

Commercial Driver License Programs



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Contents

Introduction.....	3
Occupation and Industry Demand	3
CDL Requirements	7
Best Practices in Commercial Driver License Programs.....	10
Other Resources.....	12

Introduction

The *Commercial Driver License Programs Report* was developed on behalf of the Greater Memphis Alliance for a Competitive Workforce (GMACW) in order to assist the Diesel Technology Sector and Commercial Driver License Sector Councils as they explore improvements for the region's commercial driver license (CDL) programs.

To offer a comprehensive review of the occupations typically requiring a CDL license and better inform the Sector Councils of regional and national trends, the following components are included in this report:

- **Occupation and Industry Demand:** Thomas P. Miller and Associates (TPMA) reviewed relevant Labor Market Information (LMI) to confirm demand and understand regional skill needs. All labor market data included in this report is from Emsi.
- **CDL Requirements:** TPMA researched federal and state requirements as well as standard skills required of a commercial motor vehicle operator. Key information, additional resources, and state differences are also noted.
- **Best and Promising Practices:** TPMA researched post-secondary programs and employer engagement strategies to compile national best practices and trends in the trucking industry.

Occupation and Industry Demand

It is important to examine the occupational growth anticipated for the region, industries typically employing CDL drivers, typical earnings, and the age of the workforce to better understand current and future industry demand. These components provide insights into the regional need and competitiveness in the industries and occupations often requiring a commercial driver license.

Occupational Growth

In 2016, the GMACW region had just over 29,500 jobs typically requiring a CDL and half of these were Heavy and Tractor-Trailer Truck Drivers. The demand for these occupations is anticipated to grow to just over 31,300 over the next decade, a 6% increase from 2016 employment. The national growth rate for these occupations is expected to be 10 percent in this same period.

In terms of overall demand, the projected growth does not take into account turnover and retirements. However, there are 759 projected annual openings for CDL workers in the Greater Memphis region, with nearly half (45%) of these openings being Heavy and Tractor-Trailer Truck Drivers.

2016-2026 Regional Occupation Projections ¹					
Occupation	2016 Jobs	2026 Jobs	# Change	% Change	Annual Openings
Heavy and Tractor-Trailer Truck Drivers	14,714	15,364	650	4%	343
Light Truck or Delivery Services Drivers	5,907	6,365	458	8%	151
Industrial Truck and Tractor Operators	5,276	5,649	373	7%	176
Bus Drivers, School or Special Client	2,620	2,885	265	10%	65
Hazardous Materials Removal Workers	86	108	22	26%	4
Rail-Track Laying and Maintenance Equipment Operators	117	137	20	17%	5
Bus Drivers, Transit and Intercity	862	859	(3)	(0%)	14
Total	29,583	31,367	1,784	6%	759

CDL Occupations, by County

With nearly 90% of 2016 jobs, Shelby County, TN, and DeSoto County, MS, comprise the largest demand for CDL occupations. These two counties also dominate the regional job gains over the next ten years. DeSoto County is anticipated to see the greatest growth, accounting for two-thirds of the net job gain (1,178) while Shelby County, TN, is predicted to gain 505 (28% of net growth).

2016-2026 Regional Occupation Projections, By County ²				
County	2016 Jobs	2026 Jobs	# Change	% Change
Shelby County, TN	22,341	22,846	505	2%
DeSoto County, MS	4,196	5,374	1,178	28%
Crittenden County, AR	1,501	1,408	(93)	(6%)
Marshall County, MS	495	554	59	12%
Tipton County, TN	324	370	46	14%
Fayette County, TN	298	371	73	24%
Tate County, MS	222	249	27	12%
Tunica County, MS	114	110	(4)	(4%)
Benton County, MS	91	85	(6)	(7%)
Total	29,583	31,367	1,784	6%

¹ The GMACW region includes Shelby, Fayette and Tipton Counties in TN; Benton, DeSoto, Marshall, Tate, and Tunica Counties in MS, and Crittenden County, AR

² Includes SOC codes 53-3032, 53-3033, 53-7051, 53-3021, 47-4041, 47-4061, and 53-3022

Respective Sector Council members will likely be able to provide a more nuanced understanding of local and county-level demand with respect to overall turnover, churn, and internal hiring projections.

