

# Chapter 1

## Overview of Workforce Education and Current Economic Surge in Oil and Gas Industry

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### **ABSTRACT**

*This chapter highlights workforce and technical training required by a demanding and growing need of oil and gas companies in the Permian Basin. The chapter focuses on the alignment of workforce training to develop specific skill sets, joining workers with companies, vendors, and community through workforce training. Paying particular attention to the challenges facing today's workforce, focusing on a growing and evolving workforce needs, and how to train and retrain to keep pace with those changes. The discussion includes a complex development and operation of workforce programs and how workforce education programs implement an industry-based training and support.*

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## **BACKGROUND**

The area known as the Permian Basin consists of the western part of Texas and the southeastern part of New Mexico. The Permian Basin spans from west Texas to southeastern New Mexico; approximately 250 miles wide and 300 miles long, this area has become saturated with employment opportunities (RRC, 2018). It encompasses the larger urban areas of Lubbock, Midland, Odessa and the southeastern part of New Mexico and smaller hometowns – Andrews, Big Spring, Big Lake, Crane, McCamey, Pecos and many others. The Permian Basin received its name because of the thick rock deposits from the Permian geological period and is comprised of the Midland Basin, Delaware Basin and Marfa Basin. The area is known for its large oil and natural gas areas and the resilience of the people who live in the hot and dry area.

Midland and Odessa, Texas are the two main towns that make up the Permian Basin thriving on the oil and gas industry; each consisting of around 150,000 residents. The oil rich area consists of oil rigs, cotton fields, and dirt roads. Roads are congested with 18 wheelers, oil service providers headed to the field and locals trying to go about their daily routine. With oil prices seeing a three-year high of around \$68 dollars a barrel with the United States expected to produce more than Russia by the end of the year (Uhler, 2018). Oil prices are seeing the greatest gain compared to the last two years because of the limited increase by OPEC (Faucon, B., Said, S. and Yang, S. 2018). The world's greatest oil producers met last week and agreed to a 600,000 barrel a day increase – less than the million gallon a day release as expected as reported by the Wall Street Journal (Faucon, et al., 2018). As a result of the OPEC - meeting, U.S. oil prices increased by 4.6% to \$68.58 a barrel as investors are confident oil prices are continuing to rise (Faucon, et al., 2018). A strong global demand for fuel is increasing profits for major producer like Exxon Mobile and Chevron Corporation. In the Permian Basin, oil prices dictate the value of houses, expansion of restaurants and addition of businesses, equating to more and more jobs. Unfortunately, the oil and gas industry are volatile. A year ago, oil was around \$50 a barrel, however; two years ago, it was half that equating to lost jobs and people moving out of town (Uhler, 2018). The top oil and natural gas production companies are based in the Permian Basin and have even gone as far as building their corporate headquarters in Midland, TX. Chevron's presence has been steadily increasing since the early 1920s and in 2011, reportedly produced its 5 billionth barrel of oil from the Permian Basin (Chevron website). Another top commodity

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