

Forklift Operation and Certification

Inland Empire/Desert Region (Riverside and San Bernardino counties)

This workforce demand report uses state and federal job projection data 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.

Summary

- This report provides occupational data related to the California Community College logistics and materials transportation (TOP 0510.00) program. One occupation is community college-level, two occupations are secondary-level, and two occupations are no formal education-level.
- Four of these occupations are considered essential critical infrastructure occupations.
- Regional employment for the community college-level occupation is expected to **increase by 28% between 2019 and 2024**. A total of **160 community college-level annual job openings** will be available each year over the five-year timeframe.
- The **median-level, 50th percentile, hourly wage** for the community college-level occupation is **\$20.23 per hour, below the \$21.78 per hour self-sustainable standard** for a single adult with one child.
- Regional community colleges conferred an annual average of **32 awards** in programs related to logistics and materials transportation over the last three academic years.

Introduction

The California Community College program most closely associated with forklift operation is the logistics and materials transportation program. Logistics and materials transportation programs prepare students for employment through instruction related to the theory, principles, functions, and procedures for the orderly and economic receiving, manufacturing, shipping and servicing of products or services (Taxonomy of Programs, 2012). The knowledge and skills trained by logistics and materials transportation programs lead to the following occupations, collectively referred to as the forklift operation occupational group in this report. The occupations in this report have lay job titles containing the keyword "forklift" (e.g., Forklift Driver/Operator) as lay job title or they operate a forklift as a task. A forklift is a tool that may be used daily as part of a primary work duty or as an occasional task as need.

Each occupation is separated into community college-level, secondary-level, and no formal education-level occupational groups to illuminate student's opportunities with various levels of educational attainment. Education-level definitions can be found in the [Appendix](#).

Community College-level Occupation

- Cargo and Freight Agents (SOC 43-5011)

Secondary-level Occupations (High School or GED)

- Shipping, Receiving, and Inventory Clerks (43-5071)
- Stockers and Order Fillers (53-7065)

No Formal Education-level Occupations

- Industrial Truck and Tractor Operators (SOC 53-7051)
- Laborers and Freight, Stock, and Material Movers, Hand (13-2021)

Except for *stock and order fillers*, all the occupations listed above are considered essential critical infrastructure occupations as identified by the Public Policy Institute of California. This classification of occupations is vital in supporting California's basic economic and safety needs (Bohn et al.). Despite the ongoing pandemic, employment demand should continue due to these occupations' critical nature and social distance ability.

Job Opportunities

In 2019, there were 1,009 community college-level jobs in the forklift operation occupational group in the Inland Empire/Desert Region. The community college-level forklift operation occupation is projected to have 160 annual job openings to fill new jobs and backfill jobs that workers are permanently vacating (includes occupational transfers and retirements). This occupation is expected to increase employment by 28% through 2024, which is less than the impressive 112% job growth that occurred over the previous five years (2014-2019). Exhibit 1 displays five-year projected job growth for the community college-level forklift operation occupation.

Exhibit 1: Five-year job projections, 2019-2024

Community College-level Occupation	2019 Jobs	2024 Jobs	5-Yr % Change (New Jobs)	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
Cargo and Freight Agents	1,009	1,292	28%	961	160	17%
Community College-level Total	1,009	1,292	28%	961	160	17%

Source: Emsi 2020.4

In 2019, there were 60,548 secondary-level jobs (jobs that typically require a high school diploma or GED to enter employment) in the forklift operation occupational group in the Inland Empire/Desert Region. The secondary-level forklift operation occupational group is projected to have 8,990 annual job openings

to fill new jobs and backfill jobs that workers are permanently vacating (includes occupational transfers and retirements). This occupational group is expected to increase employment by 9% through 2024, which is less than the 64% job growth over the previous five years (2014-2019). Exhibit 2 displays five-year projected job growth for the secondary-level forklift operation occupational group.

