AMI Update to CTT Commission

Chris Stewart – AW Chief Information Officer

March 13, 2019

WATER FORWARD
INTEGRATED WATER RESOURCE PLAN

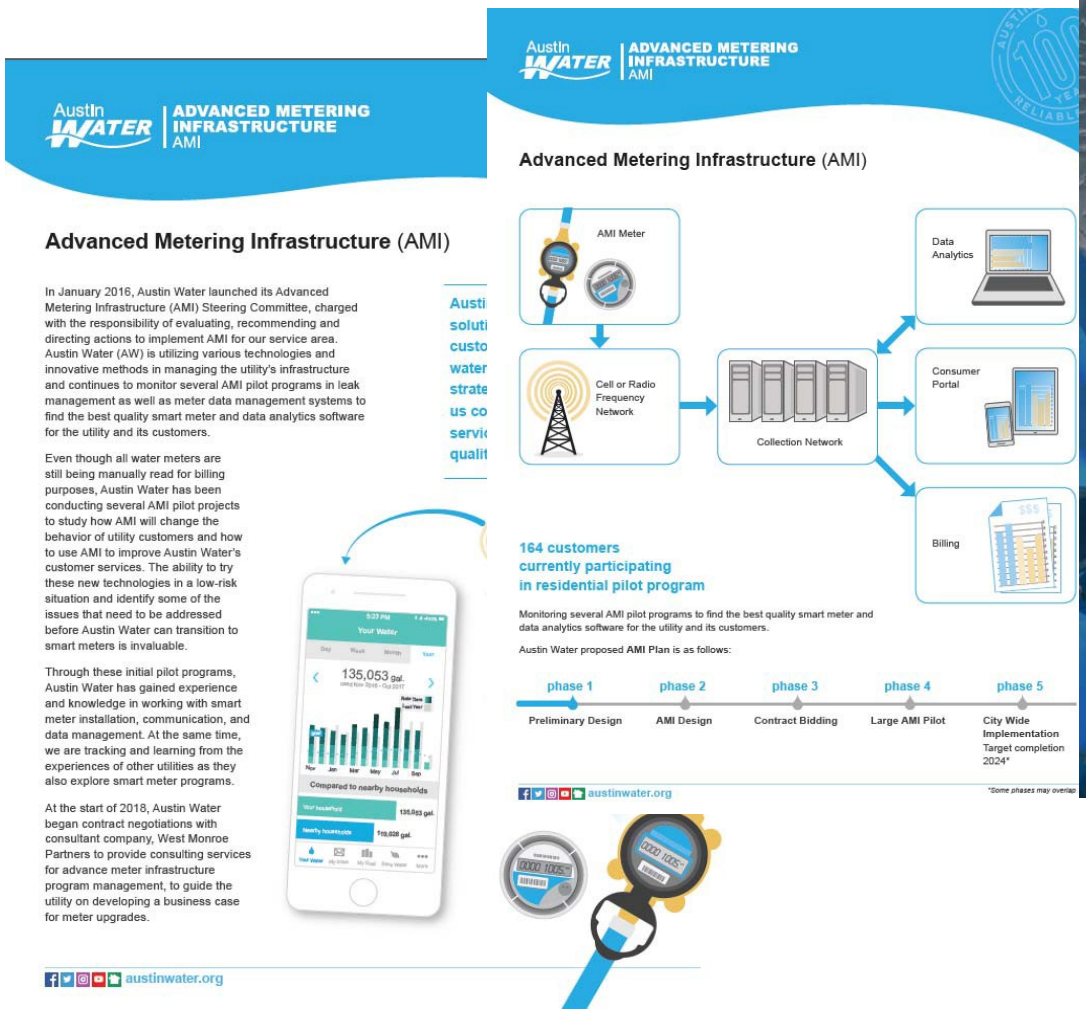
In November 2018, Austin City Council adopted Water Forward, an integrated water resource plan that includes a suite of demand- and supply-side strategies to address Austin's water needs over the next 100 years and ensure long-term water availability through a variety of climate conditions.

Water Forward recommended strategies include both major water supply projects and incremental solutions such as demand management or reuse.

