

Commercial Truck Driving

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

- Community college truck and bus driving programs provide the knowledge, skills, and abilities that lead to the community college-level occupation, heavy and tractor-trailer truck drivers.
- Heavy and tractor-trailer truck drivers are projected to have 4,251 annual job openings through 2025, increasing employment by 12%.
- The 50th percentile hourly earnings for heavy and tractor-trailer truck drivers is \$23.81 per hour, below the regional \$24.36 per hour self-sustainable earnings standard for a single adult with one child.
- Regional community colleges do not currently offer truck and bus driving programs. One private educational institution in the region has issued 12 awards annually over the last three academic years.
- The Centers of Excellence recommends developing a truck and bus driving program to meet the regional demand for heavy and tractor-trailer truck drivers.

Introduction

This report aims to determine the regional supply and demand for heavy and tractor-trailer truck drivers with Class A Commercial Driver's Licenses (CDL). According to the Department of Motor Vehicles (DMV.org, 2021), a Class A CDL is required to operate any combination of vehicles with a gross combination weight rating of 26,001 lbs. or more, typically including tractor-trailers, truck and trailer combinations, tractor-trailer buses, tanker vehicles, livestock carriers, and flatbeds (DMV.org, 2021).

The community college truck and bus driving (TOP 0947.50) program trains students in the operation of trucks and buses with diesel, gasoline, or alternative power engines and may also prepare students for a Class A CDL test (DMV.org, 2012; Taxonomy of Programs, 2012). The knowledge, skills, and abilities trained by truck and bus driving programs lead to the occupation, heavy tractor-trailer truck drivers.

Heavy and Tractor-Trailer Truck Drivers (53-3032)

Drive a tractor-trailer combination or a truck with a capacity of at least 26,001 pounds Gross Vehicle Weight (GVW). May be required to unload truck. Requires commercial drivers' license. Includes tow truck drivers.

Sample job titles: Driver, Line Haul Driver, Log Truck Driver, Over the Road Driver (OTR Driver), Production Truck Driver, Road Driver, Semi Truck Driver, Tractor Trailer Operator, Truck Driver

Entry-Level Educational Requirement: Postsecondary nondegree award

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

Work Experience Required: None

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 30%

Job Counts and Projections

In 2020, there were 32,121 heavy tractor-trailer truck driver jobs in the region. This occupation is projected to have 4,251 annual job openings to fill new or backfill jobs that workers are permanently vacating (includes occupational transfers and retirements). Heavy tractor-trailer truck driver employment is expected to increase by 12% through 2025. Exhibit 1 displays the job counts, five-year projected job growth, job openings, and the share of incumbent workers age 55 years and greater.

Exhibit 1: Five-year projections, 2020-2025

| 2020 Jobs | 2025 Jobs | 5-Yr % Change (New Jobs) | 5-Yr Openings (New + Replacement Jobs) | Annual Openings (New + Replacement Jobs) | % of workers age 55+ |
|-----------|-----------|--------------------------|--|--|----------------------|
| 32,121 | 36,127 | 12% | 21,255 | 4,251 | 28% |

Source: Emsi 2021.3

Exhibit 2 shows the number of job ads posted during the last 12 months and the regional and statewide average time fill. Job advertisements were limited to positions that required a Class A Commercial Driver’s License. Approximately 63% (9,907 ads) of the 15,705 total job advertisements for heavy and tractor-trailer truck drivers listed in the Inland Empire/Desert Region required a Class A CDL. On average, regional employers fill online job advertisements for heavy and tractor-trailer truck drivers within 38 days. This is two days shorter than the statewide time to fill, indicating that regional employers likely face similar challenges filling open positions as other employers in California.

Exhibit 2: Job ads and time to fill

| Job Ads | Regional Average Time to Fill (Days) | Statewide Average Time to Fill (Days) |
|---------|--------------------------------------|---------------------------------------|
| 9,907 | 38 | 40 |

