



Utility Digital Transformation and the Advanced Meter Project

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Public Utility Board
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The call to action for utilities...



"We can no longer stay in our comfort zone on our side of the meter – providing basic electric service and sending bills. We must diversify the menu, develop new rate designs to handle increased demands on our distribution grids, adapt to changing customer preferences, and prove we can be our customers' trusted energy advisors."

Sue Kelly, President of the American Public Power Association



Digital business is the new normal...

Digital Natives

NETFLIX Uber

Digital Adapters

Bank of America



Digital Deniers



Utility customers have high expectations!

Immediacy



Convenience & ease of use



Simplicity



Self-service ability



Familiarity



Creativity



Digital transformation is about leveraging modern technology to:

Provide equitable access for all TPU customers

Drive Tacoma's economy & develop TPU's workforce

Protect & steward the environment

Improve TPU's resiliency & reliability



TPU's digital vision

Value my time



Value my money



Value me



TPU Customers

Value my preferences



TPU's drivers for digital transformation



Ever-increasing customer expectations



Advanced Meters

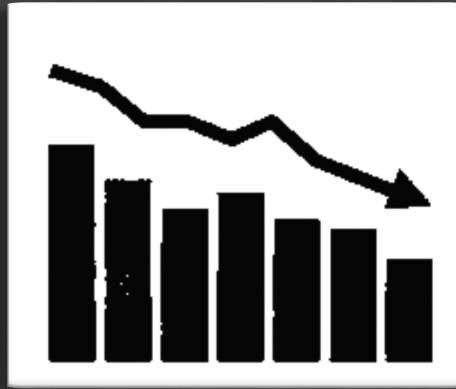


An evolving workforce

Advanced metering technology is mature



Based on industry standards



Deployment costs decreasing



Secure & reliable

Over 75 million homes nationwide upgraded to advanced meters.

