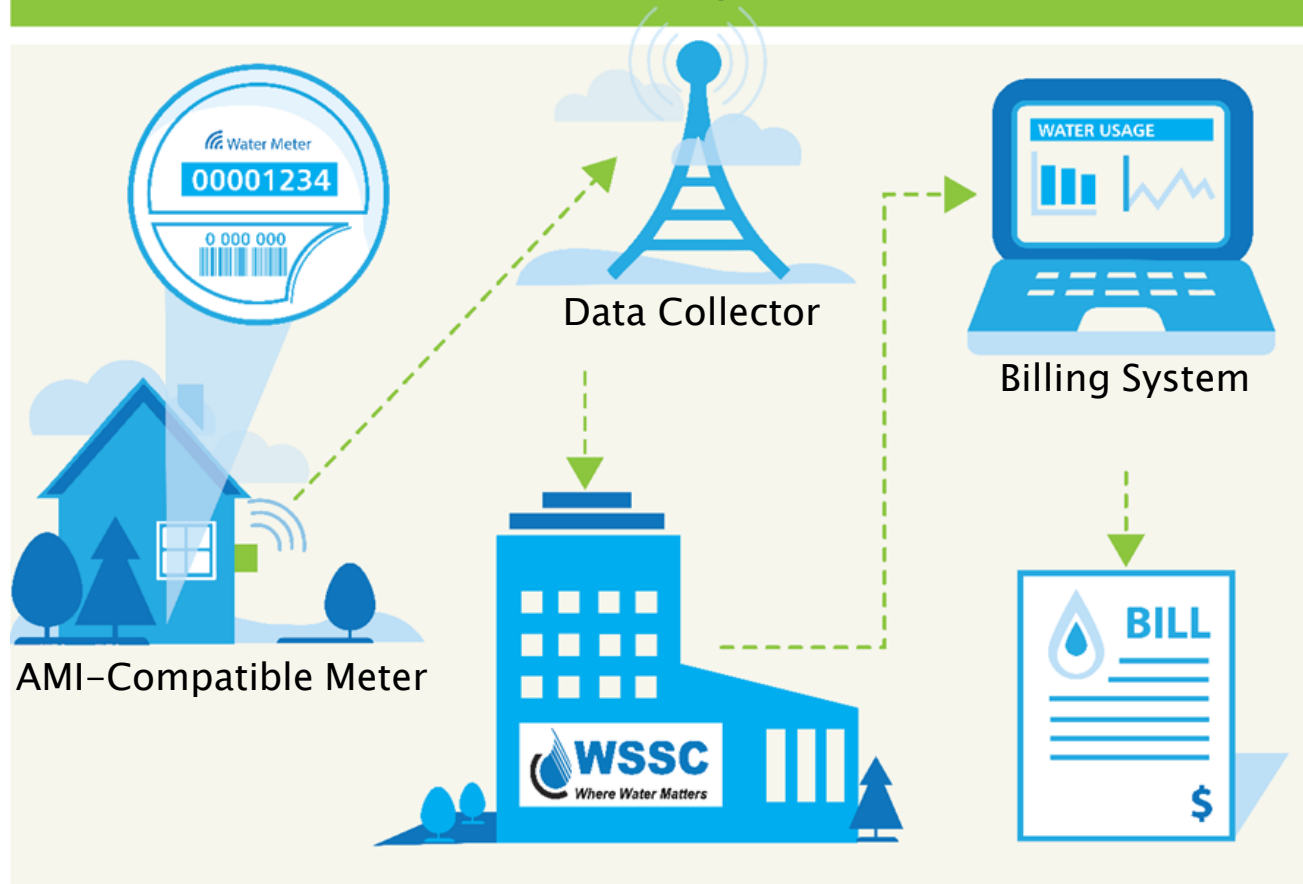


# Advanced Metering Infrastructure (AMI) Implementation

Commissioners Meeting  
March 20, 2019

# What is AMI?

## Advanced Metering Infrastructure



# Communication Network

- ▶ Based on commonly used digital communication methods
- ▶ Very short transmission duration... milliseconds
- ▶ Encrypted and secured
- ▶ No personally identifiable information
- ▶ Redundancy

Fixed Network



Cellular Network



# AMI-Compatible Meters

## ▶ Snapshot of Existing Meters

Meter Location	Number of Meters
Inside	20,400
Outside	158,545
Remote Read	303,208
<b>Total</b>	<b>482,153</b>

97% Residential, 3% Commercial

- ▶ Approx. 200,000 meter replacements
  - System incompatibility
  - End of useful life

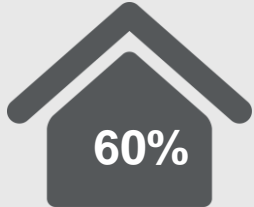
CURRENT

# Today

vs

# Future

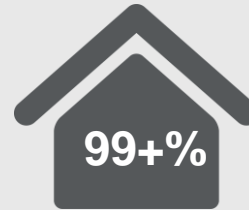
AMI



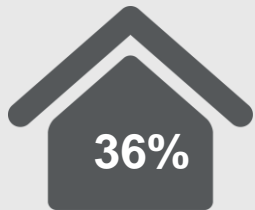
Touch Read



Walk By Meter Reading



Data Collection Network

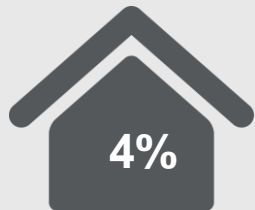


Visual Read



Walk By Meter Reading

**Customer Portal**      **Customer**



Radio Read



Drive By Meter Reading (AMR)



Water Analytics Software



System Manager and Data Analysts



Technicians and Field Reps.

# AMI Benefits to Customers

- ▶ Enables monthly billing
  - Smaller bills, more frequent
  - Monthly budgeting
- ▶ Fewer estimated reads
- ▶ On-property leak detection
- ▶ Proactive customer service

# AMI Benefits to WSSC

- ▶ Reduced meter staff field visits
- ▶ Improved meter management
- ▶ Fewer estimated reads
- ▶ Detection of water theft
- ▶ Distribution system leak detection
- ▶ Distribution system planning
- ▶ Return on investment

# Project Schedule

TASK NAME	DURATION	2018	2019	2020	2021	2022	2023	2024	
<b>AMI Program</b>	<b>295wk</b>								
<b>Phase I - Planning and Procurement</b>	<b>68wk</b>								
Task - Needs Assessment	16wk								
Task - AMI System Procurement	26wk								
<b>Phase II - Design</b>	<b>8wk</b>								
<b>Phase III - Configuration, Development, Construction</b>	<b>52wk</b>								
<b>Phase IV - Full AMI Deployment</b>	<b>194wk</b>								
<b>Phase V - Project Closure</b>	<b>4wk</b>								



# Questions

