CAAL-Skills Workforce Metrics Dashboard Report 2022

Chapter 3: Statewide Benchmarks

The California Workforce Development Board (CWDB) assists the Governor in setting and guiding policy in the area of workforce development. The CWDB is responsible for assisting the Governor in performing the duties and responsibilities required by the federal Workforce Innovation and Opportunity Act (WIOA) of 2014. California's Unified Strategic Workforce Development Plan directs its work in providing guidance to the statewide workforce development system.

The production of this report would not have been possible without the ongoing support and participation of the CAAL-Skills partner agencies and the diligent work of the Employment Development Department (EDD) Labor Market Information Division.

This document can be found on the CWDB's website at cwdb.ca.gov

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3 Statewide Benchmarks

In the report, two kinds of state-level statistics are used as "benchmarks" or bases of comparison, with program enrollments and outcomes. Estimates of the statewide labor force are used to benchmark representation in workforce programs by a set of demographic characteristics (race, ethnicity, etc.) and industry sector employment statistics generated from the universe of employment captured by the Quarterly Census of Employment and Wages are used to compare employment and earnings levels in various industries among workforce program participants with industry employment and earnings in the state as a whole.

These statistics are described in this chapter.

3.1 Labor Force Estimates from the Current Population Survey Used to Benchmark Demographic Representation

In the report, estimated characteristics of the statewide labor force provided by data from the Current Population Survey are used as a benchmark to compare the representation of participants in workforce programs according to a set of demographic characteristics including race, ethnicity, gender, age, and veteran status. The Current Population Survey is jointly sponsored by the Census Bureau and Bureau of Labor Statistics (BLS) and is the primary source of labor force statistics for the population of the United States. The CPS is administered using a probability selected sample of about 60,000 occupied households nationwide. In California, the sample size during the years in question was approximately 5,100 households.

CPS data is reported for state fiscal years 2014-2015 and 2015-2016 (fiscal year = July 1, 201X-June 30, 201X).

Definition of "Labor Force" Population:

The Bureau of Labor Statistics defines "labor force" as the sum of the sum of employed and unemployed persons. The labor force participation rate is the labor force as a percent of the civilian non-institutional population—or, put a different way,[1] the percentage of the civilian non-institutional population 16 years and older that was either working or actively looking for work in the period leading up to the survey.[2]

Because the CPS data relies on survey methods that ask about job-seeking, the labor force population is defined on the basis of positive information that individuals are either employed or seeking work. In the CPS survey, this is established through questions which ask both about employment and whether an individual, if unemployed, is looking for work.[3]

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[1] U.S. Bureau of Labor Statistics. "Labor force statistics from the Current Population Survey." https://www.bls.gov/cps/lfcharacteristics.htm#nlf

[2] U.S. Bureau of Labor Statistics. "Labor force participation: what has happened since the peak." https://www.bls.gov/opub/mlr/2016/article/labor-force-participation-what-has-happened-since-the-peak.htm

[3] The questionnaire used by the CPS for labor force participation-related items may be viewed here.

In general, measures of employment rate used by the BLS utilize labor force as a denominator to avoid capturing persons who are not actively seeking work. This differs from the method used to calculate employment rates of former workforce program participants in this report, which are derived by linking participant records with UI wage records, and dividing the number of former participants for whom linked wage records were found by the total number of participants who exited the program. There is no way to account for individuals who may for any reason not be accurately seeking work at that time.

Such methodological differences represent a key reason that the report chapters do not attempt to directly compare employment rates of workforce program participants with any benchmark data from national surveys. A second reason is the possibility that participants in workforce programs exhibit systematic but unmeasured differences from the larger populations of which they are a part. Such differences (in level of need, pre-program education or training, etc.) could render comparison with statewide employment rates inappropriate or misleading.

Tables and figures below display the estimated distribution of the labor force population according to demographic characteristics, alongside the estimated distribution of the working-age population, also derived from CPS data. The distribution of the working age population, which represents the total of all noninstitutionalized individuals age 16 or higher in the state, is shown both to provide a sense of the overall size of a given population in the state and to provide context for the size of labor force shares.

3.2 Statewide Industry Employment Data from the Quarterly Census of Employment and Wages

The second set of benchmark data are statistics showing statewide employment and mean quarterly earnings by industry sector. These data come from the Quarterly Census of Employment and Wages (QCEW), a near-census of employment and wage information for workers covered by California Unemployment Insurance (UI) laws and Federal workers covered by the Unemployment Compensation for Federal Employees (UCFE) program.

The QCEW, which derives data on employment and wages from California employers' quarterly tax records, is a cooperative program involving the Bureau of Labor Statistics (BLS) of the U.S. Department of Labor and the State of California's Employment Development Department's (EDD) Labor Market Information Division (LMID). More on the QCEW methodology including definitions and categories of excluded establishments and workers can be found at the Employment Development Department's Labor Market Information Division web page. (See also section 3.5.1 of this chapter, which provides additional detail and caveats).

Industry employment distributions and mean earnings from the QCEW provide a means to compare industry employment outcomes – where are workforce participants becoming employed? – with patterns of industry employment in the state as a whole. They also provide the ability to compare earnings of former workforce participants with average pay by sector.

3.3 Factors Affecting Metrics

- The Current Population Survey asks respondents questions about race and ethnicity separately. The category of "Hispanic origin" (ethnicity) comprises Hispanic and non-Hispanic only.
- Persons of Hispanic origin are identified through a question that asked for self-identification of the persons' origin or descent.[4]
- Statewide workforce programs utilize multiple reporting options for ethnicity and race, which vary in their treatment of Hispanic origin; in the number of categories an individual may choose to identify with; and in other aspects. (These options, their data implications, and how they have been accommodated to the federal reporting scheme described above and utilized in the report, are thoroughly discussed in the Appendix). A combined Ethnicity/Race table (3.4.3) is provided with this variation in mind, in order to provide a more complete picture of the racial and ethnic composition of the California labor force and working age population.
- Weights applied to sample data by the CPS have a small but noticeable effect upon the sizes of estimated population totals. This is most clearly visible in the differences between estimated population totals (Working Age and Labor Force populations) associated with estimates of the state's veteran versus non-veteran population and the corresponding totals for other variables (age, race, ethnicity, sex/gender). This does not affect the accuracy or utility of estimated population ratios provided.

3.4 California Population Demographics

3.4.1 Ethnicity

3.4.1.1 Table Set – Ethnicity

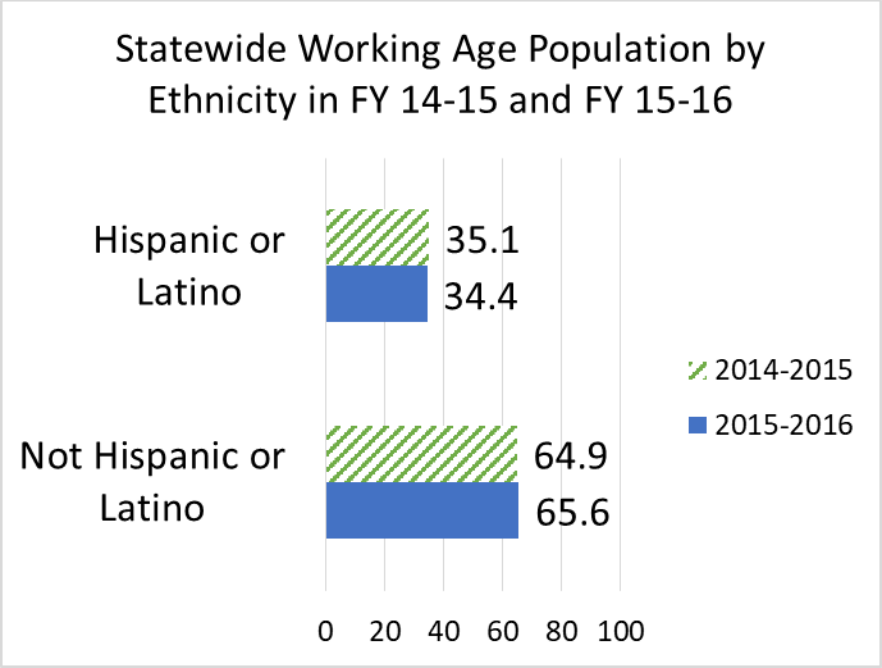
FY 2014-2015				
Ethnicity	Working Age Population	% Working Age Population	Labor Force Population	% Labor Force Population
Hispanic / Latino	10,611,000	35.1%	6,938,000	36.6%
Not Hispanic / Latino	19,630,000	64.9%	12,009,000	63.4%
TOTAL	**30,241,000**	**100.0%**	**18,947,000**	**100.0%**

[4] U.S. Bureau of Labor Statistics. Current Population Survey – Subject Definitions. https://www.census.gov/programs-surveys/cps/technical-documentation/subject-definitions.html#ethnicorigin