Exhibit 2: Five-year job projections, 2019-2024

Secondary-level Occupations	2019 Jobs	2024 Jobs	5-Yr % Change (New Jobs)	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
Stockers and Order Fillers	49,637	53,807	8%	45,743	7,624	16%
Shipping, Receiving, and Inventory Clerks	10,911	12,179	12%	8,195	1,366	17%
Secondary-level Total	60,548	65,985	9%	53,938	8,990	16%

Source: Emsi 2020.4

In 2019, there were 72,706 no formal education-level jobs in the forklift operation occupational group in the Inland Empire/Desert Region. The no formal education-level forklift operation occupational group is projected to have 12,800 annual job openings to fill new jobs and backfill jobs that workers are permanently vacating (includes occupational transfers and retirements). This occupational group is expected to increase employment by 18% through 2024, which is slightly less than the 19% job growth over the previous five years (2014-2019). Exhibit 3 displays five-year projected job growth for the no formal education-level forklift operation occupational group.

Exhibit 3: Five-year job projections, 2019-2024

No Formal Education-level Occupation	2019 Jobs	2024 Jobs	5-Yr % Change (New Jobs)	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
Laborers and Freight, Stock, and Material Movers, Hand	56,146	65,443	17%	60,832	10,139	14%
Industrial Truck and Tractor Operators	16,560	20,007	21%	15,966	2,661	14%
No Formal Education-level Total	72,706	85,449	18%	76,798	12,800	14%

Source: Emsi 2020.4

Job Advertisements

Exhibits 4-6 display the number of online job ads posted during the last 12 months, along with the regional and statewide average time to fill for the forklift occupational group. To ensure that advertisements were related to forklift operation, this search was limited to ads that required the forklift certification from the Occupational Safety and Health Administration (OSHA). Over the last 12 months, there were 2,319 total job advertisements for the forklift operation occupational group with certification requirements listed in the Inland Empire/Desert Region.

Job advertisements indicate that there may be an inverse relationship between forklift certification requirements and formal education requirements within job ads. Of the 2,319 total advertisements for this occupational group, 0% (0 job ads) were for the community college-level occupation, 17% (383 ads) were for secondary-level occupations, and 83% (1,936 ads) were for no formal education-level occupations. Over the last 12 months, there were no job ads that required forklift certifications for *cargo and freight agents* in the region; only 10 ads were posted across the state that required certifications. Due to the limited demand for this occupation with forklift certifications, reliable job advertisement information could not be obtained.

On average, local employers fill online job postings for the forklift operation occupational group within 39 days, one day shorter than the statewide average of 40 days, indicating that local employers may face similar challenges filling open positions as other employers in California as a whole.

Exhibit 4: Job ads and time to fill

Community College-Level Occupation	Job Ads	Regional Average Time to Fill (Days)	California Average Time to Fill (Days)
Cargo and Freight Agents	0	0	0
Community College-level Total	0	0	0

Source: Burning Glass – Labor Insights

Exhibit 5: Job ads and time to fill

Secondary-level Occupations	Job Ads	Regional Average Time to Fill (Days)	California Average Time to Fill (Days)
Stockers and Order Fillers	235	39	41
Shipping, Receiving, and Inventory Clerks	148	41	37
Secondary-level Total	383	40	40

Source: Burning Glass – Labor Insights

Exhibit 6: Job ads and time to fill

No Formal Education-level Occupations	Job Ads	Regional Average Time to Fill (Days)	California Average Time to Fill (Days)
Laborers and Freight, Stock, and Material Movers, Hand	1,088	42	40
Industrial Truck and Tractor Operators	848	36	40
No Formal Education-level Total	1,936	39	40