Empowering TPU customers thru advanced meters



Sensus

80 million meters deployed



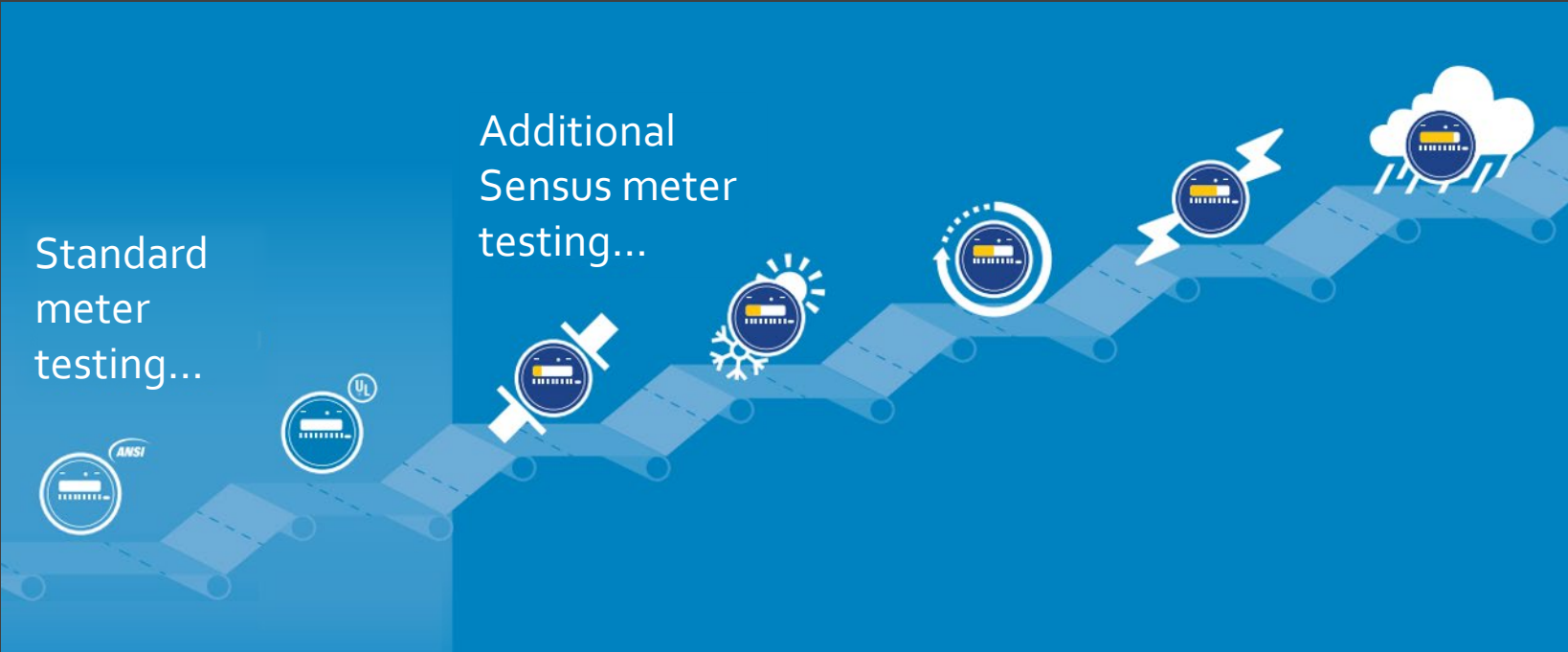
10% of revenue in R&D



Over 2,200 communities covered



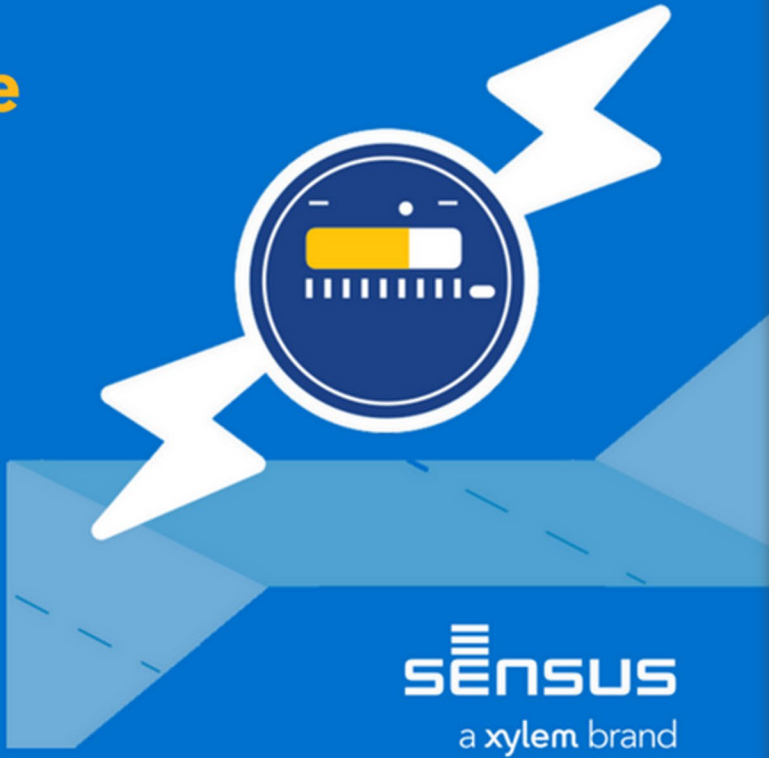
Sensus goes above and beyond!



Sensus meters are the safest in the industry...

