

SECTION



The Impact of Oil on Texas

Why It Matters Now

Without the oil industry, the way Texans work, play, travel, and live would be very different.

TERMS & NAMES

petrochemical, synthetic rubber, toxic waste, Federal Aid Road Act, Amon Carter Museum

OBJECTIVES

1. Analyze the impact of the oil and gas industry on Texas and the United States.
2. Analyze the effects of the discovery of oil and gas on the development of Texas.
3. Analyze the effects of technological advances such as the automobile and airplane on the development of Texas.

MAIN IDEA

The oil industry has been very important to the growth and development of industry, technology, culture, and education in Texas.

WHAT Would You Do?

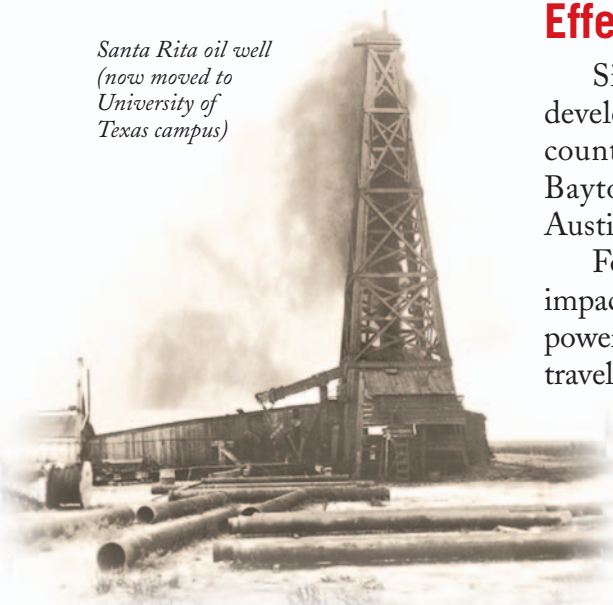
Write your response to *Interact with History* in your *Texas Notebook*.



INTERACT WITH HISTORY

Imagine that you are a reporter for a national magazine during the 1930s. You are assigned to write a feature story about the oil boom in Texas since 1901. What people, places, and events would you write about? How has oil affected Texas in these 30 years?

*Santa Rita oil well
(now moved to
University of
Texas campus)*



Effects of the Oil Boom

Since its discovery at Spindletop, oil has been a major influence on development in all regions of Texas. Houston and Midland are home to countless oil companies. Corpus Christi, Beaumont, Port Arthur, and Baytown boast major oil refineries. Even the University of Texas at Austin had an operating oil well on its campus for years.

For evidence of the power of oil, just take notice of how oil has an impact on transportation. The cars, trucks, and buses you see each day are powered by oil products such as gasoline and diesel. The asphalt roads they travel on were made using oil. Also, the Texas skies are filled with airplanes fueled by oil-based jet fuel. Oil is even a source of electric power.

Look around you. Many of the plastic and rubber products in your home and classroom are made from oil-based chemicals. In fact, the development of the **petrochemical** industry is significant evidence of the oil industry's impact on Texas.

The Petrochemical Industry

In the 1920s chemists found ways to remove chemicals from petroleum to make everyday household items. Also, during World War II, when many overseas supplies were unavailable, chemicals were used to make explosives and **synthetic rubber** for tires. This demand led to further growth and development of the petrochemical industry.

petrochemical *a chemical made from petroleum or natural gas*

synthetic rubber *rubber that comes from chemicals rather than from plants*



Although petrochemicals provided many important benefits to the Texas economy and the public, their production raised environmental concerns. The processes used to separate these chemicals from oil created tons of **toxic waste** each year. They also released cancer-causing fumes and gases into the air. In years to come, Texas would launch a major effort to control pollution caused by petrochemical and other industries.

toxic waste *poisonous by-product from chemical production*



To Economics

Hundreds of petrochemical plants in Texas produce products such as ethylene (ETH•uhl•een), used to ripen fruit, and propylene (PROH•pull•een), used as antifreeze in car radiators. Plastics, tires, inks, fertilizers, and many other widely used products are made from petrochemicals. At one time, the world's largest ethylene production plants were located along the Texas Gulf Coast. ● **Has the development of the petrochemical industry had a positive or negative effect on Texas? Why?**

The Development of Transportation

Besides creating new industries, the oil boom led to improvements in Texas transportation. Automobiles, which were first seen in Texas around 1900, would not have been practical if not for oil production. Although alarmed at first by the noisy engines of early cars, Texans quickly learned to appreciate the automobile.