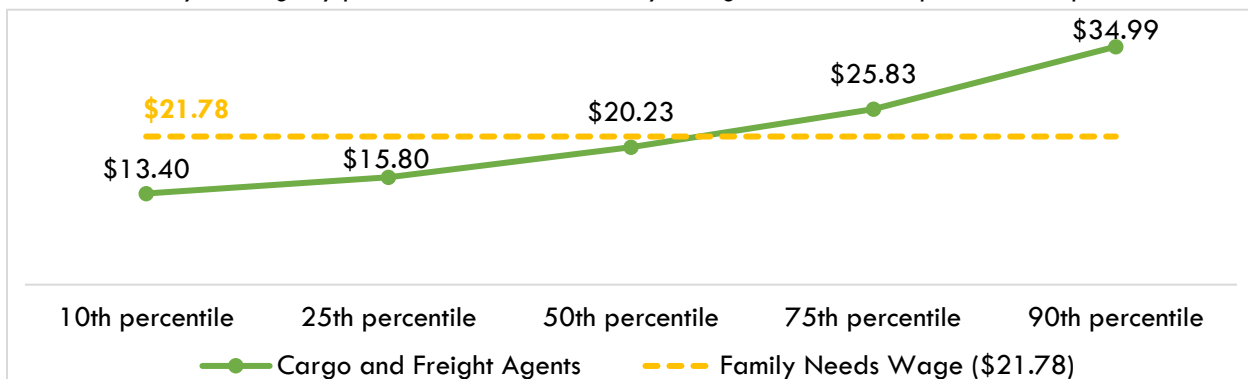
Source: Burning Glass – Labor Insights

Earnings and Benefits

Community colleges should ensure their training programs lead to employment opportunities that provide a self-sustainable level of income. The Family Needs Calculator estimates that a self-sustainable wage for a single adult with one school-age child is \$21.78 per hour or \$45,992 annually in Riverside County, \$21.24 per hour or \$44,867 annually in San Bernardino County (Pearce, 2020). For this study, the higher hourly wage requirement in Riverside County is adopted as the self-sufficiency standard for the two-county region.

Wages for the forklift operation occupational group are low, with occupations not surpassing the Family Needs Calculator self-sustainability rate until the 75th and 90th percentiles. Wages for *cargo and freight agents* do not exceed the self-sustainability rate until the 75th percentile. Wages for the secondary-level and no formal education-level occupational groups do not surpass the self-sustainability rate until the 90th percentile, indicating that only the top 10% of workers earn a self-sustainable wage. Exhibits 7 – 9 display the hourly earnings for each occupation in this study.

Exhibit 7: Hourly earnings by percentile for the community college-level forklift operation occupation



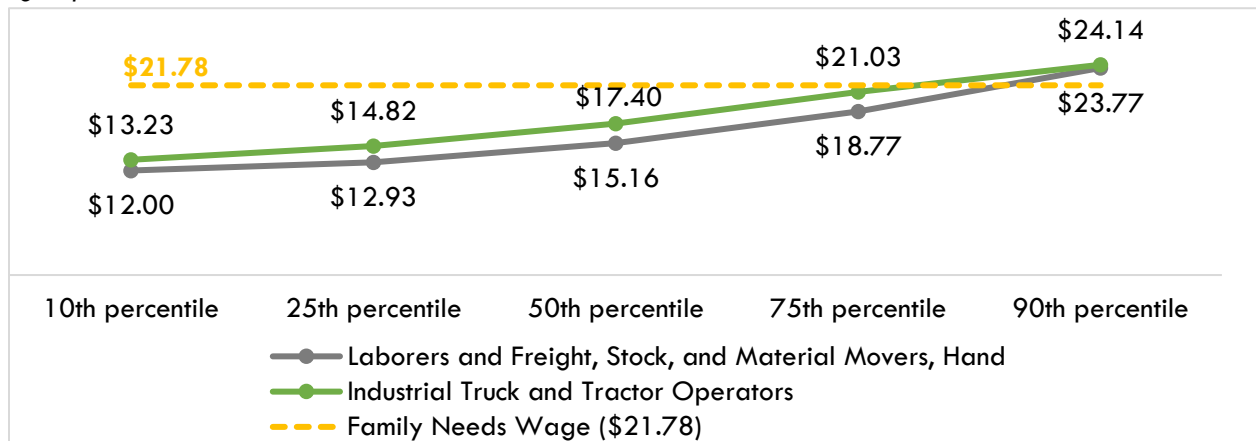
Source: Emsi 2020.4

Exhibit 8: Hourly earnings by percentile for the secondary-level forklift operation occupational group



Source: Emsi 2020.4

Exhibit 9: Hourly earnings by percentile for the no formal education-level forklift operation occupational group



Source: Emsi 2020.4

Benefits information is not available for *laborers and freight, stock, and material movers, hand*. Benefits for the forklift operation occupational group are uncommon and typically depend on employment status and the size of the employer. Benefits for *cargo and freight agents* vary by employer but typically include medical, dental, life, and vision insurance. Benefits for the secondary-level occupational group and the no formal education-level occupational group sometimes include medical insurance. (Detailed Occupational Guides, 2020).

