

From: [David Ward](#)
To: [UTC DL Records Center](#)
Subject: Docket #180117--Advanced Metering Infrastructure Policy
Date: Thursday, March 8, 2018 5:22:28 PM
Attachments: [Text for PowerPoint Presentation.docx](#)
[Smart Meter Power Point Presentation--Shorter Version.pptx](#)

I would encourage the WUTC to adopt an opt-in policy regarding smart meters/AMI (Docket #180117--Advanced Metering Infrastructure Policy). An opt-in policy would best fulfill the WUTC mission to “protect the people of Washington by ensuring that investor-owned utility services are safe, available, reliable and fairly priced.”

And if investor-owned utility companies truly believed that smart meters provided real and substantial benefits to the people of Washington, they would also promote an opt-in policy because most ratepayers would rush to get smart meters installed—and utilities would not have to charge an exorbitant fee (both initially and monthly) to avoid having a smart meters installed—a meter they didn’t want and never had to pay for before separately or directly, either to install or to have the meter read.

But instead of rushing to have smart meters/AMI installed, there has been worldwide opposition to smart meters--and that opposition has come because those meters are not safe, reliable, or fairly priced.

Please see the attached files: a short PowerPoint presentation, the text for that presentation, and links and screenshots to document the presentation to show the many problems with smart meters including:

- House Fires
- Privacy Issues
- Health Problems
- Personal Security Concerns
- Grid Security Concerns
- Increased and Unnecessary Costs to Ratepayers from Multiple Sources

Thank you.

David Ward
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3/8/18

P.S. I called the WUTC offices to get the correct email address to send this to and I did not receive the information before 5:00pm today. Consequently I sent another email similar to this to comments@utc.wa.gov and now to this more correct address. I hope that these comments will be considered even though the comments were submitted shortly after 5:00 given the circumstances. Thank you.

Received
Records Management
03/09/18 08:09

State Of WASH
UTIL AND TRANSP
COMMISSION

P.P.S. Please acknowledge receipt and let me know whether you will consider this comment, despite it being a few minutes after the deadline.

 [Links & Screenshots for Smart Meter PowerPoint...](#)

Text for PowerPoint Presentation

1-Opening

2-Overview

Introduction, Problems, Solutions, Actions to Take

3-Analog Meters

Have been around for 100 years
Are durable, long lasting, reliable

4-Smart Meters

Digital
Work by microwave radiation, talk with other meters
Two way communication, are read remotely, require towers
Can control your individual household electricity
Also known as AMI—Advanced Metering Infrastructure

5-Lots of Problems

No customer benefits, high costs, cause fires & explosions, highly invasive of privacy, create personal and grid security issues, cause health problems

6, 7-Opposition

- 6-Because of these problems, there's [lots of opposition](#)
- 40 states have groups (those shaded in blue), many have multiple organizations
- There are also [dozens of websites](#)
- 7-Many cities oppose these, a few examples include [Michigan](#), [California](#), [British Columbia](#), and [Quebec](#)
- Unfortunately state regulators overrode the opposition of those cities
- Seattle is fortunate that City Council could stop these meters, but so far haven't done that—and City Light plans to install over 400,000 in every house and business

While mostly benefit utilities, even some utilities are opposed

- New England's largest utility says "there is [no rational basis \[for smart meters\]](#)"
- John Rowe, CEO of Exelon, the U.S.'s largest electric holding company says: "[It costs too much, and we're not sure what good it will do.](#)"

Problems

8-No Customer Benefits

Energy, Money
Public advocates at regulators in [California](#), [New Jersey](#), and [others](#) report few, if any, **Money**:
Numerous sources like

An [Appellate Judge in MI](#) says "the notion that smart meters will save the public money is inherently illogical: how can smart meters save money when they add millions of dollars to

the base rate to fund the Smart Meter program? It appears, ... that the smart meter program actually increases rates."

[Lisa Madiqan, Illinois Attorney General writes](#), "Utilities have shown no evidence of billions of dollars in benefits to consumers from these new meters. The utilities want to experiment with expensive and unproven technology, yet all the risk will lie with consumers."

Energy:

Utilities tout energy savings
Even industry insiders recognize [only a few percent look at energy they use](#), almost no one looks over time.

[5% increase from Energy Star appliances.](#)

Huge data center increases.

9-It's clear utilities aren't really interested in energy savings. [Utilities actively against DE like solar](#), other policies that would reduce energy far more.

High Costs

10-Summary: Installation, Re-installation, Time of Use, Overbilling

11-**Installation**: City Light, public quote, quote in 2009 grant to DOE

12-In [Ontario](#), \$1 billion projected costs vs. almost \$2 billion actual costs

13-**Re-installation**: Analog meters last 30 years or longer, industry says smart meters last 15 years, but Congressional testimony by leading industry representative says [5-7 years](#) and [IRS](#) says some smart meters use 6 year depreciation. After all, they're computers.

Problem is whatever financial validity there might possibly have been at 15 years is lost if they have to be replaced twice as often as estimated.

14-**Time of Use (TOU)**: Sacramento, CA got a Department of Energy grant for their [TOU to be a model for others](#). It [more than doubles the price](#) for the 4-7 pm peak time when most energy is used. Sacramento shifted 8-10% of its load outside that time, which means that 90% of people paid double their regular rates.

15-**Overbilling**: [California](#), [Maryland](#), [Ontario](#), [Quebec](#), Utilities blame customers, say analog meters not accurate

Utilities Save, Make \$\$

16-Summary In addition to the money utilities make from Time of Use and overbilling.

17-Graph of City Light savings

- “[Smart meter] deployment . . . allows utilities to lower operating costs while increasing revenues. – [Frost & Sullivan](#)
- City Light, admits this in their 2009 DOE grant and say there’s an “Increase in revenue due to new meters.”
- For-profit utilities make profit based on their capital expenses, meaning the more smart meters they buy, the more money they make.

