

# Non-Gas Pipeline Alternative Working Group

Working Group Meeting #4

January 15, 2025



Energy+Environmental Economics



# Agenda

Time	Topic
10-10:10	Welcome + agenda
10:10-10:40	Community Focus Group Update – Marti Frank
10:40-11:10	Affordability Presentation + Discussion – Jenifer Bosco
11:10 – 11:45	Intro to Framework Presentation
11:45-12:30	Lunch
12:30-2:45	Framework Presentation + Discussion
2:45-3	Next Steps



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# Community Focus Group Update – Marti Frank

# Community Engagement Progress Update

NPA Working Group  
January 15, 2025



# EJ Input to the Framework

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## Benefit-cost analysis

- + Benefits
- + Costs

## Implementation

- + Financial and technical supports
- + Messages, messengers
- + Timeline

# Engagement Design

Stakeholder	Building type	Engagement Activity	Research questions
<b>EJ homeowners</b>	Single family	Expert Zoom Group	How could you benefit from electrification?
<b>EJ renters</b>	Single family Multifamily	In-home Interviews Parent Intercepts	
<b>Rental property managers</b>	Singe family Multifamily	In-home Interviews Phone/Zoom Interviews	What are the risks of electrification?  What would it take for you to electrify?
<b>Rental property developers</b>	Multifamily	Phone/Zoom Interviews	How can utilities work with you to build all-electric?

