California Community Colleges

# Community College Pipeline Dashboard 2022 Release Webinar

December 8, 2022

Bitly link for PPT: http://bit.ly/LBCCP-08122022

# Welcome

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# Quick Reminders

- Chat is disabled, but presenters will post links and other information in chat
- Link to the slide deck is currently available in chat
- Participants will need to use Q&A feature to ask questions to be answered live or  directly in Q&A
- Closed Captioning is available by clicking the "CC" button on your screen

# Objectives

*By the end of this webinar, participants will understand how:*

- The nearly **150 metrics** in the Community College Pipeline (CCP) enhance data in other dashboards for conducting local program review or for fulfilling other requirements for student data
- The dashboard has been **updated and improved**
- The **equity gap charts** and drilldowns can support conversations around addressing persistent equity gaps
- The **LMI and online job postings** data from Lightcast (formerly Emsi) has been updated to consider regional jobs, annual openings, skills, qualifications and employers

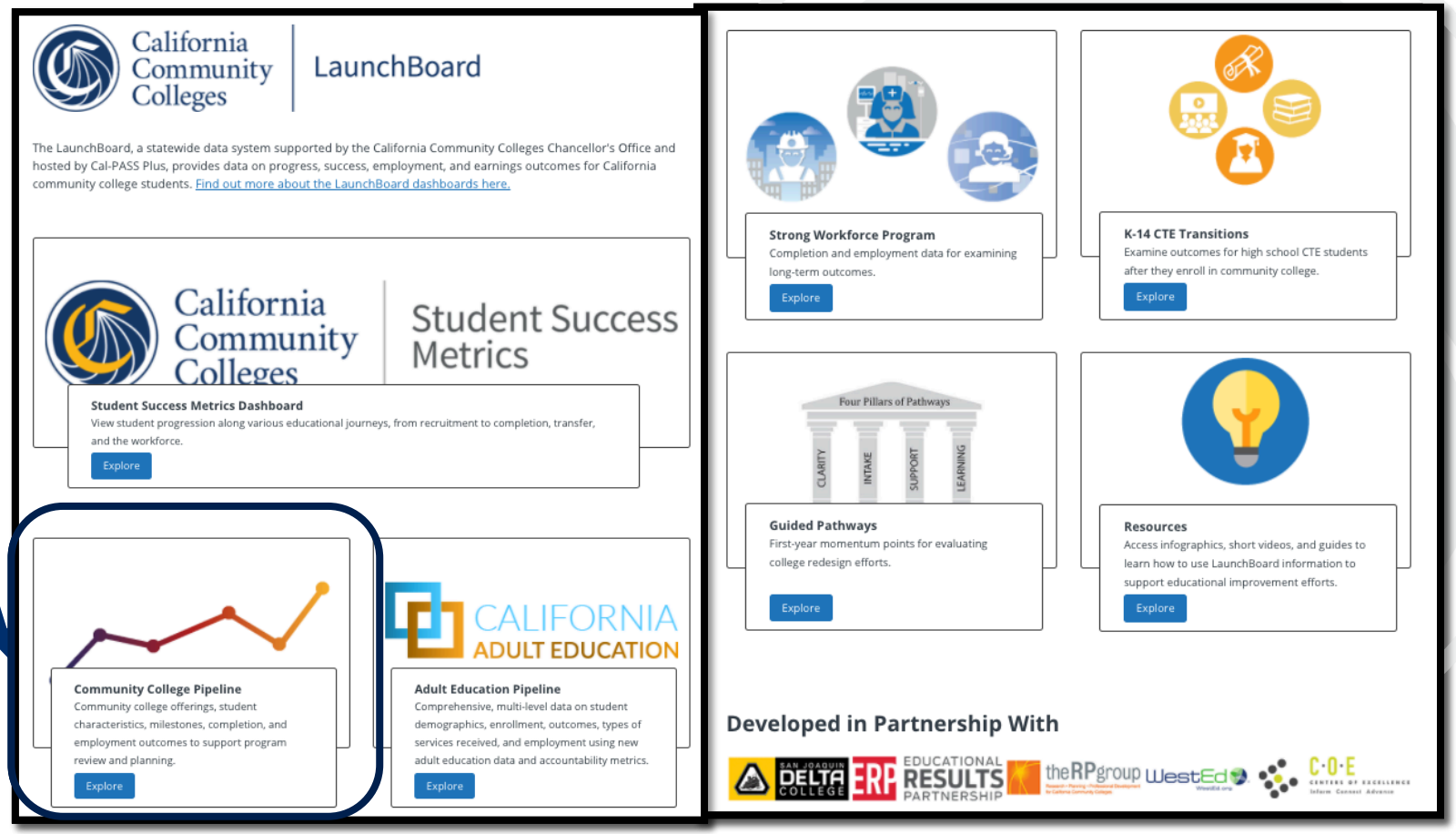
# Purposes of CCP

- Informs Program Review
- Enhances limited information in other Accountability dashboards
- Helps in evaluating persistent equity gaps
- Highlights where we need to focus improvement efforts or to expand what is working well
- Provides LMI and online job postings data to consider

# What is the Community College Pipeline Dashboard?

The most comprehensive dashboard, offering longitudinal data about students that is specific to industry sector or TOP code level

Offers detailed data to help inform **who** we are serving and **how well** we are serving them in our system

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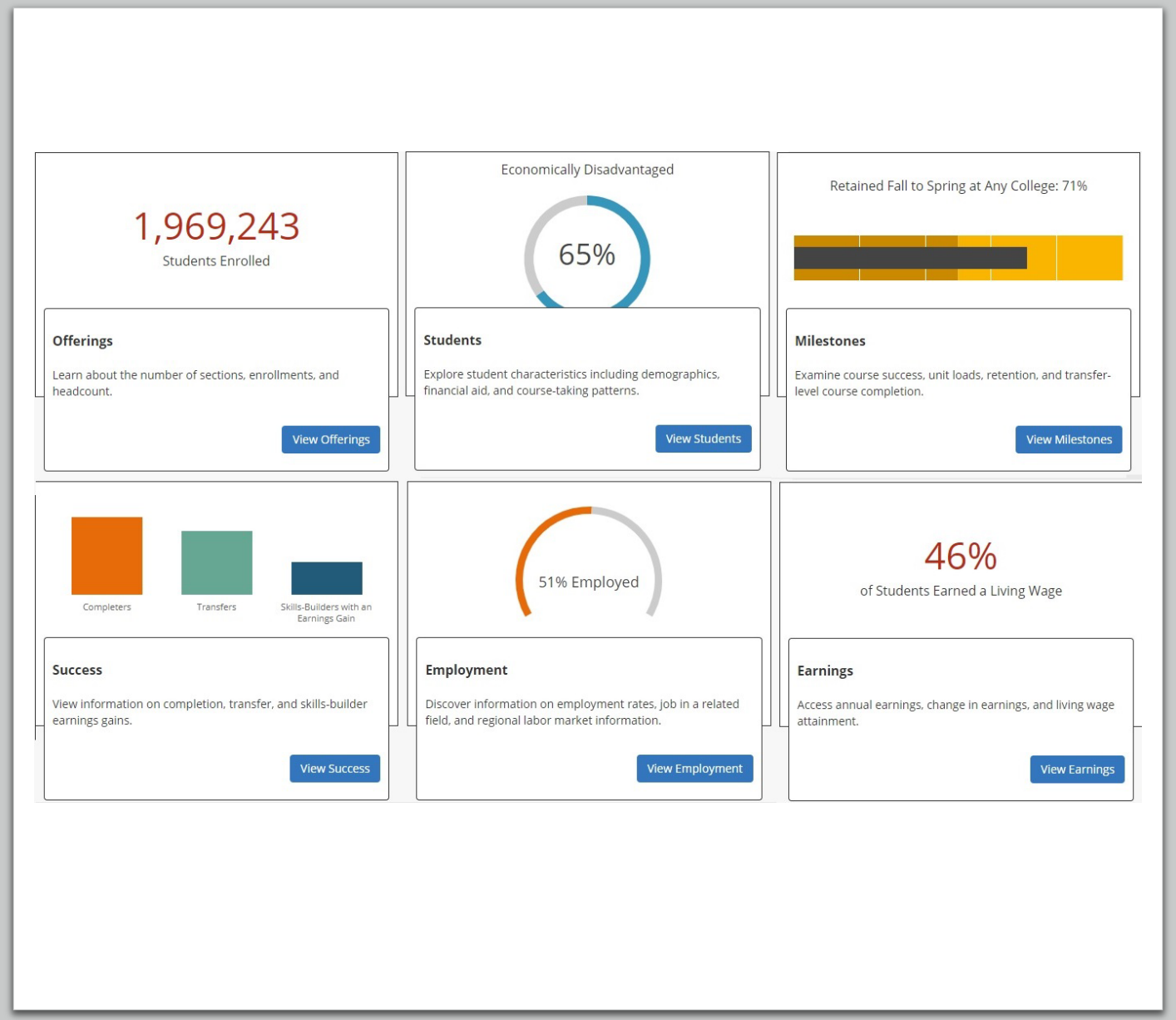
# CCP Dashboard

Provides details to help us understand who our students are, how well we are serving them, and what their outcomes are in the workforce once they leave us

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# Community College Pipeline enables users to find program-specific information

| Locale | AND | Program | AND | Year | AND | Disaggregations |
|---|---|---|---|---|---|---|
| • Statewide<br>• Macroregion<br>• Microregion<br>• District<br>• College | | • All programs<br>• All CTE Program<br>• All Non-CTE Programs<br>• Sector<br>• Top04<br>• Top06 | | • 2011-2012 to 2020-2021 | | • Gender<br>• Race/Ethnicity<br>• Age Group<br>• **Perkins Economically Disadvantaged** |

New in 2022

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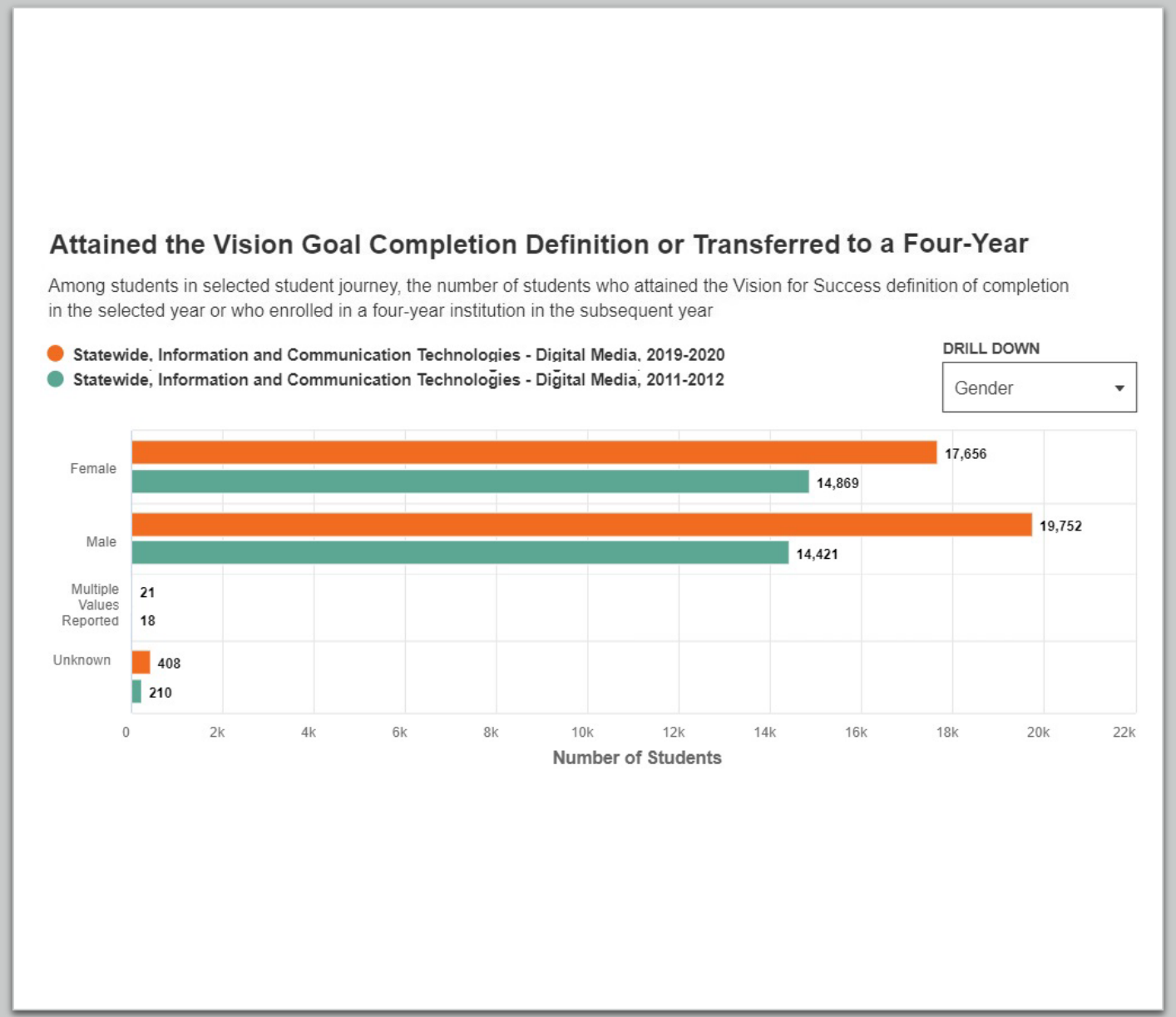
# Recognize Possible Successes and Challenges

For example, between 2011-12 and 2019-20:

- 2,787 more female students attained the Vision Goal Definition of Completion or Transferred which is a **19% increase**

- 5,331 more male students achieved the metric outcome which is a **37% increase**

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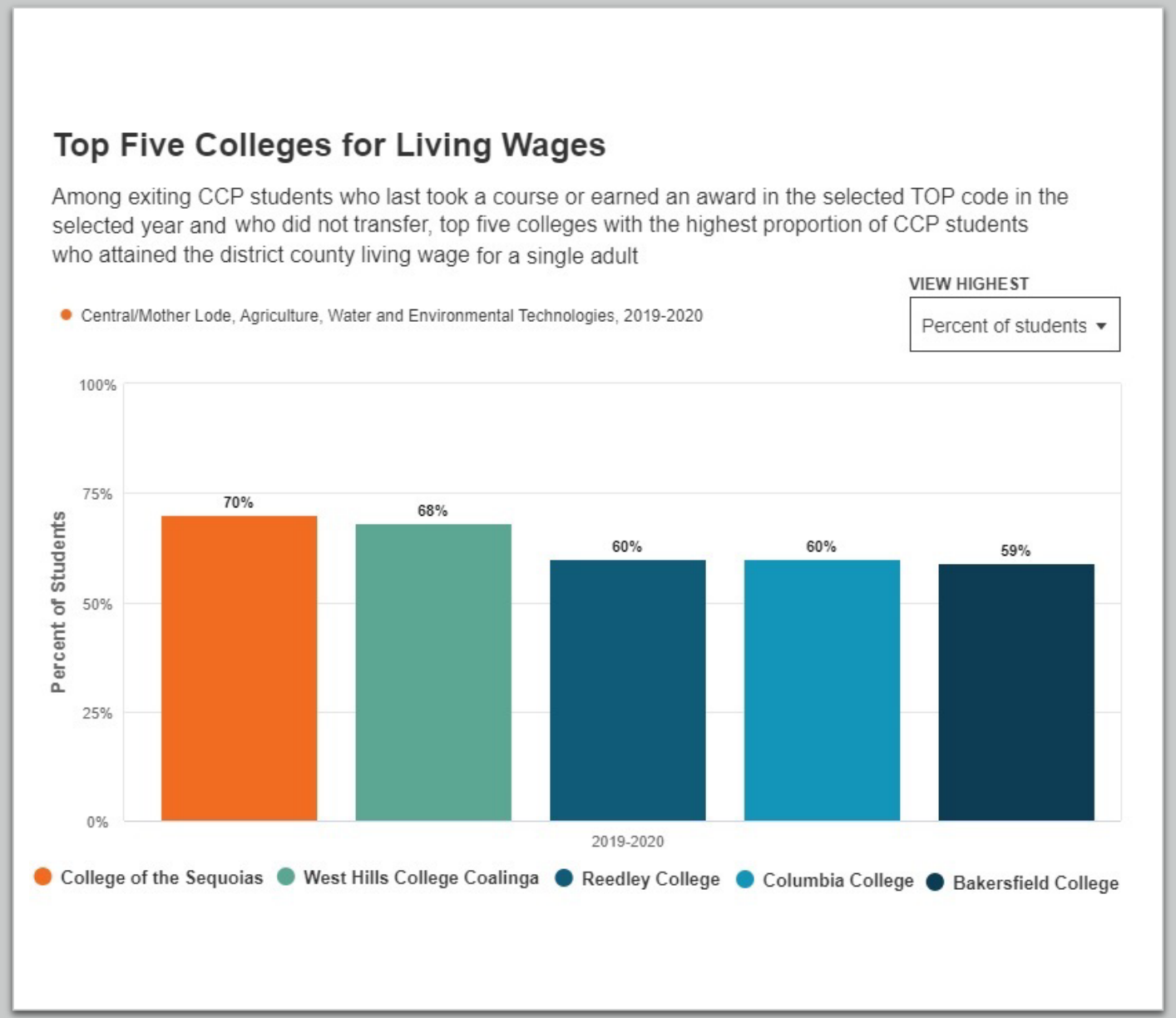
# Identify Areas to Focus on for Improvement with Comparisons

**Top Five** Colleges, Districts, or Regions (depending on selections made) available for Completion, Transfer, Employment Rates, Attained the Living Wage, and Median Change in Earnings

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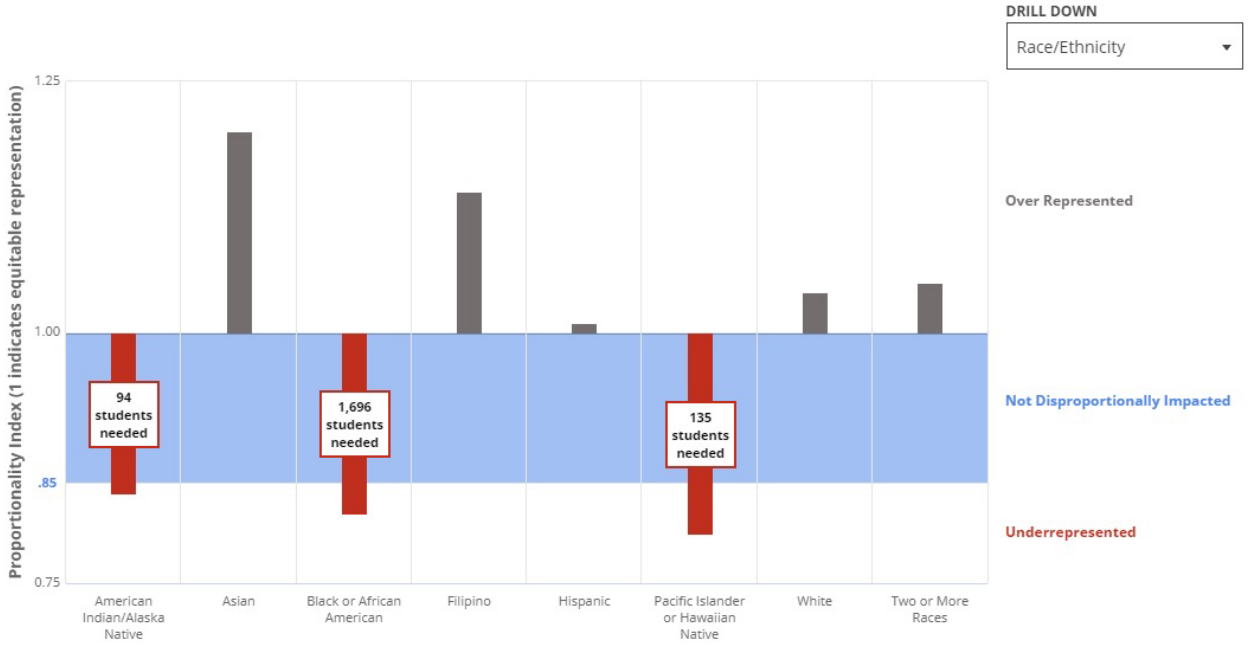
# Understand equity gaps

## Equity gap chart for completion

**Are there Equity Gaps in Completion using a Proportionality Index?**

For more detailed information, go to the Detailed Data view under the Equity Gap section.