Top Industries Employing CDL Workers

It is also important to examine the industries that employ CDL workers. Couriers and Express Delivery Services was the largest industry in the region, with one-fifth of the region’s CDL workers in 2016. General Freight Trucking, Long-Distance Truckload was the second largest industry (18% of CDL workers), although it is anticipated to contract the most (601 jobs, or 12% decline) over the next decade. General Warehousing and Storage is expected to add the most CDL workers (665, or 32% growth) over this same timeframe.

2016-2026 Largest Industries Employing CDL Workers³					
Industry	2016 Jobs	2026 Jobs	Change		2016 % of Occupation in Industry
			#	%	
Couriers and Express Delivery Services	5,875	6,131	256	4%	20%
General Freight Trucking, Long-Distance, Truckload	5,191	4,590	(601)	(12%)	18%
General Freight Trucking, Long-Distance, Less Than Truckload	2,647	3,018	371	14%	9%
General Warehousing and Storage	2,052	2,717	665	32%	7%
Temporary Help Services	1,037	1,291	254	24%	4%
Elementary and Secondary Schools (Local Government)	1,034	987	(47)	(5%)	4%
General Freight Trucking, Local	903	1,120	217	24%	3%
Local Government, Excluding Education and Hospitals	768	758	(10)	(1%)	3%
Specialized Freight (except Used Goods) Trucking, Long-Distance	736	881	145	20%	3%
School and Employee Bus Transportation	609	804	195	32%	2%

Occupational Earnings and Typical Requirements

At nearly \$20/hour, Heavy and Tractor-Trailer Truck Drivers earn the highest median hourly earnings of the occupations identified, and it is the only one that typically requires postsecondary non-degree award. Even for jobs that do not typically require more than a high school diploma, there is typically short to moderate-term on-the-job training involved.

³ 6-Digit NAICS, GMACW region

Typical Earnings, Education, and On-The-Job Training for CDL Occupations			
Occupation	Median Hourly Earnings	Typical Entry Level Education	Typical On-The-Job Training
Heavy and Tractor-Trailer Truck Drivers	\$19.93	Postsecondary non-degree award	Short-term
Light Truck or Delivery Services Drivers	\$15.90	HS diploma or equivalent	Short-term
Industrial Truck and Tractor Operators	\$13.10	No formal credential	Short-term
Bus Drivers, School or Special Client	\$11.75	HS diploma or equivalent	Short-term
Hazardous Materials Removal Workers	\$19.52	HS diploma or equivalent	Moderate-term
Rail-Track Laying and Maintenance Equipment Operators	\$13.29	HS diploma or equivalent	Moderate-term
Bus Drivers, Transit and Intercity	\$17.06	HS diploma or equivalent	Moderate-term

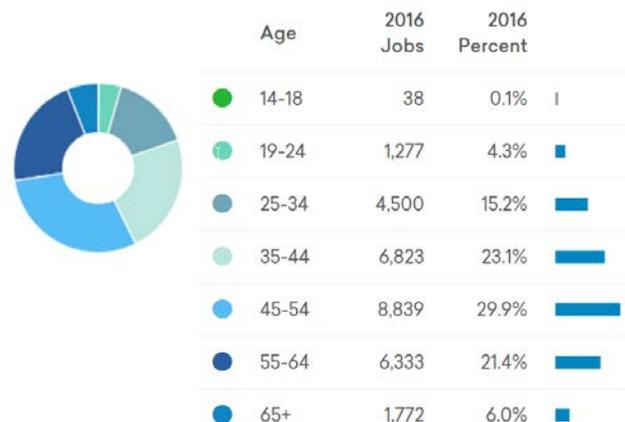
The median hourly earnings for CDL positions in the GMACW region are \$17.06 per hour, slightly less than the national average of \$17.28 per hour. Although the GMACW region trends slightly less than national percentile earnings, it has a competitive advantage compared to the states of Tennessee, Mississippi, and Arkansas. When applying hourly earnings to full-time employment (2,080 hours/year), the percentile breakdown of average yearly salaries is:

Region	25th Percentile	50th Percentile	75th Percentile
USA	\$29,058	\$35,942	\$44,845
GMACW	\$28,496	\$35,485	\$44,138
Tennessee	\$27,851	\$34,050	\$42,910
Mississippi	\$26,707	\$33,342	\$42,474
Arkansas	\$26,562	\$32,635	\$41,038

While salaries can vary by distance driven, employer, and vehicle operated, owner and independent operators, solo company, and hazardous materials drivers typically earn higher salaries.