18-Health

In some ways, smart meter RF is similar to cell phones and microwaves,

19-[New NIH study](#), plus many decades of studies ([here](#), [here](#), [here](#))

20-(Industry denials) Always a fight between those who are concerned about public health vs. industry

U.S. uses FCC 6 minutes, 200 lb man, not 24 hrs, infants, women, elderly, disabled

[City Light says AMI is ten times less](#), doesn’t address spikes in AMI, nor combination of all the other RF

[Many countries much lower](#)

Russia 100 times less

[WHO Class 2B carcinogen](#)—Lead, DDT

[Swiss Re high liability risk](#), Not covered in their policies
[National League of Cities](#) Wireless lawsuits from Cellphone Towers

21-Fires & Explosions

- Smart meters have caused house fires in many cities
- "Our experience has shown that these [issues are systemic in the industry](#)." Sensus President Randy Bays
- Deaths—[TX](#), [CA](#), [NV](#) and others
- Explosions in [Stockton, CA](#)
- Tom Lawton from TESCO: “the number of [reported fires](#) in the United States has increased dramatically to the point where [Smart] Meter fires have dominated the news locally, nationally and internationally”
- Utilities try to deny that smart meters cause these fires
- 22-Yet replace them in many cities due to fire hazards:
- [Portland](#), [Saskatchewan](#), [British Columbia](#), [Philadelphia](#)

23-Privacy

[Congressional Research Service](#): “With smart meters, police will have access to data that might be used to track residents’ daily lives and routines while in their homes, including their eating and sleeping, and showering habits, what appliances they use and when, and whether they prefer the television to the treadmill, among a host of other details.”

[NIST](#) (National Institute of Science & Technology): intimate details of people’s lives and their habits and preferences inside their homes.”

I was astounded to learn just how detailed this information is, since every appliance has a specific electrical fingerprint

CA already [giving away energy use to police](#).

DOE teaching third parties [how to get info from utilities](#).

24-[List of privacy problems](#)

Data Sales

Miles Keogh, director of grants and research at the National Association of Regulatory Utility Commissioners: information on consumer habits and behaviors within the home "is going to be [worth a lot more](#) than the commodity that’s being consumed to generate the data."

25-Security

- [German study](#) found 43 potential security problems, an additional [American study](#) found more than two dozen
- Easy to hack
- Burglars, stalkers as mentioned above
- Small time criminals, don’t pay for energy use, FBI showed [increase in energy theft](#)
- Manipulate others billing and energy use individually
- Part that really scares me more than anything else is the increasing possibility of collapse of the electrical grid

Cybercrime

Hide attack attempts

Create malware, prevent security updates

Show false energy load

Could crash entire grid system

AP Investigation: US [power grid vulnerable to foreign hacks](#)

Disasters

[2003 NE blackout](#)

Tree fell on line, but glitch in program didn’t catch it and cascading outage. The more digital meters, the more chances for glitches

[Significant increase in number and size of blackouts](#) in timeframe of smart meters. Partly age of infrastructure, but also partly greater complication added because of meters

26-Solutions

- [Opt-In](#)
- 27-Conservation ([here](#), [here](#), [here](#))
- Distributed Energy
- Microgrids
- Storage
- Transverters

28-Action

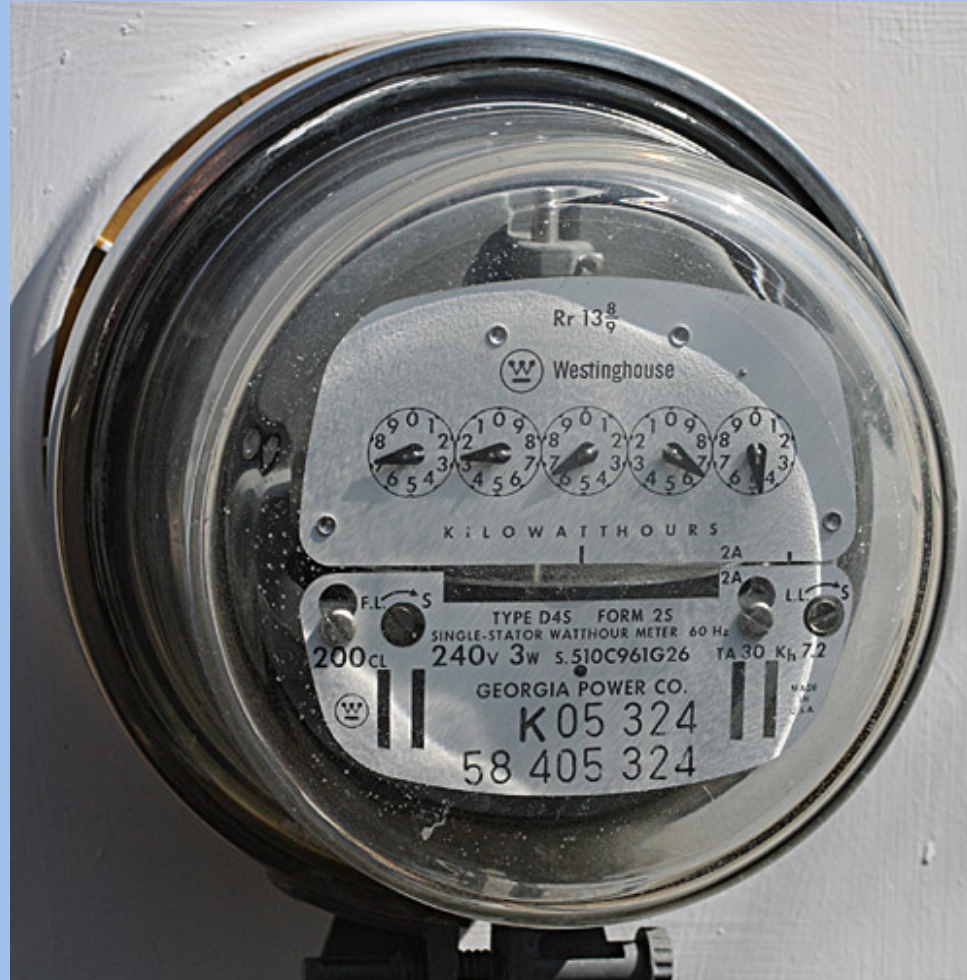
- Contact City Council
- Spread the word to neighbors, coworkers, at church
- Watch the film Take Back Your Power
- Notice of Liability
- Distributed Energy policies

Smart Meter Dangers &

What You Can Do About Them



Analog Meter



Smart Meter (AMI)

