

Home Appliance Repairers

Labor Market Analysis: San Diego County

January 2018

Summary

The following list summarizes findings from the labor market analysis below for *Home Appliance Repairers*:

- Between 2016 and 2021, *Home Appliance Repairers* are projected to increase by two jobs (or one percent) in San Diego County.
- Employers in San Diego County will need to hire 25 workers annually to fill new jobs and to backfill jobs due to attrition such as retirement or turnover.
- Between 2010 and 2017, there was an average of 52 online job postings per year for *Home Appliance Repairers* in San Diego County.
- *Home Appliance Repairers* earn median hourly earnings of \$16.43, 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 colleges supply the state with an annual average of 43 awards for this occupation: Los Medanos College and Hacienda La Puente Adult Education.
- Comparing labor market demand against labor supply, there is a supply gap for this occupation in San Diego County, with 25 annual openings and zero awards. Comparatively, there are 431 annual openings in California and 43 awards.
- Between January 1, 2015 and December 31, 2017, the top four employers in San Diego County for this occupation were Sears, A&E Factory Services, Hilton Hotel Corporation and Ecolab Incorporated.
- The typical on-the-job training for this profession is moderate-term. The typical entry-level education is a high school diploma or equivalent.

Introduction

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

Home Appliance Repairers (SOC 49-9031): Repair, adjust or install all types of electric or gas household appliances, such as refrigerators, washers, dryers and ovens. Sample reported job titles include:

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.

- Appliance Technician
- Washer Repairman
- Vacuum Repairer
- Service Technician
- Service Manager
- Appliance Service Technician
- Household Appliance Installer
- Electrical Appliance Servicer Apprentice
- Refrigerator Repairman
- Repair Technician

Projected Occupational Demand

Between 2016 and 2021, *Home Appliance Repairers* are projected to increase by **two jobs** (or **one percent**) in San Diego County (Exhibit 1a and Exhibit 1b).²

Exhibit 1a: Number of Jobs for Home Appliance Repairers (2006-2021)³

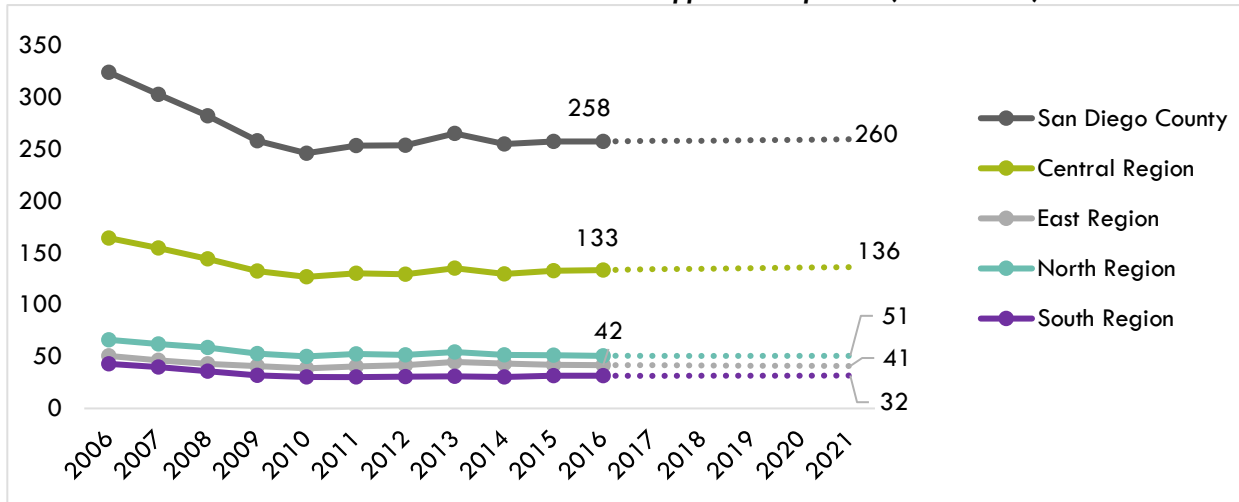
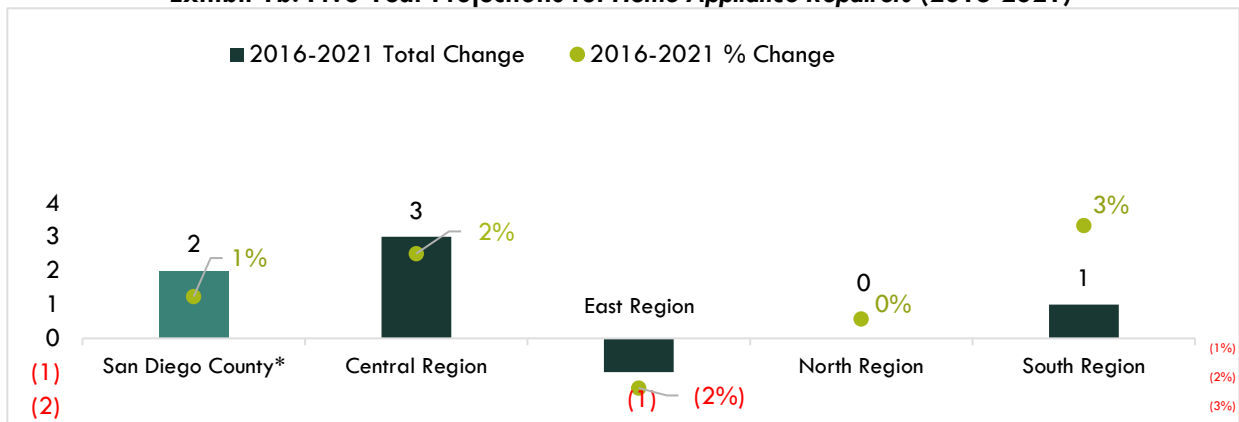