Employment by Age

Just over one quarter (27%) of workers in the described occupations are within ten years of retirement age. The majority of individuals working in CDL occupations in the GMACW region are 45-54 years old (30%), followed by 35-44 year olds (23%). Nearly one-fifth of the workers are individuals age 19 to 34. With a large number of fast-growing occupations, it will be important to engage, recruit, and train new workers to meet demand and as older CDL drivers leave the workforce.



CDL Requirements

Driving a commercial motor vehicle requires special skills and knowledge and there are three primary classes of licenses and learning permits (CLPs) that states issue, mainly⁴:

- **Class A:** Any combination of vehicles which has a gross combination weight of 26,001 pounds or more, inclusive of a towed unit(s) with a gross vehicle weight 10,000 pounds.
- **Class B:** Any single vehicle which has a gross vehicle weight of 26,001 pounds or more, or any vehicle towing a vehicle with a gross vehicle weight that does not exceed 10,000 pounds.
- **Class C:** Any single vehicle, or combination of vehicles, that does not meet the definition of Class A or Class B, but is either designed to transport 16 or more passengers, including the driver, or is transporting material that has been designated as hazardous or is transporting any quantity of a material listed as a select agent or toxin.

Drivers must hold a commercial driver's license from only one state at a time, which is typically the driver's state of residence. In addition to classes A-C, special endorsements may be required if an employee will be driving:

- a truck with double or triple trailers
- a truck with a tank
- a truck carrying hazardous materials
- a passenger vehicle

Drivers who operate special types of commercial motor vehicles must pass additional tests to obtain any of the following endorsements placed on their CDL:

Endorsement Code	Description	Type of Test ⁵
T	Double or Triple Trailers	Knowledge
P	Passenger	Knowledge, Skills
N	Tank vehicle	Knowledge
H	Hazardous materials*	Knowledge
S	School Bus *	Knowledge, Skills
X	Combination of tank vehicle and hazardous materials endorsements	Knowledge

*School Bus and Hazardous materials drivers also require a Background Check.

Additionally, drivers must obtain a Department of Transportation medical card via physical examination certifying they are physically qualified to drive a commercial motor vehicle. The Federal Motor Carrier Safety Administration also mandates rules for drug and alcohol testing for CDL holders.

⁴ Federal Motor Carrier Safety Administration

⁵ Knowledge tests are written exams while skills test are driving test.

Although states must comply with federal mandates, states can and do offer conditional licenses based on:

- Operator Age – While the typical requirement is 21 and older per the US Department of Transportation, some states allow 17 to 20 year olds to obtain a CDL that is valid only in the driver’s state of residence.
- Vehicle Use – Commercial vehicles may be defined differently in each state. For example, California defines a commercial vehicle as one that transports either people or products (e.g. if primary employment is driving).

Restrictions may also be placed on a CDL and a driver may receive a restriction if they take the skills test with the wrong type of vehicle or if they cannot operate an air brake system or manual transmission.

State Requirements

In the state of Tennessee, drivers age 18 and older can obtain a Class B license without special endorsement if they operate a vehicle solely within the operator’s state, and within 100 miles of the job. At age 19, drivers can obtain a Class A or Class B license without endorsement(s), although intrastate and distance restrictions still apply until the age of 21. Mississippi allows individuals to obtain a CDL A at age 17, but also requires them to drive intrastate and without endorsement(s) until they are 21.

For any CDL or permit, the driver must not be under a license suspension, cancellation or revocation (in any state) and must provide proof of U.S. Citizenship or Lawful Permanent Resident status.

