

DISTRIBUTION SYSTEM IMPROVEMENTS

Confronting the State's Rapidly Aging Infrastructure



Nationwide, it is well-known that the aging infrastructure throughout the country must be addressed in a timely, cost-effective manner.

In fact, the U.S. Environmental Protection Agency (EPA) estimates that nationwide \$384.2 billion* in capital investments is needed in our water systems from 2011 to 2030 to continue to provide safe drinking water to the public.

* Measured in 2011 dollars.

Did you know?

Statewide, EPA estimates that New Jersey water systems will require an investment of \$7.9 billion by 2030 to cover infrastructure improvements needed to continue to provide safe water to the public.

New Jersey's Aging Infrastructure

New Jersey's drinking and wastewater infrastructure is rapidly approaching the end of its useful life. A significant percentage of the state's drinking water infrastructure was installed between 1870 and 1960 – and in less than 10 years, the vast majority of this pipe will have reached, or aged beyond, the reasonably expected life span. The problem is real and accelerating, but it is also masked because unlike the roads and bridges we all travel across, much of our water infrastructure is underground and therefore out of sight. EPA estimates that of the \$384.2 billion needed to cover infrastructure improvements, New Jersey

water systems will require an investment of \$7.9 billion, with more than 60 percent of this needed for transmission and distribution projects.

We can't ignore the issue

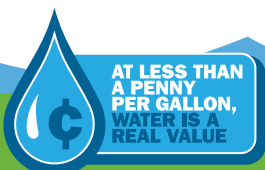
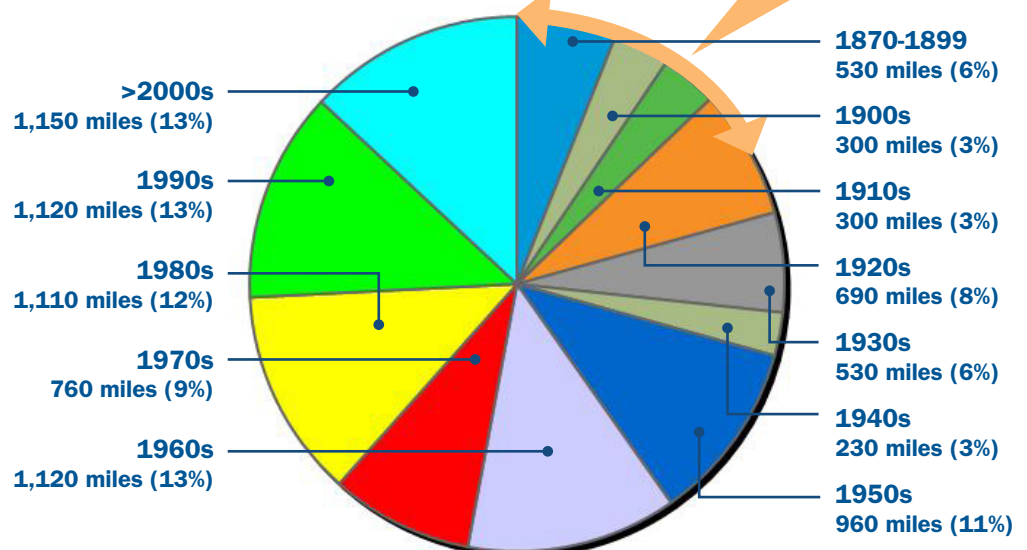


The impacts of not addressing this problem now could result in an unreliable supply of safe drinking water; increased service

interruptions; more frequent and costly emergency repairs; insufficient water flow and pressure; and lack of sufficient water infrastructure to support local and state economic growth.

Age of New Jersey American Water's Pipes by Decade

As it stands today, approximately 11 percent - or 980 miles – of New Jersey American Water's 8,800 miles of pipe are between 100 and 140 years old and nearing the end of their useful lives.





A solution is needed to minimize the impacts of aging infrastructure and related service issues that can cost up to 10 times more to fix as an emergency than under a well-thought-out water infrastructure renewal plan.

The time is now

In recognition of the need to accelerate the rate at which the state's water infrastructure is renewed, the New Jersey Board of Public Utilities, after a lengthy public stakeholder process that lasted almost two years, created a distribution system improvement program.

The program is designed to foster accelerated investment by water utilities on the timely rehabilitation and replacement of critical water distribution components to enhance safety, reliability, water quality, system flows and pressures. Only improvements to specific components designated by the BPU are eligible for the program. These generally include distribution main replacement and rehabilitation; hydrant, valve and service line replacements.

DSIC accelerates projects

The program's infrastructure projects are funded through a Distribution System Improvement Charge (DSIC) that will appear on as a separate item on customers' bills. DSIC is a proven regulatory tool that allows for modest surcharges outside of the general rate proceeding for rehabilitating and replacing aging infrastructure, while maintaining BPU oversight.

States that have implemented DSIC

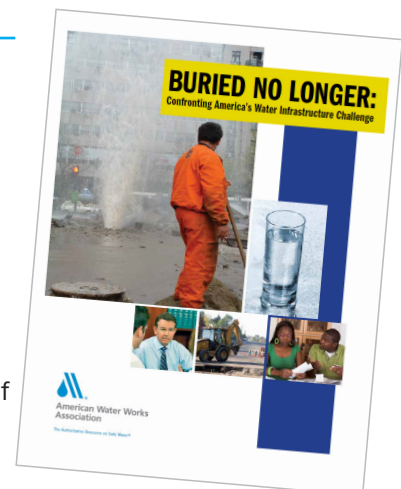
The DSIC mechanism has been used elsewhere for more than ten years. Other states that have adopted this innovative funding mechanism to accelerate infrastructure projects include Connecticut, Delaware, Illinois, Indiana, Missouri, New Hampshire, Pennsylvania, New York, Ohio and California.

Accelerated projects create jobs

A side benefit of DSIC is that the projects funded by the program will stimulate job creation in New Jersey. Estimates by the American Society of Engineers and Rutgers University indicate that 10,000 to 30,000 jobs are created for every \$1 billion of infrastructure expenditures. This means that \$50 million spent on DSIC projects would create approximately 240 construction-related jobs. In addition to the construction-related jobs, we believe that many more ancillary jobs will be created.

Learn more about our nation's infrastructure challenges

- **American Water Works Association: "Buried No Longer: Confronting America's Water Infrastructure Challenge"**
www.awwa.org/portals/0/files/legreg/documents/buriednolonger.pdf
- **American Society of Civil Engineers: 2015 "Report Card for America's Infrastructure"**
www.infrastructurereportcard.org/a/#p/drinking-water/overview
- **U.S. Congressional Budget Office: "Future Investment in Drinking Water & Wastewater Infrastructure"**
www.cbo.gov/sites/default/files/cbofiles/ftpdocs/39xx/doc3983/11-18-watersystems.pdf
- **Environment Protection Agency: "Drinking Water Infrastructure Needs Survey and Assessment: Fifth Report to Congress"**
water.epa.gov/grants_funding/dwsrf/upload/epa816r13006.pdf



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