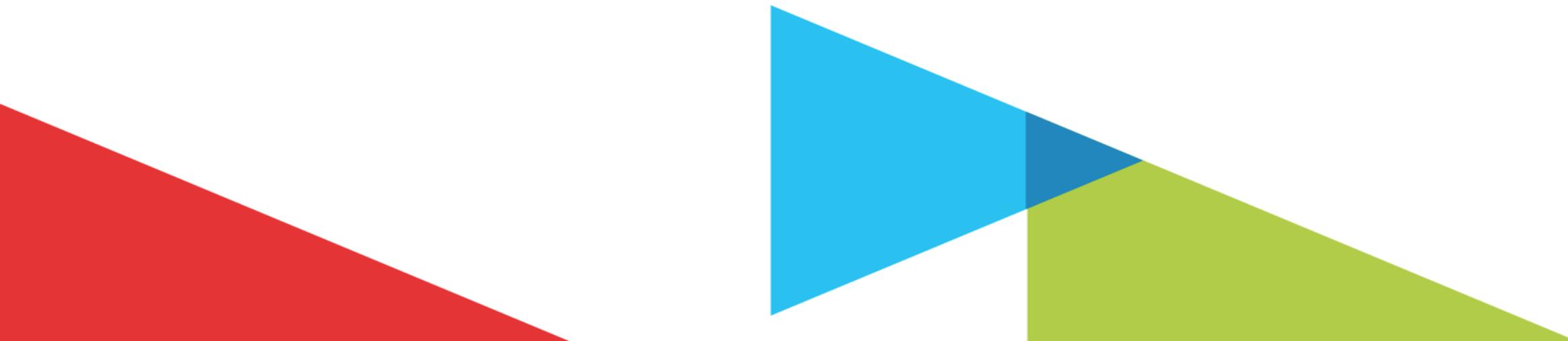


Nicor Gas Portfolio Overview

Presented By Randy Opdyke

3/11/2020



Agenda



- Overview of current EE portfolio programs (business, residential, and income qualified)
- Portfolio progress for 2018-2019 program years
- Emerging Technology & Market Transformation update
- Q&A

Portfolio Design Objective



1. Budget
 - Remain within the 2% statutory budget
 - Size programs according to rate class contribution
 - Meet other statutory constraints (e.g. IQ, Public Sector)
2. Cost-effectiveness
 - Cost-effective portfolio
3. Savings
 - Annual
 - Lifecycle/WAML
4. Fairness
 - Provide diverse cross section of opportunities
5. Diversity
 - Increase opportunities for diverse vendors and communities
6. Market
 - Maintain stability for trade partners
7. Economic development
 - Increase economic activity in Illinois



Nicor Gas Portfolio & Program Structure Overview



Portfolio (Evaluation, Management, Emerging Technology, Market Transformation and Marketing)

Business

- Business Energy Efficiency Rebates (BEER)
- Small Business (SB)
- Custom
- Business New Construction(BNC)*

Residential

- Home Energy Efficiency Rebates (HEER)
- Home Energy Savings (HES)**
- Multi-Family (MF)*
- Outreach & Education*
- Residential New Construction (RNC)**

Income Qualified

- Single Family Weatherization*
- Multi-Family Weatherization*
- Public Housing Authority*
- Affordable Housing New Construction*

*Joint program or coordinated programs with ComEd and/or Ameren

** Reduced coordination with ComEd starting in 2020



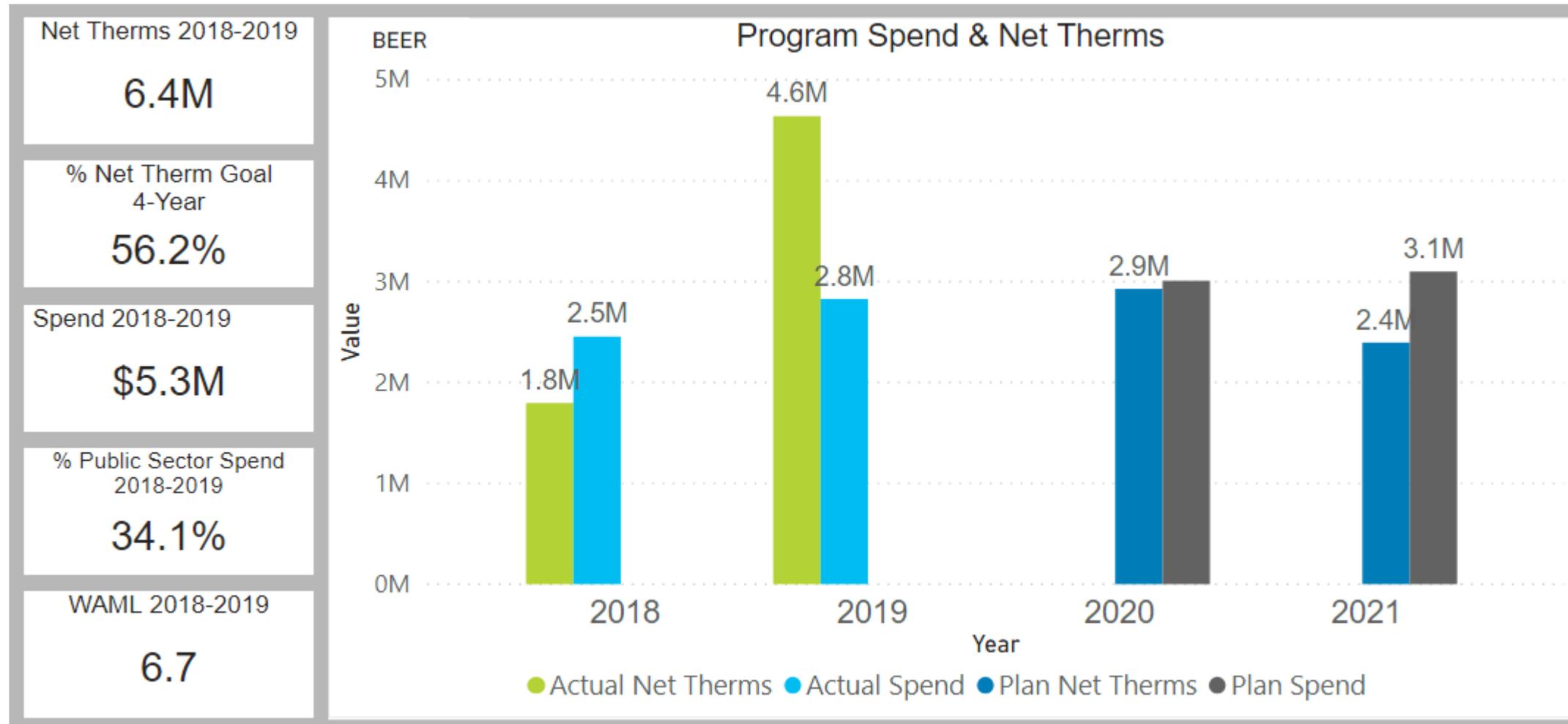
- Energy Efficiency Portfolio:
 - 65.8M Adjusted Net Therms (4 Year)
 - 16.5M Adjusted Net Therms/year
- 2% revenue cap: \$160M (4 year budget)
 - \$40M annual budget
 - Emerging Technology (3%): \$4.8M (4 year)
 - Market Transformation (5%): \$8M (4 year)
 - Evaluation (3%): \$4.8M (4 year)
- Stipulation requirements:
 - 20% income-qualified spend: \$32.3M (4 year)
 - 10% public sector spend: \$16.1M (4 year)
 - Adjusted Weighted Average Measure Life >11.89 years
- No shareholder incentives or bonus

Program Overview

Business Energy Efficiency Rebates (BEER)



- Offerings: Business and public sector prescriptive rebates, assessments and direct installs for high-efficiency space & process heating, water heating, food service technologies, tune-ups and upgrades.
- Challenges: Participation in pipe insulation (late 2019 incentive increase)

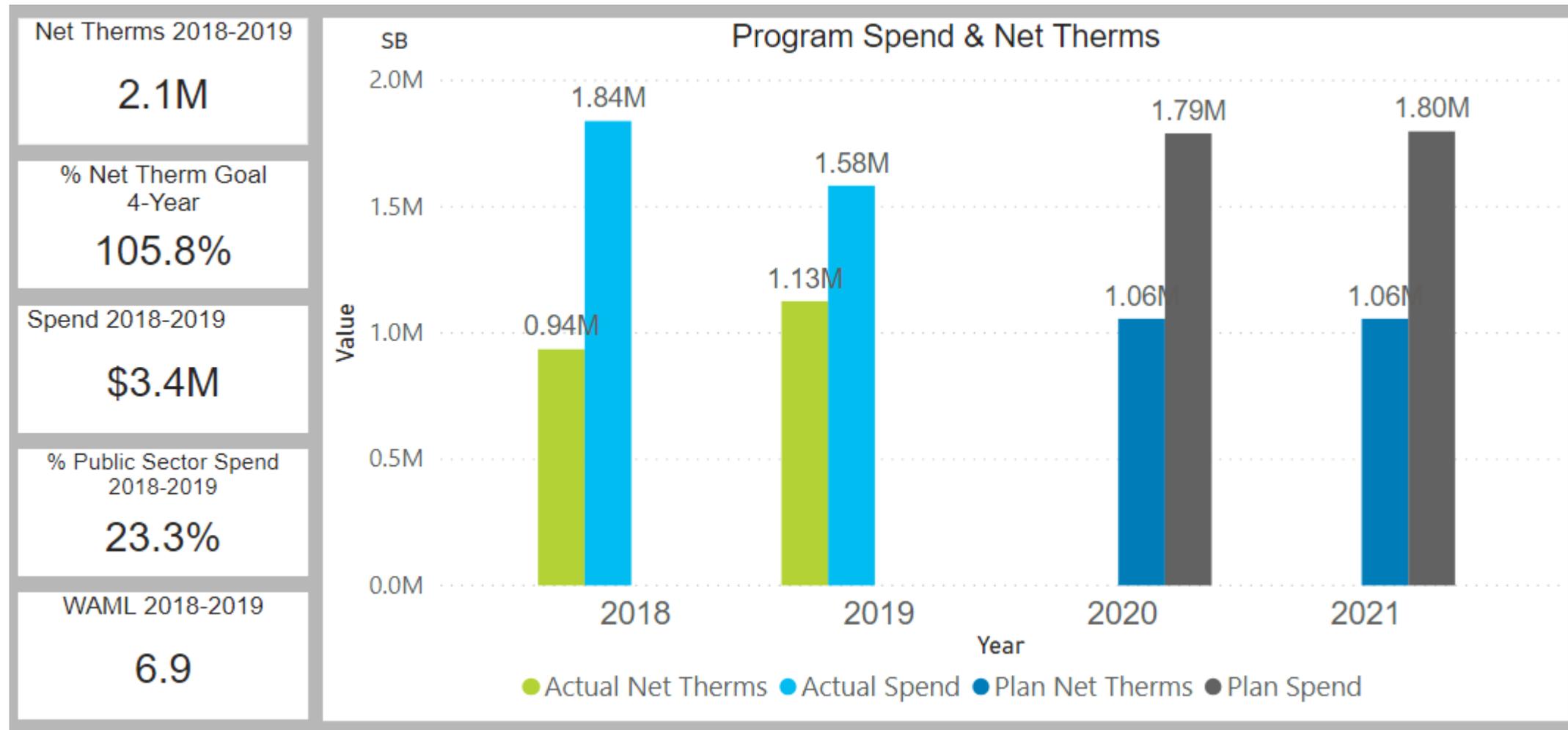


Verified Net Therms for 2018 & Ex Ante Net Therms for 2019

Small Business Energy Efficiency Rebates (SB)



- Offerings: Small business customers (< 50,000 annual therms). Prescriptive Rebates, Assessments and Direct Install and Custom Projects
- This program is continuing to see higher participation in the Public Sector and Dry Cleaner Steam Trap measure.