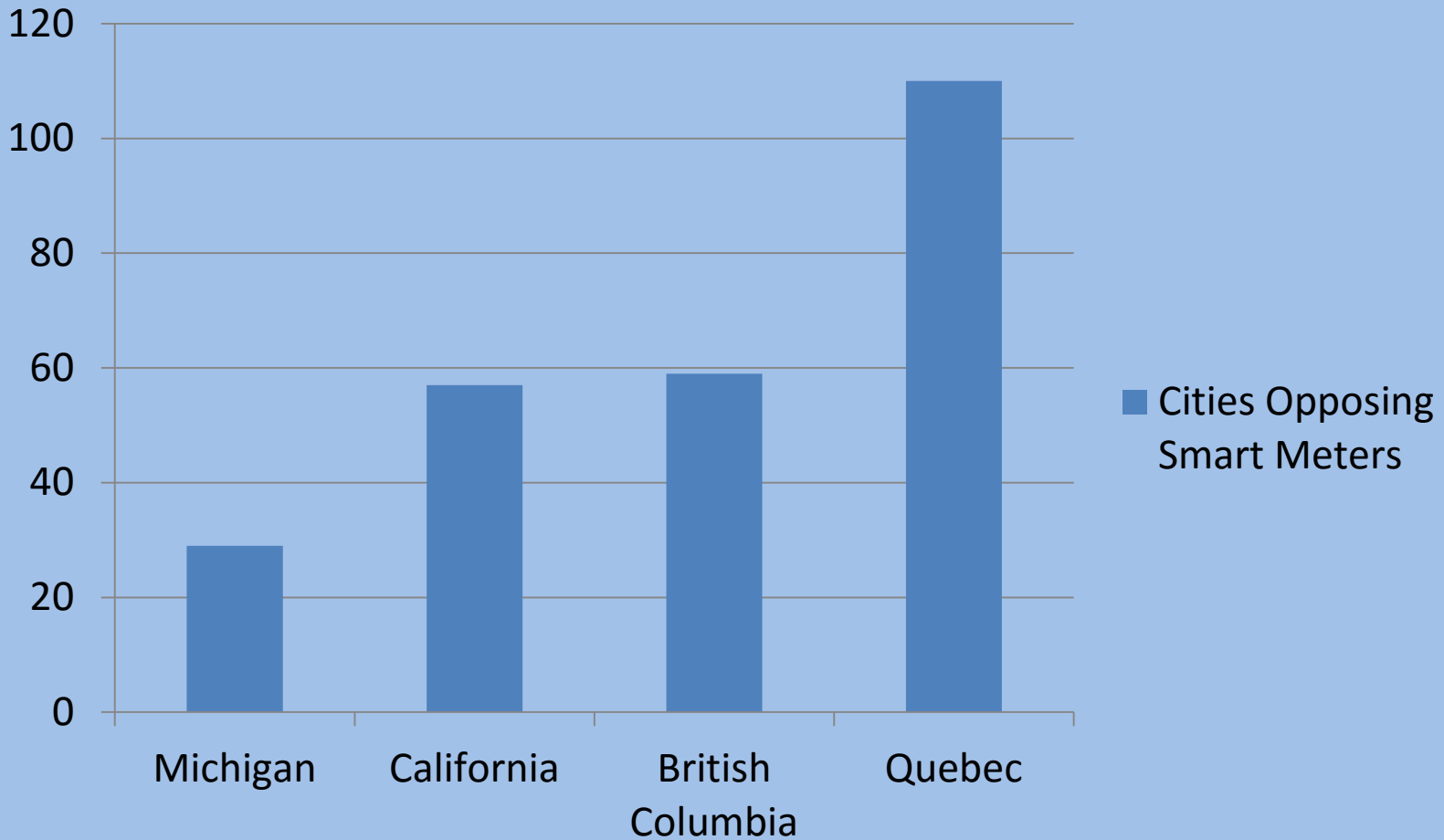


Problems

- No Customer Benefits
- Costs
- Fires
- Privacy
- Security
- Health

Cities Opposing AMI

Cities Opposing Smart Meters

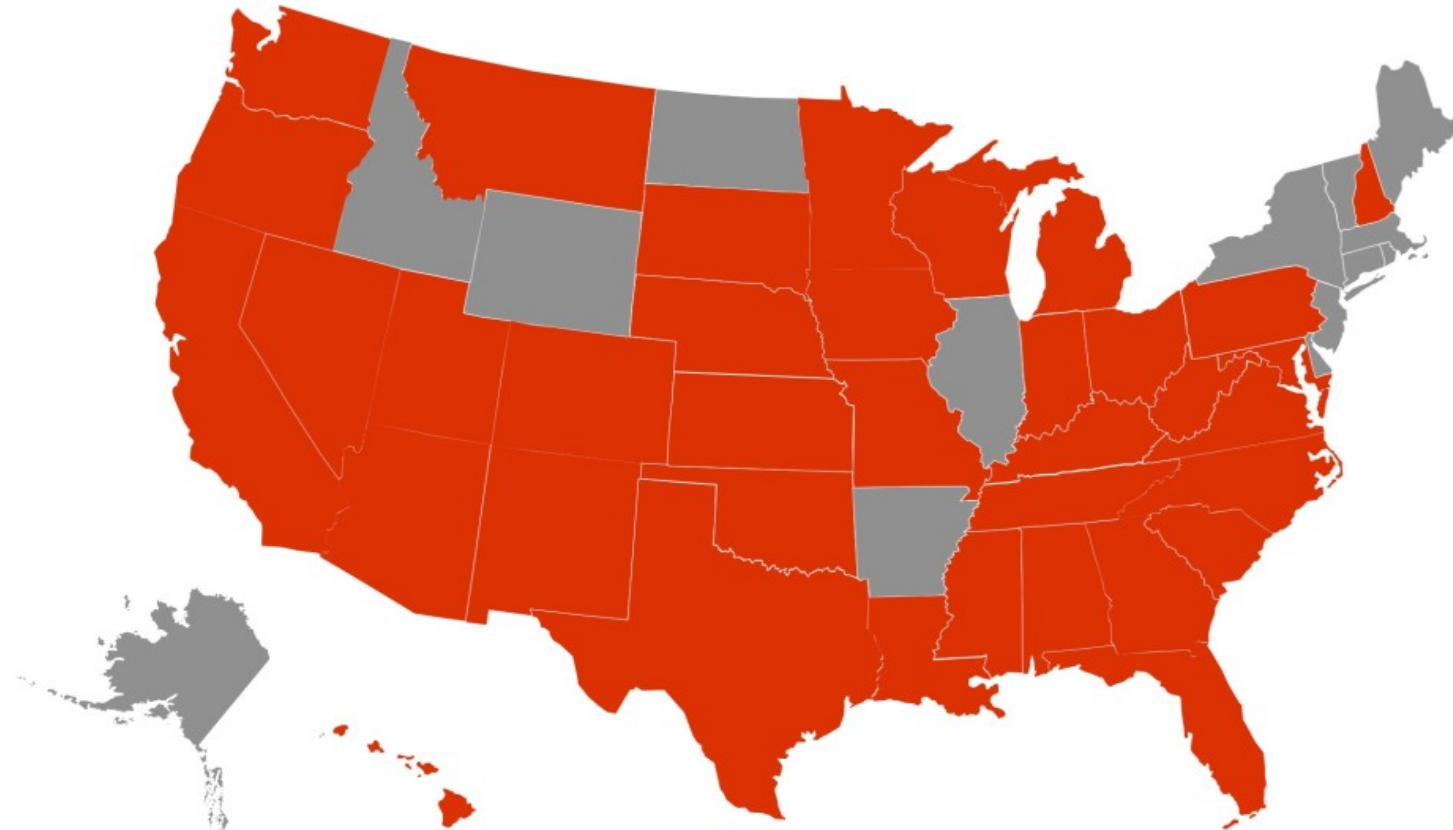


No Customer Benefits

- Gov. Reports: No Savings
- No Energy Savings
- 5% Energy Star Increases