FY 2015-2016				
Ethnicity	Working Age Population	% Working Age Population	Labor Force Population	% Labor Force Population
Hispanic / Latino	10,564,000	34.4%	6,794,000	35.6%
Not Hispanic / Latino	20,111,000	65.6%	12,264,000	64.4%
TOTAL	**30,675,000**	**100.0%**	**19,059,000**	**100.0%**

***Source**: Employment Development Department*

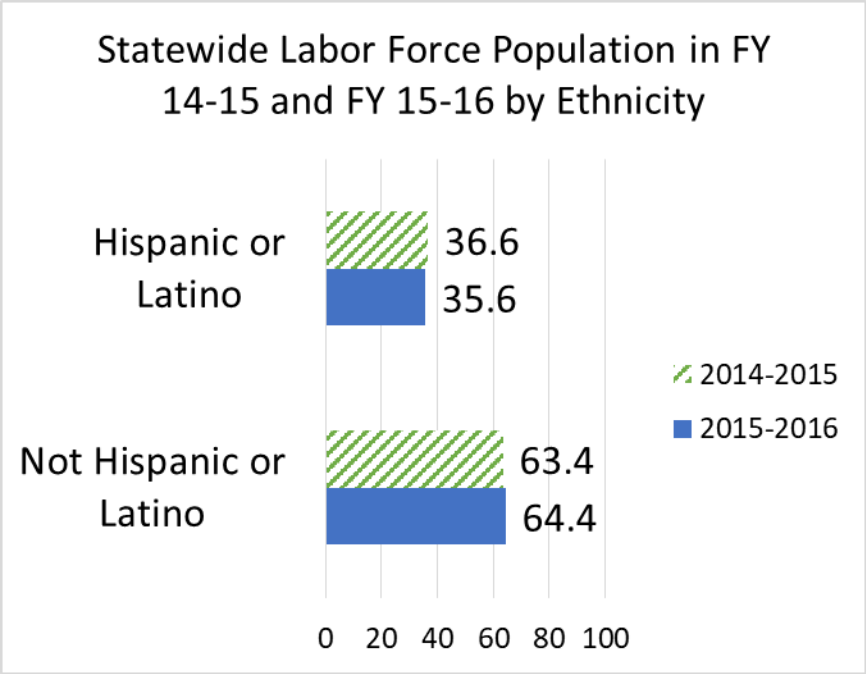
3.4.1.2 Figure – Statewide Working Age Population by Ethnicity



In FY 14-15, 35.1% of the state's population of working age was of Hispanic or Latino origin, with a similar 34.4% of Hispanic or Latino origin in FY 15-16.

Note that figures 3.2.1.2 and 3.3.1.3. display both Hispanic and non-Hispanic working age and labor force population shares, in keeping with CPS methodology. In the Executive Summary to this report, only Hispanic or Latino population shares are displayed, for more appropriate direct comparison with workforce program data and to avoid inaccuracy for those programs which may not provide a "not Hispanic or Latino" reporting option.

3.4.1.3 Figure – Statewide Labor Force Population by Ethnicity



Individuals of Hispanic or Latino descent made up shares of the state's labor force population that were similar to—and somewhat larger than—shares of the working age population in both years. These larger shares (36.6% of total in FY 14-15 and 35.6% of total in FY 15-16) suggest high rates of labor force participation.

3.4.2 Race

3.4.2.1 Table Set – Race

FY 2014-2015				
Race	Working Age Population	% Working Age Population	Labor Force Population	% Labor Force Population
American Indian or Alaskan Native	468,000	1.5%	276,000	1.5%
Asian	4,556,000	15.1%	2,822,000	14.9%
Black or African American	1,914,000	6.3%	1,169,000	6.2%
Native Hawaiian or Other Pacific Islander	252,000	0.8%	168,000	0.9%
White	22,343,000	73.9%	14,043,000	74.1%
More than One Race	708,000	2.3%	469,000	2.5%
TOTAL	**30,241,000**	**100.0%**	**18,947,000**	**100.0%**

FY 2015-2016				
Race	Working Age Population	% Working Age Population	Labor Force Population	% Labor Force Population
American Indian or Alaskan Native	476,000	1.6%	272,000	1.4%
Asian	5,014,000	16.3%	3,077,000	16.1%
Black or African American	1,938,000	6.3%	1,164,000	6.1%
Native Hawaiian or Other Pacific Islander	266,000	0.9%	180,000	0.9%
White	22,249,000	72.5%	13,887,000	72.9%
More than One Race	733,000	2.4%	479,000	2.5%
TOTAL	**30,675,000**	**100.0%**	**19,059,000**	**100.0%**

***Source**: Employment Development Department*

3.4.2.2 Figure – Statewide Working Age Population by Race

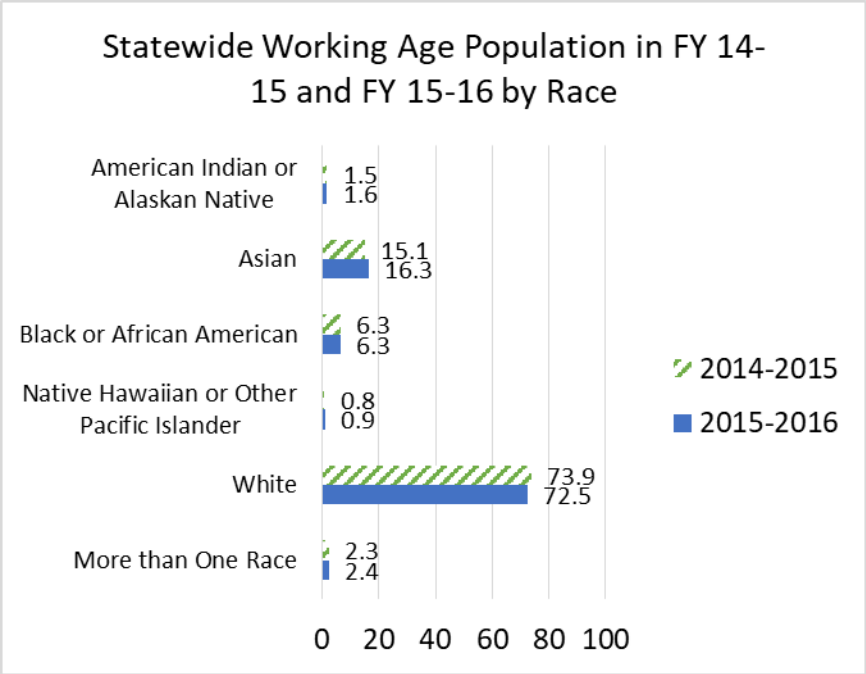


Figure 3.3.2.2 displays a percentage distribution of the state working age population according to categories of racial identification as defined by the Census Bureau.

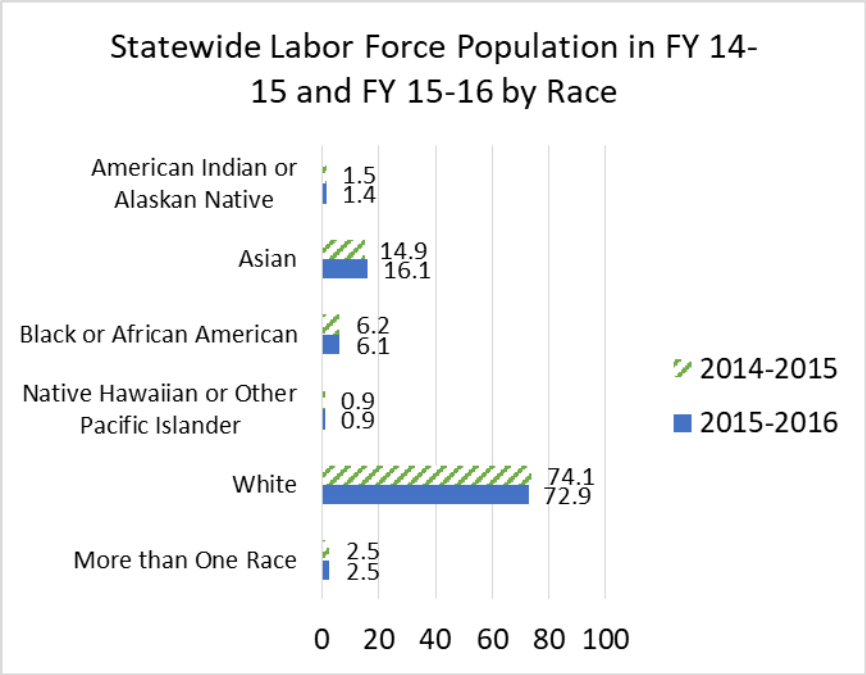
Whites made up almost three-quarters of the working age population of California in both FY 14-15 and FY 15-16. Of important note is that this population contains both non-Hispanic whites and white Californians of Hispanic or Latino origin.

Asians were the next-largest group, representing 15.1% and 16.3% of the working age population in each respective year.

Californians who were Black or African American were the next-largest shares of working age population, 6.3% of the total in both years.

