Standard 8.46 Lesson

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8.46 Analyze the physical obstacles to and the economic and political factors involved in building a network of roads, canals, and railroads, including Henry Clay’s American System (E,G,H,P)

The Canal Era

(Pictured Above: Tourist boats like the Georgetown still run on sections of the Chesapeake and Ohio Canal in Washington, D.C.)

The Eric Canal by Bruce Springsteen...and some information too!

https://www.youtube.com/watch?v=Koj5yGigFNU

Ever since the days of Jamestown and Plymouth, America was moving West. TRAIL BLAZERS had first hewn their way on foot and by horseback. HOMESTEADERS followed by WAGON and by either keelboat or barge boat, bringing their possessions with them. Yet, real growth in the movement of people and goods west started with the canal.
For over a hundred years, people had dreamed of building a canal across New York that would connect the Great Lakes to the Hudson River to New York City and the Atlantic Ocean. After unsuccessfully seeking federal government assistance, DEWITT CLINTON successfully petitioned the New York State legislature to build the canal and bring that dream to reality. His critics called it "CLINTON'S DITCH."

( Pictured Above: Canals like this one meandered across the Pennsylvania landscape in the 1800s. Some, like this one in the Manayunk section of Philadelphia, were operational into the 20th century.)
Construction began in 1817 and was completed in 1825. The canal spanned 350 miles between the Great Lakes and the Hudson River and was an immediate success. Between its completion and its closure in 1882, it returned over $121 million in revenues on an original cost of $7 million. Its success led to the great CANAL AGE. By bringing the Great Lakes within reach of a metropolitan market, the ERIE CANAL opened up the unsettled northern regions of Ohio, Indiana and Illinois. It also fostered the development of many small industrial companies, whose products were used in the construction and operation of the canal.

New York City became the principal gateway to the West and financial center for the nation. The Erie Canal was also in part responsible for the creation of strong bonds between the new western territories and the northern states. Soon the flat lands of the west would be converted into large-scale grain farming. The Canal enabled the farmers to send their goods to New England. Subsistence farmers in the north were now less necessary. Many farmers left for jobs in the factories. The Erie Canal transformed America.

( Pictured Above: Locks like this one on the Erie Canal made it possible to connect the Hudson River and Lake Erie despite their 571-foot difference in height.)

Pennsylvanians were shocked to find that the cheapest route to Pittsburgh was by way of New York City, up the Hudson River, across New York by the Erie Canal to the Great Lakes — with a short overland trip to Pittsburgh. When it became evident that little help for state improvements could be expected from the federal government, other states followed New York in constructing canals. Ohio built a canal in 1834 to link the Great Lakes with the Mississippi Valley. As a result of Ohio’s investment, Cleveland rose from a frontier village to a Great Lakes port by 1850. Cincinnati could now send food products down the Ohio and Mississippi by flatboat and steamboat and ship flour by canal boat to New York.

The state of Pennsylvania then put through a great portage canal system to Pittsburgh. It used a series of inclined planes and stationary steam engines to transport canal boats up and over the Alleghenies on rails. At its peak,
Pennsylvania had almost a thousand miles of canals in operation. By the 1830s, the country had a complete water route from New York City to New Orleans. By 1840, over 3,000 miles of canals had been built. Yet, within twenty years a new mode of transportation, the railroad, would render most of them unprofitable.

**Early American Railroads**

![Image Not Available](image-url)

*Crash Course by John Green  The Railroad Journey and the Industrial Revolution*

[https://www.youtube.com/watch?v=GYAk5jCTQ3s](https://www.youtube.com/watch?v=GYAk5jCTQ3s)

*(Pictured Above: In 1869, a golden spike linked the Central Pacific Railroad and the Union Pacific Railroad at Promontory, Utah.)*

The development of RAILROADS was one of the most important phenomena of the Industrial Revolution. With their formation, construction and operation, they brought profound social, economic and political change to a country only 50 years old. Over the next 50 years, America would come to see magnificent bridges and other structures on which trains would run, awesome depots, ruthless rail magnates and the majesty of rail locomotives crossing the country.

The railroad was first developed in Great Britain. A man named GEORGE STEPHENSON successfully applied the steam technology of the day and created the world’s first successful locomotive. The first engines used in the United States were purchased from the STEPHENSON WORKS in England. Even rails were largely imported from England until the Civil War. Americans who had visited England to see new STEAM LOCOMOTIVES were impressed that railroads dropped the cost of shipping by carriage by 60-70%.
(Pictured Above: This stereograph of the Central Pacific Railroad would have appeared three-dimensional when viewed through special glasses.)

Baltimore, the third largest city in the nation in 1827, had not invested in a canal. Yet, Baltimore was 200 miles closer to the frontier than New York and soon recognized that the development of a railway could make the city more competitive with New York and the Erie Canal in transporting people and goods to the West. The result was the BALTIMORE AND OHIO RAILROAD, the first railroad chartered in the United States. There were great parades on the day the construction started. On July 4, 1828, the first spadeful of earth was turned over by the last surviving signer of the Declaration of Independence, 91-year-old CHARLES CARROLL.

New railroads came swiftly. In 1830, the SOUTH CAROLINA CANAL AND RAIL-ROAD COMPANY was formed to draw trade from the interior of the state. It had a steam locomotive built at the West Point Foundry in New York City, called THE BEST FRIEND OF CHARLESTON, the first steam locomotive to be built for sale in the United States. A year later, the Mohawk & Hudson railroad reduced a 40-mile wandering canal trip that took all day to accomplish to a 17-mile trip that took less than an hour. Its first steam engine was named the DeWitt Clinton after the builder of the Erie Canal.

Although the first railroads were successful, attempts to finance new ones originally failed as opposition was mounted by turnpike operators, canal companies, stagecoach companies and those who drove wagons. Opposition was mounted, in many cases, by tavern owners and innkeepers whose businesses were threatened. Sometimes opposition turned to violence. Religious leaders decried trains as sacrilegious. But the economic benefits of the railroad soon won over the skeptics.

(Pictured Above: Shares were sold to fund the construction of the BO Railroad. In only 12 days, the company had raised over $4,000,000.)

Perhaps the greatest physical feat of 19th century America was the creation of the TRANSCONTINENTAL RAILROAD. Two railroads, the CENTRAL PACIFIC starting in San Francisco and a new railroad, the Union Pacific, starting in Omaha, Nebraska, would build the rail-line. Huge forces of immigrants, mainly Irish for the UNION PACIFIC and Chinese for the Central Pacific, crossed mountains, dug tunnels and laid track. The two railroads met at PROMONTORY, UTAH, on May 10, 1869, and drove a last, golden spike into the completed railway.
Henry Clay was instrumental in finding the Whig Party. He was one of the “War Hawks” who encouraged war with Great Britain during the War of 1812. His American System was a plan to help each section of the country. Clay believed high tariffs was the answer. If the government received tariffs (revenue), they could use the money to build roads, canals and improve the infrastructure. The American System never became government policy. Southerns were not convinced the high tariffs would benefit them.