

First-Line Supervisors of Mechanics, Installers and Repairers

Labor Market Analysis: San Diego County

January 2018

Summary

The following list summarizes findings from the labor market analysis below for *First-Line Supervisors of Mechanics, Installers and Repairers*:

- Between 2016 and 2021, *First-Line Supervisors of Mechanics, Installers and Repairers* are projected to increase by 218 jobs (or seven percent) in San Diego County.
- Employers in San Diego County will need to hire 296 workers annually to fill new jobs and to backfill jobs due to attrition such as retirement or turnover. The most demand will be in the Central Region.
- Between 2010 and 2017, there was an average of 493 online job postings per year for *First-Line Supervisors of Mechanics, Installers and Repairers* in San Diego County.
- *First-Line Supervisors of Mechanics, Installers and Repairers* earn median hourly earnings of \$31.47, more than the self-sufficiency wage (\$13.09 per hour) for a single adult in San Diego County.
- According to the California Community Colleges Chancellor's Office Management Information System (MIS) Data Mart, two community colleges supply the region with an annual average of 177 awards for this occupation: Palomar College and San Diego City College.
- Comparing the labor market demand against labor supply, there is a supply gap for this occupation in San Diego County, with 296 annual openings and 177 awards. Comparatively, there are 4,328 annual openings in California and 45 completions.
- Between January 1, 2015 and December 31, 2017, the top five employers in San Diego County for this occupation were Cintas, Bridgestone/Firestone, CBRE, Marriott International Inc. and Lincoln Military Housing.
- The typical entry-level education for this occupation is a high school diploma.

Introduction

This report provides labor market information in San Diego County for the following occupational code in the Standard Occupational Classification (SOC)¹ system:

¹ The Standard Occupational Classification (SOC) system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating or disseminating data. bls.gov/soc.

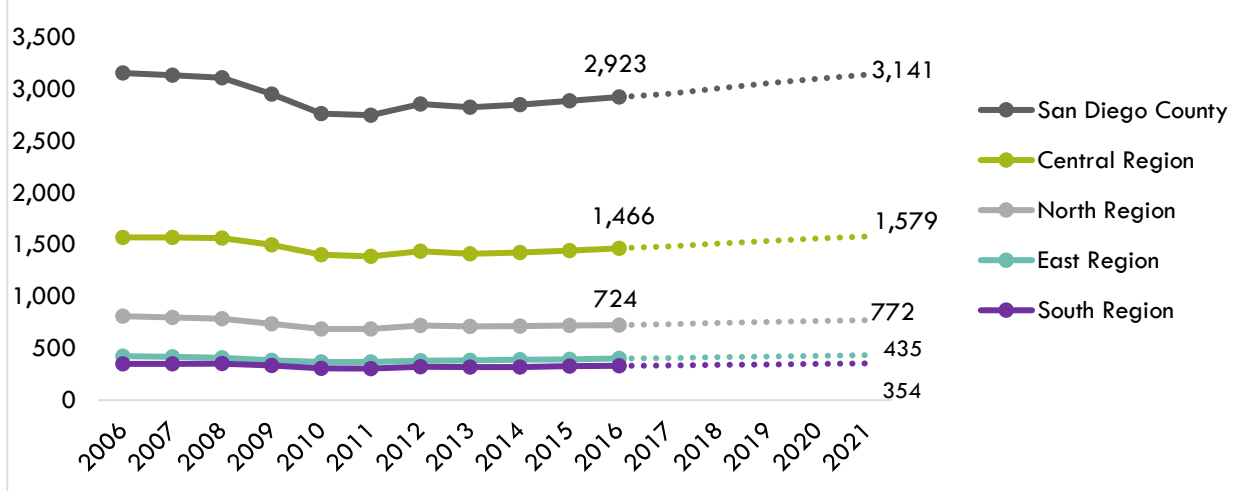
First-Line Supervisors of Mechanics, Installers and Repairers (SOC 49-1011): Directly supervise and coordinate the activities of mechanics, installers and repairers. Excludes team or work leaders. Sample reported job titles include:

- Service Manager
- Mechanical Maintenance Supervisor
- Maintenance Supervisor
- Maintenance Superintendent
- Equipment Maintenance Supervisor
- Superintendent
- Maintenance Planner
- Maintenance Foreman
- Electrical Supervisor
- Electrical Foreman

Projected Occupational Demand

Between 2016 and 2021, *First-Line Supervisors of Mechanics, Installers and Repairers* are projected to increase by 218 jobs (or seven percent) in San Diego County (Exhibit 1a and Exhibit 1b).²