Reviewing salary information from online job ads revealed that nearly two-thirds (65%) of employers provided salary information. The average annual advertised wages for the forklift occupational group are between \$32,000 and \$34,000, lower than the regional self-sustainability wage of \$45,992 annually. The salary figures are prorated to reflect full-time, annual wage status. There were too few postings for

cargo and freight agents to obtain accurate salary information. Exhibits 10 – 12 display advertised salary data from online job ads over the last 12 months.

Exhibit 10: Advertised salary information for the community college-level forklift operation occupation

Community College-level Occupation	Real-Time Salary Information					Average Annual Salary
	Number of job postings	Less than \$35,000	\$35,000 to \$49,999	\$50,000 to \$74,999	More than \$75,000	
Cargo and Freight Agents	0	N/A	N/A	N/A	N/A	N/A

Source: Burning Glass – Labor Insights

Exhibit 11: Advertised salary information for the secondary-level forklift operation occupational group

Secondary-level Occupations	Real-Time Salary Information					Average Annual Salary
	Number of job postings	Less than \$35,000	\$35,000 to \$49,999	\$50,000 to \$74,999	More than \$75,000	
Stockers and Order Fillers	101	80%	19%	1%	-	\$32,000
Shipping, Receiving, and Inventory Clerks	75	69%	28%	3%	-	\$34,000

Source: Burning Glass – Labor Insights

Exhibit 12: Advertised salary information for the no formal education-level forklift operation occupational group

No Formal Education-level Occupations	Real-Time Salary Information					Average Annual Salary
	Number of job postings	Less than \$35,000	\$35,000 to \$49,999	\$50,000 to \$74,999	More than \$75,000	
Laborers and Freight, Stock, and Material Movers, Hand	720	84%	15%	1%	0%	\$32,000
Industrial Truck and Tractor Operators	601	80%	19%	1%	0%	\$33,000

Source: Burning Glass – Labor Insights

Employers, Skills, Education, and Work Experience

Exhibits 13 – 15 displays the employers posting the most online job advertisements for forklift operation occupational group during the last 12 months. Due to the lack of advertisements for cargo and freight agents, employer information is not available.

Exhibit 13: Employers posting the most job ads for the community college-level occupation

Occupation	Employers
Cargo and Freight Agents (n=0)	• N/A

Source: Burning Glass – Labor Insights

Exhibit 14: Employers posting the most job ads for the secondary-level occupational group

Occupations	Employers	
Stockers and Order Fillers (n=235)	<ul style="list-style-type: none"> Walmart/Sam's Club DHL Express Reyes Holdings 	<ul style="list-style-type: none"> Niagara Bottling LLC Del Real Foods Arvato
Shipping, Receiving, and Inventory Clerks (n=148)	<ul style="list-style-type: none"> Niagara Bottling LLC Lennox International 	<ul style="list-style-type: none"> Pep Boys Lowe's Companies

Source: Burning Glass – Labor Insights

Exhibit 15: Employers posting the most job ads for the no formal education-level occupational group

Occupations	Employers	
Laborers and Freight, Stock, and Material Movers, Hand (n=1,088)	<ul style="list-style-type: none"> DHL Express Floor and Décor Petco 	<ul style="list-style-type: none"> Utopia Deals Freight Handlers Incorporated
Industrial Truck and Tractor Operators (n=848)	<ul style="list-style-type: none"> NFI Industries DHL Express 	<ul style="list-style-type: none"> Propak Compa Logistics Inc.