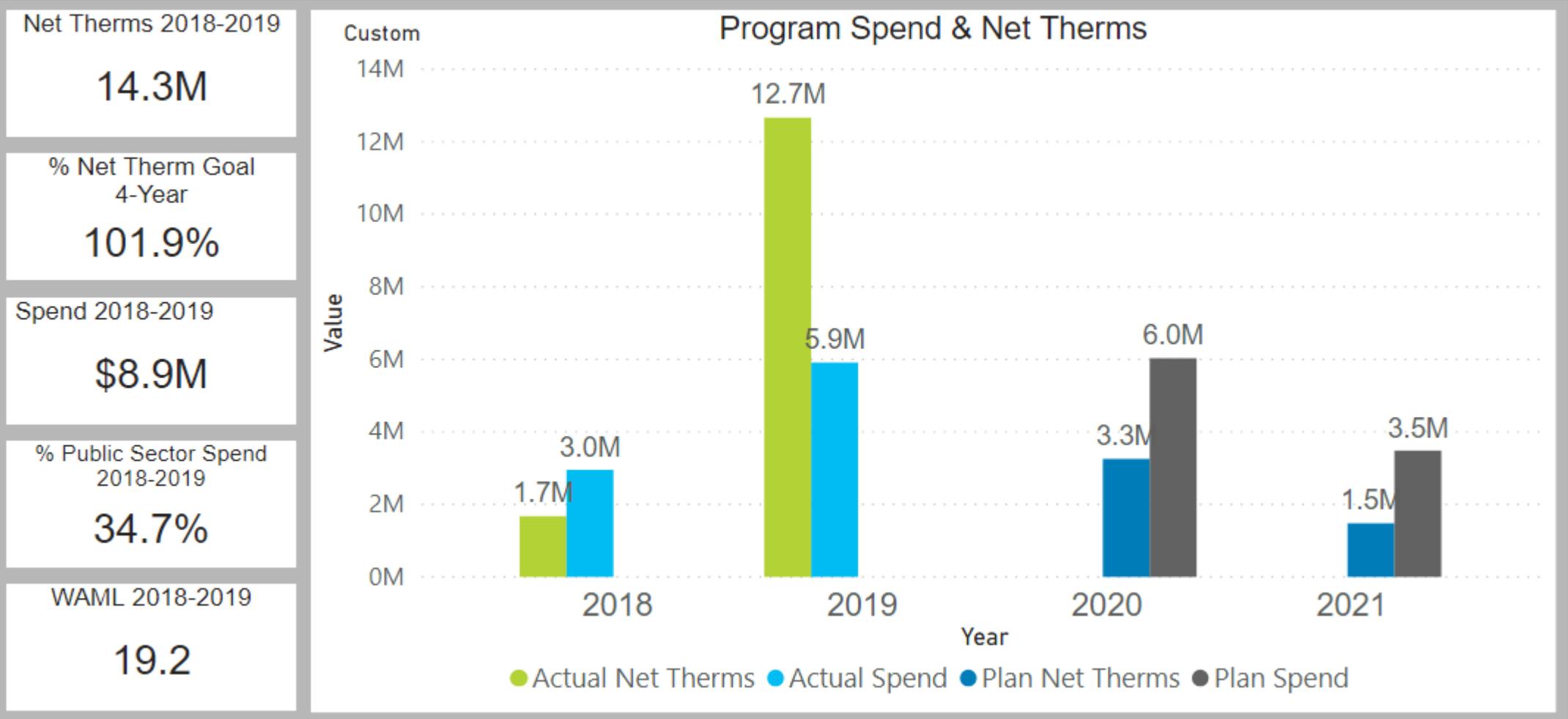


Verified Net Therms for 2018 & Ex Ante Net Therms for 2019



Business Custom Program

- Offerings: Business customers Custom projects, Combined Heat and Power (CHP) and Retro-Commissioning (RCX)
- Challenges: Developing Public Sector projects pipeline with long lead time.

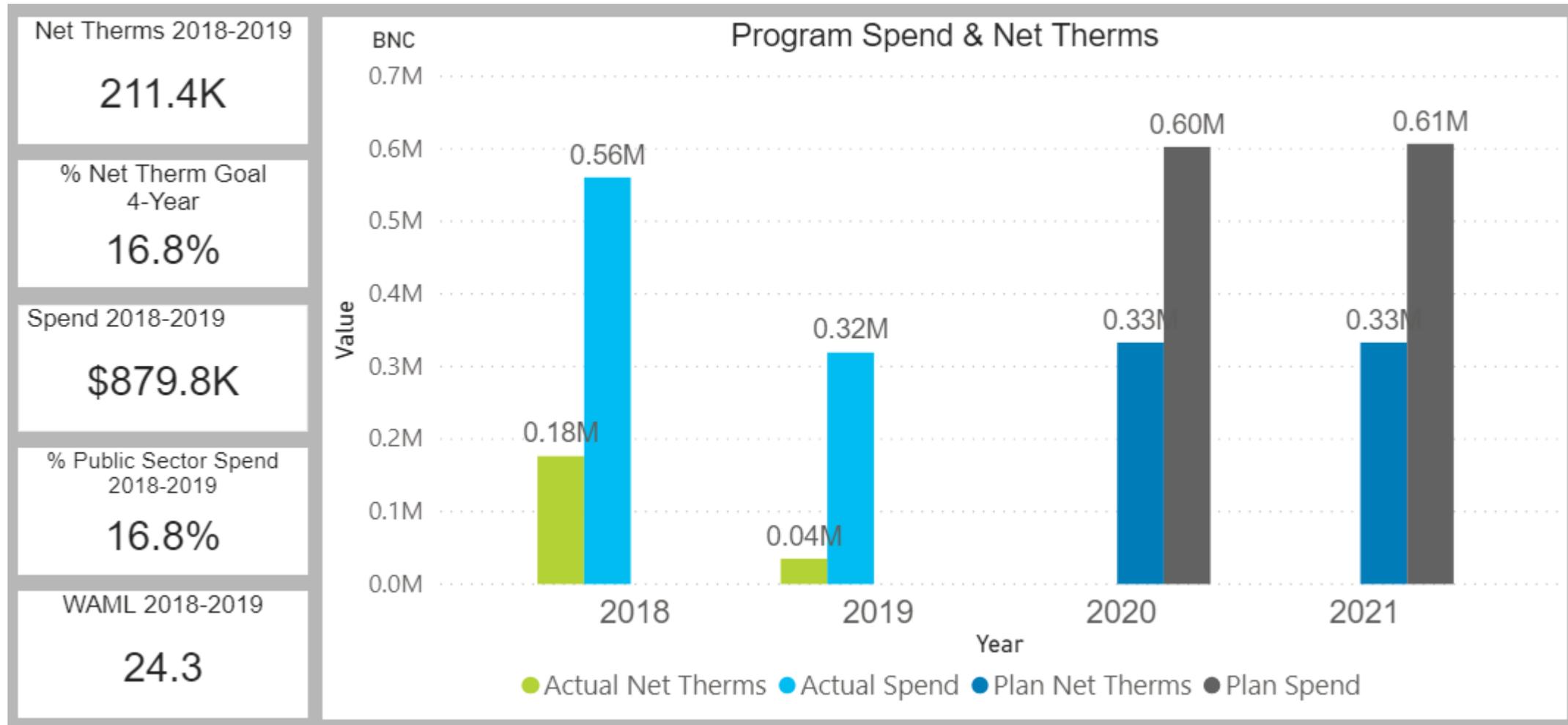


Verified Net Therms for 2018 & Ex Ante Net Therms for 2019

Business New Construction Program



- Offerings: Provides education, financial incentives and technical assistance to help building owners and design teams exceed the current energy codes.
- Joint Program with ComEd
- Challenges: Project participation, net-to-gross

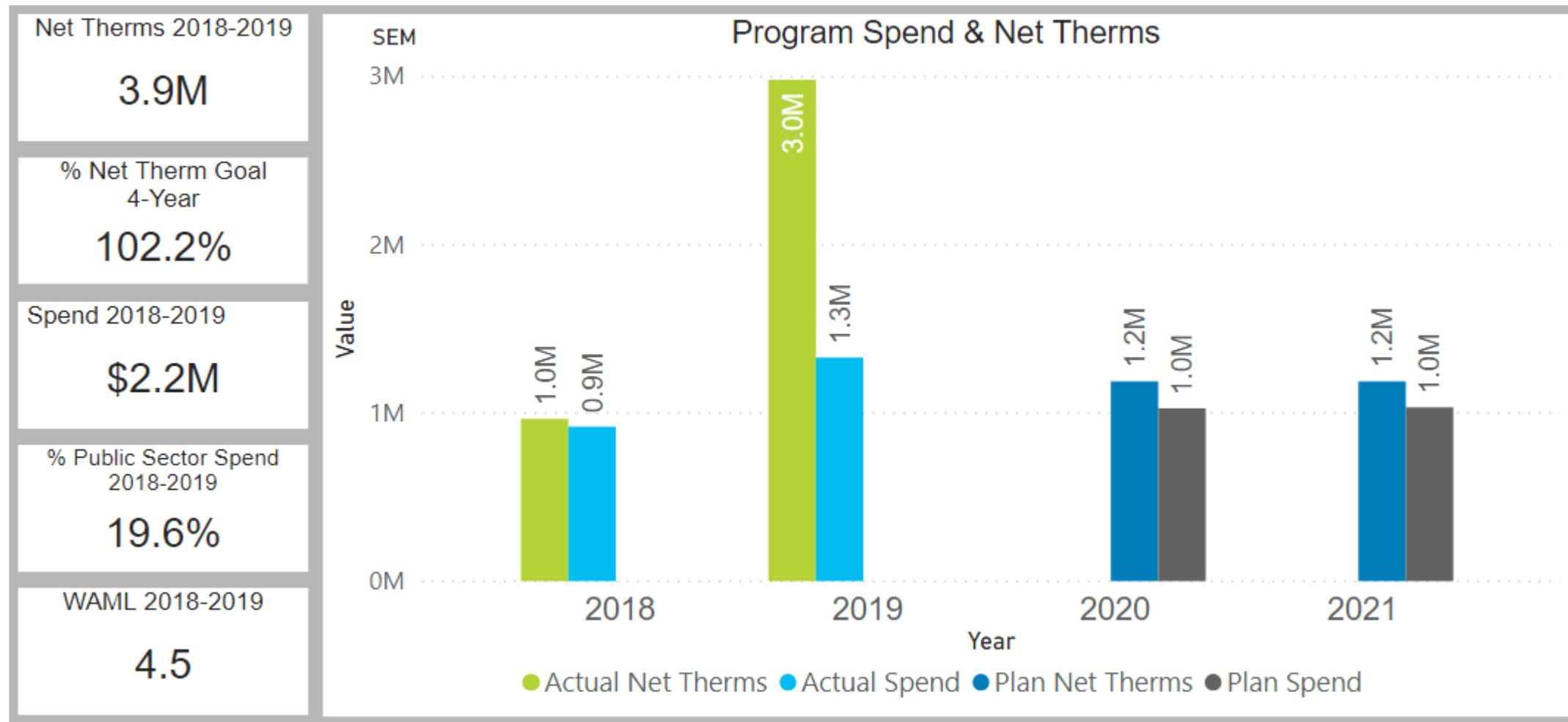


Verified Net Therms for 2018 & Ex Ante Net Therms for 2019

Strategic Energy Management Program



- Offerings: Business and public sector customer opportunities to obtain energy savings by focusing on improving and optimizing operations, processes and energy equipment.
- Cohort include: K-12 Public Sector, MEGA and Alumni cohorts
- Challenges: Timing with late starts with one cohort and savings calculations.

