



SECTION 2

The Age of the Railroads

MAIN IDEA

The growth and consolidation of railroads benefited the nation but also led to corruption and required government regulation.

WHY IT MATTERS NOW

Railroads made possible the expansion of industry across the United States.

Terms & Names

- transcontinental railroad
- George M. Pullman
- Cr dit Mobilier
- Munn v. Illinois
- Interstate Commerce Act

One American's Story

In October 1884, the economist Richard Ely visited the town of Pullman, Illinois, to write about it for *Harper's* magazine. At first, Ely was impressed with the atmosphere of order, planning, and well-being in the town George M. Pullman had designed for the employees of his railroad-car factory. But after talking at length with a dissatisfied company officer, Ely concluded the town had a fatal flaw: it too greatly restricted its residents. Pullman employees were compelled to obey rules in which they had no say. Ely concluded that "the idea of Pullman is un-American."



A PERSONAL VOICE RICHARD T. ELY

"It is benevolent, well-wishing feudalism [a medieval social system], which desires the happiness of the people, but in such way as shall please the authorities. . . . If free American institutions are to be preserved, we want no race of men reared as underlings."

▲ The town of Pullman was carefully laid out and strictly controlled.

—"Pullman: A Social Study"

As the railroads grew, they came to influence many facets of American life, including, as in the town of Pullman, the personal lives of the country's citizens. They caused the standard time and time zones to be set and influenced the growth of towns and communities. However, the unchecked power of railroad companies led to widespread abuses that spurred citizens to demand federal regulation of the industry.

Railroads Span Time and Space

Rails made local transit reliable and westward expansion possible for business as well as for people. Realizing how important railroads were for settling the West and developing the country, the government made huge land grants and loans to the railroad companies.

A NATIONAL NETWORK By 1856, the railroads extended west to the Mississippi River, and three years later, they crossed the Missouri. Just over a decade later, crowds across the United States cheered as the Central Pacific and Union Pacific Railroads met at Promontory, Utah, on May 10, 1869. A golden spike marked the spanning of the nation by the first **transcontinental railroad**. Other transcontinental lines followed, and regional lines multiplied as well. At the start of the Civil War, the nation had had about 30,000 miles of track. By 1890, that figure was nearly six times greater.

ROMANCE AND REALITY The railroads brought the dreams of available land, adventure, and a fresh start within the grasp of many Americans. This romance was made possible, however, only by the harsh lives of railroad workers.

The Central Pacific Railroad employed thousands of Chinese immigrants. The Union Pacific hired Irish immigrants and desperate, out-of-work Civil War veterans to lay track across treacherous terrain while enduring attacks by Native Americans. Accidents and diseases disabled and killed thousands of men each year. In 1888, when the first railroad statistics were published, the casualties totaled more than 2,000 employees killed and 20,000 injured.

RAILROAD TIME In spite of these difficult working conditions, the railroad laborers helped to transform the diverse regions of the country into a united nation. Though linked in space, each community still operated on its own time, with noon when the sun was directly overhead. Noon in Boston, for example, was almost 12 minutes later than noon in New York. Travelers riding from Maine to California might reset their watches 20 times.

In 1869, to remedy this problem, Professor C. F. Dowd proposed that the earth's surface be divided into 24 time zones, one for each hour of the day. Under his plan, the United States would contain four zones: the Eastern, Central, Mountain, and Pacific time zones. The railroad companies endorsed Dowd's plan enthusiastically, and many towns followed suit.