Including are projects such as Advanced Metering Infrastructure, Aquifer Storage and Recovery, Centralized Reclaim expansion, and many others.

Affordability and social equity will continue to be key considerations in the development of ordinances, incentive programs, and water supply projects.

- Primer - Fundamental Documents
  http://www.austintexas.gov/AMI



Austin WATER | ADVANCED METERING INFRASTRUCTURE AMI

Advanced Metering Infrastructure (AMI)

In January 2016, Austin Water launched its Advanced Metering Infrastructure (AMI) Steering Committee, charged with the responsibility of evaluating, recommending and directing actions to implement AMI for our service area. Austin Water (AW) is utilizing various technologies and innovative methods in managing the utility's infrastructure and continues to monitor several AMI pilot programs in leak management as well as meter data management systems to find the best quality smart meter and data analytics software for the utility and its customers.

Even though all water meters are still being manually read for billing purposes, Austin Water has been conducting several AMI pilot projects to study how AMI will change the behavior of utility customers and how to use AMI to improve Austin Water's customer services. The ability to try these new technologies in a low-risk situation and identify some of the issues that need to be addressed before Austin Water can transition to smart meters is invaluable.

Through these initial pilot programs, Austin Water has gained experience and knowledge in working with smart meter installation, communication, and data management. At the same time, we are tracking and learning from the experiences of other utilities as they also explore smart meter programs.

At the start of 2018, Austin Water began contract negotiations with consultant company, West Monroe Partners to provide consulting services for advance meter infrastructure program management, to guide the utility on developing a business case for meter upgrades.

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Austin WATER | ADVANCED METERING INFRASTRUCTURE AMI

Advanced Metering Infrastructure (AMI)

164 customers currently participating in residential pilot program

Monitoring several AMI pilot programs to find the best quality smart meter and data analytics software for the utility and its customers.

Austin Water proposed **AMI Plan** is as follows:

phase 1	phase 2	phase 3	phase 4	phase 5
Preliminary Design	AMI Design	Contract Bidding	Large AMI Pilot	City Wide Implementation Target completion 2024*

