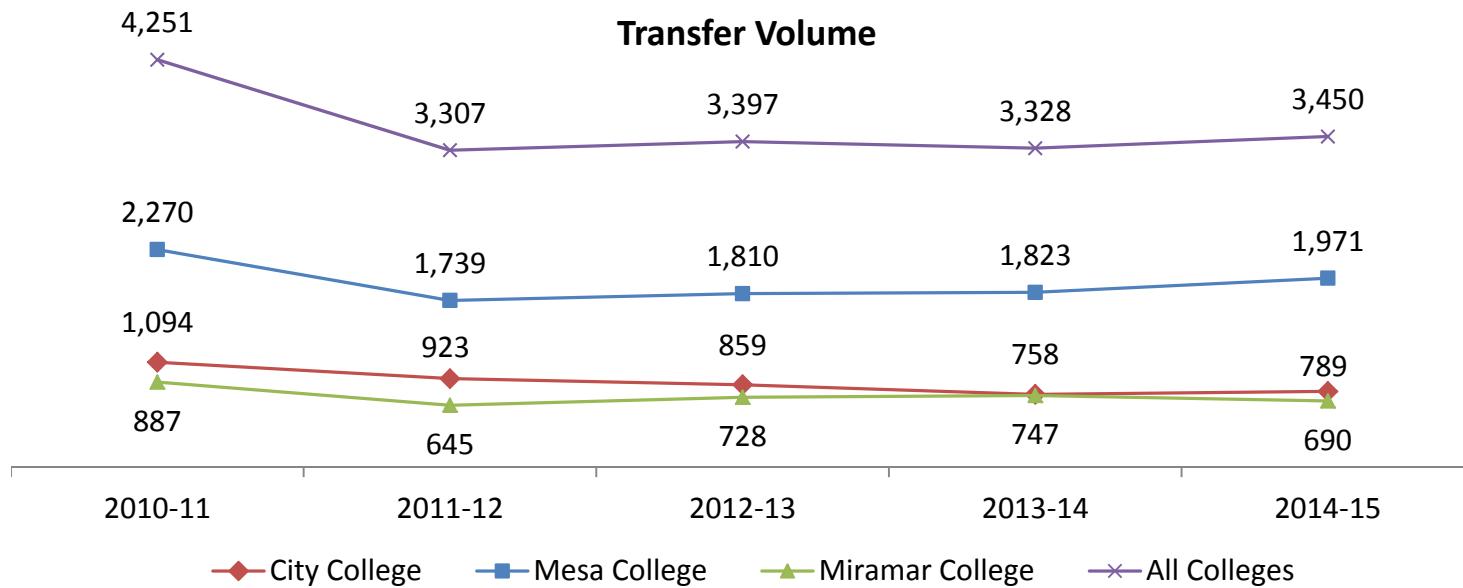
*African American students on average take approximately one year, or two terms longer than most of the other student groups to complete a degree. Latino students take about half a year or nearly two terms longer.*

