



## OFFICE OF THE MAYOR

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Hon. Stephanie A. Miner, Mayor

### **Testimony of Mayor Stephanie A. Miner**

U.S. House of Representatives Energy and Commerce Committee, Environment Subcommittee  
Hearing on Reinvestment and Rehabilitation of our Nation's Safe Drinking Water Delivery Systems  
March 16, 2017

#### **I. Introduction**

Syracuse is a City of 145,000 people located in Upstate New York. The fifth-largest City in the State of New York, Syracuse is home to major educational institutions including Syracuse University, Upstate Medical University, Le Moyne College, the St. Joseph's College of Nursing, and others. Syracuse is building a prosperous future for its residents thanks to the thousands of New Americans who call this city home. The City has the fourth-highest rate of refugee acceptance in the nation, per capita, and these New Americans are starting small businesses, rebuilding aging neighborhoods, and being active, involved public school parents. Syracuse is a twenty-first century city on the move with a bright future ahead.

The City of Syracuse would not be on the map today without a major piece of infrastructure: the Erie Canal, which celebrates its bicentennial this year. The Erie Canal served as the primary thoroughfare to send products from Atlantic ports to the growing industries of the Midwest. Syracuse – along with other canal cities like Rochester, Buffalo, and Utica – owes our existence today to this prescient investment years ago. Begun in 1817 and completed in 1825, the Erie Canal – constructed largely with the labor of Irish immigrants – was the largest transportation infrastructure investment in our young nation's history and set the standard as manifest destiny gave our nation a new frontier that required new methods of shipping goods and people from one place to another.

As our nation grew, so did the City of Syracuse. In the late 1800s, we saw another engineering marvel created in the shadow of the Erie Canal: the Syracuse water system. Coming from a pure source, Skaneateles Lake, 14 miles away from the City, our water comes to us through a gravity-fed system built almost entirely by hand with just simple tools. This has enabled the City of Syracuse to enjoy affordable, clean water for over a century, meeting the needs of our citizens and businesses.

Now, more than ever, it is important for cities like Syracuse to continue to have access to reliable, affordable, clean water. We have seen with the crisis in Flint, Michigan that no community can take its drinking water for granted. It is critical that Congress and the Administration take measures to support our clean water systems.

## **II. Infrastructure Challenges**

Cities today are faced with a wide range of challenges facing their infrastructure systems. Syracuse, in particular, must address our major concern: the age of our infrastructure. Pipes were laid more than 100 years ago in many parts of the City system. While the cast iron pipes have done an excellent job transporting water from our source to our City, they are showing their age. In 2016, the City experienced 322 water main breaks. In 2015 and 2014, we experienced 375 and 391, respectively. It was once the norm for water main breaks to happen only in winter, when the freeze-thaw cycle would heave ground and break mains; now it is commonplace for breaks to happen throughout the year. Already in 2017, the City has had 70 breaks.

Part of the challenge Syracuse faces is directly related to climate change: with colder winters, warmer summers, and more dramatic freeze-thaw events happening both earlier and later in the season. This leads to more breaks happening more frequently. Our aging pipes cannot heave with the ground and, without fail, they break due to our weather conditions.

Aging infrastructure is not the only source of struggle for America's water systems; ensuring the quality of a safe supply of clean, potable water is critical. In the cases of Hoosick Falls, New York and Flint, Michigan, we have seen government decisions put the bottom line before the people we are sworn to serve. It is critically important that the federal government support localities when they need to make decisions about water quality. Careful testing for contaminants in water sources is important and strict standards – while beneficial – must also come with support from the governments that require them. Mandates should come with financial assistance to help municipalities meet the rules. No community should ever be forced to make decisions about importing water for their residents from a system that has been contaminated and, with the right support from the federal government, no city will have to again.

## **III. Innovation and Opportunity**

It is said that necessity is the mother of invention; if that is true, then public budgeting is the mother of innovation. Cities like Syracuse are learning to do more with less and develop creative new solutions to addressing infrastructure challenges.

In 2014, the City of Syracuse opened its Office of Innovation, made possible with a three-year, \$1.35 million grant from Bloomberg Philanthropies. Syracuse was one of fourteen cities selected in 2014 as part of the Bloomberg Philanthropies' Innovation Teams (i-teams) program. The program aims to improve the capacity of City Halls to effectively design and implement new approaches that improve citizens' lives. Grant funds allow mayors to hire and fund i-teams for up to three years. These teams function as in-house innovation consultants, moving from one mayoral priority to the next. Using Bloomberg Philanthropies' tested Innovation Delivery approach, i-teams help agency leaders and staffs implement a data-driven process to assess problems, generate responsive new interventions, develop partnerships, and deliver measurable results.

The first issue area our i-team was assigned was infrastructure. Through intensive study and collaborative partnerships with other organizations, including the Eric and Wendy Schmidt Data Science for Social Good fellowship at the University of Chicago, the City has done remarkable work to bring new ideas to the forefront to serve our citizens and lead a national conversation on infrastructure. Syracuse has developed a predictive analytics model to determine where water main breaks are most likely to occur based on the age of pipes and the frequency of breaks in the immediate area. Using that study, the City is better able to plan for preventative maintenance, rather than simply reactive repairs that leave customers out of water for hours.

Syracuse has also begun installing sensors on water valves to help detect system leaks. These sensors were first piloted in our Downtown neighborhood – which, after many years is now experiencing a renaissance of new construction, apartment living, and thriving nightlife all built upon aging infrastructure. They work by measuring small vibrations within the water mains. Should even a small leak occur, they transmit a radio signal to the Water Department’s headquarters, notifying the appropriate staff who can schedule maintenance before a small leak becomes catastrophic.

We are working on predictive technologies as part of a “Dig Once” philosophy. Repeated construction on the same blocks not only tears up roadways but has the potential to damage infrastructure, even after it is repaired. The City of Syracuse is working to coordinate infrastructure projects several years in advance with utility providers so improvements and preventative maintenance can occur simultaneously and roads can be sealed once and for all – saving on expensive reconstruction costs.

#### **IV. Federal Actions**

##### **a. Supporting Grant Programs to Localities**

The federal government needs to do more to provide funding for municipalities to address their ongoing water system challenges. Several streams of funding do exist now, principally through the Drinking Water State Revolving Fund (DWSRF), but it is not adequate for all purposes. First, it is a loan, not grant program, and does not add revenue to cash-strapped cities bottom lines. Additionally, with historically low interest rates, mid-size and large cities like Syracuse are able to perform their own borrowing at lower rates than most state DWSRFs are able to provide. The DWSRF is a critical support to smaller municipalities who do not have the bonding ability a city like Syracuse enjoys.

Congress should examine additional ways to provide grant aid directly to municipalities to support clean water systems and other infrastructure programs. This investment helps create jobs and creates a level playing field on which businesses can grow, our economy can thrive, and jobs can be created.

##### **b. Addressing Climate Change**

We are long overdue for an honest national dialogue on the impacts of climate change. The ongoing effects of climate change will continue to effect infrastructure systems across the nation. New temperature milestones – both positive and negative – will heave the ground, freezing and thawing pipes and conduits. Super Storms, a phenomenon New Yorkers know sadly all too well, will bring challenges to our electrical grids. Burying lines as part of a “Dig Once” policy, like Syracuse is pursuing, can be expensive but with the right incentives from the federal government would be possible.

The debate on the causes of climate changes rages on but its impacts are being felt in cities across the country. Leaders need to take action; begin the conversation today to prevent catastrophic system failures in the future.