








Plumbing, Pipefitting and Steamfitting

Labor Market Analysis for San Diego College of Continuing Education

September 2021

Summary

NEW PROGRAM RECOMMENDATION?	EVIDENCE OF A SUPPLY GAP?	AT OR ABOVE THE LIVING WAGE?	EXPECTED LEVEL OF EDUCATION
 Do Not Proceed with New Program	 	 	<input type="checkbox"/> Bachelor's Degree+ <input type="checkbox"/> Associate Degree <input type="checkbox"/> Some College or Certificate <input checked="" type="checkbox"/> HS Diploma or Equivalent <input type="checkbox"/> Less than a HS Diploma <input type="checkbox"/> Apprenticeship
SUPPORT FOR PROGRAM MODIFICATION?	NUMBER OF INSTITUTIONS THAT PROVIDE TRAINING	NUMBER OF ANNUAL JOB OPENINGS	
The COE defers to the region	<div style="text-align: center;">LOW</div> 	<div style="text-align: center;">LOW</div> 	

This report provides labor market information for an occupation selected by San Diego College of Continuing Education for its *Plumbing, Pipefitting and Steamfitting* program. The training provided by this program is likely to lead to employment as *Septic Tank Servicers and Sewer Pipe Cleaners*. According to available labor market information, *Septic Tank Servicers and Sewer Pipe Cleaners* in San Diego County has a labor market demand of 35 annual job openings (while average demand for a single occupation in San Diego County is 242 annual job openings). On average, one institution supplies one for-credit award and one institution supplies eight noncredit awards in San Diego County for this occupation. In short, the region supplies nine for-credit and noncredit awards for 35 annual job openings, suggesting that there is a supply gap in the labor market. Entry-level wages are below the living wage for this occupation, but median earnings are above the living wage. This brief recommends not proceeding with developing a new program and defers to the region for a program modification because 1) there is a supply gap; and 2) there is a low number of annual job openings; and 3) entry-level wages are below the living wage, but median earnings are above the living wage.

Introduction

This report provides labor market information in San Diego County for an occupation related to the six-digit Taxonomy of Programs (TOP)¹ code, Plumbing, Pipefitting and Steamfitting (TOP 0952.30). The purpose of this brief is to assist noncredit program providers in the region, such as San Diego College of Continuing Education (SDCCE), with program development and review. SDCCE identified one occupation from the Standard Occupational Classification (SOC)² system for *Plumbing, Pipefitting and Steamfitting*, which will be the focus of this report:

Septic Tank Servicers and Sewer Pipe Cleaners (SOC 47-4071): Clean and repair septic tanks, sewer lines, or drains. May patch walls and partitions of tank, replace damaged drain tile, or repair breaks in underground piping. Sample reported job titles include:

- Drain Technician
- Public Works Technician
- Service Technician
- Septic Cleaner
- Laborer
- Septic Pump Truck Driver
- Sewer Bricklayer
- Septic Tank Service Technician
- Maintenance Worker
- Drain Cleaner

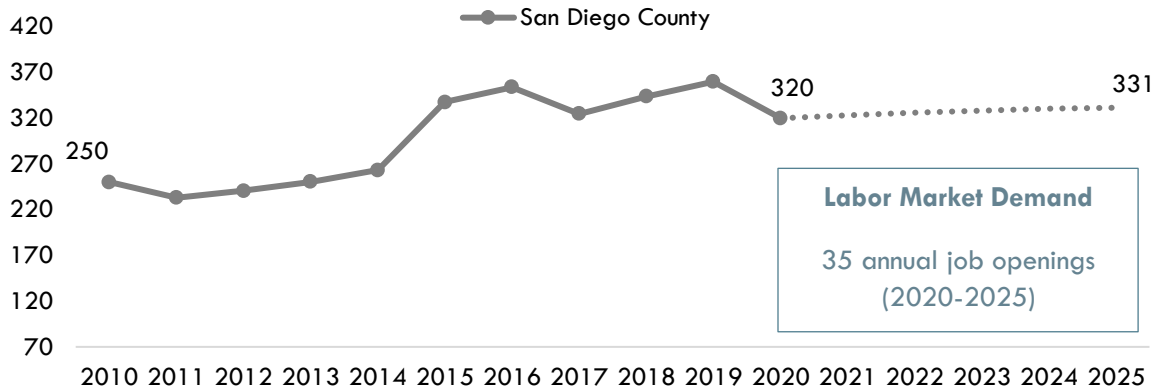
¹ Taxonomy of Programs (TOP) is a system of codes used by the California Community Colleges for the purpose of collecting, calculating, or disseminating data about similar training programs.

