



Labor Market Analysis for Program Recommendation

Diesel Technology Occupations

North Bay Subregion

Prepared by the Bay Region Center of Excellence for Labor Market Research

Certificate Program

May 2026

Recommendation Based on Labor Market Data: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> With Reservations <input type="checkbox"/> No		
	Earning Wage Meets Living Wage	Meets Demand
Bay Region	Entry Level Hourly Wage- \$28 Mid-Career Hourly Wage- \$36 Mid-Career Hourly Wage at or above the Bay Living Wage (\$27)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Demand: 351 Supply: 37 (11% of Demand is Met) Gap: 314 In-Demand? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
North Bay Subregion	Entry Level Hourly Wage- \$27 Mid-Career Hourly Wage-\$34 Mid-Career Hourly Wage at or above the Subregion Living Wage (\$24)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Demand: 72 Supply: 17 (24% of Demand is Met) Gap: 55 In-Demand? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Note: An occupation is considered to provide a living wage if the mid-career wage is at or above the amount required for a single adult to be economically self-sufficient within a specified region. As a rule of thumb, an occupation will be considered **in-demand** when the supply is less than 75% of the demand **and** the labor market gap exceeds 40 openings (a reasonable regional threshold for starting a new program), but this approach may not apply in all cases. For definitions of demand, supply, and living wage, please scroll to the bottom of the report under **Definitions**.

Recommendation

The labor market data supports this proposed program. The occupations meet both the Bay Region and North Bay subregion living wage at the entry and mid-career levels. An additional 314 students are needed in the Bay Region

and 55 students in the North Bay subregion to complete their program. Lastly, only 11% of labor market demand is being met in the Bay Region, and 24% of demand is being met in the North Bay subregion overall.

Introduction

This report provides student outcomes data on employment and earnings for TOP 0947.00 - Diesel Technology programs in the state and region. It is recommended that these data be reviewed to better understand how outcomes for students taking courses on this TOP code compare to potentially similar programs at subregion in the state and region.

This report profiles Diesel Technology Occupations in the 12 county Bay Region and in the North Bay subregion. The occupations classified as middle-skill occupations require a certificate, or an associate degree, or it may require a bachelor's degree, but 33% or fewer of current workers in these roles hold one.

- Bus and Truck Mechanics and Diesel Engine Specialists (49-3031):** Diagnose, adjust, repair, or overhaul buses and trucks, or maintain and repair any type of diesel engines. Includes mechanics working primarily with automobile or marine diesel engines.
 - Typical Entry-Level Educational: High school diploma or equivalent
 - Skill Level: Middle-Skill
 - Work Experience Required: None
 - Percentage of individuals 25+ with an associate degree, certificate, or some postsecondary coursework as their highest level of education attainment: 38%

Occupational Demand

Table 1. Employment Outlook for Diesel Technology Occupations in the Bay Region

Occupation	2024 Jobs	2029 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	Entry Level Hourly	Mid-Career Hourly Wage
Bus and Truck Mechanics and Diesel Engine Specialists	3,903	4,045	142	4%	1,753	351	\$28	\$36
Total	3,903	4,045	142	4%	1,753	351	\$28	\$36

Source: Lightcast 2026.1

The Bay Region includes: Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano and Sonoma Counties

Table 2. Employment Outlook for Diesel Technology Occupations in the North Bay Subregion

Occupation	2024 Jobs	2029 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	Entry Level Hourly	Mid-Career Hourly Wage
Bus and Truck Mechanics and Diesel Engine Specialists	773	812	39	5%	359	72	\$27	\$34
Total	773	812	39	5%	359	72	\$27	\$34

Source: Lightcast 2026.1

North Bay Subregion includes: Marin, Napa, Solano, Sonoma Counties

Job Postings in the Bay Region and North Bay Subregion

Table 3. Number of Job Postings by Occupation for the latest 12 months

Occupation	Bay Region	North Bay
Bus and Truck Mechanics and Diesel Engine Specialists	774	131

Source: Lightcast 2026.1; "Job Posting Analytics." May. 2025 - Apr. 2026

Table 4a. Top Job Titles in Job Postings for Diesel Technology Occupations in the Bay Region