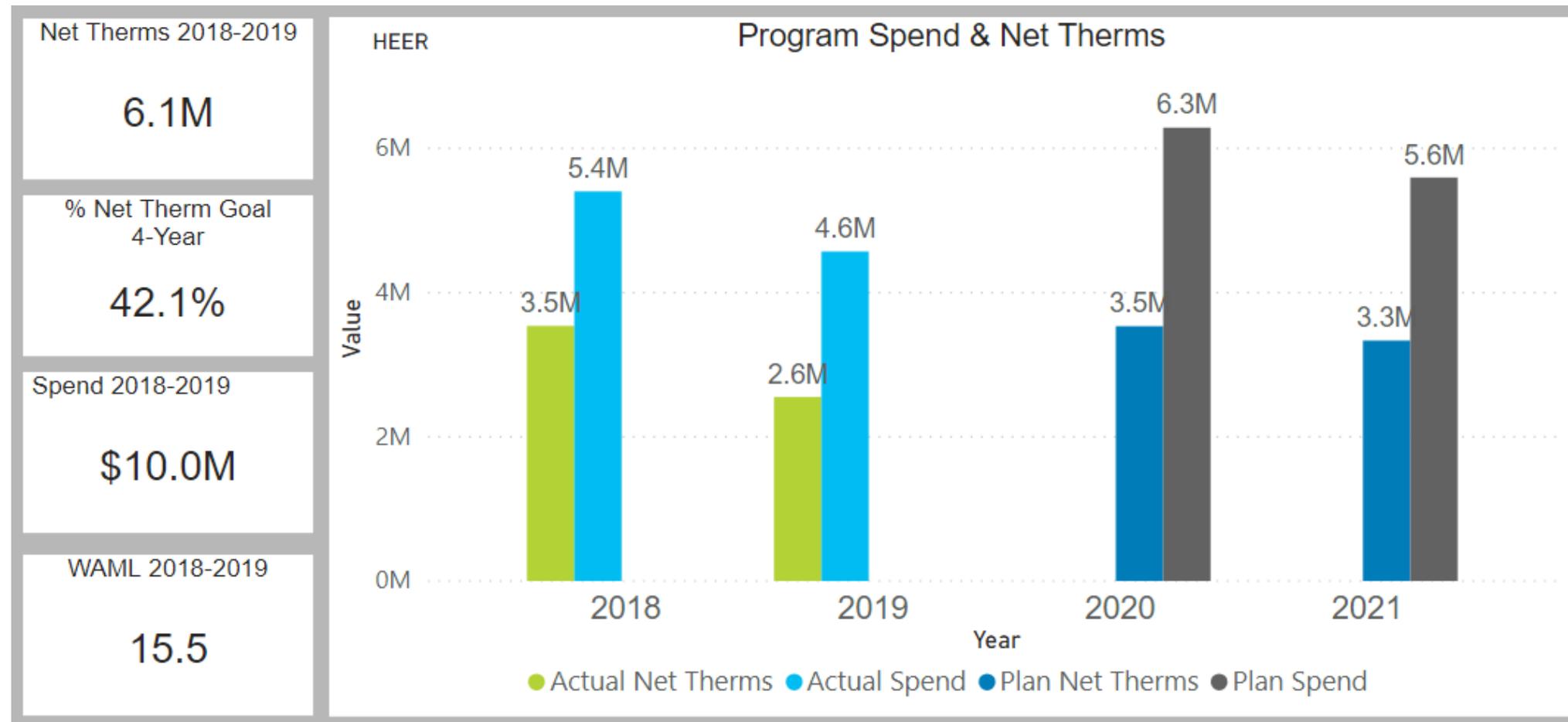


Verified Net Therms for 2018 & Ex Ante Net Therms for 2019



Home Energy Efficiency Program (HEER)

- Offerings: Residential customer prescriptive rebates for high efficiency furnaces & boilers and smart thermostats. Customer engagement through our Contractor Circle/trade ally partnerships.
- 2019 launched stacked rebates for smart thermostats on ComEd market place.
- Challenges: Further participation in smart thermostats (alternative delivery option) and 97% furnaces (incentives increased in late 2019).

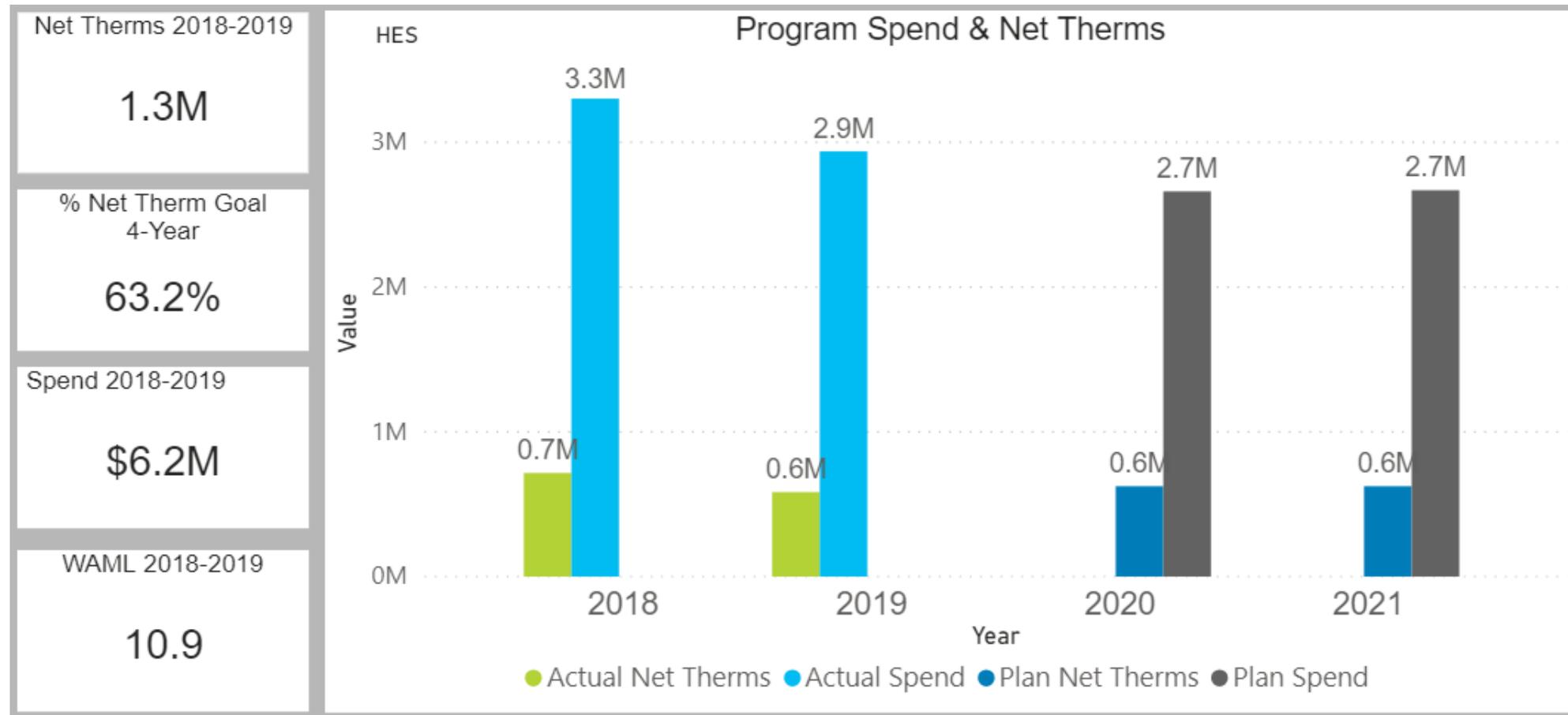


Verified Net Therms for 2018 & Ex Ante Net Therms for 2019

Home Energy Savings (HES)



- Offerings: Whole home single family weatherization program offering home energy assessments/direct installs (HEA) and air sealing and insulation (ASI).
- 2018-2019 Joint Program with ComEd serving annually approximately 10,000 homes in HEA and 1,100 homes in ASI.
- Challenges: ASI in 2020 will be fully funded by Nicor Gas. Incentive levels will remain consistent, but participation will decrease.