*Some phases may overlap

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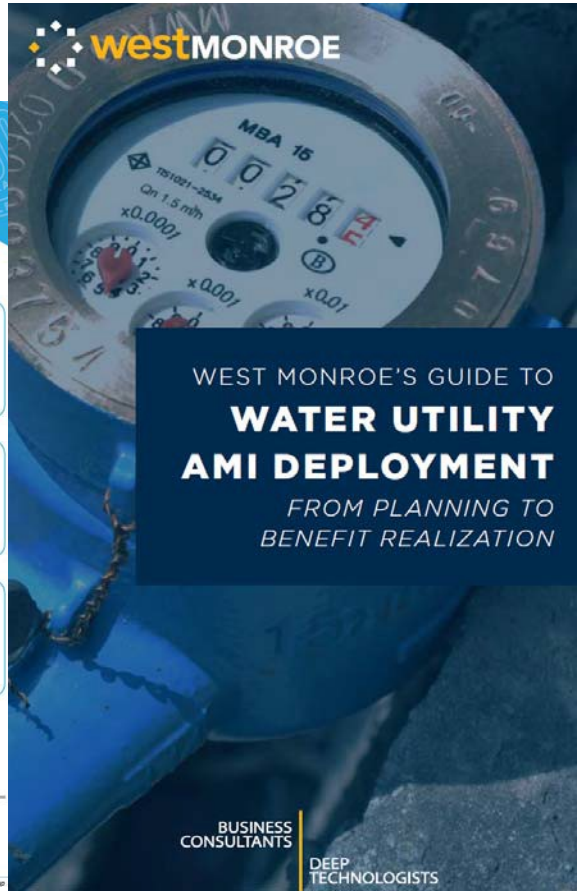