American Indian or Alaskan Native Californians as well as Californians who identified as Native Hawaiian or Other Pacific Islander made up smaller shares of the overall working age population, respectively about one-and-a-half and one percent in both years of data.[5]

3.4.2.3 Figure – Statewide Labor Force Population by Race



For all groups, the distribution of labor force population was similar to that of working-age population. Whites represented the largest share of labor force population in both years, respectively 74.1% of total in FY 14-15 and 72.9% of total in FY 15-16. Once again, these statistics include the significant share of the state's population that identifies racially as white and ethnically as Hispanic or Latino.

Californians of Asian origin were respectively 14.9% and 16.1% of the labor force population in each of the two fiscal years, and individuals who identified as Black or African American made up about 6% of the labor force in each year. For both groups, labor force shares were within two-tenths of a percentage point of the size of the working age population, suggesting proportionate participation in the labor force.

Populations whose numbers were small in the overall California working age population made up approximately proportionate shares of the labor force: American Indian or Alaskan Natives

[5] Effects of the estimation process may lead totals to not sum to 100%.

represented about one-and-a-half percent of the labor force population, and Pacific Islanders, about one percent. About two-and-a-half percent of the labor force identified as multiracial in each year.

CPS categories shown are mutually exclusive, whereas this is not necessarily the case for workforce programs. In the CPS, an individual who identifies as multiracial is reported under the "more than one race" category, but in some workforce program reporting the same individual may be reported once under each specific category (e.g., Black, Asian) with which they identified. This is another factor that leads comparisons with CPS estimates to represent merely a rough benchmarking of program demographics.

3.4.3 Ethnicity/Race

3.4.3.1 Table Set – Ethnicity/Race

FY 2014-2015				
Race	Working Age Population	% of Working Age Population	Labor Force Population	% of Labor Force Population
White only	22,343,000	73.9%	14,043,000	74.1%
Hispanic	*9,575,000*	*31.7%*	*6,234,000*	*32.9%*
Non-Hispanic	*12,768,000*	*42.2%*	*7,809,000*	*41.2%*
Black only	1,914,000	6.3%	1,169,000	6.2%
Hispanic	*226,000*	*0.7%*	*157,000*	*0.8%*
Non-Hispanic	*1,688,000*	*5.6%*	*1,013,000*	*5.3%*
American Indian, Alaskan Native Only	468,000	1.5%	276,000	1.5%
Hispanic	*330,000*	*1.1%*	*207,000*	*1.1%*
Non-Hispanic	*138,000*	*0.5%*	*69,000*	*0.4%*
Asian only	4,556,000	15.1%	2,822,000	14.9%
Hispanic	*174,000*	*0.6%*	*130,000*	*0.7%*
Non-Hispanic	*4,382,000*	*14.5%*	*2,692,000*	*14.2%*
Hawaiian/Pacific Islander Only	252,000	0.8%	168,000	0.9%
Hispanic	*67,000*	*0.2%*	*46,000*	*0.2%*
Non-Hispanic	*185,000*	*0.6%*	*122,000*	*0.6%*
More than one race	708,000	2.3%	469,000	2.5%
Hispanic	*239,000*	*0.8%*	*165,000*	*0.9%*
Non-Hispanic	*469,000*	*1.6%*	*304,000*	*1.6%*
TOTAL	**30,241,000**	**100.0%**	**18,947,000**	**100.0%**
Total Hispanic	***10,611,000***	***35.1%***	***6,938,000***	***36.6%***
Total Non-Hispanic	***19,630,000***	***64.9%***	***12,009,000***	***63.4%***

FY 2015-2016				
Race	Working Age Population	% of Working Age Population	Labor Force Population	% of Labor Force Population
White only	22,249,000	72.5%	13,887,000	72.9%
Hispanic	*9,536,000*	*31.1%*	*6,123,000*	*32.1%*
Non-Hispanic	*12,713,000*	*41.4%*	*7,764,000*	*40.7%*
Black only	1,938,000	6.3%	1,164,000	6.1%
Hispanic	*192,000*	*0.6%*	*125,000*	*0.7%*
Non-Hispanic	*1,745,000*	*5.7%*	*1,039,000*	*5.5%*
American Indian, Alaskan Native Only	476,000	1.6%	272,000	1.4%
Hispanic	*347,000*	*1.1%*	*212,000*	*1.1%*
Non-Hispanic	*129,000*	*0.4%*	*60,000*	*0.3%*
Asian only	5,014,000	16.3%	3,077,000	16.1%
Hispanic	*203,000*	*0.7%*	*137,000*	*0.7%*
Non-Hispanic	*4,812,000*	*15.7%*	*2,939,000*	*15.4%*
Hawaiian/Pacific Islander Only	266,000	0.9%	180,000	0.9%
Hispanic	*36,000*	*0.1%*	*26,000*	*0.1%*
Non-Hispanic	*229,000*	*0.7%*	*155,000*	*0.8%*
More than one race	733,000	2.4%	479,000	2.5%
Hispanic	*250,000*	*0.8%*	*171,000*	*0.9%*
Non-Hispanic	*483,000*	*1.6%*	*308,000*	*1.6%*
TOTAL	**30,675,000**	**100.0%**	**19,059,000**	**100.0%**
Total Hispanic	***10,564,000***	***34.4%***	***6,794,000***	***35.6%***
Total Non-Hispanic	***20,111,000***	***65.6%***	***12,264,000***	***64.4%***