For the locale, program/sector and year selection made above, the Equity Gap charts shows how many students need to complete in order to Close the Equity Gap for underrepresented populations disproportionately impacted either by gender, race/ethnicity or age. The number of students needed to Close the Equity Gap refers to the number of students who need to complete (by gender, by race/ethnicity or by age) to achieve a one-to-one ratio. Example of a one-one-ratio: % of Hispanic students in the Health Sector in 2018-19 who completed = % of Hispanic students who enrolled in the Health Sector in 2018-19 at the college, district, microregion, macroregion, or statewide selected.




Ratio: percentage of the subgroup who completed compared to the percentage of the subgroup at the locale selected (college, district, microregion, macroregion, statewide)

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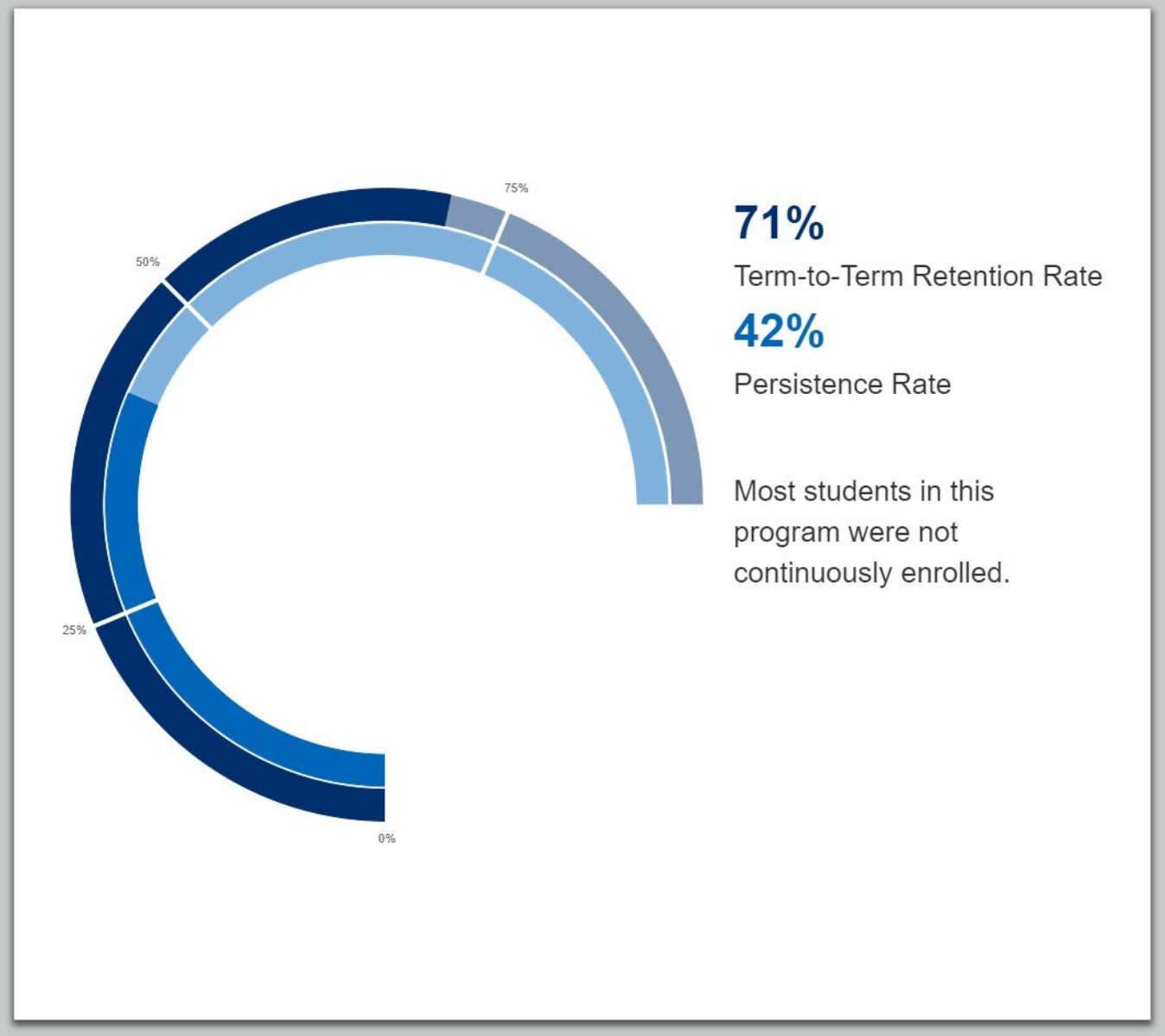
# Identify Barriers and Opportunities

Retention and Persistence

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# Use Community College Pipeline data to select a path for improvement efforts

- Identify what has worked
- Gather more information to understand why the barriers exist
- Brainstorm and try solutions to address gaps
- Measure results and improve efforts

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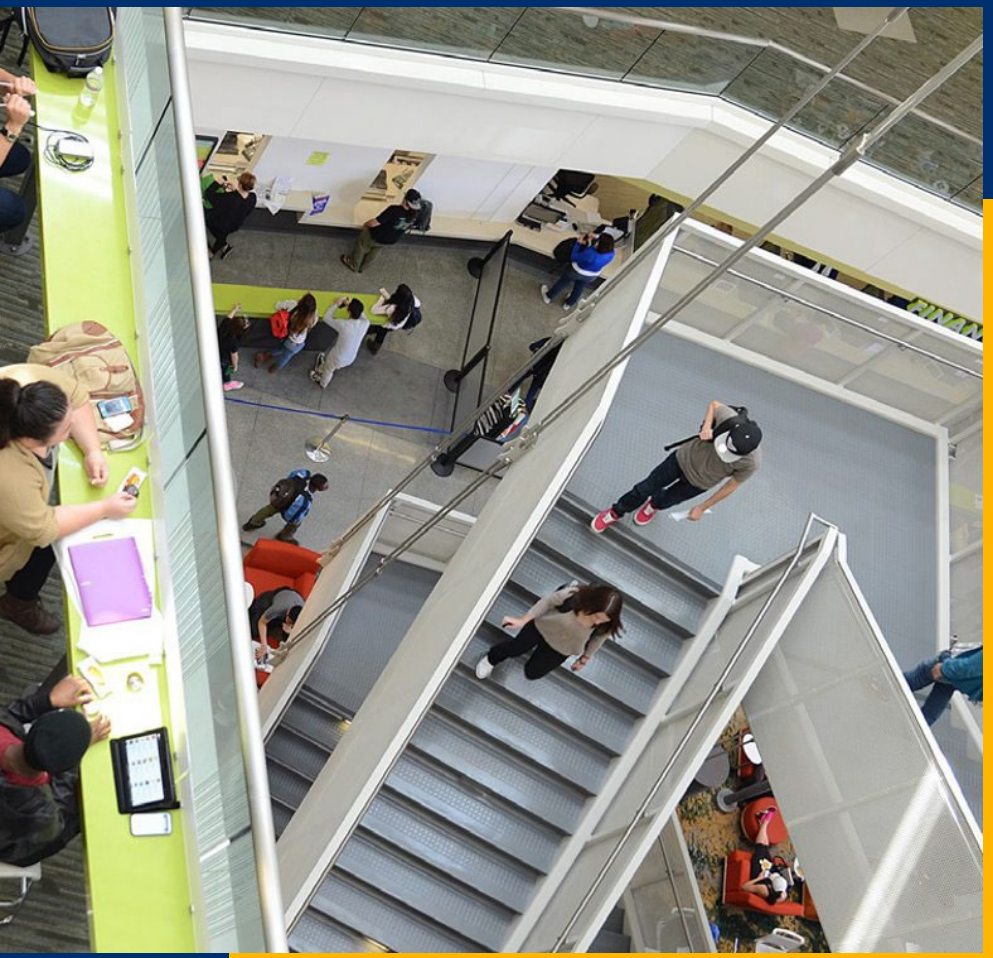

# The Hard Truth

Dashboards cannot answer all your questions or the why, BUT the data can be useful

# Types of Information: Interesting

# Types of Information: Useful

# Types of Information: Useful and Actionable

# Very Actionable: Eyewitness

# All Types of Information: Eyewitness

Joel, do you know what you are going to do after graduation with an AS in Accounting?

I've got a full-time job making $85K/year as an Accounting Analyst for Disney. It took me 3.2 months to find it through Indeed. I got the job because you taught me how to prepare contribution-margin income statements in ACCT 031 in Spring 2021. Let me show you my pay stub.

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# Dashboard data is more like this level of useful information

## Job Closely Related to Field of Study*

Among CTE students who responded to this CTE Outcomes Survey question(s) and did not transfer to any postsecondary institution, the proportion who reported that they are working in a job very closely or closely related to their field of study

**9 out of 11 respondents (82%)**

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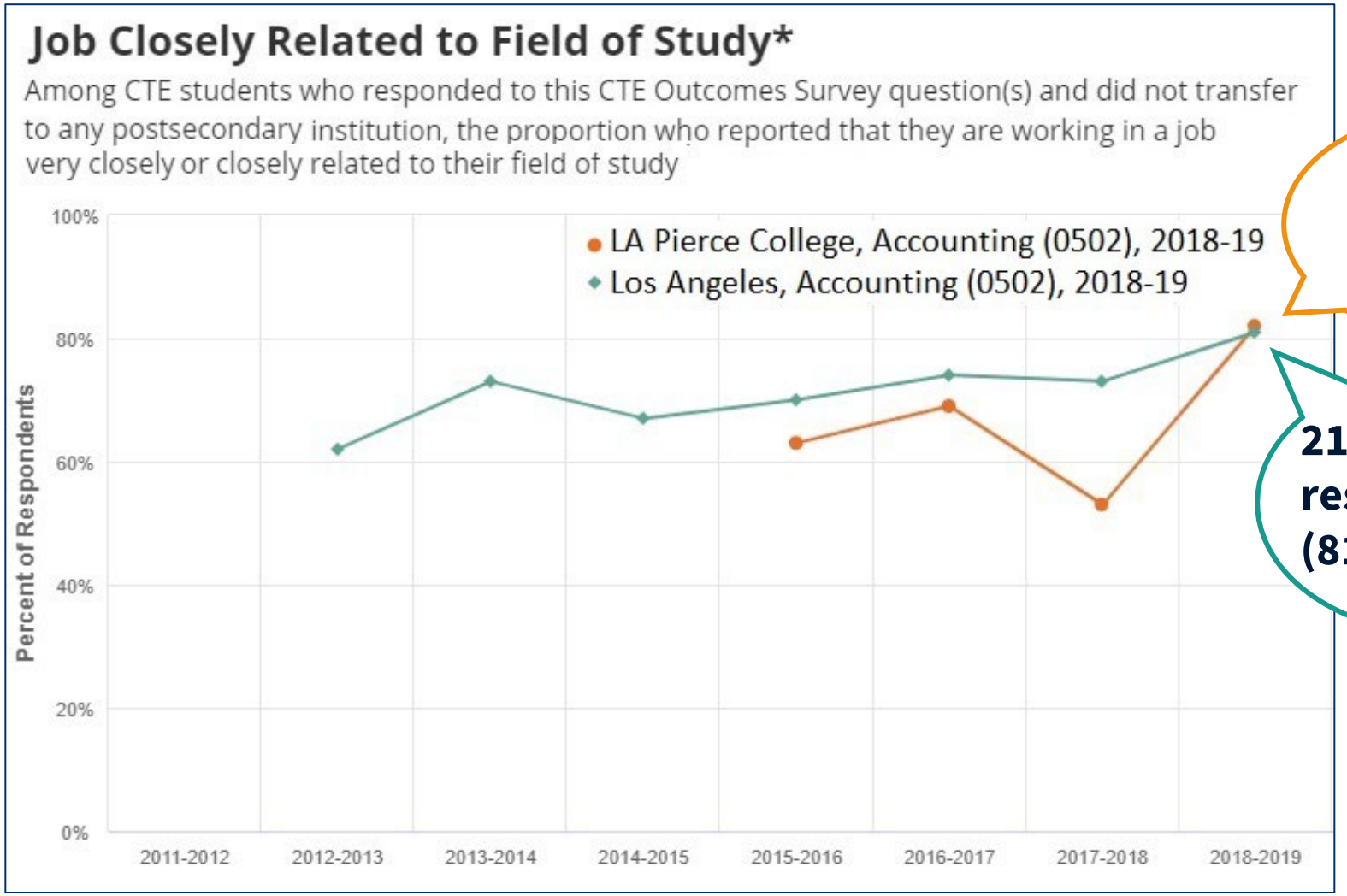
# Dashboard data is more like this level of useful information




**9 out of 11 respondents (82%)**

**217 out of 267 respondents (81%)**

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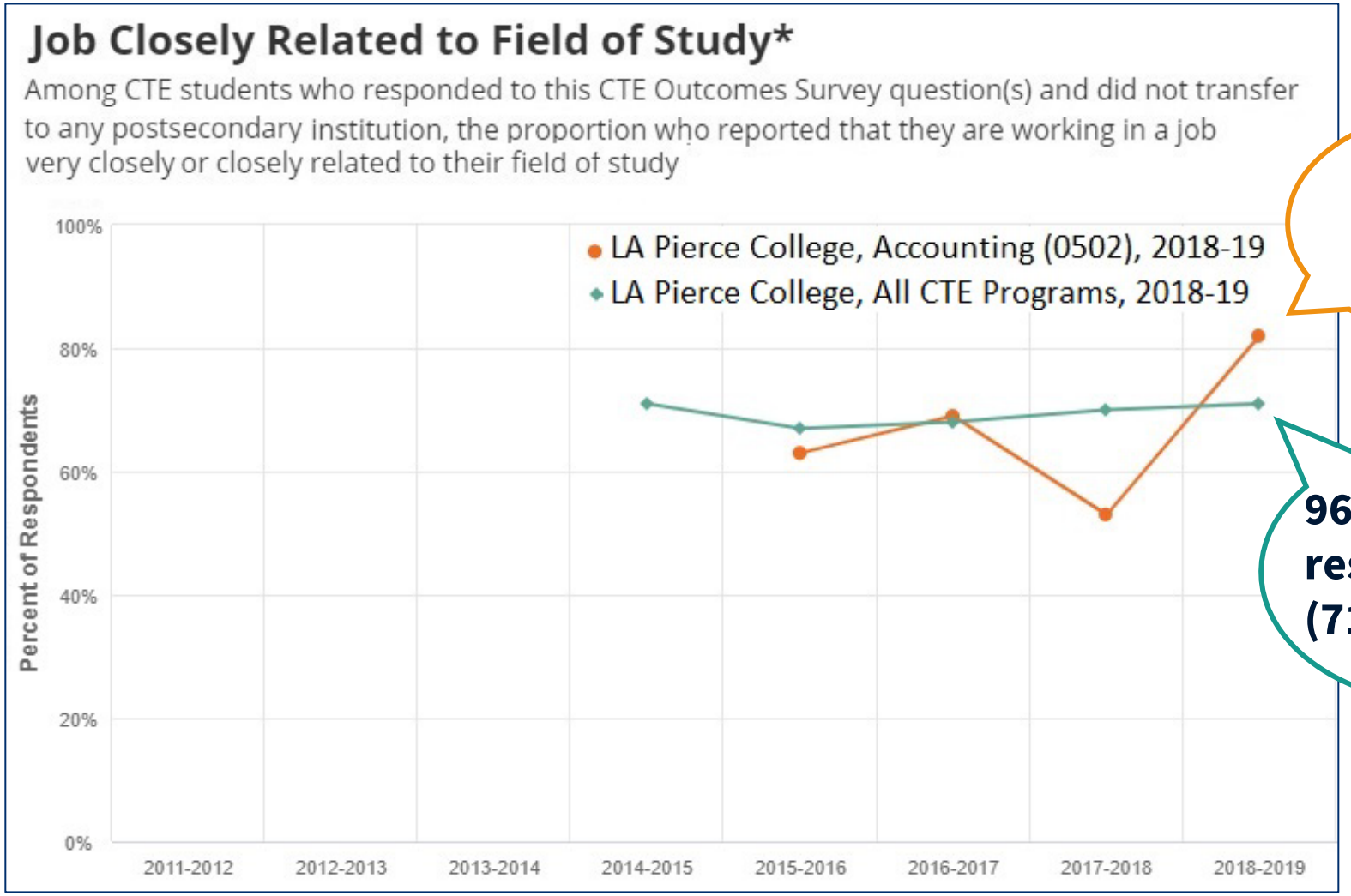
# Dashboard data is more like this level of useful information




**9 out of 11 respondents (82%)**

**96 out of 135 respondents (71%)**

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# Updates to CCP

New features and other changes in the most recent release

# New Features in CCP

**New Metric for Success:** Attained the Vision Goal Definition of Completion or Transferred to a Four-Year Institution

**New Drilldown**: Perkins Economically Disadvantaged

**New Locales**: CalBright College and Madera College

**New UI Features**:
- Incomplete years of data display and notes from Student Success Metrics
- Toggle to display number or percentage of students for top five metrics
- Disaggregations added to Successfully Completed Unit Thresholds in the Fall Term and in the Selected Year

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Feedback and questions are encouraged to improve display. Please email launchboard@cccco.edu

# What to Understand about Display of Incomplete Years of Data in the CCP Snapshot View

- Incomplete years of data will **update** over time
- Lighter, transparent bars or outlined markers signify that **incomplete years** of data are displayed
- In CCP the metrics with incomplete years of data include:
  - **3 Metrics in the Milestones View**: Completed Transfer Level Math and English, Math Only and English Only (Expanded View)
  - **1 Metric in the Employment View**: Employed in the Fourth Fiscal Quarter After Exit