² 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](https://www.bls.gov/soc).

Projected Occupational Demand

Between 2020 and 2025, *Septic Tank Servicers and Sewer Pipe Cleaners* are projected to increase by 11 net jobs or three percent (Exhibit 1). Employers in San Diego County will need to hire 35 workers annually to fill new jobs and backfill jobs due to attrition caused by turnover and retirement, for example.

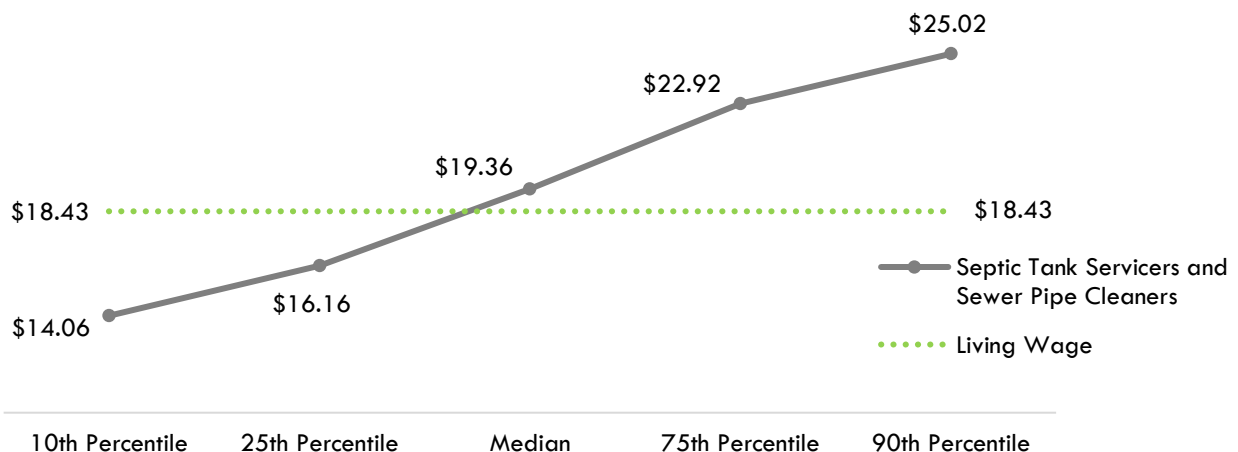
Exhibit 1: Number of Jobs for Septic Tank Servicers and Sewer Pipe Cleaners (2010-2025)³



Earnings

Septic Tank Servicers and Sewer Pipe Cleaners receive entry-level hourly earnings of \$16.16; this is less than the living wage for a single adult in San Diego County, which is \$18.43 per hour (Exhibit 2).⁴

Exhibit 2: Hourly Earnings⁵ for Septic Tank Servicers and Sewer Pipe Cleaners in San Diego County⁶



³ EMSI 2021.2; QCEW, Non-QCEW, Self-Employed.

⁴ "Family Needs Calculator (formerly the California Family Needs Calculator)," Insight: Center for Community Economic Development, last updated 2021. insightccd.org/family-needs-calculator/.

⁵ 10th and 25th percentiles could be considered entry-level wages, and 75th and 90th percentiles could be considered experienced wages for individuals who may have been in the occupation longer, received more training than others, etc.

⁶ EMSI 2021.2; QCEW, Non-QCEW, Self-Employed.

Educational Supply

Educational supply for an occupation can be estimated by analyzing the number of awards in related Taxonomy of Programs (TOP) or Classification of Instructional Programs (CIP) codes.⁷ According to TOP and CIP⁸ data, one community college supplies the region with for-credit awards for Plumbing, Pipefitting and Steamfitting (TOP 0952.30): [San Diego City College](#) (Exhibit 3a).