***Source**: Employment Development Department*

3.4.3.2 Figure – Statewide Working Age Population by Ethnicity/Race

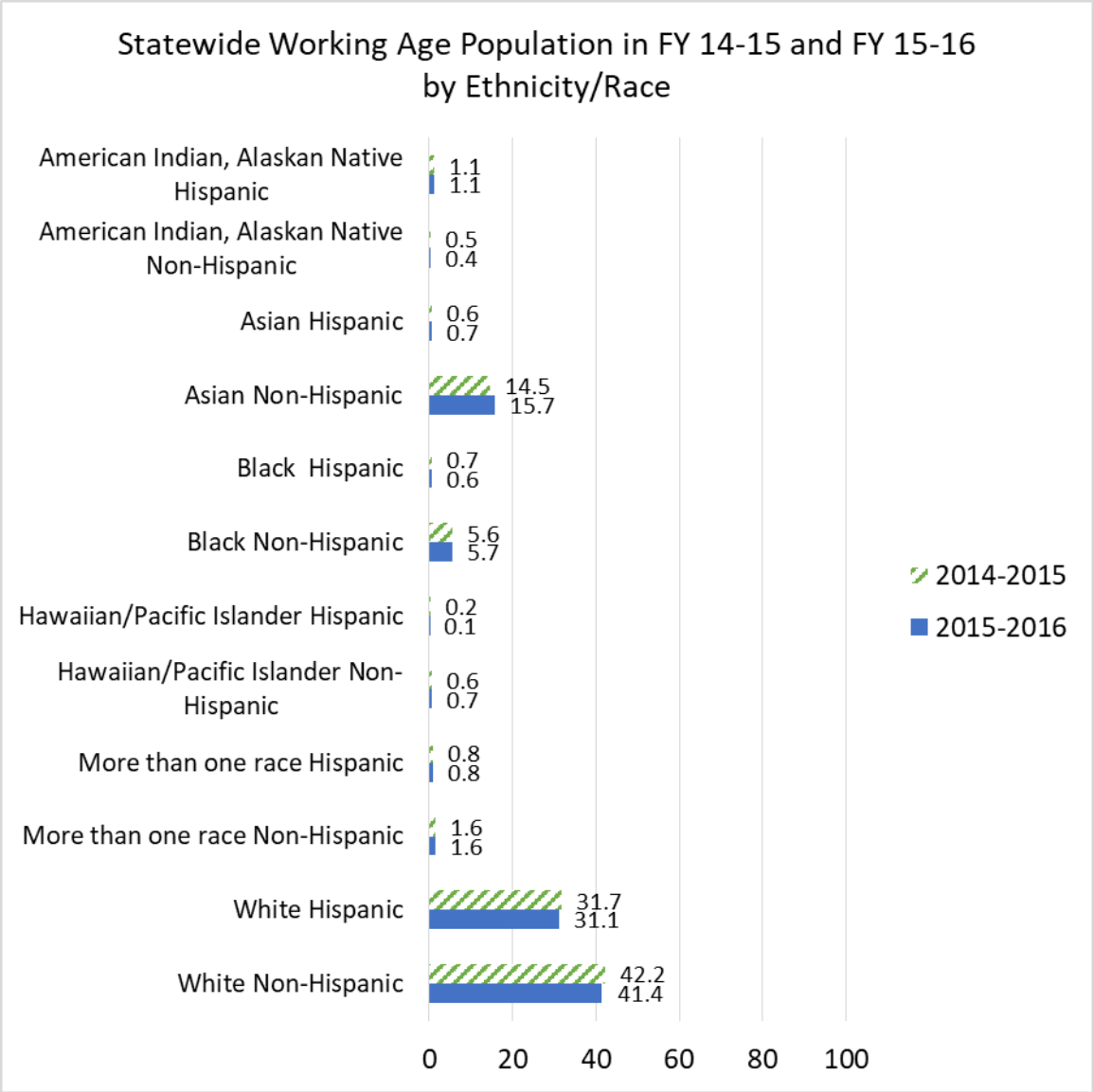


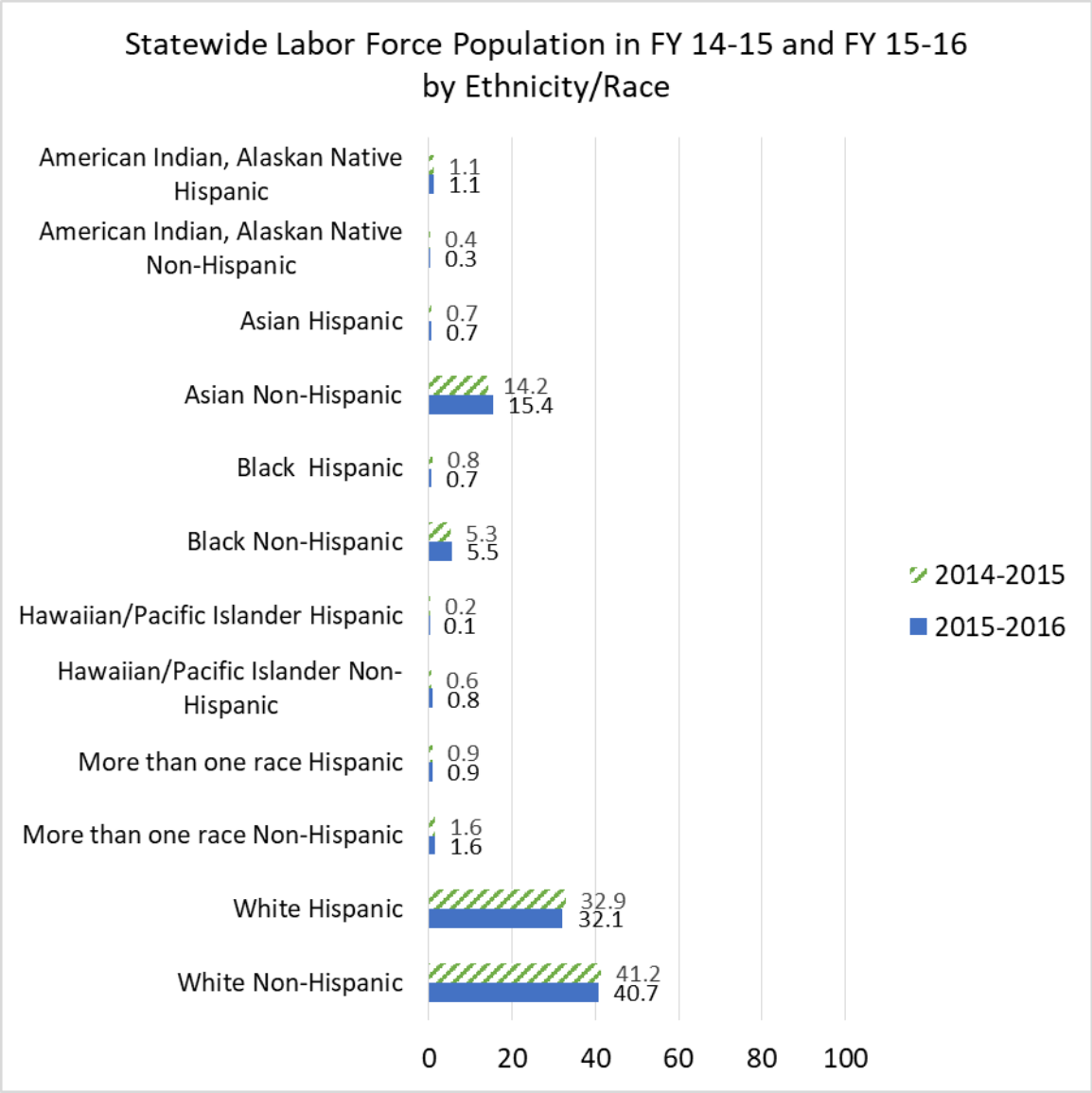
Table Set 3.3.3.1 and associated figures serve to visually illustrate the distribution of persons of Hispanic or Latino origin by race in California in both of the two fiscal years covered by this report.

A key takeaway here is, as noted in discussion in the section above, the fact that the population identifying racially as white is almost evenly divided among non-Hispanic and Hispanic individuals.

This is an important point to underscore for correct interpretation of data for the various workforce programs in chapters to come. Categories and methods for collecting participant demographic information vary program to program, often with focus on sensitivity to

population need and self-identity, and this is particularly true when it comes to how Hispanic or Latino participants are counted. What may otherwise appear to be large discrepancies between state population demographics and program demographics are likely in part explained by such reporting differences.

3.4.3.3 Figure – Statewide Labor Force Population by Ethnicity/Race



Estimates of each group's constituent share in the state's labor force population were similar to estimated working age population shares. In both years' data, white Hispanic shares were slightly larger than share of the working age population, consistent with the above-described slightly higher rate of labor force participation among this population in the state.

3.4.4 Sex/Gender

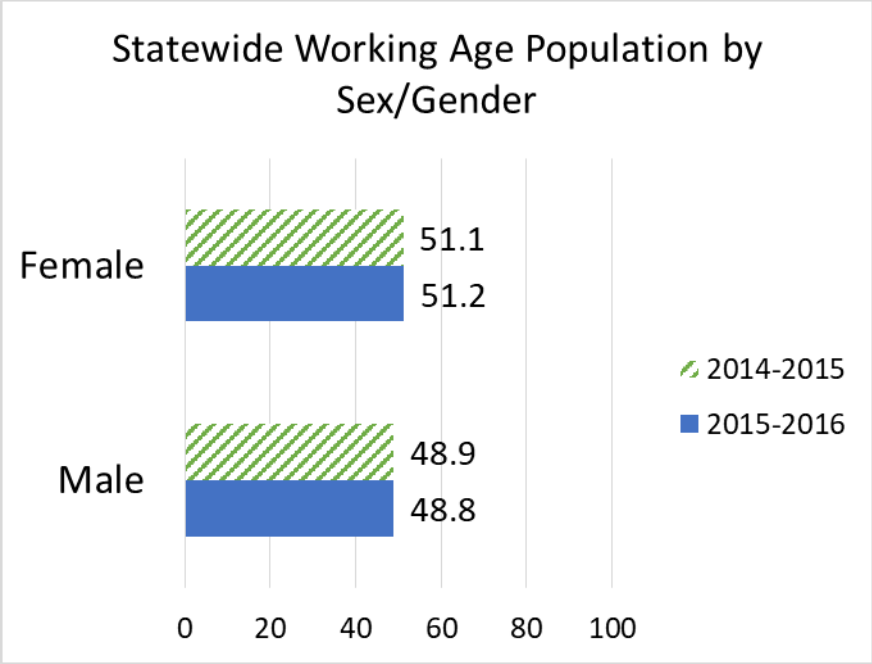
3.4.4.1 Table Set – Sex/Gender

FY 2014-2015				
Sex / Gender	Working Age Population	% Working Age Population	Labor Force Population	% Labor Force Population
Male	14,774,000	48.9%	10,352,000	54.6%
Female	15,468,000	51.1%	8,595,000	45.4%
TOTAL	**30,241,000**	**100.0%**	**18,947,000**	**100.0%**

FY 2015-2016				
Sex / Gender	Working Age Population	% Working Age Population	Labor Force Population	% Labor Force Population
Male	14,978,000	48.8%	10,415,000	54.6%
Female	15,697,000	51.2%	8,643,000	45.4%
TOTAL	**30,675,000**	**100.0%**	**19,059,000**	**100.0%**

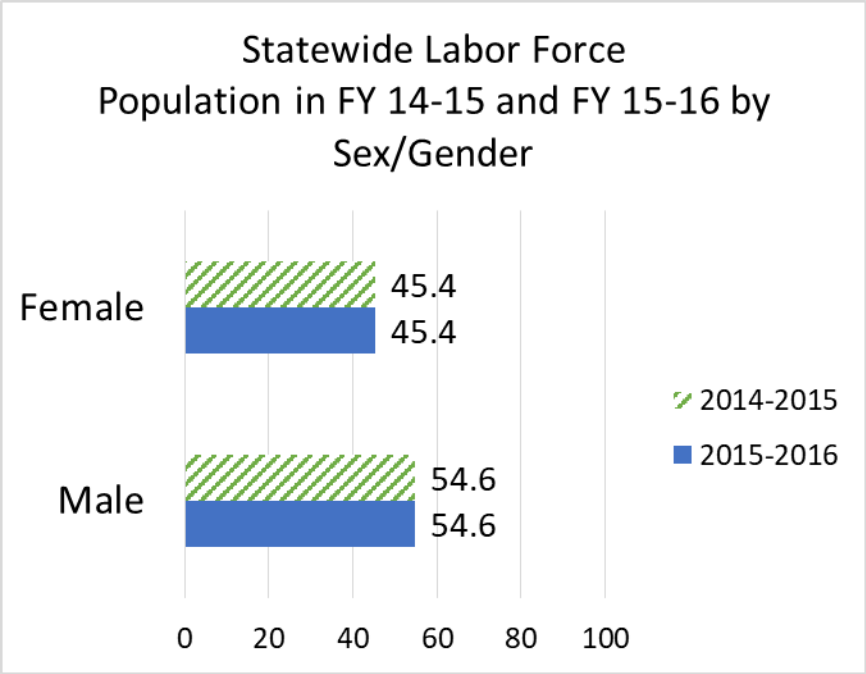
***Source**: Employment Development Department*

3.4.4.2 Figure – Statewide Working Age Population by Sex/Gender



Women were a larger share of the state's working age population during FY 14-15 and FY 15-16, making up about 51% of each year's total to men's approximate 49%.