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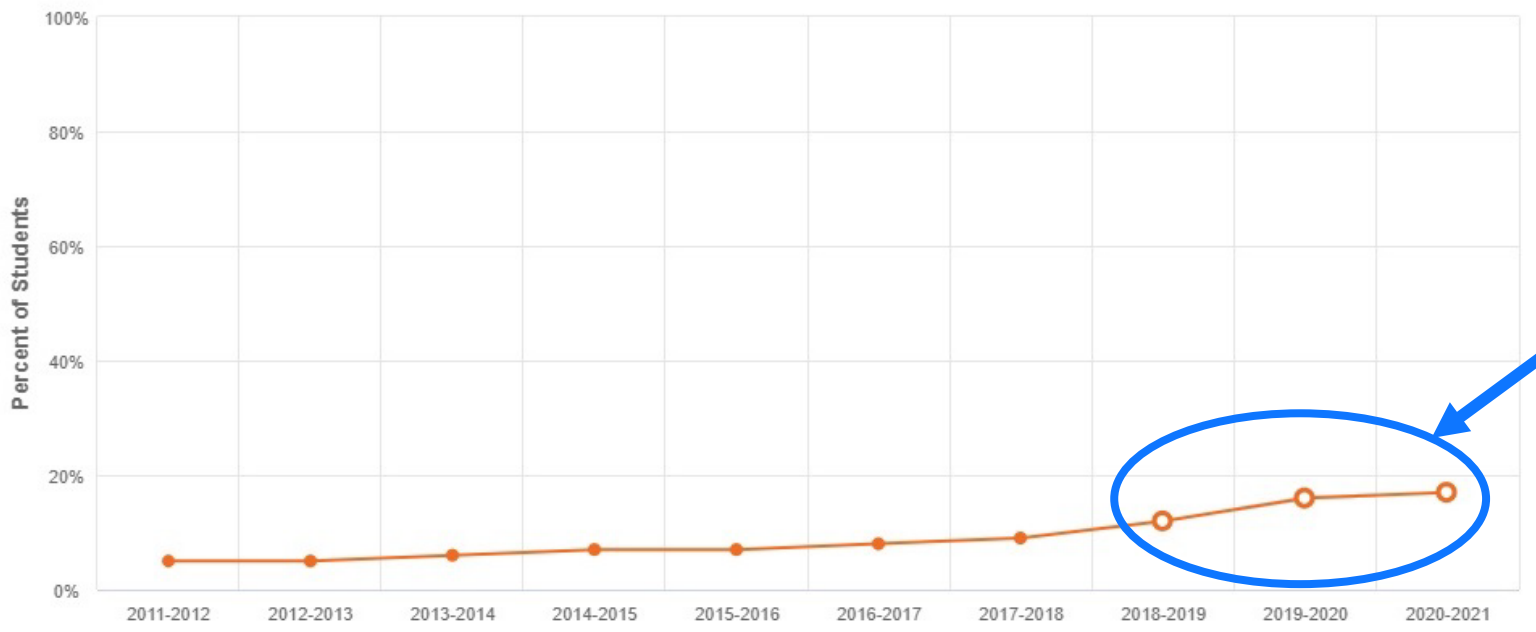
Link to resource on SSM Dashboard for **Incomplete Years of Data**

# Completion of TL Math & English (Expanded View)

## Time Trend Display of Incomplete Years of Data

### Completion of Transfer-Level Math and English (Expanded)*

Among CCP students first-time NSA credit students, the proportion who completed both transfer-level math and English in their first academic year of credit enrollment from their first term within the district allowing for students who enrolled in credit ESL to complete transfer-level math and English within three complete years from first term




**Display Note:** Information is displayed for students where the timeframe allowed to meet the outcome of the metric is complete as noted by solid data point markers and incomplete as noted by outlined markers.

**Note:** The Completed Transfer-Level Math and English (expanded view) counts students who complete within one year from their first term of enrollment while Credit ESL students can complete within three years from their first term of enrollment. Therefore, depending on the academic year as data becomes available, values and percentages for these metrics will update over time for incomplete years as more students complete within the applicable timeframes from their first enrollment.

**Outlined markers for incomplete years of data**

**Notes to remind why incomplete data is displayed for this metric**

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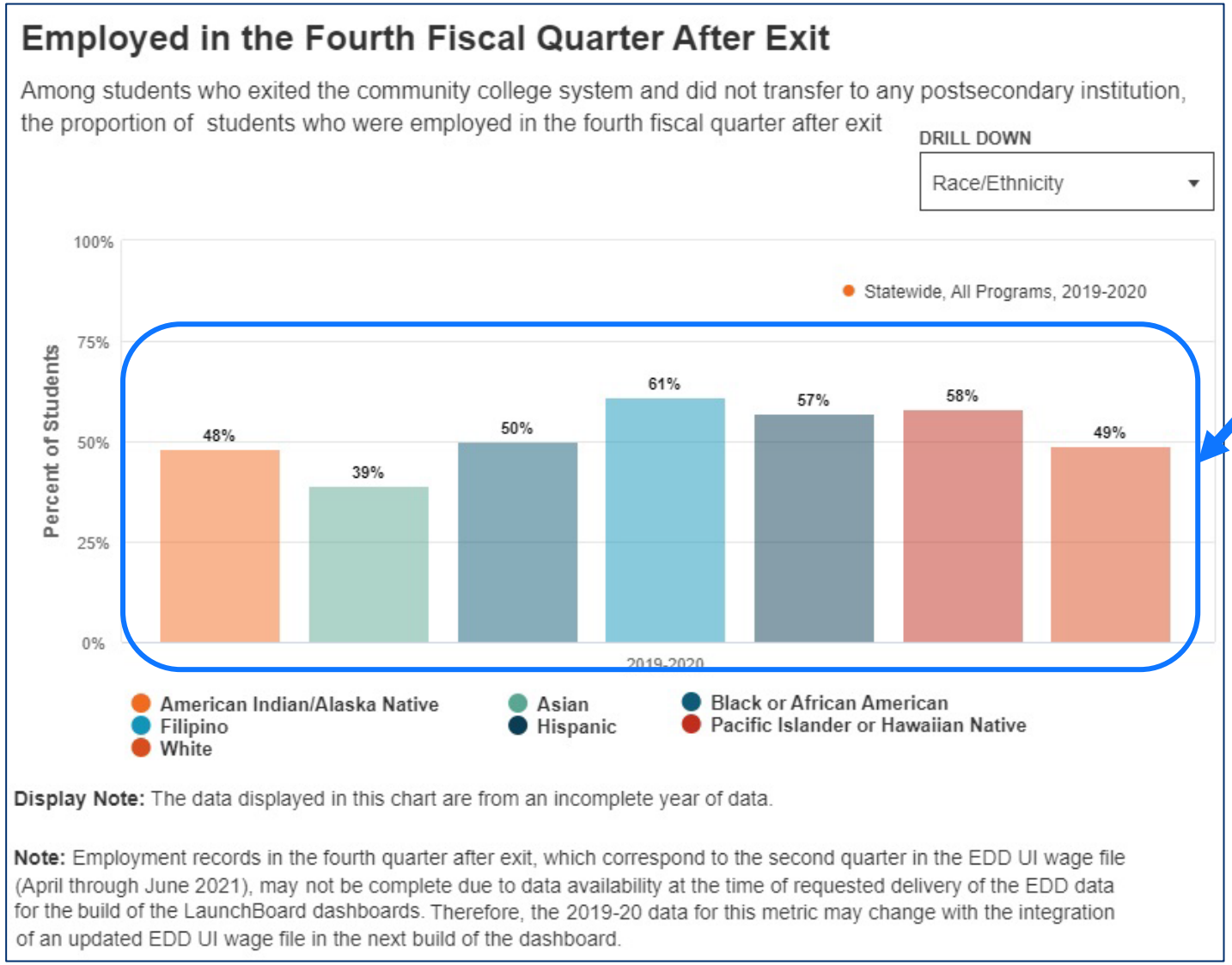
# Employed in 4th Fiscal Quarter After Exit

**Single Year Display of Incomplete Year of Data for Drill Down Selection**




**Lighter transparent bars are displayed for incomplete year of data**

**Notes to remind why incomplete data is displayed for this metric**

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# Updates to Metrics

- Summary slides in Appendix for updates to metrics in Community College Pipeline including impact
- For a more thorough review of changes in definitions:

For thorough high-level explanations of significant changes, see the **Changes in Definition on CCP November 22** resource provided in the resource section

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# Live Demo

How to navigate the Community College Pipeline to find useful information

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# The Use

How to understand equity gap charts and find labor market information in CCP

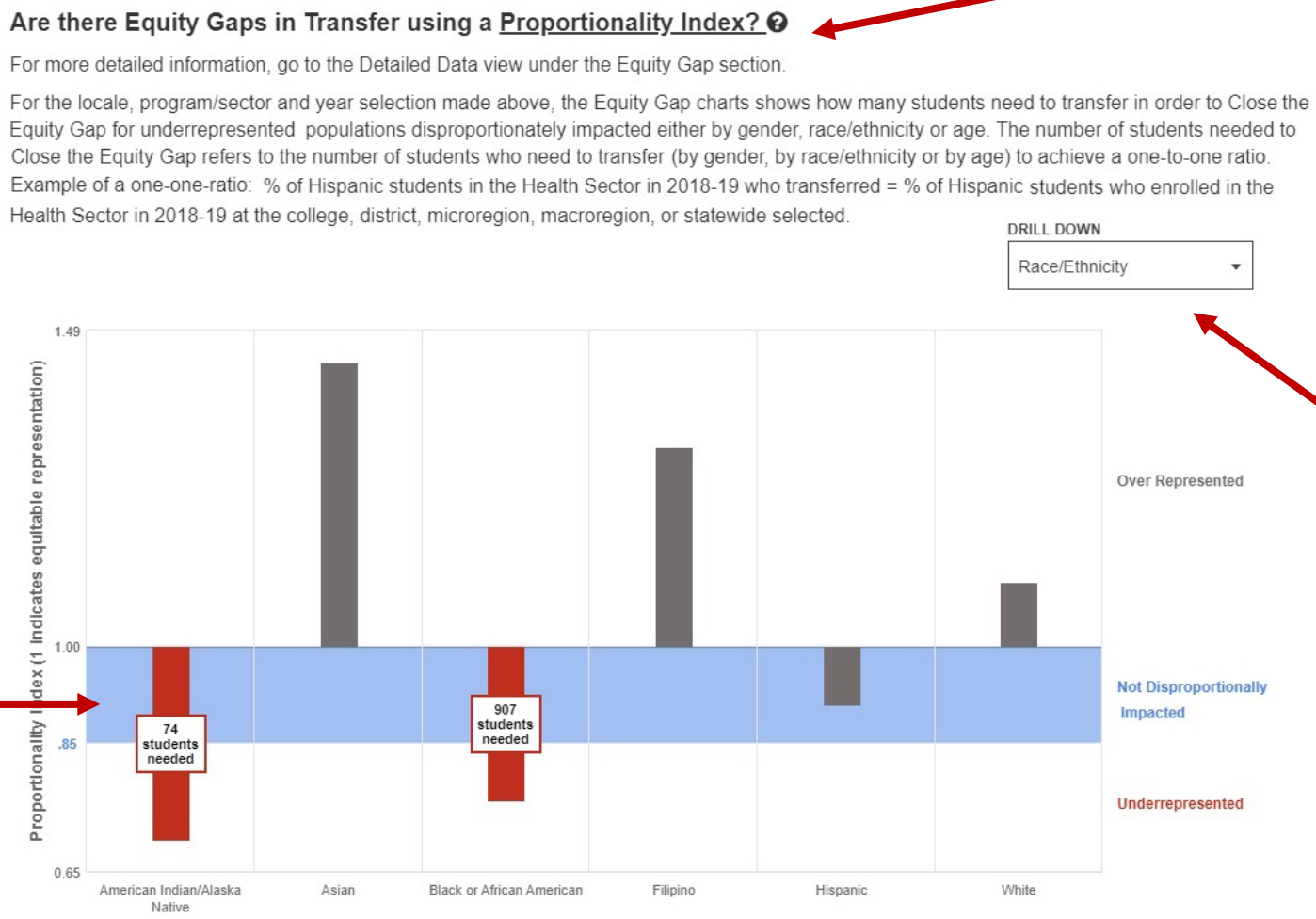
# The importance of disproportionate impact calculations

- Consistency and intentionality
- A gap needs a reference point
- Use statistical methods to help be confident that a gap exists (that it's not random chance)
- Help inform prioritization based on the size the gap or number of students impacted

# What equity gaps exist in transfer rates for students of different races/ethnicities?

The number of students needed to transfer to eliminate the equity gaps is displayed for Underrepresented student populations with substantive DI.

For example, if 907 more Black and 74 more American Indian/Alaska Native CTE students transferred to a four-year, the equity gap would be eliminated.




Pop-up text to describe Proportionality Index

View gaps by gender, race/ethnicity or age group

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# 5 Things to Know About Labor Market Information (LMI)

1. The coding system for LMI or Labor Market Demand and Supply is based on **national data** by US Bureau of Labor Statistics and the Department of Education:
   - SOC Codes (Standard Occupational Codes)
   - CIP Codes (Classification of Instructional Programs)
   - Typical Entry-Level of Education for a SOC code

2. Since TOP codes are unique to CA Community Colleges, a **TOP-SOC crosswalk** is needed to map SOC codes to TOP codes which is based on the national CIP-SOC crosswalk.

3. **One SOC code nearly always represents many different jobs** and job titles and can map to more than one program or CIP code (See **o*net** for more information on SOC codes)

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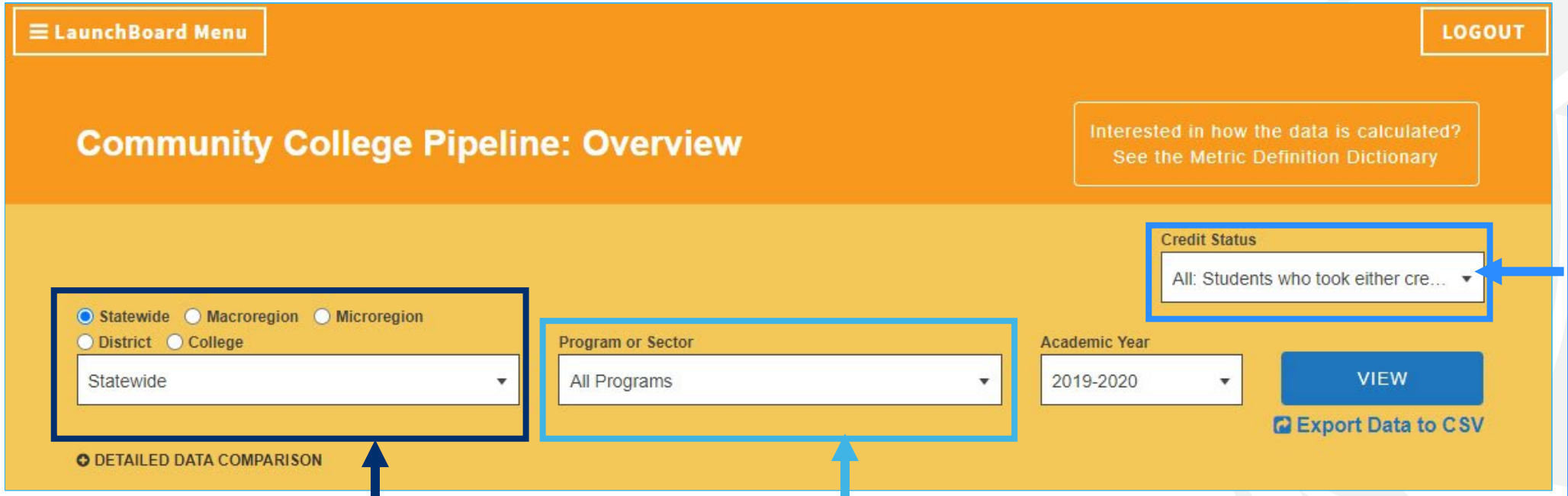
# 5 Things to Know About LMI (Continued)

4. Labor Market Data is very **different** from Online Job Postings
    - Labor Market Data is useful for getting an understanding of trends in employment and earnings over time
    - Information from online job postings helps to augment the traditional labor market data

5. Since **Typical Entry-Level Education** is based on national data, **alternative paths to employment may vary at the regional level**
    - Because of this, a SOC code's 'Typical Entry-Level Education ' might not align to local or regional skills requirements for a given job or industry

# Using the menu to find the information relevant to your region and program




Select Credit Status for All Students, Students Who Took Credit Courses or Students Who Took Noncredit Courses

Select Statewide, Macroregion, Microregion, District or College

Select Statewide, Macroregion, Microregion, District or College

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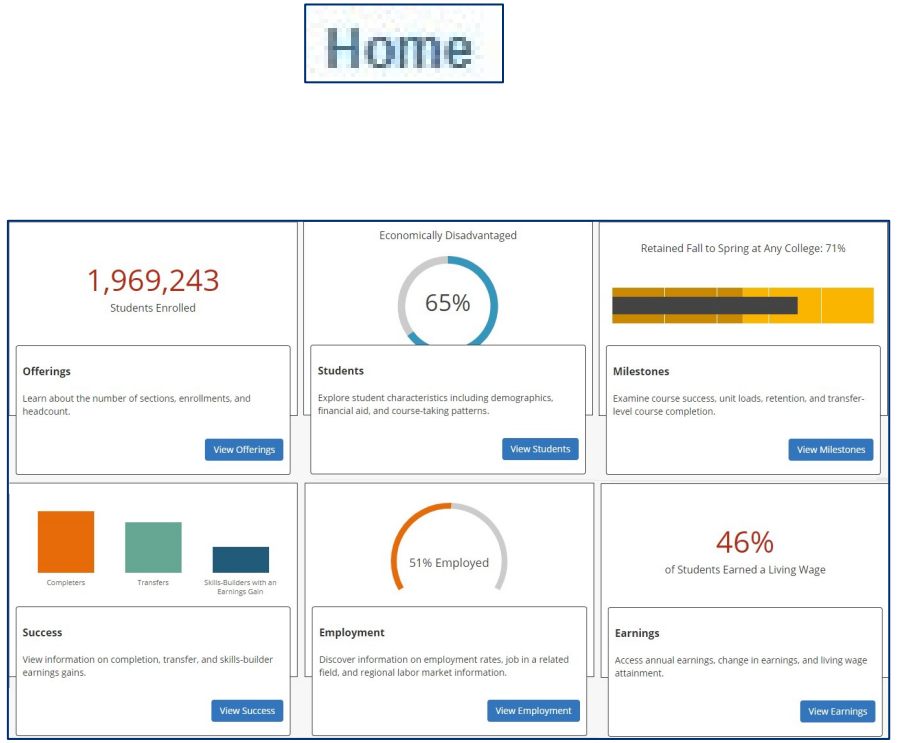
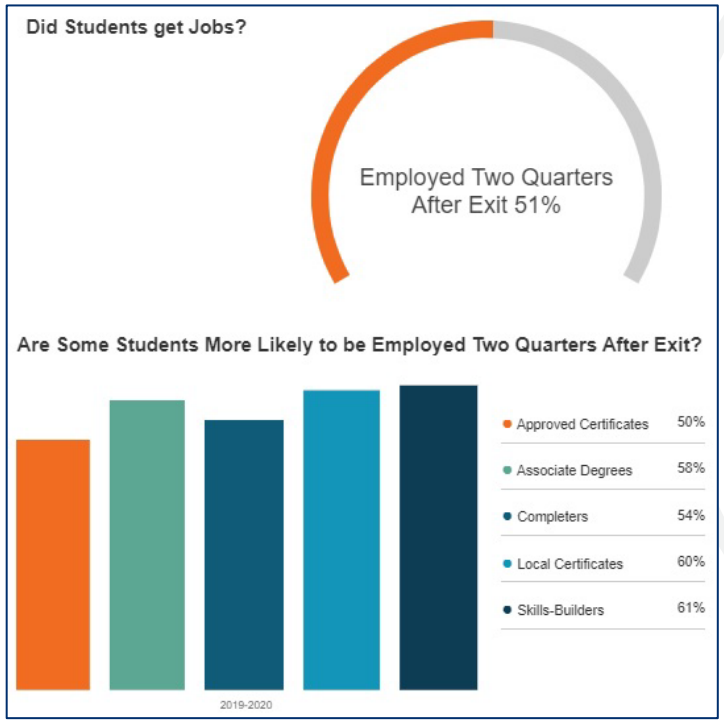
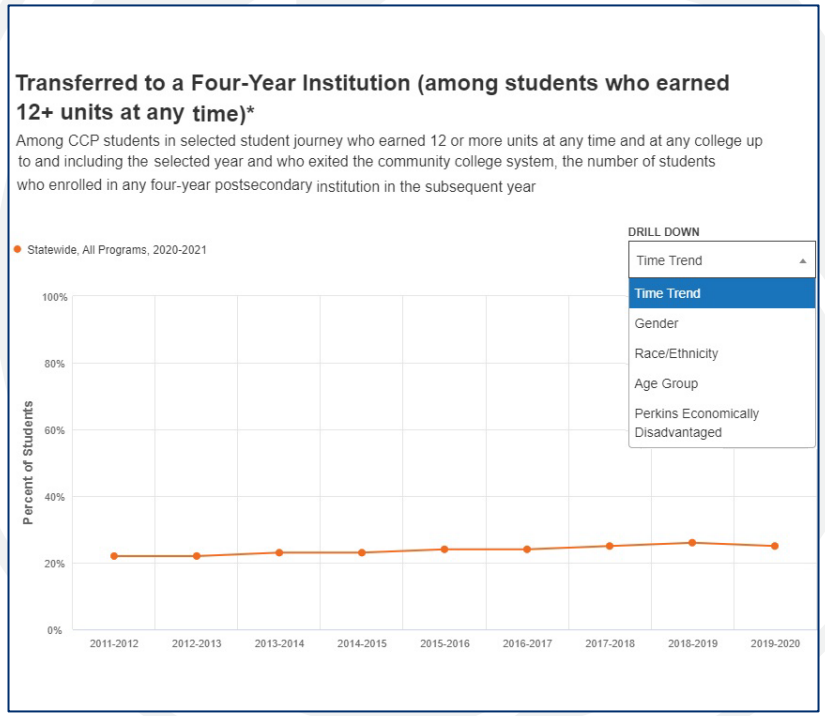
# Three ways to see the information