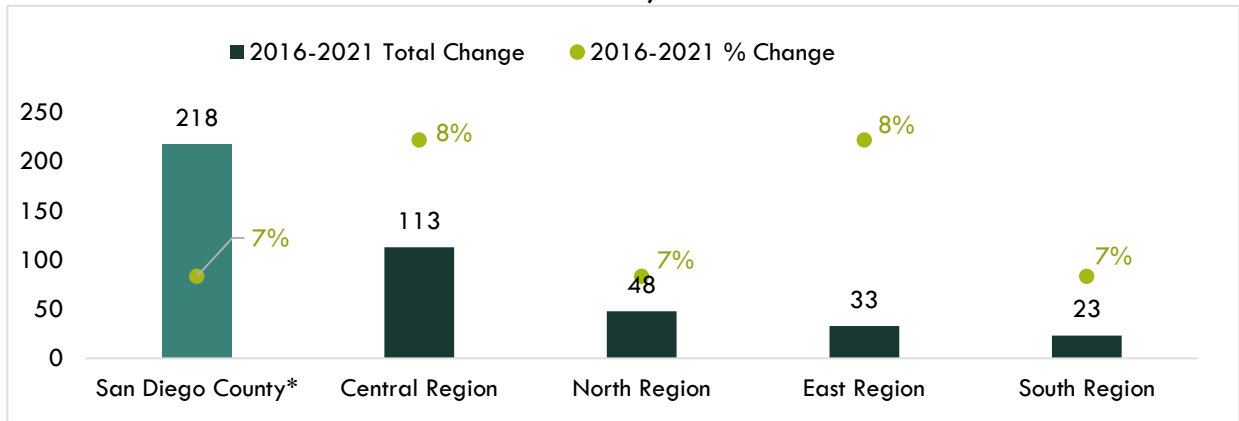
Exhibit 1a: Number of Jobs for First-Line Supervisors of Mechanics, Installers and Repairers (2006-2021)³



² South, East, Central and North Regions' ZIP codes in this report are defined by the local Workforce Development Board, the San Diego Workforce Partnership.

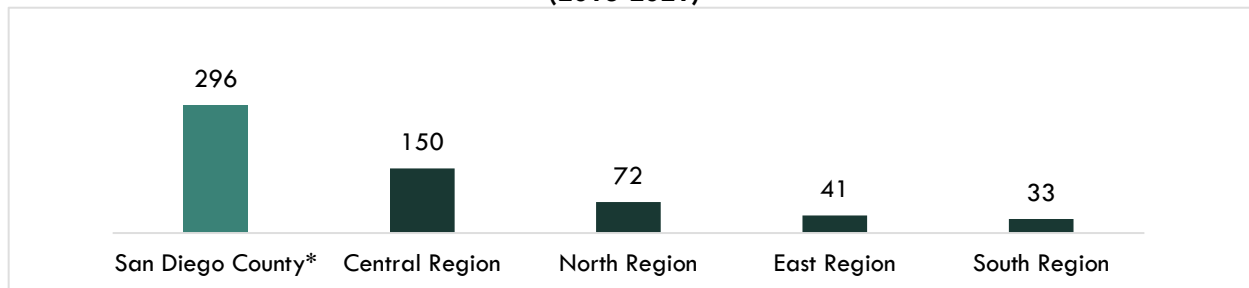
³ EMS. San Diego County (6073). 2017.03 Class of Worker. QCEW + Non-QCEW+ Self-Employed. 2006-2021.

Exhibit 1b: Five-Year Projections for First-Line Supervisors of Mechanics, Installers and Repairers (2016-2021)⁴



Employers in San Diego County will need to hire 296 workers annually to fill new jobs and backfill jobs due to attrition such as retirement or turnover (Exhibit 2). The most demand will be in the Central Region.

Exhibit 2: Projected Annual Openings for First-Line Supervisors of Mechanics, Installers and Repairers (2016-2021)⁵



*Total annual openings for the subregions in San Diego County may not added up exactly due to rounding.