3.4.4.3 Figure – Statewide Labor Force Population by Sex/Gender



Compared with larger shares of the working age population, women represented only about 45% of the labor force to men's almost 55%.

Women's continued underrepresentation in the labor force is due to multiple intersecting factors, including women's greater likelihood compared with men to withdraw (often assuming unpaid caretaker roles) from work for familial reasons, alongside more overt forms of discrimination and/or discouragement. Of note is that women's lower numbers of participation in the paid, formal economy obscure their contributions to unpaid household labor.[6]

A key takeaway for the purpose of this report is that while current labor force participation is used here (as with other demographic categories) to "benchmark" levels of women's representation in workforce programs, need for employment services may not be proportionate to current labor force participation for women or other disadvantaged groups. To illustrate: women's higher rates of poverty, single parenthood, and likelihood of receiving

[6] See, for discussion of related issues: Fry, Richard and Renee Stepler. January 31, 2017. "Women may never make up half of the U.S. workforce." Pew Research. https://www.pewresearch.org/fact-tank/2017/01/31/women-may-never-make-up-half-of-the-u-s-workforce/; Pew Research Center, Social and Demographic Trends. "Modern Parenthood – Chapter 6: Time in work and leisure, patterns by gender and family structure." https://www.pewsocialtrends.org/2013/03/14/chapter-6-time-in-work-and-leisure-patterns-by-gender-and-family-structure/; https://www.pewresearch.org/fact-tank/2015/03/10/women-still-bear-heavier-load-than-men-balancing-work-family/;

public assistance translate to higher barriers[7] than men and therefore greater need of services. The same insights carry with regard to other populations that face forms of structural inequality.

3.4.5 Age Group

3.4.5.1 Table Set – Age Group

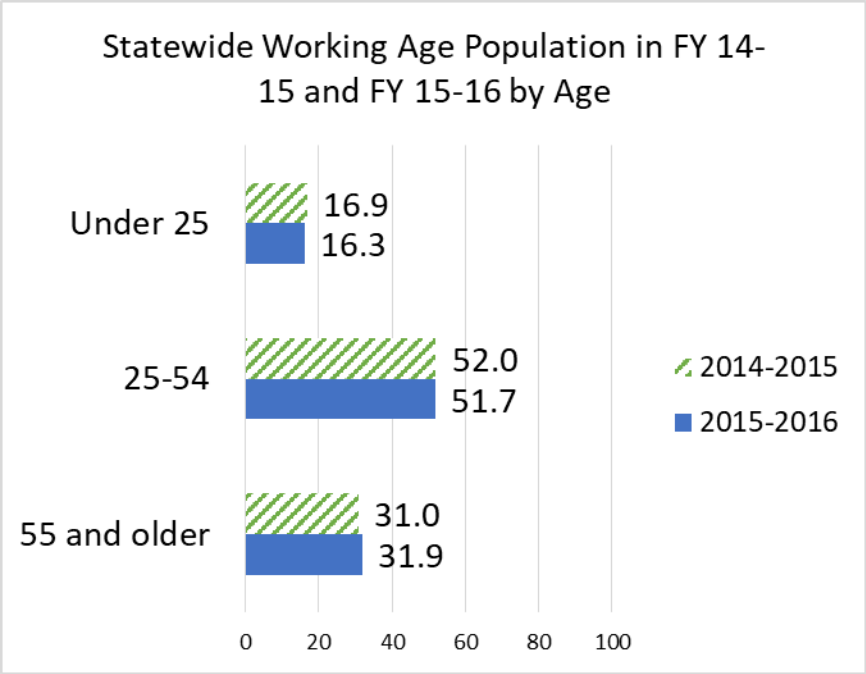
FY 2014-2015				
Age Group	Working Age Population	% Working Age Population	Labor Force Population	% Labor Force Population
Under 25	5,113,000	16.9%	2,561,000	13.5%
25-54	15,739,000	52.0%	12,478,000	65.9%
55 and older	9,389,000	31.0%	3,907,000	20.6%
TOTAL	**30,241,000**	**100.0%**	**18,947,000**	**100.0%**

FY 2015-2016				
Age Group	Working Age Population	% Working Age Population	Labor Force Population	% Labor Force Population
Under 25	5,015,000	16.3%	2,507,000	13.2%
25-54	15,864,000	51.7%	12,538,000	65.8%
55 and older	9,796,000	31.9%	4,013,000	21.1%
TOTAL	**30,675,000**	**100.0%**	**19,059,000**	**100.0%**

***Source**: Employment Development Department*

[7] See for instance, Maxwell, Nan, Heinrich Hoch, Natalya Verbitsky-Savitz and Davin Reed. "How are women served by the WIA Adult and Dislocated Worker Programs? Findings from Administrative Data" Mathematic Policy Research, 2012.

3.4.5.2 Figure – Statewide Working Age Population by Age

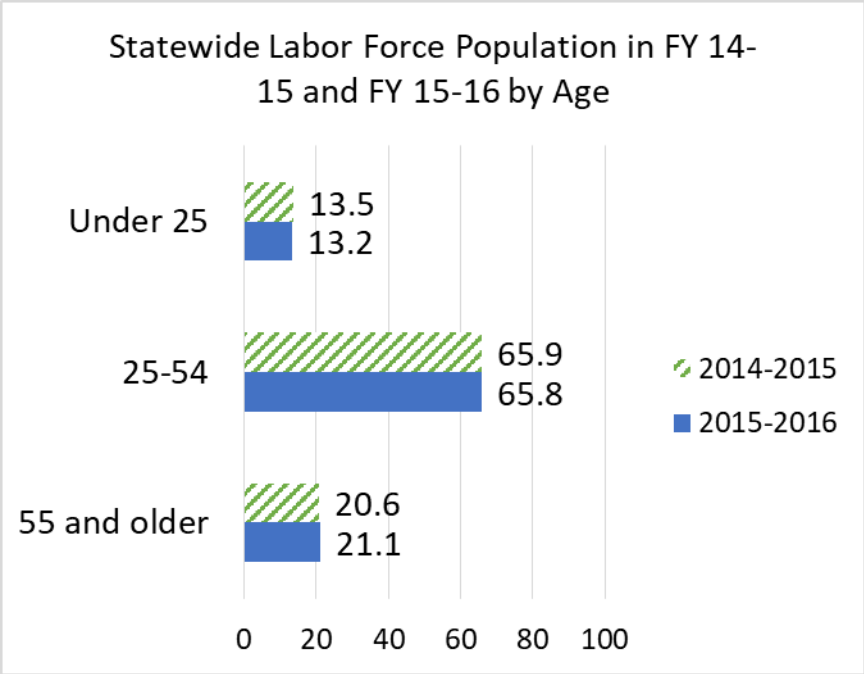


In both FY 14-15 and FY 15-16, Californians between 25 and 54 made up the largest share of the working age population, about 52% in each year.

Those 55 and older were just under one-third the working age population in each year, 31% in FY 14-15 and about 32% in FY 15-16.

Individuals under 25 were about 17% and about 16% of the working age population in each respective fiscal year.

3.4.5.3 Figure – Statewide Labor Force Population by Age



Compared with the working age population, individuals 25-54 were a much larger share of the state's labor force: about 66% in both years.

Given that members of this age group are of prime working age, while many in the younger and older age groups may be in continuing education or entering retirement, overrepresentation of this middle group is unsurprising.

Based on comparison of labor force shares to working age population shares, it appears that lower labor force participation among older Californians may be the biggest explanatory factor: only about 21% of the labor force population were 55 or older in FY 14-15 and FY 15-16, more than ten percentage points lower than working age population share. By comparison, the difference between working age population and labor force shares among the youngest Californians was between three and four percentage points.

