The Panic of 1819 alerted many to the need for more effective transportation of goods. Most rivers west of the Appalachians ran north to south, so they could not connect western farmers with the eastern markets where their goods were sold. The National Road was the primary connection between east and west, and it advanced further west each year. In addition, between 1815 and 1825 seven northern states built toll roads, or turnpikes. However, this did not solve the problem of transportation. Horse-drawn wagons had very limited capacity and roads were very expensive to maintain. Thus, interest turned toward the concept of water transportation.

1. What was the National Road? Why do you suppose that it advanced further west each year?

2. Why was water transportation an idea that needed to be developed?

In 1807, Robert Fulton and Robert Livingston introduced the first steamboat, known as the Clermont, on the Hudson River. Steamboats quickly caught on and became the preferred mode of water transportation. Between 1817 and 1820 the number of steamboats in America jumped from 17 to 69, and by 1855, the number had reached 727. Before the advent of the steamboat, flatboats, sometimes little more than rafts, carried goods down the Mississippi River. There, the boats were broken up and sold as firewood because they could not make the trip back upstream. The return voyage was then made on foot or horseback. Keelboats, like flatboats except in that they had a rudder, could make the return journey upstream, but progress was extremely slow. Steamboats moved about four times as fast as keelboats upstream. The speed and versatility of the steamboat, augmented by a number of important functional improvements made over the years, established the steamboat an indispensable method of trade for all seasons.

1. Why were boats used as firewood after a trip?

2. What season was best to travel in a steamboat? Why?

As steamboats gained popularity, enthusiasm grew for the building of canals. In 1816, the US had only 100 miles of canals. However, the invention of the steamboat and the resources of the west convinced many that canals were a necessary connection between the Mississippi-Ohio waterways with the Great Lakes, and thereby the East. The first major canal project,
the Erie Canal, spanned 363 miles and connected Buffalo and Albany, New York. Through the Erie Canal, New York City was linked, by the Hudson River in the East, and the Great Lakes in the West, all the way to Ohio. The growing canal system linked the major trading and manufacturing centers of the nation. Shipping costs dropped dramatically. Average freight costs from Buffalo to New York City fell from 19 cents per ton per mile in 1817 to 2 to 3 cents during the 1830s.

1. How did the growing canal system help the US economy?

2. What led to the enthusiasm for building canals?

As the canal boom slowed in the late 1830s, the railroad boom kicked into gear. By 1840, about 3,000 miles of track had been lain in America and investment in railroads had outstripped that in canals. The Baltimore and Ohio Railroad, chartered in 1828, successfully competed with the Erie Canal for business. Massachusetts, unable to connect to the Erie Canal due to obstructing mountains, chartered the Boston and Worcester Railroad in 1831 and the Western Railroad from Worcester to Albany in 1833. Railroads were faster, cheaper, and had greater range than canals, but still grew only gradually at first.

1. What were 3 advantages that railroads had over canals?

The transportation revolution produced the rapid growth of towns and cities. In 1820, 6.1 percent of Americans lived in places with populations of greater than 2,500 people, and only New York City and Philadelphia had more than 100,000 people. By 1860, however, nearly 20 percent of the population lived in places of 2,500 or more, and New York City’s population had climbed from 124,000 to 800,000. The West experienced dramatic changes as well. Before 1830, all of the major cities in the West were on main rivers. However, the canal system heightened the importance of lake cities such as Buffalo, Cleveland, Detroit, and Chicago. Between 1830 and 1840, the portion of westerners living along rivers dropped from 75 to 20 percent.

1. How did the transportation revolution lead to the rapid growth of cities?