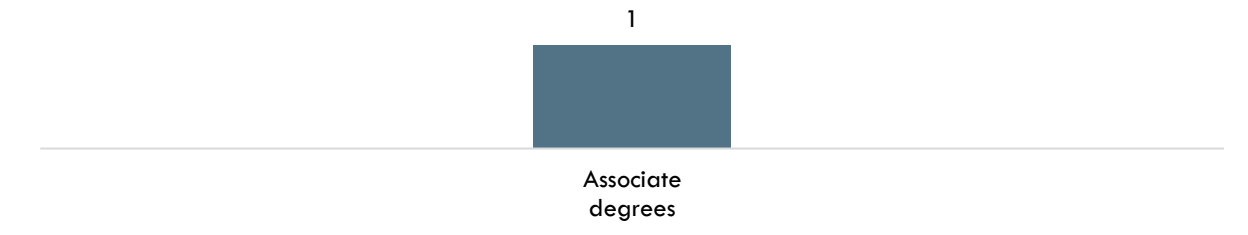
Exhibit 3a: Number of For-Credit Awards (Certificates and Degrees) Conferred by Postsecondary Institutions (Program Years 2017-18 through 2019-20)

College	Award Type	PY 17-18	PY 18-19	PY 19-20	3-Yr Total Average
San Diego City	Associate Degree	0	3	0	1
Total		0	3	0	1

Note: The numbers may not add up exactly due to rounding.

By for-credit award type, the college supplied the most awards for [associate degrees](#) based on the three-year average (program years 2017-18 through 2019-20) (Exhibit 3b).

Exhibit 3b: Total Number of For-credit Awards by Type for Plumbing, Pipefitting and Steamfitting (TOP 0952.30) in San Diego County (3-Yr Average)



⁷ TOP data comes from the California Community Colleges Chancellor's Office MIS Data Mart (datamart.cccco.edu) and CIP data comes from the Integrated Postsecondary Education Data System (nces.ed.gov/ipeds/use-the-data).

⁸ There are two CIP codes related to Plumbing, Pipefitting and Steamfitting (TOP 0952.30): Pipefitting/Pipefitter and Sprinkler Fitter (CIP 46.0502) and Plumbing Technology/Plumber (CIP 46.0503).

In terms of noncredit awards, only San Diego College of Continuing Education provides noncredit awards for Plumbing, Pipefitting and Steamfitting (TOP 0952.30), with a three-year average of **eight** noncredit awards (program years 2017-18 through 2019-20) (Exhibit 4).

**Exhibit 4: Number of Noncredit Awards Conferred by SDCCE
(Program Years 2017-18 through 2019-20)**

Program Title	Award Type	PY 17-18	PY 18-19	PY 19-20	3-Yr Total Average
Plumbing	Noncredit	23	1	1	8

Demand vs. Supply

Comparing labor demand (annual openings) with labor supply⁹ suggests that there is a **supply gap** in San Diego County, with **35** annual openings and **nine** for-credit and noncredit awards supplied by the region (Exhibit 5).

Exhibit 5: Labor Demand (Annual Openings) Compared with Labor Supply (Average Annual Awards)

TOP6 Program	Demand (Annual Openings)	Supply (Total Annual Average Supply)		Supply Gap or Oversupply
		Noncredit	For-Credit	
Plumbing, Pipefitting and Steamfitting (TOP 0952.30)	35	8	1	26

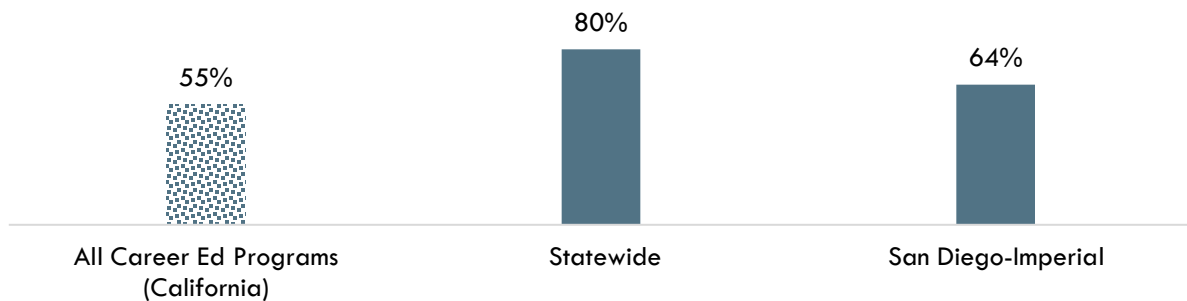
Please note: This is a basic analysis of supply and demand of labor. The data does not include workers currently in the labor force who could fill these positions or workers who are not captured by publicly available data. This data should be used to discuss the potential gaps or oversupply of workers;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

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.