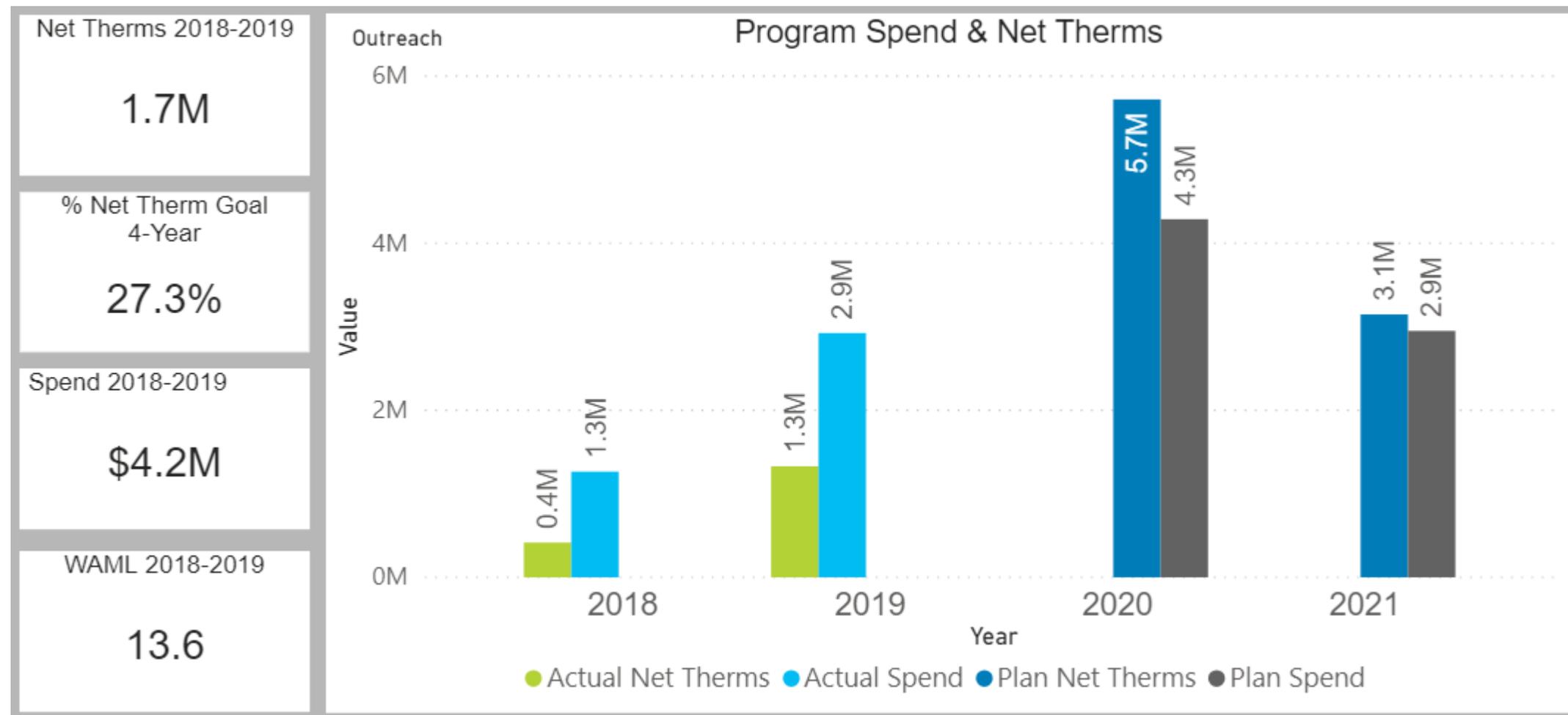


Verified Net Therms for 2018 & Ex Ante Net Therms for 2019

Outreach and Education



- Offerings: Enhance residential customer understanding of their energy usage in their homes and educate these customers on available energy efficiency opportunities.
- Behavior Energy Savings, Energy Saving Kits (“ESKs”), and Energy Education Kits (“EEKs”) joint with ComEd

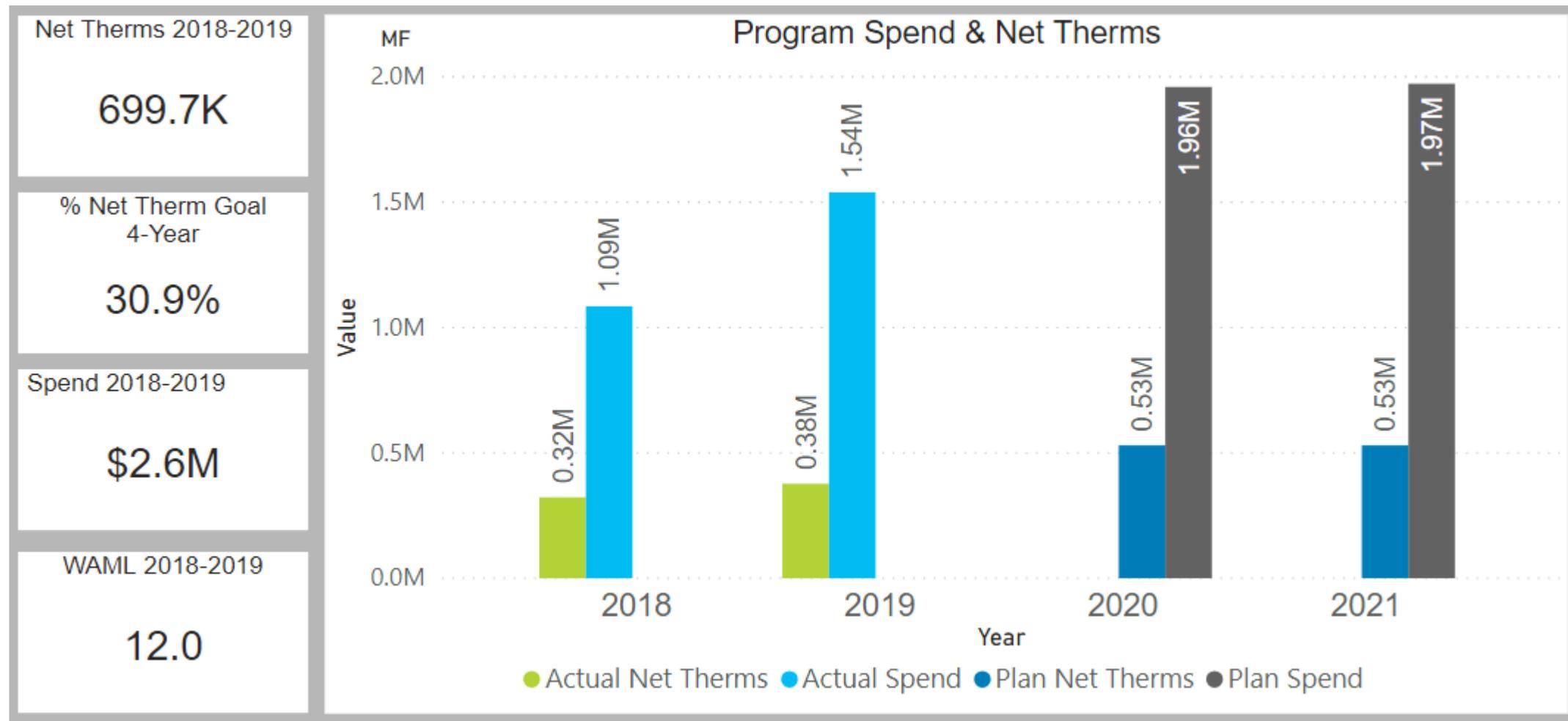


Verified Net Therms for 2018 & Ex Ante Net Therms for 2019

Multi-Family Program



- Offerings: Comprehensive assessments, technical assistance and direct installs joint with ComEd. Nicor Gas customer prescriptive/custom rebates on measures.
- New Central Plant Optimization Program (CPOP) in 2020 and will consist of incentivized trade ally direct installation of prescriptive measures for customers. Nicor Gas only.

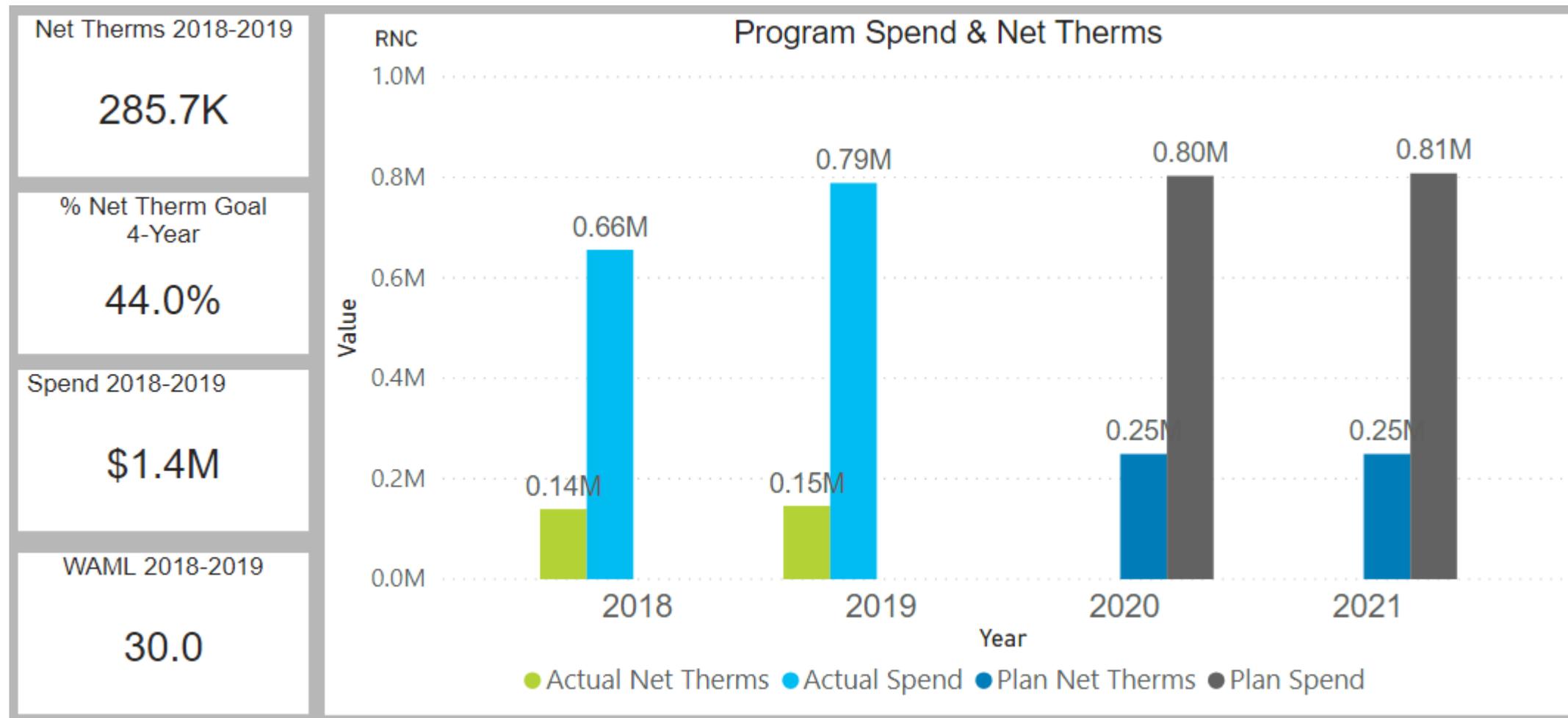


Verified Net Therms for 2018 & Ex Ante Net Therms for 2019

Residential New Construction



- Offering: New prescriptive program for home builders. Incentive to exceed state building code regarding duct/air sealing, smart thermostats and high-efficiency equipment.
- Challenge: 2020 ComEd is no longer a partner, maintaining momentum and relationships with the builders in our territory.