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

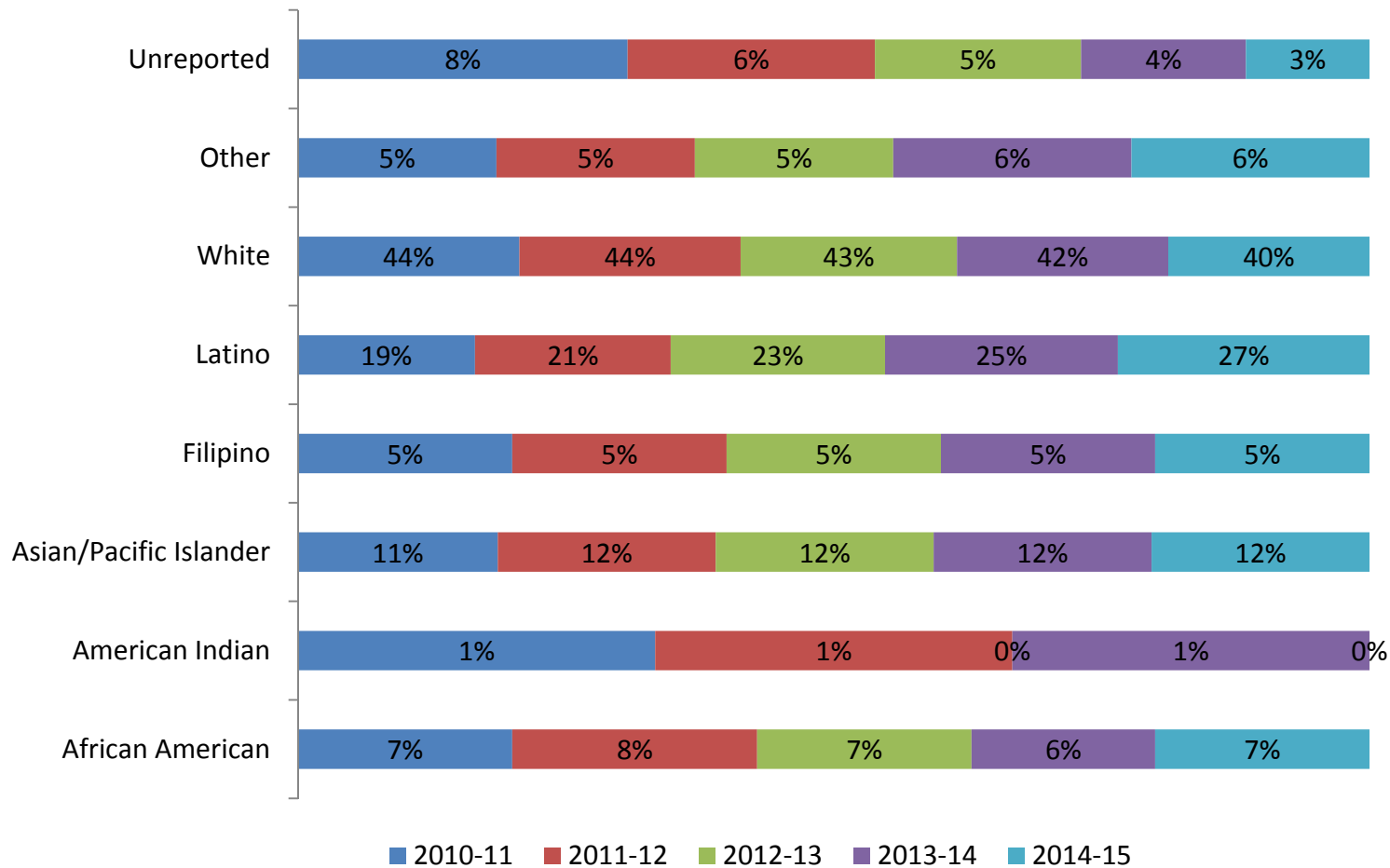


# Overall Transfer

*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

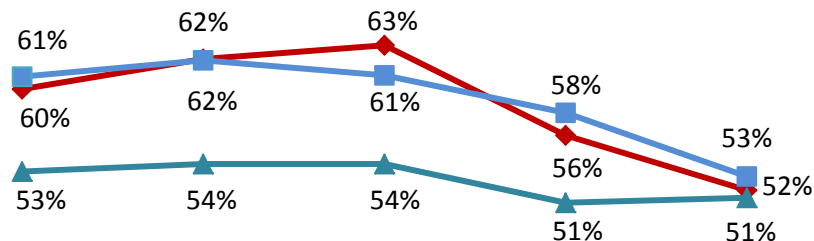
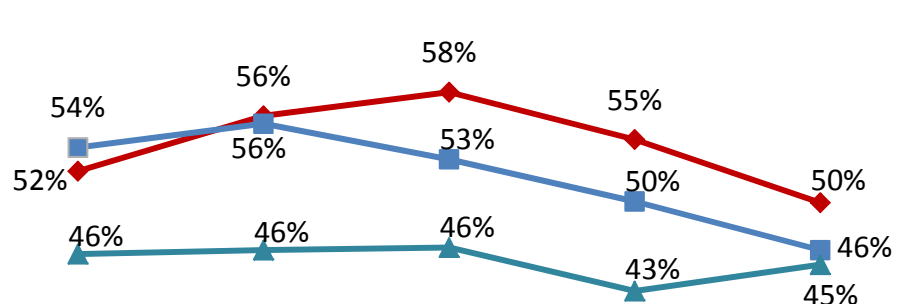


