Late 19th century rails linked sea to shining sea

For the complete maps with media resources, visit:
http://www.nationalgeographic.org/maps/tracking-growth-us/

The United States’ first transcontinental railroad was completed in November 1869. Nicknamed the “Overland Route,” it linked the sprawling, sparsely populated American West with the bustling and closely connected urban areas in the Midwest and East Coast.

Over the next 20 years, railroad construction boomed, influencing the economic and cultural growth of the United States.

Instructional Ideas

Consult National Geography Standard 1: How to use maps and other geographic representations, geospatial technologies, and spatial thinking to understand and communicate information.

- Discuss different representations of geographic data: maps, charts, graphs, globes, models, etc.
- Discuss different types of maps: thematic, topographic, satellite, street or highway, etc.
- Discuss questions 1-3 in the Questions tab.
Consult National Geography Standard 17: How to apply geography to interpret the past.

- Discuss the geographic context of the U.S. in the late 1800s.
  
  - What social and economic changes was the nation undergoing? For example:
    
    - recovery from the Civil War (Reconstruction)
    - growth of big business (the Gilded Age)
    - greater social mobility for the African American population
    - new waves of immigration
  
- Discuss questions 4-9 in the Questions tab.

**Questions**

- The caption on this map says that the amount of railroad tracks in the U.S. tripled between 1870 and 1890. National Geographic chose to display this information with two historical maps. How else could these geographic data have been displayed? Why do you think National Geographic chose to display the information using maps?

  *Answers will vary!* Designers could have used a graph or chart to display the growth of railroads in the U.S., as this researcher did.

  National Geographic probably chose to display the data using maps in order to represent the geographic range of railroad growth in the 1880s. Unlike charts or graphs, these historical maps display where the railroad growth was taking place, not simply the amount of growth.

- National Geographic cartographers chose to use a simple political map displaying modern (unlabeled) state boundaries as a base for these historical
maps. What other types of base maps could the cartographers have chosen? Why do you think they chose the simple political map?

*Answers will vary!* For instance, cartographers may have chosen a type of *road map*, which usually displays the distance between points. This would have conveyed the actual kilometers or miles of rail lines laid, and distance between train stations.

Cartographers may have also chosen a *topographic map*, which displays elevation, or a *terrain map*, which displays the surface features of an area. These base maps would have shown the massive obstacles railroad builders faced in the West—the Rocky and Sierra Nevada mountain ranges and the giant desert known as the Great Basin.

*National Geographic* cartographers probably chose the simple political map as a base because they wanted the focus to be on the growth of railroad lines, not the physical geography of the region.

- In 1870, America’s first transcontinental railroad linked the port of Oakland, California, to the Midwestern rail network starting at Council Bluffs, Iowa. Why do you think Oakland and Council Bluffs are not represented on the 1870 map?

Oakland sits across the San Francisco Bay from San Francisco, California, while Council Bluffs is across the Missouri River from Omaha, Nebraska. **Oakland and Council Bluffs were smaller urban areas that linked the railroad with their larger, more well-known neighbors.**

- What other transportation methods were available to people wanting to travel from coast-to-coast in the 1800s? Why do you think the transcontinental railroad was nicknamed the “Overland Route”?

In addition to the transcontinental railroad, cross-country travelers could *walk,*
use **animals** or **animal-pulled vehicles**, or take **steam ships** that navigated the entire coast of South America. This usually took at least six months. The railroad cut the journey’s time to one week.

The **transcontinental railroad was nicknamed the “Overland Route” because it was an alternative to the maritime route** around South America. It went over land, not sea.

- Promontory, Utah, was never a large urban area. In fact, in 1870, Utah was not even a state (Promontory was in the Utah Territory). Why do you think cartographers chose to represent it on the 1870 railroad map, along with such well-established cities as Chicago and San Francisco?

**Promontory Summit was where the famous “Golden Spike” was driven** in 1869. The Golden Spike marked the official completion of the transcontinental railroad project, which had teams laying track from west-to-east and east-to-west. Promontory was where the teams met, and the railroad was complete.

- Why do you think rail companies chose to link the first transcontinental railroad to San Francisco, and not Seattle or Los Angeles?

Thanks largely to the California Gold Rush of the 1850s, **San Francisco was the largest, wealthiest city on the West Coast** at the time.

- All the cities represented on the 1890 map are major transportation hubs. In addition to their train stations, what other geographic feature makes these cities important places for transport?

**All represented cities sit on major bodies of water, linking the two largest transportation methods of the time.**

- Boston, Massachusetts; New York, New York; and Charleston, South Carolina, all have ports on the Atlantic Ocean.
- Washington, D.C., has a port on the Potomac River.
- Houston, Texas, has a port on the Gulf of Mexico.
- Los Angeles, California; San Francisco; and Seattle, Washington, have ports on the Pacific Ocean.
- Omaha, Nebraska, sits on the banks of the Missouri River.
- St. Louis, Missouri, and New Orleans, Louisiana, sit on the banks of the Mississippi River.