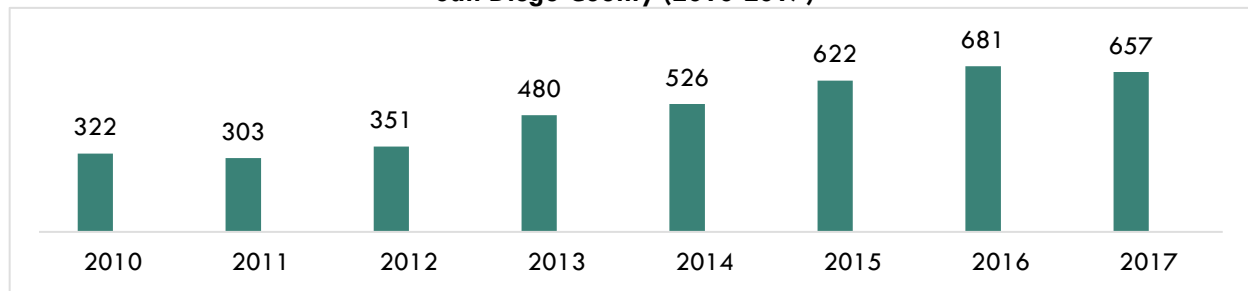
Online Job Postings

Between 2010 and 2017, there was an average of 493 online job postings per year for First-Line Supervisors of Mechanics, Installers and Repairers in San Diego County (Exhibit 3).

⁴ EMSI. San Diego County (6073). 2017.04 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2016-2021.

⁵ EMSI. San Diego County (6073). 2017.04 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2016-2021.

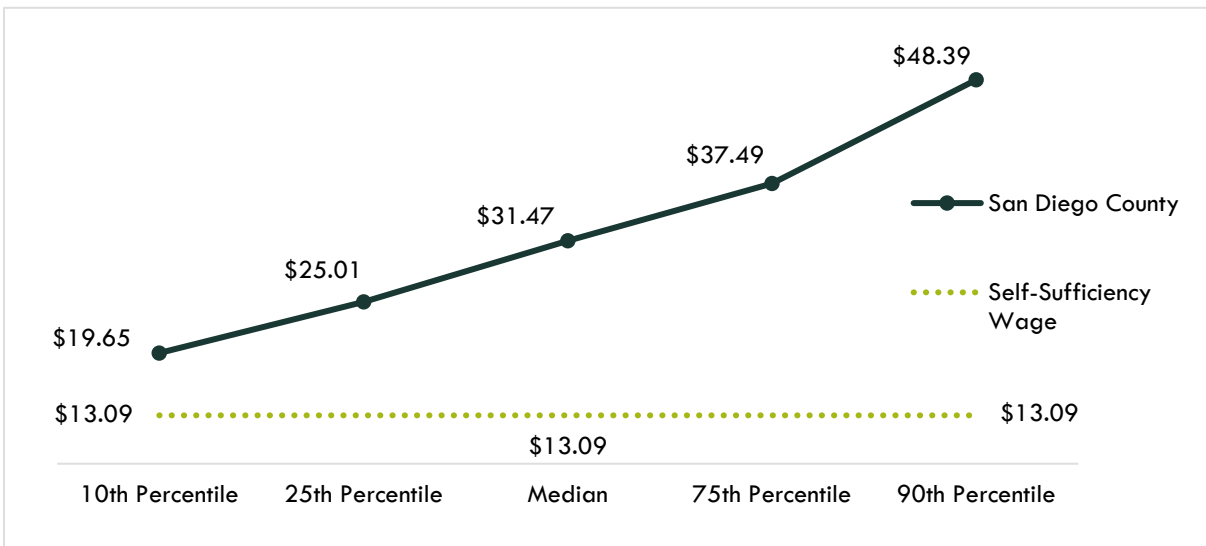
Exhibit 3: Number of Online Job Postings for *First-Line Supervisors of Mechanics, Installers and Repairers* in San Diego County (2010-2017)⁶



Earnings

First-Line Supervisors of Mechanics, Installers and Repairers earn median hourly earnings of **\$31.47**, more than the self-sufficiency wage (\$13.09 per hour)⁷ for a single adult in San Diego County (Exhibit 4).

Exhibit 4: Hourly Earnings for *First-Line Supervisors of Mechanics, Installers and Repairers* in San Diego County⁸



Educational Supply

Educational supply for an occupation can be estimated by analyzing the number of related program completers/graduates/awards in San Diego County. To determine what programs are available, Exhibit 5 lists the Taxonomy of Programs (TOP) code(s) related to the SOC code analyzed.

⁶ Labor Insight Jobs. Burning Glass Technologies. San Diego, CA. Full years 2010-2017.

⁷ The self-sufficiency wage in San Diego for one adult is \$13.09 (insightccd.org/tools-metrics/self-sufficiency-standard-tool-for-california).

