

Water Celebration on Boston Common, 1848
Image: Boston Public Library



INFRASTRUCTURE

“... in 1848, 300,000 people from all over New England gathered on Boston Common. They came to celebrate the completion of the city’s first municipal water system. With the construction of an aqueduct that brought fresh water 15 miles from Lake Cochituate in Natick to Boston, the city for the first time had a pure supply of water for drinking, bathing, cooking and cleaning.”

Excerpt from [“October 25, 1848: Boston Celebrates Opening of Aqueduct”](#)

City Dwellers:

Turn on your faucet, and clean water comes out. Flush your toilet, and the opposite of clean water goes away. It may not be magic, but few things have had a greater beneficial effect on public health and modern urban life.

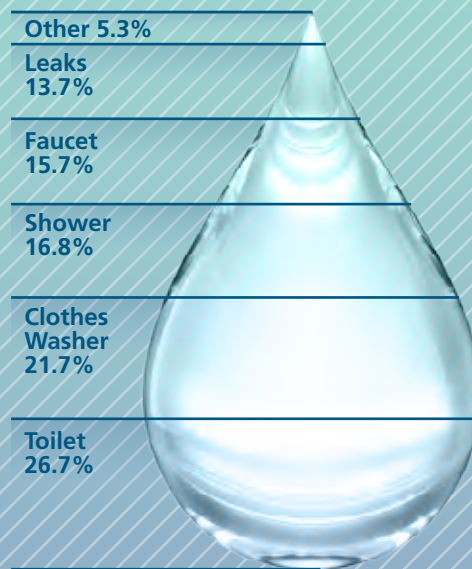
In the vast majority of U.S. cities clean water and effective sewage disposal are provided by public entities. You pay for those services, of course, but on balance they are worth (almost) every penny.

Even if you're one of those people who buys bottled water because you don't trust what comes out of the tap, you probably use municipal water for bathing, doing laundry, and general washing up. If so, consider this fact from Stanley Lebergott's book *Pursuing Happiness*: In the days before running water, housewives (because it was almost always women who got stuck doing this) had to haul 10,000 gallons a year into the kitchen, laundry, or bath.

Ten thousand gallons a year averages out to 27 gallons a day. Not much by modern standards, but it's still a lot to carry. Anyone who's ever bought gallon-jugs of bottled water at the grocery store, knows what it's like to lug one or two from the car to the kitchen. Imagine carrying 27 of them up two or three flights of stairs ... every day ... for your entire life.

Now consider this: Indoor water use currently averages around 75-80 gallons of water per person, per day.

How Much Water Do We Use?



Source: American Water Works Association Research Foundation, "Residential End Uses of Water," 1999

That's in the neighborhood of 300 gallons per day for a household of four.

Think about that for a minute. Without the infrastructure and maintenance that municipal water agencies provide—and we all pay for—we'd be spending a lot more time toting water into our homes. We'd also be taking a lot fewer showers and washing our clothes far less often.

The only people who might be happy with that are the makers of Febreze® and underarm deodorant.

Country Folks and Denizens of Deep Suburbia:

You might have your own private water wells and septic systems, but what about electricity?

By the 1930s, most American cities were wired for electricity, but 90 percent of America's farms were without power. Private utilities had little incentive to run high-cost lines to isolated homesteads. (For a more modern parallel, think "broadband internet service.")

Things only began to change when the U.S. government created the Rural Electrification Administration (REA) in 1935. Thanks to the REA, almost every farm had electricity by the 1950s.



Image: Library of Congress

Getting From Point A to Point B

Fact: A ton of goods could be brought 3000 miles from Europe to America for about nine dollars, and for the same sum it could be moved only 30 miles overland in this country. (Excerpt from a U.S. Senate Committee Report issued in 1816).

Fact: In 1812, a freight wagon drawn by four horses took 75 days to travel from Worcester, MA to Charleston, S.C. (Source: *The Transportation Revolution*, George Rogers Taylor).

Fact: In the 1840s, the voyage from Boston to San Francisco took 150 to 200 days aboard a conventional sailing ship or 110 days by clipper ship. Today, commercial jets make the trip in under five hours. (Source: *The Transportation Revolution*, George Rogers Taylor).

In preindustrial times, travel was slow, costly, uncomfortable and dangerous. People often spent their entire lives within a few miles of where they were born. There was no easy way to get from Point A



Joining the Tracks for the First Transcontinental Railroad, Promontory Point, Utah, 1869
Image: National Archives



to Point B, and even a simple shopping excursion to a market town ten miles away could turn into a daylong odyssey.

The convergence of private enterprise and government involvement helped to change all that. Two huge undertakings, separated by almost a century, serve as examples.

One was the completion of America's first transcontinental railroad in 1869. The ceremonial driving of the last spike at Promontory Point, Utah, marked the completion of a project that was an engineering marvel and a testament to human perseverance. The financiers and the laborers who laid the tracks were the ones who took the project from dream to reality, but they had considerable help from the U.S. Congress. [The Pacific Railroad Act of 1862](#) provided two key elements: 1) millions of acres of public land to serve as rights of way for the rail lines, and 2) financial backing in the form of 30-year government bonds.

Nearly 100 years later, Congress passed the Federal-Aid Highway Act of 1956, which funded most of the [Interstate Highway System](#): \$25 billion to construct 41,000 miles of modern, limited-access highway. Without federal involvement and funding, the Interstates might never have been built.



Interstate Highway System, 1976
Image: Library of Congress