The transportation industry is very global in nature and its growth has been spurred by the increased adoption of new technologies that allow time-specific delivery and electronic tracking of cargo. (Hoover’s Online)

Employment in the transportation industry is expected to increase from 4,205,000 jobs in 2002 to 5,120,000 jobs in 2012, an increase of 914,000 jobs. (U.S. Bureau of Labor Statistics)

Between 2002 and 2012 there will be substantial employment opportunities in a wide range of transportation-related occupations, such as:
- Truck drivers, heavy and tractor-trailer: 337,000 new jobs
- Bus and truck mechanics and diesel engine specialists: 38,000 new jobs
- Railroad conductors and yardmasters: 10,000 job openings

Many jobs in truck transportation and warehousing require a high school education, although an increasing number of workers have at least some college education. Whereas many states allow those who are 18 years old to drive trucks within state borders, the U.S. Department of Transportation establishes minimum qualifications for truck drivers engaged in interstate commerce. Federal Motor Carrier Safety Regulations require truck drivers to be at least 21 years old, have at least 20/40 vision and good hearing, and be able to read and speak English. They must also have good driving records. In addition, drivers must have a state commercial driver’s license (CDL), for which they must pass a written examination and a skills test operating the type of vehicle they will be driving. Individual companies often have additional requirements applicants must meet. Many truck drivers enter the occupation by attending training schools for truck drivers.

The skills and experience needed by workers in air transportation differ by occupation. Some jobs may be entered directly from high school, while others require extensive specialized training. Most airline positions involve extensive customer service contact requiring strong interpersonal and communication skills. Mechanics and pilots require extensive specialized formal training and must...
Skills Sets (cont’d)

be certified by the Federal Aviation Administration (FAA); skills for many other air transportation occupations can be learned on the job or through company-sponsored training.

• Railroads require that applicants for many positions have a minimum of a high school diploma or its equivalent. Physical stamina is required for many entry-level jobs. Employers require railroad transportation job applicants to pass a physical examination, drug and alcohol screening, and a criminal background check. Many rail transportation employees work nights, weekends, and holidays because trains operate 24 hours a day, 7 days a week. Rail yard workers spend most of their time outdoors in varying weather. Entry-level conductors must generally be at least 21 years of age and are either trained by their employers or required to complete a formal conductor training program. Applicants for locomotive engineer jobs must be at least 21 years old. Employers almost always fill engineer positions with workers who have experience in other railroad-operating occupations.

• Key occupations in the transit and ground passenger transportation sector include transit and intercity bus drivers, bus and truck mechanics and diesel engine specialists, and first-line supervisors/managers of transportation and material-moving machine and vehicle operators. Bus drivers must be courteous and have strong customer service skills. In addition, federal regulations require drivers who operate commercial motor vehicles to hold a CDL from the state in which they live. Although many persons qualify for diesel service technician and mechanic jobs through years of on-the-job training, employers prefer to hire graduates of formal training programs. Many community colleges and trade and vocational schools offer programs in diesel repair. In addition to the hands-on aspects of the training, many institutions teach communication skills, customer service, basic understanding of physics, and logical thought. The most significant source of training for first-line supervisors/

managers of transportation and material moving machine and vehicle operators is work experience in a related occupation.

• Within the scenic and sightseeing transportation and support activities sector, aircraft mechanics and service technicians and customer service representatives are two of the primary occupations. Most mechanics learn their job in one of about 200 trade schools certified by the FAA. About one-third of these schools award two and four year degrees in avionics, aviation technology, or aviation maintenance management. Aircraft mechanics must do careful and thorough work that requires a high degree of mechanical aptitude. Employers seek applicants who are self-motivated, hard-working, enthusiastic, and able to diagnose and solve complex mechanical problems. A high school diploma or the equivalent is the most common educational requirement for customer service representatives. Basic computer knowledge and good interpersonal skills also are important qualities for people who wish to be successful in the field. Because customer service representatives constantly interact with the public, strong communication and problem-solving skills are a must.

• Entry, training, and educational requirements for most water transportation occupations are established and regulated by the U.S. Coast Guard. All officers and operators of commercially operated vessels must be licensed by the Coast Guard, which offers various kinds of licenses, depending on the position and type of vessel. Sailors and unlicensed engineers working on U.S. flagged deep-sea and Great Lakes vessels must hold a Coast Guard-issued document. A medical certificate of excellent health attesting to vision, color perception, and general physical condition is required for higher level deckhands and unlicensed engineers. No special training or experience is needed to become a seaman or deckhand on vessels operating in harbors or on rivers or other waterways.

ETA in Action

ETA will partner with employers, education providers, and workforce professionals to develop and model skills training solutions nationally that can be replicated and sustained throughout the state and local public workforce system. These approaches will help ensure that workers have the right skills for the right jobs at the right time.

Resources