

Michigan Rides the Rails - Lesson Plan

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Background Notes

Flexible, cheap, and dependable transportation has always been important in Michigan for both the development of natural resources and the movement of manufactured goods. Rivers freeze in winter, flood in spring, or dry up in summer. The Great Lakes become ice-locked during part of the winter. Good highways were not available until the middle 20th century. During the late 19th century, railroads became a desirable means of transportation.

Some early railroads include these three in lower Michigan in 1860: 1) The Michigan Southern began at Monroe and ran through southern counties, veered through Indiana to end in Chicago; 2) The Michigan Central began in Detroit and went through Ann Arbor, Jackson, Battle Creek, and Kalamazoo south to Niles and Chicago; 3) The Detroit and Milwaukee ran from Grand Haven and Muskegon to Detroit. These railroads built feeder lines in a mainly northward direction to service northern towns and industry.



Other lines constructed across lower Michigan in the 1870s and 1880s were: 1) The Peninsular Railroad ran from Chicago to Lansing to Port Huron and in 1871 became part of the Grand Trunk; 2) The Ann Arbor Railroad was started in 1869 and ran from Toledo, Ohio to Elberta, Michigan, and to the north; 3) The Flint and Pere Marquette was constructed from Saginaw west to Ludington. This became part of the Pere Marquette System.

In 1856, Congress granted three million acres of land to the state to be doled out to the railroads. Michigan also granted to the railroads 1,659,509 acres of "swamp land" that had been donated by the federal government to the state. Sale of these lands did not produce enough money to pay for construction of the railroads, but they did attract capital from domestic and foreign sources. Railroads built either on these lands or from money generated by their sale were called land-grant railroads. Land-grant railroads were obligated to carry government property and personnel at approximately half-price. The savings to the government has been estimated to be more than ten times the original value of the lands granted.

Railroads constructed tunnels and car ferries to transport railroad cars across or under rivers and larger bodies of water. In 1891 the Grand Trunk completed a tunnel under the St. Clair River between Port Huron and Sarnia, Ontario, replacing the car ferry. The first car ferry to cross open waters was placed in service by the Ann Arbor Railroad from the mouth of the Betsie River (near Elberta and Frankfort) to Kewaunee, Wisconsin. In 1867 a ferry, the Great Western, capable of carrying twelve railroad cars, was put into service from Windsor, Ontario, to Detroit.

Several canals were proposed when the railroad planning was underway. A 12-mile stretch of canal was completed between Mount Clemens and Rochester, and canal boats operated briefly between Mount Clemens and Utica. The Soo Canal was completed in 1855.

Objectives

- Students will correctly place specified cities on an outline map of Michigan.
- Students will locate specified railroads and canals on the map and indicate which ones were developed earliest.
- Students will list how railroads and ships can work together.

Michigan Curriculum Content Social Studies Standards

This lesson presents an opportunity to address, in part, these standards:

- SOC.II.3. Location, Movement, and Connections. All students will describe, compare, and explain the locations and characteristics of economic activities, trade, political activities, migration, information flow, and the interrelationships among them.

- SOC.IV.2. Business Choices. All students will explain and demonstrate how businesses confront scarcity and choice when organizing, producing, and using resources, and when supplying the marketplace.

Materials Needed

Large outline map of Michigan map including the Upper Peninsula and Great Lakes; felt tip pens; paste or tape; paper for city names, railroad tracks and small ships all of which will be placed on the map in appropriate locations. (Make a map by projecting a transparency of the outline map onto brown wrapping paper, paper used for table covers or oilcloth, then drawing the outline with permanent marker.) This exercise can use the same map as the "Michigan, A Manufacturer" and "Carriage's Come Before Cars" lessons, adding to information already placed on the map in those lessons.

Directions

Share the information in "Background Notes" with the class. Ask students to print or place city names on map at the beginning and ending of the railroad lines. Have the students draw or place railroad tracks on map, showing beginning and ending of the routes. Draw canals and rivers on map. Identify ports where ships picked up railroad cars and/or raw materials to be delivered to market or to manufacturing plants in other states or Michigan.

Questions for Discussion or Research

1. Why were railroads and ships important to manufacturing and agriculture in Michigan?
2. How did the railroads and ships work together?
3. In what part of the state were railroads first developed?
4. Was your town served by a railroad in the 19th century? Is it now?

At the Museum

- Look at the map of railroad routes. Is your town on this map?
- Find the hand car used on the railroad. What was its purpose?
- Compare the cost of railroad travel to other forms of land transportation.

Vocabulary

- Branch line: Railroad line developed from the main line in order to extend transportation deeper into the state
- Ferry: Boat built to carry people and railroad cars over bodies of water
- Industry: Companies developed to create products from natural resources
- Natural resource: Material found in nature which can be used to manufacture products for people

References

- Catton, Bruce. *Michigan, A History*. New York: Wm. W. Norton & Co., 1976.
- Dunbar, Willis F. *All Aboard! A History of Railroads in Michigan*. Grand Rapids, MI: Wm. B. Eerdmans Publishing Co., 1969.
- Dunbar, Willis F., and May, George S. *A History of the Wolverine State*. (Revised Ed.). Grand Rapids, MI: Wm. B. Eerdmans Publishing Co., 1980.
- Elliott, Frank. *When the Railroad Was King*. Lansing, MI: Bureau of History, Michigan Department of State, 1988.
- Ellis, Wm. Donohue. *Land of the Inland Seas*. New York: Weathervane Books, American West Publishing Co., 1974.
- Sommers, Lawrence M., Editor. *Atlas of Michigan*. East Lansing, MI: Michigan State University Press (Distributor: Wm. B. Eerdmans Publishing Co., Grand Rapids, MI), 1977.

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