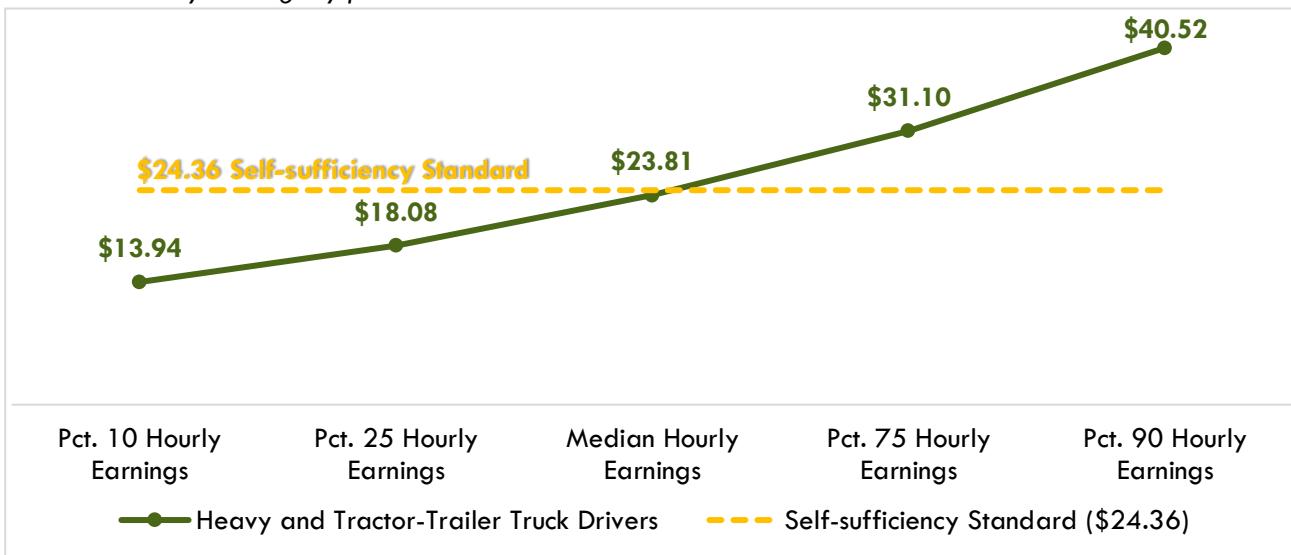
Source: Burning Glass – Labor Insights

Earnings and Benefits

Community colleges should ensure their training programs lead to employment opportunities that provide self-sustainable income. The University of Washington estimates that a self-sufficient hourly rate for a single adult with one school-age child is \$24.36 per hour or \$51,452 annually in Riverside County; \$23.73 per hour or \$50,119 annually in San Bernardino County (Pearce, 2021). For this study, the higher hourly earnings requirement in Riverside County is adopted as the self-sufficiency standard for the two-county region.

The hourly earnings for heavy and tractor-trailer truck drivers surpasses the self-sustainability rate at the 75th percentile, indicating that the top 25% of workers in the field earn a self-sustainable wage. Exhibit 3 displays the hourly earnings for heavy and tractor-trailer truck drivers.

Exhibit 3: Hourly earnings by percentile



Source: Emsi 2021.3

According to the California Labor Market Information Division's occupational guides, heavy tractor-trailer truck drivers generally receive medical, dental, disability, and life insurance. Benefits for union truck drivers are negotiated by their union representatives (Detailed Occupational Guides, 2021).

Advertised Salary from Online Job Ads

Exhibit 4 displays online job ad salary data for heavy and tractor-trailer truck drivers over the last 12 months in the Inland Empire/Desert. Online job ad salary information reveals that employers are willing to pay heavy and tractor-trailer truck drivers \$60,000 annually, above the \$51,452 annual (\$24.36 hourly) self-sufficiency standard for the region. Consider the salary information with caution since only 61% of online job ads (6,067 out of 9,907) for this occupation provided salary information. The salary figures are prorated to reflect full-time, annual earnings status.

Exhibit 4: Advertised salary information

| Number of job ads | Real-Time Salary Information | | | | |
|-------------------|------------------------------|----------------------|----------------------|--------------------|-----------------------|
| | Less than \$35,000 | \$35,000 to \$49,999 | \$50,000 to \$74,999 | More than \$75,000 | Average Annual Salary |
| 6,067 | 9% | 31% | 36% | 24% | \$60,000 |

Source: Burning Glass – Labor Insights

Employers, Skills, Education, Work Experience, and Certifications

Exhibit 5 displays the employers that posted more than 100 job ads over the last 12 months in the Inland Empire/Desert Region. Displaying employer names provides some insight into where students may find employment after completing a program. CPC Logistics posted the most job advertisements for heavy and tractor-trailer truck drivers in the Inland Empire/Desert Region.

Exhibit 5: Employers posting the most job ads for heavy and tractor-trailer truck drivers

| Top Employers | Job Ads |
|----------------------------------|--------------|
| CPC Logistics | 745 |
| Reddaway Trucking | 477 |
| CRST International | 331 |
| Dependable Highway Express | 233 |
| YRC Freight (Yellow Corporation) | 196 |
| RoadOne, Inc. | 183 |
| Schneider National Incorporated | 165 |
| Hub Group Trucking | 149 |
| J.B. Hunt Transport, Inc. | 121 |
| ITS Logistics | 119 |
| Three Way Logistics | 112 |
| All other employers | 7,076 |
| Total | 9,907 |

Source: Burning Glass – Labor Insights

Exhibit 6 lists a sample of employers' specialized and employability skills when looking for workers to fill heavy tractor-trailer truck driver positions. Specialized skills are occupation-specific skills that employers request 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 advertisements may be utilized to guide curriculum development.