*Latino students displayed the greatest increase in transfer volume in the last five years, while White students displayed the highest average transfer volume.*

# 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

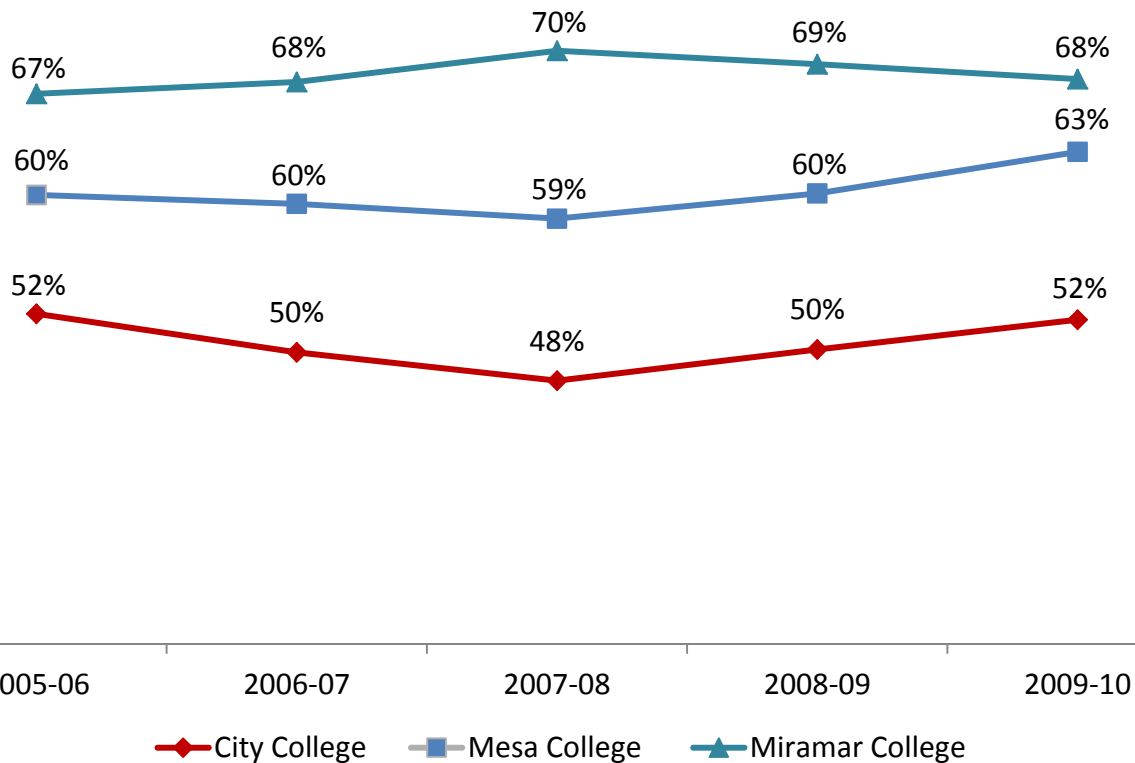
2005-06    2006-07    2007-08    2008-09    2009-10

◆ 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.

