



Ohio

Top Three Infrastructure Concerns*

1. Roads
2. Schools
3. Bridges

To view the local infrastructure report card of ASCE's Akron-Canton Section please visit <http://www.asce.org/reportcard>

Key Infrastructure Facts

- 36% of Ohio's major urban roads are congested.
- 25% of Ohio's major roads are in poor or mediocre condition
- Vehicle travel on Ohio's highways increased 25% from 1990 to 2003. Ohio's population grew 5% between 1990 and 2003.
- Driving on roads in need of repair costs Ohio motorists \$1.6 billion a year in extra vehicle repairs and operating costs—\$203 per motorist.
- Congestion in the Akron-Canton area costs commuters \$219 per person per year in excess fuel and lost time.
- Congestion in the Cincinnati area costs commuters \$687 per person per year in excess fuel and lost time.
- Congestion in the Cleveland area costs commuters \$204 per person per year in excess fuel and lost time.
- Congestion in the Columbus area costs commuters \$514 per person per year in excess fuel and lost time.
- Congestion in the Dayton area costs commuters \$261 per person per year in excess fuel and lost time.
- Congestion in the Toledo area costs commuters \$233 per person per year in excess fuel and lost time.
- 25% of Ohio's bridges are structurally deficient or functionally obsolete.
- Ohio has 462 high hazard dams. A high hazard dam is defined as a dam whose failure would cause a loss of life and significant property damage.
- The rehabilitation cost for Ohio's most critical dams is estimated at \$384.7 million.
- Ohio's drinking water infrastructure needs \$4.95 billion over the next 20 years.
- Ohio has \$8.72 billion in wastewater infrastructure needs.
- Ohio generates 1.42 tons of solid waste per capita.
- Ohio recycles 23.5% of the state's solid waste.
- 76% of Ohio's schools have at least one inadequate building feature.
- 83% of Ohio's schools have at least one unsatisfactory environmental condition.

Field notes from civil engineers in the state

"Roadways continue to get repaired in a helter skelter fashion, without sufficient thought or attention to current engineering practices and improved methods and materials that would greatly improve the service life of these roads—case in point, lack of attention to adequate subgrade drainage and lack of attention to surface cracking problems." —a civil engineer from Middletown, OH

"We just need the Federal Transportation bill to pass at the \$300 billion figure. We need about \$1 billion of that just for the Cleveland Innerbelt Project." —a civil engineer from Cleveland, OH

From the Headlines

The emergency closing of the bridge carrying Four Mile House Road over Indian Creek this week points directly to continued financial problems across the state and the apparent growing need to give higher priority to bridge safety. The bridge, however, began to cave in early this week, creating a dangerous situation and prompting the county to close it until it can be replaced. High water and freezing and thawing conditions are believed to have caused the rapid damage to the support structure. The county had planned to replace the bridge, which was built in the 1940s, last summer but chose to replace the Portage River South Road bridge in Salem Township instead because it had even more problems. Money simply is not available to keep up with maintenance, a situation that can create an environment in which deteriorating bridges are dangerously kept in use for too long of a time. *News Herald*, 1/25/05

More than 60 percent of the trash filling up Ohio's landfills could be recycled instead of thrown away. That's the conclusion of a new study released by the Ohio Department of Natural Resources. It found that recyclable paper and cardboard makes up 41 percent of the stuff being tossed into landfills across the state. Another 16 percent of Buckeye trash consists of recyclable plastic, from soda bottles to milk jugs. *Cincinnati Enquirer*, 1/5/05

There is a new reason for swimmers, waders and paddlers to take note of the Cuyahoga River: the hepatitis A virus. The U.S. Geological Survey, in a final report looking at pathogens in the stretch of river between Akron and Cleveland, confirmed the presence of the virus, which the report said appears to be entering the waterway through the city of Akron's sewage system. Other bacteria, viruses and parasites that can trigger diseases also were found in the Cuyahoga River sampling. Finding the virus in the water was not surprising because combined sanitary and storm sewers that overflow into America's urban streams can make those waterways home to numerous health-threatening pathogens. *Beacon Journal*, 12/17/04

Corrosion in steel support beams in the Brent Spence Bridge has prompted emergency repairs that will close lanes of the span. The deterioration and drainage problems were detected during a recent bridge inspection. The problems are not severe enough to warrant closing the bridge before the repairs are made but serious enough to have

expedited repairs. The corrosion is just the latest problem associated with the overused and aging 41-year-old bridge, which carries Interstates 75 and 71 across the Ohio River. Government, business and civic leaders in Greater Cincinnati and Northern Kentucky have prioritized replacement of the double-deck bridge for economic and safety reasons. The bridge carries about 160,000 vehicles a day and regularly gridlocks during morning and afternoon rush hours. It was modified in 1987 to four lanes in each direction from three lanes to accommodate more traffic. But that left narrower lanes—11 feet instead of 12—and no emergency lanes for disabled cars. *Cincinnati Post*, 10/30/04

Mogadore is seeking funds to build a combined junior high and high school and dropped—for now—plans to renovate the elementary building. Mogadore students now must crisscross a busy parking lot to go to and from classes in the junior high and high school. Both schools are more than a half-century old, with outdated electrical systems and plumbing. A football player who injured his knee recently had to change his schedule because there was no elevator to take him to the school's second floor. *Akron Beacon Journal*, 10/19/04

The crumbling 72-year-old Fulton Road Bridge over the Cleveland Metroparks Zoo has suffered another blow en route to its demise. The city of Cleveland closed two of the four lanes and won't restore traffic to all four before the bridge is torn down in nearly three years. A new \$50 million bridge is to open at the same spot in late 2008. The concrete columns supporting the outer lanes have deteriorated too much to keep those lanes open, officials said. The landmark bridge spans railroad tracks, Big Creek and the zoo. Some 22,000 vehicles travel the bridge daily, or about twice the amount that two-lane roads normally are designed to handle. *Plain Dealer*, 3/30/04

Sources

*Survey of the state's civil engineers conducted in December 2004.
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EPA Drinking Water Infrastructure Needs Survey, 2001
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