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# Three ways for navigating

Go back to the homepage

Use the arrows

Jump between summary and detailed

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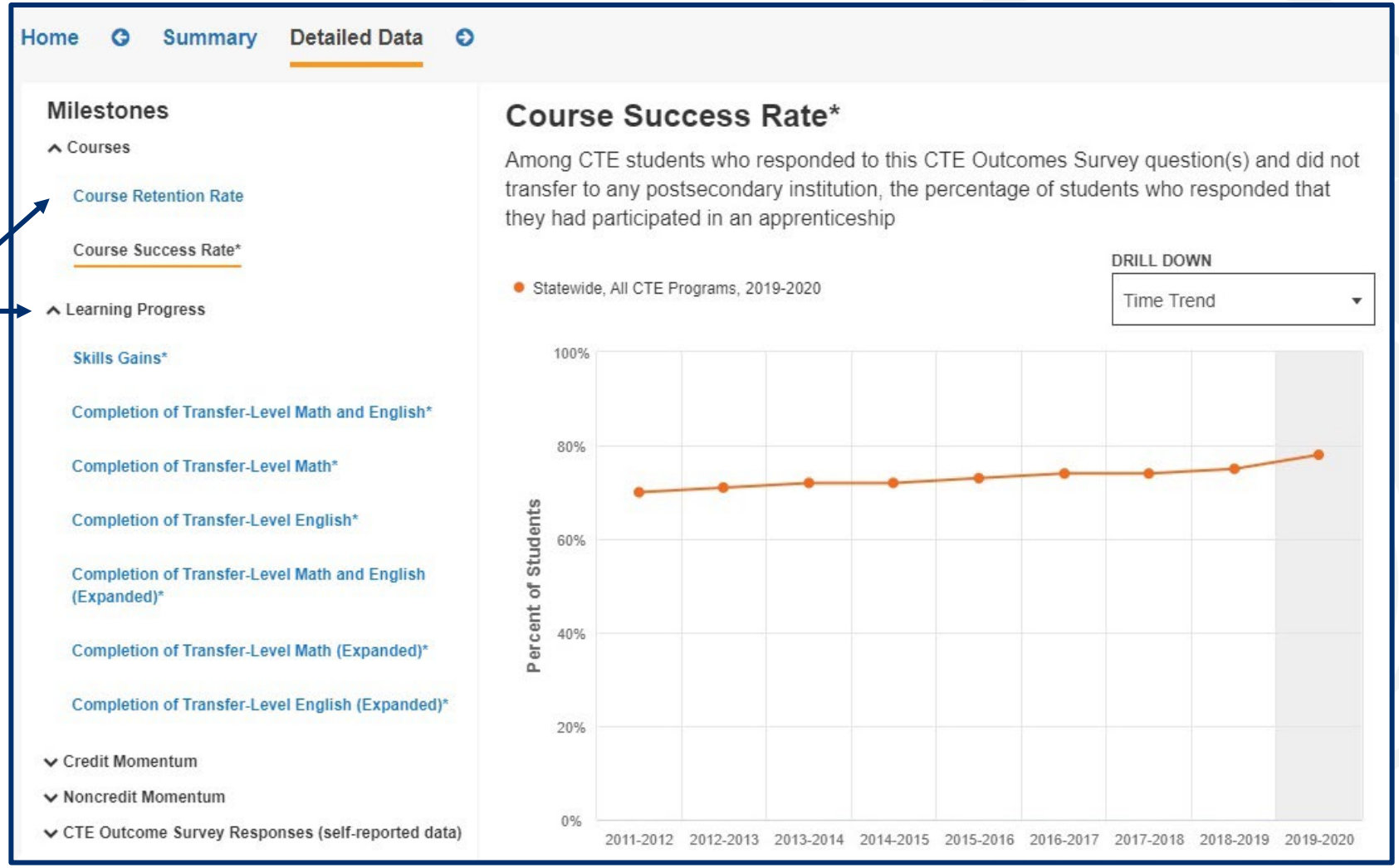
# Select the relevant metrics from the detailed data menu

Expand carrots in left navigation to see groupings of metrics

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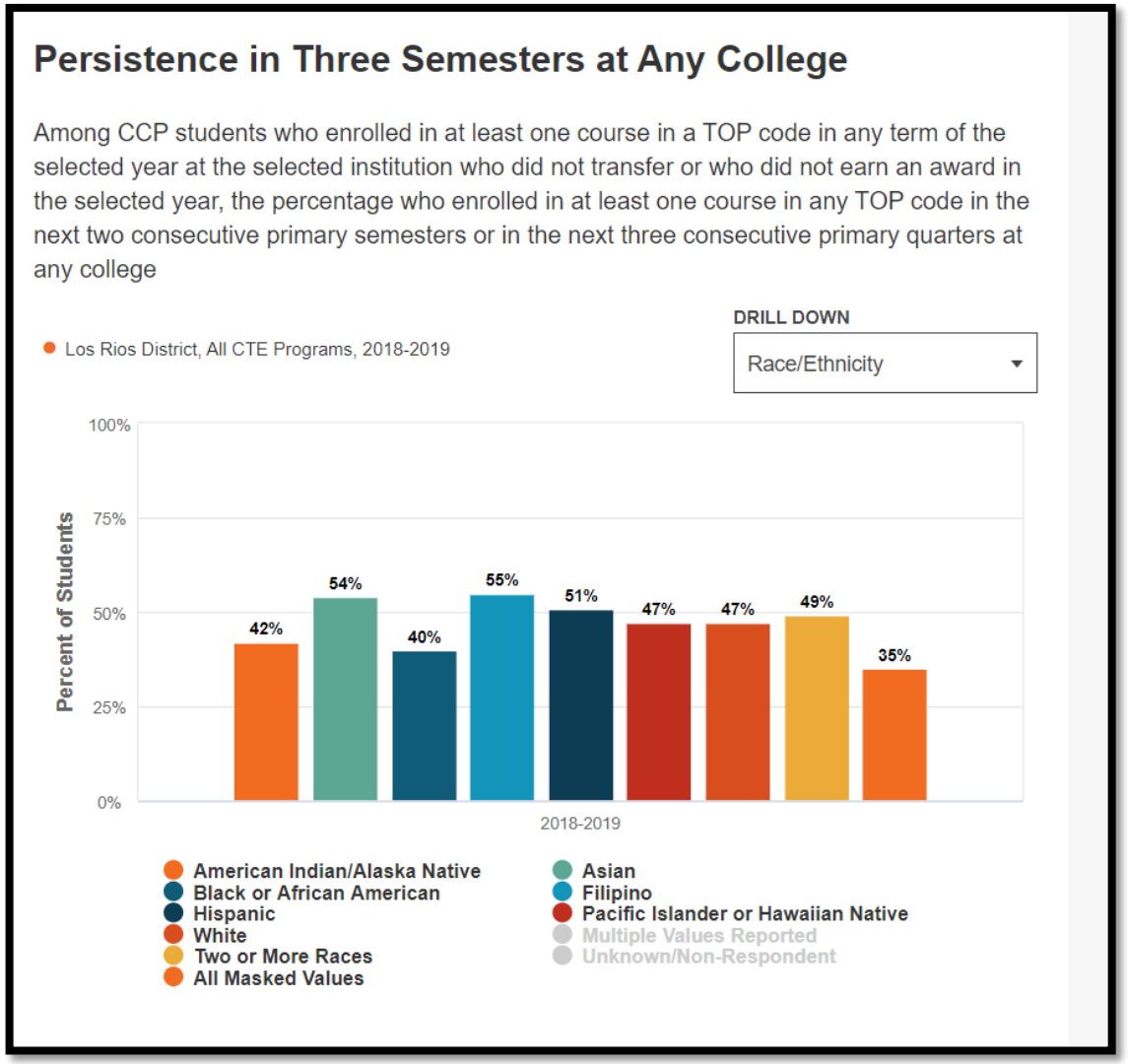
# Using drill downs to find information for specific populations

How many students persist through three terms?

Example: Los Rios District, All CTE Programs

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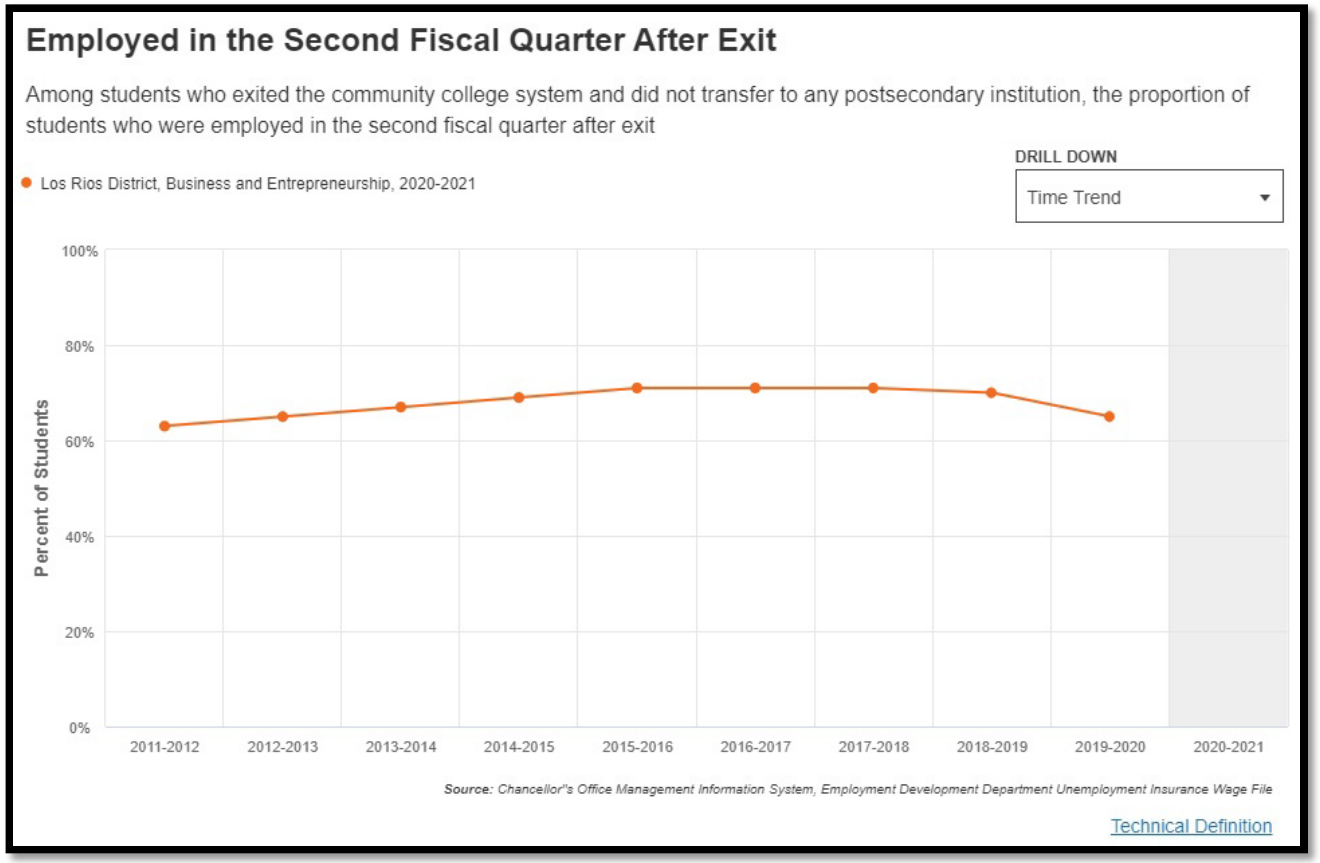
# How many students are employed after exiting?

Example: Los Rios, Business & Entrepreneurship

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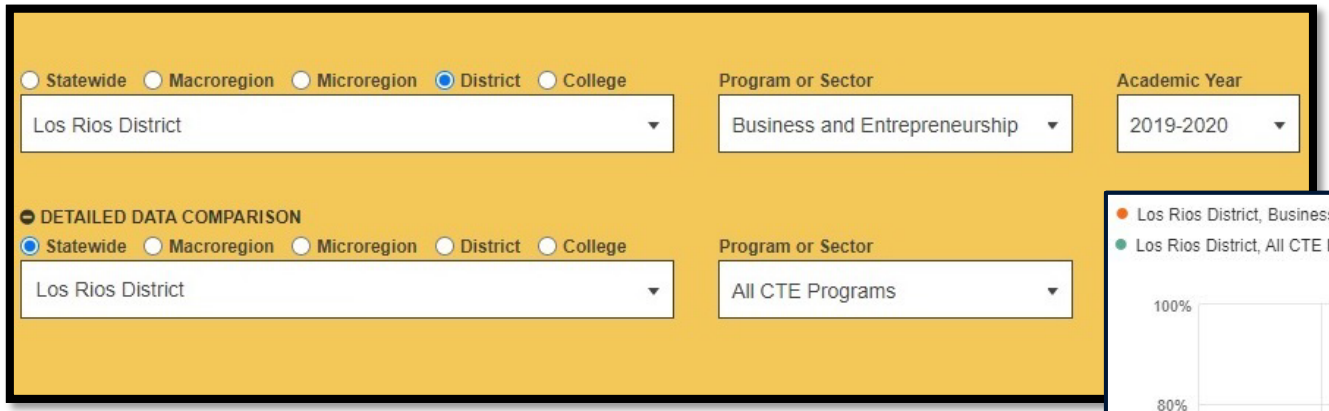
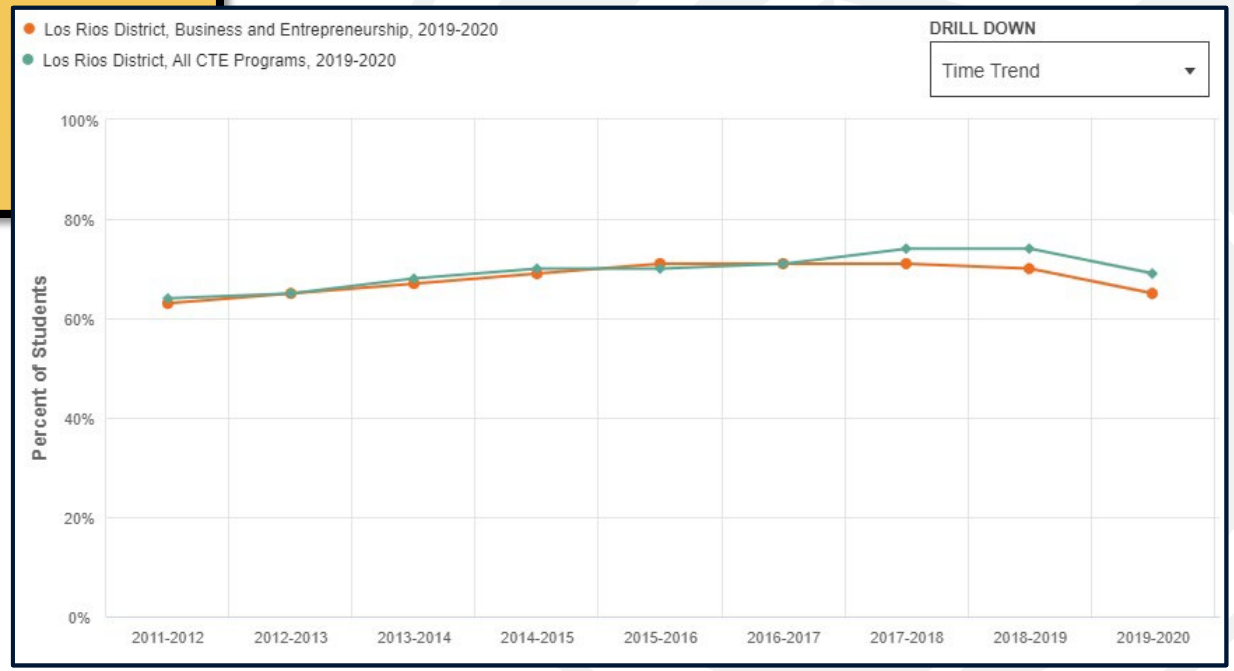
# Comparison data

## Employed in the Second Fiscal Quarter after Exit




Expand the Detailed Data Comparison to compare in the top ribbon

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# What jobs are projected to increase in the next five years?

