



Welcome

***NEEA Board Meeting – Day 1
Monday, September 15, 2025***



Introductions

***NEEA's mission:
NEEA catalyzes the most efficient use of
energy for a thriving Northwest.***

***NEEA's purpose:
An alliance of utilities and partners that
pools resources and shares risks to
transform the market for energy efficiency
to the benefit of all consumers in the
Northwest.***

Group Norms

Communicate with...

- Compassion for others and ourselves
- Positive intentions and honesty
- Thoughtful feedback for others (and invite it for ourselves)
- Curiosity rather than judgement
- A growth mindset
- Humility and limited influence from ego
- Patience for ourselves, each other, and the processes we work through together

Reflect on...

- How and why this experience may be healthily uncomfortable
- Our roles in systems and institutions

Commit to...

- Engaging in this work, however engagement may look for you
- Being accountable for both our intentions and impacts
- Being both a teacher and a learner
- Facilitate everyone's participation in discussions
- Engaging in conflict and disagreement with respect for each other

Governance

NEEA Board Secretary

Board Risk Management Follow-Up

2024 Board Self-Assessment Actions

Public Interest Board Seat Election

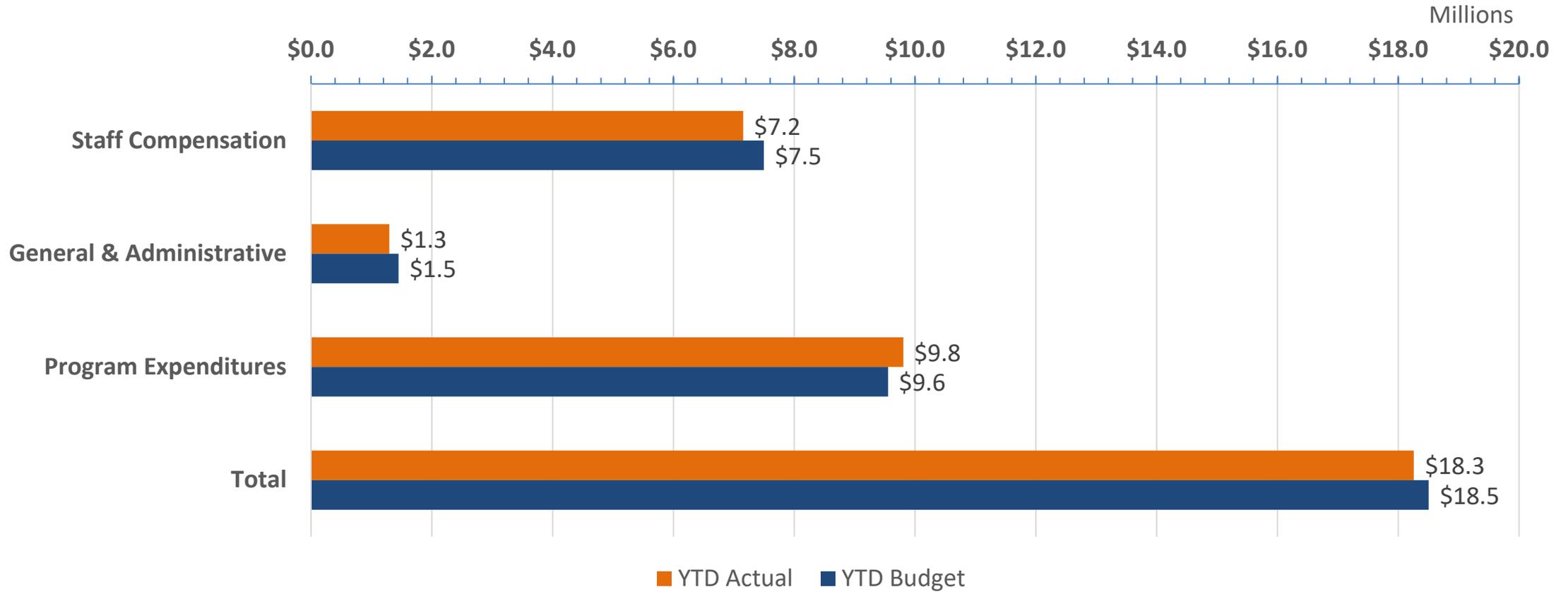
Finance

Q2 2025 Financials



Electric Expenses YTD through Q2 2025

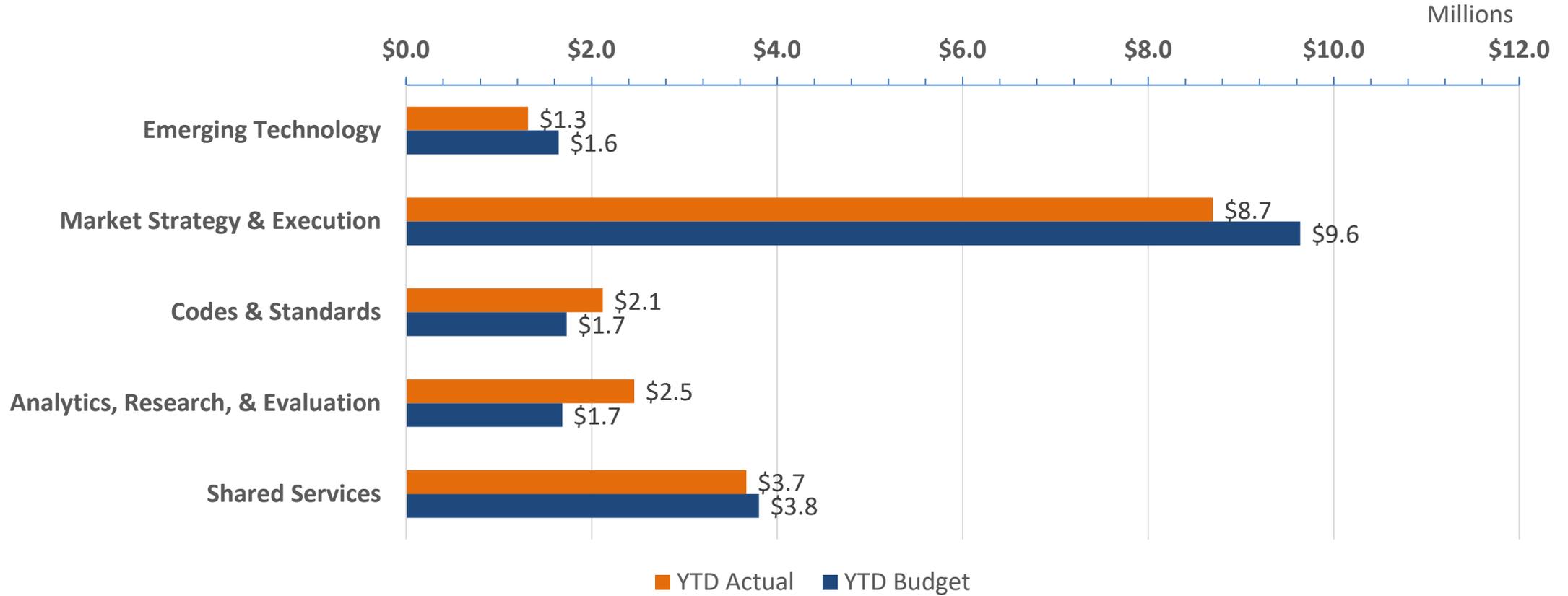
YTD Electric Expenses





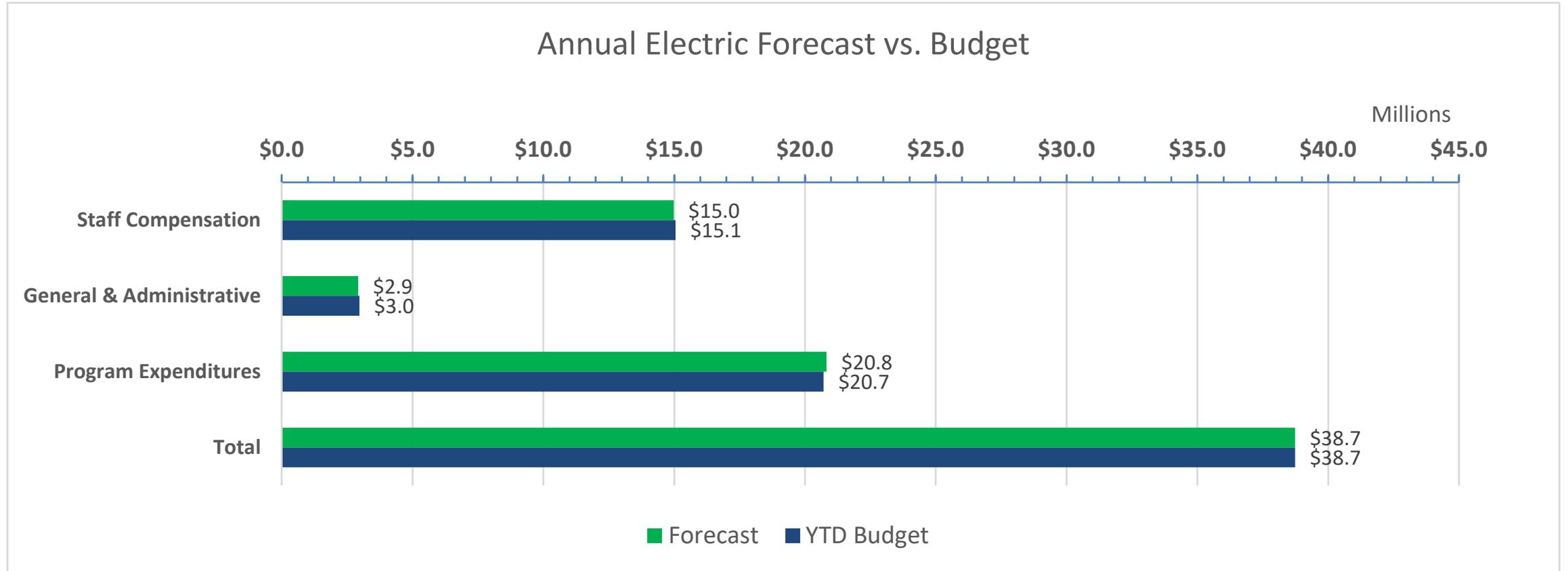
Q2 2025 YTD Electric Expenses by Workstream