3.4.6 Veteran Status

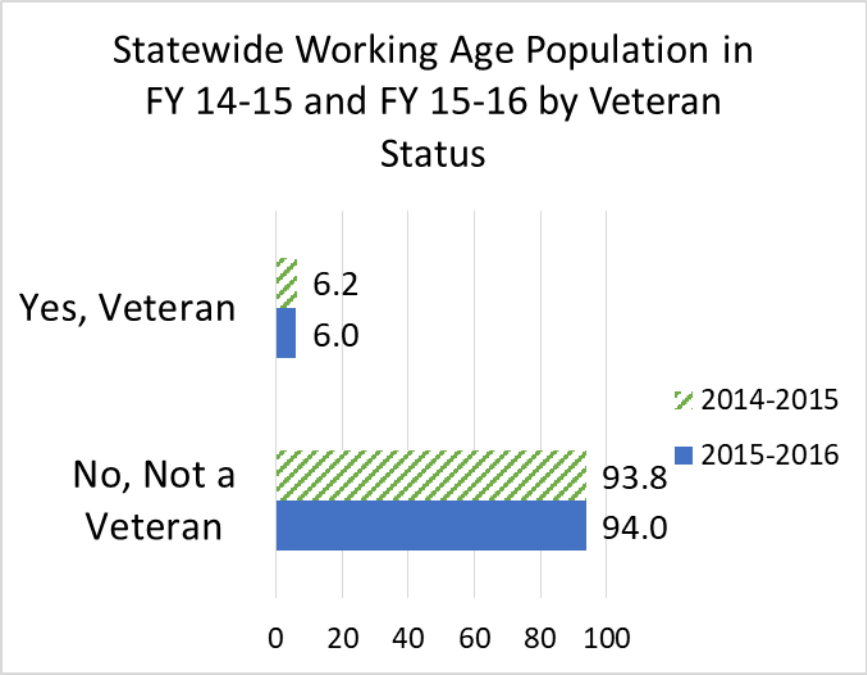
3.4.6.1 Table Set – Veteran Status

FY 2014-2015				
Veteran Status	Working Age Population	% Working Age Population	Labor Force Population	% Labor Force Population
Yes, Veteran	1,827,000	6.2%	906,000	4.8%
No, Not a Veteran	27,812,000	93.8%	17,888,000	95.2%
TOTAL	**29,639,000**	**100.0%**	**18,794,000**	**100.0%**

FY 2015-2016				
Veteran Status	Working Age Population	% Working Age Population	Labor Force Population	% Labor Force Population
Yes, Veteran	1,803,000	6.0%	894,000	4.7%
No, Not a Veteran	28,227,000	94.0%	17,977,000	95.3%
TOTAL	**30,029,000**	**100.0%**	**18,871,000**	**100.0%**

***Source**: Employment Development Department*

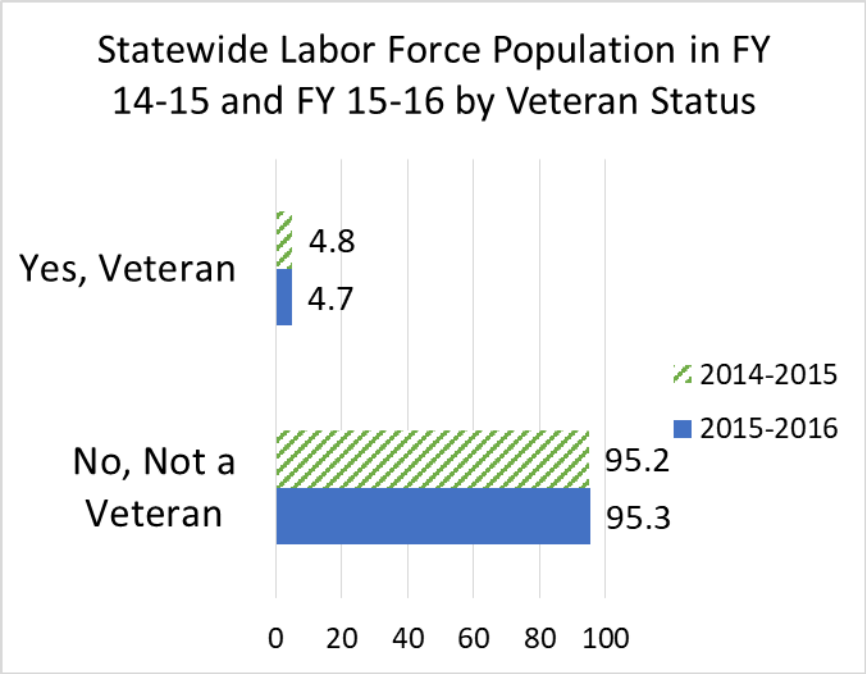
3.4.6.2 Figure – Statewide Working Age Population by Veteran Status



About six percent of California's working age population in both FY 14-15 and FY 15-16 were veterans.[8]

[8] Population denominators in Table Set 3.3.6.1 for both Working Age Population and Labor Force Population differ from the respective denominator values shown in the other CPS-based tables shown in this chapter. The

3.4.6.3 Figure – Statewide Labor Force Population by Veteran Status



Veterans represented slightly smaller shares of the state's labor force population, 4.8% (FY 14-15) and 4.7% (FY 15-16). This suggests that veterans are slightly underemployed in respect to population size, which could indicate population need for services.

3.5 United States Bureau of Labor and Statistics (BLS) – Quarterly Census of Employment and Wages (QCEW) Used for Sector Employment Comparisons

The Quarterly Census of Employment and Wages (QCEW) Program is a federal/state cooperative program between the U.S. Department of Labor's Bureau of Labor Statistics (BLS) and the EDD's Labor Market Information Division (LMID). The QCEW program produces a comprehensive tabulation of employment and wage information for workers covered by California Unemployment Insurance laws and federal workers covered by the Unemployment Compensation for Federal Employees (UCFE) program.

The QCEW program serves as a near census of monthly employment and quarterly wage information by 6-digit industry codes from the North American Industry Classification System (NAICS) at the national, state, and county levels. At the national level, the QCEW program publishes employment and wage data for nearly every NAICS industry. At the state and local level, the QCEW program publishes employment and wage data down to the 6-digit NAICS industry level, if disclosure restrictions are met.

discrepancy is caused by the weighting technique applied to the estimate for veteran status. This discrepancy in totals does not affect the accuracy or utility of the estimated population ratios.

Sector descriptions are based on NAICS codes.

3.5.1 Factors Affecting Metrics

The following caveats should be noted concerning quarterly wage estimates:

- The measure of central tendency calculated on the basis of QCEW data is a mean, or average found by totaling all earnings values for individuals employed in an industry sector and dividing by the total count of individuals. This is different from the measure of central tendency calculated for program participant earnings, which is a median. The median is found by arranging all values in a set from low to high and identifying the middle value.[9]
- Mean quarterly earnings data for fiscal year 2014-15 and 2015-16 were calculated using Quarterly Census of Employment and Wage (QCEW) data. The QCEW captures the universe of CA establishments that participate in the Unemployment Insurance program, which represents approximately 98 per cent of establishments in California, or 1.4 million establishments.
- Despite this broad coverage of California employers, methodology of the QCEW (i.e., as a survey of employers who report to UI) means that the definition of "employment" used to generate the industry sector estimates is narrower than that used by the Current Population Survey (CPS) to generate labor force estimates. The QCEW cannot account for self-employment, gig-type employment, and other work arrangements that do not participate in the Unemployment Insurance program.[10] In this report, the discrepancy is not an issue, given the choice (described in the previous section) to not present comparisons with program outcomes that rely on estimates of employment rates from CPS data.

Ultimately, the choice to utilize the QCEW was made based on QCEW's recognized status as the "gold standard" for data on jobs and industry wages.

A second caveat relates to the imperfect overlap between the time periods of the estimates produced by the CQEW, and reported program outcomes, which has two components: first, in this report, employment and earnings outcomes are reported two and four quarters following exit in the noted fiscal year. This means that actual dates of employment or earnings may or may not be within the same fiscal year, depending upon the date that a given participant

[9] LMID cannot provide a median on the basis of QCEW data, as this would violate confidentiality associated with use of employer tax records for statewide industries.

[10] By contrast, the CPS survey definition of employment is more inclusive than that of the QCEW in that it includes self-employed individuals who are not a part of (or who do not pay into) the Unemployment Insurance (UI) system as well other groups such as unpaid family workers. The questionnaire asks "Did you work one for pay during the survey reference week, which is always the week that contains the 12th day of each month? If the reply is "yes" that individual is classified as employed. As such the CPS, in theory, also picks up more informal work arrangements such as gig-type work, day labor, etc. In contrast, the QCEW definition is much more formal, and represents a count of the number of UI covered jobs as reported by employers.

exited. Second, estimates produced by the QCEW were available from just a single quarter during each of the two fiscal years, whereas participant outcomes are reported from two different periods (second and fourth quarter after exit). On the other hand, estimates of labor force share and average earnings by sector from the QCEW are from the noted fiscal year. Therefore, while estimates provide a good benchmark for employment share and average earnings, they may not precisely reflect labor market dynamics at the time a given individual was employed. This is relevant if, for instance, sector employment levels changed or if changes to the business cycle caused changes in earnings. However, given the slightness of the time discrepancy, it is likely that such effects would be small.

