

Advanced Meter Infrastructure Update

Council Update
June 23, 2020



2019-2027 Strategic Plan Priorities

Agenda

1. Project Overview
2. Review of Business Drivers
3. Revised Project Schedule
4. Upcoming Significant Project Components
5. AMI Network Deployment
6. Public Engagement
7. Impacts due to COVID



Project Overview

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2019-2027 Strategic Plan Priorities



Project Overview



Owner



Consultant &
Subject Matter
Expert



Sensus AMI Technology
Installation Services



Water Meters



Water Billing



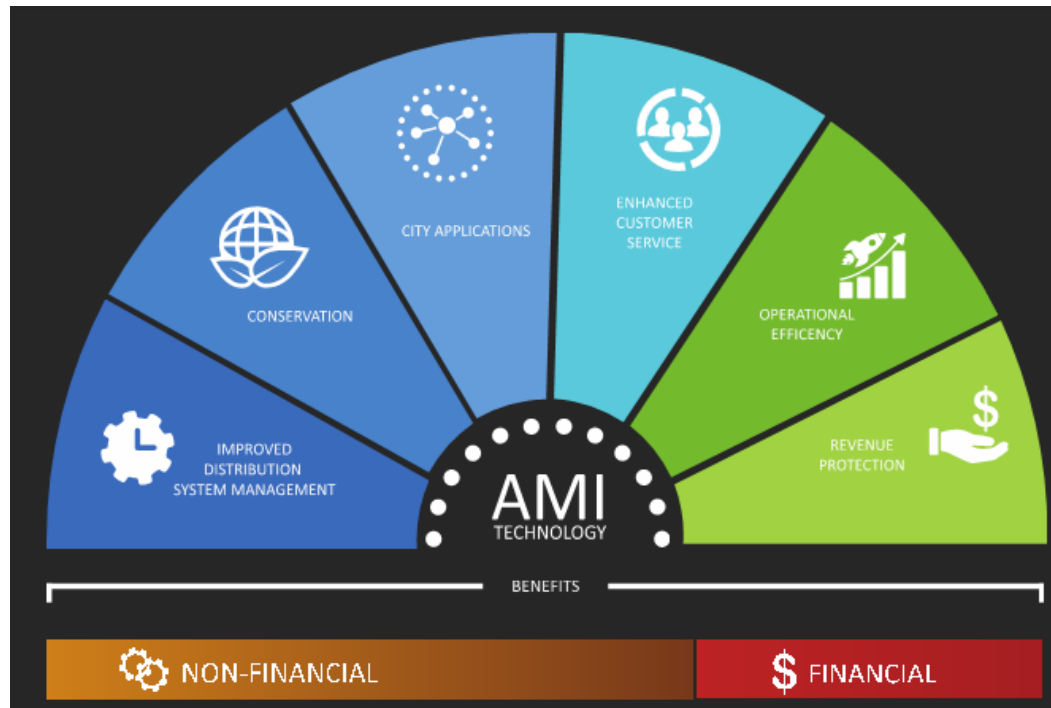
Meter Reading



Review of Business Drivers



2019-2027 Strategic Plan Priorities



- Enhanced Customer Experience
- Operational Efficiencies and Savings
- Revenue Protection
- Improved Distribution Management
- Conservation

Enhanced Customer Service



- Eliminate estimated bills
- Monthly billing cycle based on actual reads
- Customer web access to consumption data and alerts
- Ability to monitor/alert frozen water services
- Quicker notice of high bill issues and leak alerts
- Improved move in/out services

Operational Efficiency



- Eliminate manual reading costs
- Reduce reading exceptions and reliability issues
- Expedites same day special reads
- Minimize high/low field visits
- Monitor and detect backflow events

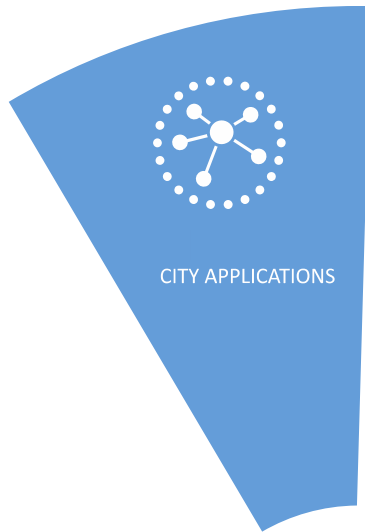


Revenue Protection



- Detect water meter damage sooner
- Improved water meter accuracy
- Improved financial reporting with fair financial accountability amongst rate payers

IT City Applications



- AMI is a type of project defined in IT's Strategic Pillars
- Customer Portal
- Improve Service Quality and Efficiency