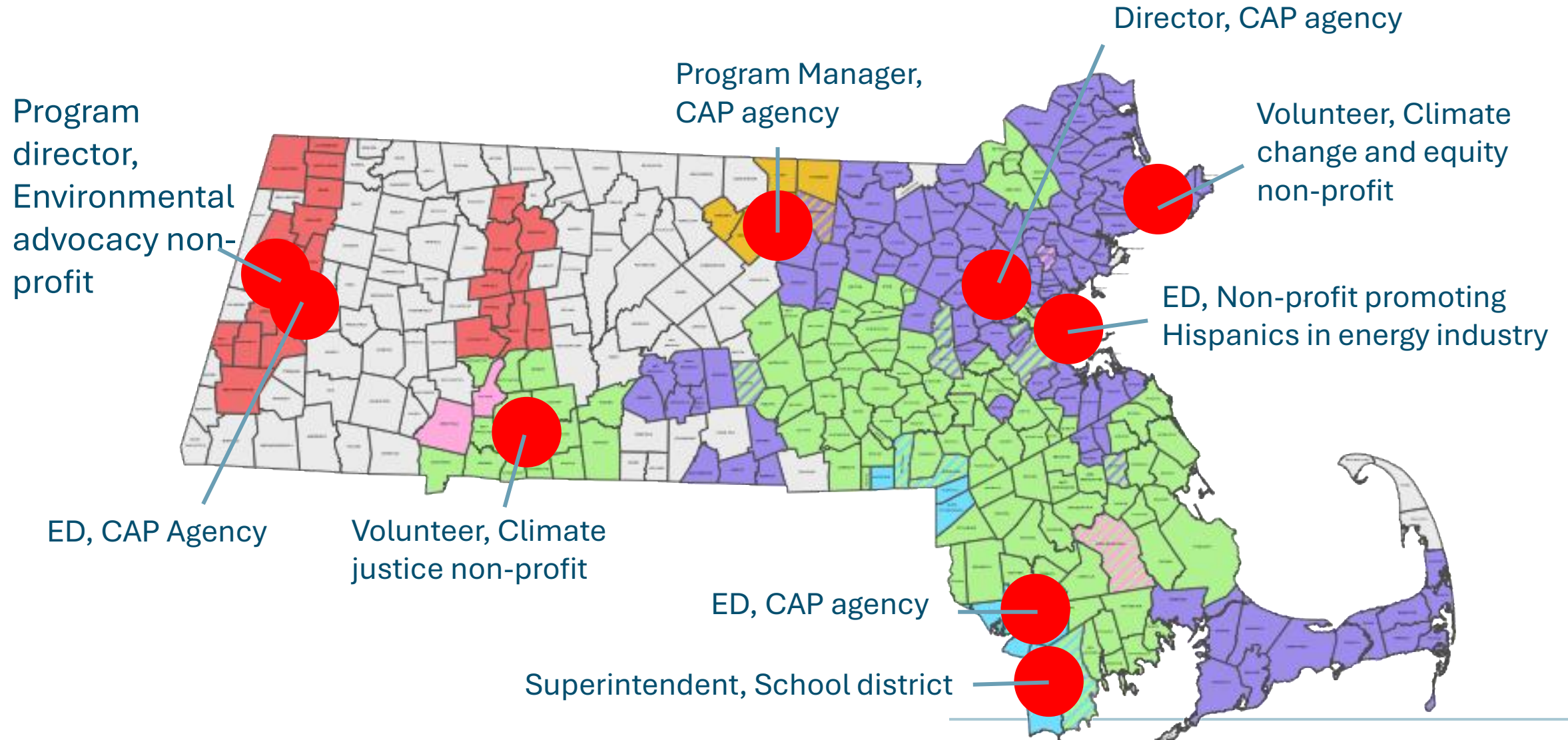


# Expert Zoom Group **Advisory Panel for EJ engagement**

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- Who**            Nine service providers and volunteers with first-hand understanding of EJ households' needs and risks
- Why**            Advise on design of community engagement, interpretation of data, development of findings and recommendations
- When**           Three Zoom meetings in December, January, February

# Expert Zoom Group Member Locations and Affiliations





# Expert Zoom Group Meeting Schedule and Objectives

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Inform discussion  
guides for in-person  
engagement



# Expert Zoom Group Meeting Schedule and Objectives

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What do we know about how electrification may impact EJ households?

What don't we know?



# Expert Zoom Group Meeting Schedule and Objectives

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# Expert Zoom Group Meeting Schedule and Objectives

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What did we learn from engagement with EJ members?

What hypotheses does it confirm?

What new information does it provide?

# Expert Zoom Group Meeting Schedule and Objectives

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# Expert Zoom Group Meeting Schedule and Objectives

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What is our current best thinking about how electrification of EJ households can be done such that it maximizes their benefits and minimizes burdens?



# Expert Zoom Group Example Output from 1<sup>st</sup> Meeting



*What are the benefits of electrification for environmental justice households?*

Word cloud created by Expert Zoom Group, December 5, 2024

# In-home Interviews **EJ Household Opinions on Electrification**

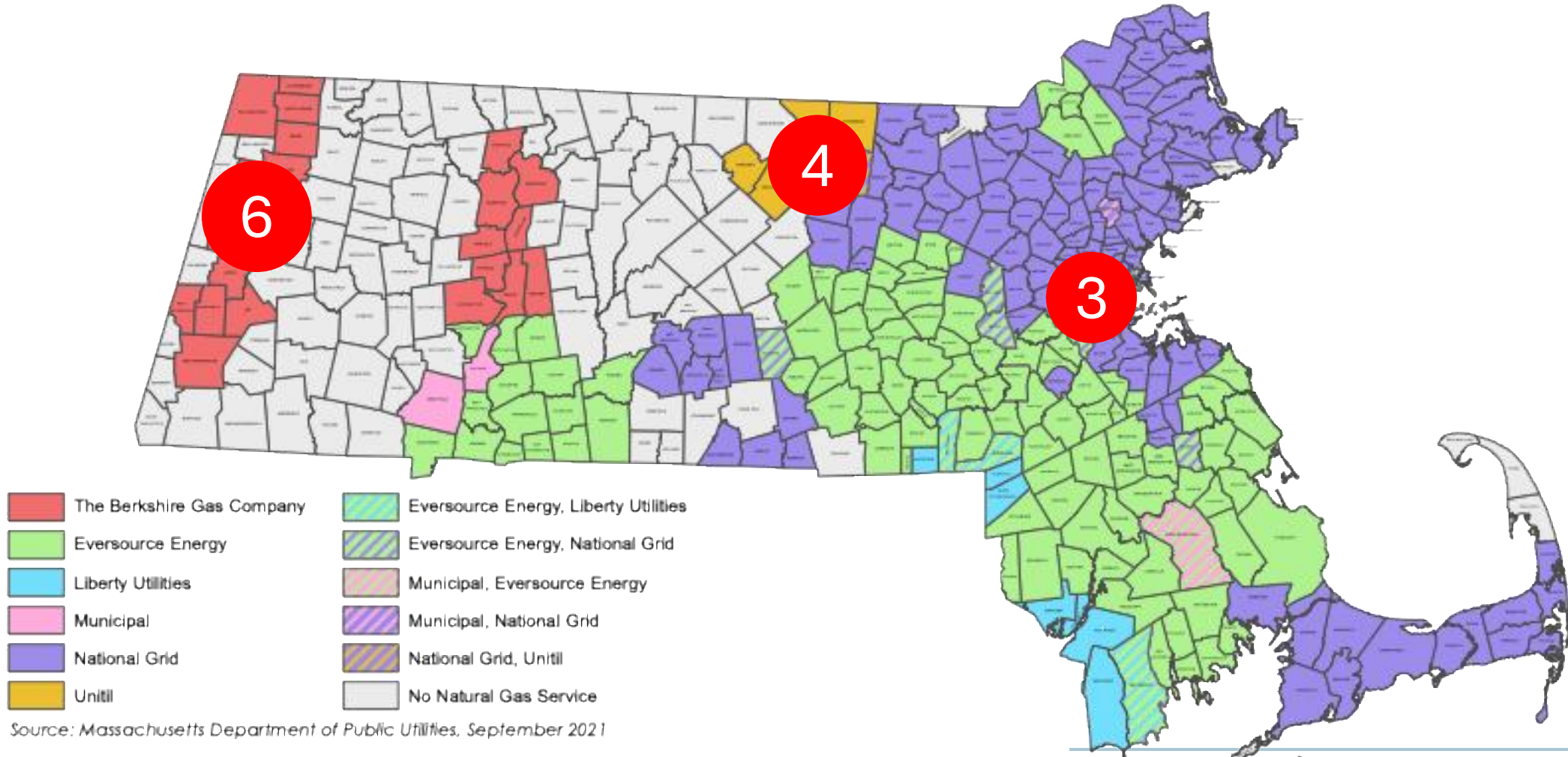
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**Who** 13 EJ households in four LDC territories

