City of North Miami Beach, Florida

Leveraging Itron AMI to Identify & Repair 23 Leaks, Saving 27 Million Gallons of Water Annually

OVERVIEW
Until recently, the City of North Miami Beach relied on traditional walk-up, manual meter reading, and a leak detection service that visited quarterly to survey areas of its distribution system. Surveyors would visit two weeks per quarter, helping city staff systematically go from one end of the 550-mile pipeline system to the other in one-mile sections—it took one and a half years to get through the city’s 25-square-mile service territory. While the city was able to maintain its system and identify leaks, the process was labor intensive and the city understood that automating meter reading and leak detection could be done simultaneously, saving precious time, staff resources, money—and most importantly, water.

SOLUTION
The City of North Miami Beach is leveraging Itron’s Advanced Metering Infrastructure (AMI) solution, equipped with leak detection technology and cloud-based analytics, which now utilize the robust and secure Microsoft Azure platform. The project, completed in 2015, includes 38,000 communication modules along with 11,000 acoustic leak sensors. The new system is providing North Miami Beach with real-time data on customer usage and potential leaks throughout the system. Instead of potentially taking more than a year to identify leaks, the city now knows within three days if a leak occurs. In 2016, North Miami Beach’s transition won Water & Wastes Digest magazine’s Top Projects Award.

“After a competitive pilot, it was evident Itron’s solution and vision best suited North Miami Beach’s long-term strategy to expand services beyond meter reading,” said Karim Rossy, chief engineer for the City of North Miami Beach. “Itron’s AMI solution has the ability to not only bring back hourly reads, but also survey our distribution system for leaks on a daily basis.”

CUSTOMER
City of North Miami Beach, FL

SERVICE TERRITORY
The City of North Miami Beach, Florida produces 21 million gallons of water per day, delivered to 38,000 endpoints across 25-square-miles of Northern Miami-Dade County

TECHNOLOGY
Itron AMI solution equipped with leak detection technology and analytics

BENEFITS
» 23 leaks identified and repaired, saving an estimated 27 million gallons and $38,000 annually
» Improved efficiency of meter reading and billing
» Enhanced safety of meter readers
» Increased quality of customer service by eliminating the need of estimated bills
» Customers may check own usage via secured website

CASE STUDY
We chose Itron for this project because of the company’s commitment to quality and extensive experience helping utilities with automated and advanced metering deployments.”
— Ana M. Garcia, City Manager.

With Itron’s AMI solution, North Miami Beach is able to enhance customer service, protect revenue, forecast consumption, analyze flow and support district metering by leveraging detailed consumption and meter alerts collected by Itron Analytics in the cloud. The utility’s customers now have access to detailed consumption information through a secure customer web portal so they can better manage their usage, conserve water and save money.

“Our goal is to drive down costs for the utility and our customers, and reduce the amount of water we produce,” said Ana M. Garcia, city manager for the City of North Miami Beach. “We chose Itron for this project because of the company’s commitment to quality and extensive experience helping utilities with automated and advanced metering deployments.”

**BENEFITS**

With 11,000 leak sensors installed, the city has already identified and repaired 23 leaks. These leaks will recover an estimated 27 million gallons of water per year, saving North Miami Beach $38,000 annually.

“One big benefit we are seeing from utilizing our new leak detection technology is the time savings, resulting from not having to do physical surveying,” said Rossy.

With access to customer consumption data, North Miami Beach is now able to identify leaks they were previously unaware of. This has allowed proactive customer service outreach and customers are happy to be alerted to maintenance and other actions being taken to repair leaks and save them money in the long run.

“With the information we are receiving from the system, we have been able to proactively engage with our customers regarding abnormal usages before sending out a bill,” Rossy said. “And our distribution crews have been able to find leaks before they come to the surface, saving close to 23 million gallons of water to date.”

This installation has laid the groundwork for additional benefits—not only to the utility, but for customers as well—including:

» Automated leak detection, which will help drive costs down for both the utility and customer.

» Improved efficiency of meter reading and billing.

» Enhanced safety of meter readers.

» Increased quality of customer service by eliminating the need of estimated bills.

» Customers can check own usage via secured website.