Finally, on November 18, 1883, railroad crews and towns across the country synchronized their watches. In 1884, an international conference set worldwide time zones that incorporated railroad time. The U.S. Congress, however, didn't officially adopt railroad time as the standard for the nation until 1918. As strong a unifying force as the railroads were, however, they also opened the way for abuses that led to social and economic unrest. **A**

MAIN IDEA

Analyzing Effects

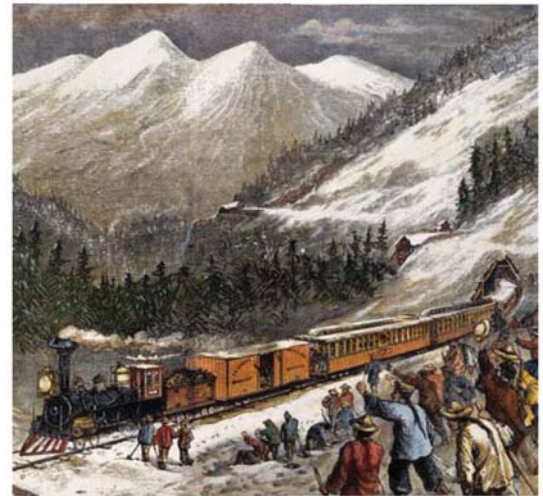
A What were the effects of railroad expansion?

HISTORICAL SPOTLIGHT

CHINESE IMMIGRANTS AND THE RAILROADS

Although the railroads paid all their employees poorly, Asians usually earned less than whites. The average pay for whites working a ten-hour day was \$40 to \$60 a month plus free meals. Chinese immigrants hired by the Central Pacific performed similar tasks from dawn to dusk for about \$35 a month—and they had to supply their own food.

The immigrants' working conditions were miserable. In 1866, for example, the railroad hired them to dig a tunnel through a granite mountain. For five months of that year, the Chinese lived and worked in camps surrounded by banks of snow. The total snowfall reached over 40 feet. Hundreds of the men were buried in avalanches or later found frozen, still clutching their shovels or picks.



Opportunities and Opportunists

The growth of the railroads influenced the industries and businesses in which Americans worked. Iron, coal, steel, lumber, and glass industries grew rapidly as they tried to keep pace with the railroads' demand for materials and parts. The rapid spread of railroad lines also fostered the growth of towns, helped establish new markets, and offered rich opportunities for both visionaries and profiteers.

ANOTHER PERSPECTIVE

ON THE WRONG TRACK

While the railroads captured the imagination of most 19th-century Americans, there were those who didn't get on the bandwagon. The writer Herman Melville raged against the smoke-belching iron horse and the waves of change it set in motion as vehemently as his character Captain Ahab raged against the white whale and the sea in *Moby-Dick*. "Hark! here comes that old dragon again—that gigantic gadfly . . . snort! puff! scream! Great improvements of the age," Melville fumed. "Who wants to travel so fast? My grandfather did not, and he was no fool."

NEW TOWNS AND MARKETS By linking previously isolated cities, towns, and settlements, the railroads promoted trade and interdependence. As part of a nationwide network of suppliers and markets, individual towns began to specialize in particular products. Chicago soon became known for its stockyards and Minneapolis for its grain industries. These cities prospered by selling large quantities of their products to the entire country. New towns and communities also grew up along the railroad lines. Cities as diverse as Abilene, Kansas; Flagstaff, Arizona; Denver, Colorado; and Seattle, Washington, owed their prosperity, if not their very existence, to the railroads. **B**

PULLMAN The railroads helped cities not only grow up but branch out. In 1880, for example, **George M. Pullman** built a factory for manufacturing sleepers and other railroad cars on the Illinois prairie. The nearby town that Pullman built for his employees followed in part the models of earlier industrial experiments in Europe. Whereas New England textile manufacturers had traditionally provided housing for their workers, the town of Pullman provided for almost all of workers' basic needs. Pullman residents lived in clean, well-constructed brick houses and apartment buildings with at least one window in every room—a luxury for city dwellers. In addition, the town

offered services and facilities such as doctors' offices, shops, and an athletic field.

As Richard Ely observed, however, the town of Pullman remained firmly under company control. Residents were not allowed to loiter on their front steps or to drink alcohol. Pullman hoped that his tightly controlled environment would ensure a stable work force. However, Pullman's refusal to lower rents after cutting his employees' pay led to a violent strike in 1894.