Source: Burning Glass – Labor Insights

Exhibits 16 – 18 display a sample of specialized and employability skills employers seek when looking for workers to fill forklift operation positions. Specialized skills are occupation-specific skills that employers are requesting for industry or job competency. Employability skills are foundational skills that transcend industries and occupations; this category is often referred to as "soft skills." The skills requested in job postings may be utilized as a helpful guide for curriculum development. Due to the lack of advertisements for *cargo and freight agents*, in-demand skills information is not available.

Exhibit 16: Sample of in-demand skills from employer online job ads for cargo and freight agents

Occupation	Specialized Skills	Employability Skills
Cargo and Freight Agents (n=0)	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A

Source: Burning Glass – Labor Insights

Exhibit 17: Sample of in-demand skills from employer online job ads for secondary-level occupations

Occupations	Specialized Skills	Employability Skills
Stockers and Order Fillers (n=224)	<ul style="list-style-type: none"> Forklift Operation Inventory Control/Management Scheduling Packaging 	<ul style="list-style-type: none"> Physical Abilities Organizational Skills English Computer Literacy

Occupations	Specialized Skills	Employability Skills
Shipping, Receiving, and Inventory Clerks (n=147)	<ul style="list-style-type: none"> Forklift Operation Packaging Inventory Control/Management Data Entry 	<ul style="list-style-type: none"> Physical Abilities Communication Skills Computer Literacy Organizational Skills

Source: Burning Glass – Labor Insights

Exhibit 18: Sample of in-demand skills from employer online job ads for no formal education-level occupations

Occupations	Specialized Skills	Employability Skills
Laborers and Freight, Stock, and Material Movers, Hand (n=921)	<ul style="list-style-type: none"> Forklift Operation Packaging Warehouse Operations Inventory Control/Management 	<ul style="list-style-type: none"> Physical Abilities Organizational Skills Detail-Oriented Computer Literacy
Industrial Truck and Tractor Operators (n=665)	<ul style="list-style-type: none"> Forklift Operation Inventory Control/Management Material Handling Equipment Customer Service 	<ul style="list-style-type: none"> Detail-Oriented Physical Abilities Computer Literacy Communication Skills

Source: Burning Glass – Labor Insights

Exhibits 19 – 21 display the entry-level education typically required to gain employment in the forklift operation occupational group according to the Bureau of Labor Statistics (BLS), educational attainment for incumbent workers with "some college, no degree" and an "associate degree" according to the U.S. Census (2016-17) and the real-time minimum advertised education requirement from employer job ads. Due to the lack of advertisements for *cargo and freight agents*, real-time minimum advertised education requirement information is not available.

Exhibit 19: Typical entry-level education, educational attainment, and minimum advertised education requirements for the community college-level occupation

Occupation	Typical Entry-Level Education Requirement	CC-Level Educational Attainment*	Real-Time Minimum Advertised Education Requirement			
			Number of Job Ads	High school diploma or vocational training	Associate degree	Bachelor's degree or higher
Cargo and Freight Agents	High school diploma or equivalent	48%	0	N/A	N/A	N/A

Source: Emsi 2020.4, Burning Glass – Labor Insights

*Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework

Exhibit 20: Typical entry-level education, educational attainment, and minimum advertised education requirements for secondary-level occupations

Occupations	Typical Entry-Level Education Requirement	CC-Level Educational Attainment*	Real-Time Minimum Advertised Education Requirement			
			Number of Job Ads	High school diploma or vocational training	Associate degree	Bachelor's degree or higher
Stockers and Order Fillers	High school diploma or equivalent	34%	145	100%	-	-
Shipping, Receiving, and Inventory Clerks	High school diploma or equivalent	34%	108	100%	-	-

Source: Emsi 2020.4, Burning Glass – Labor Insights

*Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework

Exhibit 21: Typical entry-level education, educational attainment, and minimum advertised education requirements for no formal education-level occupations

Occupations	Typical Entry-Level Education Requirement	CC-Level Educational Attainment*	Real-Time Minimum Advertised Education Requirement			
			Number of Job Ads	High school diploma or vocational training	Associate degree	Bachelor's degree or higher
Laborers and Freight, Stock, and Material Movers, Hand	No formal education credential	28%	636	98%	2%	-
Industrial Truck and Tractor Operators	No formal education credential	25%	366	100	-	-

Source: Emsi 2020.4, Burning Glass – Labor Insights

*Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework

Exhibits 22 – 24 display the work experience typically required for the forklift operation occupational group and the real-time work experience requirements from employer job ads. Due to the lack of advertisements for *cargo and freight agents*, real-time work experience requirement information is not available.