YTD Electric Expenses by Workstream





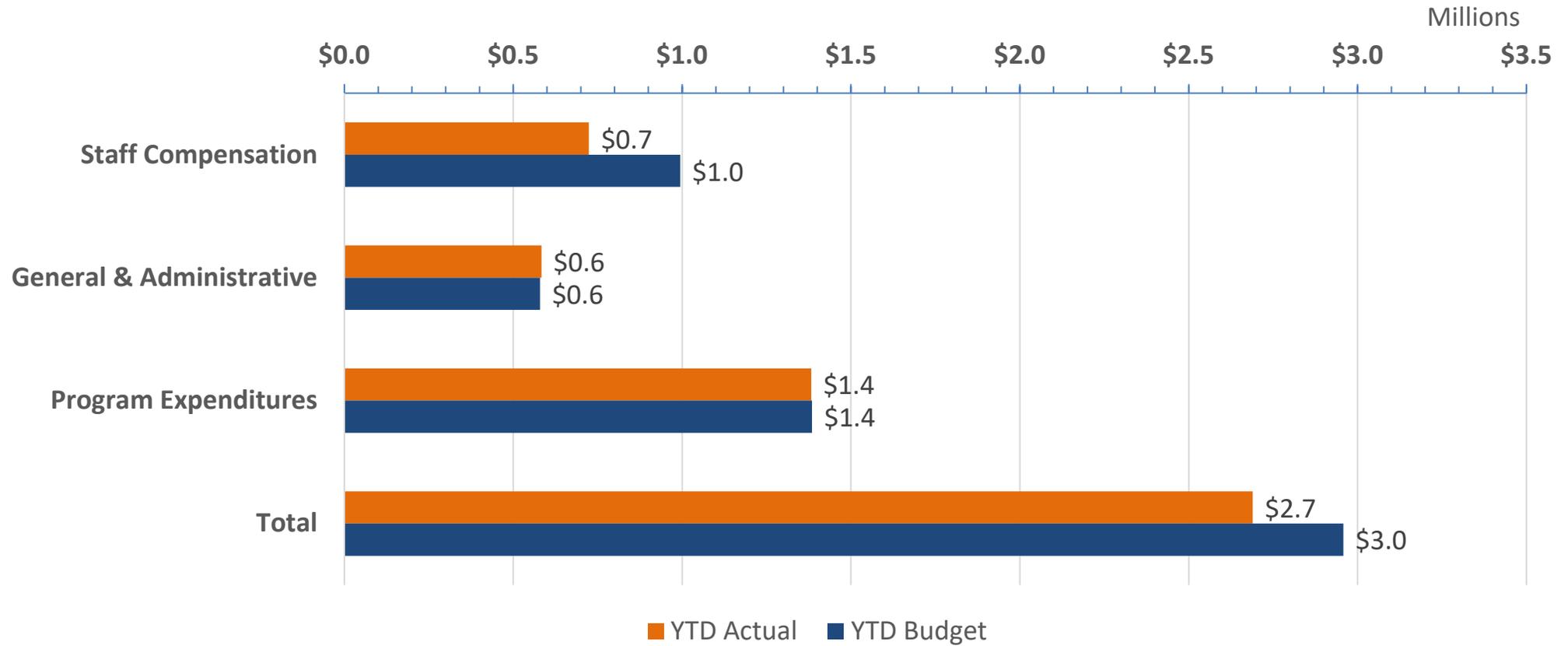
2025 Electric Forecast as of July





Natural Gas Expenses YTD through Q2 2025

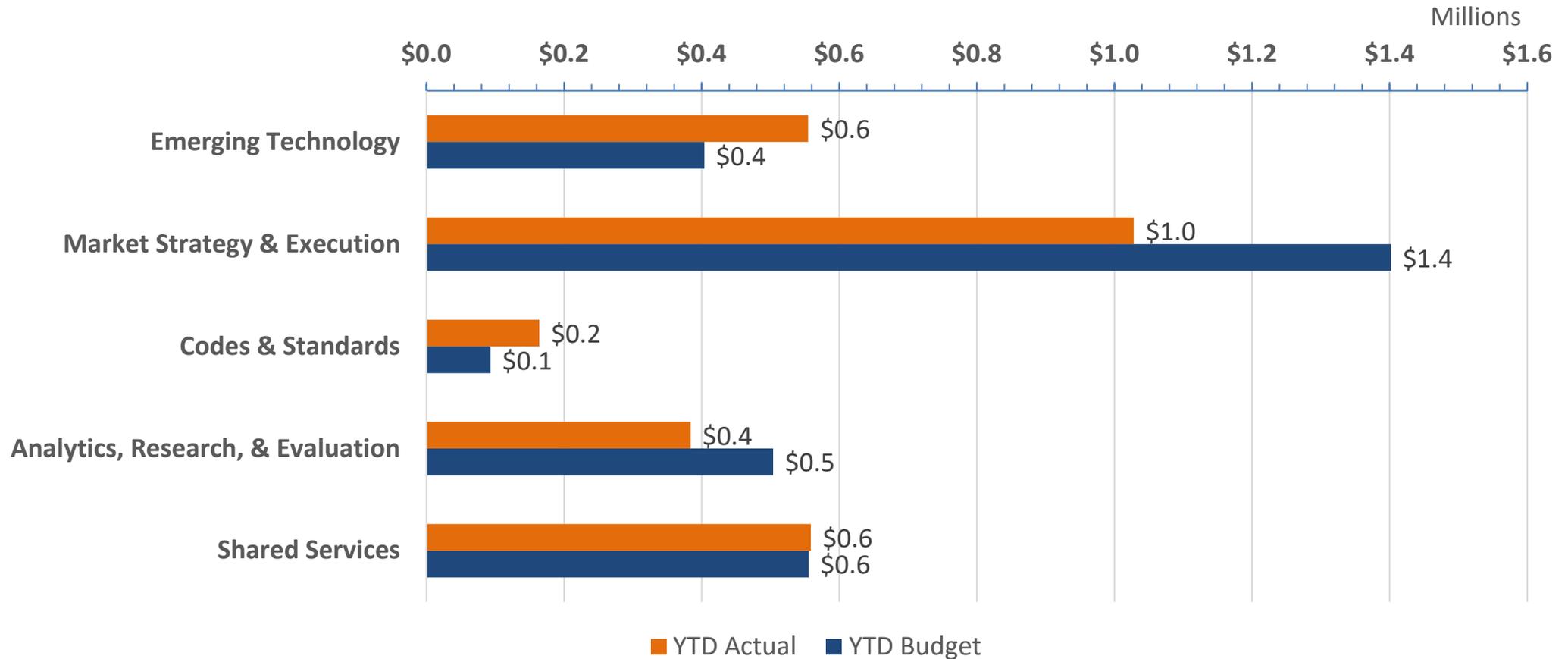
YTD Natural Gas Expenses





Q2 2025 YTD Natural Gas Expenses by Workstream

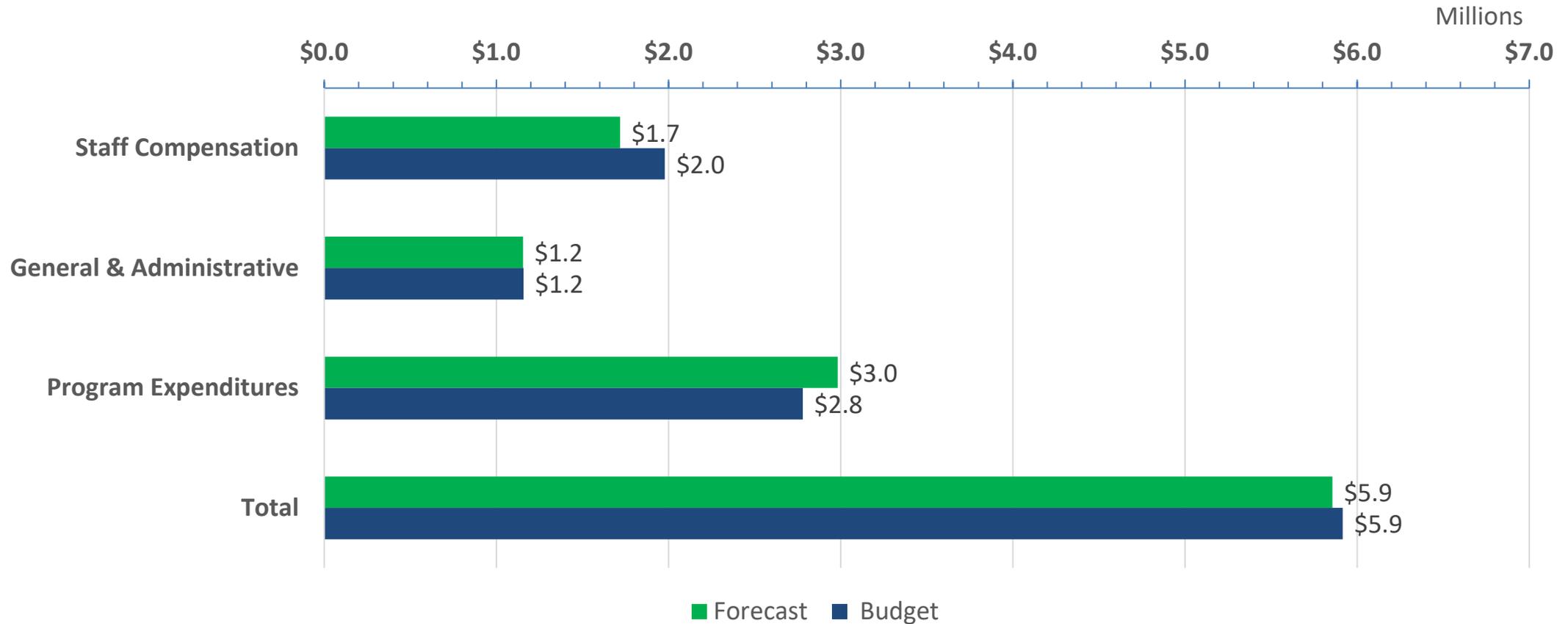
YTD Natural Gas Expenses by Workstream





2025 Natural Gas Forecast as of July

Annual Natural Gas Forecast vs. Budget





Balance Sheet summarized (unaudited) Q1 2025

	Current Qtr End (June 2025)	Previous Qtr End (March 2025)	Last Fiscal Year (December 2024)
ASSETS			
Current Assets			
Cash and Cash Equivalents	\$ 14,336,965	\$ 25,001,613	\$ 14,473,898
Accounts Receivable	13,873,295	760,534	204,764
Other Current Asset	1,183,820	1,469,506	965,171
Total Current Assets	\$ 29,394,079	\$ 27,231,654	\$ 15,643,833
Fixed Assets	1,725,878	1,670,190	1,618,572
Right of Use Asset : Lloyd Lease	3,198,360	3,336,816	3,474,889
Total ASSETS	\$ 34,318,318	\$ 32,238,660	\$ 20,737,294
LIABILITIES & EQUITY			
Current Liabilities			
Advances From Funders	5,040,400	4,359,454	5,686,580
Total Current Liabilities	\$ 26,863,033	\$ 24,800,582	\$ 13,270,010
Total Long Term Liabilities	\$ 4,052,677	\$ 4,217,291	\$ 4,379,832
Net Assets			
Equity			
Without Donor Restriction	\$ 3,402,608	\$ 3,220,786	\$ 3,051,657
With Donor Restriction	-	1	35,796
Total Net Assets	\$ 3,402,608	\$ 3,220,787	\$ 3,087,452
Total LIABILITIES & EQUITY	\$ 34,318,318	\$ 32,238,660	\$ 20,737,294
Net Assets Without Donor Restriction Detail			
Property and Equipment, net of Right to Use Asset and associated Liability	871,562		
Net Reserved for End-Use Load Research (NREL Funding)	439,931		
Net Financial Reserve	2,091,115		
Total Net Assets Without Donor Restriction	3,402,608		

Draft Form 990

Public Board Meeting Adjourns





Welcome

***NEEA Board Meeting – Day 2
Tuesday, September 16, 2025***



Introductions

***NEEA's mission:
NEEA catalyzes the most efficient use of
energy for a thriving Northwest.***

***NEEA's purpose:
An alliance of utilities and partners that
pools resources and shares risks to
transform the market for energy efficiency
to the benefit of all consumers in the
Northwest.***

Group Norms

Communicate with...

- Compassion for others and ourselves
- Positive intentions and honesty
- Thoughtful feedback for others (and invite it for ourselves)
- Curiosity rather than judgement
- A growth mindset
- Humility and limited influence from ego
- Patience for ourselves, each other, and the processes we work through together

Reflect on...

- How and why this experience may be healthily uncomfortable
- Our roles in systems and institutions

Commit to...

- Engaging in this work, however engagement may look for you
- Being accountable for both our intentions and impacts
- Being both a teacher and a learner
- Facilitate everyone's participation in discussions
- Engaging in conflict and disagreement with respect for each other

Consent Agenda



Motion: consent agenda

Approve the Q2 2025 Board Orientation
and Q2 2025 Board Meeting minutes

Executive Director Update

2025 Q3 ED Update

Becca Yates, Executive Director, NEEA

September 16, 2025





Welcome to Boise!



Delivering on regional priorities

Leveraging NEEA's expertise, relationships and influence in the market to:

- Accelerate opportunities for near-term energy savings and peak load reduction
- Adaptively manage the electric and gas portfolios to optimize both, including dual-fuel opportunities
- Ensuring a future pipeline of opportunities
- Delivering value across the region, including rural areas and to all Northwest consumers

Heat Pump Water Heaters: Leading National Engagement to Support Regional Opportunity

- Developing a national partner matrix with the Advanced Water Heating Initiative to identify HPWH efforts across the country
- Supporting NEEA's national engagement strategy and efforts to increase HPWH adoption in the Northwest, including 15% boost in total sales

Advanced Commercial Water Heating: Expanding Market Presence + Influence

Accelerating efficient dual-fuel + gas water heating in multi-family and commercial markets through:

- Field demonstrations
- Data modeling
- Manufacturer engagement





High-Performance HVAC: Leveraging Expertise to Explore New Markets

Multiple benefits of expanding electric program to advance efficient gas technologies

- Simplifies message for promoting high-performance approach to industry designers and specifiers
- Benefits both gas and electric utilities through larger representation of building types, sizes and locations
- Realizes natural market growth of hydronic air to water heat pump systems where both fuel options benefit from technical guidance



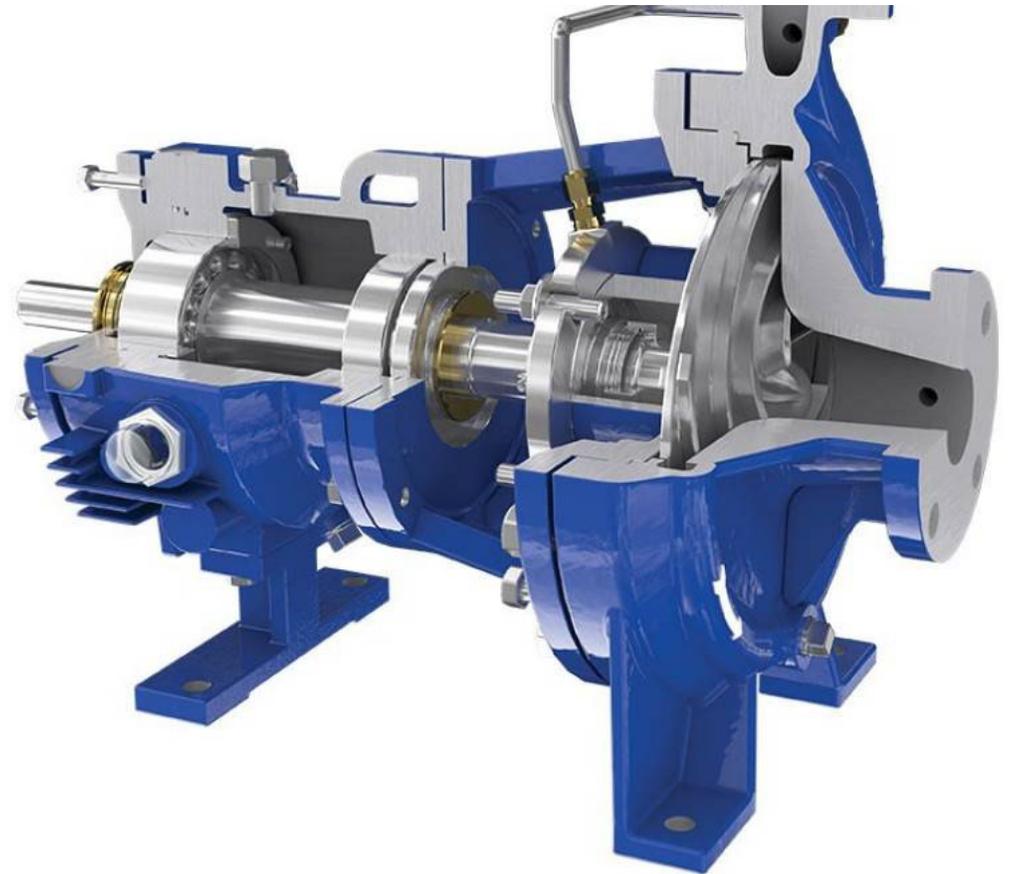
Pumps: Expanding to Agricultural + Industrial Markets

Agricultural

- Partnering with market leaders Franklin Electric and Montana distributor 2M Company
- Monthly sales data in partnership with senior leadership
- Reviewing preliminary findings on agricultural pump market research

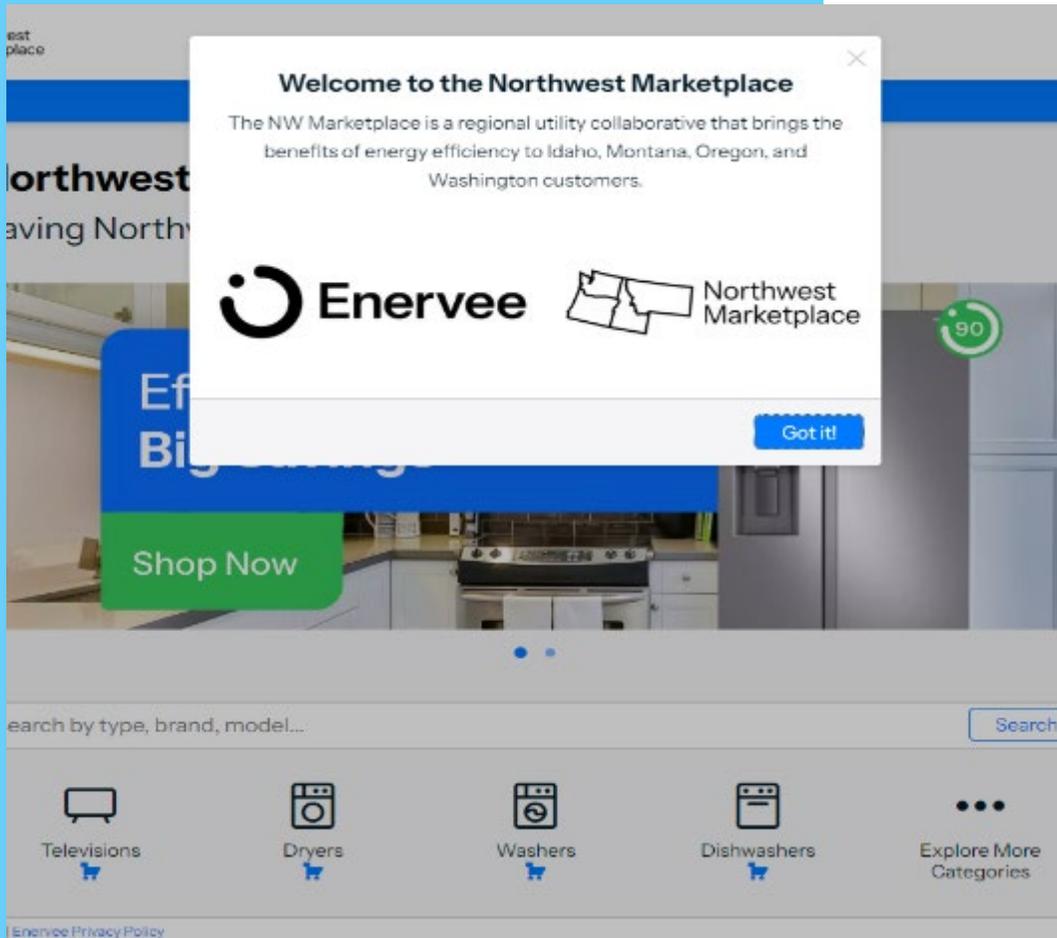
Industrial

- Exploring program expansion to include American National Standards Institute (ANSI) process pumps – an industrial, all-purpose pump



Market Data Driven Solution: Online Marketplace

- Scanning project testing online marketplace
- Offering consumers an efficient way to shop for energy-saving products in 40+ categories, based on an efficiency score
- Tracking customer purchasing and adoption of efficient products in both rural and urban markets
- Data to provide new insights into energy efficient consumer product selection, measure lift in regional efficient product sales



nw.enervee.com



Other Regional Updates

Highlights from Quarterly Advisory Meetings

- **Regional Portfolio Advisory Committee** – Determined participation in the Q4 Level Up heat pump water heater regional awareness campaign.
- **Natural Gas Advisory Committee** – Voted to advance the Residential Dual-Fuel HVAC Program, focused on efficient systems with grid-enabled controls that provide both energy and cost savings without sacrificing year-round comfort.
- **Cost Effectiveness and Evaluation Advisory Committee** – Aligned on final recommendations on NEEA's methodology and claimed savings from electric building codes.



2026 Operations Planning Underway

Timing	What to Expect
Oct 14	Draft Ops Plan Emailed to the Board, RPAC, NGAC
Oct 16	Draft Ops Plan Overview Webinar
Oct 29	NGC Meeting
Oct 30	Feedback due from Board + Committee Members
Nov 12	Finance & Audit Committee Meeting
Dec 8	December Board Meeting (<i>Vote on 2026 Ops Plan</i>)



Leadership in Energy Efficiency Awards: Nominations Open August 4 – September 19



Nominate teams, projects and individuals for these awards:

- **Rising Star**
- **Innovative Collaboration**
- **Lifetime Achievement**

www.neea.org/leadershipawards



EFX26: Call for Session Topics Opens September 15



Submit your ideas for
conference sessions and
keynote speakers

September 15 – October 24

www.neea.org/EFX

Thank You!



Strategic Discussion: Affordability



Today's Goals

- Revisit outcomes and take-aways from June Board conversation on affordability, including staff recommendations.
- Share recent Northwest Market Characterization study.
- Discuss future research opportunities and recommended approach to future affordability conversations.



Take-aways Board conversations to date

- Affordability is a critical issue for the region and one that utilities are all working to address.
- NEEA should focus on strategies that benefit the entire region and align with NEEA's core Market Transformation focus.
- NEEA should pursue activities that use staff time wisely and to the greatest benefit for the region.



Staff Recommendations

- NEEA should not pursue bulk buying opportunities or fixed price installation strategies for the region.
- NEEA should explore potential research questions and approaches to better understand the barriers to affordability and the drivers of cost across the region.
- NEEA should continue to opportunistically explore innovative financing strategies for efficient products and services as part of our core work.
- NEEA should continue to leverage Board meetings to update the Board and explore issues of affordability. Programmatic approaches will continue to be discussed within NEEA's committees.