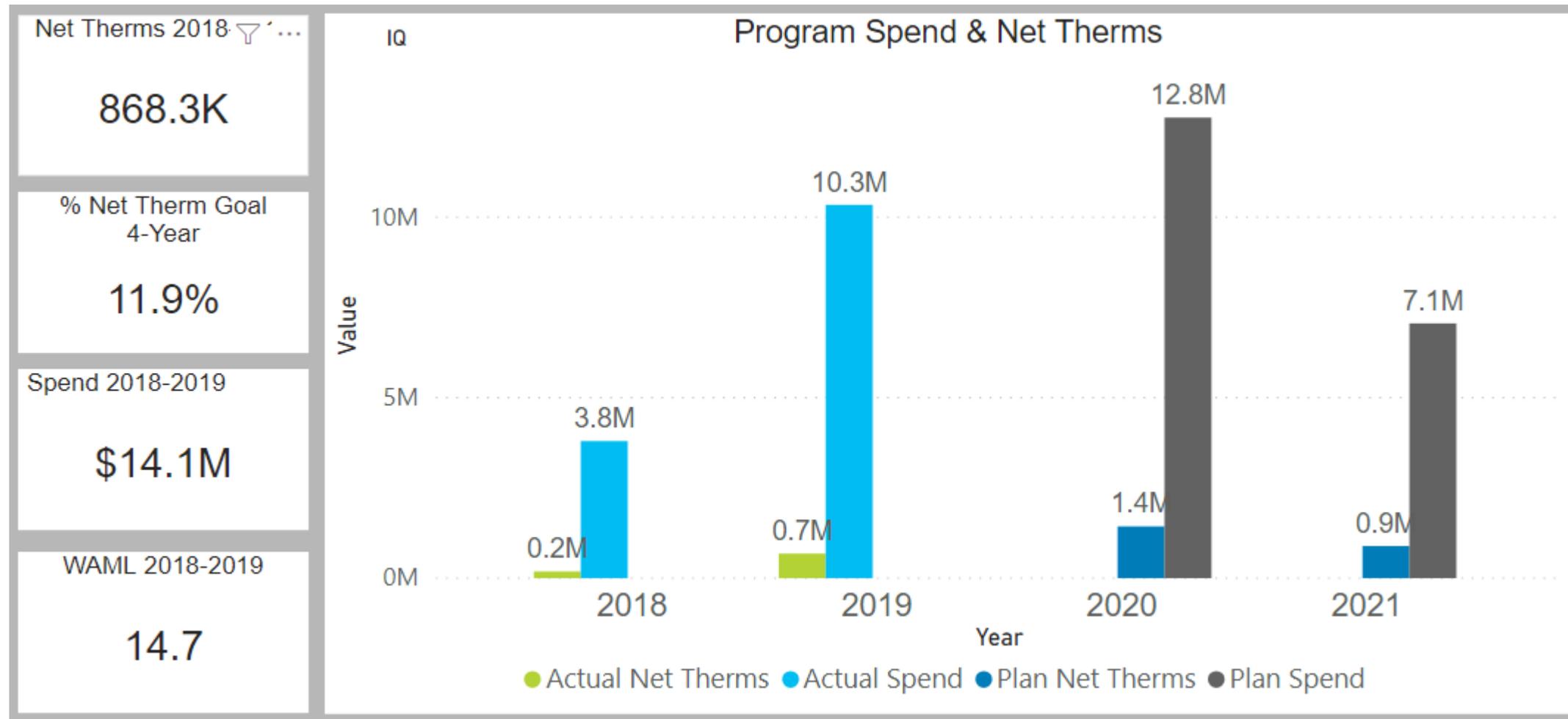


Verified Net Therms for 2018 & Ex Ante Net Therms for 2019

Income Qualified Program



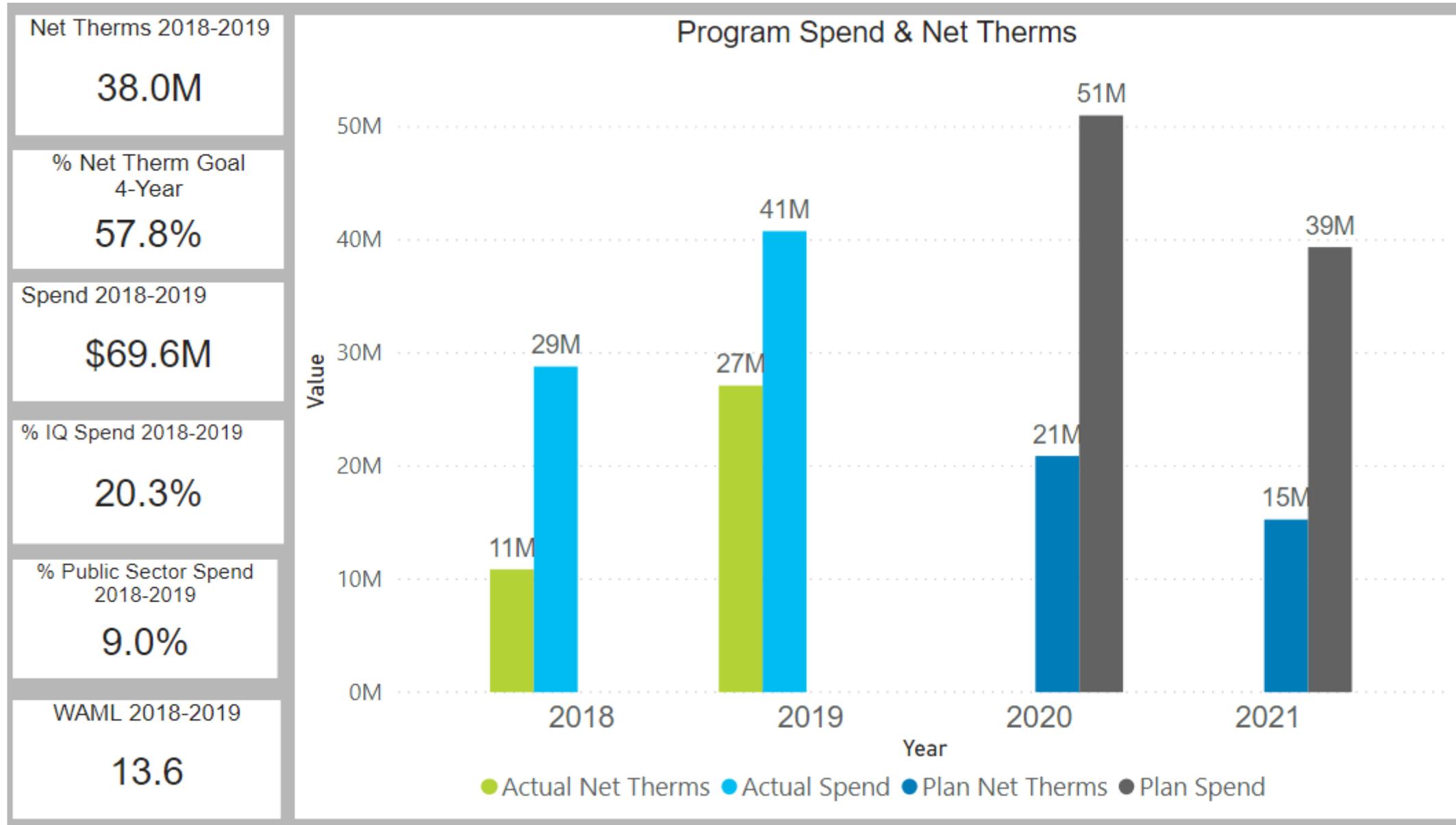
- Offerings: Single Family Weatherization, Multi-Family Weatherization, Public Housing Authority (PHA), Affordable Housing New Construction (AHNC), IQ Energy Savings Kits
- Joint with ComEd (IHWAP SF/MF weatherization, PHA and AHNC)
- Challenges: Cost per therm is still higher than planned