Exhibit 1b: Five-Year Projections for Home Appliance Repairers (2016-2021)⁴



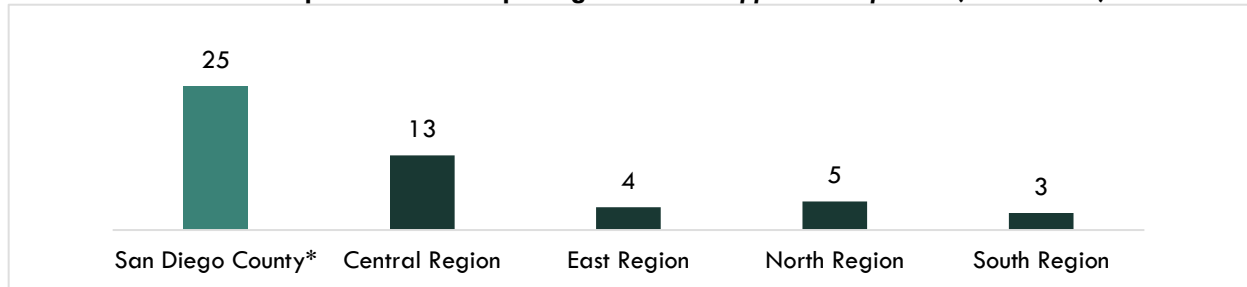
² South, East, Central and North Regions' ZIP codes in this report are defined by the local Workforce Development Board, the San Diego Workforce Partnership.

³ Economic Modeling Specialists, Int'l. (EMSI). San Diego County (6073). 2017.03 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2006-2021.

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

Employers in San Diego County will need to hire 25 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 Home Appliance Repairers (2016-2021)⁵

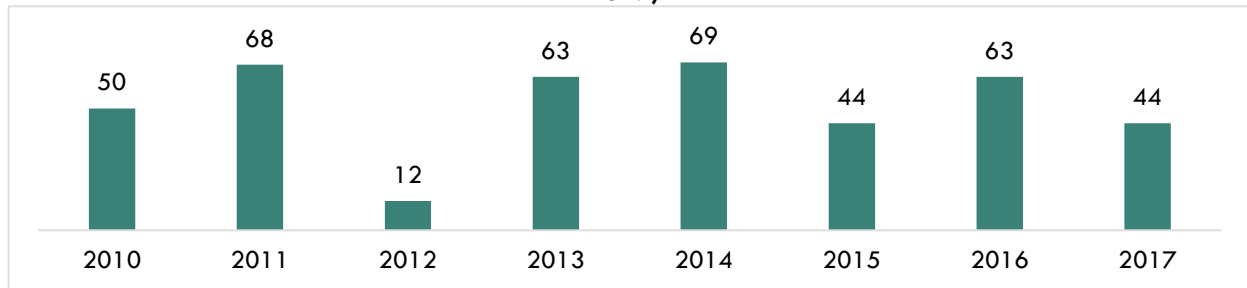


*Total annual openings for the sub regions in San Diego County may not add up exactly due to rounding.