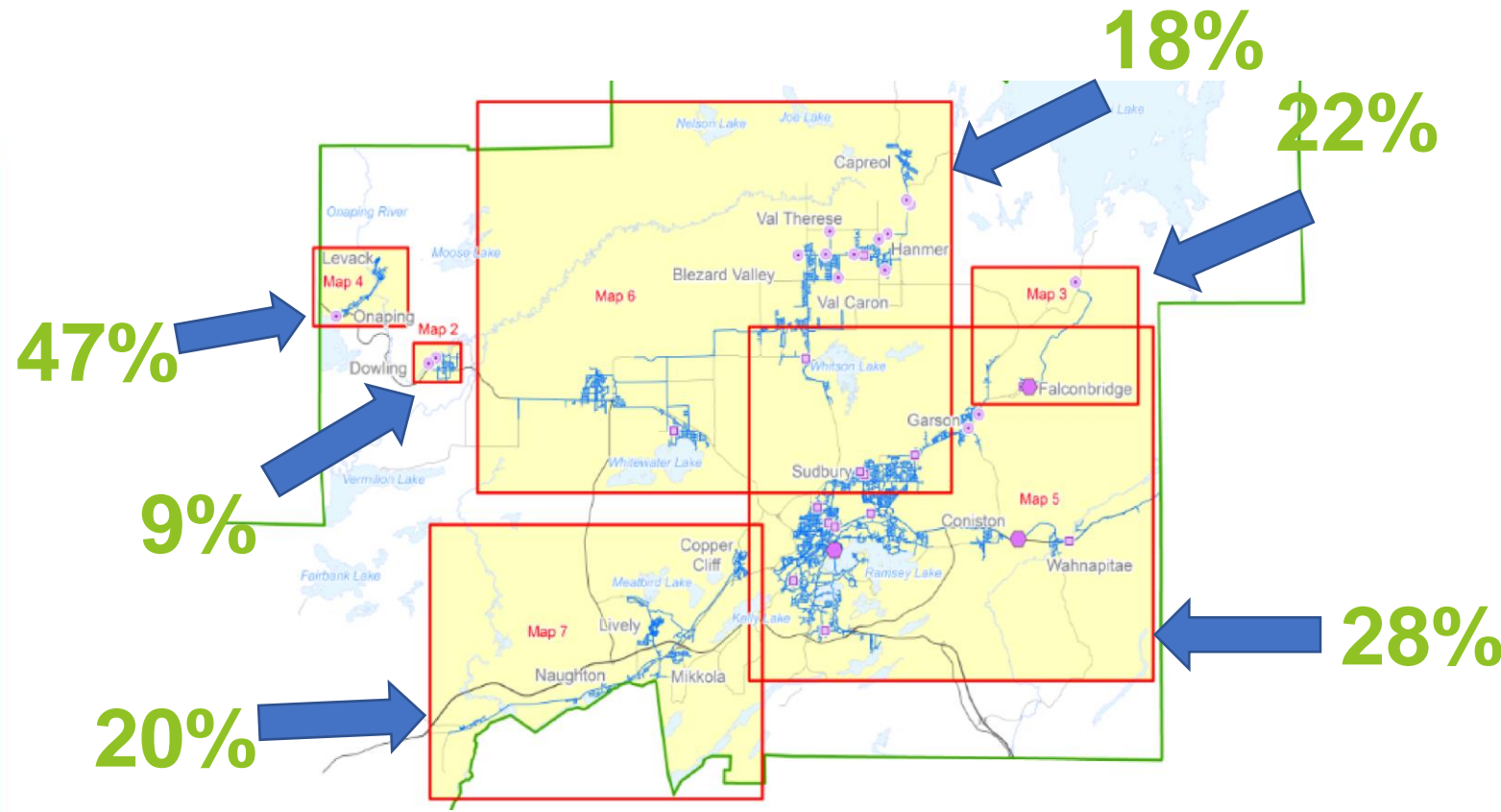
Improving Distribution Systems



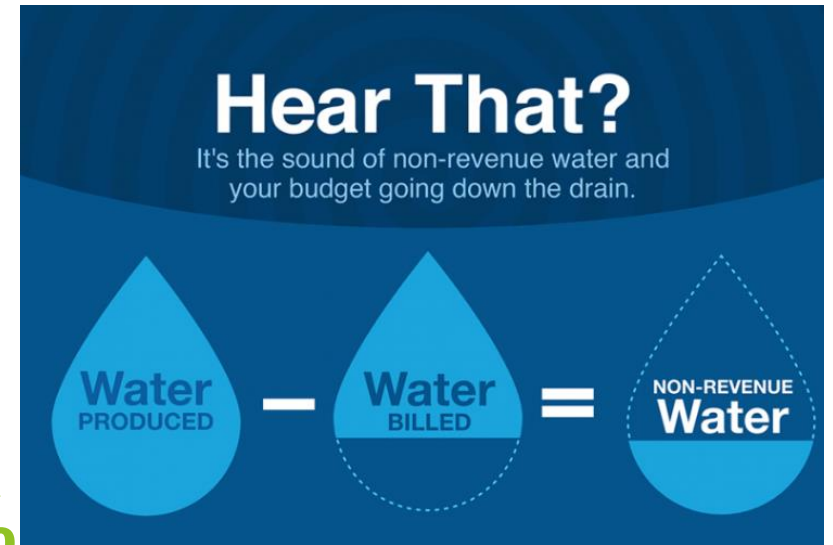
- Better understand water loss and where to prioritize investment
- Improvements based on system water loss
- Improved consumption recognition

Improving Distribution Systems

- Leakage Rates Per Community



* AWWA Target is <15%



Conservation



- Reduce chemical and energy use for water and wastewater treatment
- Ability to embark on innovative conservation efforts