⁸ EMSI. San Diego County (6073). 2017.04 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2016-2021.

Exhibit 5: Related TOP Codes in San Diego County

SOC 49-1011: First-Line Supervisors of Mechanics, Installers and Repairers

TOP 093440: Electrical Systems and Power Transmission

TOP 094850: Recreational Vehicle Service

TOP 095220: Electrical

According to the California Community Colleges Chancellor's Office Management Information System (MIS) Data Mart, **two** community colleges supply the region with an annual average of **177** awards for this occupation: **Palomar College** and **San Diego City College** (Exhibit 6).

Exhibit 6 shows the annual average regional community college awards (associate degrees and certificates) conferred during the three academic years between 2013 and 2016, as well as other awards granted outside the California Community Colleges from 2012 to 2015 with the relevant TOP code.

Please note: An award is not equivalent to a single person in search of a job opening because a student may earn more than one award such as an associate degree in addition to a certificate.

Exhibit 6: Number of Awards (Certificates and Degrees) Conferred by Postsecondary Institutions by Occupation (Program Year 2012-13 through PY2015-16 Average)

TOP06	TOP06 Title	3-Yr Annual Average Supply (PY13-14 to PY15-16)	3-Yr Annual Average CC Awards (PY13-14 to PY15-16)	Other Educational Institutions 3-Yr Annual Average Awards (PY12-13 to PY14-15)
093440	Electrical Systems and Power Transmission	62	62	0
	<ul style="list-style-type: none"> San Diego City College 		62	
094850	Recreational Vehicle Service	0	0	0
095220	Electrical	115	115	0
	<ul style="list-style-type: none"> Palomar College 		73	
	<ul style="list-style-type: none"> San Diego City College 		42	
TOTAL		177		

*Total number of awards may not add up exactly due to rounding.

Demand vs. Supply

Comparing the labor demand (annual openings) with labor supply⁹ from the region's community colleges, there is a **supply gap** for this occupation in San Diego County, with **296** annual openings and **177** awards. Comparatively, there are **4,328** annual openings in California and **45** completions.¹⁰

Exhibit 7: Labor Demand (Annual Openings) Compared to Labor Supply (Average Annual Awards)

Community Colleges and Other Postsecondary Educational Institutions	Demand (Annual Openings)	Supply (Total Annual Average Supply)	Supply Gap or Oversupply
San Diego County	296	177	119
California	4,328	45	4,283

Please note: This is a basic analysis of supply and demand of labor for these occupations. This data should be used to discuss the potential gaps or oversupply of workers for these occupations; however, it should not be the only basis for determining whether or not a program should be developed. Additionally, the data does not include workers who are currently in the labor force who could fill these positions or workers who are not captured by publicly available data.

Student Outcomes

Based on the information available in the CTE LaunchBoard,¹¹ students who took courses in the related TOP codes exhibited the following outcomes (Exhibit 8).

Exhibit 8: Strong Workforce Program Metrics for TOP 093440 Electrical Systems & Power Transmission and 095220 Electrical vs. All Programs in San Diego-Imperial Region (PY2014-15)

Metric	TOP 093440	TOP 095220	All Programs
Number of course enrollments ¹²	68	2,709	1,009,712
Number of students who got a degree or certificate ¹³	63	117	17,536
Number of students who transferred ¹⁴	0	0	6,269
Employed in the second fiscal quarter after exit ¹⁵	100%	85%	66%

⁹ Labor supply can be found from two different sources: EMSI or the California Community Colleges Chancellor's Office MIS Data Mart. EMSI uses CIP codes while MIS uses TOP codes. Different coding systems result in differences in the supply numbers.

¹⁰ EMSI. San Diego County (6073). 2017.04 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2016-2021.

¹¹ calpassplus.org/LaunchBoard/SWP.aspx.

¹² The number of enrollments in courses assigned to the TOP code in the selected year.

¹³ The number of unduplicated students who earned a locally-issued certificate, Chancellor's Office approved certificate, associate degree, and/or California Community Colleges bachelor's degree in the selected TOP code.

¹⁴ Students who took non-introductory courses or completed a California Community Colleges Chancellor's Office award in the selected TOP code in selected year who subsequently enrolled for the first time in a four-year institution the following year.

¹⁵ Among all exiters with a valid SSN, the percentage who were employed two quarters after exiting California Community Colleges.