Total 2020 and 2025 Jobs in Microregion where college is located displayed along with top 5 SOC codes mapped to program or sector selection grouped by Skill Level: Typical Entry-Level Education

## Total Projected Regional Employment

The total number of jobs for 2020 and 2025 and percentage growth or decline in occupations associated with the selected TOP code in the microregion where the college is located

- Los Rios District, Business and Entrepreneurship, 2019-2020

| | 2020 Jobs | 2025 Jobs | 2020-25 Change | 2020-25% Change |
|---|---|---|---|---|
| **Regional Jobs Total** | 426,179 | 456,064 | 29,885 | 7% |
| **Above Middle Skill: Bachelor's Degree Or Higher** | | | | |
| Management Analysts (13-1111) | 28,806 | 30,756 | 1,950 | 7% |
| General and Operations Managers (11-1021) | 16,461 | 17,870 | 1,408 | 9% |
| Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other (11-9198) | 16,397 | 17,618 | 1,221 | 7% |
| **Middle Skill: HS Diploma Or Equivalent** | | | | |
| Real Estate Sales Agents (41-9022) | 30,457 | 32,893 | 2,436 | 8% |
| **Middle Skill: On-The-Job Training** | | | | |
| Retail Salespersons (41-2031) | 27,131 | 27,712 | 581 | 2% |

*Source: Emsi Labor Market data 2021.3, TOP-SOC Crosswalk*

Technical Definition

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# What skills are needed for those jobs?

## Hard Skills Requested in Online Job Postings (90 days)

The number of unduplicated online job postings for top five hard skills in top 10 occupations in the region associated with the selected industry sector or TOP code in the locale selected over a 90-day period (July -Sept 2021). Hard skills are specific, learnable, measurable, often industry- or occupation-specific abilities related to a position. Example: JavaScript might be a hard skill for a data analyst or CPR for a nurse.

- Los Rios District, Business and Entrepreneurship, 2019-2020

| | Skill |
|---|---|
| **Bachelor's Degree Or Higher** | |
| • Accountants and Auditors (13-2011)<br>• Loan Officers (13-2072)<br>• Sales Managers (11-2022)<br>• Software Developers and Software Quality Assurance Analysts and Testers (15-1256) | Software Engineering |
| | Accounting |
| | Java (Programming Language) |
| | Python (Programming Language) |
| | SQL (Programming Language) |
| **Associate Degree** | |
| • Web Developers and Digital Interface Designers (15-1257) | JavaScript (Programming Language) |
| | Cascading Style Sheets (CSS) |
| | HyperText Markup Language (HTML) |
| | Java (Programming Language) |
| | SQL (Programming Language) |
| **HS Diploma Or Equivalent** | |
| • First-Line Supervisors of Retail Sales Workers (41-1011)<br>• Insurance Sales Agents (41-3021)<br>• Customer Service Representatives (43-4051) | Merchandising |
| | Cash Handling |
| | Insurance Sales |
| | Medicare |
| | Cash Register |

## Common Skills Requested in Online Job Postings (90 days)

The number of unduplicated online job postings for top five common skills in top 10 occupations in the region associated with the selected industry sector or TOP code in the locale selected over a 90-day period (July -Sept 2021). Common skills can be self-taught and usually do not necessitate a certain completed level of education, such as a Master's degree, or other certifications/credentials. They are essential in many industries and occupations (Example: problem-solving, project management).

- Los Rios District, Business and Entrepreneurship, 2019-2020

| | Skill |
|---|---|
| **Bachelor's Degree Or Higher** | |
| | Sales |
| • Accountants and Auditors (13-2011)<br>• General and Operations Managers (11-1021)<br>• Software Developers and Software Quality Assurance Analysts and Testers (15-1256)<br>• Sales Managers (11-2022) | Software Engineering |
| | Accounting |
| | Java (Programming Language) |
| | Operations |
| **HS Diploma Or Equivalent** | |
| • Customer Service Representatives (43-4051)<br>• First-Line Supervisors of Office and Administrative Support Workers (43-1011)<br>• Insurance Sales Agents (41-3021)<br>• First-Line Supervisors of Retail Sales Workers (41-1011)<br>• Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (41-4012) | Customer Service |
| | Sales |
| | Merchandising |
| | Management |
| | Communications |
| **On-The-Job Training** | |
| | Sales |
| | Customer Service |
| • Retail Salespersons (41-2031) | Merchandising |
| | Communications |
| | Retail Sales |

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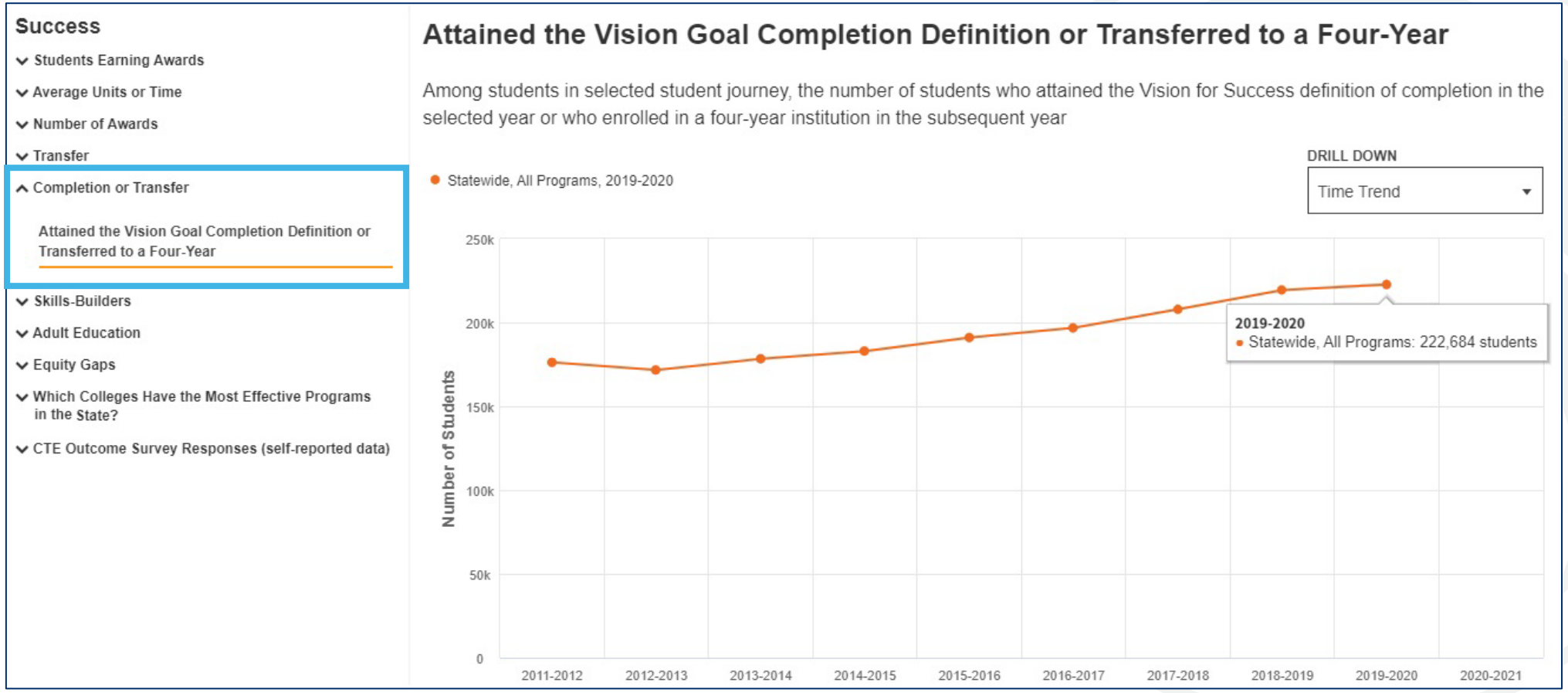
# New: A New Metric for Attained the Vision Goal Definition of Completion or Transferred

**New Metric Added to Success View for Completion or Transfer**

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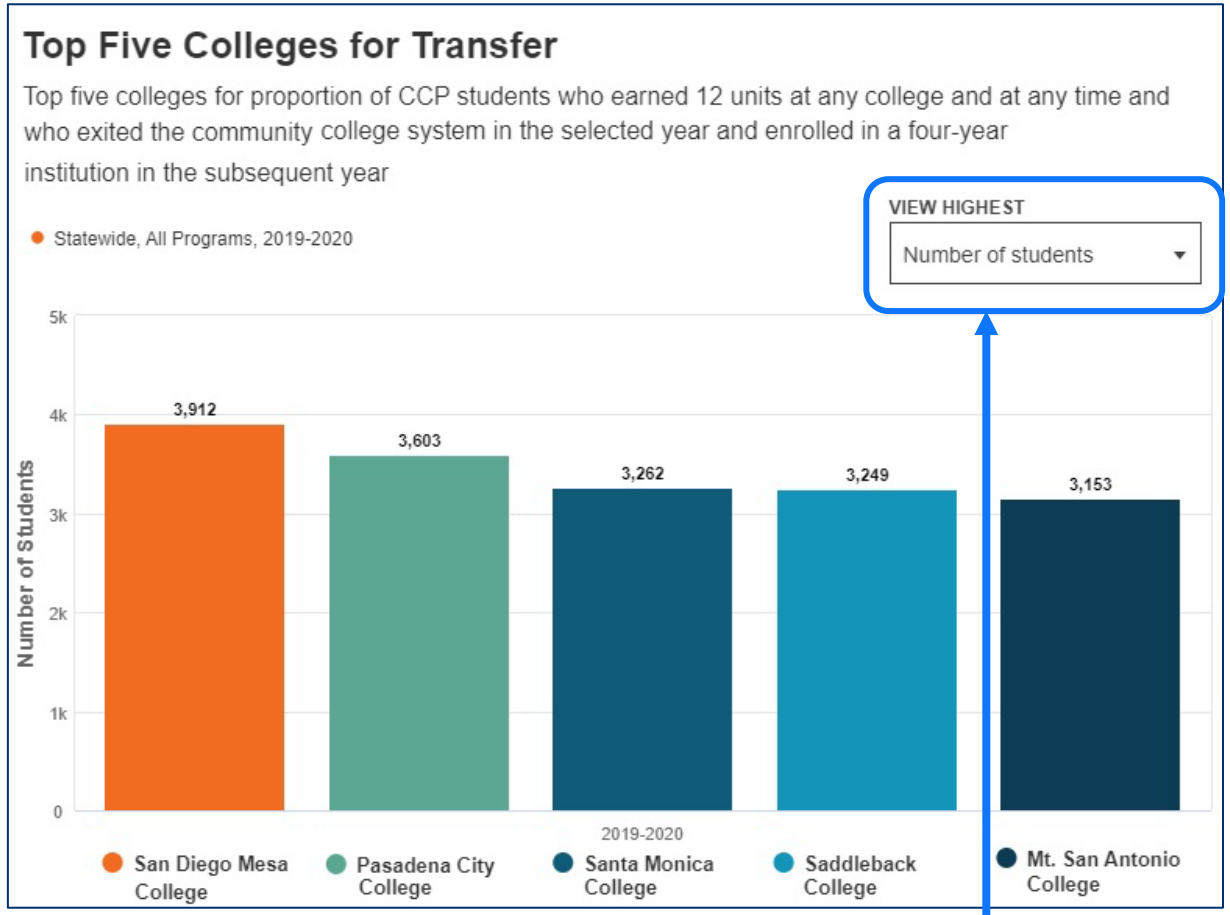
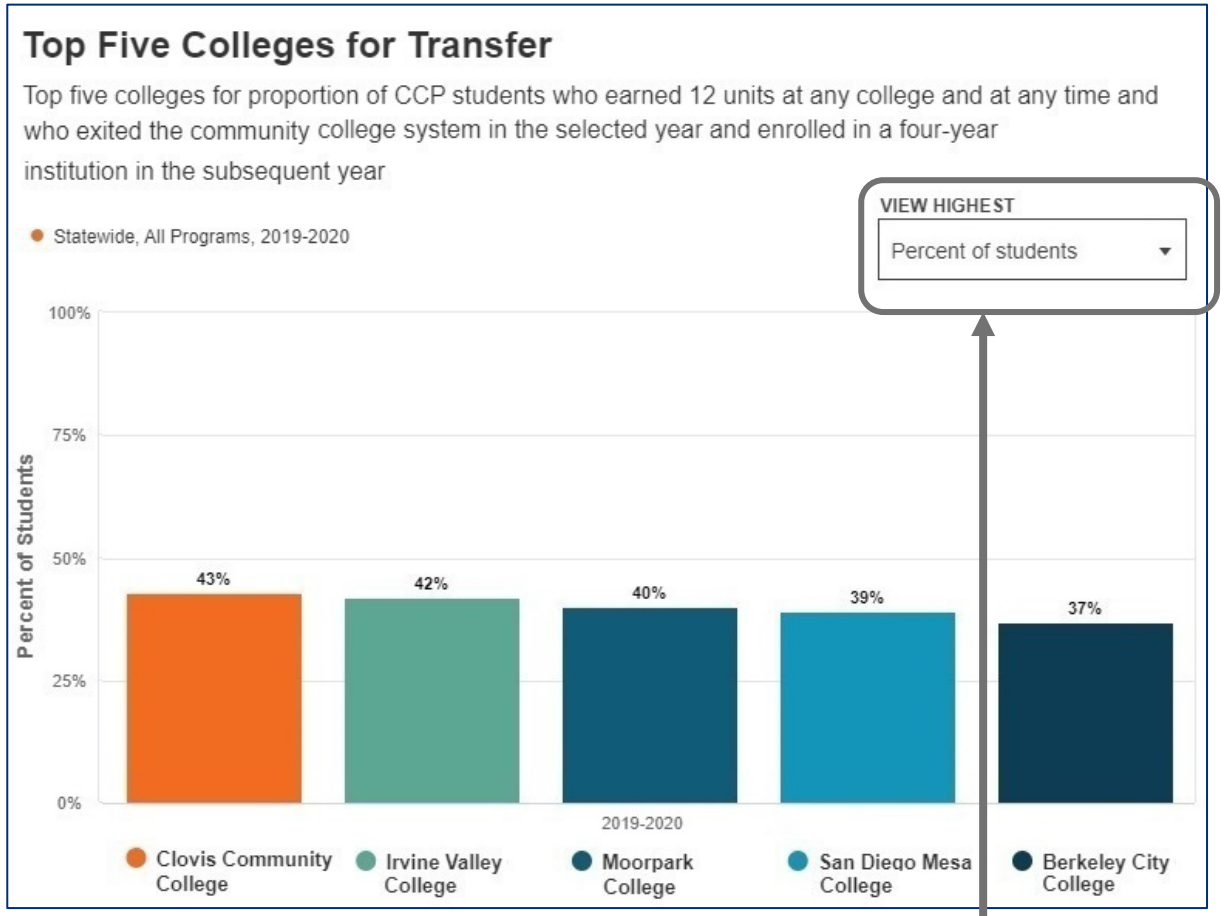
# New: Top 5 Metrics Displayed by Number and Percentage of Students




View by Highest in terms of **Number** of Students

View by Highest in terms of **Percent** of Students

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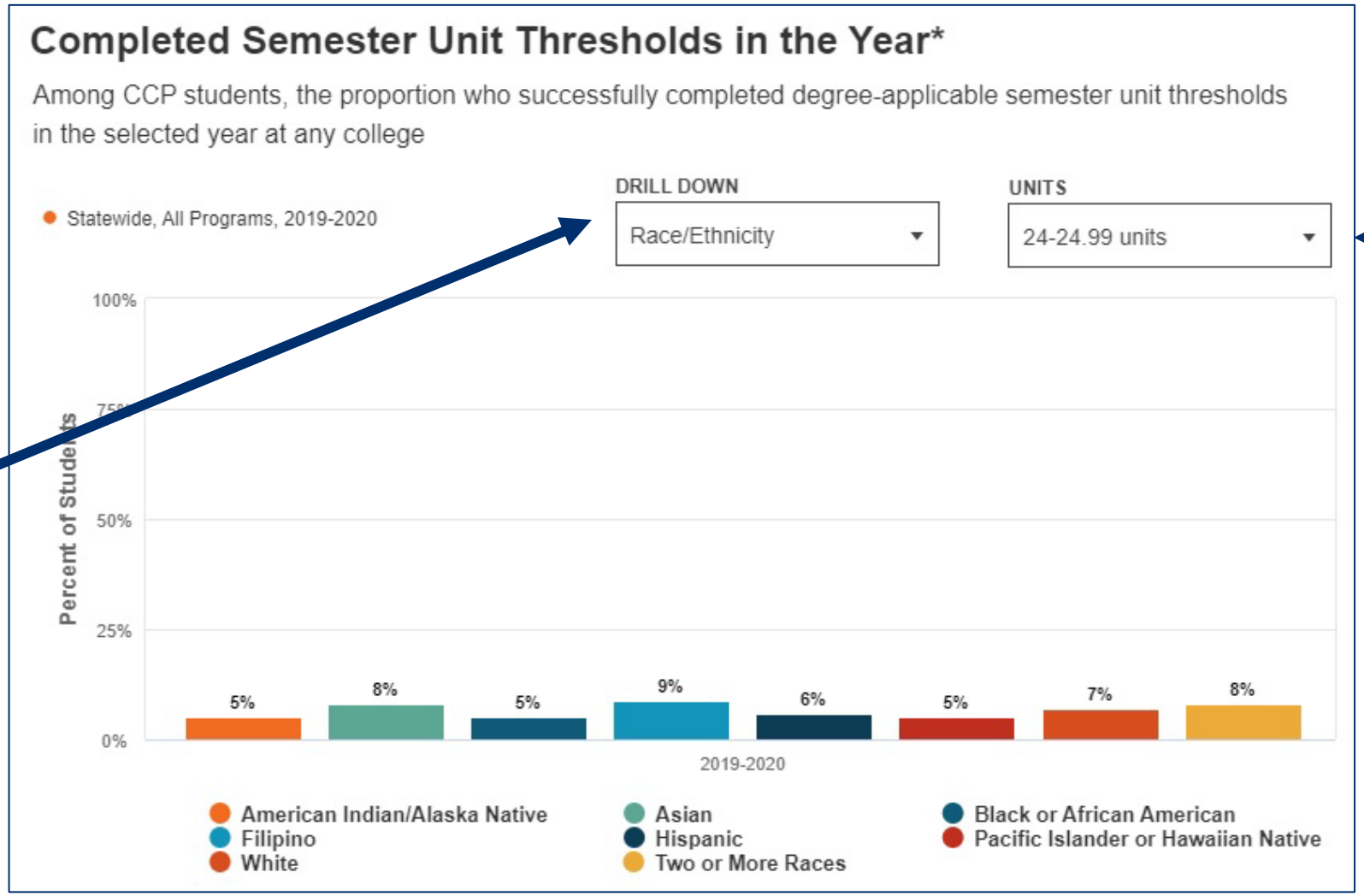
# New: Drill Downs Added for Unit Threshold Metrics

**Drilldown by Age, Gender, Race/Ethnicity or Perkins Economically Disadvantaged for each unit bucket**




**Units drill down allows for toggling between unit buckets**

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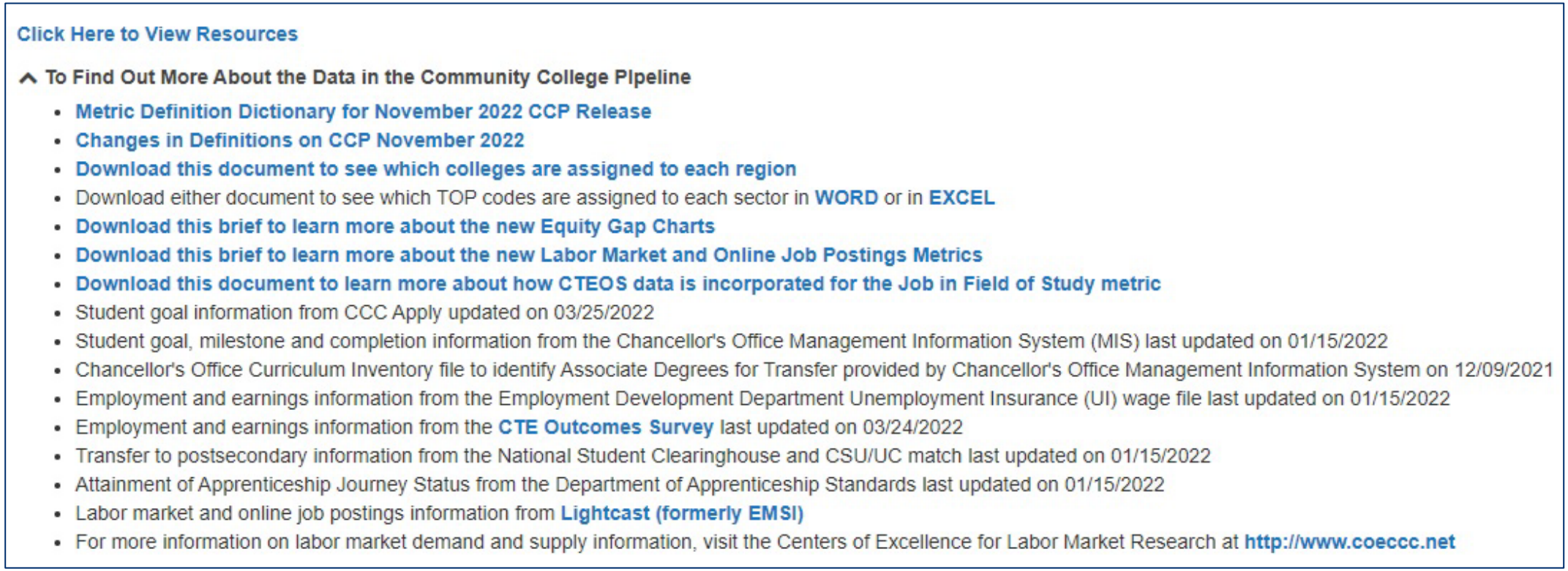
# CCP Dashboard Resources

- Click Here to **“View Resources”** takes you to the Resource Library
- Click Here **“To Find Out More About the Data in the Community College Pipeline”** provides resources related to the 20201-22 build and dates of data files received for the build



# Acting on the data

Work with colleagues to answer the following questions:

- What other information do you need?
- Which partners need to be involved?
- What are all the possible ideas for addressing the gaps and acting on the opportunities you identified?
- Which of these ideas are likely to benefit students?
- Which of these ideas are within your current capacity to implement?
- How can you measure what's working and make improvements as you go?