CRÉDIT MOBILIER Pullman created his company town out of the desire for control and profit. In some other railroad magnates, or powerful and influential industrialists, these desires turned into self-serving corruption. In one of the most infamous schemes, stockholders in the Union Pacific Railroad formed, in 1864, a construction company called **Crédit Mobilier** (kréd'īt mō-bēl'yər). The stockholders gave this company a contract to lay track at two to three times the actual cost—and pocketed the profits. They donated shares of stock to about 20 representatives in Congress in 1867.

A congressional investigation of the company, spurred by reports in the *New York Sun*, eventually found that the officers of the Union Pacific had taken up to \$23 million in stocks, bonds, and cash. Testimony implicated such well-known and respected federal officials as Vice-President Schuyler Colfax and Congressman James Garfield, who later became president. Although these public figures kept their profits and received little more than a slap on the wrist, the reputation of the Republican Party was tarnished. **C**

The Grange and the Railroads

Farmers were especially disturbed by what they viewed as railroad corruption. The Grangers—members of the Grange, a farmers' organization founded in 1867—began demanding governmental control over the railroad industry.

MAIN IDEA

Summarizing

B How did the railroads affect cities?

Pullman cars brought luxury to the rails, as shown in this advertisement from around 1890.



MAIN IDEA

Summarizing

C How did railroad owners use Crédit Mobilier to make huge, undeserved profits?

Major Railroad Lines, 1870–1890



GEOGRAPHY SKILLBUILDER

- 1. Human-Environment Interaction** What factor led to rapid growth in Chicago, Minneapolis, and Denver?
- 2. Movement** Why was rail construction concentrated in the East before 1870 and in the West after 1870?

Background

Price fixing occurs when companies within an industry all agree to charge the same price for a given service, rather than competing to offer the lowest price.

RAILROAD ABUSES Farmers were angry with railroad companies for a host of reasons. They were upset by misuse of government land grants, which the railroads sold to other businesses rather than to settlers, as the government intended. The railroads also entered into formal agreements to fix prices, which helped keep farmers in their debt. In addition, they charged different customers different rates, often demanding more for short hauls—for which there was no alternative carrier—than they did for long hauls.

GRANGER LAWS In response to these abuses by the railroads, the Grangers took political action. They sponsored state and local political candidates, elected legislators, and successfully pressed for laws to protect their interests. In 1871 Illinois authorized a commission “to establish maximum freight and passenger rates and prohibit discrimination.” Grangers throughout the West, Midwest, and Southeast convinced state legislators to pass similar laws, called Granger laws.

The railroads fought back, challenging the constitutionality of the regulatory laws. In 1877, however, in the case of *Munn v. Illinois*, the Supreme Court upheld the Granger laws by a vote of seven to two. The states thus won the right to regulate the railroads for the benefit of farmers and consumers. The Grangers also helped establish an important principle—the federal government’s right to regulate private industry to serve the public interest. **D**

INTERSTATE COMMERCE ACT The Grangers’ triumph was short-lived, however. In 1886, the Supreme Court ruled that a state could not set rates on interstate commerce—railroad traffic that either came from or was going to another state. In response to public outrage, Congress passed the **Interstate Commerce Act** in 1887. This act established the right of the federal government to supervise railroad activities and established a five-member Interstate Commerce Commission (ICC) for that purpose. The ICC had difficulty regulating railroad rates because of a long legal process and resistance from the railroads. The final

MAIN IDEA

Analyzing Issues

D How did the Grangers, who were largely poor farmers, do battle with the giant railroad companies?

