

# WATER METER READING

Efficient Metering



City of Santa Ana employees drive to neighborhoods and walk from meter to meter (a total of 44,531) to collect and record water usage data. But there is a more efficient way to read water meters. It's called Automated Meter Infrastructure (AMI).

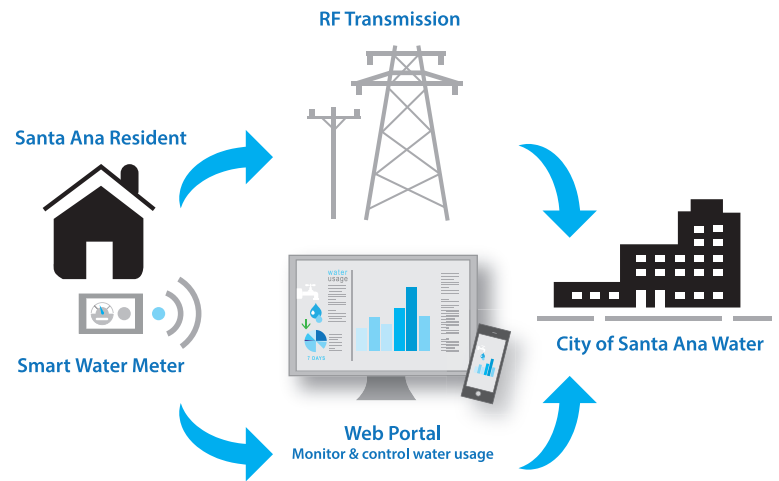
Reduced Operation Costs. Improved Service Reliability.

AMI minimizes meter reading costs. It is faster and more efficient than visual manual readings. It will also advance Santa Ana's infrastructure and prepare us for future needs. Optimizing our operations helps us address issues more quickly and effectively and keep costs lower for our customers.

- Accurate meter readings
- Improved billing
- Early leak and defective meter detection
- Reduced operating costs
- Better data allowing staff to plan, construct and optimize the water distribution system
- Ability to measure and target new water conservation programs

After conducting a thorough study of our water system, we are evaluating the implementation of this advanced metering technology throughout the city. Upgrading to an AMI system would be made at no additional costs to metered residential and commercial customers.

This fact sheet is designed to provide you with information about AMI and what it means to you.



## What is AMI?

AMI uses two-way communication over a secure wireless network between the water meter at your home or business and the City of Santa Ana.

## How does AMI work?

Smart meters record the amount of the water consumed over time. They differ from traditional water meters in that they are electronic and can talk to a central computer system via radio frequency (RF) transmission.

## Would I have access to the data provided by my smart meter?

Yes, you would have access to a web portal where you could track your water consumption and other detailed information via a computer or smart phone. Similar services are offered through electrical and gas companies.

## Will I be able to read my water meter after a smart meter is installed?

Yes, you would still be able to manually read your water meter if needed.

## How does the City know these meters are accurate?

Meters are tested by the manufacturers and comply with the American Water Works Association standards.



### Will my water use and personal information be secure?

Yes, your information is secure and kept safe at all times through data encryption.

### What about privacy? Will the City of Santa Ana be able to tell what I am doing in my home?

No. The AMI system would be collecting information on water use intermittently (not continuously). No one will be actively monitoring a particular home or business. The computer system analyzes patterns of use and reports deviations from the normal pattern (i.e. leaks, high consumption, etc.)

### Will this system pose any risk to my family's health?

No. In fact, wireless smart meters result in much smaller levels of radio frequency (RF) exposure than many existing common household electronic devices, particularly cell phones, Wi-Fi routers, and microwave ovens.

### Will the smart meter's radio signals affect the operation of other electronic devices in my home?

No, the radio signal is similar but significantly weaker than that of a cordless phone.

### Will AMI require a rate increase?

No, the initial investment in AMI would be offset by avoiding planned investments in our current, less efficient water meter technology and by savings from operational efficiency improvements.

### How long do smart meters work?

The life expectancy of smart meters are usually 20 years. Periodic inspection and maintenance will be performed to ensure all devices are performing as expected.

### Who can I call if I have questions about this?

Call Santa Ana Water Resources Division at 714-647-3320.

While few scientific studies have specifically focused on water meter AMI technology, the available studies (mainly associated with electric meters) come to the same conclusions as the many peer-reviewed studies of similar technologies using low-level wireless radio frequencies: no adverse health impacts.

For more information, we encourage you to read these two additional resources:

**Health Impact of Smart Meters by the American Cancer Society.**

**California Council on Science and Technology Study on the Health Impacts of Radio Frequency Exposures from Smart Meters.**