Metric	TOP 093440	TOP 095220	All Programs
Employed in the fourth fiscal quarter after exit ¹⁶	100%	80%	65%
Job closely related to field of study ¹⁷	N/A ¹⁸	N/A ¹⁹	N/A ²⁰
Median earnings in the second fiscal quarter after exit ²¹	\$34,016	\$14,003	\$9,134
Median change in earnings ²²	77%	53%	31%
Attained a living wage ²³	100%	82%	50%

Top Employers and Work Locations

Between January 1, 2015 and December 31, 2017, the top five employers in San Diego County for this occupation were [Cintas](#), [Bridgestone/Firestone](#), [CBRE](#), [Marriott International Inc.](#) and [Lincoln Military Housing](#) (Exhibit 9).

Exhibit 9: Top Industries and Employers in San Diego County for *First-Line Supervisors of Mechanics, Installers and Repairers*

Top Employers	Top Industries
<ul style="list-style-type: none"> • Cintas • Bridgestone/Firestone • CBRE • Marriott International Inc • Lincoln Military Housing 	<ul style="list-style-type: none"> • Construction • Manufacturing • Professional, Scientific and Technical Services • Public Administration • Educational Services

Skills, Education and Certifications

Exhibit 10 indicates the educational attainment for the occupation found currently in the national labor force. The typical entry-level education for this occupation is a [high school diploma or equivalent](#).²⁴

¹⁶ Among exiting students with a valid SSN, the percentage who were employed four quarters after exiting California Community Colleges.

¹⁷ Among students who responded to the CTEOS, the percentage reporting employment in the same or similar field as their program of study.

¹⁸ Data for this metric has not been released for PY2014-15; however, in PY2013-14, the result was 83%.

¹⁹ Data for this metric has not been released for PY2014-15; however, in PY2013-14, the result was 93%.

²⁰ Data for this metric has not been released for PY2014-15; however, in PY2013-14, the result was 81%.

²¹ Among exiting students, the median second -quarter earnings one year after the year in which they exited California Community Colleges

²² Among exiting students with a valid SSN, the percentage change in earnings one year before and one year after exiting California Community Colleges.

²³ Among completers and skills-builders who exited, the proportion of students who attained a living wage.

²⁴ EMSI. San Diego County (6073). 2017.04 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2016-2021.

Exhibit 10: National Educational Attainment of First-Line Supervisors of Mechanics, Installers and Repairers

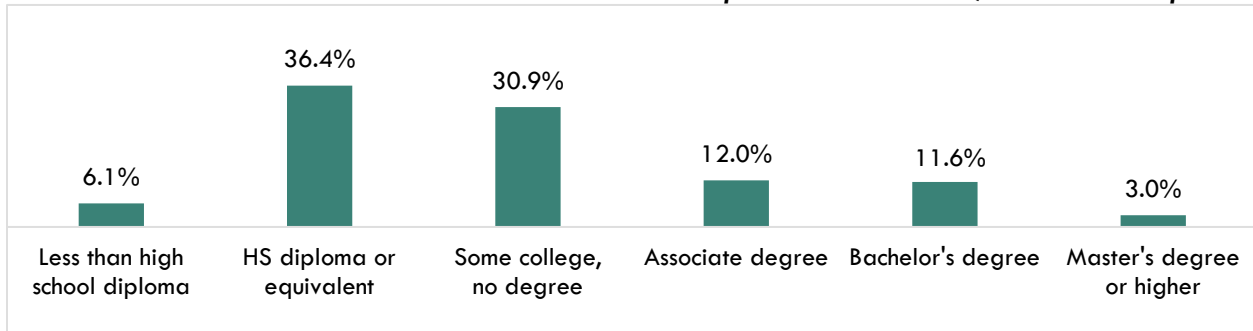


Exhibit 11 lists the top specialized, soft and software skills that appeared in online job postings between January 1, 2015 and December 31, 2017.

Exhibit 11: Top Skills for First-Line Supervisors of Mechanics, Installers and Repairers in San Diego County²⁵

Specialized Skills	Soft Skills	Software Skills
<ul style="list-style-type: none"> • Repair • Supervisory Skills • Scheduling • Budgeting • Plumbing 	<ul style="list-style-type: none"> • Communication Skills • Preventive Maintenance • Planning • Computer Skills • Writing 	<ul style="list-style-type: none"> • Microsoft Excel • Microsoft Office • Microsoft Word • Microsoft PowerPoint • Microsoft Outlook

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²⁵ Labor Insight Jobs. Burning Glass Technologies. San Diego, CA. Full years 2015-2017.