Student Outcomes and Regional Comparisons

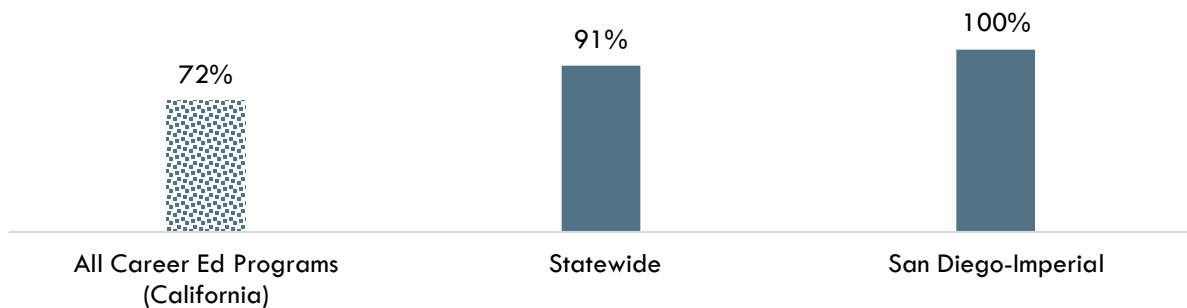
According to the California Community Colleges LaunchBoard, 64 percent of students in the San Diego-Imperial region earned a living wage after completing a Plumbing, Pipefitting and Steamfitting (TOP 0952.30) program, compared to 80 percent statewide and 55 percent of students in Career Education programs in general across the state (Exhibit 6a).¹⁰

**Exhibit 6a: Percentage of Students Who Earned a Living Wage by Program
(Plumbing, Pipefitting and Steamfitting, PY 2017-18)¹¹**



According to the California Community Colleges LaunchBoard, 100 percent of students in the San Diego-Imperial region obtained a job closely related to their field of study after completing a Plumbing, Pipefitting and Steamfitting (TOP 0952.30) program, compared to 91 percent statewide and 72 percent of students in Career Education programs in general across the state (Exhibit 6b).¹²

**Exhibit 6b: Percentage of Students in a Job Closely Related to Field of Study by Program
(Plumbing, Pipefitting and Steamfitting, PY 2016-17)¹³**



¹⁰ "California Community Colleges Strong Workforce Program," California Community Colleges, calpassplus.org/LaunchBoard/SWP.aspx.

¹¹ Among completers and skills builders who exited, the proportion of students who attained a living wage.

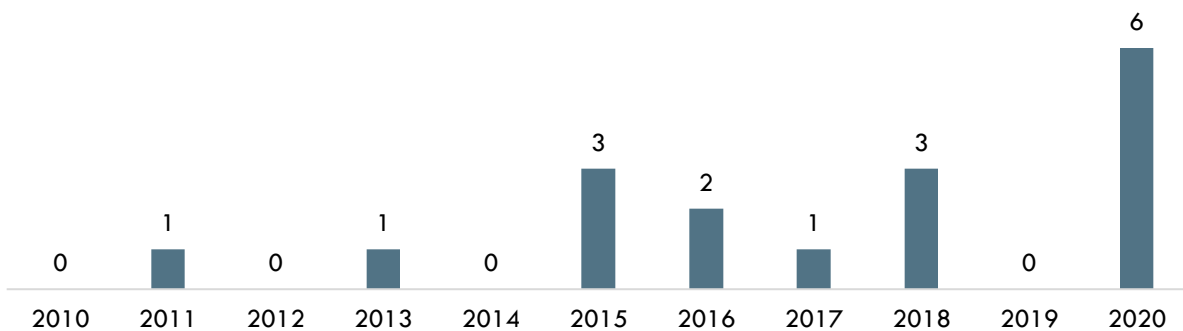
¹² "California Community Colleges Strong Workforce Program," California Community Colleges, calpassplus.org/LaunchBoard/SWP.aspx.

¹³ Most recent year with available data is Program Year 2016-17. Percentage of Students in a Job Closely Related to Field of Study: Among students who responded to the CTEOS, the percentage reporting employment in the same or similar field as their program of study.

Online Job Postings

This report analyzes not only historical and projected (traditional LMI) data, but also recent data from online job postings (real-time LMI). Online job postings may provide additional insight about recent changes in the labor market that are not captured by historical data. Between 2010 and 2020, there was an average of **two** online job postings per year for *Septic Tank Servicers and Sewer Pipe Cleaners* in San Diego County (Exhibit 7). Please note that online job postings do **not** equal labor market demand; demand is represented by annual job openings (see Exhibit 1). Employers may post a position multiple times for various reasons, such as increasing the pool of applicants, for example.