Finally, sector descriptions vary slightly between industry sector codes used in the QCEW and the industry sector codes used in the Unemployment Insurance Base Wage file (the latter being the source of industry sector employment information for employed workforce program participants). This is most evident when it comes to public sector (government) employment. Specifically: whereas QCEW categories disaggregate the public sector as employer according to whether an individual worked for federal, state, or local government, Base Wage categories report any public sector employment as “public administration.”

3.5.2 Industry / Sector

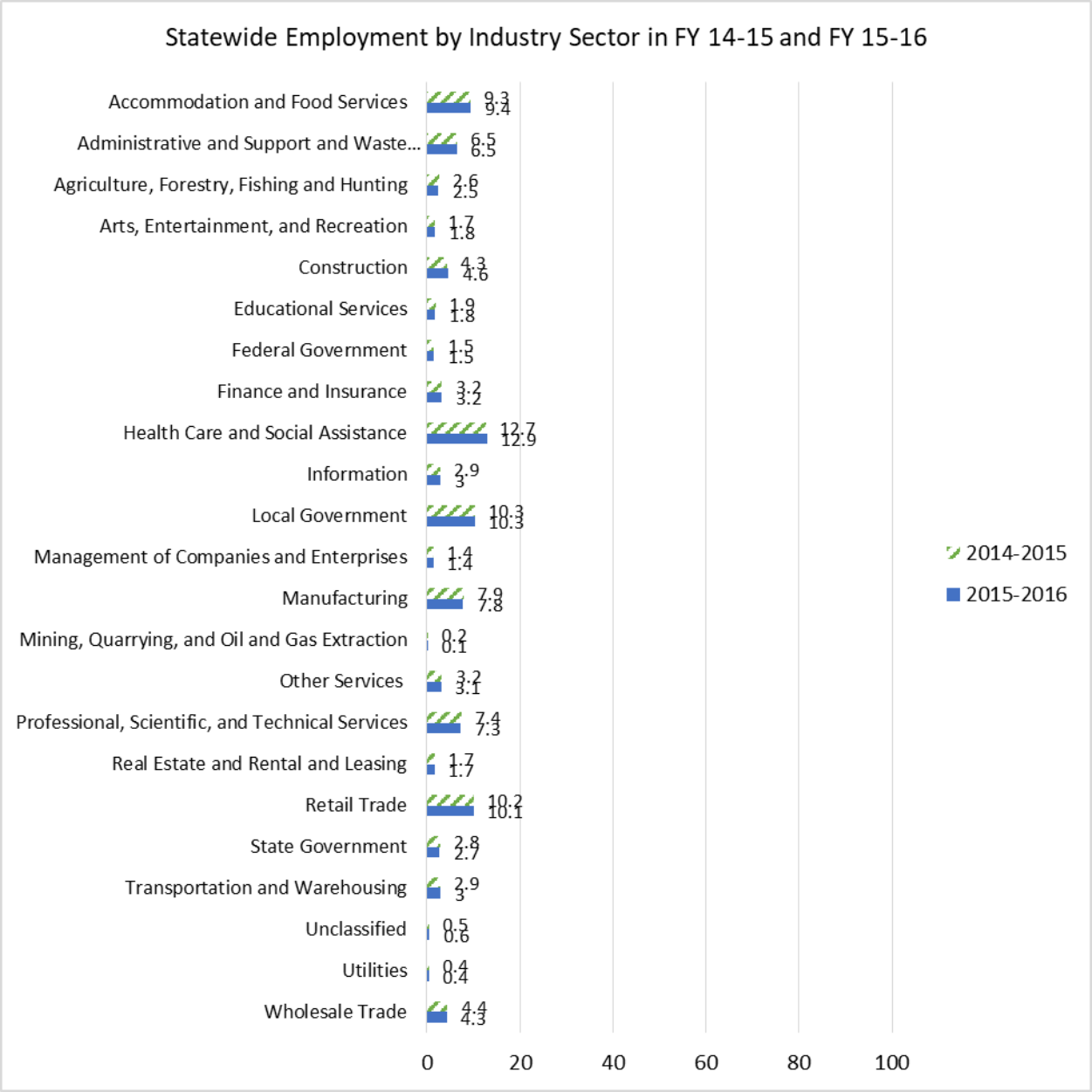
3.5.2.1 Table Set – Industry/Sector

FY 2014-2015			
Industry / Sector	Labor Force Population	% Labor Force Population	Average Quarterly Earnings
Agriculture, Forestry, Fishing and Hunting	418,700	2.6%	$7,386
Mining, Quarrying, and Oil and Gas Extraction	27,900	0.2%	$34,806
Utilities	57,200	0.4%	$29,981
Construction	693,700	4.3%	$15,097
Manufacturing	1,274,100	7.9%	$20,709
Wholesale Trade	712,000	4.4%	$18,507
Retail Trade	1,639,100	10.2%	$8,458
Transportation and Warehousing	461,100	2.9%	$12,635
Information	467,600	2.9%	$34,819
Finance and Insurance	518,500	3.2%	$27,697
Real Estate and Rental and Leasing	266,700	1.7%	$15,183
Professional, Scientific, and Technical Services	1,183,500	7.4%	$27,276
Management of Companies and Enterprises	227,900	1.4%	$30,791
Administrative and Support and Waste Management and Remediation Services	1,039,400	6.5%	$10,046
Educational Services	307,600	1.9%	$12,433
Health Care and Social Assistance	2,038,200	12.7%	$11,829
Arts, Entertainment, and Recreation	280,100	1.7%	$13,569
Accommodation and Food Services	1,499,000	9.3%	$5,295
Other Services	508,300	3.2%	$8,907
Federal Government	243,300	1.5%	$19,311
State Government	446,600	2.8%	$17,564
Local Government	1,651,700	10.3%	$14,707
Unclassified	80,300	0.5%	$12,833
TOTAL	**16,042,500**	**100.0%**	**$15,085**

FY 2015-2016			
Industry / Sector	Labor Force Population	% Labor Force Population	Average Quarterly Earnings
Agriculture, Forestry, Fishing and Hunting	421,400	2.5%	$7,779
Mining, Quarrying, and Oil and Gas Extraction	24,000	0.1%	$34,382
Utilities	58,000	0.4%	$30,588
Construction	752,500	4.6%	$15,799
Manufacturing	1,292,300	7.8%	$21,139
Wholesale Trade	716,500	4.3%	$18,706
Retail Trade	1,662,200	10.1%	$8,645
Transportation and Warehousing	494,000	3.0%	$13,055
Information	503,300	3.0%	$36,632
Finance and Insurance	532,500	3.2%	$28,536
Real Estate and Rental and Leasing	273,500	1.7%	$15,648
Professional, Scientific, and Technical Services	1,208,800	7.3%	$27,498
Management of Companies and Enterprises	227,800	1.4%	$31,648
Administrative and Support and Waste Management and Remediation Services	1,072,500	6.5%	$10,447
Educational Services	302,000	1.8%	$12,772
Health Care and Social Assistance	2,127,400	12.9%	$12,174
Arts, Entertainment, and Recreation	292,600	1.8%	$13,589
Accommodation and Food Services	1,560,400	9.4%	$5,570
Other Services	515,900	3.1%	$9,246
Federal Government	246,000	1.5%	$19,573
State Government	453,600	2.7%	$18,308
Local Government	1,705,100	10.3%	$15,225
Unclassified	91,100	0.6%	$13,034
TOTAL	**16,533,400**	**100.0%**	**$15,504**

***Source**: Employment Development Department*

3.5.2.2 Figure – Statewide Employment Industry/Sector



Data shown in Figure 3.5.2.2 are percent shares –the percentage of the whole—of employment in specific industry sectors in the state. Percentage values shown are not estimates, but rather shares of employment by industry from among tax records from the census of employers in the QCEW. In the report's program chapters, these shares are used to benchmark sector employment among former workforce program participants.

Sectors are based on the NAICS that is maintained by the BLS. The NAICS system defines industries based on their outputs, organization, and what is produced, rather than based on

occupations within them. In some cases, an occupation may be found across multiple sectors. In others (e.g., the utilities sector) occupations may be largely or wholly industry-specific.

More information about these sectors, how they are defined, and the types of occupations found within them, can be found at the BLS site as well as (in California) through information maintained by the EDD-LMID.

The sector employing the greatest numbers of Californians in both fiscal years was Health Care and Social Assistance, which employed 12.7% of the state's total work force in FY 14-15 (an estimated 2,038,200 individuals) and 12.9% (2,127,400 individuals) in FY 15-16.

The Health Care and Social Assistance sector encompasses an array of industries, including those that provide medical care exclusively, those that provide health care and social assistance, and those that exclusively provide social assistance. The services provided by establishments in this sector are delivered by trained professionals. All industries in the sector share this commonality of process, namely, labor inputs of health practitioners or social workers with the requisite expertise. Many of the industries in the sector are defined based on the educational degree held by the practitioners included in the industry. The industry "super-sector" is comprised of several sectors: Ambulatory Health Care Services, Hospitals, Nursing and Residential Care Facilities, and Social Assistance.[11]

Health Care and Social Assistance is and has been one of the fastest-growing industries in California, projected to experience nearly 20% growth by 2028.[12]

Two sectors—Mining, Quarrying, and Oil and Gas Extraction; and Utilities—employed very small numbers of Californians in both fiscal years, consistently less than one-half of one percent of the total labor force population, or in the tens of thousands of individuals.