Exhibit 22: Work experience required and real-time work experience requirements for the community college-level occupation

Occupation	Work Experience Typically Required	Real-Time Work Experience			
		Number of Job Ads	0 – 2 years	3 – 5 years	6+ years
Cargo and Freight Agents	None	0	N/A	N/A	N/A

Source: Emsi 2020.4, Burning Glass – Labor Insights

Exhibit 23: Work experience required and real-time work experience requirements for the secondary-level occupations

Occupations	Work Experience Typically Required	Real-Time Work Experience			
		Number of Job Ads	0 – 2 years	3 – 5 years	6+ years
Stockers and Order Fillers	None	98	90%	10%	-
Shipping, Receiving, and Inventory Clerks	None	87	89%	11%	-

Source: Emsi 2020.4, Burning Glass – Labor Insights

Exhibit 24: Work experience required and real-time work experience requirements for the no formal education occupational group

Occupations	Work Experience Typically Required	Real-Time Work Experience			
		Number of Job Ads	0 – 2 years	3 – 5 years	6+ years
Laborers and Freight, Stock, and Material Movers, Hand	None	392	90%	10%	-
Industrial Truck and Tractor Operators	None	463	90%	10%	-

Source: Emsi 2020.4, Burning Glass – Labor Insights

Student Completions and Program Outcomes

Three regional community colleges offer logistics and materials transportation (TOP 0510.00) programs. These programs have collectively awarded an annual average of 32 associate degrees and certificates over the last three academic years. Please note that regional logistics and materials transportation programs provide training to logistics and supply chain management and do not provide training related to forklift certifications. Exhibit 25 displays the annual average awards for this program.

Exhibit 25: 2016-19, Annual average community college awards for the logistics and materials transportation programs

0510.00 – Logistics and Materials Transportation	Associate degree	Certificate requiring 30 to <60 semester units	Certificate requiring 18 to <30 semester units	Total CC Annual Average Awards, Academic Years 2016-19
Barstow	1	-	-	1
Chaffey	3	-	3	6
Norco	10	6	9	25
Total	13	6	12	32

Source: MIS Data Mart

California program outcome data may provide a useful insight into the likelihood of success for the proposed program. Community college student outcome information based on the selected TOP codes and

region is provided in Exhibit 26. The outcome methodology is available in the appendix section of this report. Dashes indicate there were too few students from which to obtain program outcome information.

Exhibit 26: 0510.00 – Logistics and materials transportation strong workforce program outcomes

Strong Workforce Program Metrics: 0510.00 – Logistics and Materials Transportation Academic Year 2017-18, unless noted otherwise	Inland Empire/Desert Region	California
Unduplicated count of enrolled students (2018-19)	400	1,525
Completed 9+ career education units in one year (2018-19)	41%	37%
Perkins Economically disadvantaged students (2018-19)	85%	74%
Students who attained a noncredit workforce milestone in a year (2018-19)	-	32%
Students who earned a degree, certificate, or attained apprenticeship (2018-19)	29	169
Transferred to a four-year institution (transfers)	23	48
Job closely related to the field of study (2016-17)	-	75%
Median annual earnings (all exiters)	\$35,132	\$36,720
Median change in earnings (all exiters)	27%	33%
Attained a living wage (completers and skills-builders)	70%	65%

Sources: LaunchBoard Community College Pipeline and Strong Workforce Program Metrics

Recommendation

This report provides forklift operation occupational data related to the California Community College logistics and materials transportation (TOP 0510.00) program. One occupation is community college-level, two are secondary-level, and two are no formal education-level. While this report highlights demand for occupations at three educational-levels, only the community college-level, the cargo and freight agents occupation is considered for recommendation in this report.