- Utility Energy Increases
- No Money Savings

FREEDOM TO GENERATE UNDER FIRE

■ STATES FACING CHALLENGES TO DISTRIBUTED POWER



10/21/15

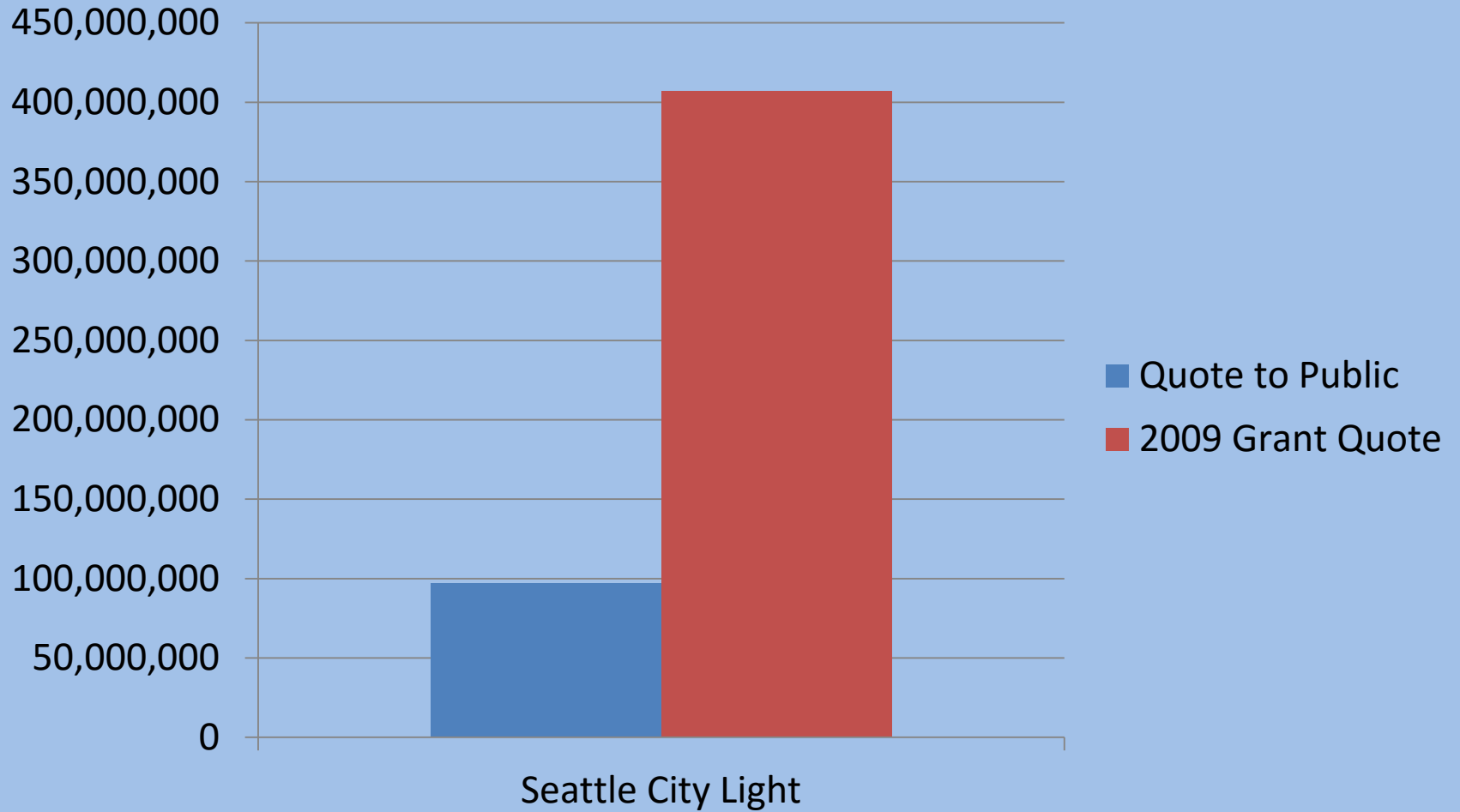
Sources: Renewable Energy World, Greentech Media, IREC, Vote Solar and many more
<http://bit.ly/DG-UnderFireMapData-ILSR>