- The map’s caption says that trains transported factory-produced products from the north and Midwest. What goods do you think were exported from southern depots? From the west?

**Southern depots mostly exported cotton.** Rail lines also transported agricultural goods to nearby regions—rail cars were not refrigerated and could not transport produce long distances. Large cities, such as Atlanta, Georgia, and Chattanooga, Tennessee, became important centers for manufactured products and iron goods. Coal was transported from the southern Appalachians (mostly mines in northern Alabama). Cattle and leather goods, as well as iron and copper ore, were exported from the station in El Paso. The port cities of New Orleans and Houston also transported international goods received from cargo ships.

The three **western depots had very different exports.** Lumber and coal dominated the rail exports of Seattle. San Francisco was a manufacturing hub, exporting machinery for mining, as well as finished goods, such as furniture and clothes. Los Angeles exported cattle and leather goods from the dozens of ranches surrounding the city, as well as oranges and other agricultural products. Like ports on the other side of the country, these Pacific depots also transported international goods.

- Goods were not the only things carried by the U.S. rail network. What other cargo changed the geography of the nation?
The railroad network made it much easier, much faster, and much less expensive to travel around the country. This increased the communication between residents of different regions, helping unify the social and political discourse of the U.S.

Railroads also helped people migrate. Millions of people moved to the sparsely populated West, which offered opportunities for both industrial and agricultural workers, as well as land to settle. Los Angeles, for example, grew from a village of about 5,000 residents in 1870 to more than 100,000 by 1900.

These growing urban areas created the need for more centralized city planning and greater government oversight, such as the establishment of fire and police departments. Native American communities were destroyed or forced to move to remote reservations. Cities created their own economies, often based around service industries such as hotels and restaurants. The lifestyle of the “Old West” was largely eradicated by the “Iron Horse.”

- The expansion of the transcontinental railroad in the 19th century was followed by the development of an Interstate Highway System in the 20th century, as motorized vehicles became more and more popular. The system is supported by infrastructure, such as gas stations, along these routes. What types of land-based transportation networks and supporting infrastructure might Americans develop in the future?

*Answers will vary!* Future land-based transportation networks may include new vehicles on *existing road and rail systems, trail networks*, and *high-speed passenger rail* systems.

Infrastructure will vary.
• On existing road networks: **New infrastructure may be needed to support electric-car fueling stations, biodiesel fueling stations, or hydrogen fuel-cell refill stations.**

• On trail and road networks: **New infrastructure may be needed to support bicycling and hiking pathways.** The Great Allegheny Passage, for example, provides extensive trails from urban areas such as Pittsburgh, Pennsylvania, through 241 kilometers (150 miles) in rural, wooded regions of Pennsylvania and Maryland.

• High speed passenger rail: **Infrastructure will depend on the type of high-speed train used—some can run on the same rails as today’s Amtrak trains, while others may require more high-tech systems.**

---

**Vocabulary**

<table>
<thead>
<tr>
<th>Term</th>
<th>Part of Speech</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>cartography</td>
<td><em>noun</em></td>
<td>art and science of making maps.</td>
</tr>
<tr>
<td>communication</td>
<td><em>noun</em></td>
<td>sharing of information and ideas.</td>
</tr>
<tr>
<td>East Coast</td>
<td><em>noun</em></td>
<td>Atlantic coast of the United States.</td>
</tr>
<tr>
<td>economics</td>
<td><em>noun</em></td>
<td>study of monetary systems, or the creation, buying, and selling of goods and services.</td>
</tr>
<tr>
<td>industry</td>
<td><em>noun</em></td>
<td>activity that produces goods and services.</td>
</tr>
<tr>
<td>Midwest</td>
<td><em>noun</em></td>
<td>area of the United States consisting of the following states: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.</td>
</tr>
<tr>
<td>migration</td>
<td><em>noun</em></td>
<td>movement of a group of people or animals from one place to another.</td>
</tr>
<tr>
<td>railroad</td>
<td><em>noun</em></td>
<td>road constructed with metal tracks on which trains travel.</td>
</tr>
<tr>
<td>trade route</td>
<td><em>noun</em></td>
<td>path followed by merchants or explorers to exchange goods and services.</td>
</tr>
</tbody>
</table>
**Term**  
**Part of Speech**  
**Definition**

**transportation** *noun*  
Movement of people or goods from one place to another.

**West Coast** *noun*  
Pacific coast of the United States, usually excluding Alaska.

**Maps**
- [Central Pacific Railroad Photographic History Museum: Maps Showing the Progressive Development of U.S. Railroads, 1830 to 1950](#)
- [University of Nebraska-Lincoln: Railroads and the Making of Modern America —Expansion](#)

**Websites**
- [PBS: American Experience—Transcontinental Railroad](#)