# Q&A

# Give us your feedback!

Feedback survey link: https://www.surveymonkey.com/r/2022CCPDASH

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# Thank you!

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# Appendix

# Review of Updates

## Offerings View: Enrollment

- Updated to count the total no. of enrollments on the selected TOP code instead of counting all enrollments on all TOP codes for students enrolled on the selected TOP code

## Students:

- **Age Groups**: students with birthdays after 10/15 of the selected year were incorrectly determined to be one year older potentially placing them in the incorrect age group
- **LGBT:** students matched now on derkey for CCCApply data
- **First-Time:** updated to align more closely with first-time cohort in SSM by removing students who received all MW or EW grades for SX04 Enrollment-Grade in all credit courses in their first term*
- **First-Time Credit:** see Age Groups above where students no longer excluded because now under 18 when found in the transfer bucket
- **Current Special Admit:** students who were only ever special admit and who never had a non-special admit enrollment at any CA community college are now included

## IMPACTS

- Enrollments are lower
- 19 or less age group is higher and other age groups are lower
- More students are flagged as LGBT
- Less students are considered first-time
- More students are considered first-time credit
- Many more students are considered current special admit

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*except if their first term was Spring 2020 or any term in academic year 2020-21 due to the onset COVID

# Review of Updates

## Student and Milestones: Goals and Noncredit Metrics

- Carry forward COVID logic for Spring 2020 to all terms in 2020-21 to include students with any noncredit enrollment because of inconsistent reporting for SX05 Positive Attendance Hours
- Remove hours reported and students enrolled on 493009 Supervised Tutoring and 493014 Study Skills as valid noncredit enrollments

## Milestones:

- **Completed Unit Thresholds**: 0-unit buckets have been added
- **Transition from Noncredit to Credit:** two of the three metrics displayed are now more closely to their definitions

## Success:

- **Students Who Attained Apprenticeship**: Derkey now used to identify students prior to 2011-12
- **Average Time to Degree:** students who earned multiple degrees in a year are deduplicated

## IMPACTS

- The number of students included in the Short-Term Career Ed. Journey is lower, and other noncredit outcomes are slightly lower
- 0 units as a threshold is now included
- Impact depends on TOP code selected but overall higher counts and percentages
- Values are much higher in earlier years and slightly higher in later
- Denominators are lower and average time to attainment very slightly impacted

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# Review of Updates

## Earnings: Median Annual Earnings, Median Change in Earnings, Attained the Living Wage, Longer-Term Earnings

- All wages equated to 2021 wages instead of 2020 wages; so, wage higher by 1% to 2% expect for colleges in LA county where there was a change to the underlying data provided by EDD for 2012 through 2018 and wages are lower by just over 0% to 5% for some colleges in that county

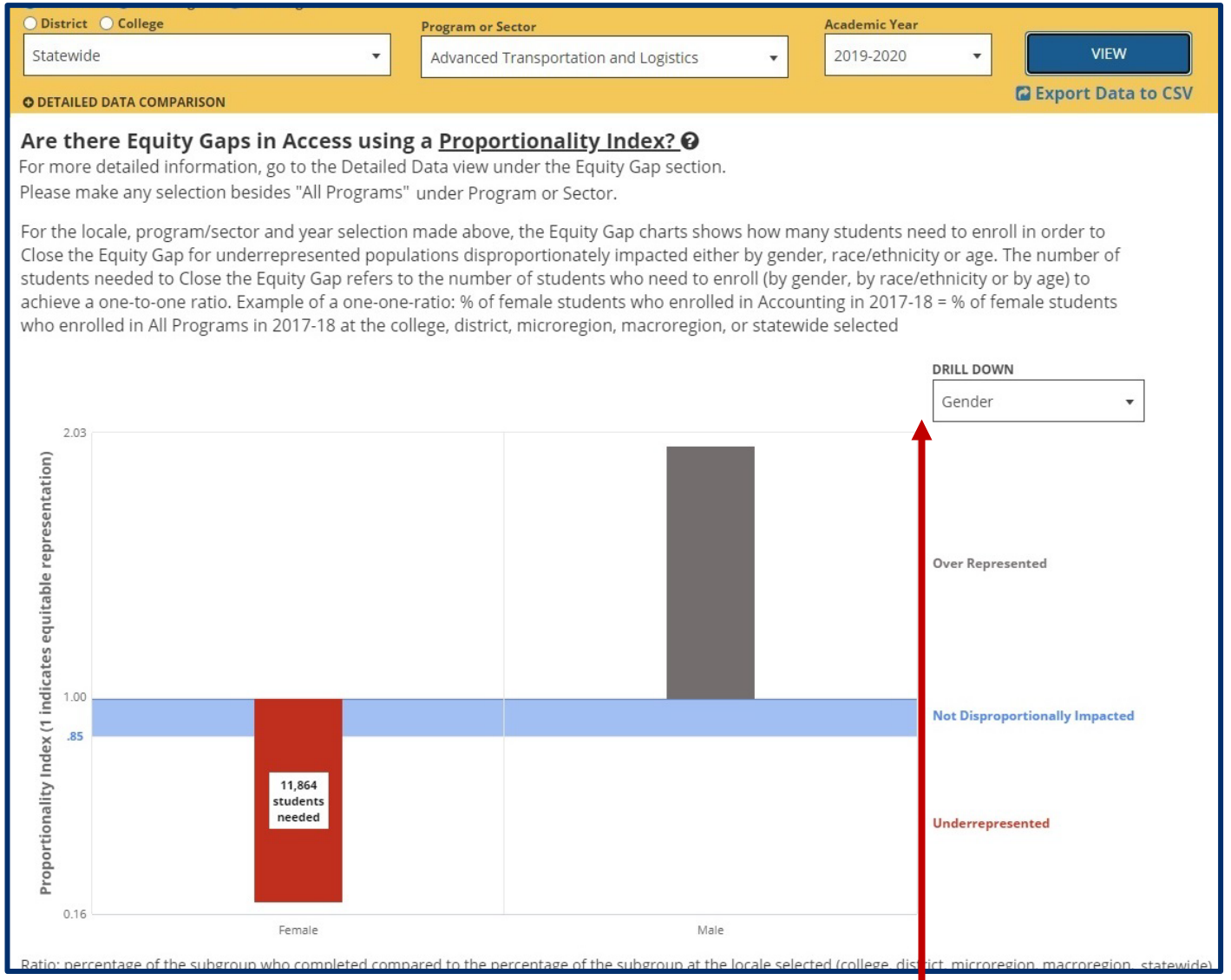
For thorough high-level explanations of significant changes, see the **Changes in Definition on CCP November 22** resource provided in the resource section

# Equity Gap Charts

Available in summary and detailed data views for the following metrics:

- Access (Enrollment)
- Completion
- Transfer

Different than just using the drilldown to compare %s




View gaps by gender, race/ethnicity or age group

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# Equity Gap Charts

## What is a proportionality index?

A methodology to identify where there are equity gaps between different student population groups, beyond direct comparisons

It provides a consistent measurement to identify:

| | |
|---|---|
| For whom? | Which student groups are experiencing disproportionate impact and are underrepresented? |
| How big? | How many students' outcomes need to change to close the equity gap? |

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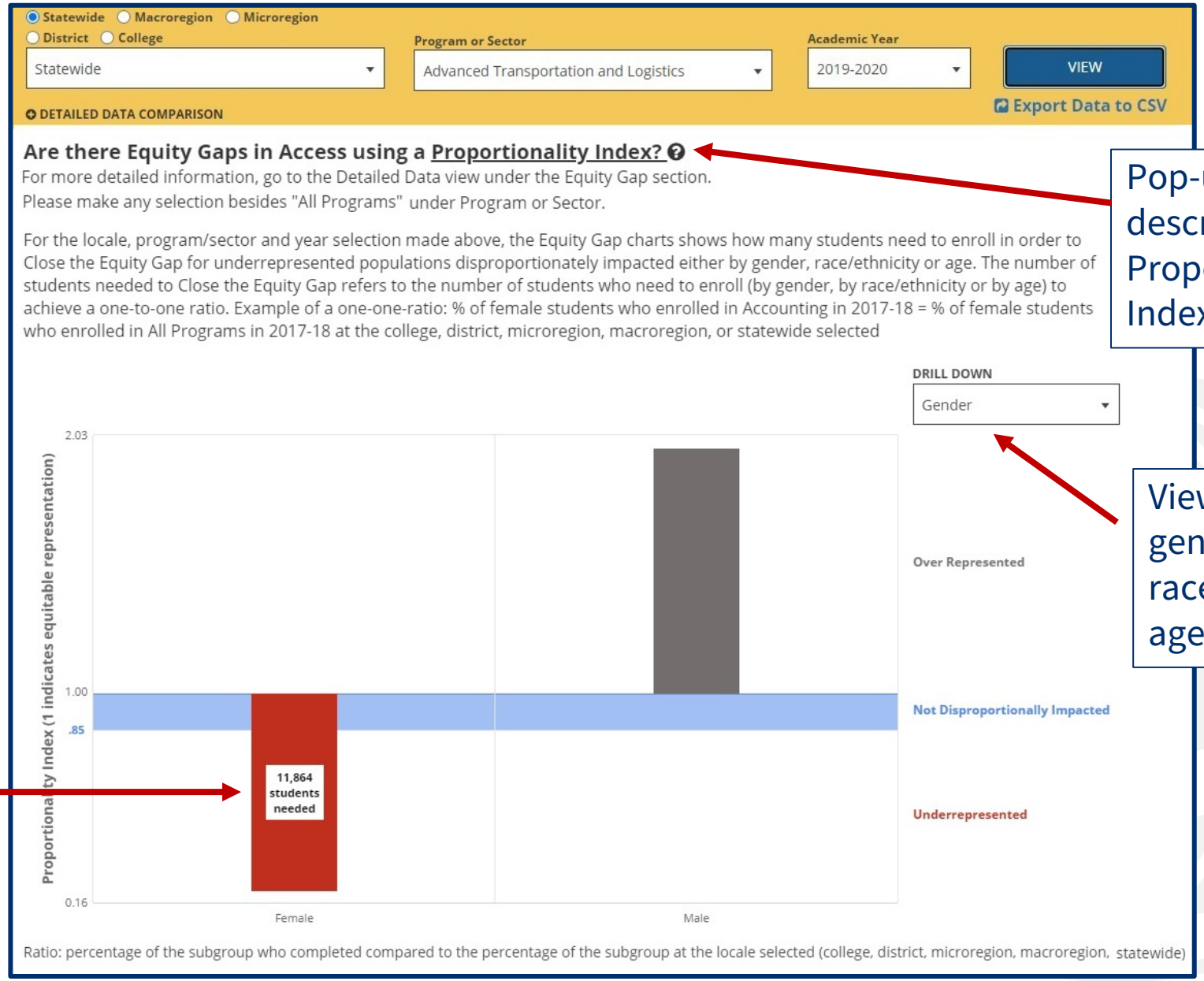
For more information about proportionality indices, please see:
https://bit.ly/CCP-EquityGapCharts-Fall21

# Summary View of Equity Gap Chart for Access

The number of students needed to enroll to eliminate the equity gaps is displayed for Underrepresented student populations with substantive DI.

For example, 11,864 more female students need to enroll in the Advanced Transportation and Logistics sector to eliminate the equity gap.




Pop-up text to describe Proportionality Index

View gaps by gender, race/ethnicity or age group

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Feedback and questions are encouraged to improve display. Please email launchboard@cccco.edu

# Proportionality Index for Calculating Equity Gaps

Group A: Underrepresented with Disproportionate Impact

Group B: Underrepresented without Disproportionate Impact

Group C: Overrepresented

**Proportionality Index**

A proportionality index of 1.00 indicates that a subgroup's representation among those achieving an educational outcome is identical to that subgroup's representation in the student population. If the ratio or index for a subgroup is less than 0.85 in terms of attainment of a metric outcome, then the Chancellor's Office considers that subgroup to be disproportionately impacted or underrepresented for that metric outcome.

**Example Calculation:**

- Group A accounts for 30% of the college population and 20% of the completions
  - 20% / 30% = .67 therefore underrepresented in completions and disproportionately impacted
- Group B accounts for 30% of the college population and 30% of the completions
  - 30% / 30% = 1 therefore equally represented in completions and not disproportionately impacted
- Group C accounts for 40% of the college population and 50% of the completions
  - 50% / 40% = 1.2 therefore overrepresented in completions and not disproportionately impacted

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# Equity Gap Charts

**How is a proportionality index calculated?**

A ratio comparing the percentage of students in a specific population who enrolled, completed, or transferred to the percentage of those students in the overall population

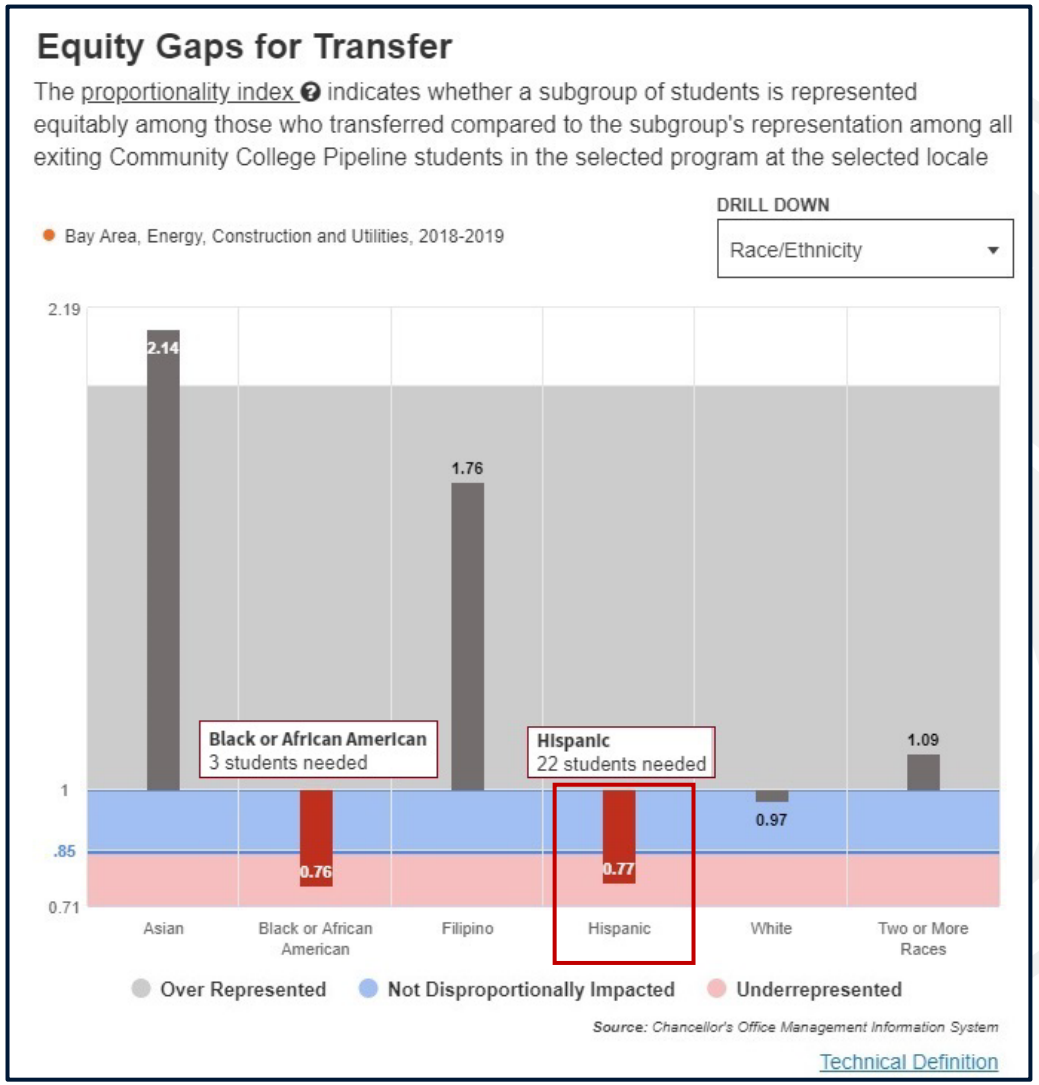
For example, in the Energy, Construction, Utilities **sector** in the Bay Area **region**:

- **27% of the students who transferred** to a four-year institution in 18-19 identify as Hispanic
- **35% of enrolled students** identify as Hispanic