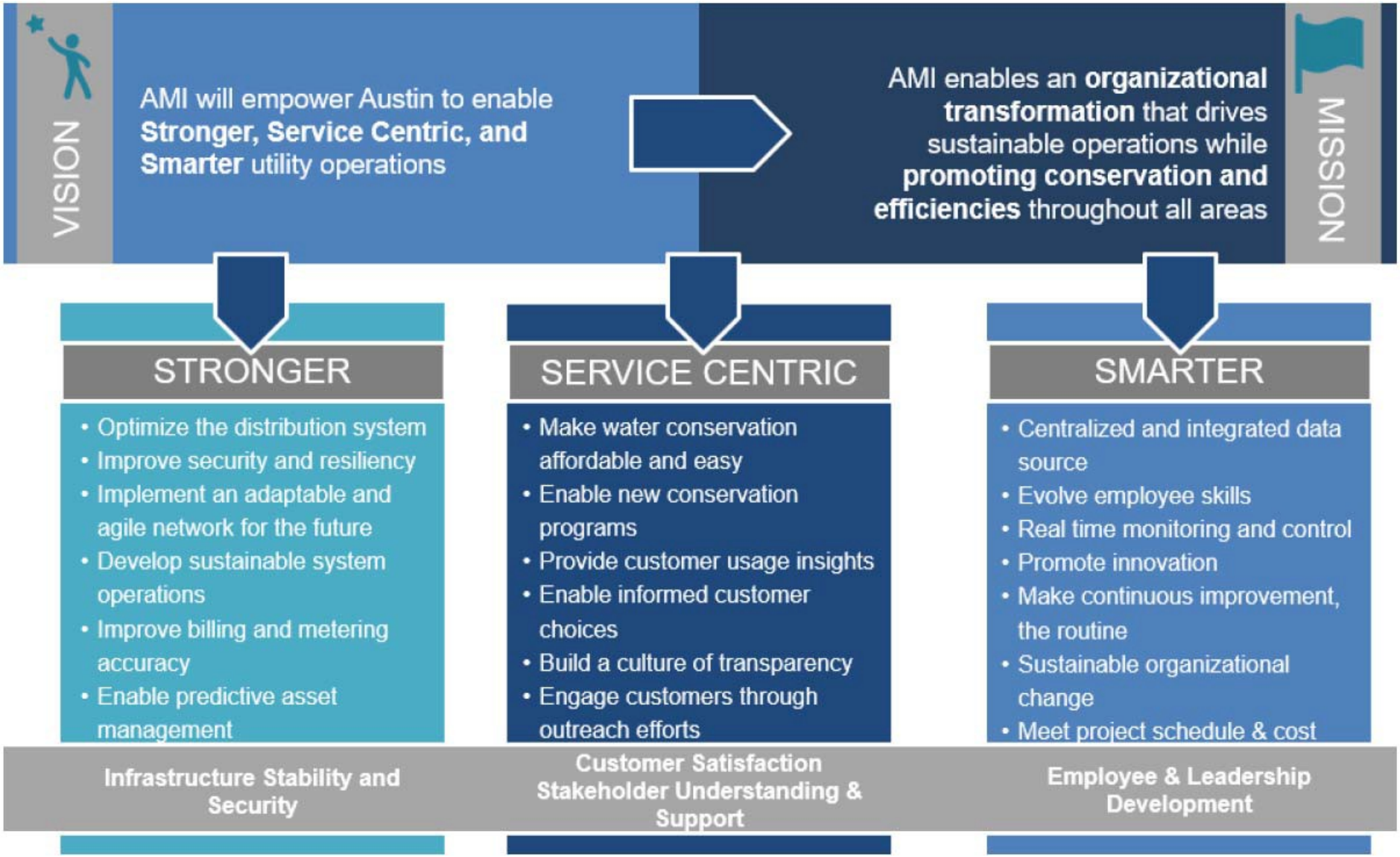
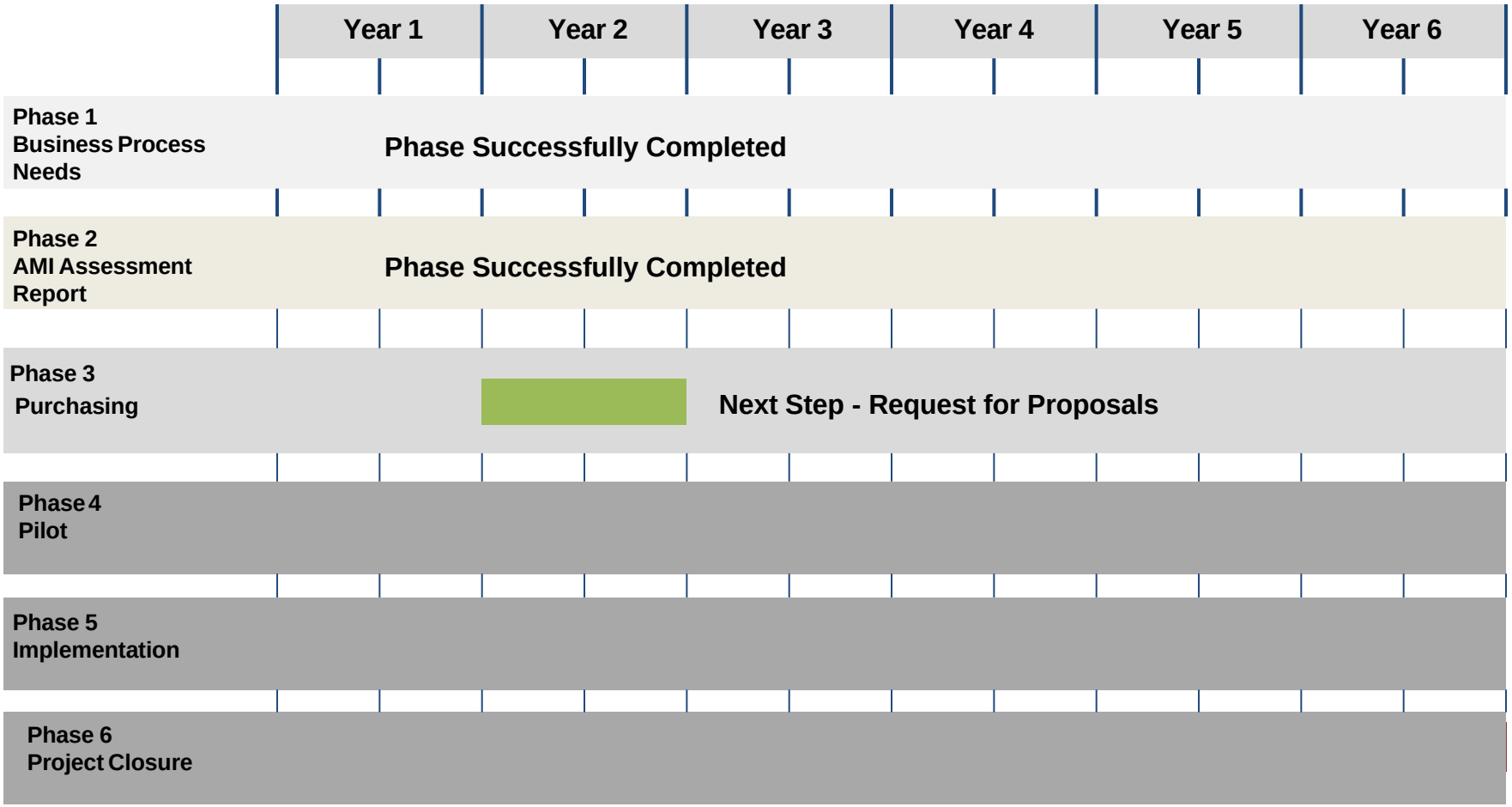