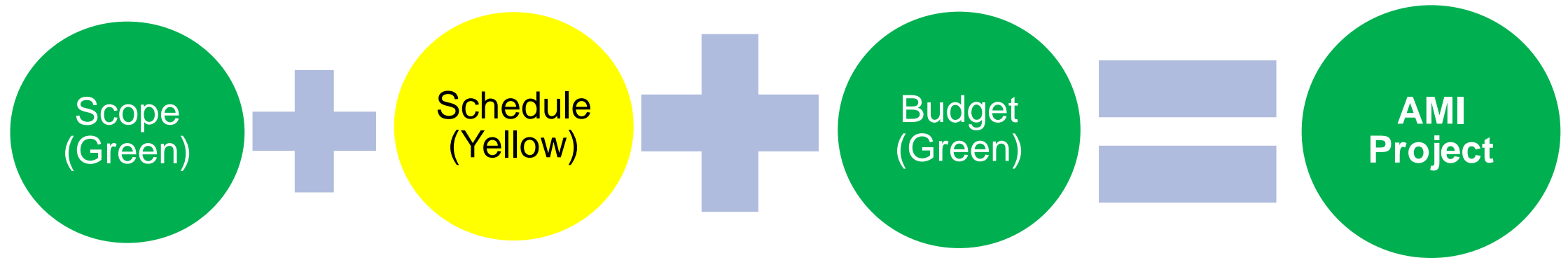


Revised Project Schedule



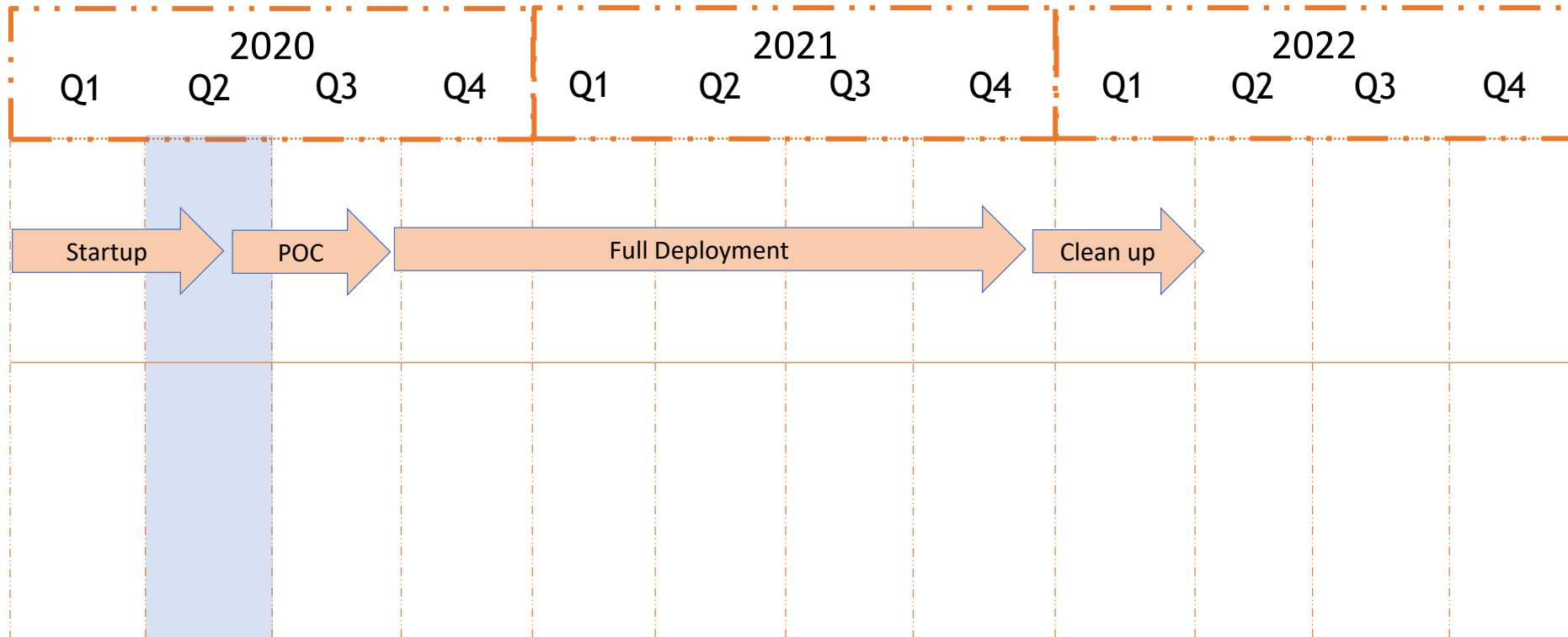
2019-2027 Strategic Plan Priorities

Project Health Indicators

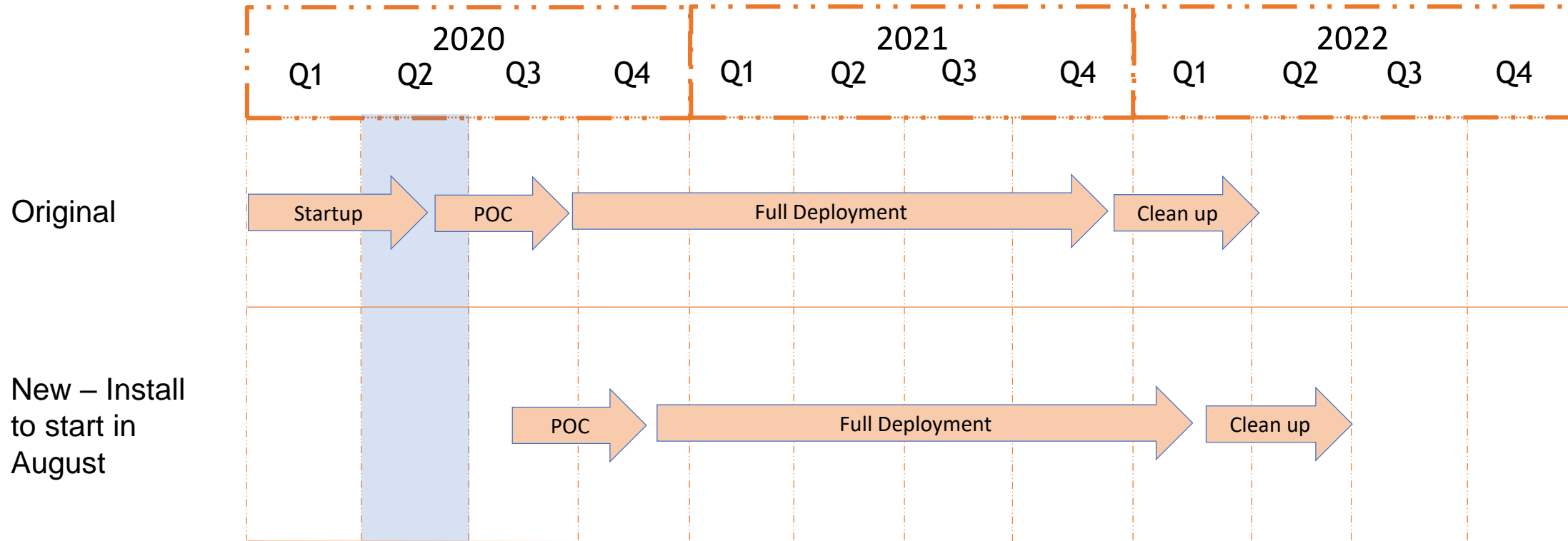


- Overall Project Indicator is Green

Original-
Install
was to
start in
May



*POC = Proof of Concept



*POC = Proof of Concept

Project Delays

- Northstar availability
- Multiple Integrations between KTI, Northstar and Sensus
- Final testing in preparation for initial installs
- Continue to work on CGS/GSU Service Level Agreement



Project Spending to date

Component	Contract Reference	Spent
<ul style="list-style-type: none">• Water Meter Supply• Installation/AMI System• Consulting• Contingency	<ul style="list-style-type: none">• ISD19-18• ISD19-2• ISD19-3• None	<ul style="list-style-type: none">• 15%• 0.5%• 20%• 12%



Upcoming Significant Project Components



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Component	Date
Initial Communications Release	Mid July
Initial Open House	Adjusted to virtual Open House
First Installations and POC	Mid August