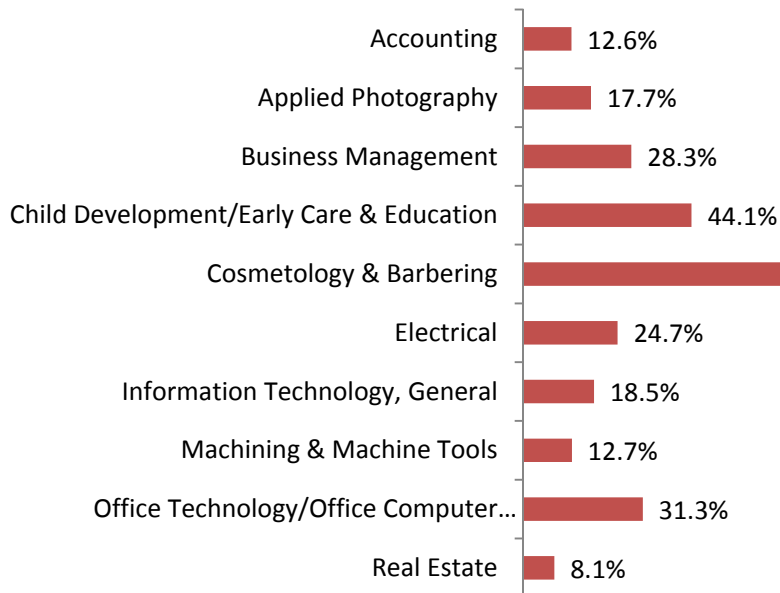


*The 30 Units Completion Rate is trending upward for students at City and Mesa Colleges, while the rate at Miramar College remains steady.*

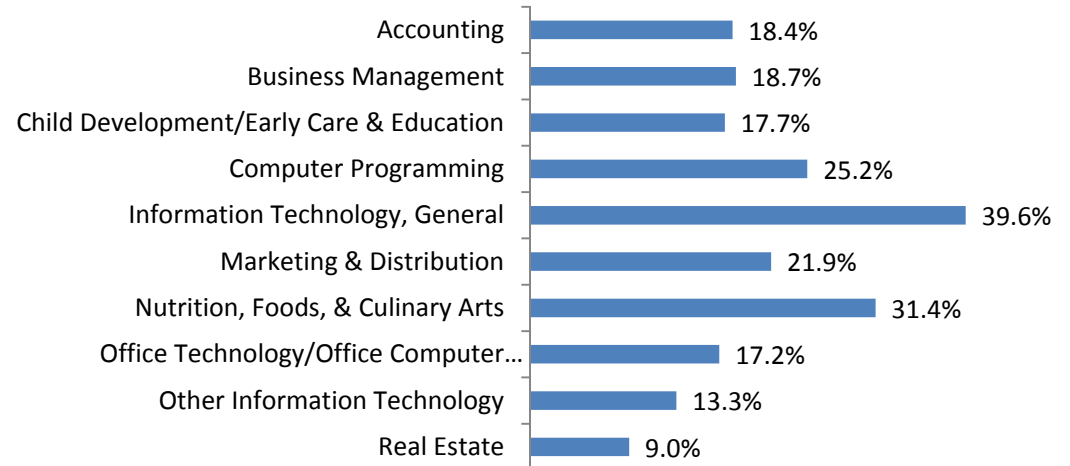
# Scorecard: Skills Builder Median Wage Gain

