



# LABOR MARKET DATA

Medium – Heavy Duty Truck Engines

Medium – Heavy Duty Truck Advanced Engines

Medium – Heavy Duty Truck Electrical & Hydraulics

Medium – Heavy Duty Truck Powertrain & Motor

Vehicle Air Conditioning (MVAC)

**Overview:**

Recently **Truck Parts & Service**, discussed the shortage in heavy duty/truck service mechanics. The article titled, "With an eye on the future, the industry works to fill today's need for technicians" details the need for more services techs, nationwide<sup>1</sup>. *"The shortage of technicians in the heavy-duty truck service industry has been an ongoing problem."* Additionally, the article continues to explain efforts to combat the shortage of technicians in this area including education/vocational endeavors, highlighting the Central Valley and Reedley College's efforts (excerpt): *"Mike Betts, chairman and CEO, Betts Company, is spearheading at the high school and collegiate level in the Central Valley area of California... finalizing curriculum with the National Institute for Automotive Service Excellence (ASE) and the National Automotive Technicians Education Foundation (NATEF) at Fresno City College and Reedley College."*

Reedley College is looking fill this need, building on the capacity of the college, specifically in the occupation of **Bus and Truck Mechanics and Diesel Engine Specialists (Transit Mechanic) – SOC Code 40-3031**. Offering certificates in this occupational field fill the need in the labor force as well as provide a sustainable living wage.

**Regional Labor Market Assessment:**

The Regional Labor Market Assessment (September 2016), a report created by the Centers of Excellence for Labor Market Research<sup>2</sup> provides labor market data and wage details for various occupational groupings. The report is specific to the Central Valley/Motherlode Region.

**Labor Market Demand, the occupational grouping of Installation, Maintenance and Repair Occupations:**

SOC	Occupation	2015 Jobs	5-Yr Change	5-Yr % Change	5-Yr Re-placements	Annual Openings
49-9041	Industrial Machinery Mechanics	4,420	632	14%	679	262
49-3023	Auto Service Techs & Mechanics	8,196	462	6%	1,229	338
<b>49-3031</b>	<b>Bus, Truck Mechanics &amp; Diesel Engine Specialists</b>	<b>3,163</b>	<b>349</b>	<b>11%</b>	<b>302</b>	<b>130</b>
49-3041	Farm Equip Mechanics & Service Techs	1,497	85	6%	205	58
49-3021	Automotive Body & Related	1,785	79	4%	235	63
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	1,963	76	4%	284	72
49-2094	Electrical and Electronics Repairers, Commercial & Industrial Equipment	614	25	4%	62	17
49-2095	Electrical and Electronics Repairers, Powerhouse, Substation & Relay	201	12	6%	24	7
49-2093	Electrical and Electronics Installers & Repairers, Transportation Equipment	111	2	2%	15	3

<sup>1</sup><https://www.truckpartsandservice.com/with-an-eye-on-the-future-the-industry-works-to-fill-todays-need-for-technicians/> 05/28/18.

<sup>2</sup> [http://dwmshowcase.com/lmilibrary/documents/lma\\_CVML\\_16.pdf](http://dwmshowcase.com/lmilibrary/documents/lma_CVML_16.pdf) Pg. 40, Regional data includes counties: Alpine, Amador, Calaveras, Fresno, Inyo, Kern, Kings, Madera, Mariposa, Merced, Mono, San Joaquin, Stanislaus, Tulare, and Tuolumne. Table is abridged.

In 2015 there were 3,163 openings in within **Bus and Truck Mechanics and Diesel Engine Specialists**. It is estimated that a positive change of 349 openings will take place within a 5 year time frame, an 11% increase. It is projected that 302 replacements will take place. Replacement estimates include retirements and general separations, but not turnover within the occupation. As such, job openings, a combination of replacements and new job growth, is a good measure of demand for workers.

### Regional Labor Market Assessment - Wages:

The Regional Labor Market Assessment includes *skill-builder* data, defined as a special cohort of students who enter college as experienced workers and take a limited number of courses to maintain and add to their skill sets for ongoing employment and career advancement<sup>3</sup>. Based on this cohort, in regards to the *occupational grouping*, more than 300 students achieved wage gains after taking one course in the following areas: agriculture, electronics, environmental control, heavy equipment or automotive. On average, *skills builders* in the installation, maintenance and repair group achieved a wage gain of 58% (about \$10,300 annually) within two years of exiting the community college system.

