



Have you ever watched kids playing in a sandbox? Digging in the sand, moving it from place to place, building something and then tearing it down. Keeps them occupied for long periods of time.

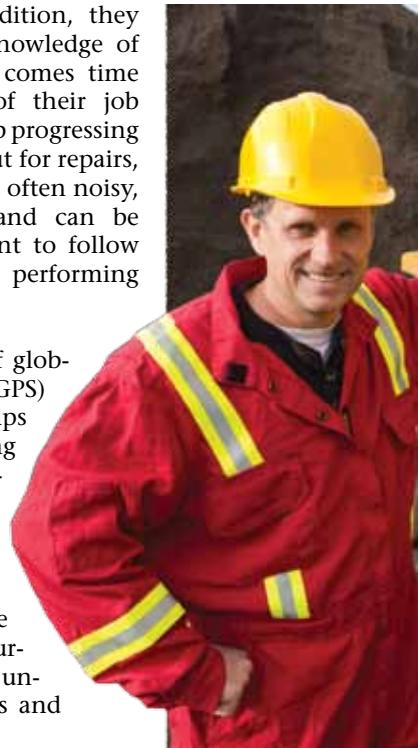
Oftentimes, they have earth moving equipment, tractors, and such to help them fantasize about changing the face of the planet. Perhaps this is where it starts for some operating engineers, those folks who make a living operating the equipment that clears and grades the land to prepare for construction of roads, buildings, bridges, runways, dams, and levees, to name a few.

Since one cannot list on a resume the time spent playing in a sandbox, how does one make the earth moving fantasy a reality? Operating engineers are trained through formal apprenticeships, on-the-job training, paid training programs, or a combination of these. An apprenticeship consists of at least three years, or 6,000 hours, of paid on-the-job experience together with 144 hours of classroom instruction each year. Since apprentices learn to operate a wide variety of equipment, they may have better job opportunities. One resource for apprenticeship programs is administered by the International Union of Operating Engineers, which

reports over 400,000 members, 1,000 instructors and hundreds of facilities across North America.

Once the training has taken place, the real work begins. Operators run the machinery in all types of weather conditions and at all hours, often in remote locations. In addition, they must have a working knowledge of the machinery when it comes time for repairs. It is part of their job description to keep the job progressing and if that means time out for repairs, so be it. The job setting is often noisy, dusty, greasy, muddy, and can be dangerous. It is important to follow safety guidelines when performing this job.

With the introduction of global positioning system (GPS) technology, which helps with grading and leveling activities, and computerized controls and improved hydraulics, the industry is more technologically advanced than in past years. These improvements require further training and a basic understanding of electronics and hydraulics.



About 63 percent of construction equipment operators work in the construction industry. Many equipment operators work in heavy and civil engineering construction, building highways, bridges, or railroads. About 16 percent of construction equipment operators work in local government. Others—mostly grader, bulldozer, and scraper operators—work in mining. Some also work for manufacturing or utility companies. About 3 percent of construction equipment operators are self-employed.

This occupation is expected to experience slower than average growth, nevertheless, there should be a high volume of annual job openings. Business expansion,

rather than the need for replacements, will provide the majority of job openings in the coming decade. In the short term, employment may be limited but should improve in concert with the economy.

For those of us who have not forgotten our sandbox days, a former fencing contractor in Las Vegas has opened a business called Dig This, where, for a fee, visitors can operate a wide variety of construction equipment in a five-acre theme park. According to AARP magazine, about half the visitors to Dig This are women, proof that gender is no barrier to sandbox dreams of becoming operating engineers. 🧠

For more information:

- <http://www.iuoe.org>
- www.bls.gov
- Associated General Contractors of America
- www.utah.gov

UTAH Occupational Wages—Published June 2011
 (data from May 2010) for Operating Engineers and Other
 Construction Equipment Operators



Area Name	Hourly Inexperienced	Hourly Median	Annual Inexperienced	Annual Median	Training Level
Box Elder and Rich	\$15.61	\$18.43	\$32,460	\$38,330	Moderate-term OJT (1-12 months)
Central	\$14.33	\$17.48	\$29,810	\$36,360	Moderate-term OJT (1-12 months)
Eastern	\$16.38	\$19.41	\$34,060	\$40,370	Moderate-term OJT (1-12 months)
Logan MSA	\$14.56	\$17.04	\$30,290	\$35,430	Moderate-term OJT (1-12 months)
Ogden-Clearfield MSA	\$15.95	\$20.86	\$33,180	\$43,390	Moderate-term OJT (1-12 months)
Provo-Orem MSA	\$13.34	\$18.53	\$27,740	\$38,540	Moderate-term OJT (1-12 months)
Salt Lake City MSA	\$16.28	\$20.16	\$33,870	\$41,930	Moderate-term OJT (1-12 months)
Southwest	\$11.07	\$19.36	\$23,020	\$40,280	Moderate-term OJT (1-12 months)
St. George MSA	\$15.87	\$19.68	\$33,010	\$40,920	Moderate-term OJT (1-12 months)
United States	--	\$19.12	--	\$39,770	Moderate-term OJT (1-12 months)
Utah	\$15.03	\$19.60	\$31,250	\$40,760	Moderate-term OJT (1-12 months)