2024 Northwest Market Characterization: Summary Findings

**Prepared for NEEA Board of Directors
September 2025**

This slide deck is a summary of the 2024 Northwest Market Characterization written report conducted by LD Consulting. Readers should refer to the report and supplemental material for a complete synthesis of the findings available at [neea.org](https://www.neea.org).



Agenda

- Background
- Energy Costs and Energy Burden
- Purchasing Behavior and Market Actors
- Findings and Discussion

Background

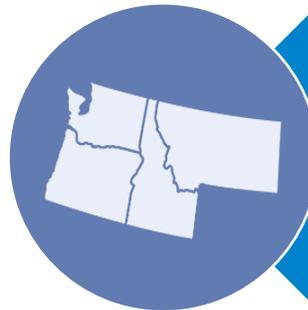
NW Market Characterization Study



NEEA's fourth goal focuses on advancing the delivery of energy efficiency benefits to all Northwest consumers through market transformation



In support of this effort, research was conducted to understand how the diffusion of these benefits occurs within different consumer segments

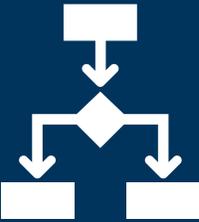


The primary emphasis of this research is on how geography influences the spread and impact of market transformation

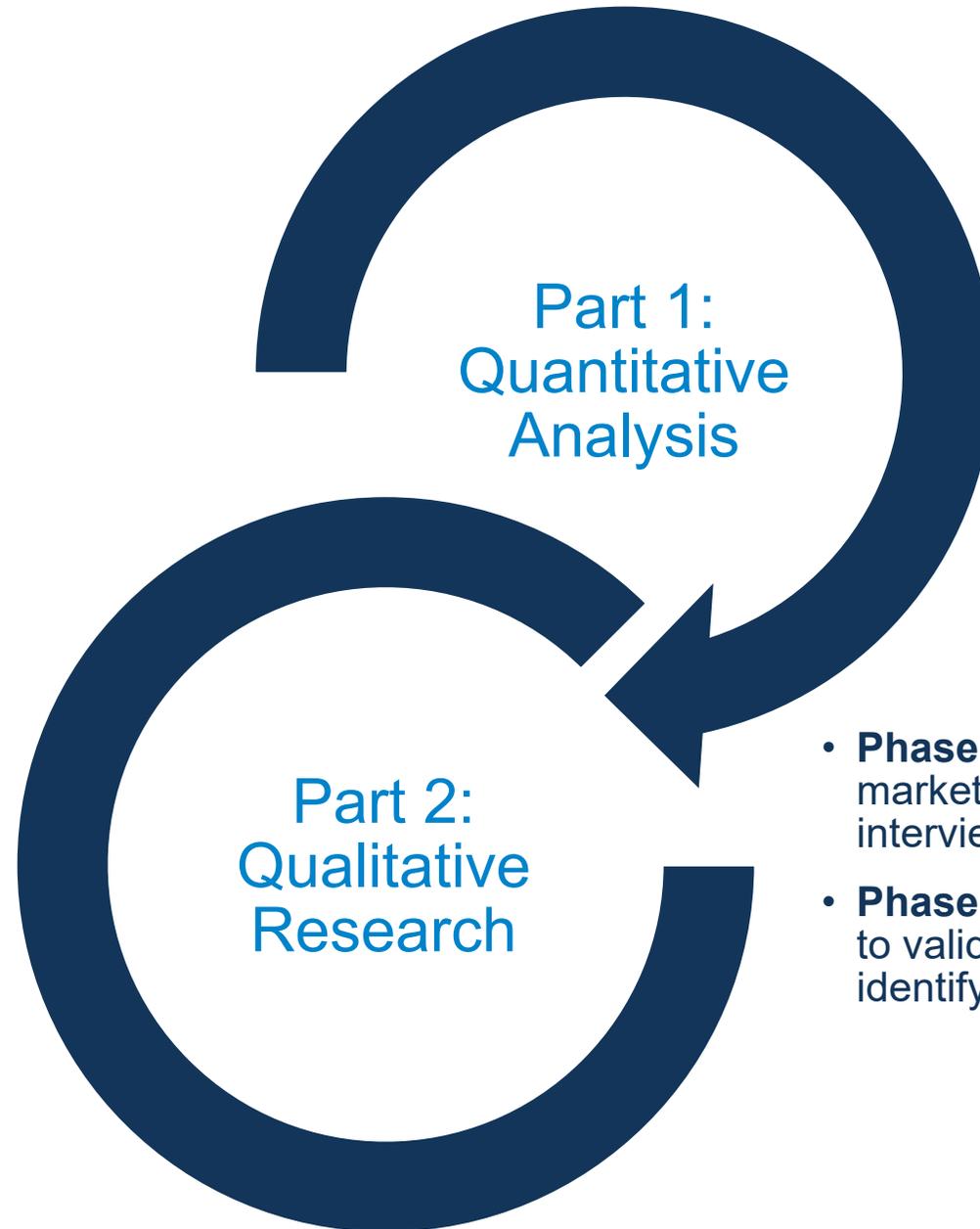
Research objectives & methods



Goal: compare characteristics of rural, suburban, and urban residential markets



Outcome: identify future research and potential strategies that could accelerate the benefits to rural markets and the region



Part 1: Quantitative Analysis

- **Phase 1:** Refine locale definition & collect secondary data
- **Phase 2:** Conduct comparative analysis across locales

Part 2: Qualitative Research

- **Phase 3:** Engage rural market actors through interviews and surveys
- **Phase 4:** Host workshop to validate findings and identify recommendations

Categorizing geography into four locales

01



City (Urban)

Large, densely populated areas, defined using the incorporated City's legally defined boundaries

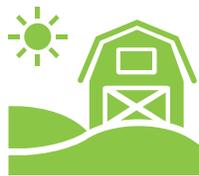
02



Suburb

Residential areas situated adjacent to or very near a City, outside of the City's legally defined boundary

04



Rural

Sparsely populated areas, defined as not being a City, Suburb or Town.

03



Towns

Small, densely populated communities independent from City or Suburb

Greater Disaggregation (not just urban-rural designation)

Examples:

Portland Metro
and Idaho Falls
areas

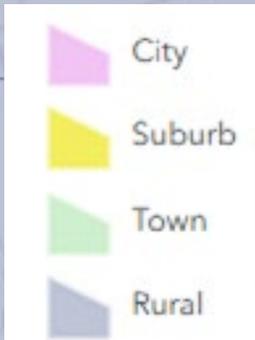
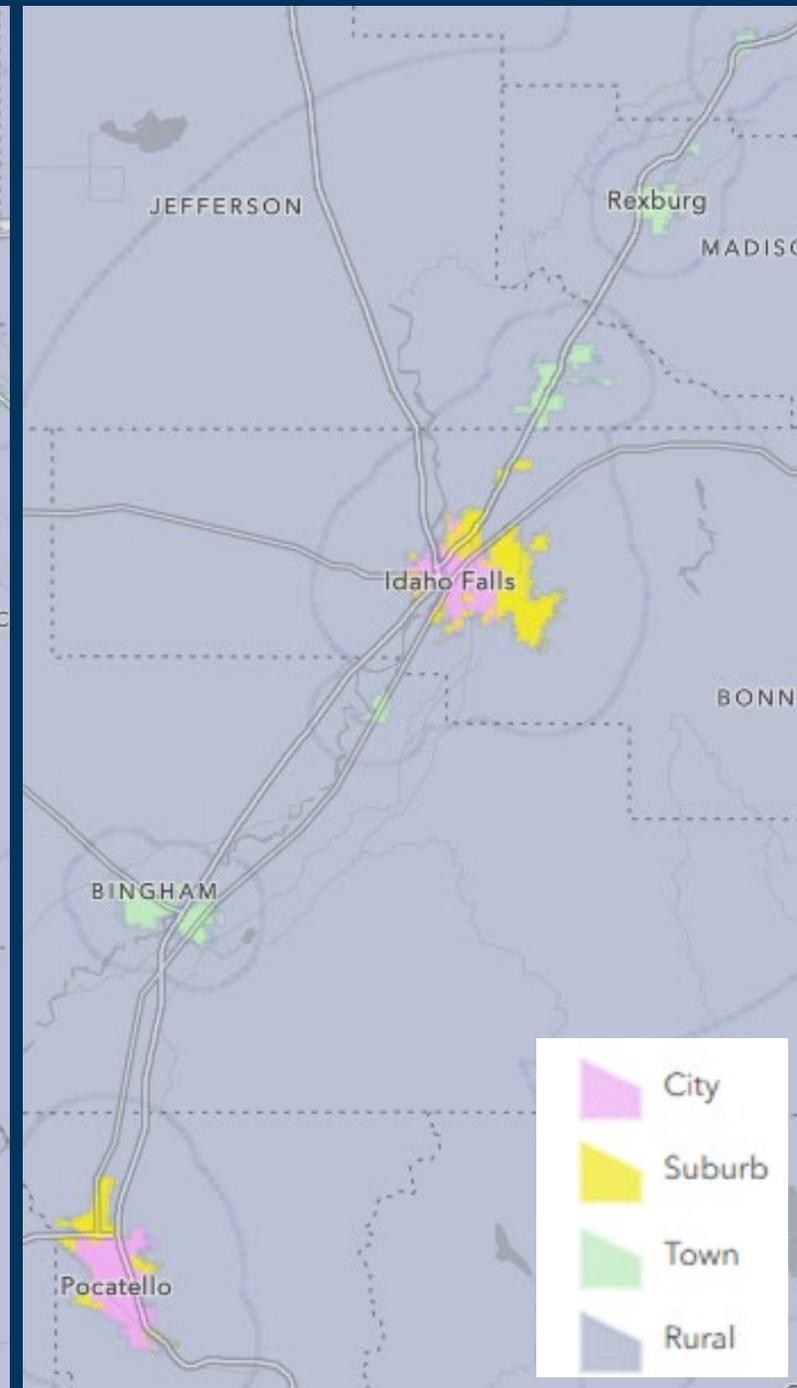
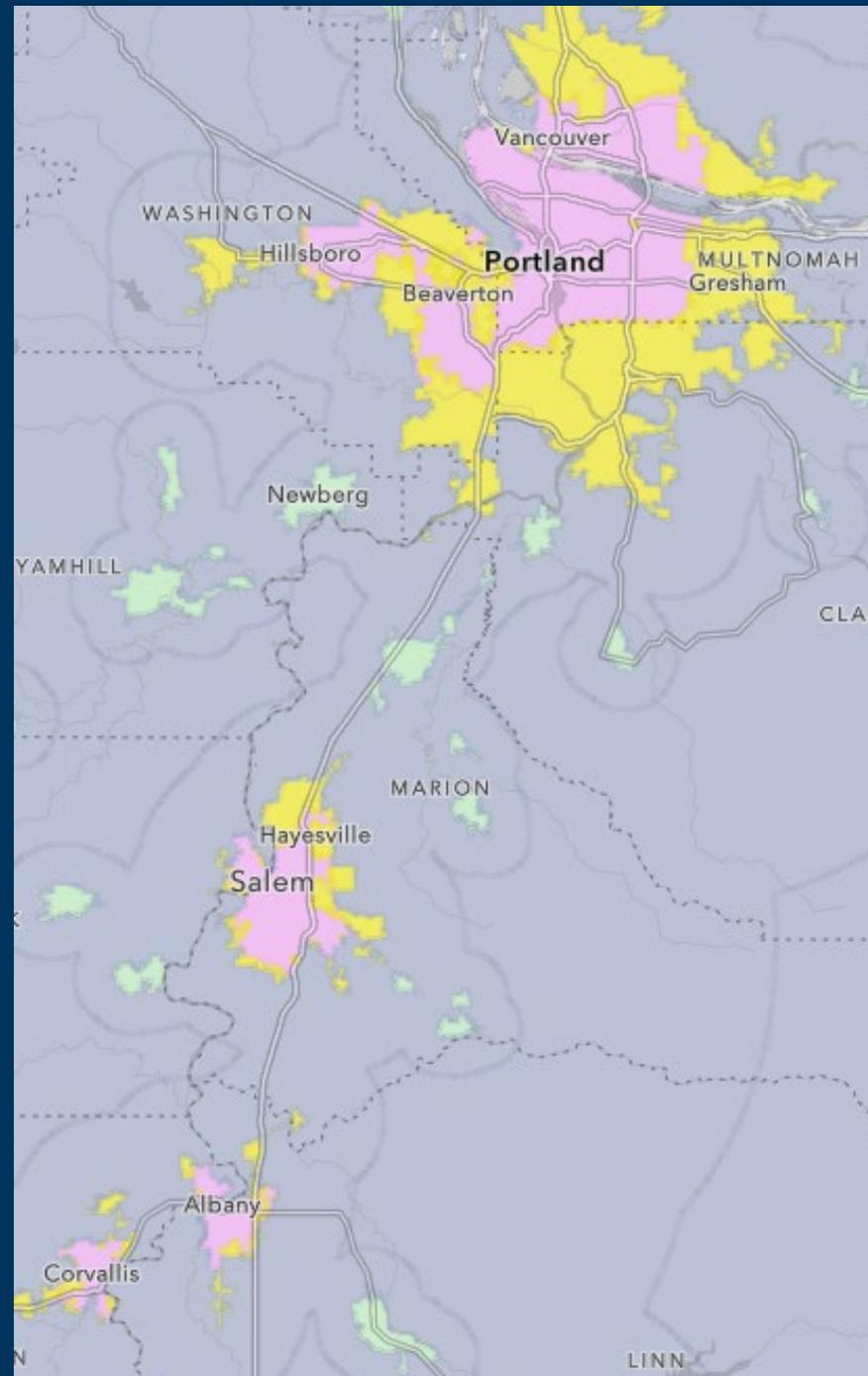
Non-technical description

City = core of the city

Suburb = rest of the city

Town = small town
(not associated with a city)

Rural = everything else



Measuring energy burden

- As a key research indicator, energy burden, the percentage of gross household (HH) income spent on energy costs, is measured by:

$$\text{Energy Burden (\%)} = \frac{C}{I}$$

- Where **C** is the average housing energy cost and **I** is the average annual household income
- Energy burden is impacted by energy consumption (and therefore: efficiency, size of home, weather, etc.), energy rates, and HH income
- A household is considered “**energy burdened**” if their energy burden exceeds 6%

Study limitations

- There are three key limitations worth noting:
 - The quantitative analysis focused on **describing the data** rather than identifying cause-and-effect relationships
 - The study is a **snapshot in time**
 - The qualitative analysis concentrated on people, groups, and market participants in **rural and small-town areas only**



Energy Costs and Energy Burden



Rural households have the highest annual energy costs

Average Annual Energy Cost by Locale



Rural households spend nearly **\$1k more** than city households on annual energy costs, and around **\$700 more** than town and suburban households



Rural households have the highest relative annual energy costs across all energy sources

Average Annual Energy Cost by Locale and Energy Source

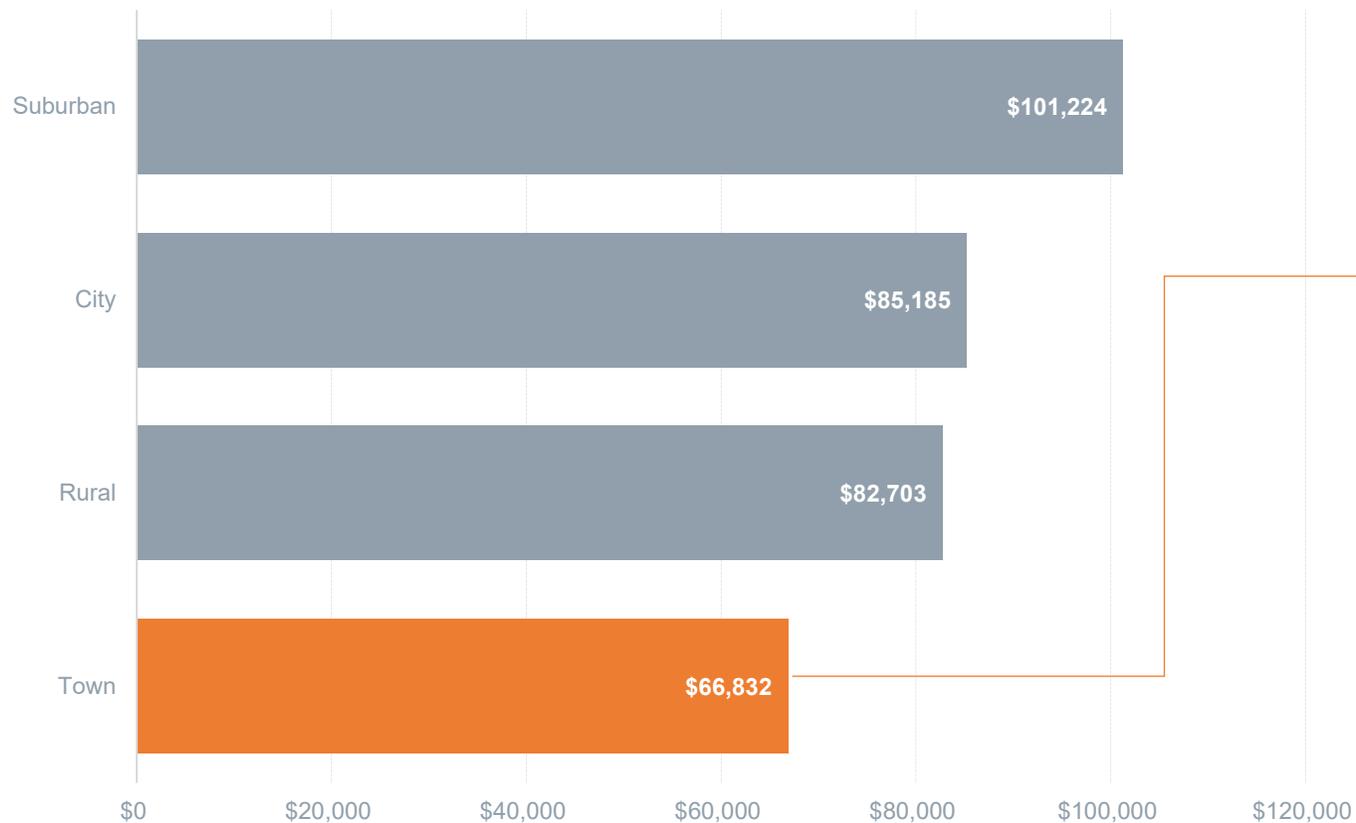


Rural households have higher average energy costs by every source, including electric, gas, and other (e.g., fuel oil, wood, etc.)