Exhibit 6: Sample of in-demand skills from employer job ads

| Specialized skills | Employability skills |
|---|--|
| <ul style="list-style-type: none"> HAZMAT Truck Driving Post Trip Inspections Freight Handling Scheduling | <ul style="list-style-type: none"> Physical Abilities English Communication Skills Detail-Oriented |

Source: Burning Glass – Labor Insights

According to the Bureau of Labor Statistics, approximately 30% of incumbent workers in this field hold a community college-level of educational attainment; "some college, no degree" and an "associate degree." All of the employers posting job advertisements for heavy and tractor-trailer truck drivers sought candidates with a high school diploma or vocational training. Exhibit 7 displays the typical entry-level education, educational attainment, and minimum advertised education requirements for heavy and tractor-trailer truck drivers.

Exhibit 7: Typical entry-level education, educational attainment, and minimum advertised education requirements

| Typical Entry-Level Education Requirement | CC-Level Educational Attainment* | Number of Job Ads | Real-Time Minimum Advertised Education Requirement | | |
|---|----------------------------------|-------------------|--|------------------|-----------------------------|
| | | | High school or vocational training | Associate degree | Bachelor's degree or higher |
| Postsecondary nondegree award | 30% | 665 | 100% | - | - |

Source: Emsi 2021.3, Burning Glass – Labor Insights

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

Exhibit 8 displays the work experience typically required before employment and the real-time work experience requirements from employer job ads for heavy and tractor-trailer truck drivers. Job advertisements indicate that the majority of employers sought candidates with zero to two years of previous work experience.

Exhibit 8: Work experience required and real-time work experience requirements

| Work Experience Typically Required | Real-Time Work Experience | | | |
|------------------------------------|---------------------------|-------------|-------------|----------|
| | Number of job ads | 0 – 2 years | 3 – 5 years | 6+ years |
| None | 7,143 | 71% | 26% | 3% |

Source: Emsi 2021.3, Burning Glass – Labor Insights

Certifications

The State of California Department of Motor Vehicles (DMV) is the regulatory agency that issues commercial driver's licenses (CDL). Individuals seeking to obtain their commercial driver's licenses must first obtain a commercial learner's permit (CLP). California strictly adheres to federal regulations for commercial motor vehicle licensure. To apply for a CLP, an individual must be 18 years old, possess a noncommercial driver's license (Class C license), complete a commercial driver's license application, complete a 10-year driving history record check, submit a completed medical examination report and medical examiner's certification form, provide residency documentation, pass a vision exam, and pass the applicable knowledge test. Once the knowledge test is passed, individuals will be issued a CLP. Individuals under 21 may only operate within California (CA DMV, 2021).

A CLP allows prospective CDL candidates to gain behind-the-wheel experience before CDL skills testing. To operate a commercial vehicle with a CLP, individuals must have both their CLP and noncommercial driver's license and be accompanied by a California CDL holder. Once a driver has waited the minimum 14 days after obtaining their CLP, they may take their driving skills test, which includes a vehicle inspection, basic control skills, and a road test. After successful completion of the skills test, individuals will be issued their CDL. For more information regarding licensure, visit the DMV website (CA DMV, 2021).

According to the U.S. Department of Transportation (DOT), an employer must receive a negative drug test before permitting a driver to operate a commercial motor vehicle. Additionally, once employed, CDL drivers must be randomly tested throughout the year to ensure driver and public safety. Drug testing adheres to federal guidelines, indicating that while medical marijuana may be legal in California, it is a Schedule 1 substance that would cause a driver to fail a drug test. For more information regarding drug and alcohol testing, visit the DOT website (DOT, March 2021). Exhibit 9 displays the certifications required by employers posting job ads for heavy and tractor-trailer truck drivers in the Inland Empire/Desert Region.