AMI Network Deployment



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Network

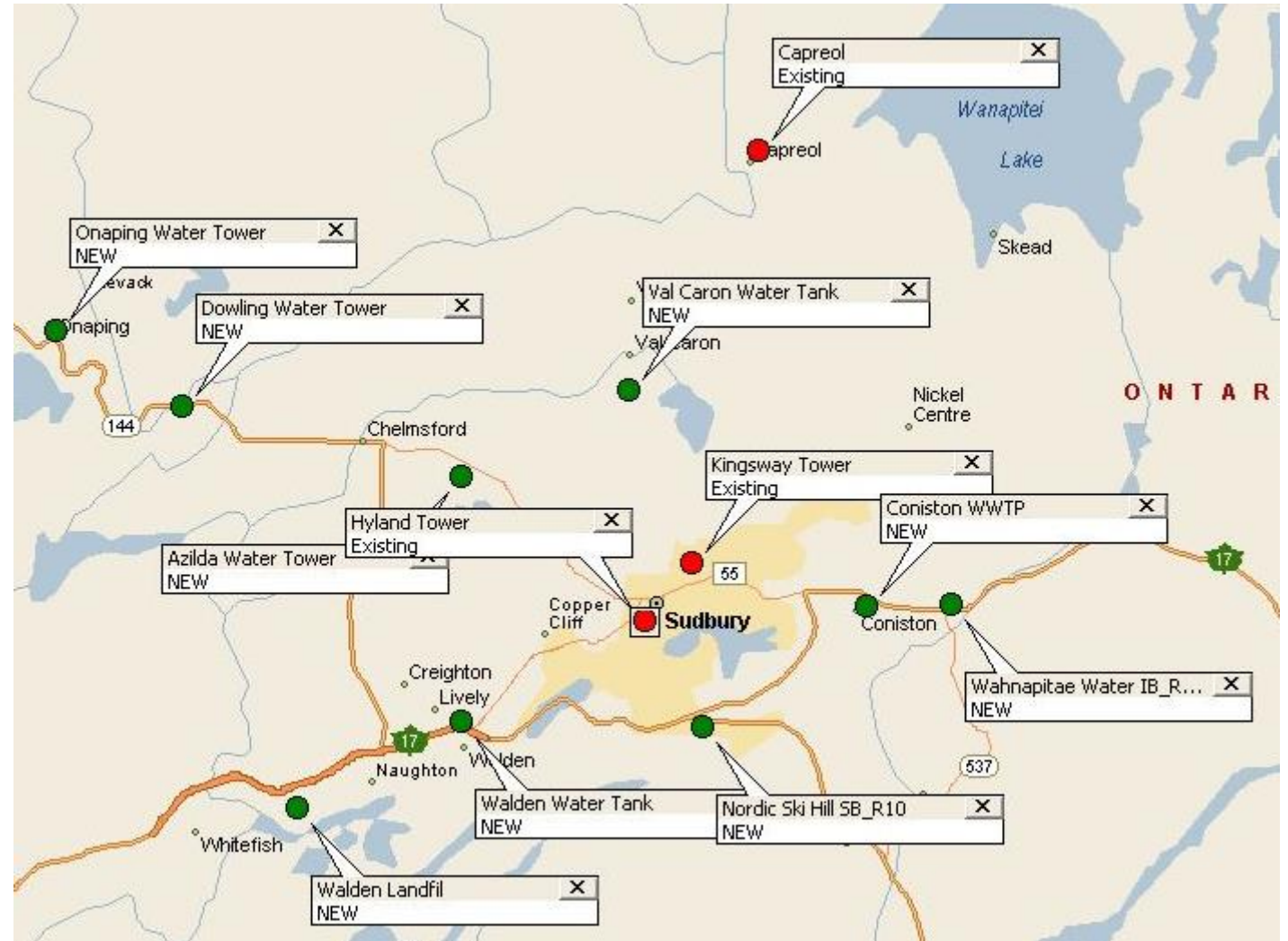
1. 3-5 Existing GSU Data Collectors
2. 9 New CGS Data Collectors

Key Activities – (March – June)

1. CGS to approve site Installation plans – In Progress
 - 0 of 9 Installations plans approved
2. Submit for Industry Canada License