Towns and more remote areas (rural; town) have much lower incomes

Median HH Income by Locale

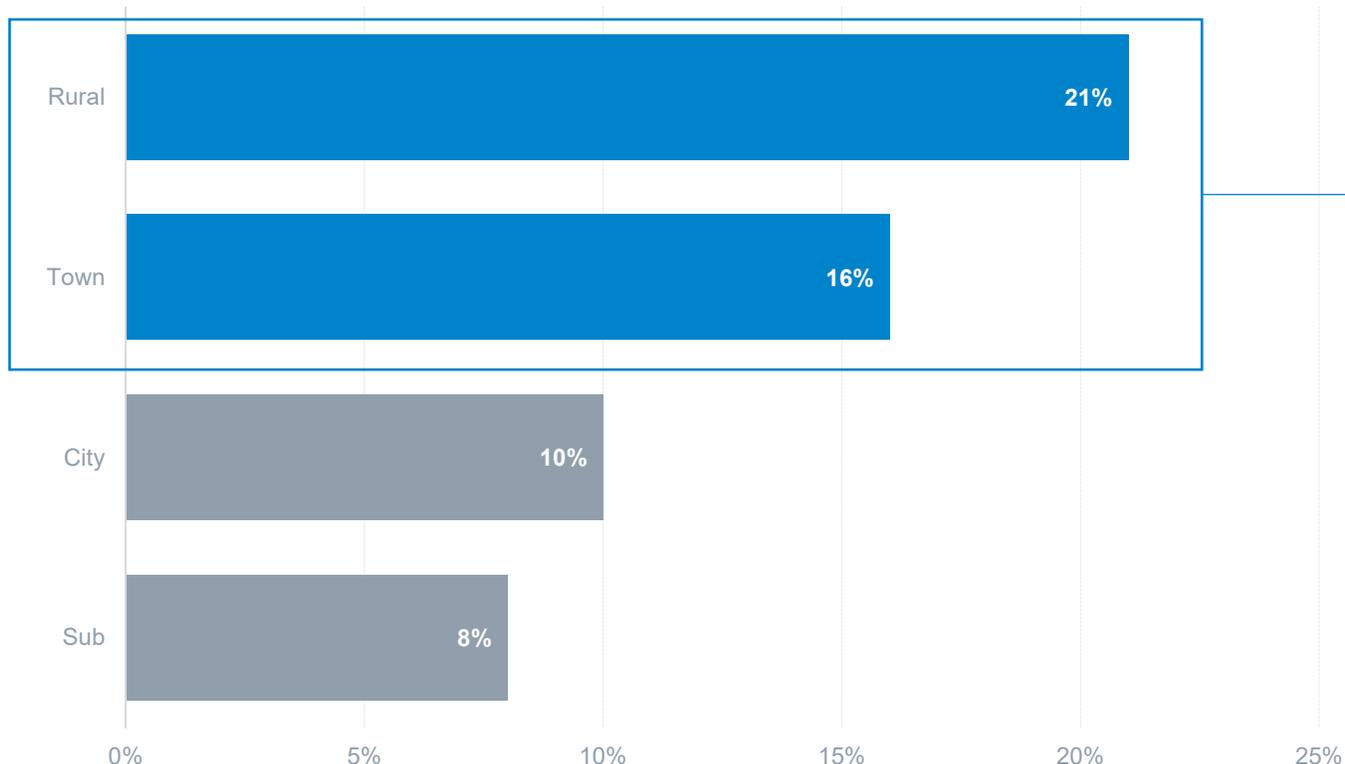


Town households earn approximately **one-third less** than suburban households, and around **20 percent less** than city and rural households



Towns and rural areas have a higher percent of energy burdened households compared to other locales

Percentage of Energy Burdened HH by Locale

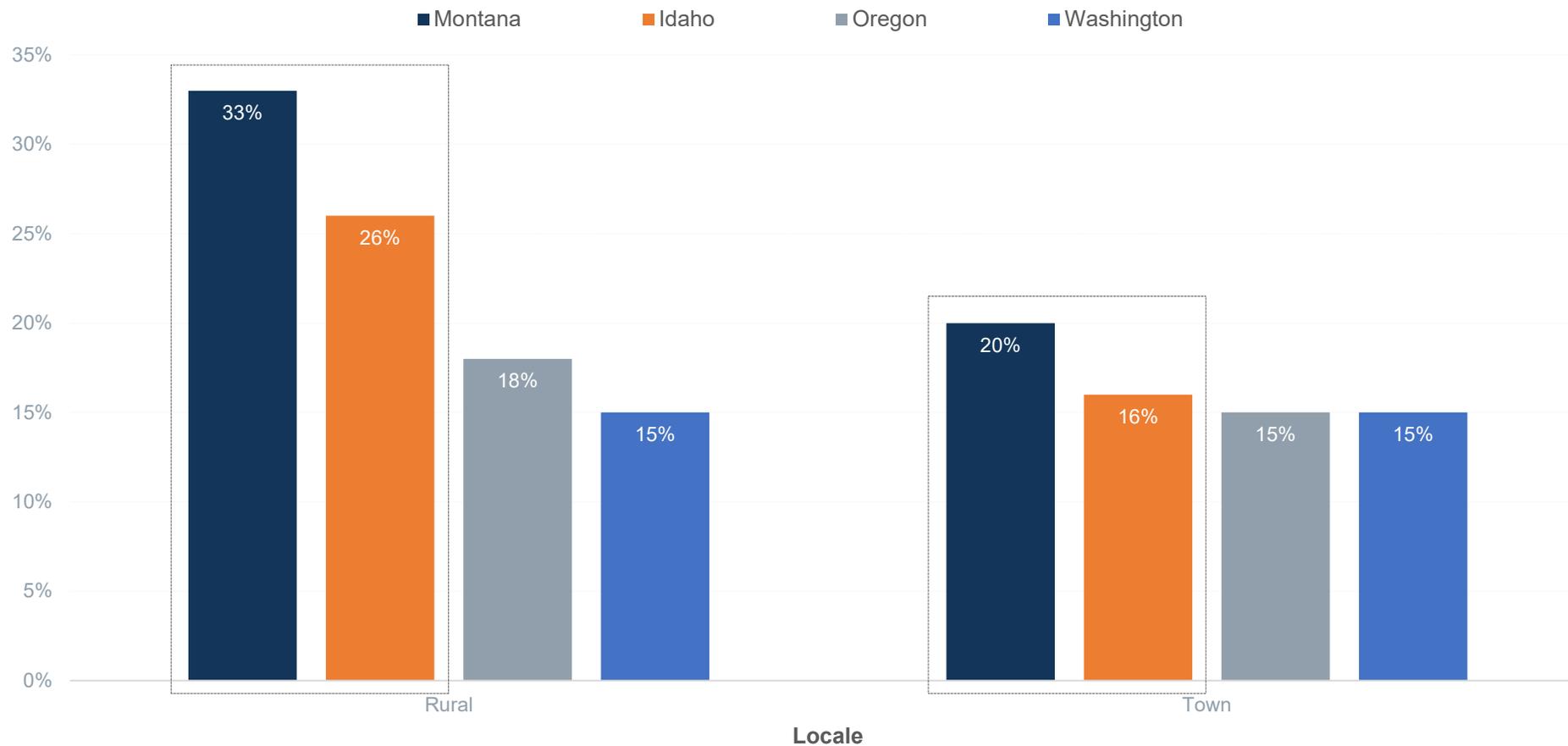


21% of rural households and 16% of town households face a high energy burden, meaning they spend over 6 percent of household income on energy costs



Montana and Idaho have a higher relative share of energy burdened households

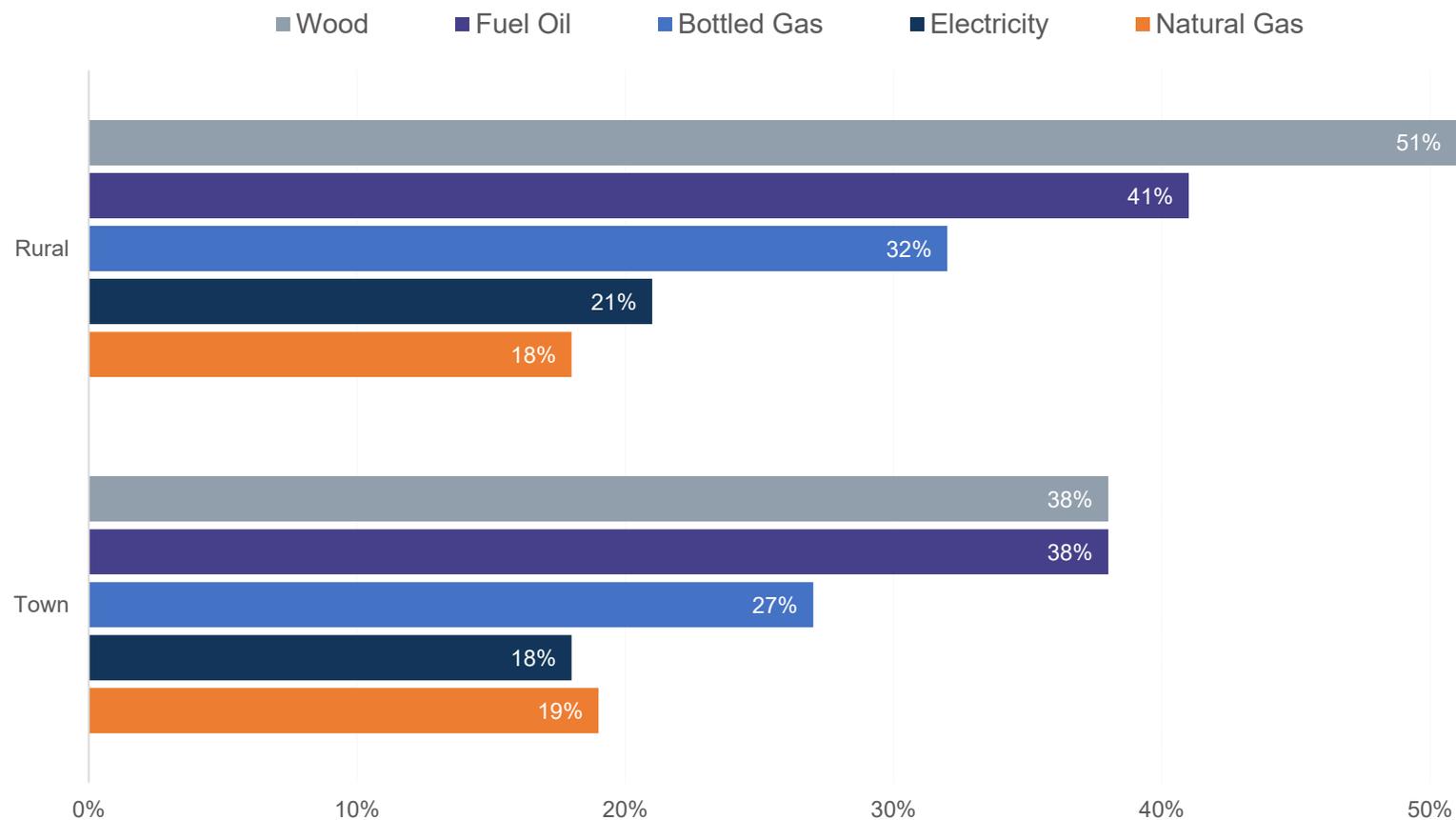
Percentage of Energy Burdened HH by State, Rural and Town Locales





Analyzing energy burden by other factors suggest some groups face an even higher energy burden – for example...

Percentage of Renter-Occupied HH that are Energy Burdened by Fuel Type



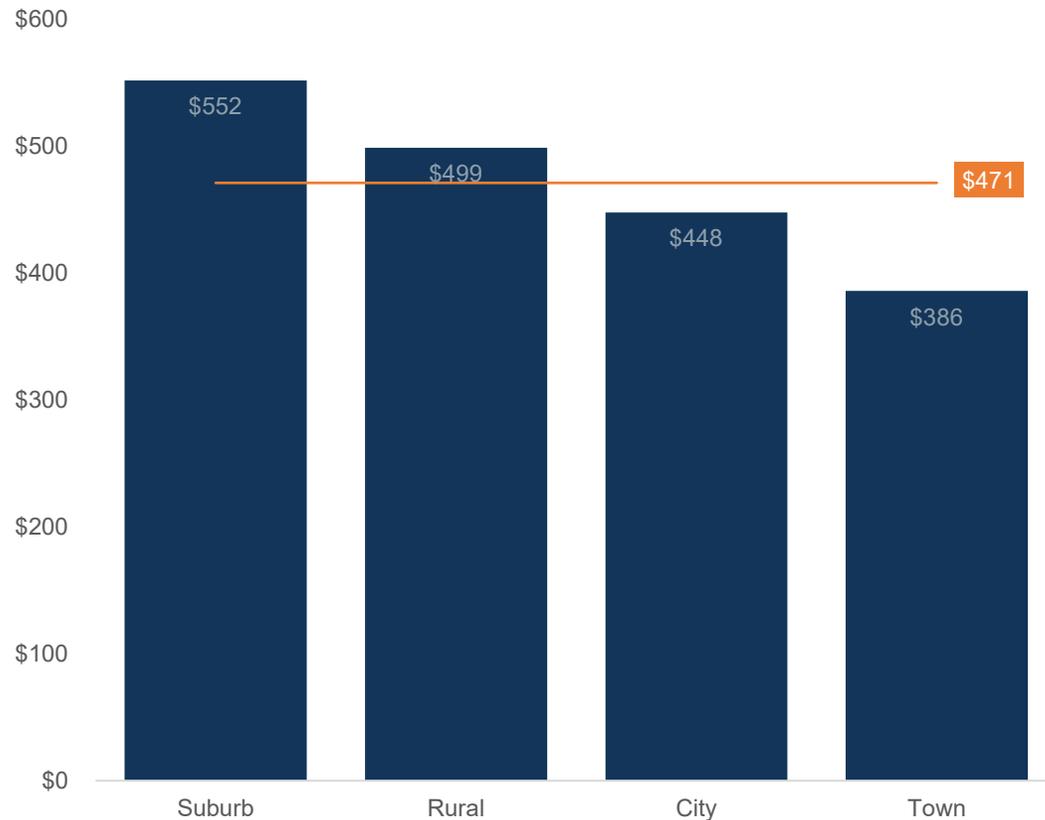


Purchasing Behavior and Market Actors

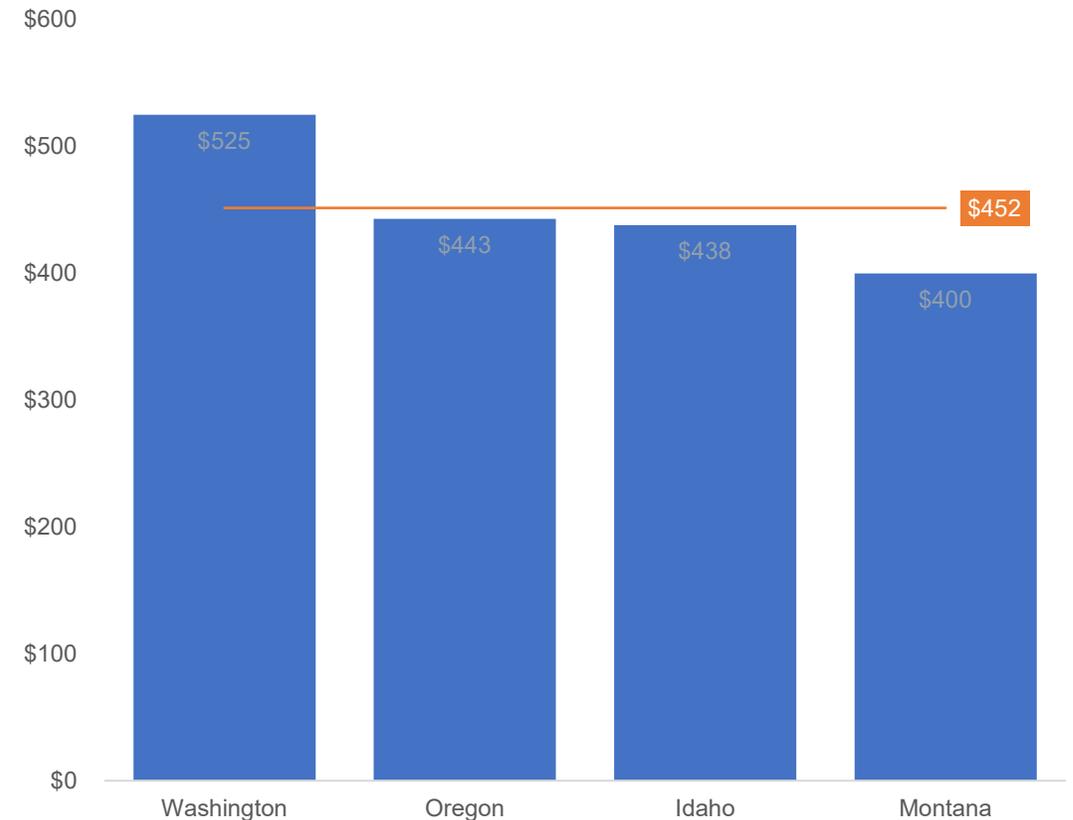


HHs spend between \$386 and \$552 on HVAC work across locales and between \$400 and \$525 across states

