

CITY OF MINNETRISTA



CITY COUNCIL AGENDA ITEM

Subject: Water Meter Reading Software Update

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Meeting Date: July 20, 2026

Issue: The software currently used to read the Itron water meters in Minnetrista is reaching end-of-life and needs to be updated.

Overview: Staff have been working with United Systems and Software, the City's Itron software vendor, to develop a process and timeline to transition from the City's current meter-reading software to a new solution. This transition needs to occur in 2027, and staff are providing this update to solicit questions before a formal agreement is brought forward, likely in September.

The City currently uses Itron Field Collection System (FCS) software to read water meters throughout Minnetrista. The current system allows for Automatic Meter Reading (AMR) drive-by processing of water usage. The proposed replacement, Itron Temetra, supports both AMR and Advanced Metering Infrastructure (AMI) meter reading. Note that there are no alternate software solutions, as the City's Itron meters are required to use Itron Temetra.

AMI reading uses a cellular connection at the meter, allowing near-continuous, 15-minute interval data to be transmitted to the City every six hours. An AMI system also alerts City staff to high water usage. The City has encountered a number of high-usage cases where, because AMR meters are read quarterly, the issue was not detected until a substantial amount of water had flowed through the meter. The upcoming transition to monthly billing will shorten that detection window, but AMI would identify high usage within hours rather than weeks. Transitioning a meter to AMI requires only swapping the Encoder Receiver Transmitter (ERT) for an AMI-compatible unit.

In 2026, the City paid \$6,621.34 for the annual Itron FCS software annual fee. The Itron Temetra proposal is broken down by years one and two. Year one totals \$37,510 and includes the software, training, 126 AMI-compatible ERTs, and cellular data fees; the ERT hardware accounts for roughly \$17,000 of this one-time cost. Year two, which is more representative of future years, totals \$9,073.61 and includes the software and data fees. Additional AMI ERTs are priced at \$135 each, with an annual cellular data fee of \$6.96 per ERT; for reference, the current AMR-compatible ERTs cost \$105.

Mission Statement:

The City of Minnetrista will deliver quality services in a cost effective and innovative manner and provide opportunities for a high quality of life while protecting natural resources and maintaining a rural character.

Once a software agreement is signed, the first invoice will arrive in 2027, allowing this expense to be included in the 2027 budget.

Other topics for discussion:

- The initial 126 AMI ERTs will be used for irrigation meters that the City pulls and manages, along with any new home builds. The City has approximately 2,350 water meters citywide. Converting the remaining ~2,224 meters to AMI would cost approximately \$300,000 in ERT hardware and approximately \$100,000 in outsourced installation (about \$45 per meter), for a total one-time cost of roughly \$400,000, plus ongoing cellular data fees of approximately \$15,500 per year. Is there a desire to swap out the existing AMR ERTs with AMI ERTs, and if so, at what pace?
- Are there any other questions about the software transition or AMR vs. AMI meter reading?

Next Steps: Staff are looking for direction to bring this item back in September for approval and implementation in 2027.

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