Verified Net Therms for 2018 & Ex Ante Net Therms for 2019

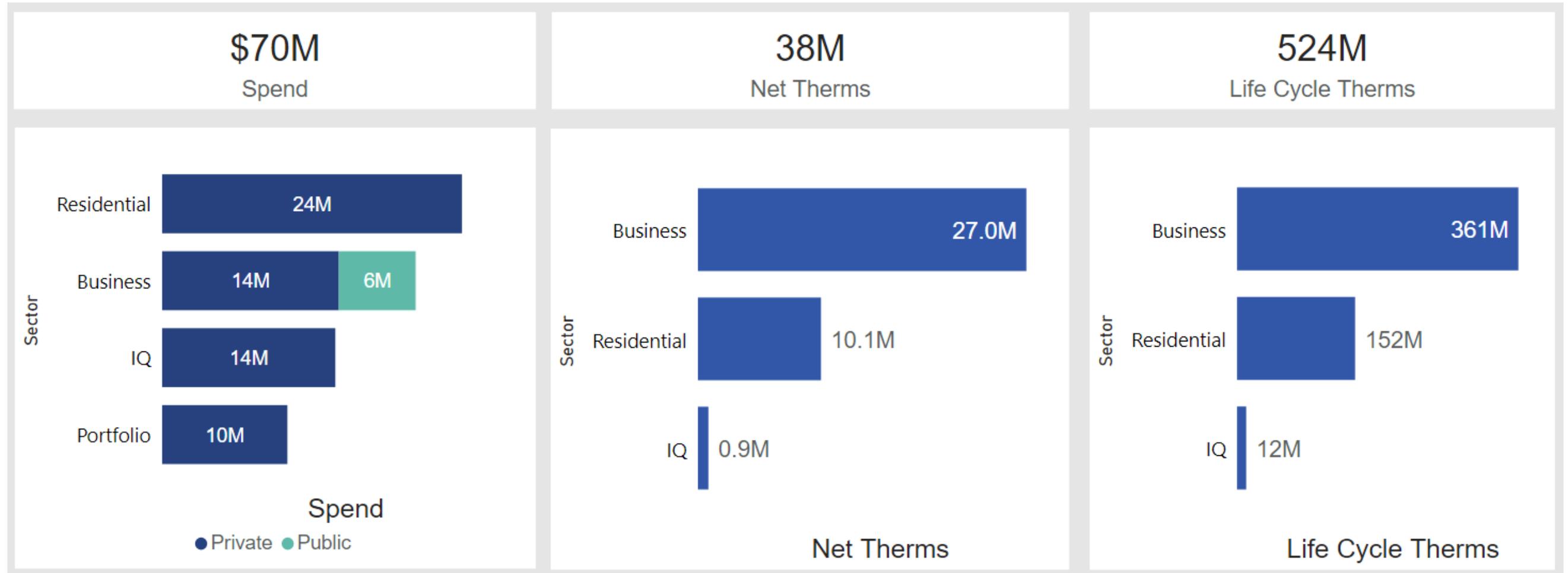
Portfolio Overview

Portfolio Overview – Spend and Net Therms



Verified Net Therms for 2018 & Ex Ante Net Therms for 2019

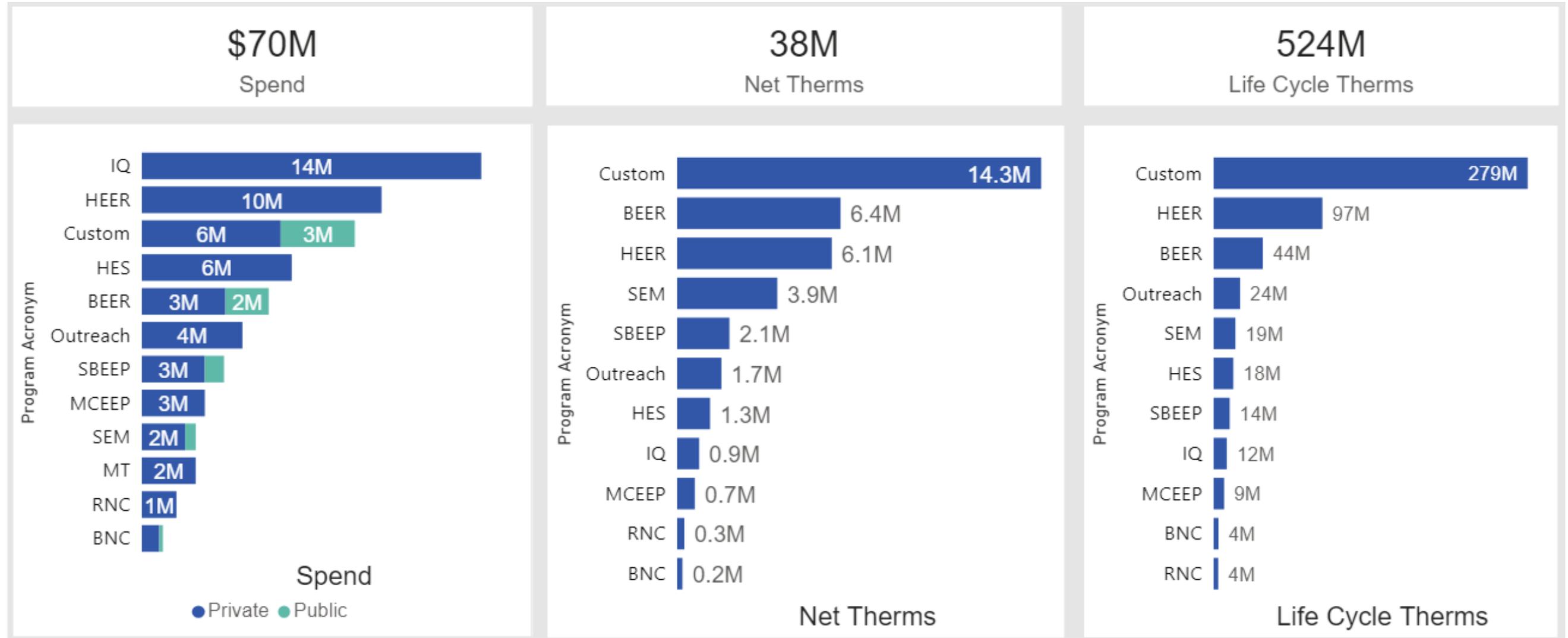
Portfolio by Sector – 2018 & 2019



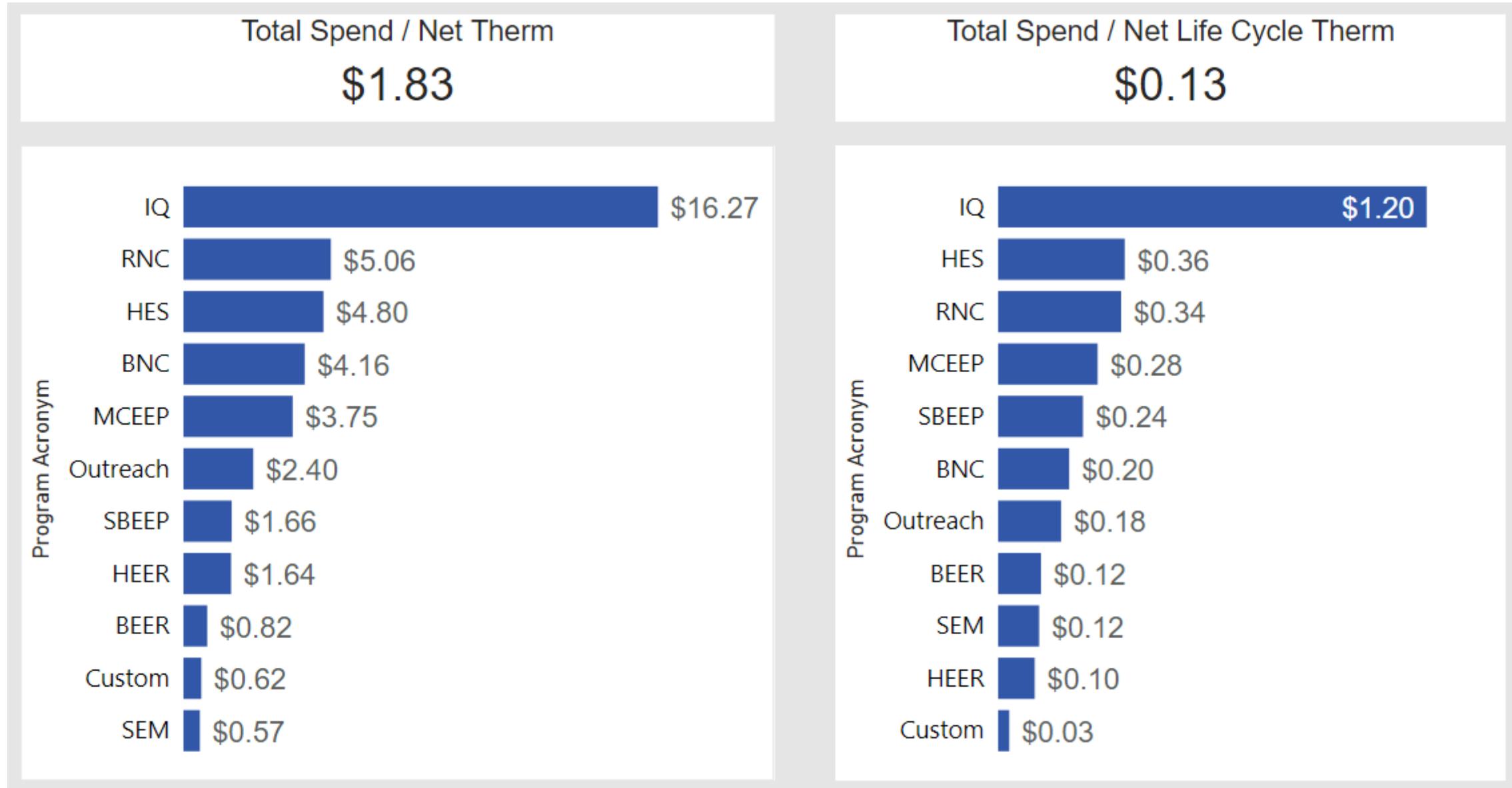
Portfolio Cost Per Net Therm



Portfolio by Program – 2018 & 2019



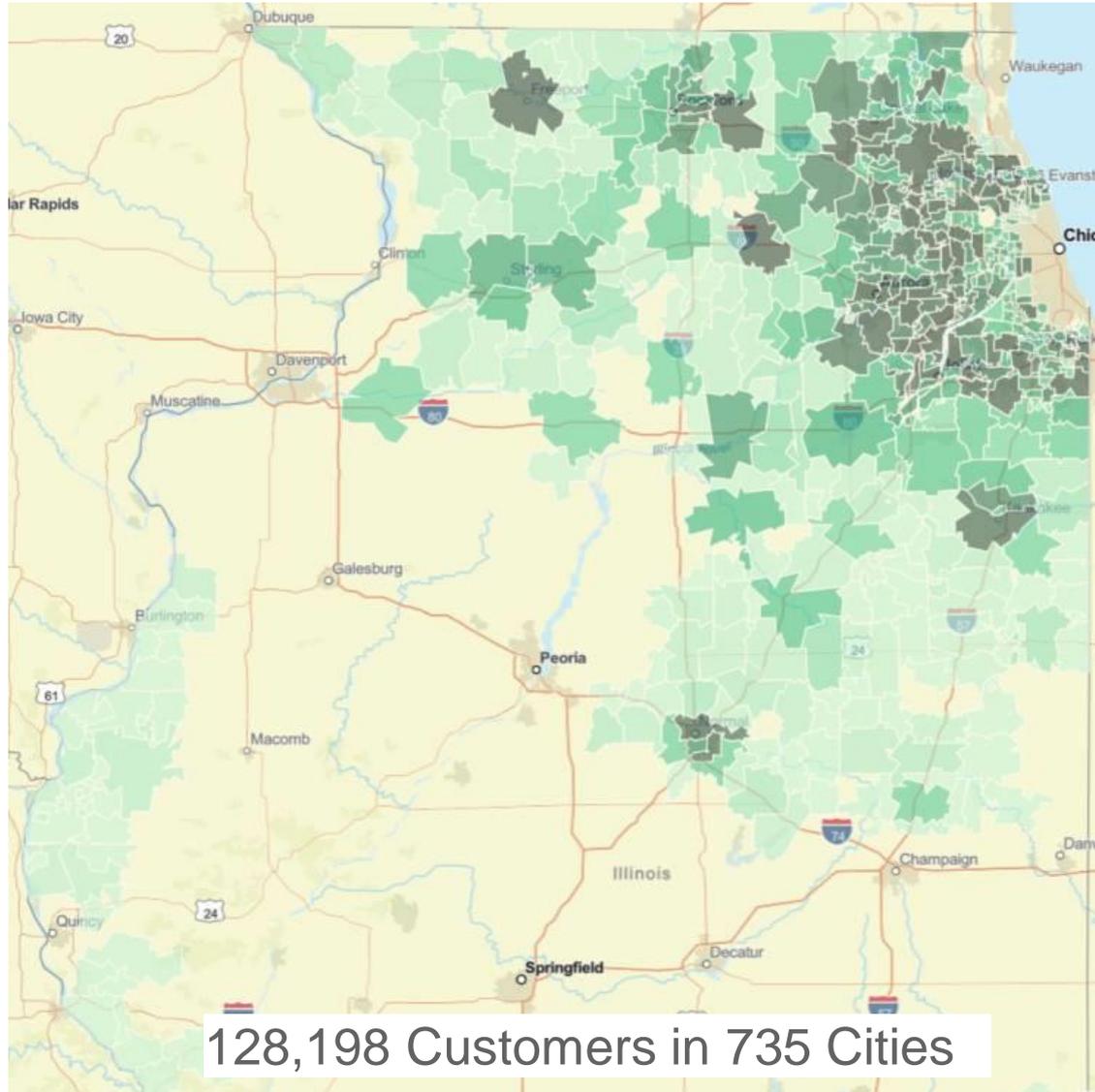
Program Cost Per Net Therm