The following individuals are exempt and not required to obtain a CDL in Tennessee:

- Farmers or nurserymen transporting agricultural products, farm machinery, or farm supplies within the state and within 150 miles of the farm or nursery (and the vehicle is not used as a common or contract motor carrier)
- Operators of emergency vehicles
- Active duty military personnel, members of the military reserves, active duty national guard personnel, and national guard military technicians while operating a commercial vehicle for military purposes
- Operators of recreational vehicles
- Operators of vehicles leased strictly to transport personal possessions for non-business purposes

Effective July 31, 2017, Arkansas state law also requires the completion of a Human Trafficking Prevention Course for the issuance or renewal of a Class “A” CDL.

Standard Skills for Entry-Level Drivers

The Federal Motor Carrier Safety Administration (FMCSA), Department Of Transportation, recently released a Final Rule on December 8, 2016, revising 49 CFR part 380, to establish Minimum Training Requirements for Entry-Level Commercial Motor Vehicle Operators⁶. The Rule establishes core and training curricula for Class A and Class B CDL, including knowledge (theory) and behind-wheel (BTW) segments. Although a minimum amount of hours required for the theory and BTW elements is not defined, driver-trainees must score at least an 80 percent on the theory assessment and demonstrate proficiency in BTW skills. Behind-the-wheel proficiency cannot be demonstrated through simulation devices.

Established in 1986, the Professional Truck Driver Institute is a nonprofit organization that has worked with industry and governmental agencies to develop uniform skill performance, curriculum, and certification standards for entry-level driver training courses. PTDI certifies training providers based on a rigorous set of standards.

Revised in February 2017, PTDI developed a set of standard skills needed for an entry-level commercial motor vehicle operator, including:

- Read and interpret control systems
- Perform vehicle inspections and visual search
- Exercise basic control and shifting
- Back and dock Commercial Motor Vehicle
- Couple and Uncouple Trailer
- Manage and adjust vehicle speed and space relations
- Check and maintain vehicle systems and components
- Diagnose and report malfunctions
- Identify potential driving hazards and perform emergency maneuver
- Identify and adjust to difficult and extreme driving conditions
- Handle and document cargo
- Address accident scenes and reporting procedures
- Address environmental issues
- Plan trips/make appropriate decisions
- Use effective communications
- Manage personal resources while on the road
- Record and maintain hours of service requirements

A detailed description of performance and assessment criteria from PTDI can be accessed at <http://www.ptdi.org/errata/SKILL%20STANDARDS%20ENTRY%20LEVEL%20021517.pdf>

⁶ <https://www.federalregister.gov/documents/2016/12/08/2016-28012/minimum-training-requirements-for-entry-level-commercial-motor-vehicle-operators>

Best Practices in Commercial Driver License Programs

Thomas P. Miller and Associates reviewed several post-secondary CDL programs and has selected a few to highlight as best and promising practices from which GMACW can draw. One of the greatest challenges facing the transportation and logistics industry is awareness, recruitment, and retention in available careers to fill a large number of available and projected jobs, especially those requiring a CDL. The following best practices primarily focus on colleges, workforce entities, and employers addressing this challenge.

Lord Fairfax Community College Workforce Solutions (Middletown, VA)

Lord Fairfax Community College Workforce Solutions offers a 160-hour fast-track training in full-time (Monday through Friday) and part-time (weekend) options that can be completed in four weeks. Collaborating with CDS Tractor Trailer Training Company, LFCC Workforce Solutions offers support with job placement and personalized training to serve the region's employment needs and support job placement in the surrounding states. Students have hands-on training, are in the trucks on the second day of the program, and have multiple pre-hire offers available upon graduation.

For more information: <https://lfccworkforce.com/commercial-truck-driver-fast-track-training-program/>

Prime Inc. (Springfield, MO, Various Locations)

The Prime Student Driver program offers a Paid Apprenticeship CDL Training program. In addition to training for and obtaining a Commercial Driver's License permit, on-the-road hours are offered during a paid training period with a Prime Trainer. Students log at least 75 hours of one-on-one behind-the-wheel training before obtaining their CDL, with opportunities for across the country loads with Instructors. Final training requires 30,000 additional team miles with a qualified instructor and a further training certification (ACE) qualifies graduates to drive solo. Competitive pay rates are available for refrigerated, flatbed, and tanker drivers.