Average Annual Expenditure on HVAC Work by Locale



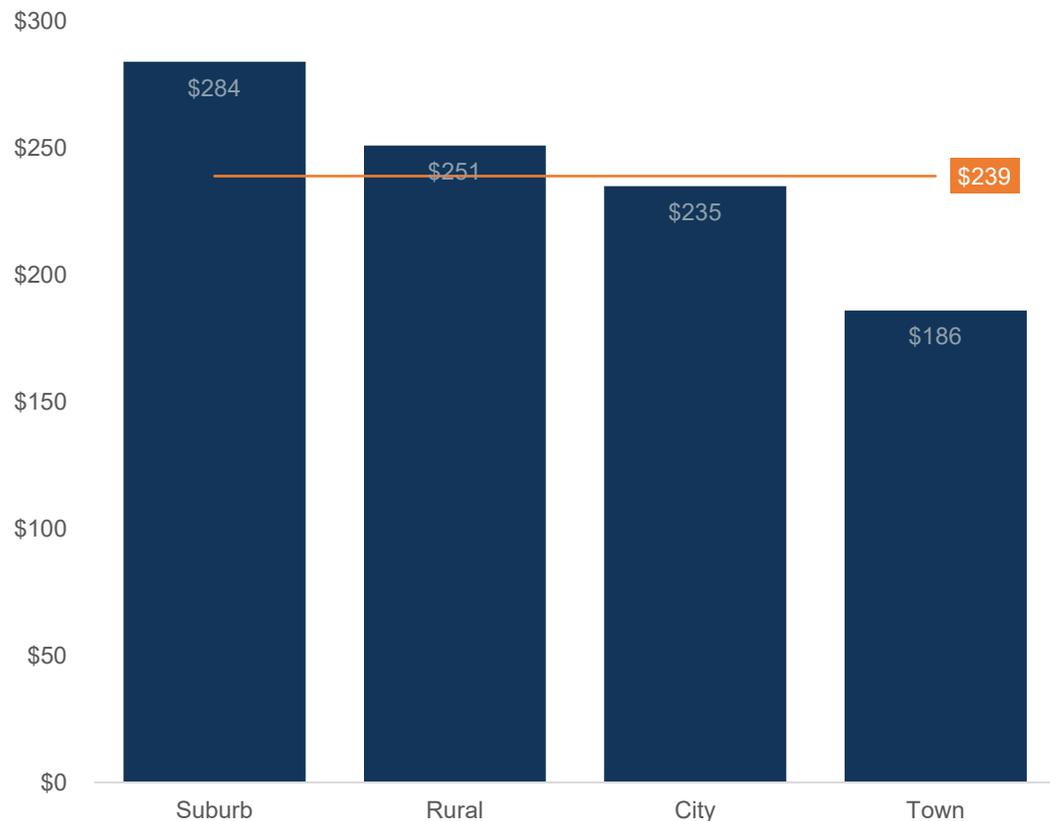
Average Annual Expenditure on HVAC Work by State



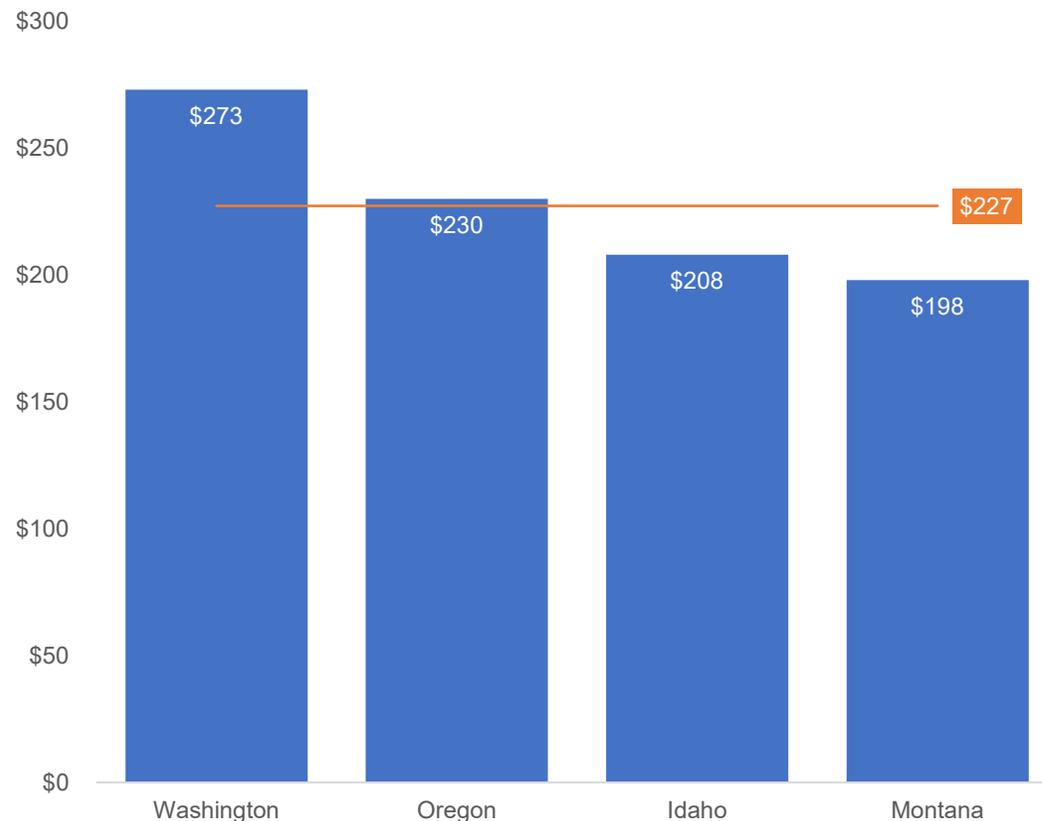


HHs spend between \$186 and \$284 on plumbing across locales and between \$198 and \$273 across states

Average Annual Expenditure on Plumbing / Water Heating Labor by Locale



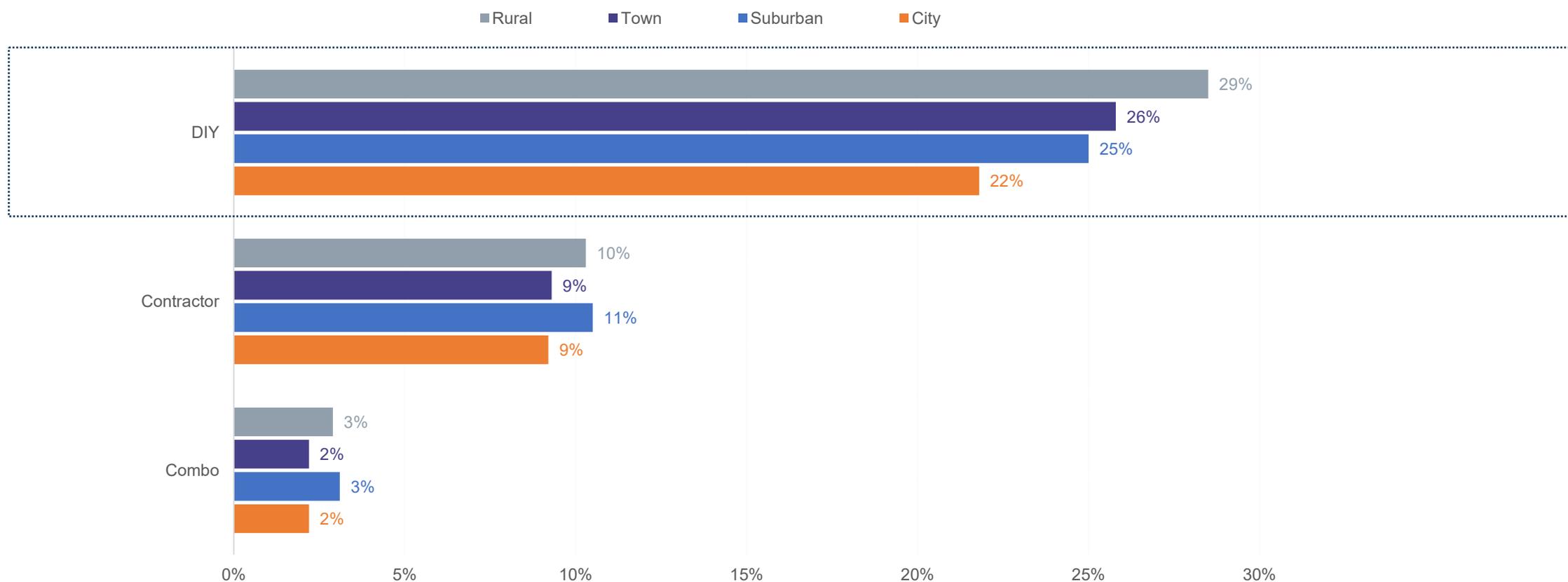
Average Annual Expenditure on Plumbing / Water Heating Labor by State





Of HHs that had a home improvement project, most performed the work on their own across all locales

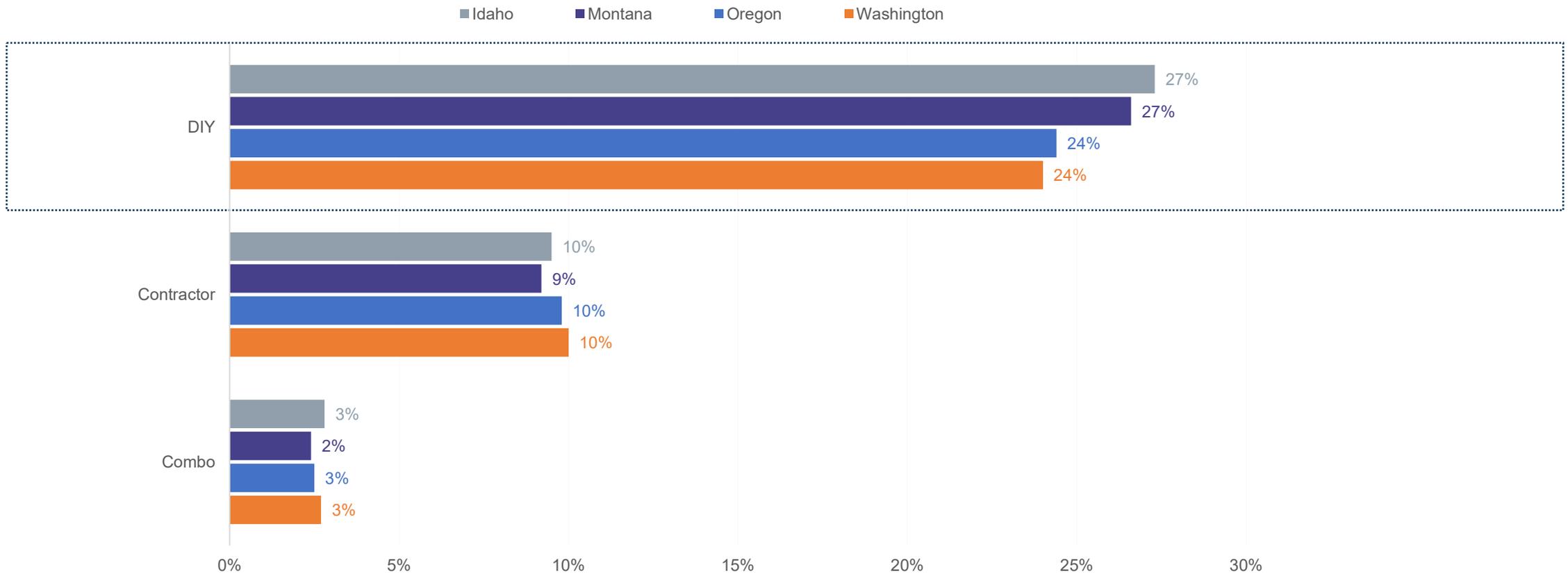
Home Improvement Project by Primary Labor Source (of HH with Project)





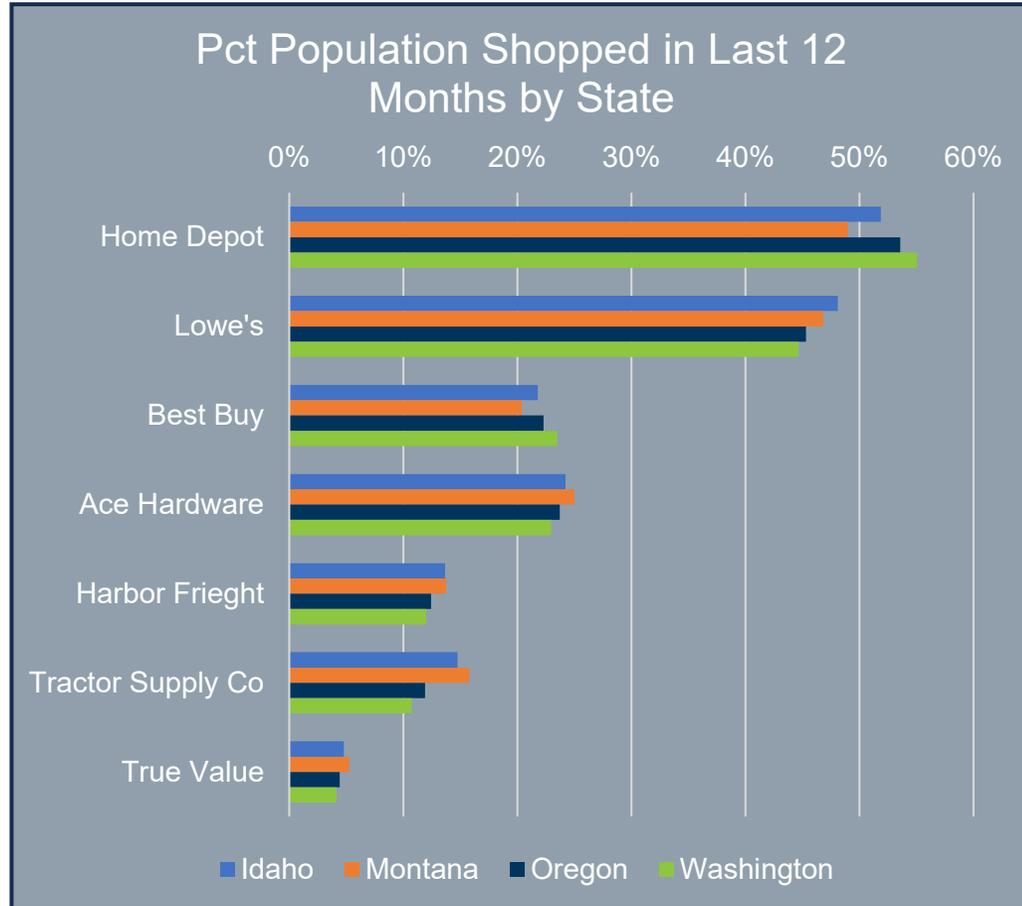
This same DIY preference holds across all four states