**Regionally**, the living wage for one adult is \$10.64 per hour<sup>4</sup>. The table below lists the average minimum wage for entry level employees and the average wage for more experienced employees:

Occupation	Entry Level Wages: Pct. 10 Hourly	Experienced Wages: Median Hourly
First-Line Supervisors of Mechanics, Installers, and Repairers	\$18.99	\$31.87
Computer, Automated Teller, and Office Machine Repairers	\$11.52	\$15.90
Radio, Cellular, and Tower Equipment Installers and Repairs	\$14.68	\$25.25
Telecommunications Equipment Installers and Repairers, Except Line Installers	\$16.18	\$26.84
Avionics Technicians	\$15.57	\$27.97
Electric Motor, Power Tool, and Related Repairers	\$13.26	\$19.93
Electrical and Electronics Installers and Repairers, Transportation Equipment	\$20.20	\$27.62
Electrical and Electronics Repairers, Commercial and Industrial Equipment	\$18.42	\$25.35
Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	\$20.82	\$33.28
Electronic Equipment Installers and Repairers, Motor Vehicles	\$9.18	\$13.41
Electronic Home Entertainment Equipment Installers and Repairers	\$12.48	\$17.31
Security and Fire Alarm Systems Installers	\$14.30	\$20.17
Aircraft Mechanics and Service Technicians	\$18.14	\$27.01
Automotive Body and Related Repairers	\$11.00	\$16.92
Automotive Service Technicians and Mechanics	\$10.27	\$16.08
Bus and Truck Mechanics and Diesel Engine Specialists	\$13.59	\$20.80
Tractor Equipment Mechanics and Service Technicians	\$11.23	\$18.41
Mobile Heavy Equipment Mechanics, Except Engines	\$16.96	\$23.69

<sup>3</sup> [http://dwms Showcase.com/lmlibrary/documents/lma\\_CVML\\_16.pdf](http://dwms Showcase.com/lmlibrary/documents/lma_CVML_16.pdf)

<sup>4</sup> MIT Living Wage Calculator. [livingwage.mit.edu](http://livingwage.mit.edu)

**Labor Market Data Specific to Fresno County:**

When looking longer range for a select area of occupations and *specifically for Fresno County 2014 - 2024* positive increases are also noted. The following table is data pulled from the State of California Employment Development Department<sup>5</sup>:

SOC Code*	Occupational Title	Est Employment 2014**	Projected Employment 2024	Numeric Change 2014-2024	% Change 2014-2024	Annual Average % Change
49-0000	Installation, Maintenance, and Repair Occupations	13,350	15,220	1,870	14.0%	1.4%
49-1000	Supervisors of Installation, Maintenance, and Repair Workers	880	980	100	11.4%	1.1%
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	880	980	100	11.4%	1.1%
49-2000	Electrical and Electronic Equipment Mechanics, Installers, and Repairers	1,380	1,450	70	5.1%	0.5%
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	200	210	10	5.0%	0.5%
49-3000	Vehicle and Mobile Equipment Mechanics, Installers, and Repairers	4,800	5,430	630	13.1%	1.3%
49-3023	Automotive Service Technicians and Mechanics	1,820	1,930	110	6.0%	0.6%
49-3031	<b>Bus and Truck Mechanics and Diesel Engine Specialists</b>	<b>760</b>	<b>870</b>	<b>110</b>	<b>14.5%</b>	<b>1.4%</b>
49-3041	Farm Equipment Mechanics and Service Technicians	430	500	70	16.3%	1.6%
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	390	440	50	12.8%	1.3%
49-9041	Industrial Machinery Mechanics	650	890	240	36.9%	3.7%
49-9043	Maintenance Workers, Machinery	280	340	60	21.4%	2.1%

Data pulled from the State of California Employment Department<sup>6</sup> *specifically addressing Fresno County wages*, listed median hourly wage/salary (first quarter wages) for **Bus and Truck Mechanics and Diesel Engine Specialists in 2016 at a medium hourly wage of \$24.90 (annual \$51,791)**. As noted earlier the regional livable wage starts at \$10.64 hourly.

<sup>5</sup> <http://www.labormarketinfo.edd.ca.gov/data/employment-projections.html> Long term projections.