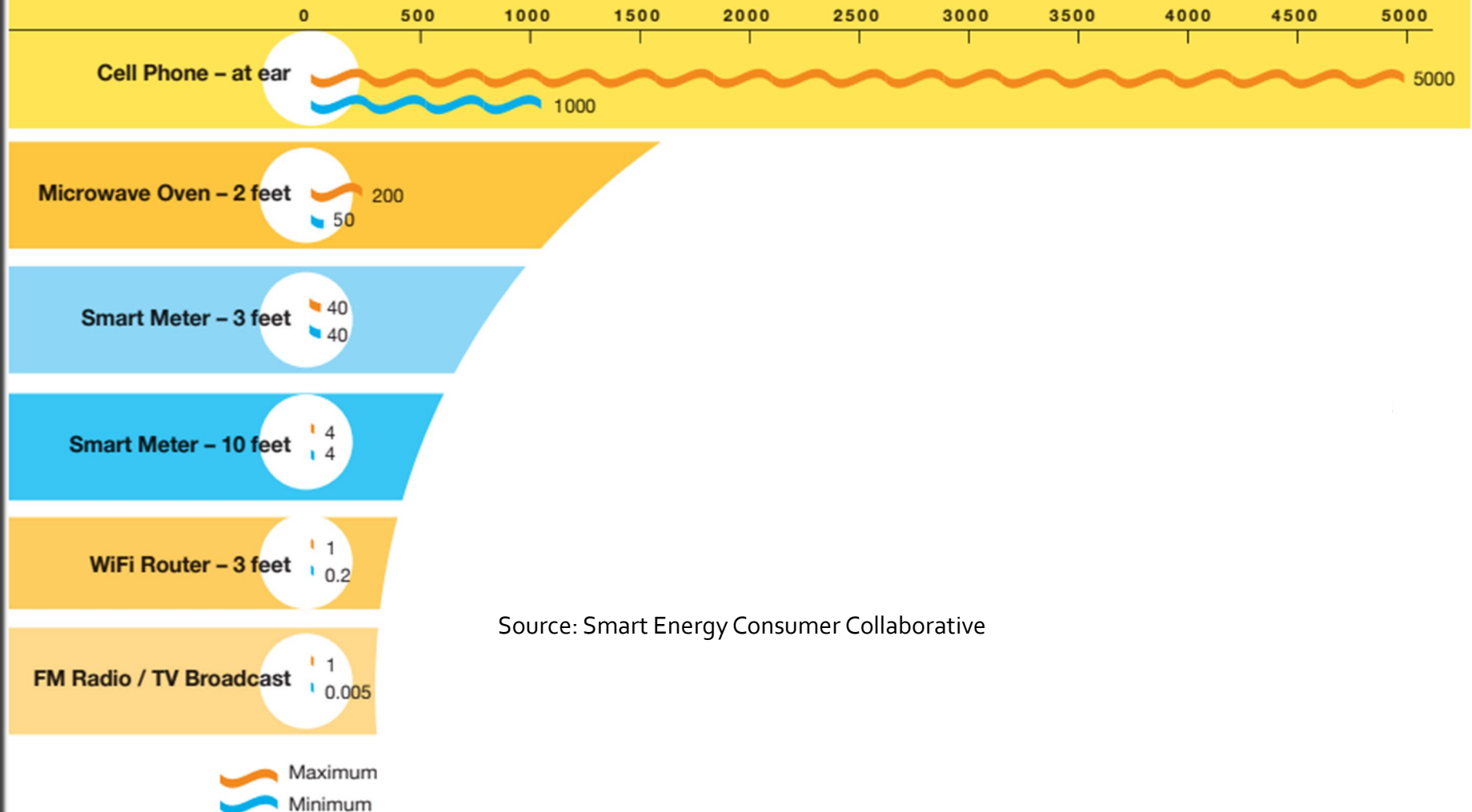
Hot Socket/Overvoltage

Stratus meters are tested to perform against hot sockets, internal heating and overvoltage incidents to ensure protection.



Relative frequency intensity

Radio Frequency Power Density Levels of Common Devices (in microWatts/cm²)



Advanced meters transmit...