Home Improvement Project by State and Primary Labor Source (of HH with Project)





Most shoppers purchase hardware and appliances at Home Depot and Lowe's, though there are differences by state

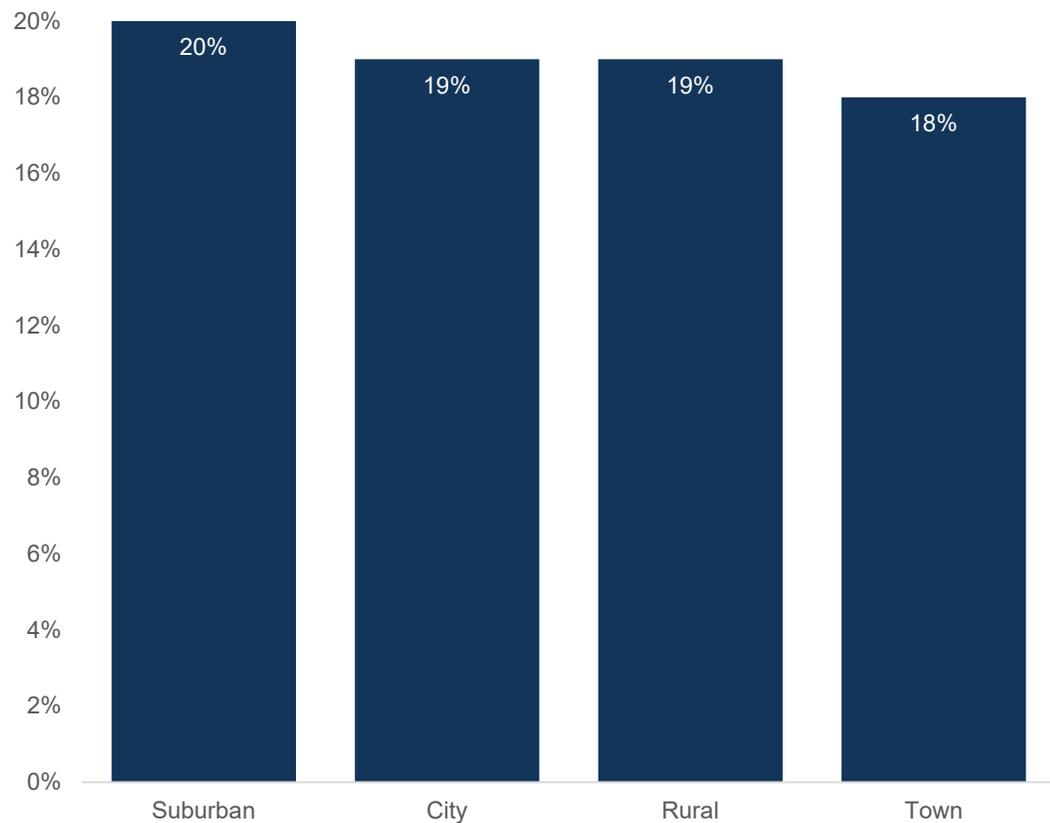


- The largest share of shoppers reported shopping at Home Depot and Lowe's
- A greater share of Idaho and Montana HHs shop at the following:
 - Lowe's
 - Ace Hardware
 - Harbor Freight
 - Tractor Supply
 - True Value

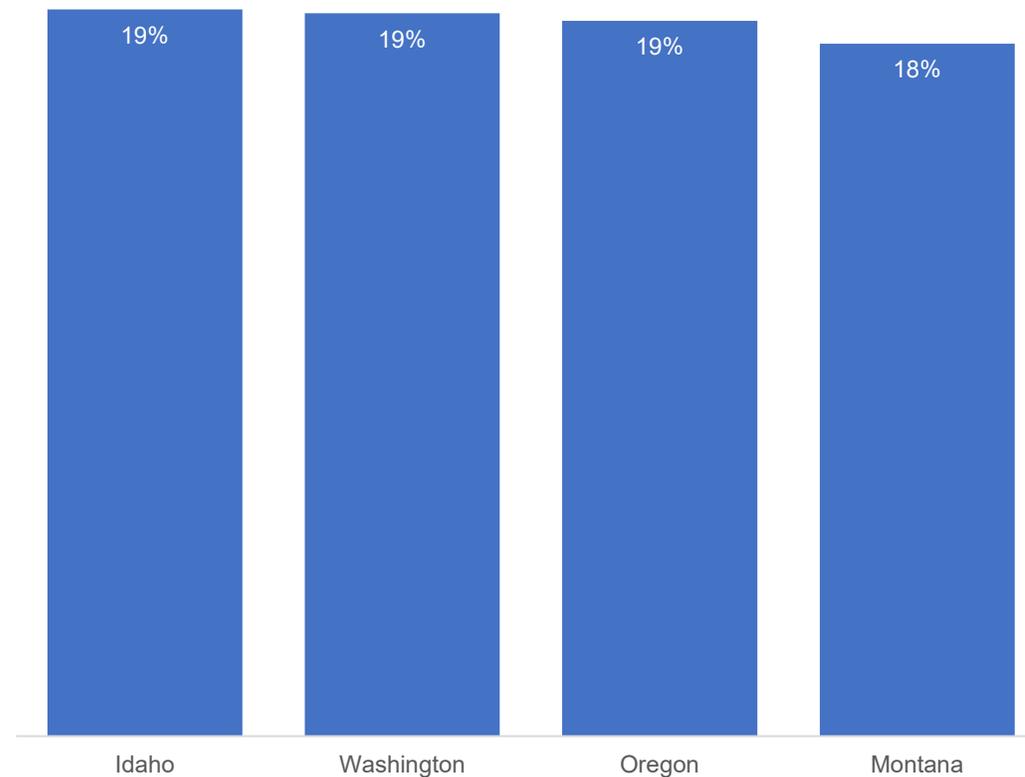


Around 19 percent of shoppers engage in online shopping – this is consistent across all locales and states

Share of HH Purchasing Home Improvement Materials / Tools Online by Locale



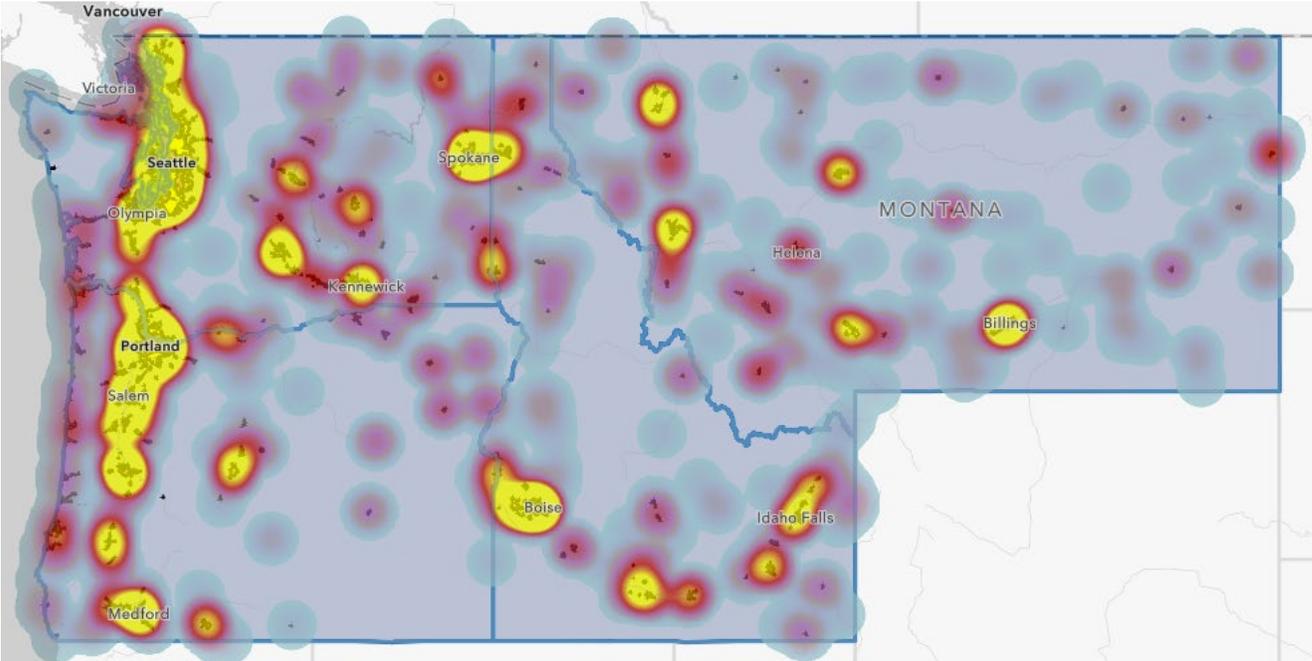
Share of HH Purchasing Home Improvement Materials / Tools Online by State





There are a comparable number of hardware stores per capita across all locales

Hardware Stores – 1,715 locations



- **Top 5 hardware stores in town/rural:**
 - Ace Hardware (176)
 - True Value (59)
 - Tractor Supply Company (24)
 - Harbor Freight Tools (20)
 - The Home Depot (18)

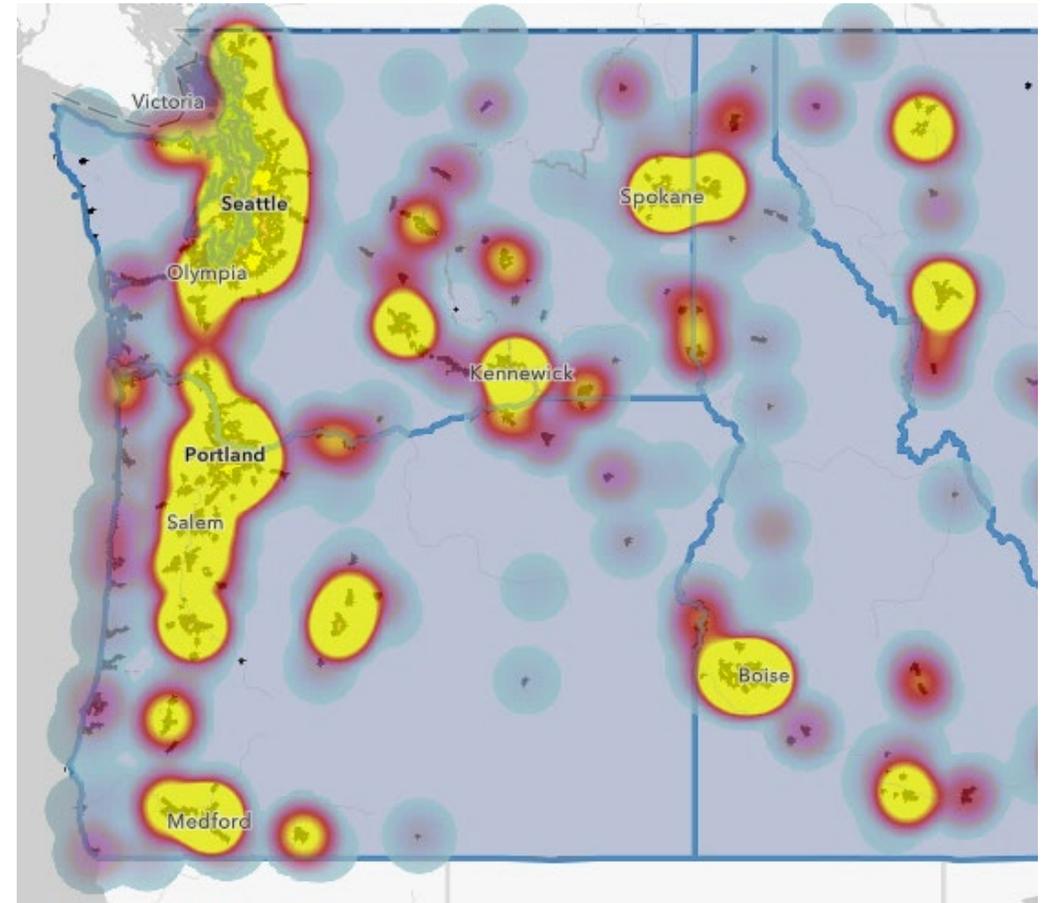
Source: Foursquare



Although rural areas and towns fewer HVAC contractors per square mile

- **The top 5 HVAC contractors across the region:**
 - Gensco (16)
 - Ferguson Waterworks (9)
 - Einstein Plumbing and Heating (8)
 - Ferguson Plumbing Supply (8)
 - Airefco (6)

HVAC Contractors (companies) – 3,308 locations



Source: Foursquare



Findings and Discussion

Identified barriers to rural communities



Access & Infrastructure

- Limited contractor availability
- Limited product availability
- Limited internet access
- Existing building stock limitations



Cost & Finance

- Upfront costs
- Installation costs
- Maintenance costs
- Financing
- Alternative fuel limitations



Awareness & Trust

- Low consumer awareness
- Distrust of outside sources
- Limited multilingual sources

Key recommendations from report

Potential strategies for rural communities

	Barrier	Strategy
	Awareness & Trust	Emphasize relatable EE benefits like health and resilience through partnerships with trusted local organizations to build acceptance and drive adoption
	Access & Infrastructure Cost & Finance	Support DIY EE by working with manufacturers and retailers to offer affordable, easy-to-install products
	Access & Infrastructure Cost & Finance	Expand access to EE products that meet rural needs by prioritizing affordability, local availability, and designs that work without high-speed internet or major home upgrades
	Access & Infrastructure Cost & Finance Awareness & Trust	Build a local energy efficiency workforce by partnering with schools and community groups to create accessible training and apprenticeship
	Cost & Finance	Expand access to low- or no-interest financing for energy upgrades by partnering with local lenders and organizations to offer tailored, easy-to-understand options to overcome credit and awareness barriers.



Future research ideas to advance affordability



Better understanding the drivers of energy burden:

Deepen analysis of energy burden and energy resilience across other HH characteristics (e.g., heating fuel, housing type, etc.)

Explore how rural households cope with high energy costs

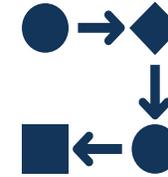


Expand community and market insights:

Extend research to urban/suburban areas and multifamily housing

Investigate the potential to work with rent-to-own and used appliance markets

Engage other communities to better understand barriers and to tailor MT strategies as needed



Deepen knowledge of supply chain dynamics:

Investigate how manufacturers and distributors perceive rural areas and how that shapes market strategies

Examine how installers in rural areas adapt to limited supply access, influencing product choices, pricing, and consumer costs

Study successful contractor business models in rural NW and beyond to support the growth of a rural energy efficiency workforce



Discussion



Financing Tool Update



Research Questions for Innovative Finance

- Does Eco-finance result in more purchases overall?
- Are there significant differences between Eco-finance purchasers and up-front cash or credit card purchasers?
- Would different eco-finance interest rates or credit score limits increase purchases of efficient product?
- Are there other instruments (e.g. BNPL 4 or 12 month payment plans), that would be effective in increasing affordability of energy efficient products?



Staff Recommendations



Staff Recommendations

- NEEA should not pursue bulk buying opportunities or fixed price installation strategies for the region.
- NEEA should explore potential research questions and approaches to better understand the barriers to affordability and the drivers of cost across the region.
- NEEA should continue to opportunistically explore innovative financing strategies for efficient products and services as part of our core work.
- NEEA should continue to leverage Board meetings to update the Board and explore issues of affordability. Programmatic approaches will continue to be discussed within NEEA's committees.



Discussion Question

- Does the Board support Staff recommendations to approach future affordability work?

Thank You!



BREAK

***Strategic Opportunity:
End Use Load Flex***

Q3 2025 Board Meeting: Strategic Planning - End-Use Load Flex Discussion

Jeff Harris





Objectives for today

- Share regional context and opportunity for load flex
- Provide update on V2 Strategic and Business Plans
- Discuss next steps



Why Load Flex?



Current Regional Context

- Unprecedented demand growth
- Looming resource adequacy problem
- Increasing customer costs, challenging affordability
- Market price volatility driven by extreme weather events and NW hydro availability
- Increasing T&D congestion, decreasing equipment life
- Lack of regional collaboration

» *What is End-Use Load Flexibility?*

“The ability to manage electric end uses and distributed energy resources (DERs) to reshape customer load profiles to provide a range of services to utilities, without sacrificing customer interests.”