<sup>6</sup> <http://www.labormarketinfo.edd.ca.gov/data/employment-projections.html> Long term projections.

**Educational Attainment:**

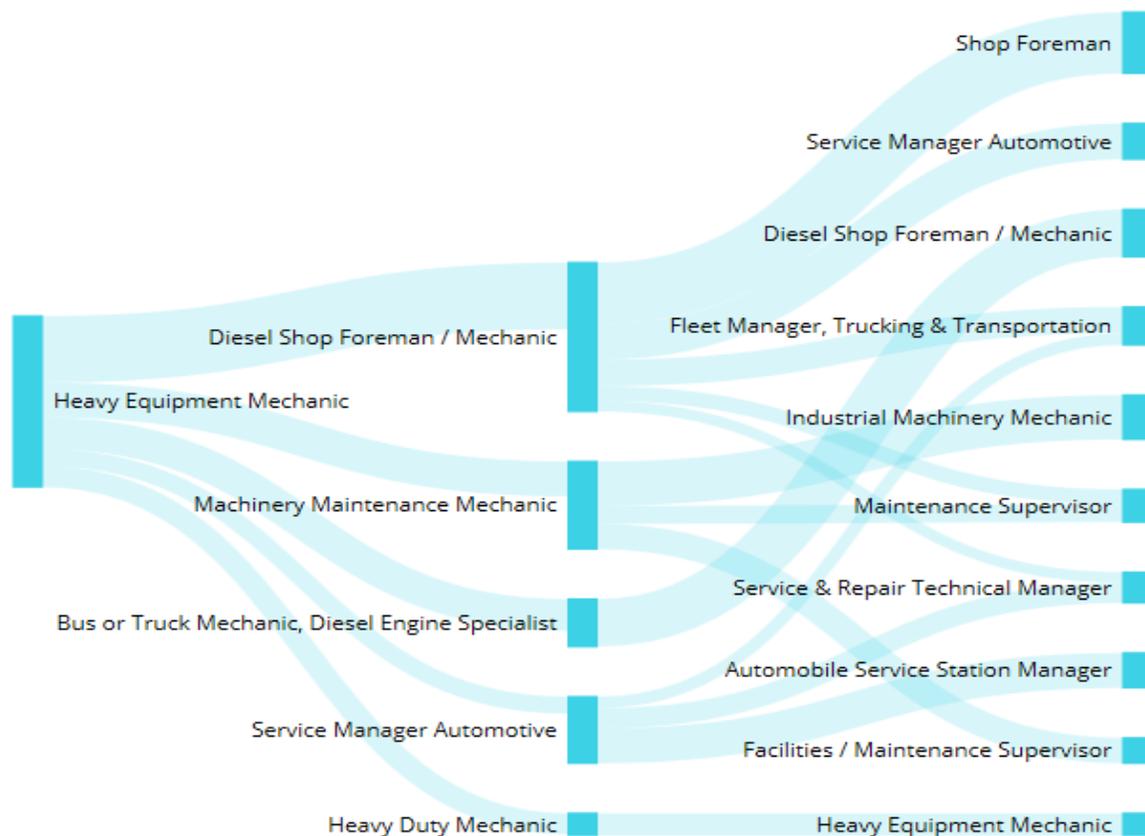
When researching *typical* entry-level education requirements<sup>7</sup>, education levels range from High school diploma/equivalent to Associate degree:

- **Bus & Truck Mechanics & Diesel Engine Specialists - High school diploma/equivalent**
- First-Line Supervisors of Mechanics, Installers and Repairers - High school diploma/equivalent
- Farm Equipment Mechanics & Service Technicians - High school diploma/equivalent

**Skills & knowledge<sup>8</sup>** listed by ONet Online (U.S. Department of Labor):

- Repairing & troubleshooting
- Equipment maintenance
- Operation monitoring, operation and control
- Mechanical
- Customer and personal service
- Mathematics