The Mining sector comprises establishments that extract naturally occurring mineral solids, such as coal and ores; liquid minerals, such as crude petroleum; and gases, such as natural gas. The term mining is used in the broad sense to include quarrying, well operations, beneficiating (e.g., crushing, screening, washing, and flotation), and other preparation customarily performed at the mine site, or as a part of mining activity.[13] The Utilities sector includes establishments that provide electric power, natural gas, steam supply, water supply, and sewage removal.[14]

[11]U.S. Bureau of Labor Statistics. Industries at a Glance – Health Care and Social Assistance (NAICS 62). https://www.bls.gov/iag/tgs/iag62.htm

[12] Employment Projections (ca.gov)

[13] U.S. Bureau of Labor Statistics. Industries at a Glance – Mining, Quarrying, and Oil and Gas Extraction (NAICS 21). https://www.bls.gov/iag/tgs/iag21.htm

[14] U.S. Bureau of Labor Statistics. Industries at a Glance-Utilities (NAICS 22). https://www.bls.gov/iag/tgs/iag22.htm

3.5.2.3 Figure – Statewide Mean Quarterly Earnings by Industry/Sector

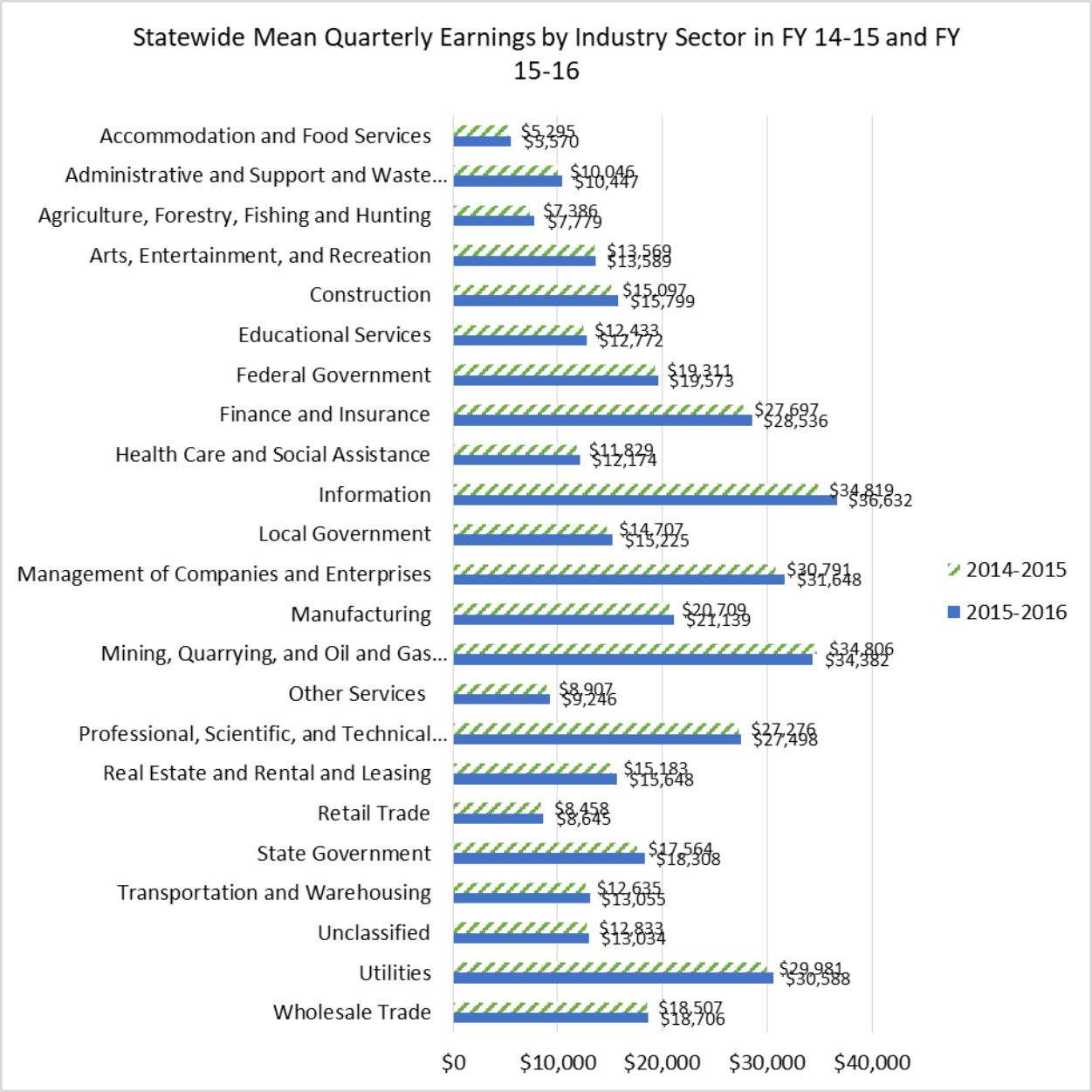


Figure 3.4.2.3 shows mean (average) earnings levels among all individuals employed in an industry sector in California in fiscal year 2014-15 and fiscal year 2015-16. Data are not derived from estimates but rather generated on the basis of direct employer-reported earnings records. These industry mean earnings serve as a basis used to compare and make statements about earnings among former workforce participants employed in an industry, post-exit.

A few things that should be kept in consideration when reading this section of the program chapters are that statewide earnings shown here (and referenced in the program chapters) represent the average of earnings of all individuals employed in a sector across the state (based

on counts from the QCEW data). There may be important differences between the statewide labor force as a whole (the portion captured by QCEW data) and characteristics of the populations served by workforce programs. These differences may be at play in differences between earnings.

Second, wage information used to generate earnings information for program participants comes directly from UI records, rather than an employer survey. These records are not subject to wholesale audit and there may also be completeness issues if an individual cannot be successfully linked on the basis of social security number. It is possible that this difference as well may produce discrepancies.

During both FY 14-15 and FY 15-16, Californians working in the Information sector had the highest mean earnings of any industry sector. At $34,819, mean quarterly earnings in this sector were +$19,734 or 131% higher than the mean earnings from all industry sectors ($15,085) in FY 14-15. At $36,632 the following year, they were + $21,128 or 136% higher than the FY 15-16 industry employment mean of $15,504 in a quarter.

This sector employed a relatively small percentage of all Californians, approximately 3% in each year. Information includes establishments that produce and distribute information and cultural products, provide means to transmit or distribute these products as well as data or communications, and process data.

The sector (considered a super-sector) includes individual sectors of publishing industries (software, internet-based, as well as traditional publishing); motion picture and sound recording; broadcasting; as well as telecommunications, web search portals, data processing, and information services.[15]

While it was the sector that employed the fewest Californians, Mining, Quarrying, and Oil and Gas Extraction was another high-paying industry in the state—offering Californians the second-highest earnings sector in each of the two fiscal years, with mean quarterly earnings respectively of $34,806 (FY 14-15) and $34,382 (FY 15-16)—over 100% greater than mean earnings across all sectors in each year. (A sector description can be found in the previous section of text).

Lowest mean earnings were seen, in each fiscal year, in the Accommodation and Food Services sector. This sector is made up of food service (restaurant, fast food, meal preparation) and lodging (e.g. hotel, motel) establishments,[16] and has consistently been a large and growing

[15] U.S. Bureau of Labor Statistics. Industries at a Glance – Information (NAICS 51). https://www.bls.gov/iag/tgs/iag51.htm

[16] U.S. Bureau of Labor Statistics. Industries at a Glance – Accommodation and Food Services (NAICS 72). https://www.bls.gov/iag/tgs/iag72.htm

sector in the state in recent year. In recent ten-year growth projections, jobs for Waiters and Waitresses are expected to increase by 12.8 percent, or 36,300 jobs between 2016 and 2026.[17] As suggested by low associated mean earnings, jobs in Accommodation and Food Services are often also low-paying. Along with office and administrative support and sales, food preparation constitutes one of 3 occupational groups making up the majority of the state's low wage jobs (a combined 5.4 million).[18]

A second low-paying industry sector in statewide data was Agriculture, Forestry, Fishing, and Hunting. Statewide mean sector earnings of $7,779 and $7,386 were about 100% lower than the statewide overall mean in each year. Earnings for this sector capture individuals employed as laborers in California's large agricultural sector, which could explain the low associated earnings.

Finally, earnings in the Retail sector were also low state-wide in each year, at $8,645 and $8,458.

[17] LMID, Occupational Guide "Waiters and Waitresses," (https://www.labormarketinfo.edd.ca.gov/OccGuides/Detail.aspx?Soccode=353031&Geography=0601000000)
[18] CWDB Unified State Plan 2016-2019, p. 44.