Utility Value Streams



Reduced peak pricing and price variability



Meet resource adequacy requirements



Renewable resources integration



Lower operating costs



Reduced reliance on emitting resources



Non-wires alternative and T&D life extension

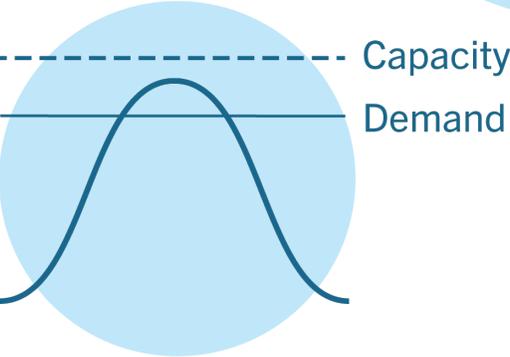
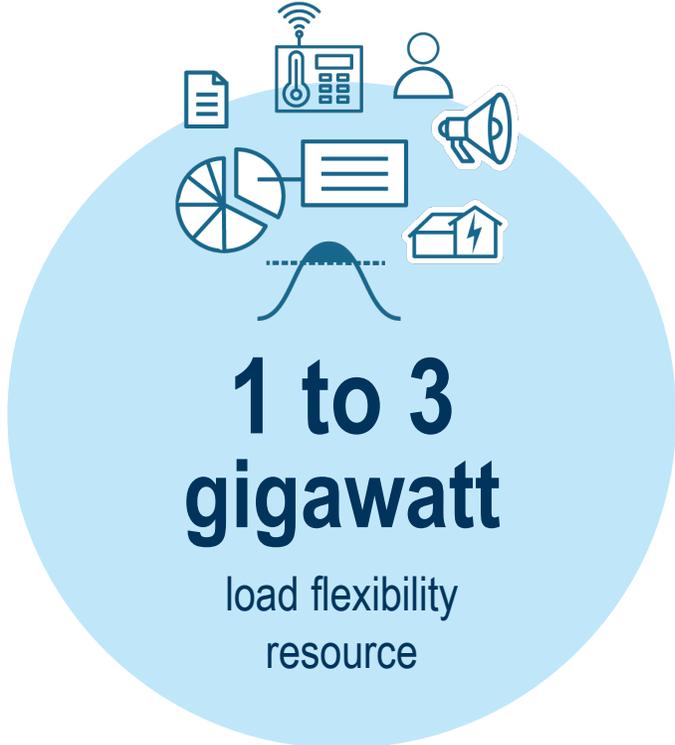


Improved grid reliability

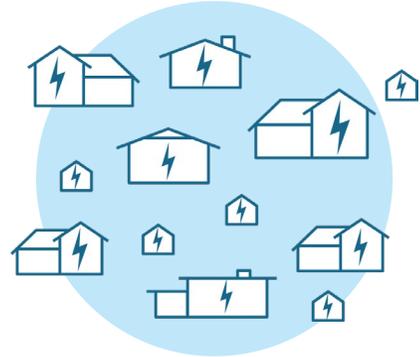


Frequency response

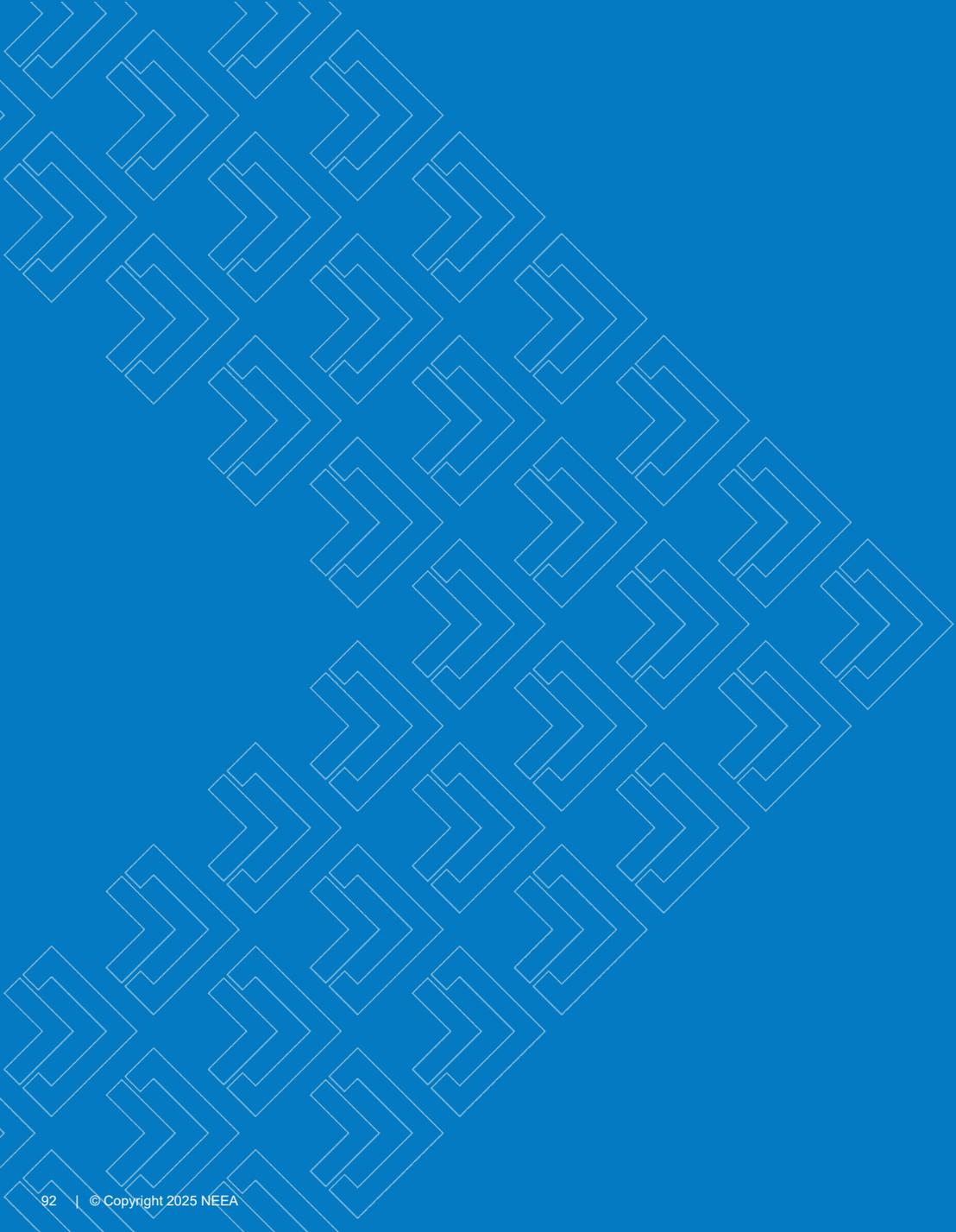
Load Flex: Part of the long-term solution...



Representing 10% of the
region's peak load



See details in appendix



Why NEEA?



Why is NEEA working on load flex?



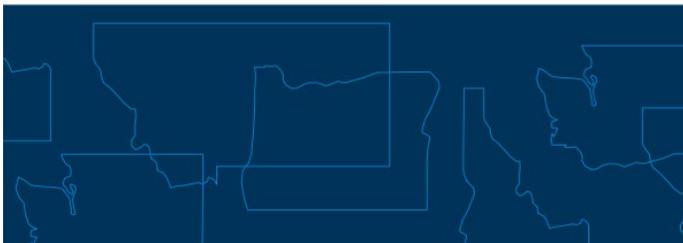
Strategic Goal #2: Accelerate the Adoption of Grid-Enabled End-Use Technologies through Market Transformation

KEY STRATEGIES

- Enabling electric-grid communications and connectivity of energy efficient products
- Undertaking projects that deliver load flexibility benefits in addition, or connected to, energy efficiency benefits
- Advancing industry-wide product standards and protocols that enable grid connectivity



CYCLE 7 (2025–2029)
STRATEGIC & BUSINESS PLANS



Why an alliance?



Market Influence



Economies of Scale



Risk Pooling



Why Market Transformation for Load Flex?

- **Structural market barriers**

- Examples: Products misaligned with utility needs for EULF, challenging end-user engagement, mismatch between utility needs and 3rd party offerings, c/e challenges specific to the Northwest, etc.

- **Timely market opportunities**

- Examples: Consumers driving new features and functionality, innovations in machine learning and communications at very large scale, standards and building code processes, etc.

- **Ability to leverage existing regional coordination models**

- Examples: WRAP, WPP, EIM

- **Synergies with ongoing energy efficiency MT work**

- Examples: Building upon existing relationships with manufacturers and ongoing product development



Energy Efficiency Experience

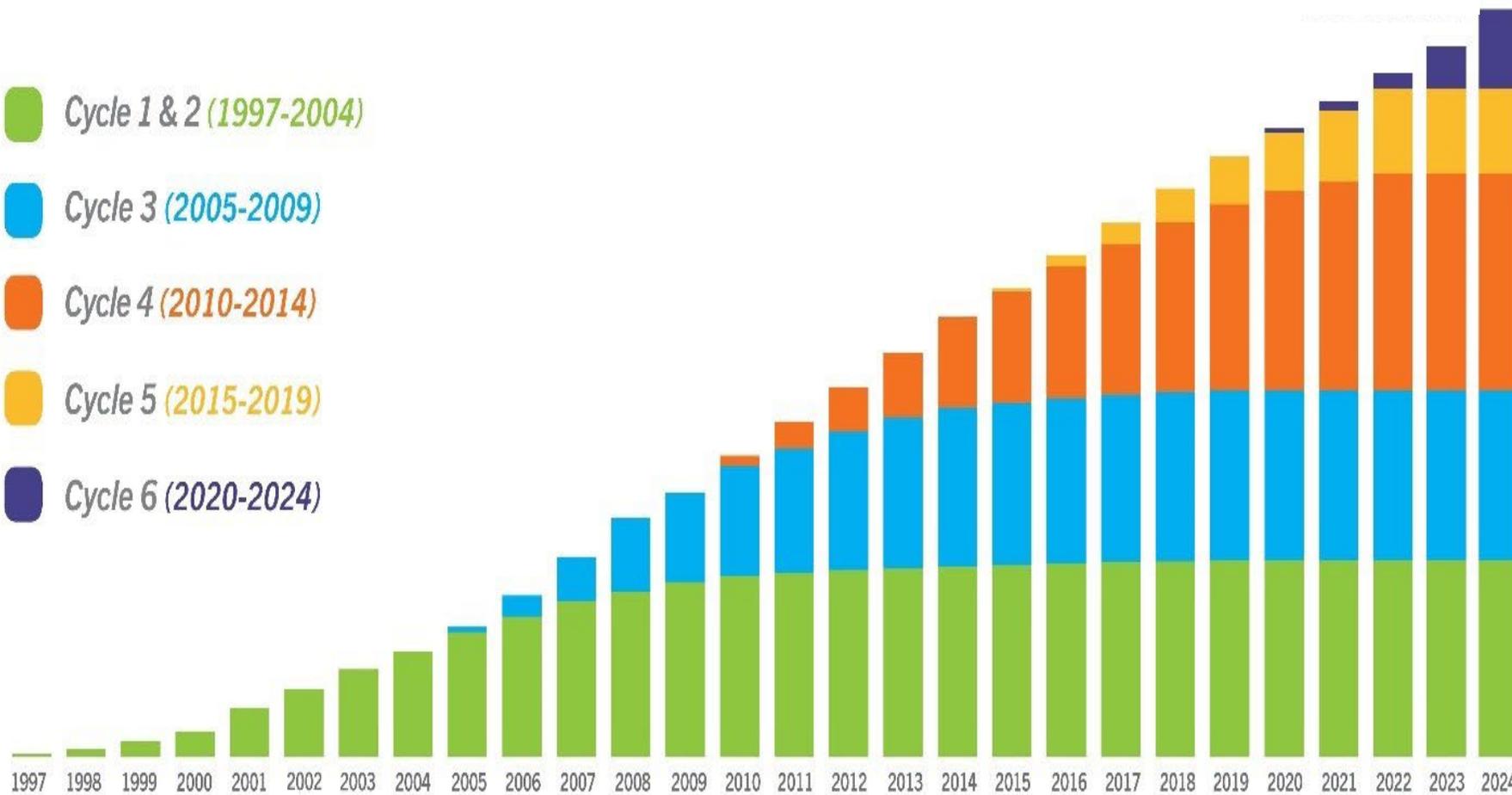
Cycle 1 & 2 (1997-2004)

Cycle 3 (2005-2009)

Cycle 4 (2010-2014)

Cycle 5 (2015-2019)

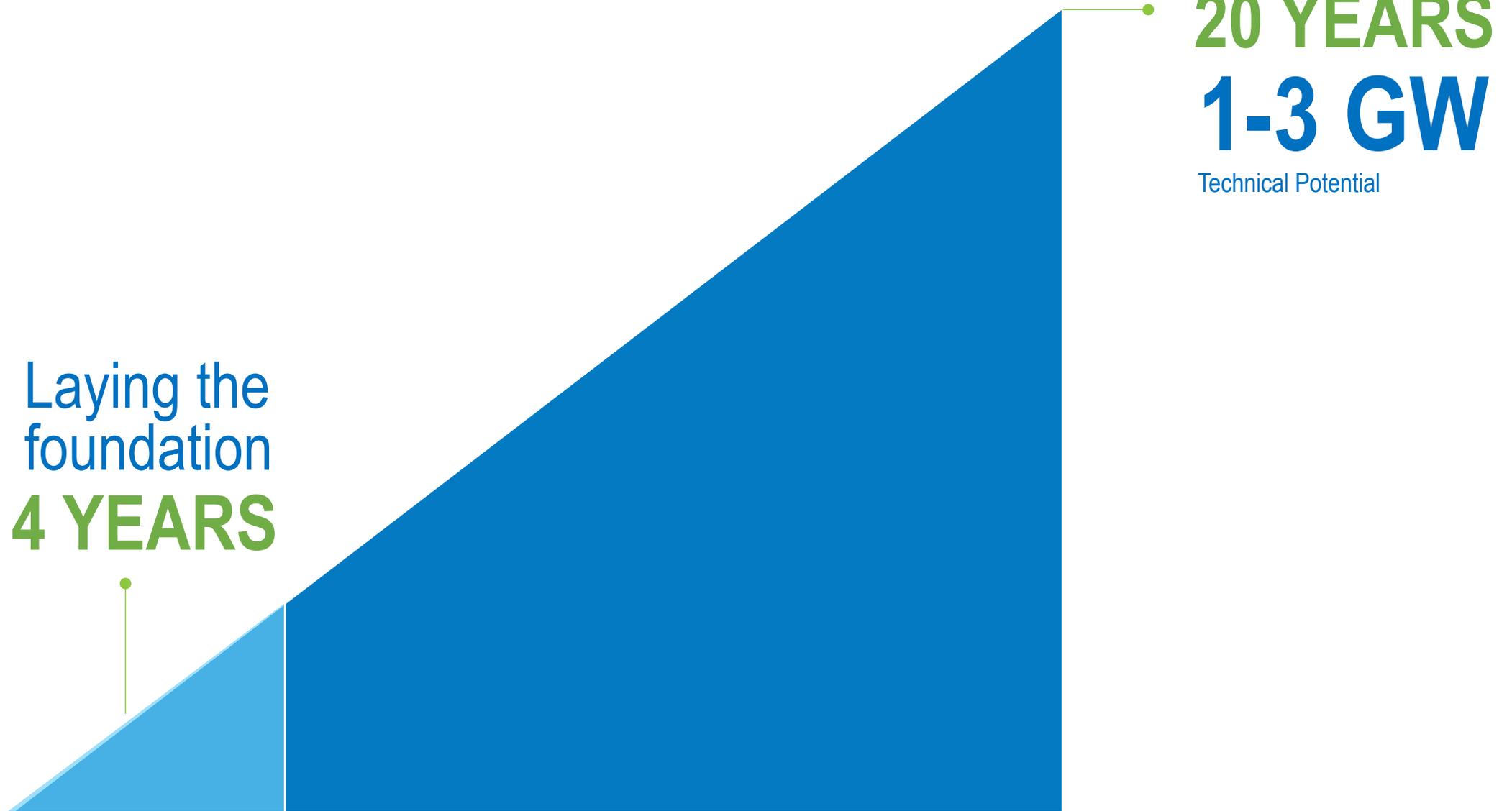
Cycle 6 (2020-2024)