*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.*

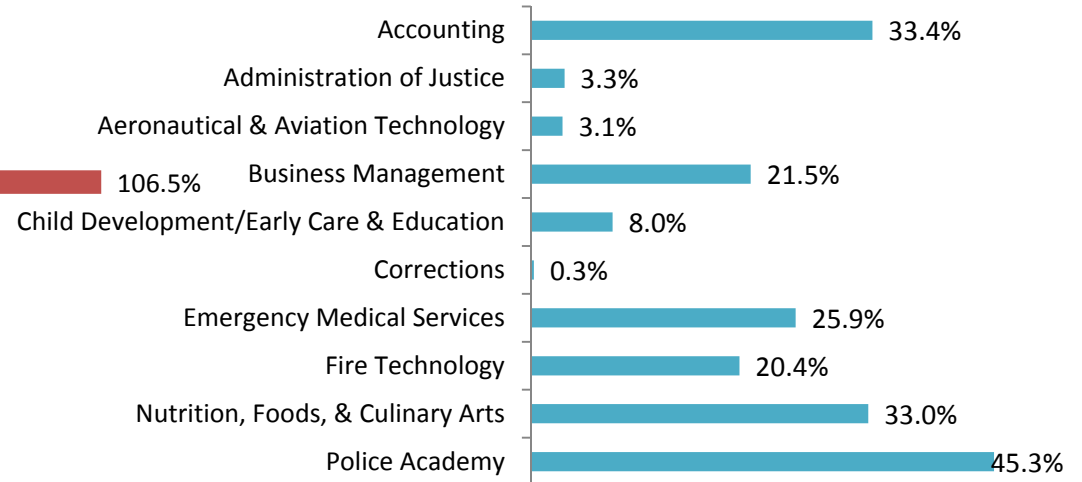
**City College**



**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

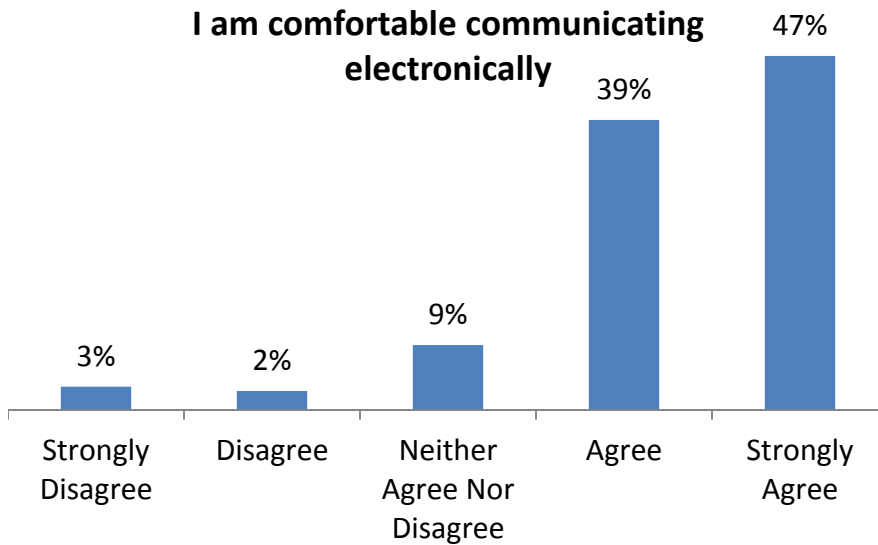
9. **ENROLLMENT.** California community colleges offer more online credit courses than any other public higher education institution in the country. In 2012, online enrollment in the CCC represented 11% of total enrollments.
10. **ETHNICITY GAP.** Online enrollment is increasing for each of the largest 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

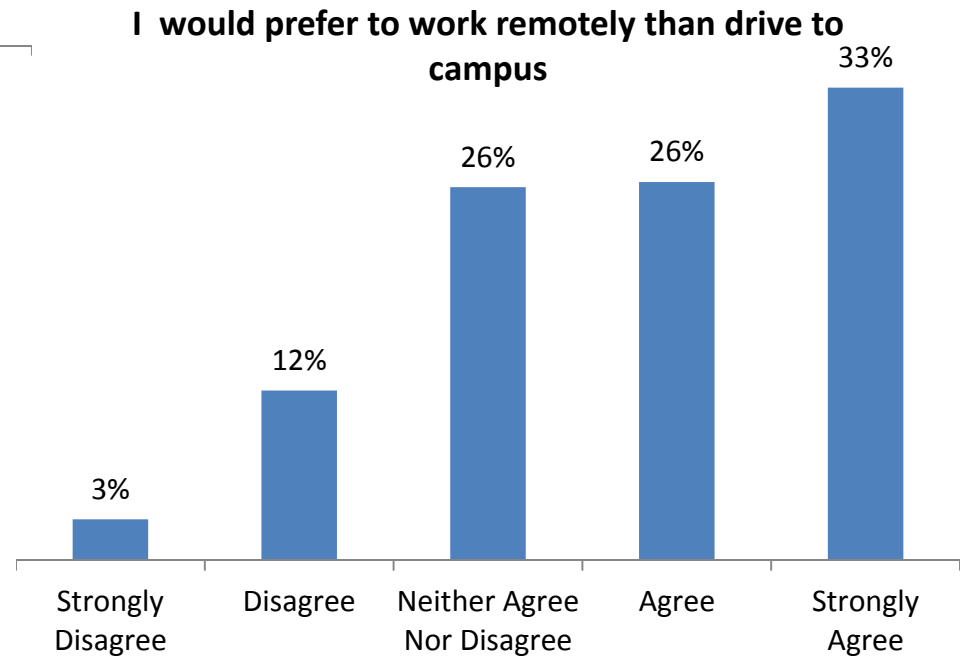
Why did you choose to take this course in the mode you did rather than as a completely traditional face-to-face course?

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.*