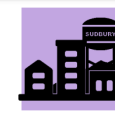
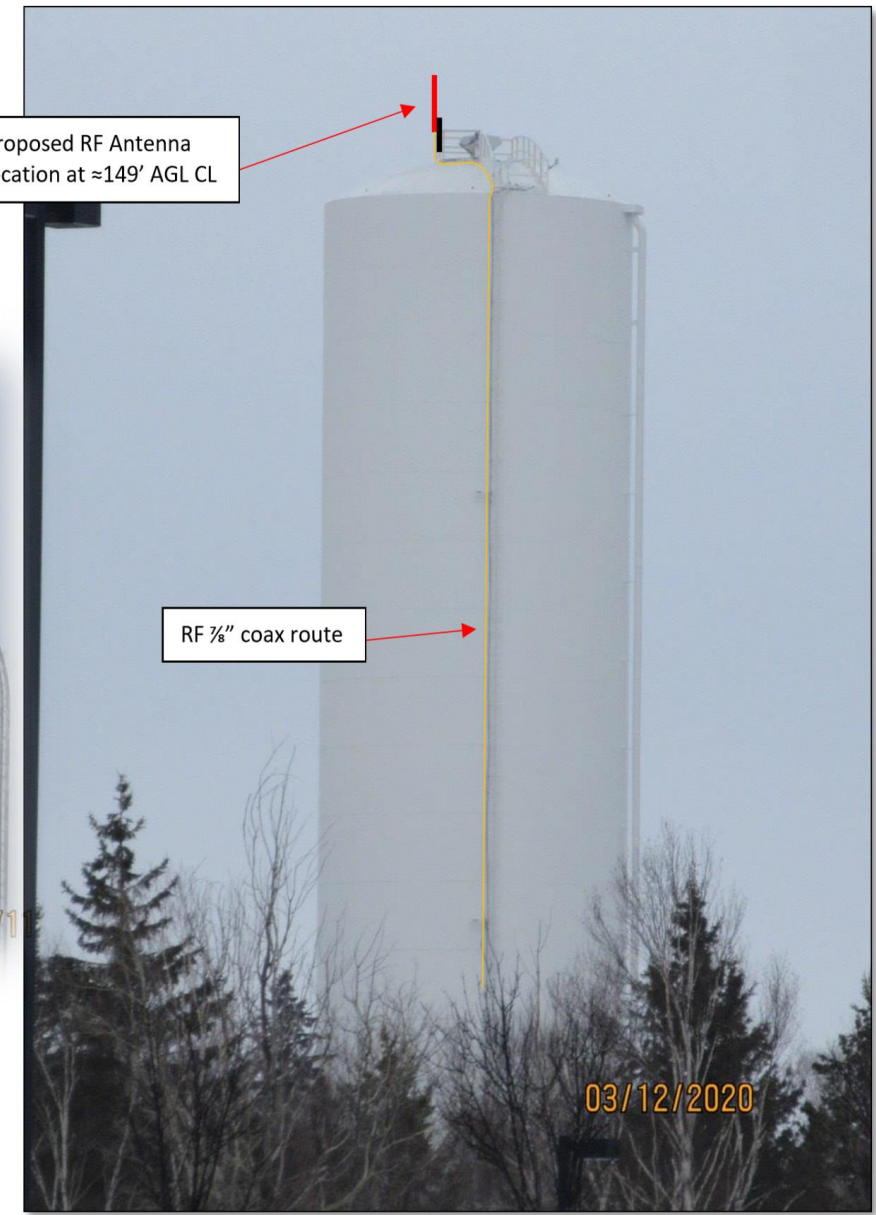
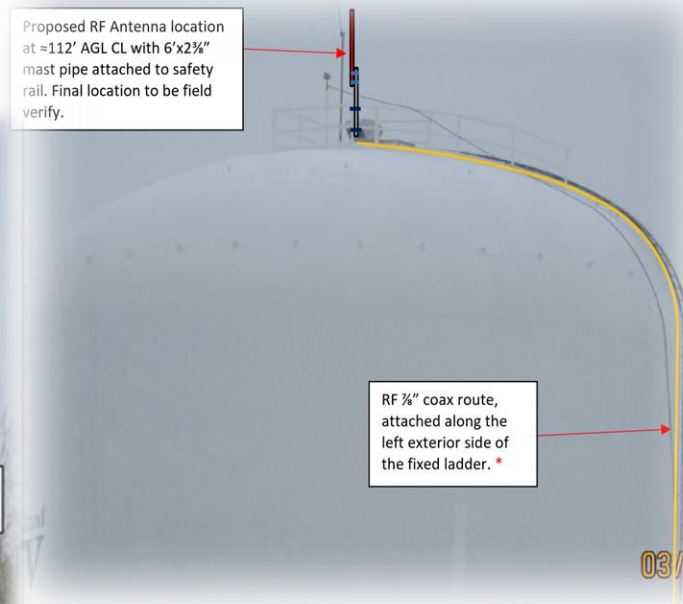
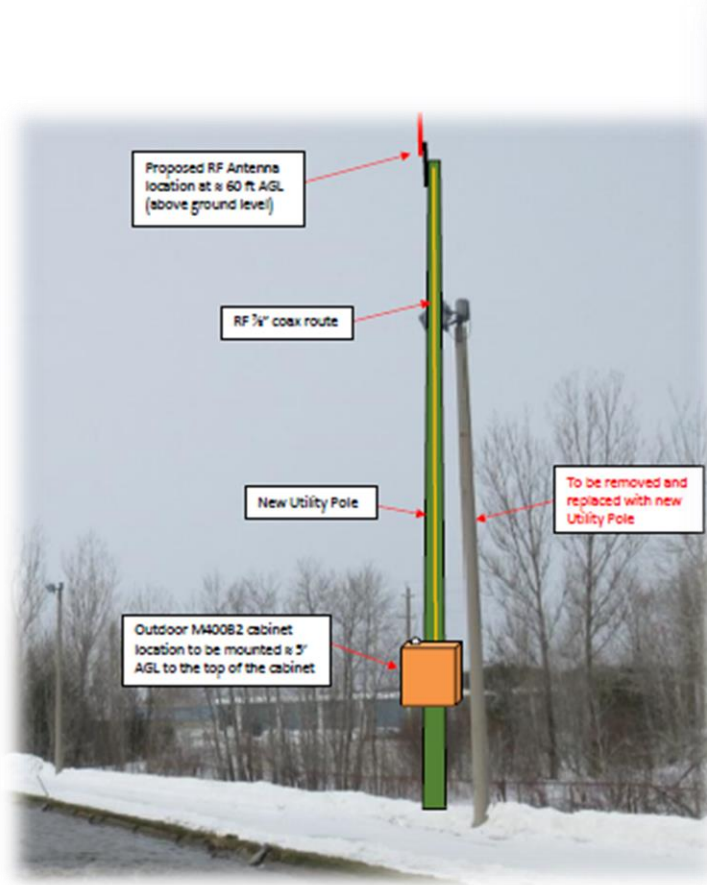
Key Activities – (July - August)