Employment demand for cargo and freight agents is expected to increase by 28%, and a total of 160 annual job openings will be available each year over the five-year timeframe. This occupation is considered an essential critical infrastructure occupation. Despite the ongoing pandemic, employment demand should continue due to this occupation's critical nature or social distancing ability. Hourly median earnings for cargo and freight agents is \$20.23, below the \$21.78 per hour or \$45,992 annual self-sustainable standard for a single adult with one child in the region. The 75th percentile rate is \$25.83 per hour, indicating that the top 25% of workers in this occupation earn an hourly rate that exceeds the self-sustainable standard.

Three regional community colleges conferred an annual average of 32 awards in logistics and materials transportation programs over the last three academic years. The median annual earnings of all exiters was \$35,132, and 70% attained a living wage.

The COE **cautiously recommends** expanding existing logistics and materials transportation programs due to the low wages for the community college-level occupation in this report. A review of online job ads revealed limited evidence of regional demand for forklift certifications for the community college-level occupation. Demand for forklift certification appeared to be concentrated in occupations that typically require a high school diploma or no formal education. Colleges considering this program should partner with employers to document demand for community college-trained forklift certification. Additionally, colleges should document the skills and additional certifications need to close the self-sustainable wage gap shortly after entering employment in this field.

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Appendix: Occupation definitions, sample job titles, five-year projections for forklift operation occupations

Cargo and Freight Agents (43-5011)

Expedite and route movement of incoming and outgoing cargo and freight shipments in airline, train, and trucking terminals and shipping docks. Take orders from customers and arrange pickup of freight and cargo for delivery to loading platform. Prepare and examine bills of lading to determine shipping charges and tariffs.

Sample job titles: Cargo Agent, Documentation Clerk, Drop Shipment Clerk, Freight Broker, Intermodal Dispatcher, International Coordinator, Load Planner, Logistics Coordinator, Logistics Service Representative

Entry-Level Educational Requirement: High school diploma or equivalent

Training Requirement: Less than one month on-the-job training

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 48%

Shipping, Receiving, and Inventory Clerks (43-5071)

Verify and maintain records on incoming and outgoing shipments involving inventory. Duties include verifying and recording incoming merchandise or material and arranging for the transportation of products. May prepare items for shipment.

Sample job titles: Material Control Associate, Order Fulfillment Specialist, Receiver, Receiving Associate, Receiving Clerk, Receiving Coordinator, Shipper, Shipping Clerk, Shipping Coordinator, Traffic Assistant, Forklift Operator, Shipping and Receiving Forklift Operator

Entry-Level Educational Requirement: High school diploma or equivalent

Training Requirement: Less than one month on-the-job training

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 34%

Industrial Truck and Tractor Operators (53-7051)

Operate industrial trucks or tractors equipped to move materials around a warehouse, storage yard, factory, construction site, or similar location.

Sample job titles: Checker Loader, Fork Lift Technician, Fork Truck Driver, Forklift Driver, Forklift Operator, Lift Truck Operator, Shag Truck Driver, Spotter Driver, Tow Motor Operator, Truck Driver

Entry-Level Educational Requirement: High school diploma or equivalent

Training Requirement: Less than one month on-the-job training

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 34%

Laborers and Freight, Stock, and Material Movers, Hand (53-7062)

Manually move freight, stock, luggage, or other materials, or perform other general labor. Includes all manual laborers not elsewhere classified.

Sample job titles: Dock Worker, Laborer, Line Tender, Loader, Material Handler, Merchandise Pickup/Receiving Associate, Receiver, Receiving Associate, Shipping and Receiving Materials Handler, Warehouse Worker, Forklift Driver/Operator

Entry-Level Educational Requirement: No formal education credential

Training Requirement: Less than one month on-the-job training

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 25%

Stockers and Order Fillers (53-7065)

Receive, store, and issue merchandise, materials, equipment, and other items from stockroom, warehouse, or storage yard to fill shelves, racks, tables, or customers' orders. May operate power equipment to fill orders. May mark prices on merchandise and set up sales displays.