**0.27/0.35 = 0.77**

Underrepresented with Disproportionate Impact

**While PI ratios may be similar, the size of the problem may not be**

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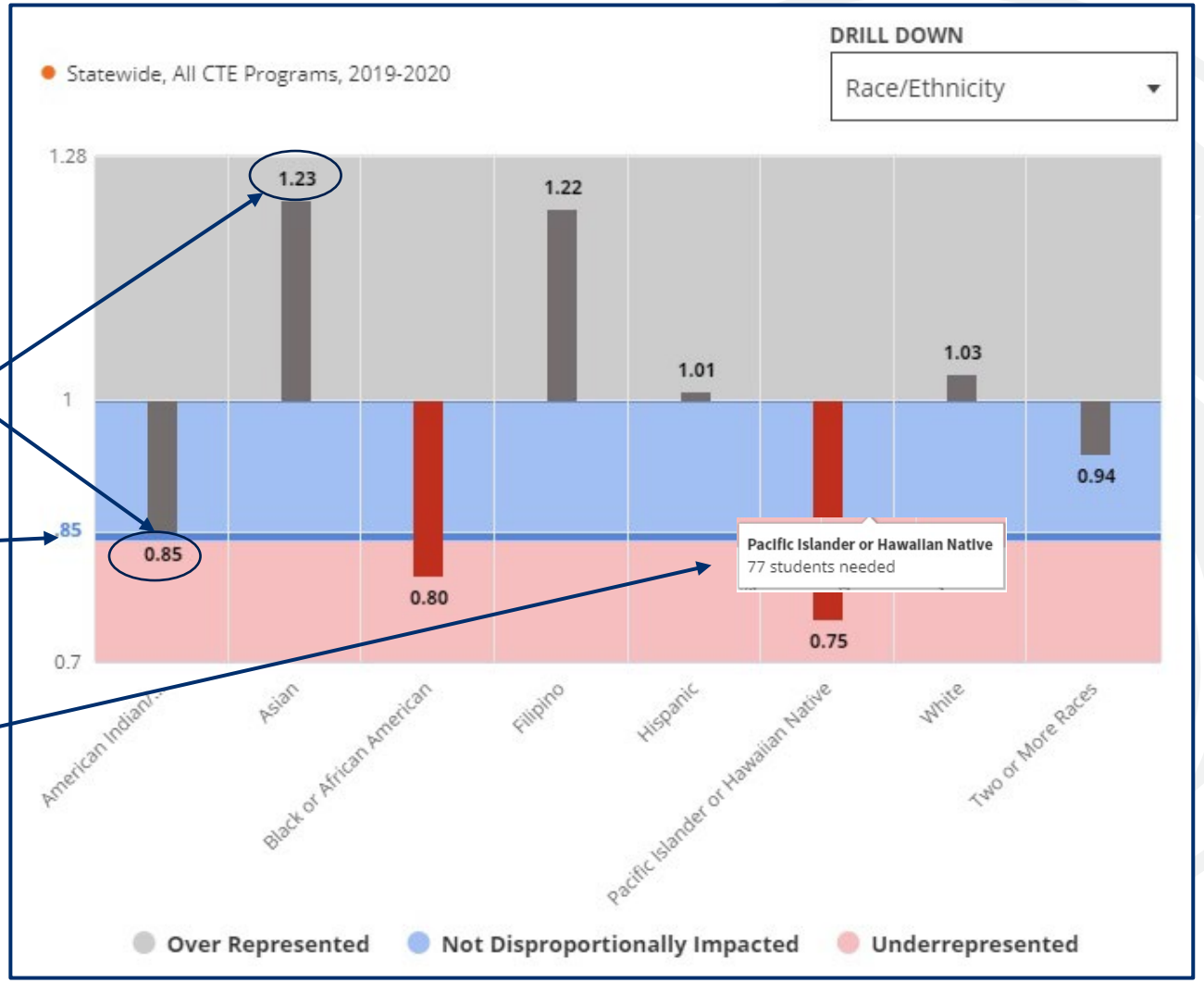
# Detailed Data View of Equity Gap Charts for Completion & Transfer

PI Ratios displayed for all student populations

The blue line visualizes when an equity gap exceeds a ratio of .85, indicating that a subgroup is considered underrepresented

Hover over the bar to see a pop-up that provides the number of students who needs to complete in order to eliminate the equity gap

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# Table on the Detailed Data View of Equity Gap Chart for Completion & Transfer

## Example: Completion | All CTE Programs | Race/Ethnicity

1. % of Pacific Islander students who completed in all CTE programs
2. % of Pacific Islander students in all CTE programs
3. % Pacific Islander students who completed in all CTE / % of Pacific Islander students in all CTE = PI Ratio
4. # of Pacific Islander completers in all CTE programs
5. Total # of Pacific Islander students who need to complete in all CTE for a 1:1 ratio
6. (Total # of Pacific Islander students who need to complete in all CTE for a 1:1 ratio) – (# of Pacific Islander students who completed in all CTE) = **# of Pacific Islander students who need to complete in all CTE for a 1:1 ratio**
7. Over (PI ratio > 1), Under without DI Impact (PI ratio 0.85 < 1), Under with DI impact (PI ratio < 0.85)

| Ethnicity | % Completed | % of Total | % Completed / % of Total | PI Ratio | Students | | | Under with Disproportionate Impact (0.85 or less), Under without Disproportionate Impact, Over Represented |
|---|---|---|---|---|---|---|---|---|
| | | | | | # of Completers | Total # Needed for 1:1 Ratio | # Needed to Complete for 1:1 Ratio | |
| American Indian/Alaska Native | 0.30% | 0.40% | 0.30% / 0.40% = | 0.85 | 248 | 292 | 44 | Under without DI Impact |
| Asian | 11.90% | 9.70% | 11.90% / 9.70% = | 1.23 | 8,823 | 7,150 | N/A | Over |
| Black or African American | 4.80% | 6.00% | 4.80% / 6.00% = | 0.8 | 3,548 | 4,418 | 870 | Under with DI Impact |
| Filipino | 3.50% | 2.90% | 3.50% / 2.90% = | 1.22 | 2,575 | 2,119 | N/A | Over |
| Hispanic | 45.90% | 45.40% | 45.90% / 45.40% = | 1.01 | 33,926 | 33,563 | N/A | Over |
| Pacific Islander or Hawaiian Native | 0.30% | 0.40% | 0.30% / 0.40% = | 0.75 | 231 | 308 | 77 | Under with DI Impact |
| White | 26.10% | 25.20% | 26.10% / 25.20% = | 1.03 | 19,273 | 18,670 | N/A | Over |
| Two or More Races | 3.50% | 3.80% | 3.50% / 3.80% = | 0.94 | 2,624 | 2,787 | 163 | Under without DI Impact |

California Community Colleges

# Metrics for Labor Market Data and Online Job Postings

## Employment

- Labor Market Data
  - Total Historical Regional Employment
  - Total Projected Regional Employment
  - Projected Regional Job Openings
- Online Job Postings
  - Hard Skills Requested in Online Job Postings (90 days)
  - Hard Skills Requested in Online Job Postings (365 days)
  - Common Skills Requested in Online Job Postings (90 days)
  - Common Skills Requested in Online Job Postings (365 days)
  - Qualifications Requested in Online Job Postings (90 days)
  - Qualifications Requested in Online Job Postings (365 days)
  - Employers in Online Job Postings (90 days)
  - Employers in Online Job Postings (365 days)

## Earnings

- Labor Market Data
  - Regional Entry-Level and Median Annual Salaries

For more information about Labor Market Data and Online Job Postings: https://bit.ly/CCP-LMI-Fall21

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# 5 Things to Know About Labor Market Information (LMI)

1. The coding system for LMI or Labor Market Demand and Supply is based on **national data** by US Bureau of Labor Statistics and the Department of Education:
   - SOC Codes (Standard Occupational Codes)
   - CIP Codes (Classification of Instructional Programs)
   - Typical Entry-Level of Education for a SOC code

2. Since TOP codes are unique to CA Community Colleges, a **TOP-SOC crosswalk** is needed to map SOC codes to TOP codes which is based on the national CIP-SOC crosswalk.

3. **One SOC code nearly always represents many different jobs** and job titles and can map to more than one program or CIP code (See **o*net** for more information on SOC codes)

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# 5 Things to Know About LMI (Continued)

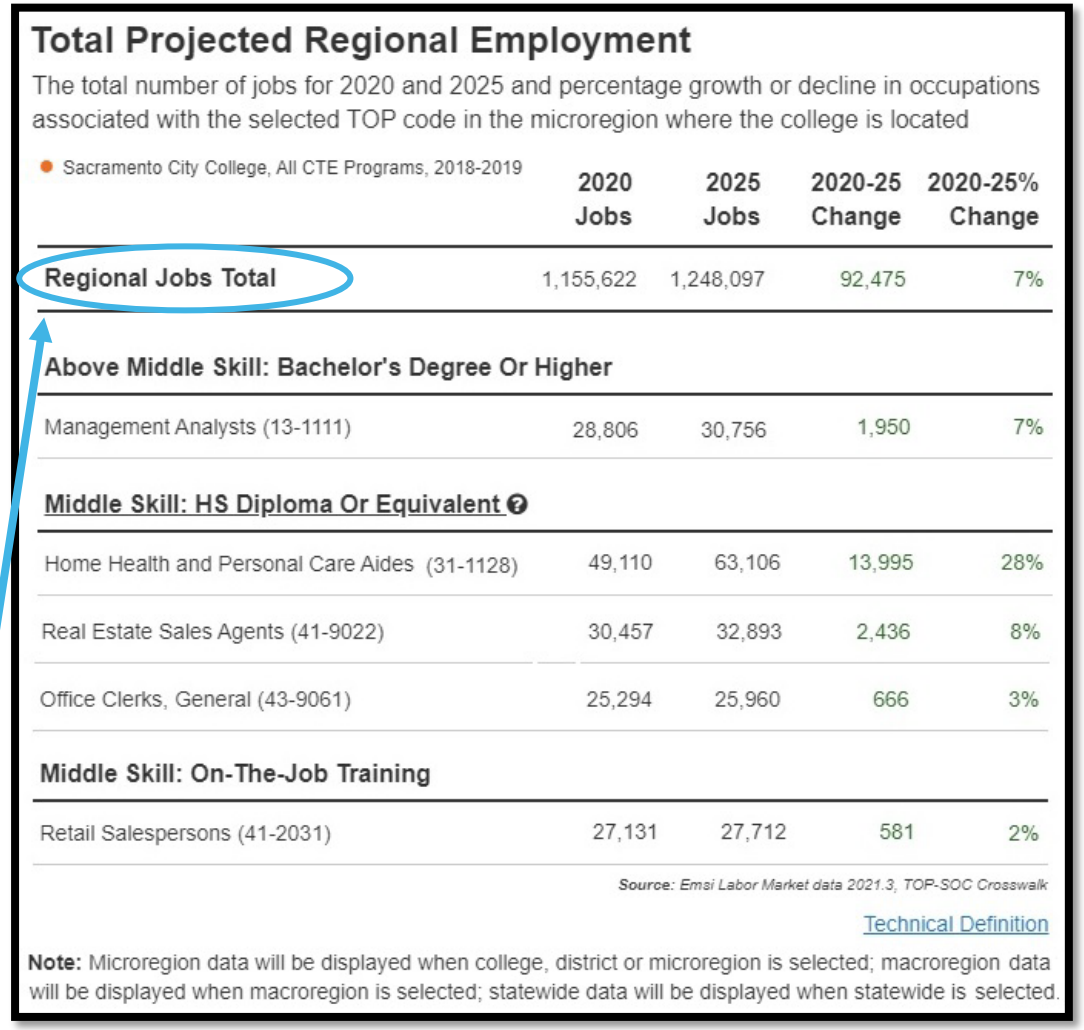
4. Labor Market Data is very **different** from Online Job Postings
    - Labor Market Data is useful for getting an understanding of trends in employment and earnings over time
    - Information from online job postings helps to augment the traditional labor market data

5. Since **Typical Entry-Level Education** is based on national data, **alternative paths to employment may vary at the regional level**
    - Because of this, a SOC code's 'Typical Entry-Level Education ' might not align to local or regional skills requirements for a given job or industry

# Labor Market Data

Available in the detailed data view under Labor Market Data under Employment:

- Total Historical Regional Employment
- Total Projected Regional Employment
- Projected Regional Job Openings



**Total Projected Regional Employment**

The total number of jobs for 2020 and 2025 and percentage growth or decline in occupations associated with the selected TOP code in the microregion where the college is located

Sacramento City College, All CTE Programs, 2018-2019

| | 2020 Jobs | 2025 Jobs | 2020-25 Change | 2020-25% Change |
|---|---|---|---|---|
| **Regional Jobs Total** | 1,155,622 | 1,248,097 | 92,475 | 7% |
| **Above Middle Skill: Bachelor's Degree Or Higher** | | | | |
| Management Analysts (13-1111) | 28,806 | 30,756 | 1,950 | 7% |
| **Middle Skill: HS Diploma Or Equivalent** | | | | |
| Home Health and Personal Care Aides (31-1128) | 49,110 | 63,106 | 13,995 | 28% |
| Real Estate Sales Agents (41-9022) | 30,457 | 32,893 | 2,436 | 8% |
| Office Clerks, General (43-9061) | 25,294 | 25,960 | 666 | 3% |
| **Middle Skill: On-The-Job Training** | | | | |
| Retail Salespersons (41-2031) | 27,131 | 27,712 | 581 | 2% |

*Source: Emsi Labor Market data 2021.3, TOP-SOC Crosswalk*

Technical Definition

**Note:** Microregion data will be displayed when college, district or microregion is selected; macroregion data will be displayed when macroregion is selected; statewide data will be displayed when statewide is selected.

Total 2020 and 2025 Jobs in Microregion where college is located displayed along with **top 5 SOC codes** (in term of 2020 Jobs) mapped to program or sector selection grouped by Skill Level: Typical Entry-Level Education

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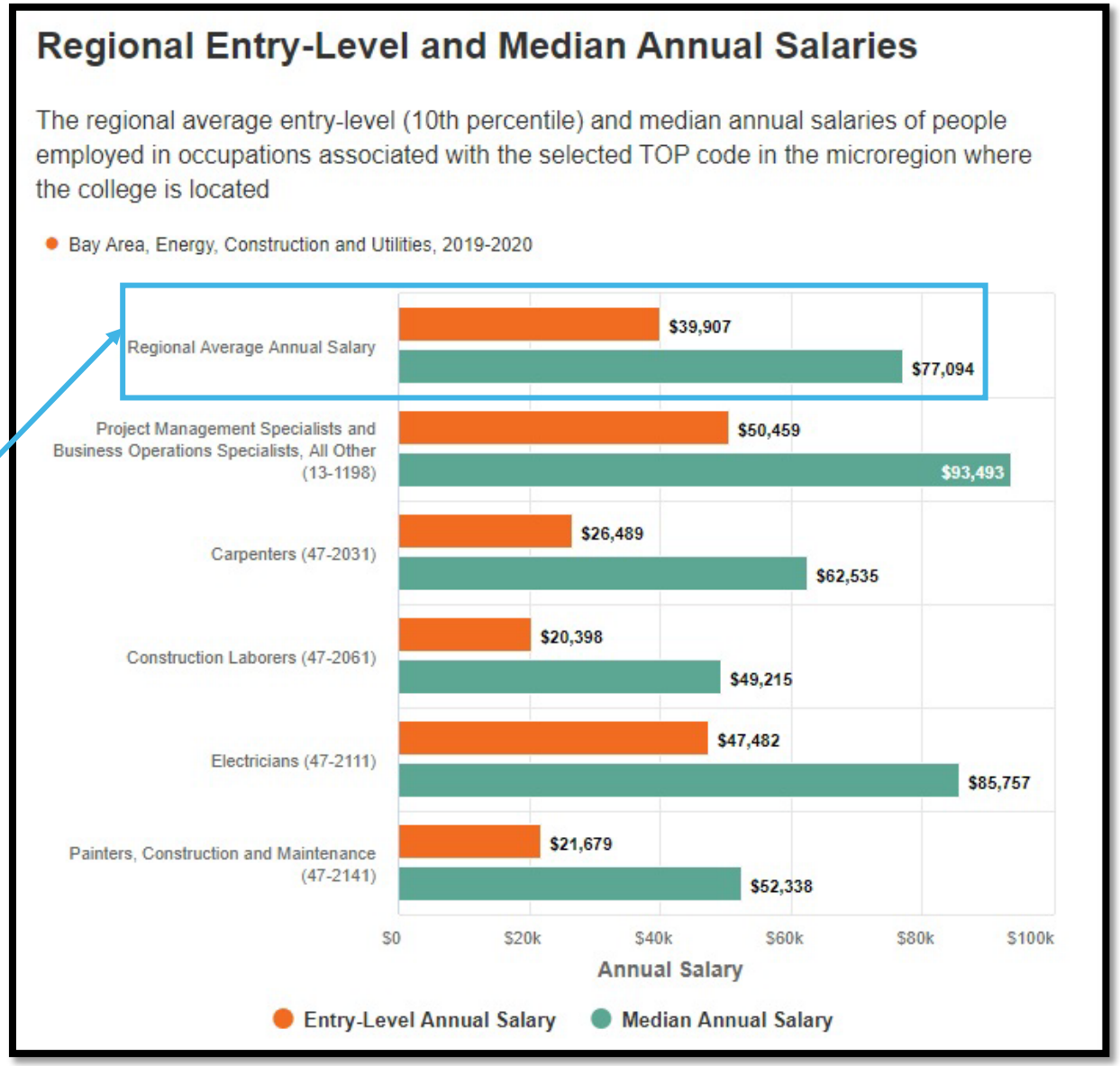
# Labor Market Data

Available in the detailed data view under Labor Market Data under Earnings:

- Regional Entry-Level and Median Annual Salaries

Compares the Regional Average Annual Entry-Level and Median Salaries in the Micro or Macro Region or Statewide to the top 5 occupations (in terms of Annual Openings 2020-25) mapped to the program or sector selected

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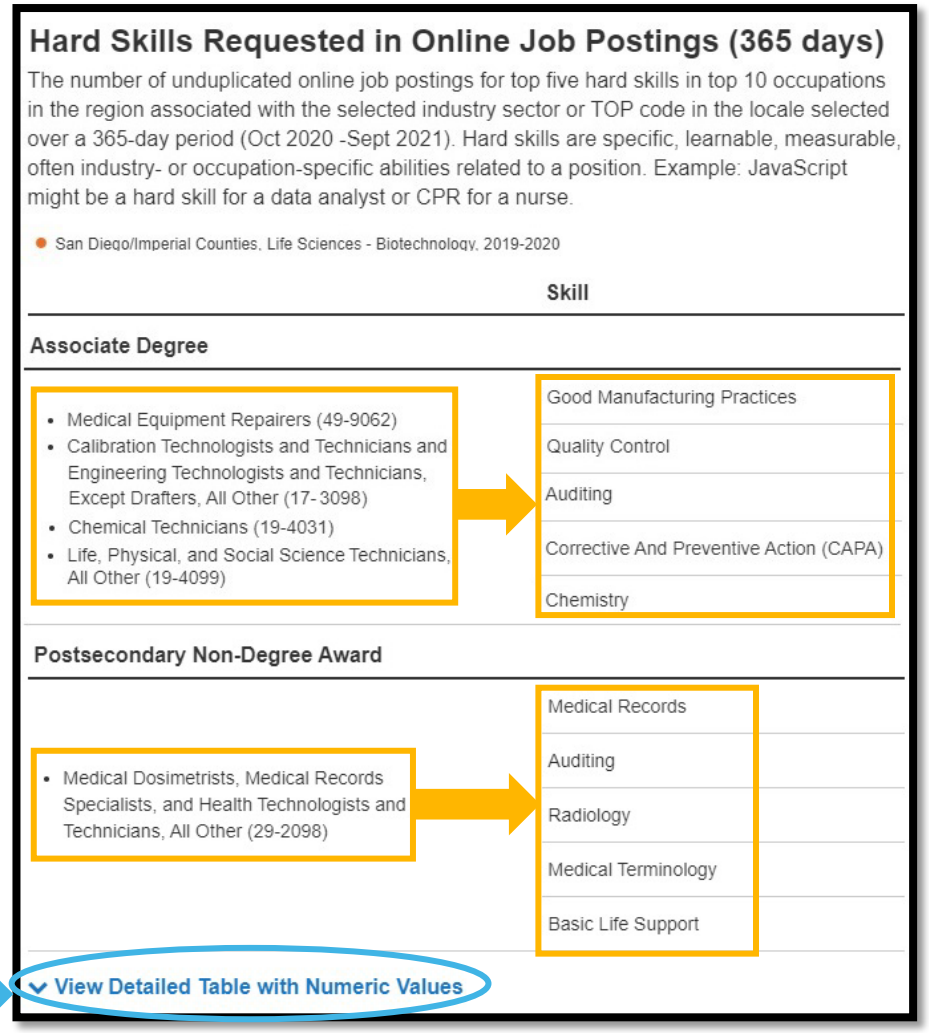
# Online Job Postings