ILSR INSTITUTE FOR
Local Self-Reliance

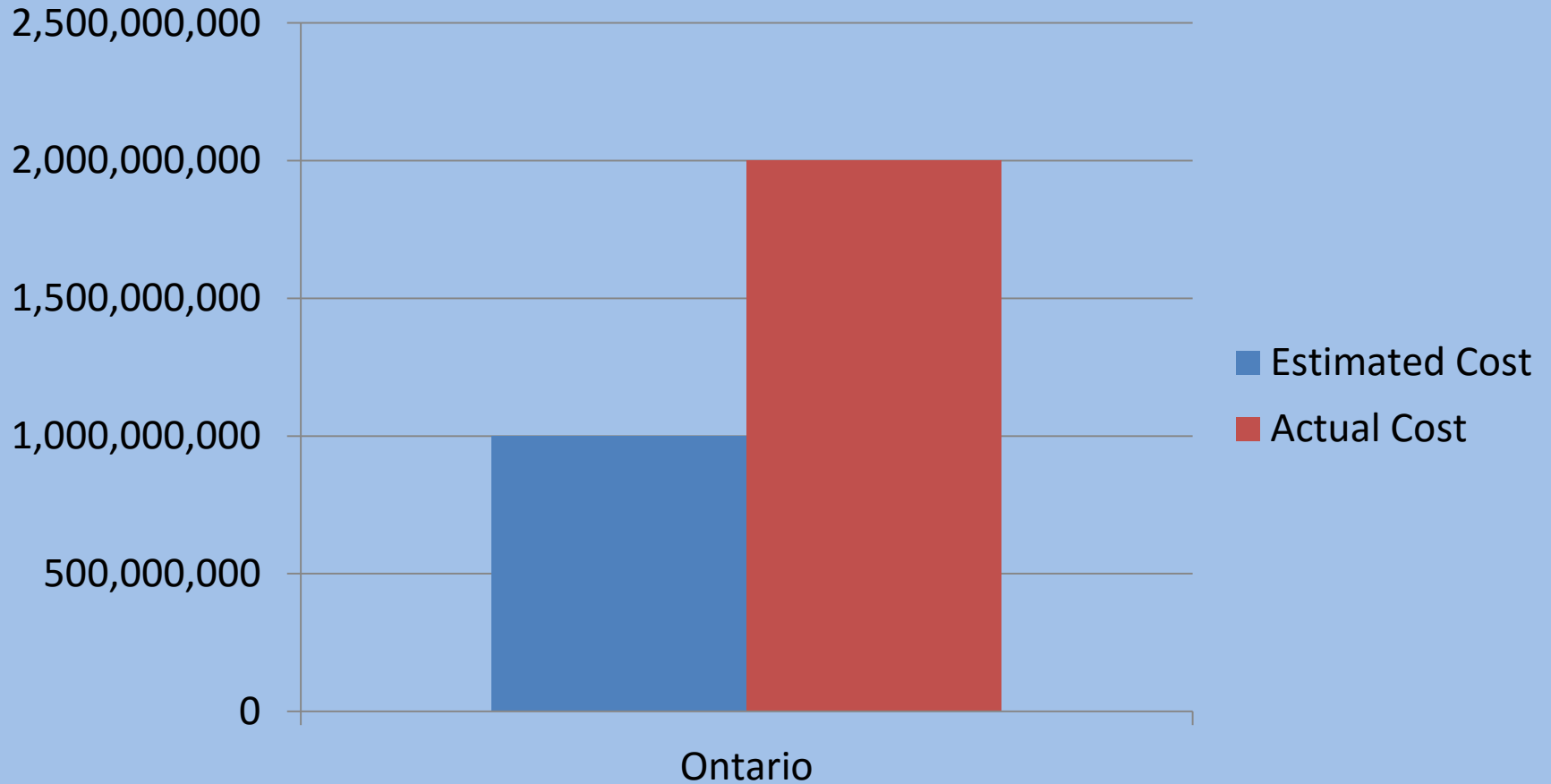
High Costs

- Installation
- Re-installation
- Time of Use
- Overbilling

Installation

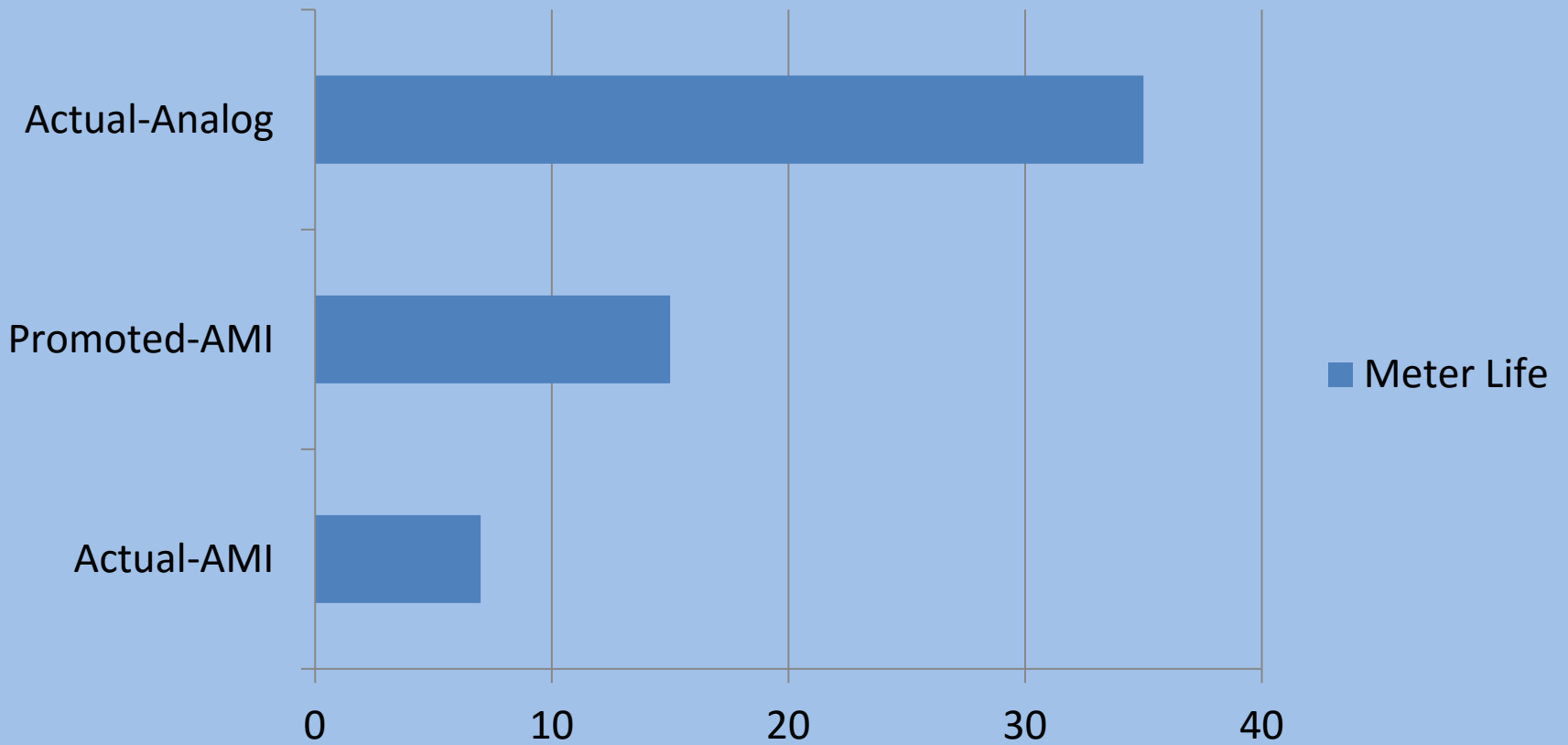