1. Network Deployment
2. System Monitoring



Data Collector Sites

Proposed Radio Frequency (RF) Antenna

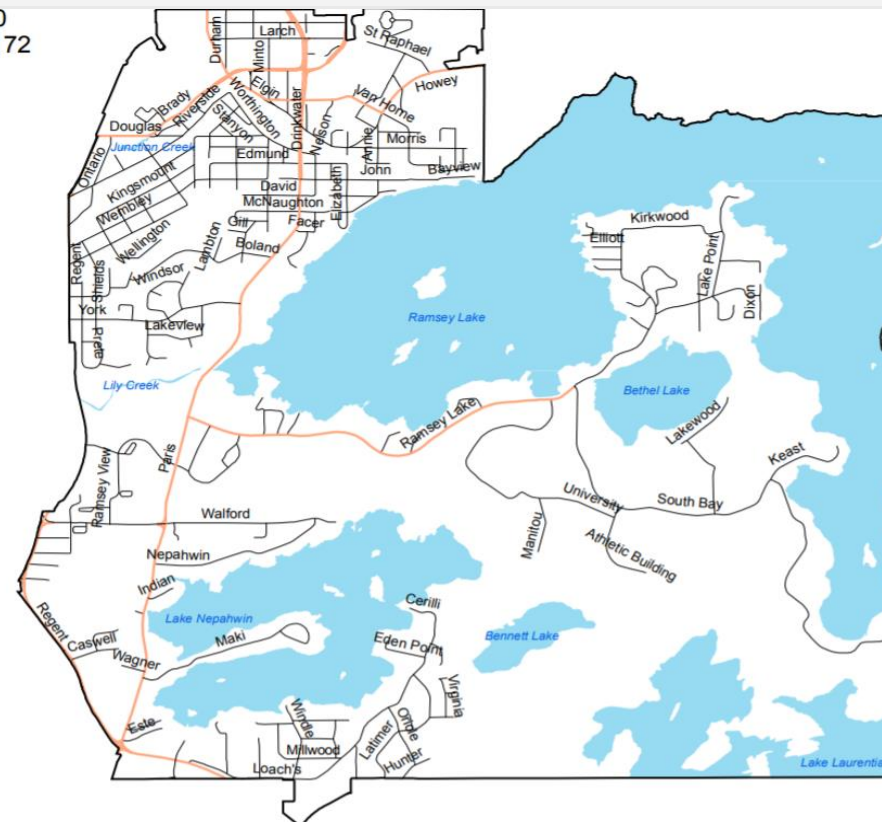


Proof of Concept

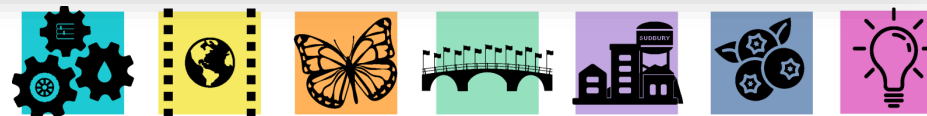
KTI has selected Ward 10:

1. AMI Network is already 100% deployed – mitigates delay in areas where network is not available
2. Central location and contains a good cross section of property types, meter sizes and types of work that is representative of the total meter population
3. Close proximity to key support personnel to allow for close monitoring during key phase of the project roll-out

Ward 10 / Quartier 10
2016 Population: 15,172
Area/aire: 21.4 km²



Ward	5/8"x3/4"	3/4"	1"	1.5"	2"	3"	4"	6"	8"	(blank)	Grand Total
10	3423		118	50	123	10	4	3		26	3757
Replace	3146		5		1					26	3178
Retrofit	127		74	17	49	6	3	2			278
Upgrade	150		39	33	73	4	1	1			301



Public Engagement


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Public Engagement Components:

- Introductory Flyer
- Appointment Booklet
- Reminder Letter
- Door Tag
- Outbound Calls
- Final Notice
- Virtual Open House
- Social Media
- Website



Your Water is Going Wireless

Water Meter Replacement and Upgrade Program

The City of Greater Sudbury has launched a two-year project to replace and upgrade the water meters in every home and business as part of a mandatory program to enhance the City's water meter technology.

Replacing Our Water Meters

The typical life of a water meter is 15 to 20 years. Like most mechanical devices, they eventually need to be replaced.

Upgrading Our Technology

Upgraded meters improve water meter accuracy and offer many operational efficiencies including increased reading accuracy, minimized estimated bills, while eliminating the need for a technician to enter your property to manually read the meter.

Enhancing Our Service

The upgraded technology offers many benefits including enhanced customer service. Our customers will be able to identify leaks at their premises, allowing for a quicker response time to avoid high water bills. Access to timely, reliable and more accurate data will also assist the City in serving the public in an efficient manner.

What You Can Expect

Meter replacements will start in XXXX 2020, completed on an area-by-area basis. When technicians are in your area, you will receive a notification in the mail containing important information on how to book an appointment at a time convenient for you. The installation typically requires 30-90 minutes to complete and there will be no charge for the installation.

Authorized Installation Company

The City has hired KTI Utility Services to carry out the installations. KTI technicians can be identified by a KTI uniform with identification badge that has both a KTI and a City of Greater Sudbury logo.




Public Information Session

A public information session will be hosted at:
Location xxx
Address xxx
Date & Time xxx

For more information on the program, please visit the City's website at greater.sudbury.ca/watermeter
We look forward to a successful project and we thank you in advance for your cooperation.

<Billing_Name>
<Billing_civic_number> <Billing_Street_Address>
<Billing_City>, <Billing_Province>
<Billing_Postal_Code>
<Account number>
<Date>

Mike Jensen
Director of Water/Wastewater Treatment and Compliance
City of Greater Sudbury

How This Upgrade Benefits You



Minimize estimated water reads



Consumption alerts reducing unexpected high water bills



Non-intrusive wireless meter reading technology

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Time to Book Your Appointment

Water Meter Upgrade Program




Impacts due to Covid



COVID-19 Impacts

1. Project Scope

- Additional Safety Requirements for Residential Entry
- Virtual Open House for Public Outreach

2. Project Schedule

- Project Completion end date may be impacted



Project Scope – Safety Requirements



Before Entering

- Verifying wellness of homeowner
- Sanitation (hand washing, PPE, equipment)
- Strategies for minimizing time inside
- Donning PPE

Inside the Home

- Social distancing measures
- Surfaces encountered (light switches, handrails)
- Sanitation of workspace (pre/post)
- Signatures

Post

- Contact card left with H/O
- Doffing PPE
- Safe PPE Disposal

Appointment Scheduling

- Wellness survey

Project Office

- Entry protocols and tracking
- Delivery protocols
- Office sanitation
- Field interaction protocols
- Monitoring wellness (start/end of day)
- Compliance monitoring
- Safety Meetings
- Inventory Distribution / Staggered times

Start of Day

- Health monitoring
- Pick up Inventory

Between Appointments

- Rest stops
- Fueling
- Vehicle sanitation

End of Day

- Verify health of technician
- Sanitation (PPE, equipment)
- Vehicle sanitation
- Clothing washing protocols

Emergency Preparedness

- Isolation measures
- Contact tracking



Project Scope – Public Engagement to Assist with Covid Plan

- Inclusion of COVID-19 letter with introductory flyer mail-out
- Open House – Adjustment to virtual format
- Social Media Strategy / Messaging
- Website



Questions?

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