Power



Electricity
kWh usage

Meter ID

Water



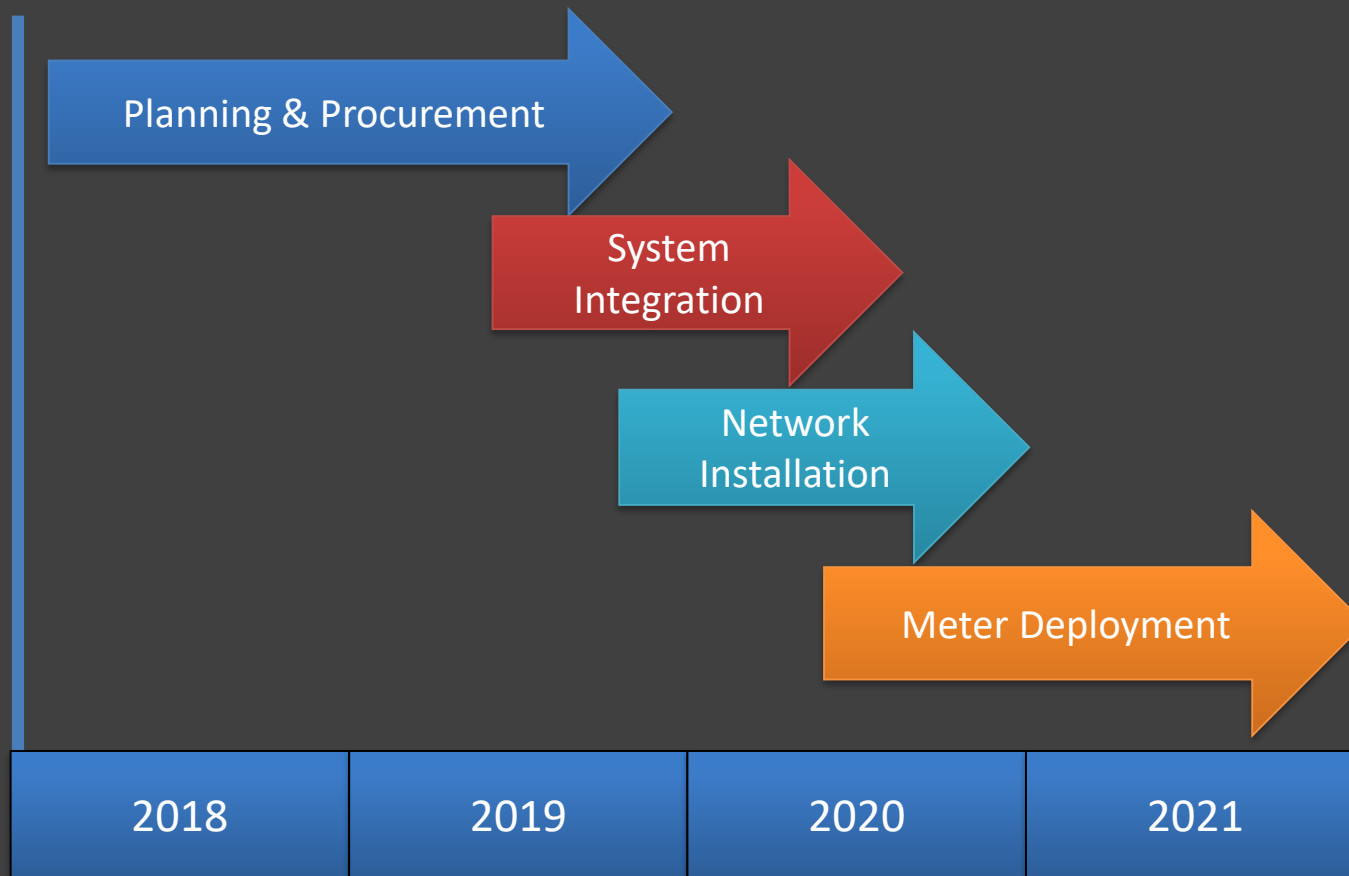
Water Cubic
Foot usage

Meter ID

Advanced meters do not transmit....



Program Schedule



Aging TPU technology...



Installing new meters - at last. The \$1.27 million installation program began in April 1954 and was completed 13 months later

1957

Water Rates Increase

The 1950s ushered in a 30% water rate hike and the introduction of universal metering. The next water rate hike wouldn't be for another 14 years, in 1971. After the installation of water meters in 1955, water consumption dropped from 54.7 million gallons per day in '53 to 48.2 million in '59. It was discovered that one-third of Tacoma's flat-rate customers had leaky plumbing.



Needs updating...



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Upfront Investment, Long-term Benefits

- Like many capital improvements, the project requires an investment up front, and the benefits are realized over the long term.
- In February 2019 TPU performed a Rate Impact Analysis and determined that the cumulative rate adjustments for residential Power and Water customers in the City of Tacoma are estimated to result in a \$2.28 annual increase each year.
- TPU has calculated the financial outlook for advanced meters over the next twenty years, we expect the benefits of AMI will likely offset these impacts.