Installation

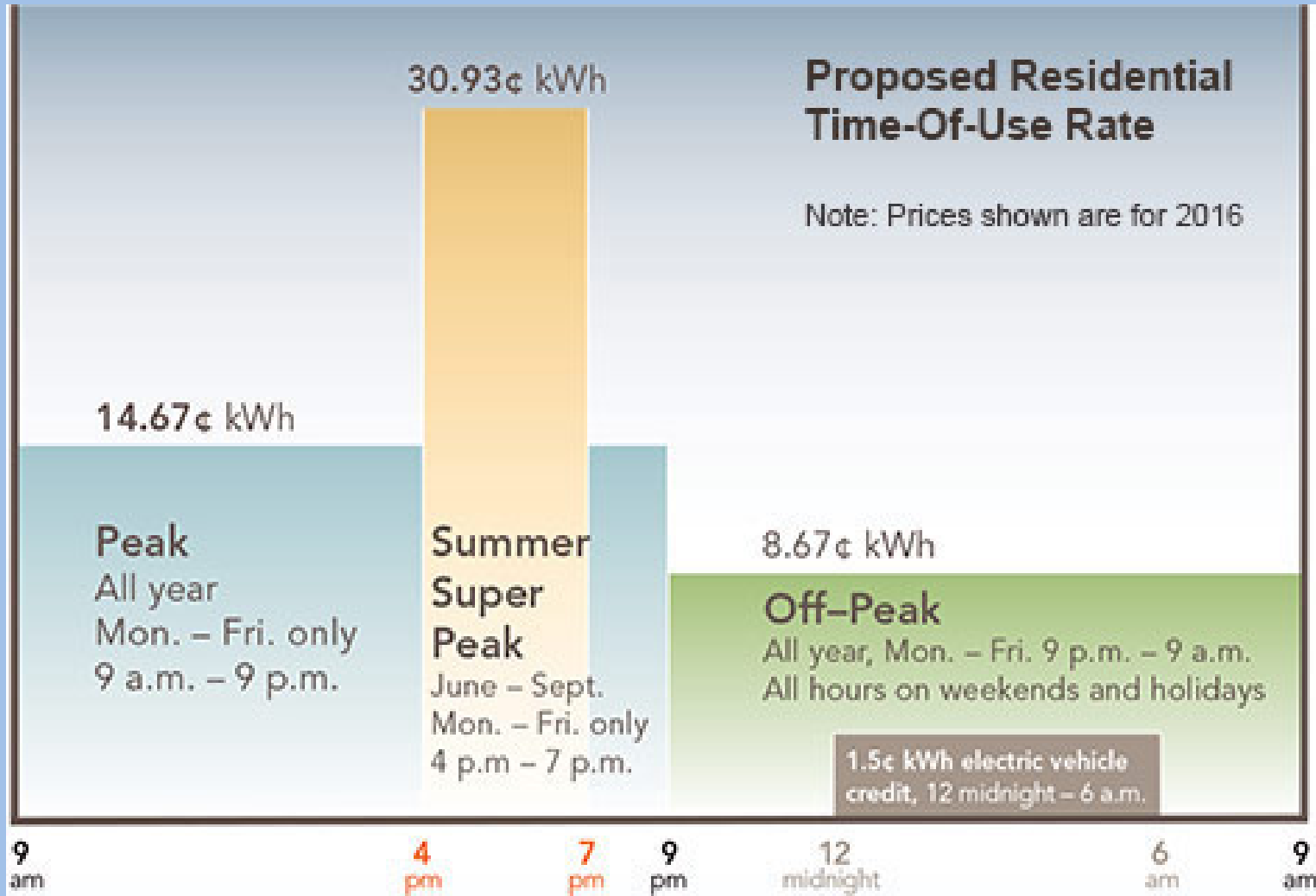


Re-installation

Meter Life



Time of Use

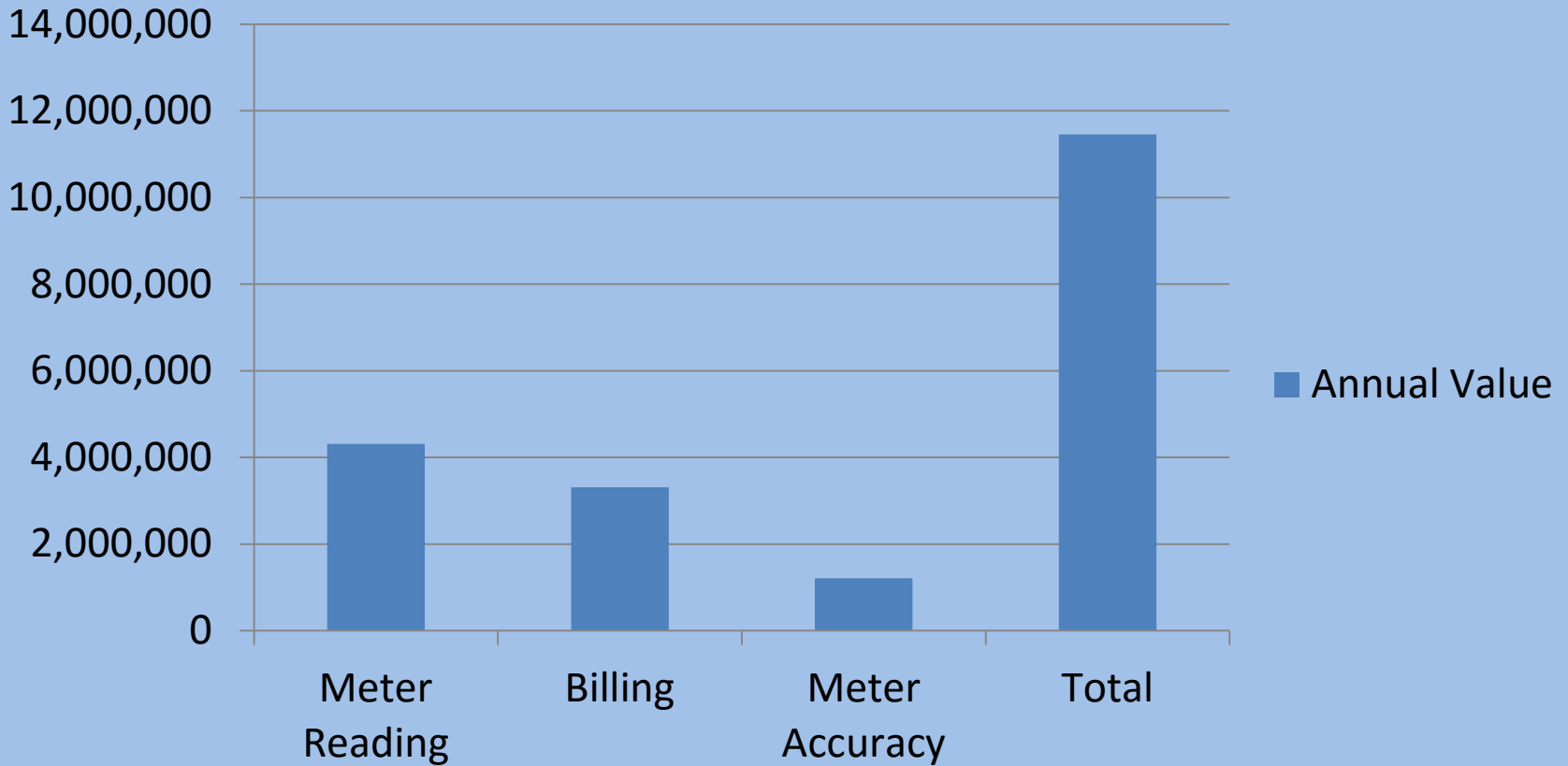


Utilities Save, Make \$\$

- No Meter Readers
- Billing Savings
- Meter Accuracy