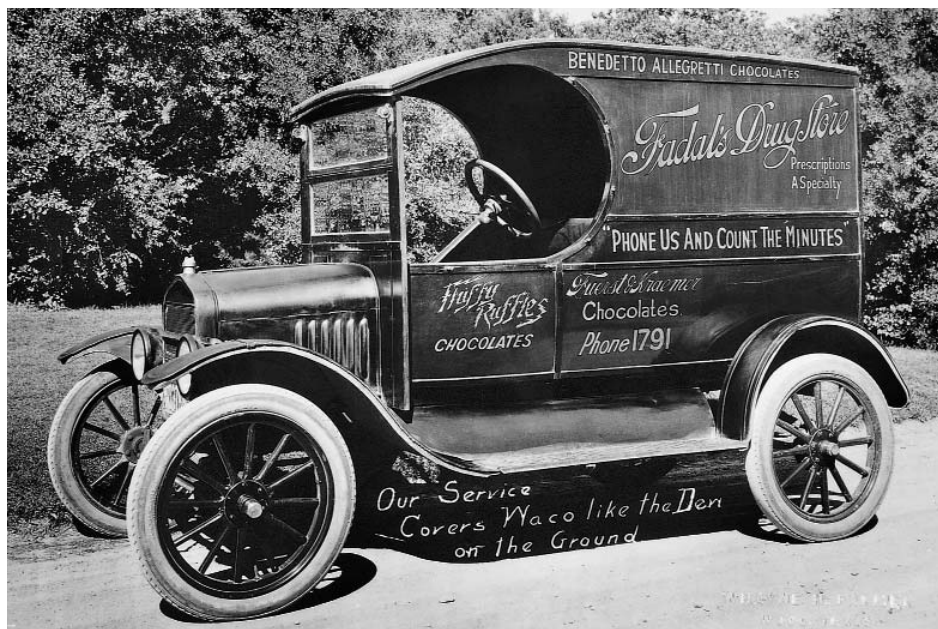
With the automobile came the need for better roads. City streets often stretched a bit past the city limits and then ended in pastures or at rivers. In 1903 concerned citizens formed "good roads" associations in Texas to work toward improving roads. Some even volunteered to do roadwork.

Requests for a highway system began in 1903. However, little was done until 1916, when the Federal Aid Road Act provided for state highway departments. Highways also made way for the development of motels, roadside restaurants, gasoline stations, and other businesses.

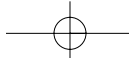
Travel in Texas

Airplanes were rarely seen in Texas skies until World War I. These new forms of transport created an immediate demand for fuel. During the World Wars, the U.S. military established air bases in Texas because of the open spaces, level ground, and warm climate. Airline companies followed soon after, serving all the state's major cities.

Strengthening the tie between oil and air travel, Amon G. Carter, an oil executive and Texas newspaper owner, helped make Fort Worth a major center of aircraft production. Howard Hughes, a Houston manufacturer of oil drilling equipment, tested and raced airplanes. He made headlines in the 1930s by setting a world air-speed record.



◀ Texas officially recognized the automobile in 1907, when the state set its first speed limit at 18 miles per hour. Soon Texans fell in love with the automobile. Fadal's Drug Store in Waco used this truck for deliveries. It bragged that "Our Service Covers Waco Like the Dew on the Ground." ● **How do you think the introduction of automobiles affected cities?**



Oil's Contributions to Culture and Education

Many museums, art galleries, colleges, and universities in Texas owe their existence to individuals and institutions related to the oil industry. During the 1900s, Houstonian Hugh Roy Cullen donated more than \$11 million of his oil fortune to the University of Houston and to Houston hospitals. Amon G. Carter established the Amon G. Carter Foundation for cultural and educational purposes. Furthermore, in his will he provided for the building of the Amon Carter Museum in Fort Worth. He specified that the museum would be free and open to all.

▲ When construction began on the original Main Building of the University of Texas at Austin, Ashbel Smith said, “Smite the rocks with the rod of knowledge, and fountains of unstinted wealth will gush forth.” His words came true in 1923 when oil was discovered at Santa Rita Oil Well on land owned by the university in West Texas. ● **Why do you think the legislature originally gave the university land in West Texas?**

Apart from donations from successful businesspeople, the oil industry has provided great support to public education in Texas. The University of Texas and Texas A&M University have received millions of dollars in oil profits through the state’s Permanent University Fund. The oil industry has its critics, but as one oil worker pointed out, many Texans view oil as the state’s lifeblood.

TEXAS VOICES

They’ve picked on the oil industry that’s paved more roads, built more schools, educated more children, and has done more for the United States than any industry alive today. I dare anybody to say that’s not true.

Clell Reed, interview in *Life in the Oil Fields*

SECTION 3 ASSESSMENT

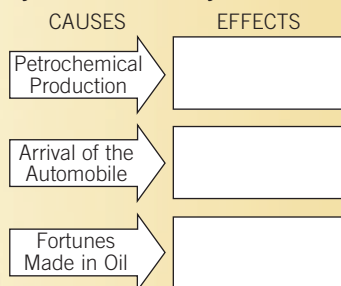
Terms & Names

Identify:

- petrochemical
- synthetic rubber
- toxic waste
- Federal Aid Road Act
- Amon Carter Museum

Organizing Information

Use a cause-and-effect diagram like the one shown to identify the effects of three developments caused by the oil industry in Texas.



How have you personally benefited from one of these developments?

Critical Thinking

1. What impact did the petrochemical industry have on Texas and the United States?
2. What effect did the discovery of oil have on the development of modern Texas?

3. What effects did the automobile and airplane have on the development of Texas?

Interact with History

Review your response to *Interact with History* in your Texas Notebook. Referring to the important people and events you listed, create a front-page newspaper article about the Texas oil boom.



Go to www.celebratingtexas.com to research the Activity topic.

ACTIVITY

History

Many Texans made their fortunes in oil. Research one major oil businessperson and his or her accomplishments. Develop an interactive report about that person and present it to your class.