Sample job titles: Checker Stocker, Inventory Specialist, Marking Clerk, Order Filler, Order Picker, Order Puller, Stock Clerk, Stocker, Stockroom Clerk, Warehouse Clerk

Entry-Level Educational Requirement: No formal education credential

Training Requirement: Less than one month on-the-job training

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 28%

Appendix: Program Completion and Outcome Methodology

Exhibit 25 displays the average annual California Community College (CCC) awards conferred during the three academic years between 2016 and 2019, from the California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart. Awards are the combined total of associate degrees and certificates issued during the timeframe, divided by three in this case to calculate an annual average. This is done to minimize the effect of atypical variation that might be present in a single year.

Community college student outcome information is from LaunchBoard and based on the selected TOP code and region. These metrics are based on records submitted to the California Community Colleges Chancellor's Office Management Information Systems (MIS) by community colleges, which come from self-reported student information from CCC Apply and the National Student Clearinghouse. Employment and earnings metrics are sourced from records provided by California's Employment Development Department's Unemployment Insurance database. When available, outcomes for completers are reported to demonstrate the impact that earning a degree or certificate can have on employment and earnings. For more information on the types of students included for each metric, please see the web link for LaunchBoard's Strong Workforce Program Metrics Data Element Dictionary in the References section (LaunchBoard, 2021a). Finally, employment in a job closely related to the field of study comes from self-reported student responses on the CTE Employment Outcomes Survey (CTEOS), administered by Santa Rosa Junior College (LaunchBoard, 2021a).

Job postings data is limited to the information provided by employers and the ability of artificial intelligence search engines to identify this information. Additionally, preliminary calculations by Georgetown Center on Education and the Workforce found that "just 30 to 40 percent of openings for candidates with some college or an associate degree, and only 40 to 60 percent of openings for high school diploma holders appear online" (Carnevale et al., 2014). Online job postings often do not reveal the hiring intentions of employers; it is unknown if employers plan to hire one or multiple workers from a single online job posting, or if they are collecting resumes for future hiring needs. A closed job posting may not be the result of a hired worker.

No Formal Education-level: Occupations that require no formal education.

Secondary-level: Occupations that require a high school diploma.

Community college-level: Occupations that mostly require some college, a postsecondary certificate, or an associate degree. These are occupations relevant to community college training.

Table 1: 2019 to 2024 job growth, wages, education, training, and work experience required

Occupation (SOC)	2019 Jobs	5-Yr Change	5-Yr % Change	Annual Openings (New + Replacement Jobs)	Entry-Experienced Hourly Wage Range (10 th to 90 th percentile)	Median Hourly Wage (50 th percentile)	Average Annual Earnings	Typical Entry-Level Education & On-The-Job Training Required	Work Experience Required
Laborers and Freight, Stock, and Material Movers, Hand (53-7062)	56,146	9,296	17%	10,139	\$12.00 to \$23.77	\$15.16	\$34,300	No formal educational credential & 1 month	None
Stockers and Order Fillers (53-7065)	49,637	4,169	8%	7,624	\$12.00 to \$21.79	\$14.84	\$32,900	High school diploma or equivalent & 1 month	None
Industrial Truck and Tractor Operators (53-7051)	16,560	3,447	21%	2,661	\$13.23 to \$24.14	\$17.40	\$37,500	No formal educational credential & 1 month	None
Shipping, Receiving, and Inventory Clerks (43-5071)	10,911	1,267	12%	1,366	\$12.27 to \$24.24	\$16.53	\$37,600	High school diploma or equivalent & 1 month	None
Cargo and Freight Agents (43-5011)	1,009	283	28%	160	\$13.40 to \$34.99	\$20.23	\$45,400	High school diploma or equivalent & 1 month	None
Total	134,264	18,463	14%	21,949	-	-	-	-	-

Source: Emsi 2020.4