25+ years
1,004 aMW

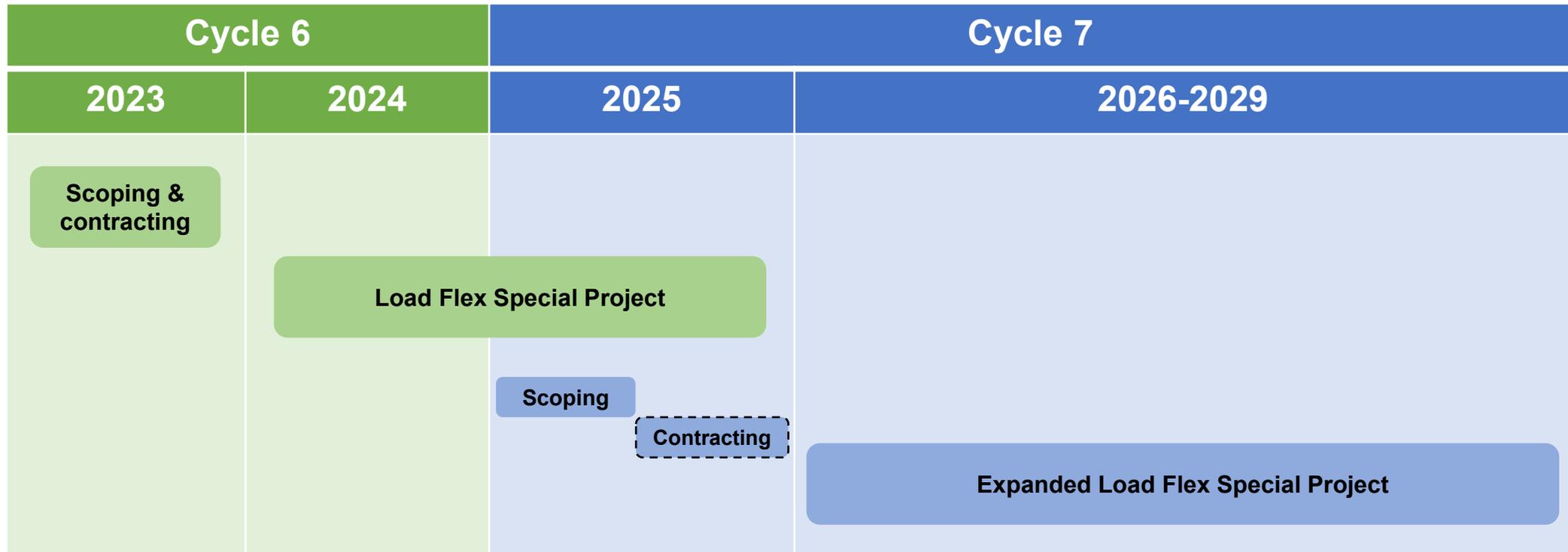


Load Flex Resource Opportunity





Load Flex Timeline





***2026-2029 End-Use
Load Flexibility
Strategic and
Business Plans***



Vision

A future in which efficiency, collaboration, and innovative technologies drive flexible load management, enabling uninterrupted access to reliable and affordable energy.



2026-2029 Business Plan Focus Areas

***Making the
Business Case***

***Increasing
Product
Availability***

***Ensuring
Connectability***

***Valuing and
Measuring***

***Testing and
Refining***

***Scaling and
Adapting***



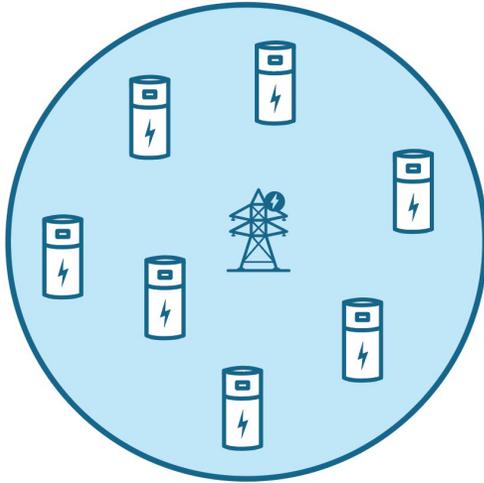
2026-2029 Value Delivery

- 
- Progress towards 20-year, 1-3GW resource
 - First MT programs for load flexibility – NW leading North America
 - Evolved products to meet future need (technologically, financially and strategically – more control)
 - Strategies to accelerate market adoption throughout the supply chain
 - Data-driven tools to align around consistent valuation methodologies and increase regulatory support



Connecting connectable devices - scaling rapidly: Water Heaters

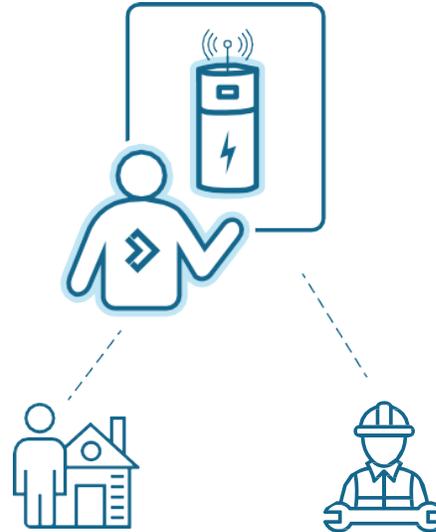
1



Current State

Thousands of connectable water heaters are being installed in homes every day and connectable thru a non-proprietary technology. Homeowners and contractors don't know how or why they should connect them.

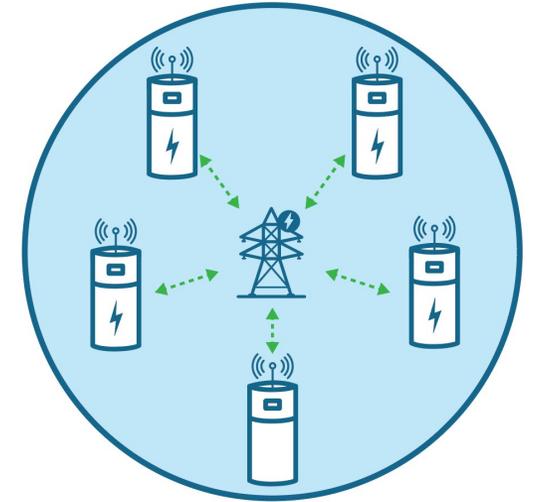
2



Intervention

The alliance provides market education and enablement, works with utilities motivating installers and homeowners to connect water heaters.

3



End State

A broad network of reliably connected water heaters are in constant communication with the grid, delivering cost effective utility value without sacrificing customer comfort



Unlocking capacity through co-development with EE: Luminaire Level Lighting Controls & HVAC

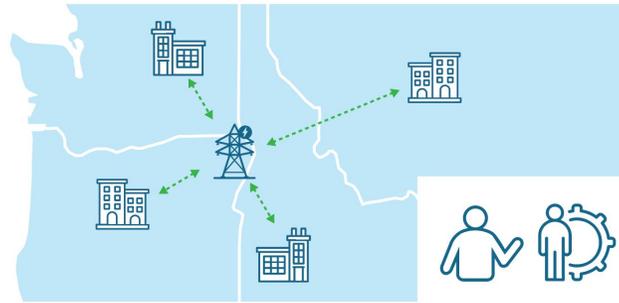
1



Current State

Opportunity to integrate load flexibility into a new emerging energy efficiency measure combining lighting and HVAC integrated controls in small to medium sized business. Only <15% of SMBs have occupancy sensors¹ today.

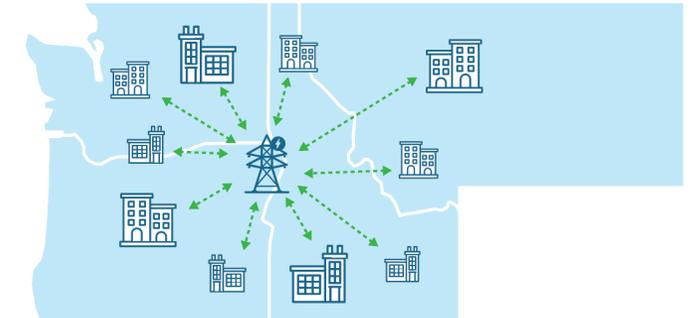
2



Intervention

NEEA works with manufacturers to establish load flex controls standards for LLC and conducts pilots quantifying the energy efficiency and load flex opportunity.

3



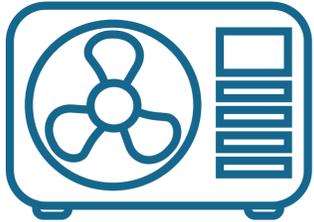
End State

Small/medium businesses use integrated controls with load-flex capabilities from the start, increasing efficiency and reducing peak loads. Solution becomes model for Energy Efficiency + Load Flexibility product development.



Expanding device connectivity - getting everything we can and keeping it: Residential and commercial HVAC

1



- ✓ Energy efficient
- ✗ Built-in, reliable connection
- ✗ Updated controls standard to meet grid needs

Current State

Variable speed heat pumps are highly efficient and given their ability to ramp down (vs. turn off), can likely provide multiple grid benefits without the negative impacts to customer comfort that lead to DR event overrides or un-enrollments.

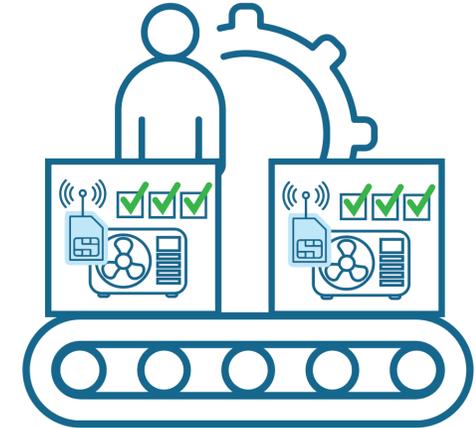
2



Intervention

NEEA motivates manufacturers by identifying shared value for reliably connected systems, adopting voluntary standards, and embedding reliable communications technology.

3



End State

Manufacturers adopt reliable connection technology and produce systems that are connected out of the box, without requiring modifications or additional equipment.



Strategic and cost-effective growth – translating unique NW needs with NEEA’s national reach & influence

Unique NW grid requirements:

- Large hydro system = cheap capacity when water is available; DR undervalued
- Dual peaking system = winter peaks deeper and longer duration than summer peaks
- Western energy markets = changing power flows in/out of Northwest seasonally
- Cost-effective challenges in good water years; high variability and market exposure in bad years/events

NEEA’s National Reach and Influence

- NEEA represents NW regional needs to national / global OEMs (e.g. Advanced WH Specification requirement for cold climate performance and CTA 2045)
- NEEA represents NW needs to national standards organizations (e.g. Federal standard for electric water heaters = HPWHs in 2029)
- NEEA co-leading Advanced Heat Pump Coalition 20+ organizations supporting standards for next generation heat pumps: (e.g. AHP recommendations adopted by CEE for federal tax credit qualification)



Example of NW Influence: Codes and standards

Committee/Organization	Time Commitment
ANSI/CTA-2045-B (CTA R7.8 Working Group)	Twice Monthly / Hour+ Meetings
AHRI-1390-202X: Commercial Smart Grid Interface	Monthly or Twice Monthly / 1 Hour Meeting
AHRI-1530-202X: Demand-Flexible Commercial Electric Water Heaters	Monthly / Hour Meeting
AHRI-1380-202X: Demand Response for VSHP Subcommittee	Monthly or Twice Monthly / 1.5 Hour Meetings
AHRI-1380 Group 1: Connectivity Standards	Weekly / 1 Hour
AHRI-1380 Group 2: Minimizing Back-Up Heat	Weekly / 1 Hour
AHRI-1380 Group 3: Exiting Curtailment/Events	Weekly / 1 Hour
AHRI-1380 Group 4: Lab Readiness	Weekly / 1 Hour
CEE Connected Committee & Dynamic Energy Management	Monthly / 1 Hour Each
OpenADR Alliance Committee	Monthly / 1 Hour Each
Advanced Water Heating Initiative Connectivity Working Group	Quarterly / Hour Meeting



Summary of Changes from V1 to V2



Decrease overall budget & gradual ramp of annual investment



Still comprehensive MT approach, targeted changes to scale



Focused on key utility values, enriched with more detail



Version 2 Scope Reduction

- **Emerging Technology**
 - Reduced and focused investment in field demonstrations
 - Impact: Utilities may need to add funding if larger scope/scale is desired in individual territories
- **Market Strategy & Execution**
 - Narrowed to 2 program concepts with 1 recommendation (50% reduction from V1), related budgets adjusted downward
 - Impact: Reduces near term impact. Increased investment required in later years to achieve 20-year, 1-3 GW resource.



Next steps

Thank You!

Jeff Harris

Chief Market Transformation Officer

Jharris@neea.org



Current project funders:





Appendix



Vision

A future in which efficiency, collaboration, and innovative technologies drive flexible load management, enabling uninterrupted access to reliable and affordable energy.

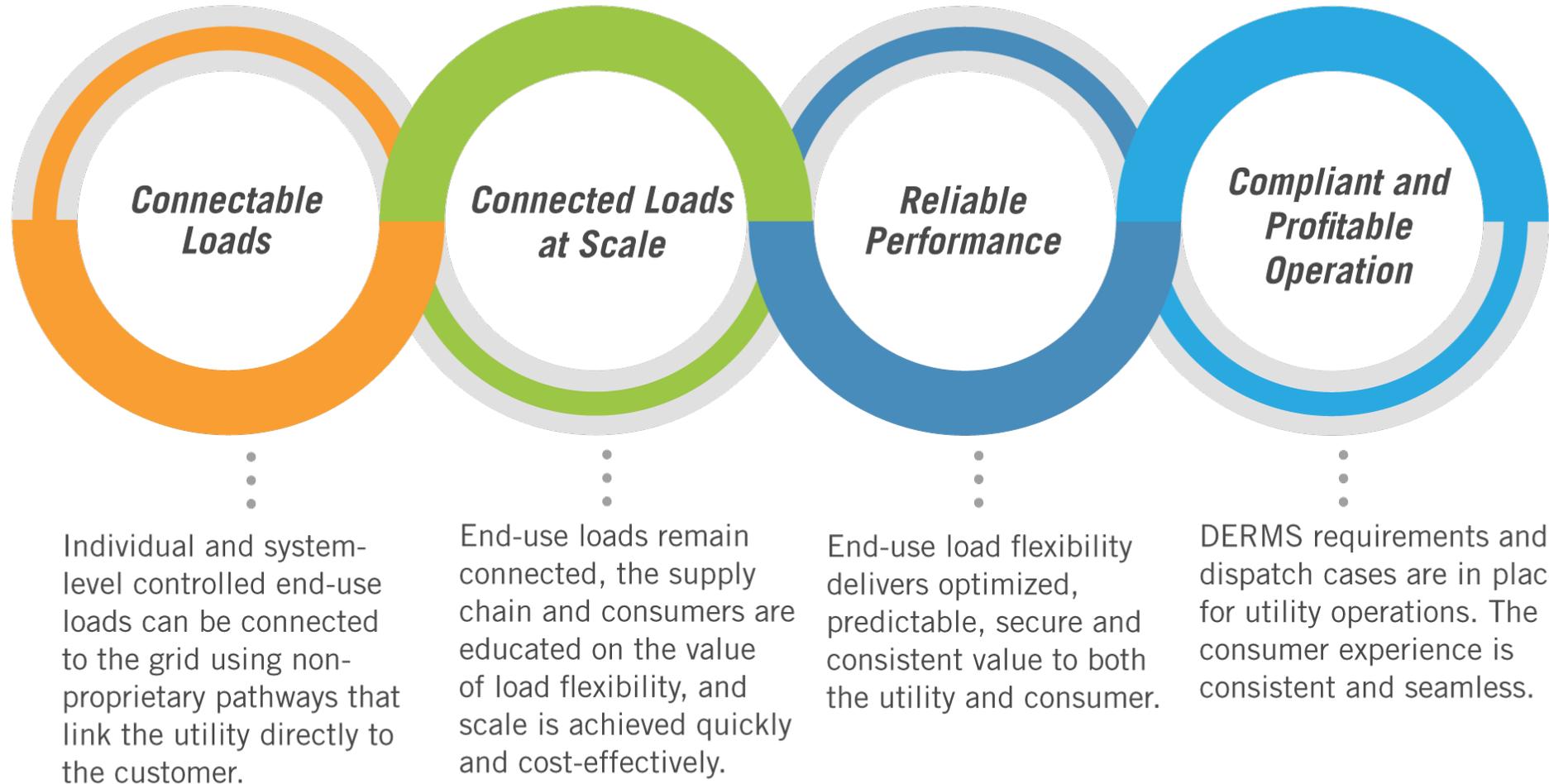


➤ *Strategic Goals*

1. **Enable cost-effective end-use load devices and controls technologies** to capture and maximize grid value delivery through Market Transformation.
2. **Expediate best-practice sharing and solution co-development** to create consistency and broaden effectiveness of regional load-flex programs.
3. **Advance the delivery of load flexibility** to benefit all Northwest consumers.
4. **Empower all Northwest utilities to realize the benefits of load flexibility.**



Vision in Practice



Public Comment

Next Steps
Action Item Review
Meeting Feedback

Public Board Meeting Adjourns