Available the detailed data view under Online Job Postings:

- Hard Skills (90- and 365-day periods)
- Common Skills (90- and 365-day periods)
- Qualifications (90- and 365-day periods)
- Employers (90- and 365-day periods)
- Expand to see table with No. of postings for prior 90- or 365-day period compared to latest 90-day or 365-day period




For each group of SOC codes (mapped to the program or sector selected) organized by Typical Entry-Level Education**, top 5 skills** (in terms of latest 90- or 365-day) are displayed over 90-day or 365-day periods

California Community Colleges

# Labor Market Historical Employment

Statewide selection will give Statewide jobs

Top five SOC codes mapped to program or sector selection displayed by Skill Level: Typical Entry-Level of Education per BLS

## Total Historical Regional Employment

The total number of jobs for 2015 and 2020 and percentage growth or decline in occupation associated with the selected TOP code in the microregion where the college is located

Statewide, Energy, Construction and Utilities, 2018-2019

| | 2015 Jobs | 2020 Jobs | 2015-20 Change | 2015-20% Change |
|---|---|---|---|---|
| **Statewide Jobs Total** | 1,446,527 | 1,636,015 | 189,488 | 12% |
| **Higher Skill: Bachelor's Degree Or Higher** | | | | |
| Project Management Specialists and Business Operations Specialists, All Other (13-1198) | 152,419 | 249,276 | 96,858 | 64% |
| **Middle Skill: Apprenticeship** | | | | |
| Carpenters (47-2031) | 160,519 | 172,965 | 12,446 | 8% |
| Electricians (47-2111) | 73,604 | 84,821 | 11,217 | 15% |
| **Below Middle Skill: On-The-Job Training** | | | | |
| Construction Laborers (47-2061) | 166,646 | 176,227 | 9,581 | 6% |
| Painters, Construction and Maintenance (47-2141) | 71,491 | 74,322 | 2,831 | 4% |

**Total Historical Employment:**

- 2015 Jobs
- 2020 Jobs
- 2015-20 Change
- 2015-20 % Change

Pop-up text for info on skills level

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# Labor Market Projected Employment

Macroregion selection will give jobs in the Macroregion

Top five SOC codes mapped to program or sector selection displayed by Skill Level: Typical Entry-Level of Education per BLS

## Total Projected Regional Employment

The total number of jobs for 2020 and 2025 and percentage growth or decline in occupations associated with the selected TOP code in the microregion where the college is located

● North/Far North, Energy, Construction and Utilities, 2019-2020

| | 2020 Jobs | 2025 Jobs | 2020-25 Change | 2020-25% Change |
|---|---|---|---|---|
| **Regional Jobs Total** | 158,210 | 171,518 | 13,308 | 8% |
| **Above Middle Skill: Bachelor's Degree Or Higher** | | | | |
| Project Management Specialists and Business Operations Specialists, All Other (13-1198) | 16,865 | 18,170 | 1,305 | 8% |
| **Middle Skill: Apprenticeship** | | | | |
| Carpenters (47-2031) | 21,396 | 22,687 | 1,291 | 6% |
| Electricians (47-2111) | 8,044 | 9,804 | 1,761 | 22% |
| **Below Middle Skill: On-The-Job Training** | | | | |
| Construction Laborers (47-2061) | 18,709 | 20,554 | 1,845 | 10% |
| Painters, Construction and Maintenance (47- 2141) | 7,621 | 8,131 | 510 | 7% |

**Total Projected Employment:**

- 2020 Jobs
- 2025 Jobs
- 2020-25 Change
- 2020-25 % Change

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# Labor Market Projected Openings

College, District or Microregion selection will give jobs in the Microregion

Top five SOC codes mapped to program or sector selection displayed by Skill Level: Typical Entry-Level of Education per BLS

## Projected Regional Job Openings

The total number of annual replacement jobs, average annual new jobs and average annual job openings for 2020-2025 time period in occupations associated with the selected TOP code in the microregion where the college is located

Chabot-Las Positas District, Energy, Construction and Utilities, 2019-2020

| | Annual Projections for 2020-2025 | | |
|---|---|---|---|
| | Annual Replacement Jobs | Annual New Jobs | Annual Openings |
| **Regional Totals** | 11,082 | 5,194 | 12,200 |
| **Above Middle Skill: Bachelor's Degree Or Higher** | | | |
| Project Management Specialists and Business Operations Specialists, All Other (13-1198) | 1,633 | 914 | 1,813 |
| **Middle Skill: Apprenticeship** | | | |
| Carpenters (47-2031) | 1,131 | 54 | 1,179 |
| Electricians (47-2111) | 769 | 957 | 962 |
| **Below Middle Skill: On-The-Job Training** | | | |
| Construction Laborers (47-2061) | 1,246 | 423 | 1,340 |
| Painters, Construction and Maintenance (47-2141) | 504 | 273 | 570 |

**Total Projected Openings:**
- Annual Replacement Jobs
- Annual New Jobs
- Annual Openings

? Including pop-up text to explain each with links to Emsi resources

California Community Colleges

# Hard and Common Skills Requested Over 90-day and 365-day Periods

Top 10 SOC codes mapped to program or sector selection for microregion, macroregion or statewide selection displayed by Typical Entry-Level of Education per BLS

## Hard Skills Requested in Online Job Postings (365 days)

The number of unduplicated online job postings for top five hard skills in top 10 occupations in the region associated with the selected industry sector or TOP code in the microregion and macroregion where the college is located over a 365-day period (Oct 2020 -Sept 2021). Hard skills are specific, learnable, measurable, often industry- or occupation-specific abilities related to a position.

Example: JavaScript might be a hard skill for a data analyst or CPR for a nurse.

Greater Sacramento. Advanced Manufacturing. 2019-2020

| | Skill |
|---|---|
| **Bachelor's Degree Or Higher** | |
| • Electrical Engineers (17-2071)<br>• Industrial Engineers (17-2112)<br>• Mechanical Engineers (17-2141)<br>• Occupational Health and Safety Specialists (19-5011)<br>• Computer Hardware Engineers (17-2061)<br>• Surveyors (17-1022) | Electrical Engineering<br>Mechanical Engineering<br>Automation<br>AutoCAD<br>Manufacturing Processes |
| **HS Diploma Or Equivalent** | |
| • Maintenance and Repair Workers, General (49-9071)<br>• First-Line Supervisors of Production and Operating Workers (51-1011)<br>• Welders, Cutters, Solderers, and Brazers (51-4121)<br>• Machinists (51-4041) | Plumbing<br>HVAC<br>Painting<br>Carpentry<br>Mechanics |

Top 5 hard (or common) skills for each grouping of top 10 SOC codes by Typical Entry-Level of Education

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# Table for Hard and Common Skills Requested Over 90-day and 365-day Periods

Expand to View Detailed Table with No. of Postings for Top Hard or Common Skills Requested in Online Job Postings for Top 10 SOC codes Mapped to Program or Sector Selected

^ View Detailed Table with Numeric Values

No. of Online Job Posting for Previous 90-Day or 365-Day Period compared to the Latest 365-Day Period for Hard or Common Skills Requested by Employers

| Skill | | No of Online Postings over 365-Day Period Oct 2019-Sept 2020 | No of Online Postings over 365-Day Period Oct 2020-Sept 2021 | % Change |
|---|---|---|---|---|
| **Bachelor's Degree Or Higher** | | | | |
| • Electrical Engineers (17-2071)<br>• Industrial Engineers (17-2112)<br>• Mechanical Engineers (17-2141)<br>• Occupational Health and Safety Specialists (19-5011)<br>• Computer Hardware Engineers (17-2061)<br>• Surveyors (17-1022) | Electrical Engineering | 534 | 695 | 30% |
| | Mechanical Engineering | 396 | 415 | 5% |
| | Automation | 192 | 260 | 35% |
| | AutoCAD | 179 | 246 | 37% |
| | Manufacturing Processes | 176 | 226 | 28% |
| **HS Diploma Or Equivalent** | | | | |
| • Maintenance and Repair Workers, General (49-9071)<br>• First-Line Supervisors of Production and Operating Workers (51-1011)<br>• Welders, Cutters, Solderers, and Brazers (51-4121)<br>• Machinists (51-4041) | Plumbing | 1,261 | 1,782 | 41% |
| | HVAC | 979 | 1,356 | 39% |
| | Painting | 787 | 1,129 | 43% |
| | Carpentry | 758 | 985 | 30% |
| | Mechanics | 566 | 753 | 33% |

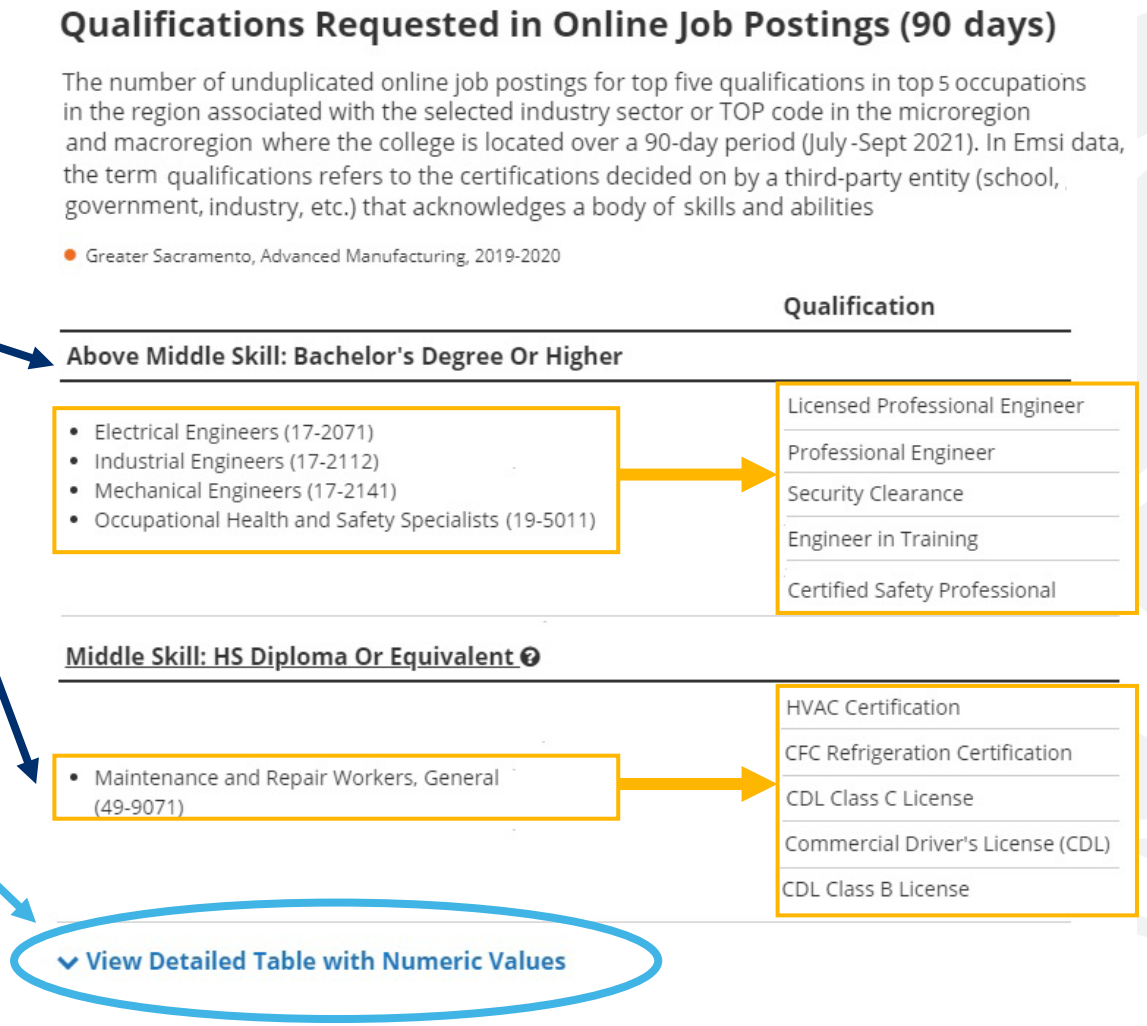
***Source:*** *Emsi Labor Market data 2021.3, TOP-SOC Crosswalk*

California Community Colleges

# Qualifications Requested Over 90-day and 365-day Periods

Top 5 SOC codes mapped to program or sector selection for microregion, macroregion or statewide selection displayed by Typical Entry-Level of Education per BLS

Expand to View Detailed Table with No. of Postings for Top Qualifications Requested comparing latest 90-day or 365-day period to previous periods




Top 5 qualifications for each grouping of top 5 SOC codes by Skills Level: Typical Entry-Level of Education

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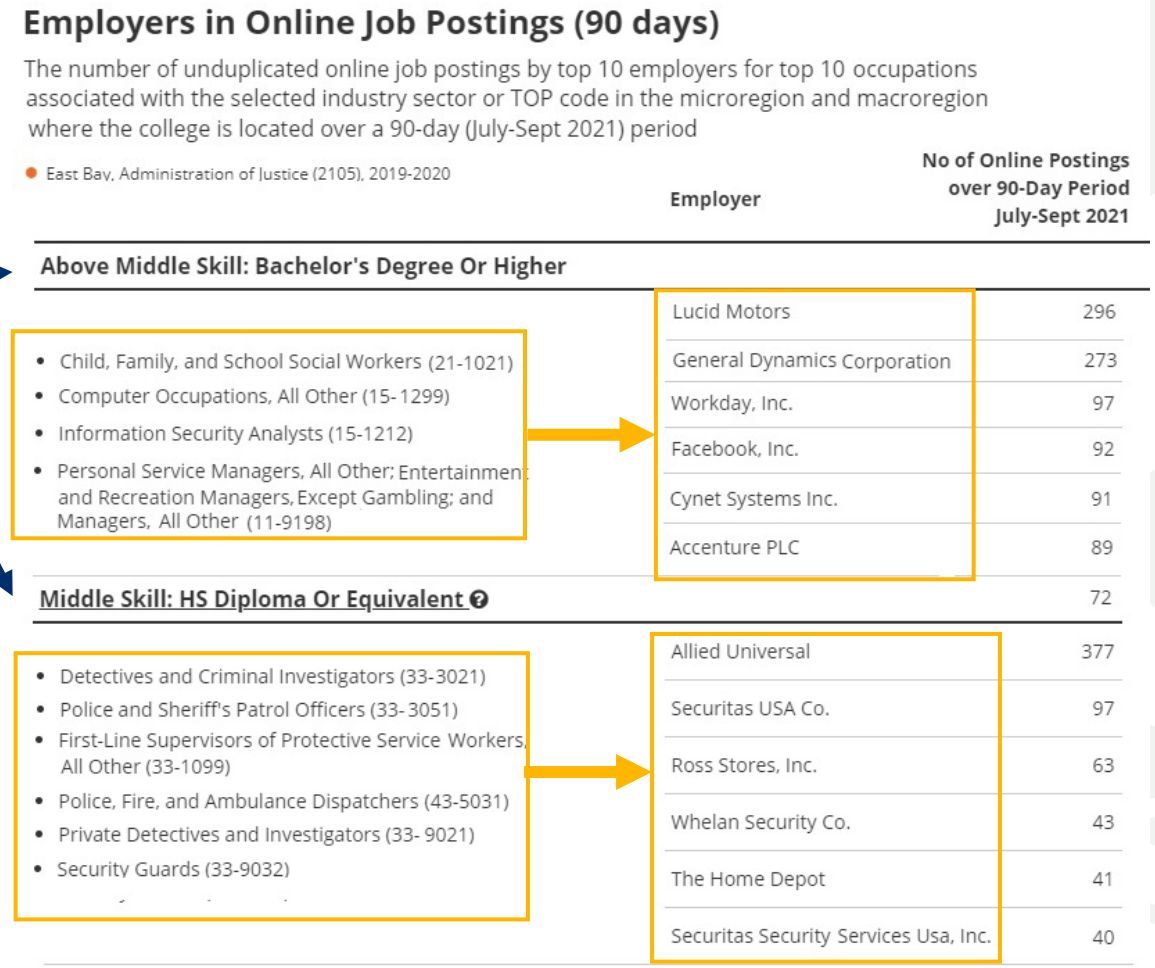
# Top Employers Posting Jobs Over 90-day and 365-day Periods

Top 10 SOC codes mapped to program or sector selection for microregion, macroregion or statewide selection displayed by Typical Entry-Level of Education per BLS



### Employers in Online Job Postings (90 days)

The number of unduplicated online job postings by top 10 employers for top 10 occupations associated with the selected industry sector or TOP code in the microregion and macroregion where the college is located over a 90-day (July-Sept 2021) period

East Bay, Administration of Justice (2105), 2019-2020

**Above Middle Skill: Bachelor's Degree Or Higher**

- Child, Family, and School Social Workers (21-1021)
- Computer Occupations, All Other (15-1299)
- Information Security Analysts (15-1212)
- Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other (11-9198)

| Employer | No of Online Postings over 90-Day Period July-Sept 2021 |
|---|---|
| Lucid Motors | 296 |
| General Dynamics Corporation | 273 |
| Workday, Inc. | 97 |
| Facebook, Inc. | 92 |
| Cynet Systems Inc. | 91 |
| Accenture PLC | 89 |

**Middle Skill: HS Diploma Or Equivalent** 72

- Detectives and Criminal Investigators (33-3021)
- Police and Sheriff's Patrol Officers (33-3051)
- First-Line Supervisors of Protective Service Workers, All Other (33-1099)
- Police, Fire, and Ambulance Dispatchers (43-5031)
- Private Detectives and Investigators (33-9021)
- Security Guards (33-9032)

| | |
|---|---|
| Allied Universal | 377 |
| Securitas USA Co. | 97 |
| Ross Stores, Inc. | 63 |
| Whelan Security Co. | 43 |
| The Home Depot | 41 |
| Securitas Security Services Usa, Inc. | 40 |

Top 10 Employers posting jobs online mapped to the top 10 SOC codes displayed by Level: Typical Entry-Level of Education

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