Title	Bay	Title	Bay
Diesel Mechanics	162	Lead Diesel Mechanics	18
Diesel Technicians	69	Fleet Diesel Mechanics	15
Mechanics	62	Mobile Diesel Technicians	15
Diesel Mechanic Technicians	51	Diesel Truck Mechanics	14
Diesel Fleet Mechanic Technicians	36	Forklift Mechanics	11
Heavy Duty Diesel Mechanics	31	Diesel Truck Technicians	10
Mobile Diesel Mechanics	22	Heavy Equipment Diesel Mechanics	10
Diesel Technicians/Mechanics	20	Tire Technicians	9
Refrigeration Mechanics	20	Fleet Mechanics	8

Source: Lightcast 2026.1; "Job Posting Analytics." May. 2025 - Apr. 2026

Table 4b. Top Job Titles in Job Posting for Diesel Technology Occupations in the North Bay Subregion

Title	North Bay	Title	North Bay
Diesel Mechanics	36	Mobile Diesel Technicians	3
Diesel Technicians/Mechanics	14	Diesel Mechanic Technicians	3
Diesel Technicians	10	Diesel Fleet Mechanic Technicians	2
Refrigeration Mechanics	8	Forklift Mechanics	2
Fleet Diesel Mechanics	5	Heavy Duty Diesel Mechanics	2
Mobile Diesel Mechanics	4	Diesel Shop Foremen	2
Mechanics/Technicians	4	Master Technicians	2
Lead Diesel Mechanics	4	Mechanic Foremen	2
Heavy Equipment Diesel Mechanics	4	Tire Technicians	2

Source: Lightcast 2026.1; "Job Posting Analytics." May. 2025 - Apr. 2026

Industry Concentration

Table 5. Industries Hiring for Diesel Technology Occupations in the Bay Region

Industry - 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2024)	Jobs in Industry (2029)	% Change (2024-29)	% Occupation Group in Industry (2024)
General Automotive Repair	488	516	6%	13%
Local Government, Excluding Education and Hospitals	456	478	5%	12%
Solid Waste Collection	186	217	16%	5%
Federal Government, Military	162	169	4%	4%
General Freight Trucking, Local	158	147	-6%	4%
School and Employee Bus Transportation	129	150	17%	3%
Elementary and Secondary Schools (Local Government)	104	108	3%	3%
Passenger Car Rental	88	89	1%	2%
Specialized Freight (except Used Goods) Trucking, Local	93	86	-8%	2%
Motor Vehicle Supplies and New Parts Merchant Wholesalers	76	61	-20%	2%

Source: Lightcast 2026.1

Table 6. Top Employers Posting Diesel Technology Occupations in the Bay Region and the North Bay Subregion

Employer	Bay	Employer	North Bay
US Foods	57	Penske	21
Mv Transportation	55	Transdev	8
Penske	38	United Rentals	5
VITUS Search Group	30	Ryder	4
Ryder	22	Clean Harbors	4
United Rentals	22	Jerry's Service Occidental Towing	4

Source: Lightcast 2026.1; "Job Posting Analytics." May. 2025 - Apr. 2026

Educational Supply

There are three community colleges in the Bay Region issuing 37 awards on average annually (last 3 years ending 2024-25) on TOP 0947.00 - Diesel Technology. In the North Bay subregion, there is one community college that issued 17 awards on average annually (last 3 years) on this TOP code.

There are no other CTE educational institutions in the Bay Region issuing awards on average annually (last 3 years ending 2023-24) on CIP 47.0605- Diesel Mechanics Technology/Technician. There are no other CTE educational institutions in the North Bay subregion issuing awards on average annually (last 3 years) on this CIP code.

Table 7. Community College Awards on TOP 0947.00 - Diesel Technology in the Bay Region

College	Subregion	Associate Degree	High unit Certificate	Low unit Certificate	Total
Alameda	East Bay	1	5	0	6
Las Positas	East Bay	3	11	0	14
Santa Rosa	North Bay	1	0	16	17
Total	-	5	16	16	37

Source: Data Mart

Note: The annual average for awards is 2022-23 to 2024-25.