Online Job Postings

Between 2010 and 2017, there was an average of 52 online job postings per year for Home Appliance Repairers in San Diego County (Exhibit 3).

Exhibit 3: Number of Online Job Postings for Home Appliance Repairers in San Diego County (2010-2017)⁶



Earnings

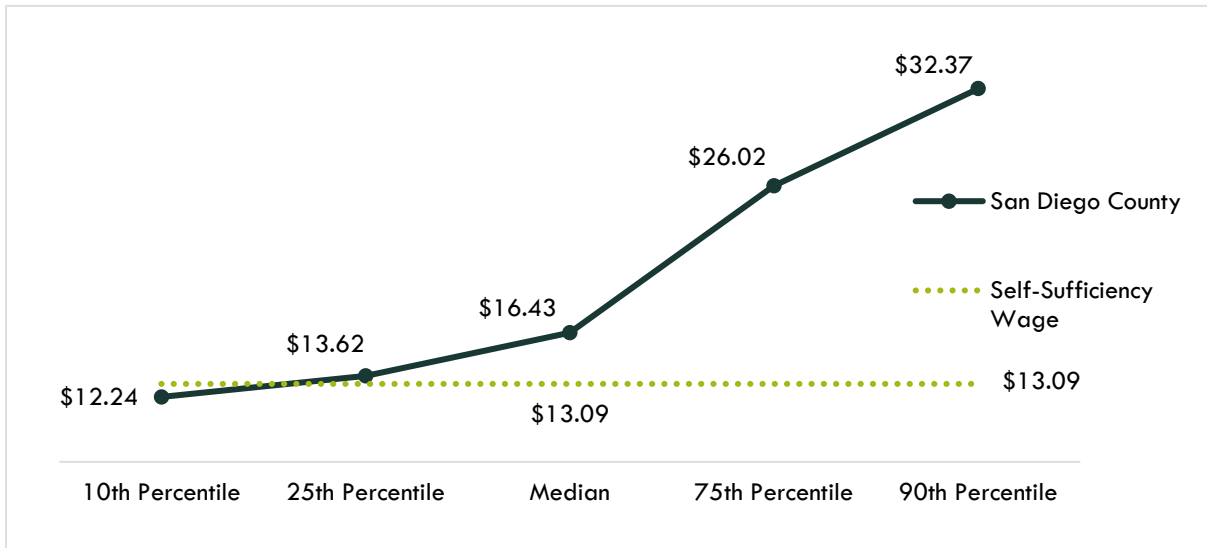
Home Appliance Repairers earn median hourly earnings of \$16.43, more than the self-sufficiency wage (\$13.09 per hour)⁷ for a single adult in San Diego County (Exhibit 4).

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

⁶ Labor Insight Jobs. Burning Glass Technologies. San Diego, CA. Full years 2010, 2011, 2012, 2013, 2014, 2015 2016, and 2017.

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

Exhibit 4: Hourly Earnings for Home Appliance 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.

Exhibit 5: Related TOP Codes in San Diego County

SOC 49-9031: Home Appliance Repairers

TOP 093510: Appliance Repair

According to the California Community Colleges Chancellor's Office Management Information System (MIS) Data Mart, **two** colleges supply the state with awards for this occupation: **Hacienda La Puente Adult Education** and **Los Medanos 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.

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

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)
093510	Appliance Repair	43	18	25
	<ul style="list-style-type: none"> Los Medanos 		18	
	<ul style="list-style-type: none"> Hacienda La Puente Adult Education 			25

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 **25** annual openings and zero awards. Comparatively, there are **431** annual openings in California and **43** 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	25	0	25
California	431	43	388

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).

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.