AW AMI Strategy

The Vision, Mission, and three pillars of the AW AMI Strategy ("Stronger", "Service Centric", and "Smarter") and their alignment to key AW goals and initiatives.



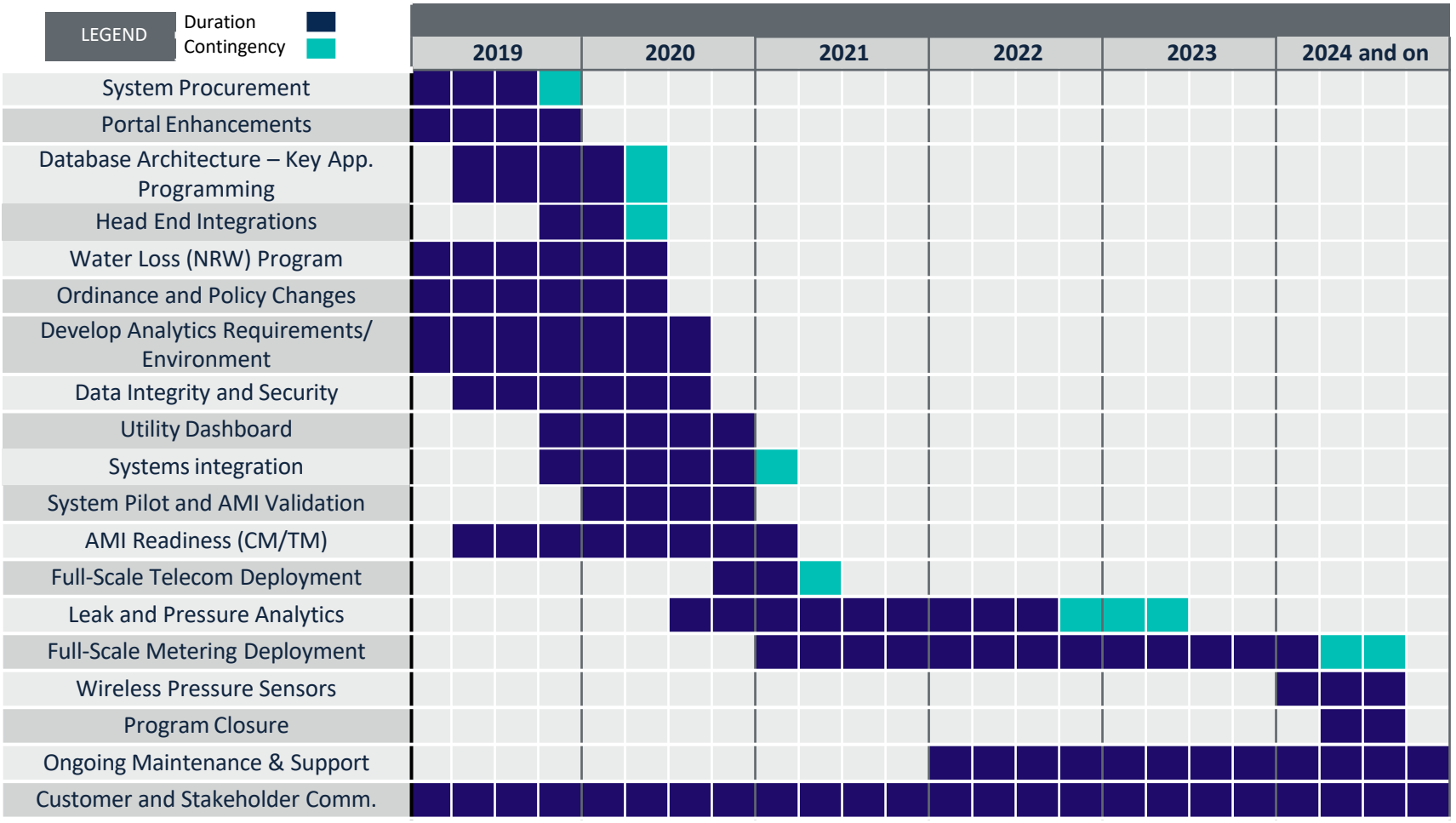
AMI Program Progress



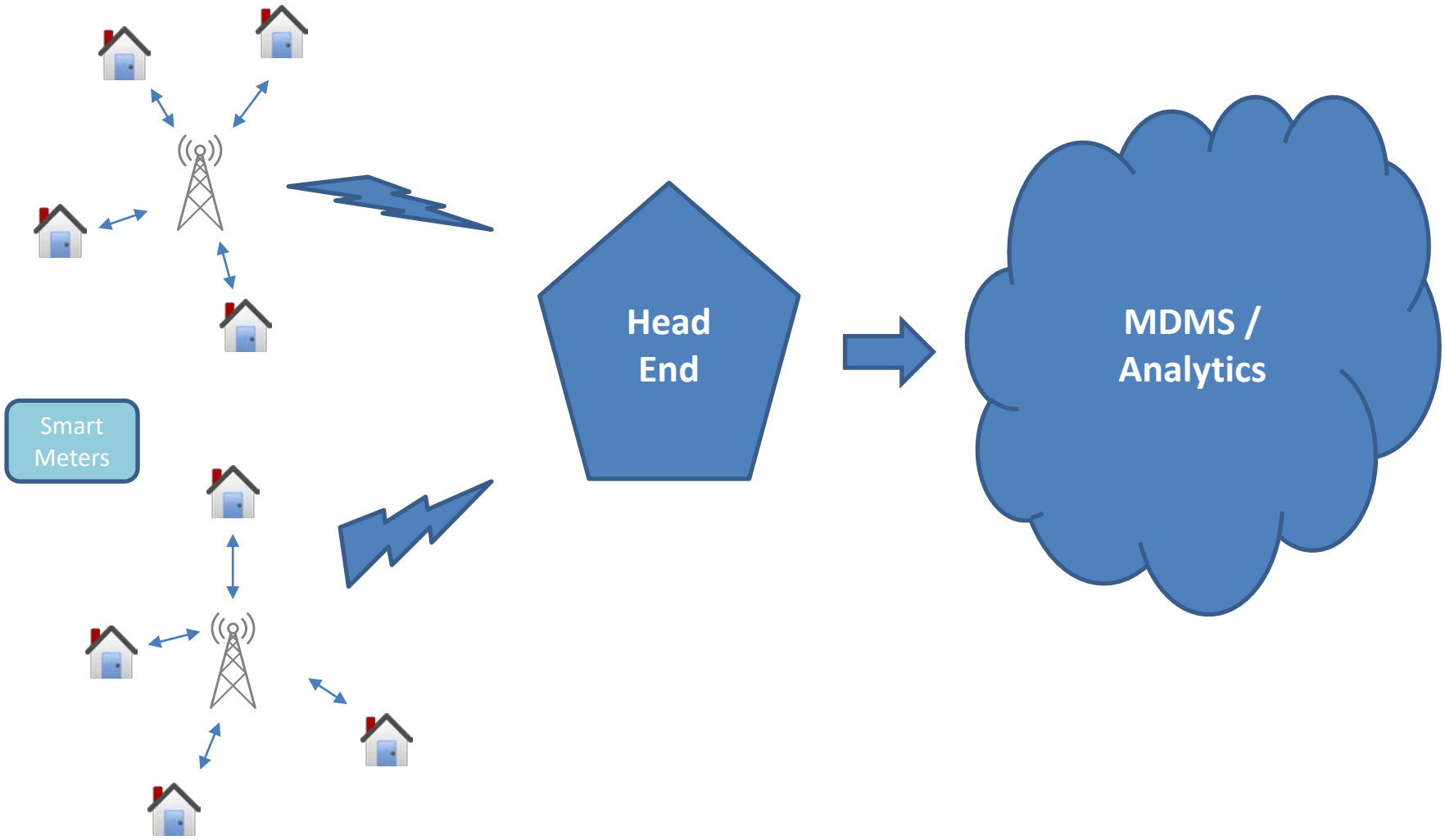
Phase 3 Plan

Final AMI Imp. Schedule and Support Plan
Interdepartmental Services Agreement
Installation Standard Operating Procedures
Permit Plan and Schedule
Negotiated Contracts and Agreements
Scored Evaluation Criteria
Vendor Bid Packages
RFP Distribution
RFP Evaluation Scoring Tool
Procurement Timeline
List of Vendors for Each AMI Component