Gap Analysis

Based on the data included in this report, there is a labor market gap in the Bay Region with 351 annual openings for the Diesel Technology occupational cluster and 37 annual (3-year average) awards for an annual undersupply of 314 students. In the North Bay subregion, there is also a gap with 72 annual openings and 17 annual (3-year average) awards for an annual undersupply of 55 students.

Student Outcomes

Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0947.00 - Diesel Technology

Metric Outcomes	Bay All CTE Program	State 0947.00	Bay 0947.00	North Bay 0947.00
Students with a Job Closely Related to Their Field of Study	75%	77%	NA	NA
Median Annual Earnings for SWP Exiting Students	\$58,379	\$50,524	\$52,368	NA
Median Change in Earnings for SWP Exiting Students	31%	61%	42%	NA
Exiting Students Who Attained the Living Wage	50%	56%	48%	NA

Source: DataVista Program Median of 2020 to 2022.

Skills, Certifications and Education

Table 9. Top Skills in Job Postings for Diesel Technology Occupations in the Bay Region

Skill	Posting	Skill	Posting
Diesel Engines	477	Good Driving Record	97
Brakes	187	Occupational Safety and Health Administration (OSHA)	88
Mechanics	170	Heavy Equipment	85
Preventive Maintenance	166	Power Tool Operation	76
Suspension (Vehicle)	166	Lifting Ability	75
Hand Tools	159	Vehicle Maintenance	73
Electrical Systems	136	Welding Equipment	64
Hydraulics	125	Planned Maintenance	60
HVAC	114	Changing Oil	59
Differentials	99	Equipment Repair	58

Skill	Posting	Skill	Posting
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Source: Lightcast 2026.1; "Job Posting Analytics." May. 2025 - Apr. 2026

Table 10. Certifications in Job Postings for Diesel Technology Occupations in the Bay Region

Certification	Posting	Certification	Posting
Valid Driver's License	287	EPA 608 Technician Certification	19
Automotive Service Excellence (ASE) Certification	138	EPA Universal Certification	17
Commercial Driver's License (CDL)	116	HVAC Certification	15
CDL Class A License	67	CDL Class B License	12
DOT Certification	41	ASE Medium-Heavy Truck Certification	9
Air Brake Certification	21	CDL Class C License	5

Source: Lightcast 2026.1; "Job Posting Analytics." May. 2025 - Apr. 2026

Table 11. Education Requirements for Diesel Technology Occupations in the Bay Region

Education Level	Job Postings	% of Total
High school or GED	331	97%
Associate degree	5	1%
Bachelor's degree & higher	5	1%

Source: Lightcast 2026.1; "Job Posting Analytics." May. 2025 - Apr. 2026

Note: 57% of records have been excluded because they do not include a degree level. As a result, the chart above may not be representative of the full sample.

Methodology

Occupations for this report were identified by use of job descriptions and skills listed in O*Net. Labor demand data is sourced from Lightcast occupation and job postings data. Educational supply and student outcomes data is retrieved from multiple sources, including CCCCO Data Mart and CTE Launchboard.

Definitions

Demand refers to average annual openings which includes a combination of both [new jobs and replacement jobs](#) between 2024 to 2029. New jobs represent the total number of additional workers required in an occupation, calculated as the difference between the current number of workers and the projected number of unfilled positions. Replacements are jobs that will need to be filled by [new hires](#) due to existing workers leaving the occupation. The average annual openings figure is derived by dividing total openings (2024 to 2029) by five years.

Supply refers to the average number of [graduates](#) between academic years 2021–2022 and 2023–2024. Graduates include students from community colleges, other two-year private and public institutions, as well as four-year institutions.

Living wage refers to the amount of income required for working families to meet basic needs at a minimally adequate level, considering family composition, ages of children, and geographic differences in costs based on the Self-Sufficiency Standard methodology.

Entry-level wages are the hourly earnings paid to workers who are newly entering an occupation.

Mid-career wages are the hourly earnings paid to workers who have accumulated several years of experience in an occupation, reflecting increased productivity, skill proficiency, and responsibility beyond entry-level roles but short of late-career or senior positions.

Sources

O*Net Online

Lightcast

CTE LaunchBoard www.calpassplus.org

Statewide CTE Outcomes Survey

Employment Development Department Unemployment Insurance Dataset

CCCCO Data Mart

Contacts

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