**Exhibit 8: Strong Workforce Program Metrics for
TOP 093510 Appliance Repair (Statewide) vs. All Programs in San Diego-Imperial Region (PY2014-15)**

Metric	TOP 093510 Appliance Repair	All Programs
Number of course enrollments ¹²	250	1,009,712
Number of students who got a degree or certificate ¹³	19	17,536
Number of students who transferred ¹⁴	0	6,269
Employed in the second fiscal quarter after exit ¹⁵	77%	66%
Employed in the fourth fiscal quarter after exit ¹⁶	86%	65%
Job closely related to field of study ¹⁷	N/A ¹⁸	N/A ¹⁹
Median earnings in the second fiscal quarter after exit ²⁰	\$11,184	\$9,134
Median change in earnings ²¹	25%	31%
Attained a living wage ²²	58%	50%

Top Employers and Work Locations

Between January 1, 2017 and December 31, 2017, the top four employers in San Diego County for this occupation were **Sears, A&E Factory Services, Hilton Hotel Corporation and Ecolab Incorporated** (Exhibit 9).

Exhibit 9: Top Industries and Employers in San Diego County for Home Appliance Repairers

Top Employers	Top Industries
<ul style="list-style-type: none"> • Sears • Viejas Enterprises • Prosol • Interstate Hotels & Resorts • Hyatt 	<ul style="list-style-type: none"> • Department Stores • Ventilation, Heating, Air-Conditioning and Commercial Refrigeration Equipment Manufacturing • Traveler Accommodation • Performing Arts Companies

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.

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; in PY2013-14, there were fewer than three students, so the metric has been suppressed.

¹⁹ Data for this metric has not been released for PY2014-15; however, in PY2013-14, the result was 81%.

²⁰ Among exiting students, the median second-quarter earnings one year after the year in which they exited California Community Colleges.

²¹ Among exiting students with a valid SSN, the percentage change in earnings one year before and one year after exiting California Community Colleges.

²² Among completers and skills-builders who exited, the proportion of students who attained a living wage.

Skills, Education and Certifications

Exhibit 10 indicates the educational attainment for the occupation found currently in the national labor force. The typical on-the-job training for this occupation is **moderate-term on-the-job training**. The typical entry-level education is a **high school diploma or equivalent**.²³

Exhibit 10: National Educational Attainment of Home Appliance Repairers

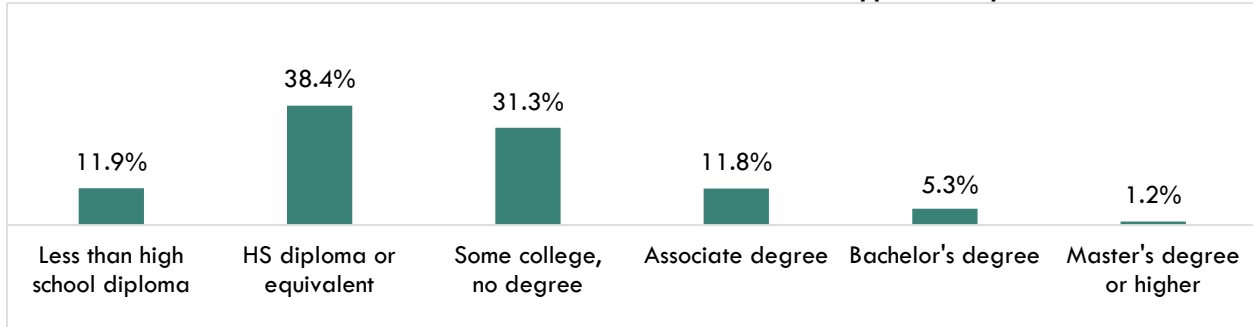


Exhibit 11 lists the top specialized, soft and software skills that appeared in online job postings between January 1, 2015 and December 31, 2017.

Exhibit 11: Top Skills for Home Appliance Repairers in San Diego County²⁴

Specialized Skills	Soft Skills	Software Skills
<ul style="list-style-type: none"> • Repair • Test Equipment • Appliance Repair • Mechanical Knowledge • Sales/Product Sales 	<ul style="list-style-type: none"> • Physical Demand • Communication Skills • Organizational Skills • Teamwork/Collaboration • Time Management 	<ul style="list-style-type: none"> • Microsoft Vista

Tina Ngo Bartel, Director
Center of Excellence, San Diego-Imperial Region
tngobartel@miracosta.edu



²³ EMSI. San Diego County (6073). 2017.04 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2016-2021.

²⁴ Labor Insight Jobs. Burning Glass Technologies. San Diego, CA. Full years 2015-2017.