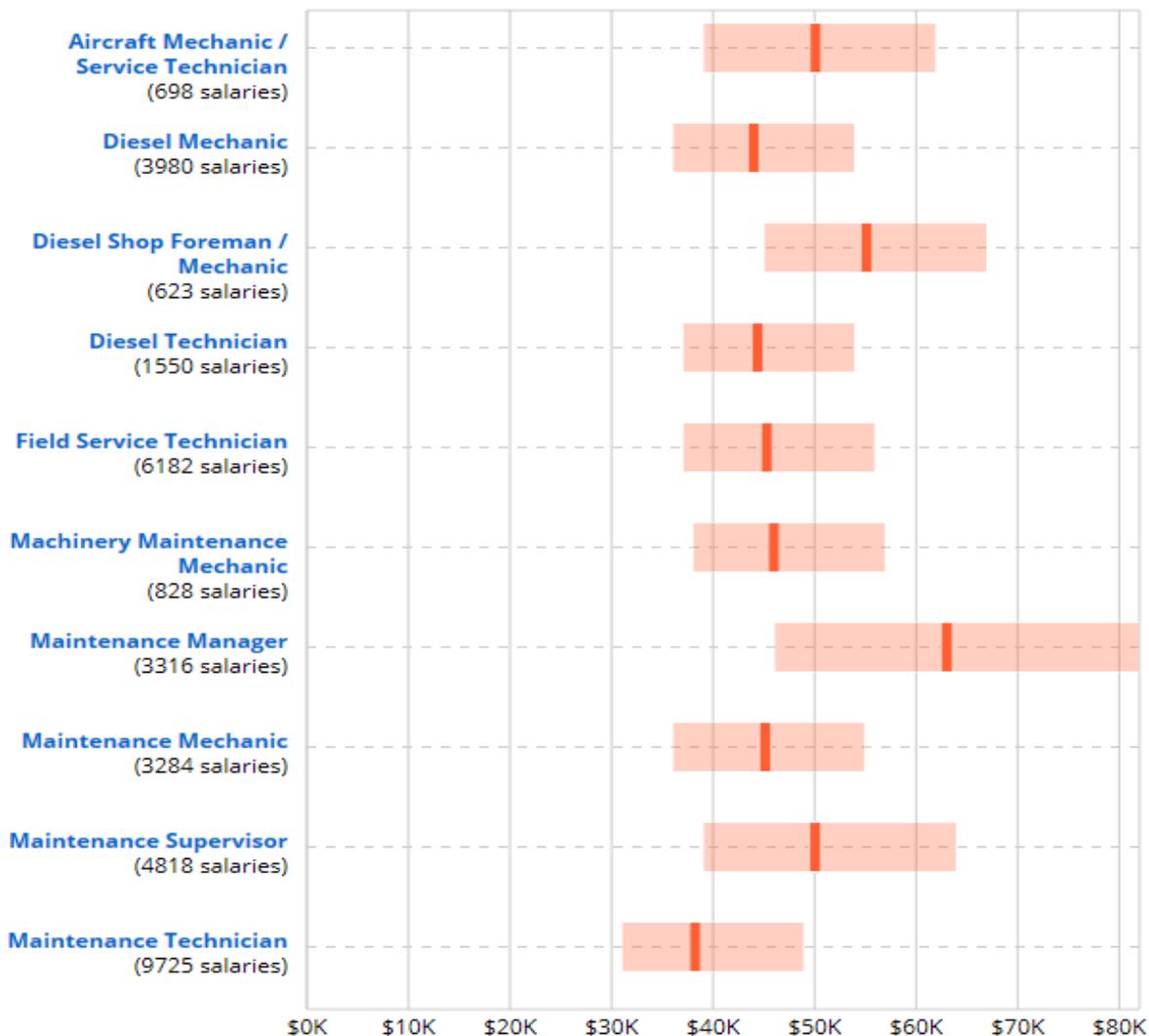
**Career Paths:** Payscale.com<sup>9</sup> reports the following areas of employment for this career field and related job salaries:



<sup>7</sup> [http://dwmsowcase.com/lmibrary/documents/lma\\_CVML\\_16.pdf](http://dwmsowcase.com/lmibrary/documents/lma_CVML_16.pdf) Full listing available

<sup>8</sup> <https://www.onetonline.org/link/summary/49-3042.00>

<sup>9</sup> [https://www.payscale.com/research/US/Job=Heavy\\_Equipment\\_Mechanic/Hourly\\_Rate](https://www.payscale.com/research/US/Job=Heavy_Equipment_Mechanic/Hourly_Rate)



In conclusion, nationally and regionally opportunity for job placement and gainful employment are available in this field. When researching local data, Fresno County opportunities are also readily available and offer a competitive salary starting above a livable wage.