Exhibit 9: Certifications typically required in advertisements for heavy and tractor-trailer truck drivers

| Certifications | Job Ads (n=9,907) |
|------------------|-------------------|
| CDL Class A | 9,907 |
| Driver's License | 3,086 |
| CDL Class B | 175 |

Source: Burning Glass – Labor Insights

Student Completions for Programs

Regional community colleges do not currently offer bus and truck driving (0947.50 programs). According to the Chancellor's Office Curriculum Inventory (COCI), there are three colleges in California that offer bus and truck driving programs. Allan Hancock College, located in Santa Maria, offers a commercial truck driving program that prepares students for commercial vehicle licensure. Allan Hancock College's program may be useful for curriculum development. The aims and objectives of this program are displayed below (Allan Hancock College, pg. 150, 2021):

The Commercial Truck Driving Certificate Program prepares students to take the knowledge test required to obtain a California Commercial Learner's Permit and prepares students to take the behind-the-wheel test. Upon passing both of these California Department of Motor Vehicle (CA DMV) tests, students will qualify for a California Commercial Driver's License, Class A or B, required for an entry-level position in the trucking industry. Before registering for the Behind-the-Wheel portion of training, students must submit an authorized Medical Examination Report, submit a 10-year driving history from California DMV, submit a current California CDL Learner's Permit, and submit a clear drug and alcohol screening test at a Hancock approved medical provider. Students must receive 80% or higher on all theory course competency tests, demonstrate proficiency in all skills per the behind-the-wheel course content, and complete a minimum of 15 hours behind-the-wheel driving (California Title 13 requirement) in order to receive a certificate of competency.

The graduate of the Certificate of Competency in Commercial Truck Driving will:

- Demonstrate knowledge of commercial vehicle control systems, reporting malfunctions, and routine maintenance.
- Demonstrate the importance of safe commercial vehicle operation, defensive driving, speed and space management, cargo handling, and hazardous materials.
- Interpret and apply knowledge of the regulations for commercial drivers established by the US Department of Transportation and the State of California Department of Motor Vehicles.
- Demonstrate competencies of basic maneuvers in operating a combination vehicle, including backing skills.
- Identify potential safety concerns or issues when performing a pre-trip inspection and citing safety hazards while performing the road trip.
- Demonstrate driving proficiency of basic skills in road training to obtain a State of California Commercial Driver's License - Class A or B.

Exhibit 10 displays awards reported by other postsecondary education providers in truck and bus driver/commercial vehicle operator and instructor (CIP 49.0205) programs. Completion data is compiled from the Integrated Postsecondary Education Data System (IPEDS) for the most recent three years available. On average, one other postsecondary education institution in the region issued 12 awards annually.

Exhibit 10: Other educational provider truck and bus driver/commercial vehicle operator and instructor programs, three-year annual average credentials in the Inland Empire/Desert Region

| 49.0205 – Truck and Bus Driver/Commercial Vehicle Operator and Instructor | Award <1 Academic Year | Other Educational Providers Annual Average Credentials, Academic Years 2016-19 |
|---|------------------------|--|
| CET-Colton | 12 | 12 |
| Total | 12 | 12 |

Source: IPEDS

Recommendation for Truck and Bus Driving Programs

Heavy and tractor-trailer truck drivers are expected to have 4,251 annual job openings and increase employment by 12% over the next five years. The median hourly earnings of \$23.81 per hour for this occupation falls short of the region’s \$24.36 per hour self-sustainable earnings standard. This occupation’s 75th percentile exceed the self-sustainability standard, \$31.10 per hour. However, job advertisements demonstrate that, on average, employers are willing to pay heavy and tractor-trailer truck drivers with Class A Commercial Driver’s Licenses \$60,000 annually, above the \$51,452 annual (\$24.36 hourly) self-sufficiency standard for the region.

Regional community colleges do not currently offer truck and bus driving (0947.50) programs. On average, other postsecondary educational institutions in the region have issued 12 awards annually.

The Centers of Excellence recommends developing a truck and bus driving program to meet the need for more qualified workers in the region. Colleges considering this program should partner with applicable employers to document the skills and certifications needed for their truck and bus driving students to earn self-sustainable earnings after exiting the program.

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Appendix: Methodology

Job advertisement 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 advertisements often do not reveal employers' hiring intentions; it is unknown if employers plan to hire one or multiple workers from a single online job ad or collect resumes for future hiring needs. A closed job ad may not be the result of a hired worker.

Table 1. 2020 to 2025 job growth, wages, entry-level education, training, and work experience required for heavy and tractor-trailer truck drivers

| Occupation (SOC) | 2020 Jobs | 5-Year Change (New Jobs) | 5-Year % Change (New Jobs) | Annual Openings (New + Replacement Jobs) | Entry-Experienced Hourly Wage (10 th to 90 th percentile) | Median Hourly Wage (50 th percentile) | Average Annual Earnings | Entry-Level Education & On-The-Job-Training | Work Experience Required |
|---|-----------|--------------------------|----------------------------|--|---|--|-------------------------|---|--------------------------|
| Heavy and Tractor-Trailer Truck Drivers (53-3032) | 32,121 | 4,005 | 12% | 4,251 | \$13.94 to \$40.52 | \$23.81 | \$25.99 | Postsecondary nondegree award & 1 month | None |

Source: Emsi 2021.3