

The Cost of Water Pipe Failure to Municipalities

Depending on its severity, a water main break can leave a community without water for hours or days. According to the American Society of Civil Engineers (ASCE), there are 240,000 water main breaks per year in the United States, wasting over two trillion gallons of treated drinking water.¹ In the 2017 Infrastructure Report Card, ASCE found that drinking water is delivered by one million miles of pipes that were laid in the early to mid-20th century.² Water is a lifeline for not just clean drinking water but for the health and safety of our citizens. It is an essential economic resource for many businesses. Many people also do not see the residual economic losses that result from failure. Many sectors depend on water, and a disruption of water and wastewater service, even for one day, can cost businesses significant revenue.³ Additionally, as we continue to combat the COVID-19 pandemic and work to stay safe, hand washing is a first line of defense, and reliable water supplies remain vital to the health of communities.⁴

At a national level, a one-day disruption in water service represents an aggregate **daily loss of \$43.5 billion in sales and \$22.5 billion in GDP.**⁵

To put this level of economic activity in context, **an eight-day national disruption in water service** would amount to a **1 percent loss in annual GDP**—putting roughly **1.9 million jobs at risk.**⁶

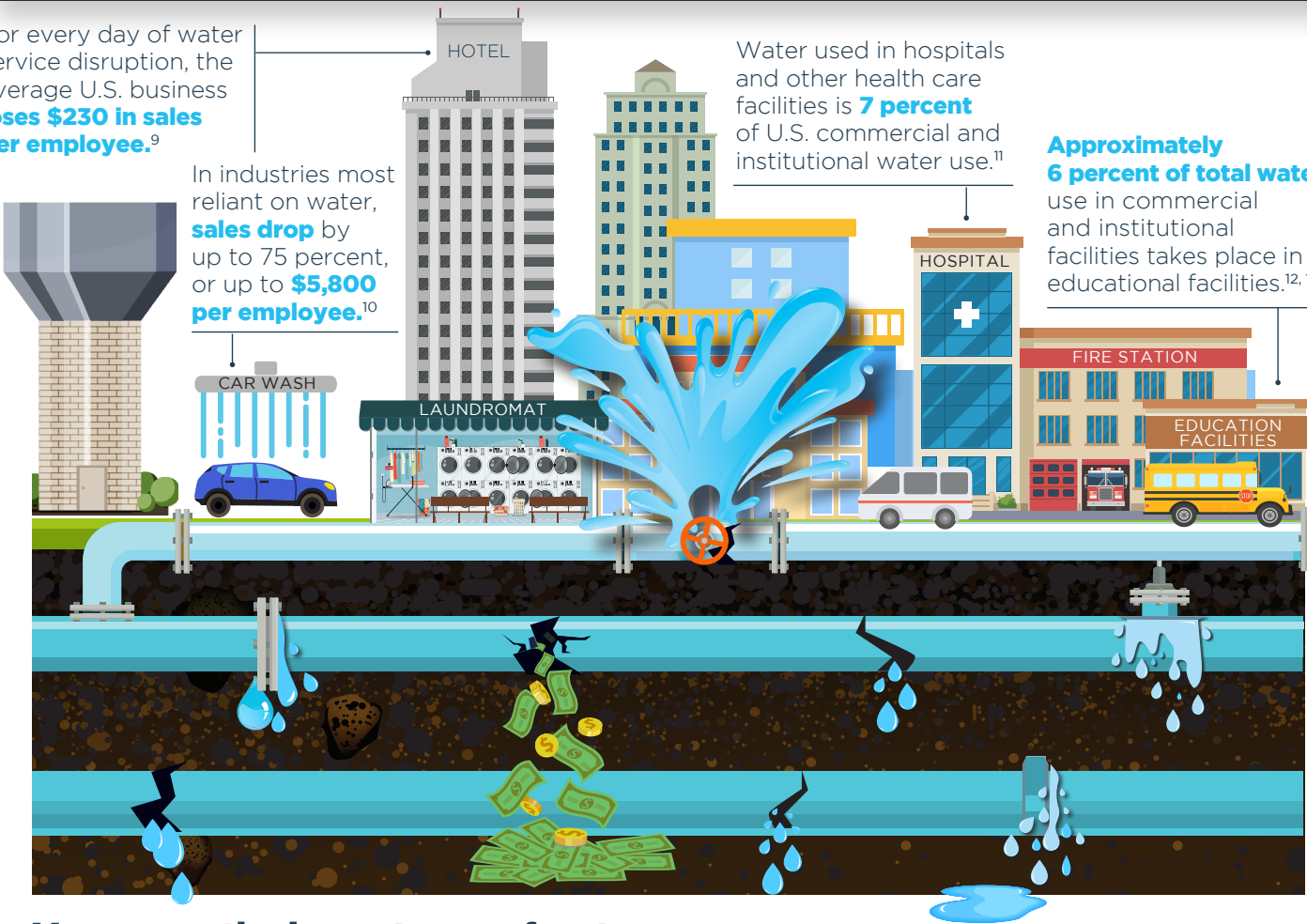
Industries that Rely On Reliable Water Delivery ^{7, 8}	
Fire/Public Safety:	2,935 gallons of water to put out an average home fire.
Hospitals/Health Care:	1,236 average gallons per day per customer.
Hotels/Motels:	7,113 average gallons per day per customer.
Office Buildings:	1,204 average gallons per day per customer.
Schools and Colleges:	2,596 average gallons per day per customer.

