

Advanced Metering Infrastructure (AMI)

fact sheet

ABOUT AUTOMATED METER READING

Pleasanton's automated metering project involves the installation of highly accurate, state-of-the-art metering technology for residential and commercial water customers. New automated meters will be installed throughout the City.

An automated meter consist of a low-powered communication device that's attached to your new water meter. The automated meter transmits hourly water usage information to the City's Customer Service Center, four times per day – over a secure communication network.

In conjunction with the automated meter installations, the City will launch a new water conservation and budgeting tool for customers. The new Customer Portal is a free online water usage analyzer tool that enables customers to see their water usage anytime during the billing cycle. After registering and providing up-to-date contact information, the customer can elect to receive water alerts via a text message, e-mail, or phone call. Notifications are provided if the customer's water usage indicates a potential leak or abnormal usage.

AUTOMATED METER BENEFITS

- **Reduction of water loss – supporting conservation** - through proactive identification of water leaks on the customer service lines as well as the City's water distribution system.
- **New online water management tools – Water alerts-** will help you manage your household water usage. You can also register to receive household water exception alerts (e.g., high consumption, continuous flow) via email or text message along with, current bill cycle information.
- **Bill-to-date information** will be made available on a daily basis, giving you greater control over your monthly water bill. You can set a household threshold/budget for usage (e.g., 5,000 gals.), and be notified if your water consumption is trending to exceed, or surpass the threshold.
- **Save money** by knowing your daily and hourly consumption history, water usage comparisons by day, week, month, year and supporting information such as weather trends. This enables you to better understand and make informed decisions about your homes water use and associated water bill.
- **Improved operational efficiency** will create savings for reinvestment in future improvements to the water system. Automated transmission of reads eliminates the requirement of "utility truck rolls", reducing CO2 emissions, and reduces the City's carbon footprint.

AMI FREQUENTLY ASKED QUESTIONS

Q: How does the automated meter system work?

A: For Customer Service Staff:

The City will deploy the Aclara Fixed Network AMI STAR® System, using a wireless fixed network system that has three components:

- **Meter Transmission Unit (MTU):** This radio unit is connected to each automated water meter and collects the customers meter reading each hour. Every six hours, it sends its information to a Data Collection Unit (DCU)

- Data Collection Unit (DCU): A total of 16 Data Collectors will be located throughout the city on city owned facilities and City-owned poles. The DCU's collect the hourly meter readings from the MTU and transmit the meter readings to the City's meter reading database.
- City Metering Database: The City's billing system will use this information to calculate the amount of water used and create bills. The data collected daily in the meter reading database will be made available to Customers through the Customer Web Portal.

A: *For Customer Inquiry:*

Every automated meter in the City collects a meter read every hour which is time stamped. Four times per day, the hourly reads are received by several collecting units throughout the City. The collection units transmit the time stamped meter reading by a secure wireless network to the City's customer service center meter reading system.

Q: Why do I need a new water meter?

A: Most of the current water meters in Pleasanton are not operating at 100 percent of their capabilities. They are old, and have exceeded their functional life and need to be replaced. As meters age, their accuracy begins to decline, resulting in unaccounted for water loss that exceeds industry and regulatory standards. The new meter will accurately reflect your water usage.

Q: How does this enhance customer service?

A: Household leaks can be proactively detected faster than possible with the existing manually-read meters. At any time using a smart phone, tablet or computer, customers can logon to the City's Customer Portal to see; water usage history and abnormal usage alerts. Customers can sign up to receive a text message, e-mail, or phone call alerts, if water usage indicates a potential leak or abnormal usage.

Q: Is the Automated Meter System secure?

A: The City maintains the confidentiality of our customers' information in accordance with appropriate privacy policies. Automated meters do not transmit any Personally Identifiable Information. Only the meter serial number and meter read is transmitted.

Q: Will automated meters affect my water bill?

A: If your water meter is old, your bill may increase, but only if your current water meter is old and is under-registering your water usage. Residents with older meters are only paying for a portion of the water they use, this condition is not fair to all customers. Replacement of water meters will ensure fairness and equality for all residents and businesses.

Q: What does installation of a new automated meter involve?

A: On the day of the automated meter installation, if your meter is running, the installer will do a courtesy knock on the door; explain the work to be performed and inform you that your water service will be briefly interrupted. The installation should take approximately 30 minutes. When the work is complete, the installer will leave a door hanger explaining the procedure that took place, and communicate any further action needed by the customer. Follow up action is generally not required.

Q: When will the automated meter be installed on my home/business?

A: The City will upgrade nearly 22,000 water meters with a new automated meter. This includes all residential and business customers. Installations will start in August 2016 and run through October 2016. You will be notified several weeks in advance of the installation. The installation schedule is currently being developed and will be posted on the City's webpage. Once completed, customers can visit the City's website to see approximately when installs are scheduled in your

neighborhood.

RF FREQUENTLY ASKED QUESTIONS

Q. Do Automated Meters emit dangerous levels of radio frequency?

A. Automated meters do not emit dangerous levels of RF. In fact, RF emissions from an automated meter fall far below federal limits. The RF exposure a person might encounter from an automated meter in a typical household setting can be of significantly less strength than the RF signals they are exposed to from common electronic devices found within the home, such as a cell phones, microwave ovens, baby monitors, Wi-Fi networks, and radio and television broadcasts. All equipment operates in compliance with state and federal communication standards.

Q. What are the health impacts of RF and Automated Meters?

A. Scientific panels and government authorities throughout the world have conducted numerous studies about the effects of RF on human health and found no evidence to suggest that RF emissions from automated meters pose any specific health risk.

Q. Do Automated Meters use radio frequency regulated by the FCC?

A. Yes. These frequencies are called industrial, scientific and medical (ISM) radio bands. The FCC designates the ISM frequency bands for equipment and appliances that generate and use RF energy. The FCC opened these frequency ranges for wireless communications in 1985 and, since then, experienced a steadily increasing stream of devices occupying the bands.