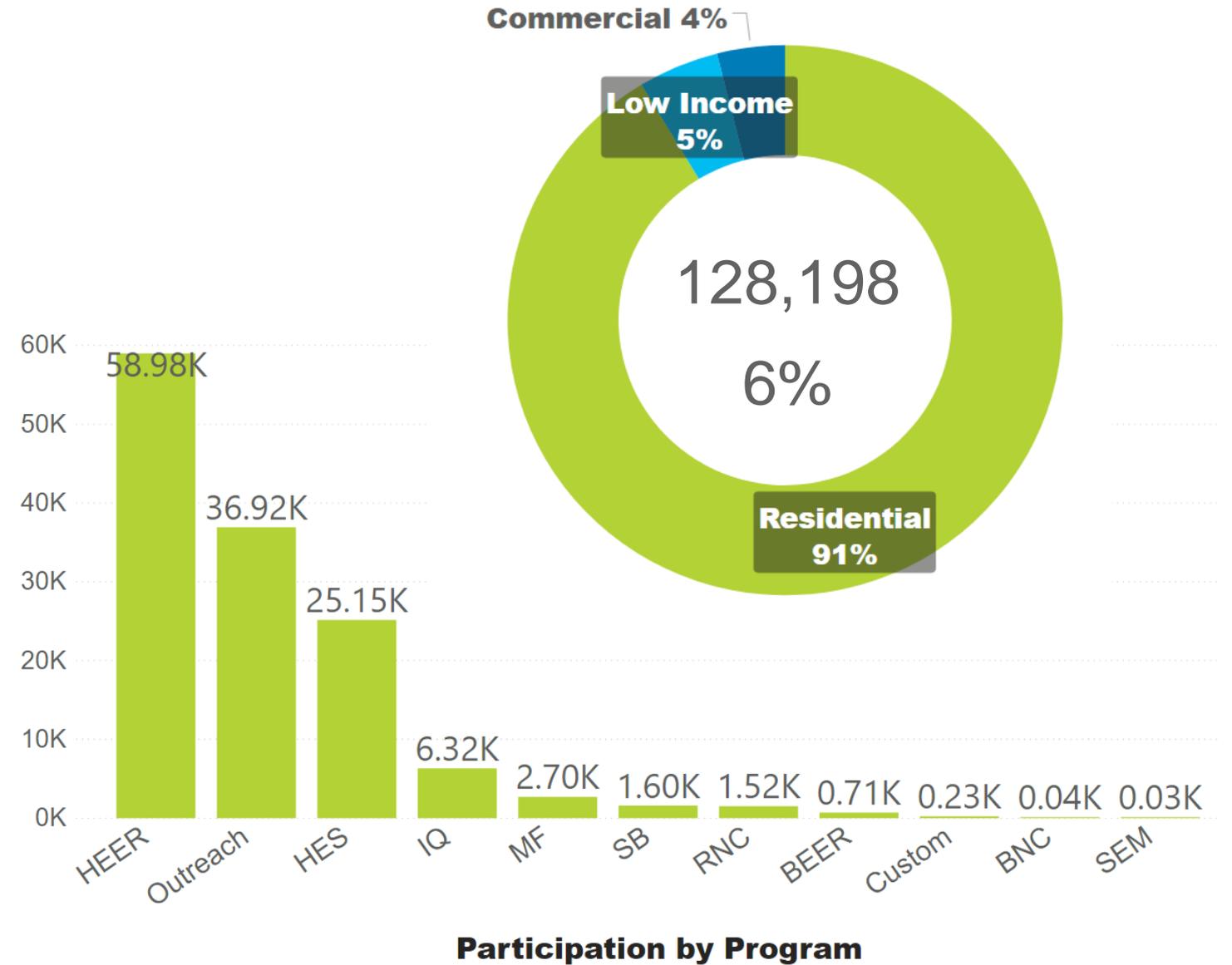
Portfolio Customer Participation



2018-2019 Customer Participation



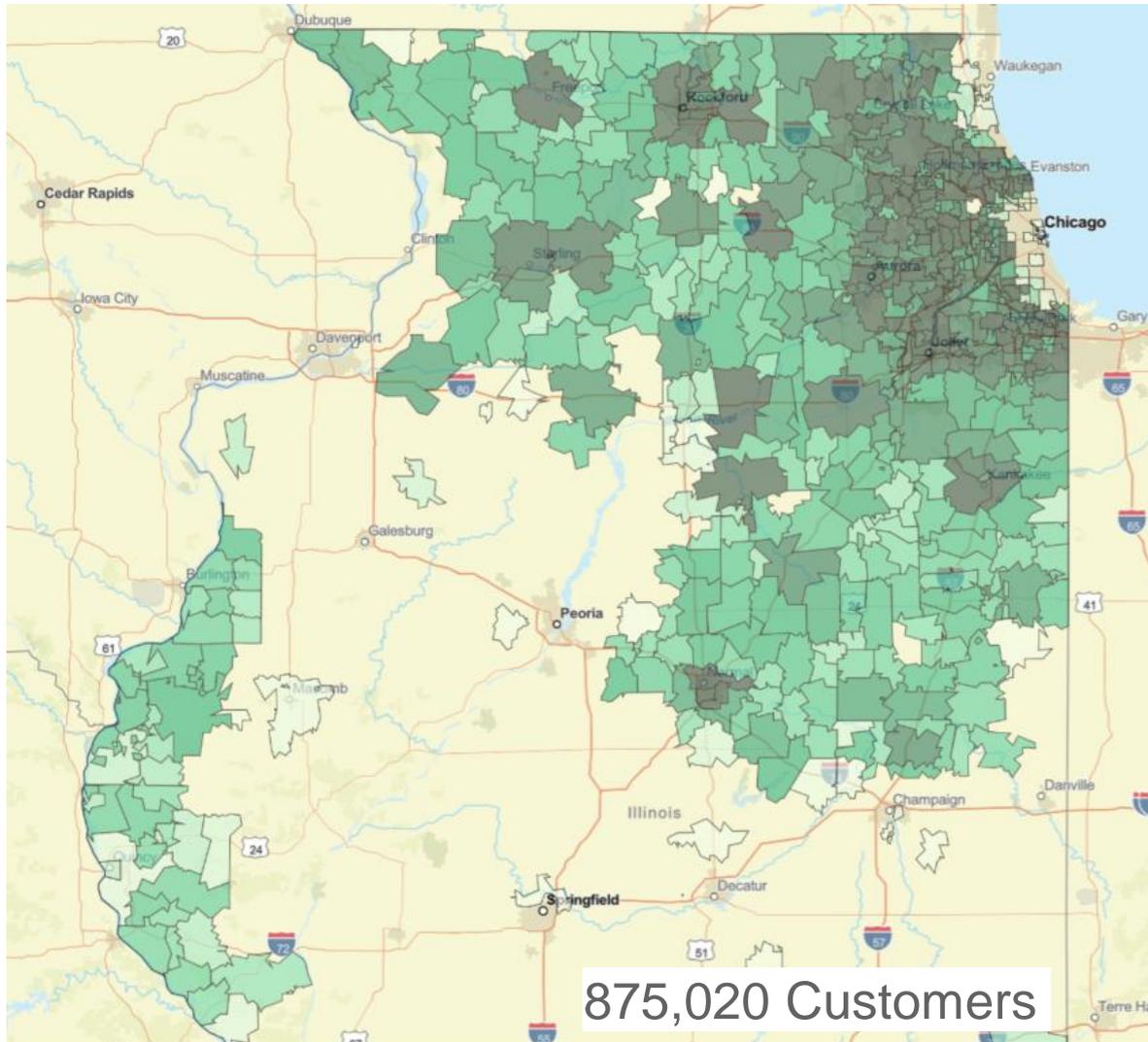
Units = Nicor Gas Customer Unique Accounts



Income Qualified Customer Participation

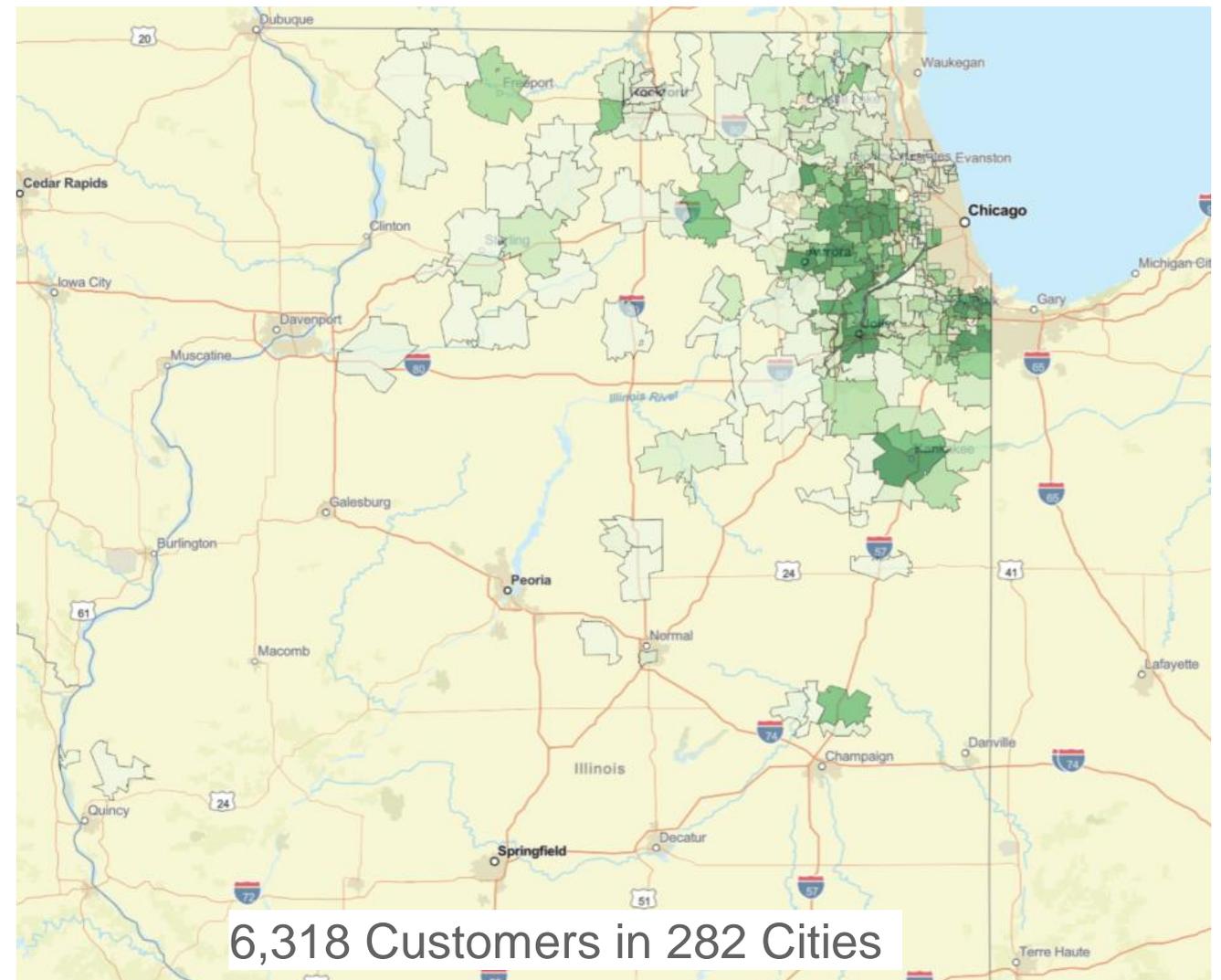


Eligible Income Qualified Customers



Based on 2017 Census Tract Data and <80% AMI

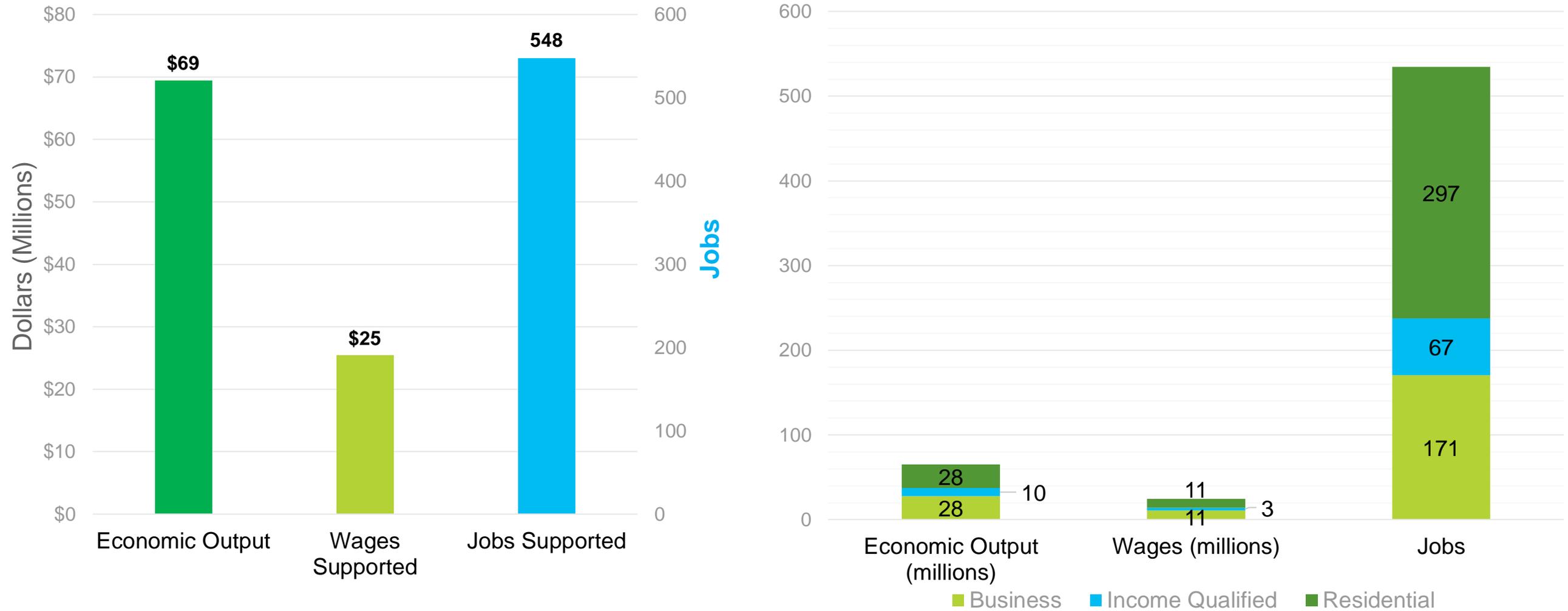
2018-2019 Income Qualified Customer Participation