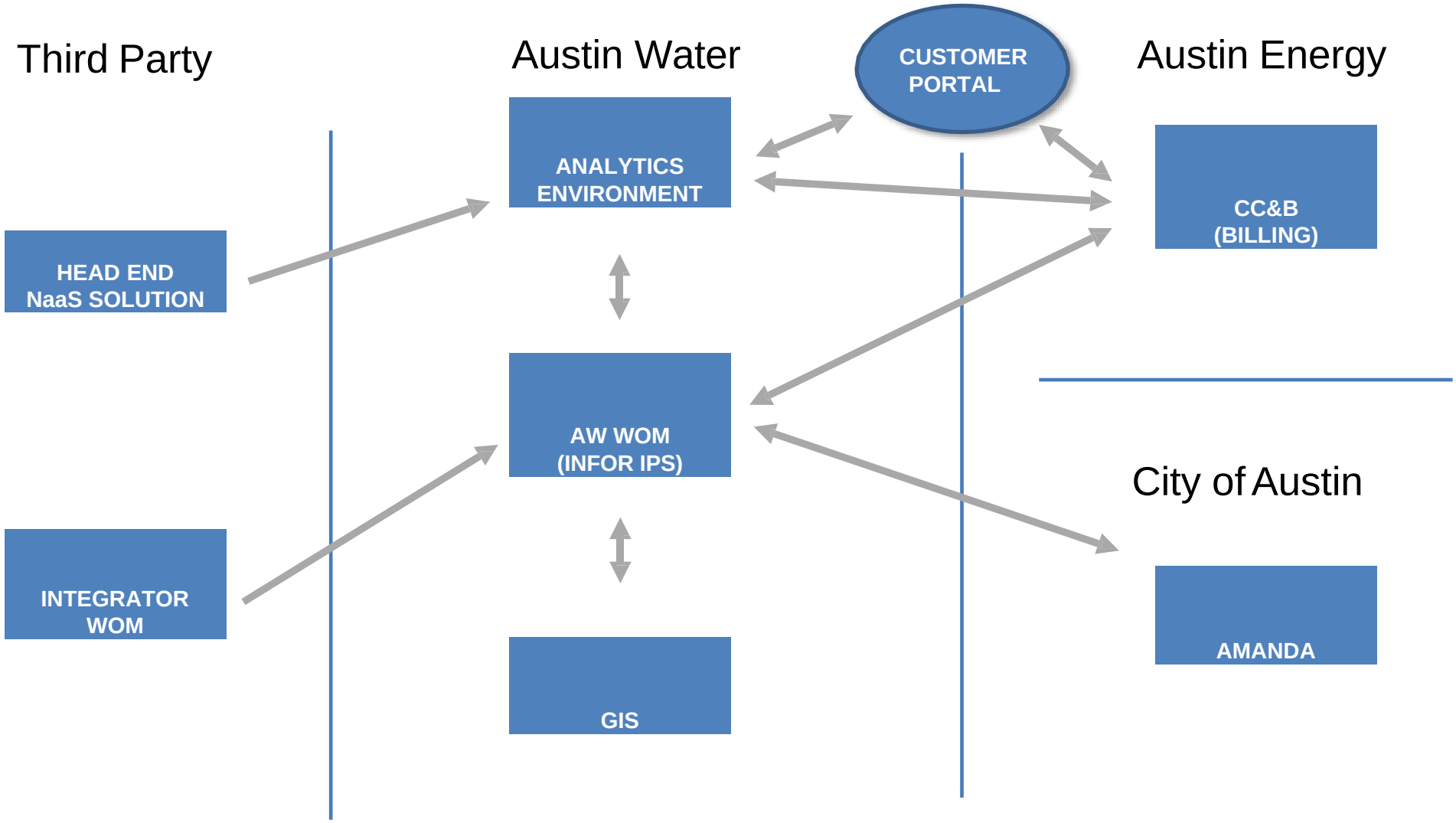
Implementation and Support Timeline



Network as a Service (NaaS)



Data Integration and Architecture Summary



This simplified depiction of the integration map represents a summary of the technology effort in Austin Water's AMI program

Security

The physical and cyber security of the AMI system has been a focal point from inception. It will continue to carry through implementation and operation.

Austin Water, Austin Energy, and the CTM CISO have worked with the AMI project team and vendors to ensure security and privacy best practices are integrated throughout the system.

While our security posture is a critical component to AMI, data will be available to citizens to help them make educated decisions on water usage and to the City to help with operational needs.

Austin
WATER