Exhibit 7: Number of Online Job Postings for Septic Tank Servicers and Sewer Pipe Cleaners in San Diego County (2010-2020)¹⁴



Top Employers

Between January 1, 2018 and December 31, 2020, the top five employers in San Diego County for this occupation were [Anderson Plumbing Heating & Air](#), [Burtech Plumbing](#), [Drain Mob](#), [Lineage Logistics](#), and [Perry Plumbing & Pipelining](#) based on online job postings (Exhibit 8).

Exhibit 8: Top Employers for Septic Tank Servicers and Sewer Pipe Cleaners in San Diego County¹⁵

Top Employers	
<ul style="list-style-type: none">• Anderson Plumbing Heating & Air• Burtech Plumbing• Drain Mob• Lineage Logistics	<ul style="list-style-type: none">• Perry Plumbing & Pipelining• Rooter Hero Plumbing• Sewer Pros

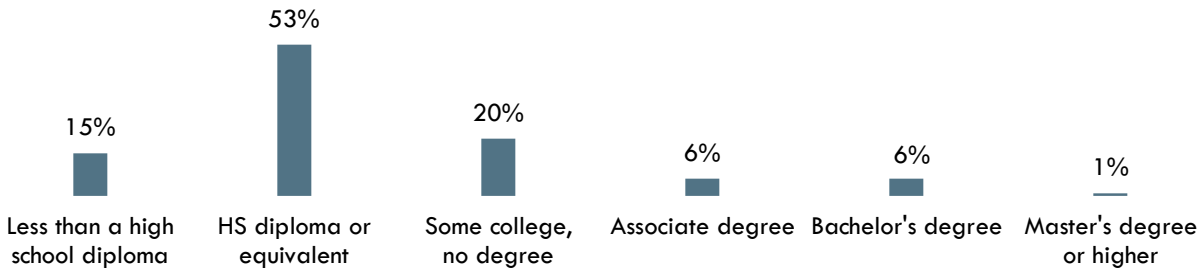
¹⁴ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2010-2020.

¹⁵ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2018-2020.

Education, Skills, and Certifications

Exhibit 9 indicates the educational attainment for this occupation found currently in the national labor force. The typical entry-level education is a [high school diploma or equivalent](#).¹⁶

Exhibit 9: National Educational Attainment of Septic Tank Servicers and Sewer Pipe Cleaners¹⁷



*may not total 100 percent due to rounding

Exhibit 10 lists the top specialized, soft, and software skills that appeared in online job postings between January 1, 2018 and December 31, 2020.

Exhibit 10: Top Skills for Septic Tank Servicers and Sewer Pipe Cleaners in San Diego County¹⁸

Specialized Skills	Soft Skills	Software Skills
<ul style="list-style-type: none"> • Plumbing • Cleaning • Repair • Basic Mathematics • Camera Operation • Drain Cleaning • Forklift Operation • Hiring Practices • Logistics • Plumbing Repairs • Power Tools • Residential Plumbing • Soldering • Valve Installation 	<ul style="list-style-type: none"> • Creativity • Detail-Oriented • Initiative • Leadership • Physical Abilities • Problem Solving • Teamwork / Collaboration 	<ul style="list-style-type: none"> • None Listed

¹⁶ EMSI 2021.2; QCEW, Non-QCEW, Self-Employed.

¹⁷ "Educational Attainment for Workers 25 Years and Older by Detailed Occupation," Bureau of Labor Statistics, last modified April 4, 2021. bls.gov/emp/tables/educational-attainment.htm.

¹⁸ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2018-2020.

Exhibit 11 lists the top certifications that appeared in online job postings between January 1, 2018 and December 31, 2020.

Exhibit 11: Top Certifications for Septic Tank Servicers and Sewer Pipe Cleaners in San Diego County¹⁹

Top Certifications in Online Job Postings

1. Driver's License²⁰
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¹⁹ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2018-2020.

²⁰ 'Driver's License' is typically excluded from PR reports. It was included because it was the only certification listed for this occupation.

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Important Disclaimers

All representations included in this report have been produced from primary research and/or secondary review of publicly and/or privately available data and/or research reports. This study examines the most recent data available at the time of the analysis; however, data sets are updated regularly and may not be consistent with previous reports. Efforts have been made to qualify and validate the accuracy of the data and the report findings; however, neither the Centers of Excellence for Labor Market Research (COE), COE host district, nor California Community Colleges Chancellor's Office are responsible for the applications or decisions made by individuals and/or organizations based on this study or its recommendations.

This workforce demand report uses state and federal job projection data that was developed before the economic impact of COVID-19. The COE is monitoring the situation and will provide more information as it becomes available. Please consult with local employers to understand their current employment needs.