Units = Nicor Gas Customer Unique Accounts



2018-2019 Economic Impacts & Jobs



Note: Analysis utilizes IMPLAN data specific to Illinois to conduct this Economic Analysis

Emerging Technology & Market Transformation Update

Energy Efficiency Emerging Technology Program (ETP)



- Web Based Submission Form
 - Go to: www.nicorgas.com
 - Business > Way to Save > Rebates
 - Emerging Technology
 - [Submit your Application](#)
- Stage Gate Process
 - Product is Scored
 - Evaluated
- Weighted Scale & Scoring
 - Score of 60+
 - Action Plan to Pilot

4S- A Ready, Set, Go Stage and Gate Process



Criteria	Score	Weighting	Final Score
Cost-Effectiveness	0 to 5	5	0 to 25
Gas Savings Potential (Net Energy Savings)	0 to 5	4	0 to 20
Value to EEP Portfolio	0 to 5	3	0 to 15
Non-Energy Benefits	0 to 5	2	0 to 10
Regional Support and Distribution	0 to 5	2	0 to 10
Technological Maturity	0 to 5	2	0 to 10
Ease of Implementation/Market Adoption	0 to 5	2	0 to 10
TOTAL	-	-	0 to 100



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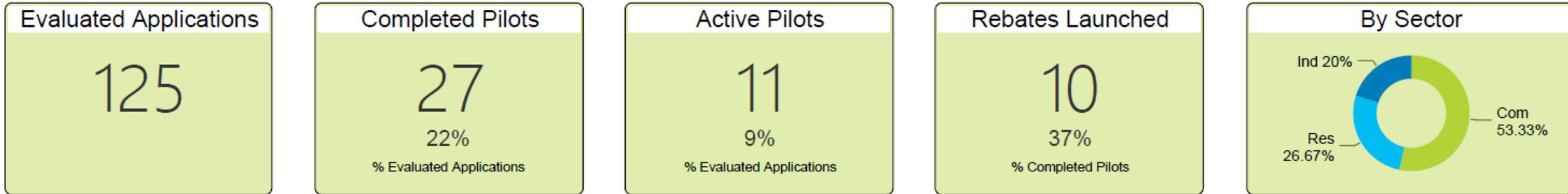




Energy Efficiency Program

Emerging Technologies Program

Updated
1/13/2020



Active Pilots	Current Pilot Tasks	Finish	% Complete
Hydronic Heating Plumbing System Flushing	Descaling Radiators	10/11/19	100%
Venturi Steam Traps Phase 2 (Field Test)	Sign Field Test Agreement (FTA)	12/13/19	50%
Commercial Tankless Domestic Hot Water Array	Field Service Agreement	02/07/20	30%
Steam Boiler Array	Field Service Agreement	02/07/20	30%
Boiler Chemical Descaling	Site # 2 Post Descaling Data	02/14/20	20%
Pipe Insulation	Prepare Software	03/06/20	15%
Low-E Interior Storm Windows	Retrofit Monitoring (Heating Data)	03/19/20	5%
Smart Radiator Valves	Retrofit Monitoring (Heating Data)	03/19/20	15%
Air Deflector for Unit Ventilator (ADUV)	Data Collection of 16 UVs	05/07/20	5%
Residential Thermal Heat Pump	Field Testing	10/30/20	10%
Gas Heat Pump Water Heater (GHPWH)	Field Testing	02/05/21	10%

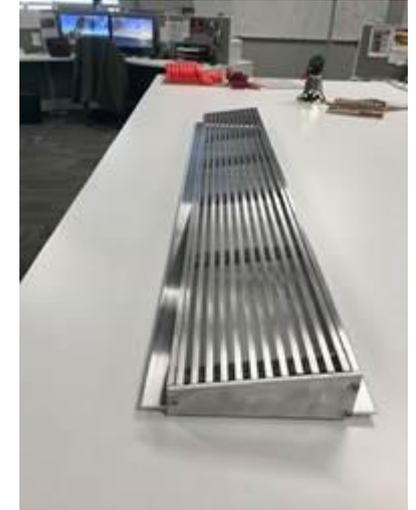


ETP Program Pilots



2019-2020 Active Pilots

- Venturi Steam Traps (Joint with Peoples Gas and Southern California Gas) (TRMv9)
- Unit Ventilator Room Air Diffuser (TRMv10)
- Low E Storm Windows (Joint with ComEd)
- Boiler Descaling Chemical
- Boiler Array
- Commercial On Demand Hot Water (Multi-Family Building)
- Old Radiator Chemical Flushing (TRMv9)
- Pipe Insulation – Online Calculator (TRMv9)
- Gas Heat Pump Water Heater (GHPWH)
- Residential Gas Heat Pump Combi Unit (Space and Water Heating)



Market Transformation Update



Working together, utilities can leverage resources, expand market impacts, and share costs

Market Transformation Collaboratives: Midwest & North American Collaborative

- Partnering with Market Transformation Experts
- Develop MT best practices and methods
- Develop MT initiatives (products & services)
- Facilitate the pooling of resources to implement MT initiatives

Midwest Market Transformation Collaborative: Timeline



2016: FEJA transfers MT authority to IOUs

Early 2018: Nicor Gas contracts with RI

Nov/Dec 2018: Formation of MW MTC



2017: Nicor includes MT into portfolio budget and planning

Sept 2018: ComEd Hosted MT Summit

2019: Development of IL MT Savings Paper into IL TRM v8.0

MW MTC: 2020 Members



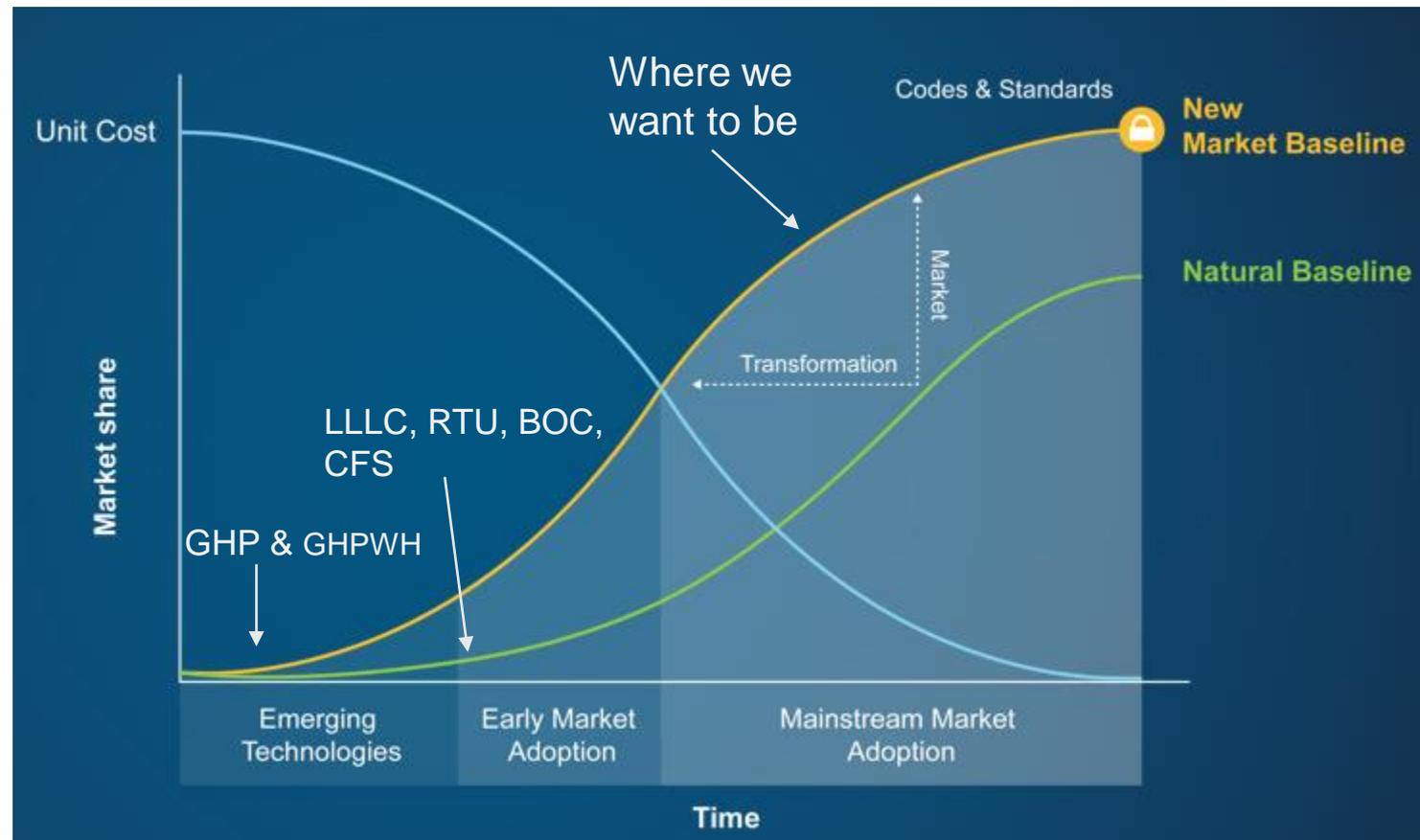
- 7 utilities, over 3 states are committed to 2020
- Illinois, Minnesota, and Michigan



Market Transformation Definition



Market Transformation (MT) is the strategic process of intervening in a market to create lasting change that results in the accelerated adoption of energy efficient products, services and practices.



Market Transformation Activities and Initiatives



- Continued engagement, recruitment, and education other utilities for 2020
- Leverage the Market Transformation Savings Paper Framework in the IL TRMv8.
- Engagement with the SAG MT Working Group savings related to potential MT initiatives

- Market Transformation Initiatives - 2020 and into next plan cycle
 - Building Operation Certification (MT Overlay)
 - Code Compliance and Advancement
 - Midstream Commercial Food Service
 - Baseline Study in 2020
 - Gas Heat Pump Water Heater (GHPWH)
 - Market Characterizations Study in 2020
 - Field demonstration pilots
 - Gas Heat Pump Combination Units
 - Field demonstration pilots
 - Condensing Rooftop Units

Thank You!



Energy
Efficiency
Program

Any Questions?