Advanced meters benefit TPU customers

Value my time

- Improved outage/restoration times
- Water leak detection capabilities
- Remote turn-on/turn-off
- Advanced self-service capabilities

Value my money

- Automated billing
- Monthly billing
- Prepayment options
- Selectable bill date



Value me

- Lower cost of service model
- Reduction of manual processes
- Paperless billing capabilities
- Demand response capabilities
- Two-way communications

Value my preferences

- Near real-time usage information
- Alerts and notifications
- Billing and payment notifications
- Conservation options
- Multi-channel capabilities



Advanced Meters Communications and Outreach

Rebekah Anderson, Communications Manager

March 27, 2019

Project Milestone

- Contract approvals represent an important milestone in the Communications and Outreach timeline
 - Meter vendor selection means we can speak specifically about the equipment we plan to install
 - Installation timelines will be established soon, allowing us to finalize our notification timeline for customers

Objectives for customers

- Distribute timely accurate information about the project to community groups, business leaders, and residential customers
- Provide opportunities for the community to learn more, ask questions and offer feedback
- Help customers utilize the many benefits provided to them from advanced meters
- Protect our customers from misinformation

What we've done so far: Communications

- Continuously updating web page and FAQs as details are determined
- Provided public comment form and email update subscription on our web page
- Developed fact sheets for public meetings
- Consolidated information about upcoming presentations on our web page

Planned/Ongoing Outreach

- List of public and stakeholder meetings so far
 - Ongoing briefings to Tacoma City Council Members and Mayor Woodards
 - Briefings for City Managers and elected officials outside Tacoma
 - AMI project mentioned during budget and rates outreach to franchise cities, neighborhood and community groups, and Metro Parks Commission
 - First Creek Block Group Presentation - Nov. 7, 2018

Where we're headed next

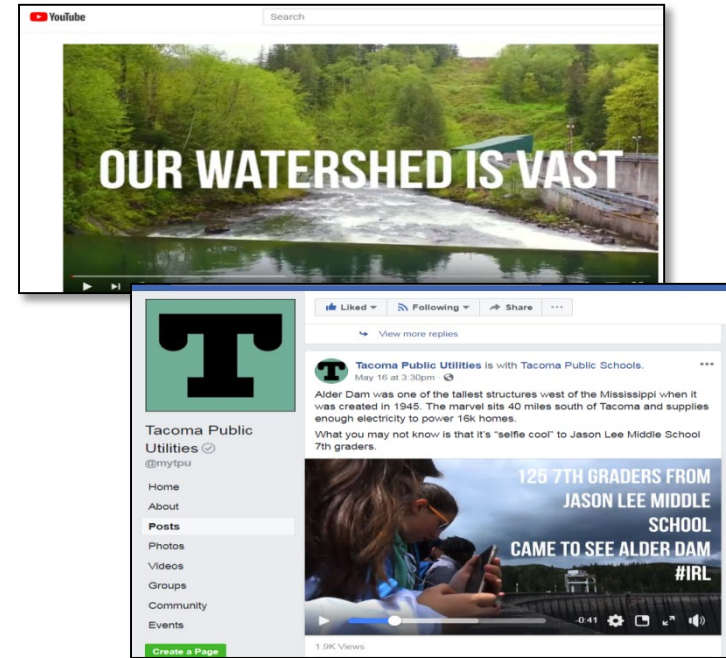
- Two Phased approach
 - Public Information
 - Installation notifications
- Upcoming communications
- Upcoming public and stakeholder meetings

Planned Communications

- Stakeholder and public outreach
 - Follow proven process used for Director Search, Budget and Rates Outreach
 - Provide resources to outreach staff
 - Update web content as program details develop -- fact sheets, videos
 - Publish testimonials from AMI and prepay advocates
 - Media outreach: TNT, Q13, TV Tacoma
 - General updates to customers referring them to web
 - Possibility for translated materials
 - Email marketing program

Customer Resources

- Video series addressing the main topics related to AMI
 - Health and safety
 - Economic impacts
 - Data privacy
- [MyTPU.org/AdvancedMeters](https://www.mytpu.org/AdvancedMeters)



Planned/Ongoing Outreach

- Tacoma's Neighborhood Councils
- Black Collective
- Neighborhood Block Groups
- Community Organizations
- City of Federal Way
- City of Fife
- City of Fircrest
- City of Lakewood
- City of University Place
- Pierce County government
- Metro Parks
- Joint Municipal Action Committee (City, Metro Parks, Pierce Co., Port of Tac., Tac. Public Schools)

Outreach Timeline

- Targeted presentation schedule for February—April to include:
 - Neighborhood Councils
 - Safe Streets Neighborhood Block Groups
 - Other Community Organizations
 - Black Collective
 - Franchise cities and governmental entities

Where to learn more

- Visit MyTPU.org/AdvancedMeters
- Sign up to receive email updates
- Submit questions through our online comment form