For more information: <https://www.primeinc.com/paid-apprenticeship-cdl-training>

The Midwest Transportation Workforce Center (MTWC) (Multi-State)

The MTWC works with individuals and organizations representing the transportation industry, education, and government in nine Midwestern states including Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Ohio, and Wisconsin. Recently launched in 2016, a searchable database of transportation resources acts as a "clearinghouse" for pre-apprenticeship programs, internships, educational opportunities, professional development opportunities, scholarships, summer programs, and workforce development initiatives in the nine-state region. The database serves as a resource for educators seeking curricula, industry professionals seeking successful practices, and individuals seeking targeted information on summer and internship opportunities. Concurrently, the database helps determine where there are gaps and need for improved career pathways in the Midwest's transportation talent pipeline.

For more information: <http://mtwc.org/clearinghouse/>

J.B. Hunt (Various Locations)

Committing to employ 10,000 Veterans by 2020, J.B. Hunt offers a CDL-A Hiring Program for entry-level civilian careers and a Military Finisher Program for fast-track heavy equipment training during military service time. Veterans are paid during the both coursework and behind-the-wheel training and those participating in the 12-month J.B. Hunt National Apprenticeship program may also be eligible to receive additional GI Bill assistance for housing.

For more information: <https://drivers.jbhunt.com/Benefits-and-Programs/Military-Programs>

Northwest Wisconsin CEP – High Wage Highway (Various Locations, WI)

The High Wage Highway program raises awareness for careers in the trucking industry by bringing new trucks to county fairs, regional festivals, car shows, and car races. Current drivers and recruiters attend events in to engage men, women, and children and allow individuals to physically step inside and explore the truck and equipment. The events bring information about the trucking industry in public spaces rather than at a conventional job fair. Employer partners have been instrumental to the success of the program and interacting with individuals in non-traditional spaces has helped reduce the stigma of the industry, especially for women and young girls in attendance.

For more information: <http://mtwc.org/2016/07/18/taking-recruitment-on-the-road-with-the-high-wage-highway-program/>

Other Resources

- **Tennessee Department of Safety & Homeland Security Commercial Driver License Manual** – <https://www.tn.gov/assets/entities/safety/attachments/CDLManual.pdf>: A comprehensive document providing information relevant to the state’s knowledge and skills tests as well as restrictions and exemptions.
- **Women in Trucking Association** - <https://wt.memberclicks.net/2017-sessions>: Founded in 2007, the Women in Trucking Association is a nonprofit organization that promotes career awareness and opportunities for women in the transportation and logistics industry, improves working conditions, and increases the representation of women in leadership while serving as a resource for women in the trucking industry.
- **National Association of Publicly Funded Truck Driving Schools** - <https://napftds.org/>: Promotes public education for the transportation industry where “educators can network with other truck driving schools across the country to provide the highest quality, most cost-effective, and up-to-date training available.”
- **American Association of Motor Vehicle Administrators (AAMVA)** - <http://www.aamva.org/>: “Develops model programs in motor vehicle administration, law enforcement and highway safety” and “serves and an information clearinghouse and international spokesman for these interests.”
- **American Trucking Associations (ATA)** – <http://www.trucking.org/>: Advocates for, “innovative, research-based policies that promote highway safety, security, environmental sustainability and profitability.” Key areas and issues the ATA is involved with include agriculture and food, auto haulers, cross border, energy, engineering, environment, government traffic, hazardous materials, highway infrastructure and funding, intermodal, labor, regional carriers, risk management, safety, security, and tax and registration.
- **Commercial Vehicle Training Association (CVTA)** – <https://cvta.org/>: Founded in 1996, the Commercial Vehicle Training Association represents over 200 commercial truck driver training programs in the United States. The mission of the CVTA is to promote excellence in training, develop safety in the transportation industry, and enhance driver professionalism. The CVTA recommends a minimum of 160 total hours of instruction, with at least 40 academic hours of behind-the-wheel driving time.