Analyzing Political Cartoons

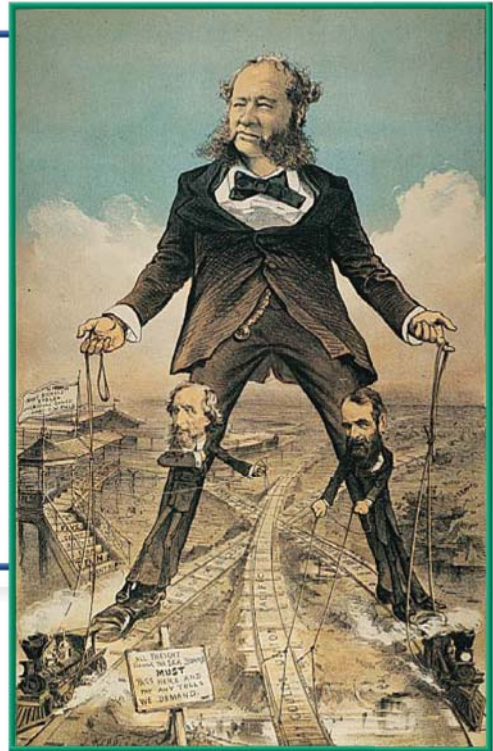
“THE MODERN COLOSSUS OF (RAIL) ROADS”

Joseph Keppler drew this cartoon in 1879, featuring the railroad “giants” William Vanderbilt (top), Jay Gould (bottom right), and Cyrus W. Fields (bottom left). The three magnates formed a railroad trust out of their Union Pacific, New York Central, and Lake Shore & Dependence lines.

SKILLBUILDER Analyzing Political Cartoons

1. The title of this cartoon is a pun on the Colossus of Rhodes, a statue erected in 282 B.C. on an island near Greece. According to legend, the 100-foot-tall statue straddled Rhodes’s harbor entrance. Do you think the artist means the comparison as a compliment or a criticism? Why?
2. The reins held by the railroad magnates attach not only to the trains but also to the tracks and the railroad station. What does this convey about the magnates’ control of the railroads?

SEE SKILLBUILDER HANDBOOK, PAGE R24.



blow to the commission came in 1897, when the Supreme Court ruled that it could not set maximum railroad rates. Not until 1906, under President Theodore Roosevelt, did the ICC gain the power it needed to be effective.

PANIC AND CONSOLIDATION Although the ICC presented few problems for the railroads, corporate abuses, mismanagement, overbuilding, and competition pushed many railroads to the brink of bankruptcy. Their financial problems played a major role in a nationwide economic collapse. The panic of 1893 was the worst depression up to that time: by the end of 1893, around 600 banks and 15,000 businesses had failed, and by 1895, 4 million people had lost their jobs. By the middle of 1894, a quarter of the nation’s railroads had been taken over by financial companies. Large investment firms such as J. P. Morgan & Company reorganized the railroads. As the 20th century dawned, seven powerful companies held sway over two-thirds of the nation’s railroad tracks.

Vocabulary

consolidation: the act of uniting or combining

SECTION 2

ASSESSMENT

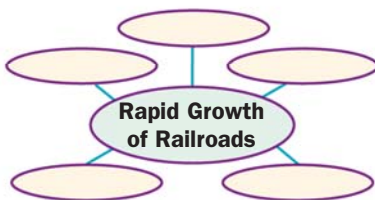
1. TERMS & NAMES For each term or name, write a sentence explaining its significance.

- transcontinental railroad
- *Crédit Mobilier*
- Interstate Commerce Act
- George M. Pullman
- *Munn v. Illinois*

MAIN IDEA

2. TAKING NOTES

In a chart like the one below, fill in effects of the rapid growth of railroads.



How did the growth of railroads affect people’s everyday lives?
How did it affect farmers?

CRITICAL THINKING

3. MAKING INFERENCES

Do you think the government and private citizens could have done more to curb the corruption and power of the railroads? Give examples to support your opinion.

Think About:

- why the railroads had power
- the rights of railroad customers and workers
- the scope of government regulations

4. SYNTHESIZING

The federal government gave land and made loans to the railroad companies. Why was the government so eager to promote the growth of railroads?

5. ANALYZING MOTIVES

Reread “Another Perspective” on railroads (page 238). Why do you think that some Americans disliked this new means of transportation?