- AMI Makes More Money

City Light Savings, Income

Annual Value

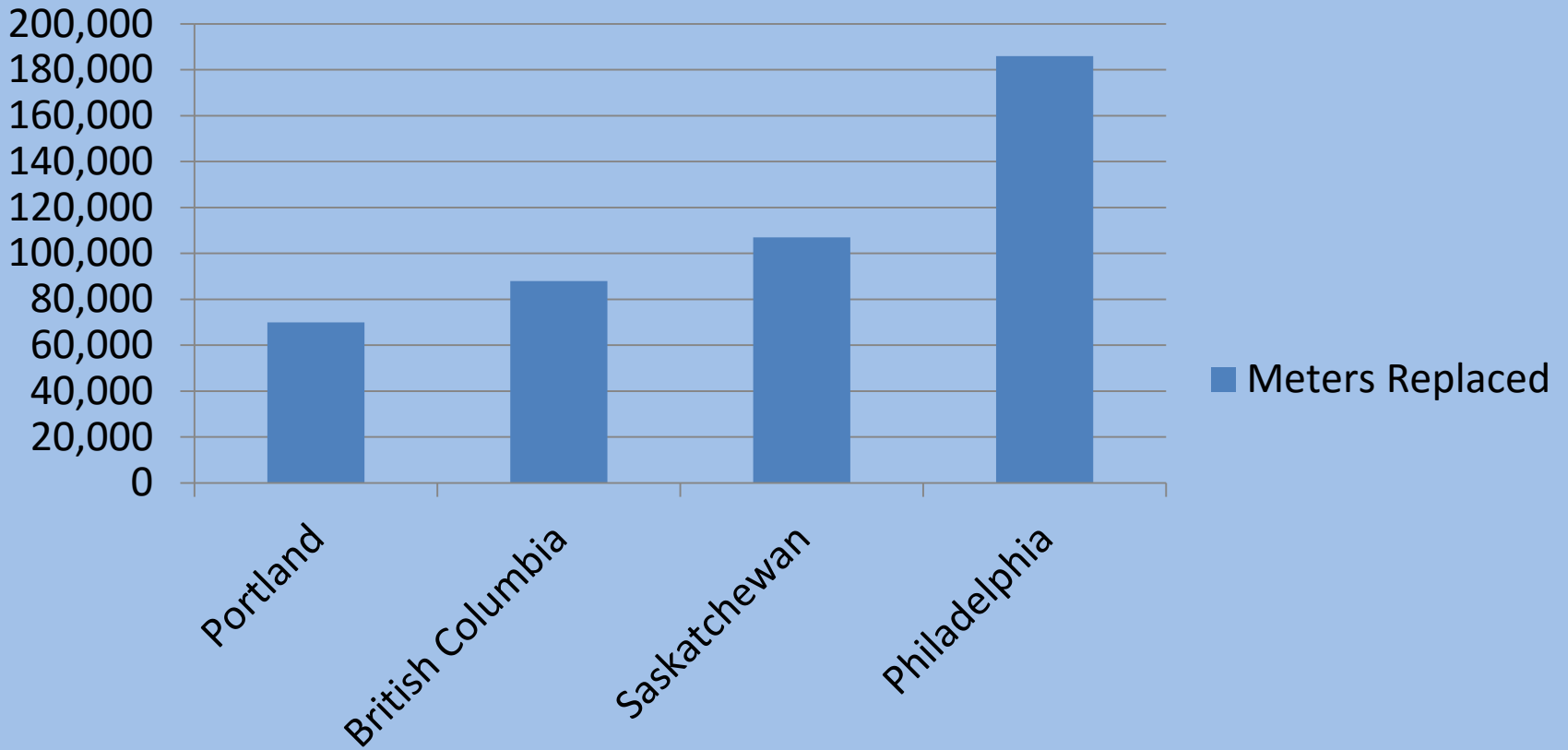


Fires & Explosions

- Problems in Many Cities
- CEO: “Systemic in Industry”
- Utility Denial
- Replace Meters