For every day of water service disruption, the average U.S. business **loses \$230 in sales per employee.**⁹

In industries most reliant on water, **sales drop** by up to 75 percent, or up to **\$5,800 per employee.**¹⁰

Water used in hospitals and other health care facilities is **7 percent** of U.S. commercial and institutional water use.¹¹

Approximately 6 percent of total water use in commercial and institutional facilities takes place in educational facilities.^{12, 13}



Mayors on the importance of water

“From agriculture to manufacturing to transportation, America’s economy runs on water,” said **Kevin Faulconer, Mayor of San Diego**. “Whether it’s brewing a San Diego craft beer or providing electricity for millions in New York, our cities depend on reliable water infrastructure – and we need to invest now so that when it comes to our future, the glass is half full.”¹⁴

“Jobs in the water and wastewater industries can’t be outsourced; this is local work done by people living and working right in our communities,” said former **Baltimore Mayor Stephanie Rawlings-Blake**, co-chair of the Water Council of the U.S. Conference of Mayors. “These jobs offer competitive salaries as well as opportunities for training and advancement. Simply put: when water works, America works.”¹⁵

¹² **ASCE: 2017 Infrastructure Report Card** https://www.infrastructurereportcard.org/cat-item/drinking_water/
^{3, 5, 6, 9, 10, 12} **Value of Water Campaign: The Economic Benefits of Investing in Water Infrastructure:** http://thevalueofwater.org/sites/default/files/Economic%20Impact%20of%20Investing%20in%20Water%20Infrastructure_VOW_FINAL_pages.pdf
⁴ **CDC Stop the Spread of Germs:** <https://www.cdc.gov/coronavirus/2019-ncov/downloads/stop-the-spread-of-germs.pdf>
⁷ **Home Fire Sprinkler Coalition: Scottsdale Report 15-Year Data:** <https://homefiresprinkler.org/fire-department-15-year-data/>
⁸ **Commercial and Institutional End Uses of Water (2000): American Water Works Association and AWWA Research Foundation.** <https://books.google.com/books?id=tZsMak36dw8C>
¹¹ **EPA Saving Water in Hospitals:** <https://www.epa.gov/sites/production/files/2017-01/documents/ws-commercial-factsheet-hospitals.pdf>
¹³ **EPA Water Sense: Types of Facilities** https://www.epa.gov/watersense/types-facilities?_sm_au=iVVVjj3qt5j74tVT01TfKK3Qv3fc4
^{14, 15} **Water Online:** <https://www.wateronline.com/doc/water-washington-rally-support-investing-in-american-cities-jobs-competitiveness-0001>