Fire-Based Replacements

Meters Replaced



Privacy

- Gov. Reports Show Invasion
- 3,000 Times More Data/mo.
- Watch All We're Doing
- Sell Data

- **Illegal:** Thieves see when no one is home. Stalkers track movements.
- **Commercial:** Targeted ads, Insurance adjusting (leave appliances on?)
- **Law Enforcement:** Detect illegal activities, Verify defendant claims (home all evening)
- **Legal:** Custody, landlord-tenant
- **Family members:** Spying on partner's behavior

Security

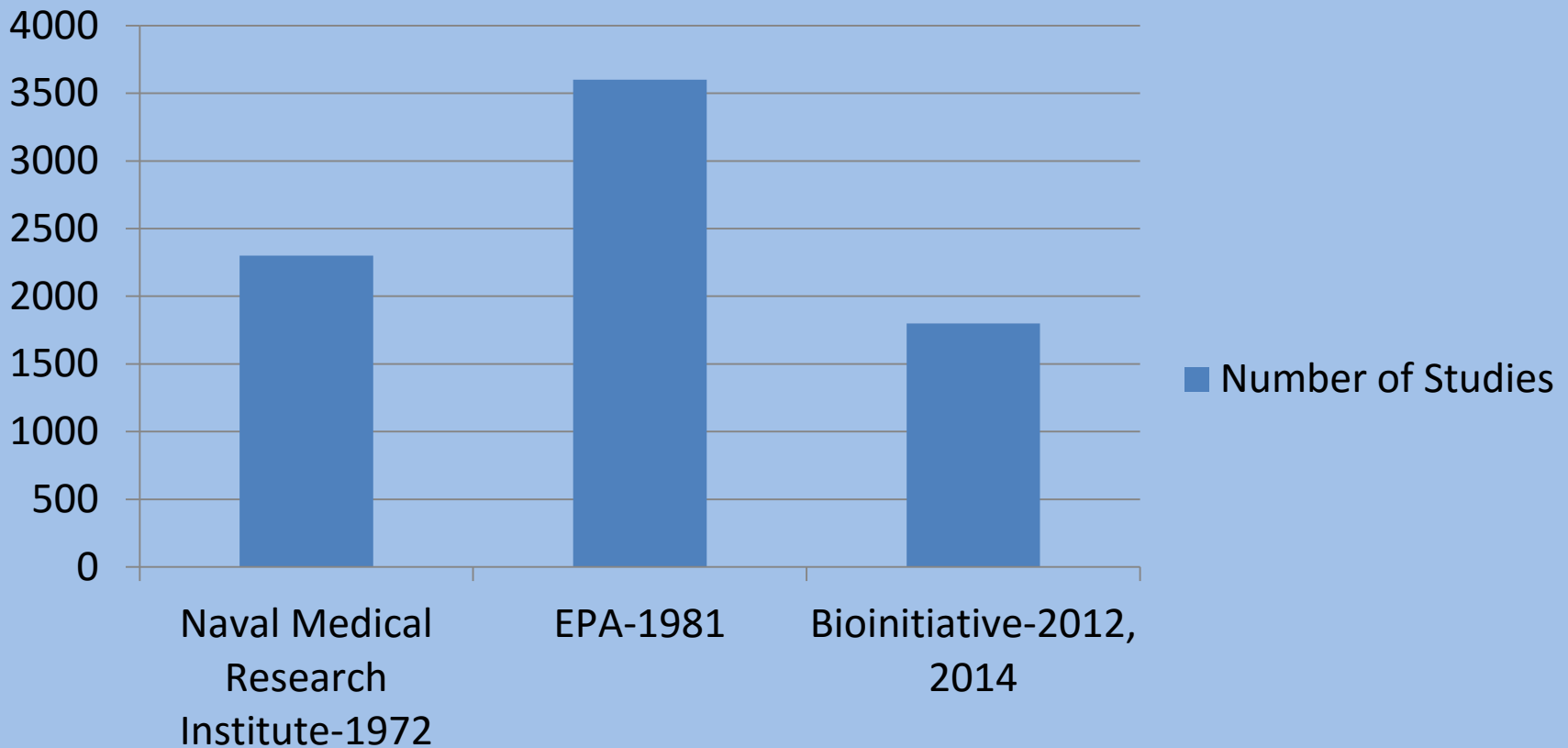
- 43 Security Problems
- Home Burglaries
- Energy Theft
- Increased Bills
- Grid Collapse

Health

- Decades of Studies
- Public Health vs. Industry
- Recognize Health Concerns

RF Danger Studies

Number of Studies



Solutions

- Opt-in
- Conservation
- Distributed Energy
- Microgrids
- Storage
- Transverters

Conservation

- Least cost, least risk, least enviro impact
- \$761 million saved above \$215 spent
- 1 million metric tons avoided
- 1,690-3,380 new jobs created (AMI eliminates jobs)
- City Light reduced budget \$94m to 61m

Actions

- Contact City Council
- Spread the Word
- Watch Take Back Your Power
- Conditional Acceptance
- Push Distributed Energy Policies

Seattle City Council

1-lisa.herbold@seattle.gov

2-bruce.harrell@...

3-kshama.sawant@...

4-rob.johnson@...

5-debora.juarez@...

6-mike.obrien@...

7-sally.bagshaw@...

8-tim.burgess@...

9-lorena.gonzalez@...

Resources

safemeters.org

smartgridawareness.org

stopsmartmeters.org

takebackyourpower.org