**Why** In-depth opinion on value of electrification benefits, attitude towards increased utility costs, understanding of electric heat technologies, aspects of an offer to electrify they find compelling, willingness to accept an electrification offer, feedback on sample electrification brochure

**When** 10- to 40-minute interviews conducted in the residents' homes, completed January 7-9

# In-home Interviews EJ Household Locations



Source: Massachusetts Department of Public Utilities, September 2021

# In-home Interviews EJ Household Demographics

First name	Own/rent	Age	Ethnicity	Home type	Htg. fuel
<b>Alex</b>	Owner	25	Unknown	Duplex	Gas
<b>Alex</b>	Owner	65	Haitian	Single family	Gas
<b>Clara</b>	Renter	80	White	Triplex	Gas
<b>Gayle</b>	Owner	60	White	Single family	Gas
<b>Germaine</b>	Renter	25	Unknown	Single family	Gas
<b>Jody and Dot</b>	Owners	65 and 91	White	Single family	Oil
<b>Kevin</b>	Renter	65	White	Duplex	Gas
<b>Marisella</b>	Owner	35	Hispanic	Single Family	Oil
<b>Martha</b>	Renter	65	Mexican	Duplex	Gas
<b>Mary</b>	Owner	90	White	Single family	Gas
<b>Odelquis</b>	Owner	50	Unknown	Single family	Gas
<b>Tom</b>	Owner	55	White	Mixed use	Gas
<b>Willy</b>	Renter	65	Af. American	Duplex	Gas



# In-home Interviews Example EJ Household Profiles

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Stock photo

## Tom, 50

Inherited mixed-use building from grandparents. Operates barber shop on main floor. Rents three apartments above.

First response when asked whether he would electrify: *“I hope not. That would be expensive.”*

However . . . He previously investigated converting rental units to DHPs to shift utility cost to renters. Updated knob & tube wiring and applied for but never received Mass Save incentive. Didn't complete because couldn't get tech questions answered or find a contractor.

# In-home Interviews Example EJ Household Profiles

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Stock photo

## Willy, 65

Lives alone. Retired from a career as a cook in the Navy and in hospitals. Has rented the main floor of a duplex for 10 years.

Forced hot water heat with a new boiler provided last year by CAP agency. Not opposed to electric heat but wants to keep his gas stove. Has solar.

When he gets a high bill: *“I have to pay it. Take from Peter to pay Paul. One bill has to wait. Wait on cell, cable, life insurance.”*

# In-home Interviews Example EJ Household Profiles

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Stock photo

## Marisella, 35

Lives with three children ages 17, 3, 1. First time homeowner, moved in one month prior. Works at an insurance company.

Forced hot water with oil boiler that had failed. Chose to replace oil boiler. Familiar with DHPs from office but concerned about the cost of electric heat: *“Electric is high. Everyone is complaining. Is there going to be a reduction in cost? As long as the cost would even out I’d be OK with it. If I’m going to be paying more then no. I don’t know what I got myself into with a house.”*

# Parent Intercepts **EJ Household Opinions on Electrification**

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- Who** Elementary school parents in Westport
- Why** High-level feedback on value of electrification benefits, attitude towards increased utility costs, understanding of electric heat technologies, willingness to accept an electrification offer
- When** Brief surveys to be conducted at school during parent-teacher conferences, February 11



# Zoom Interviews **Property Owner/Manager Opinions**

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**Who** Seven owners and managers of affordable rental properties\*

\*Twelve informants still being contacted, one scheduled

**Why** Detailed input on facilitating factors for and barriers to electrification in existing properties, appropriate points of contact and timeframe to discuss developing new all-electric properties

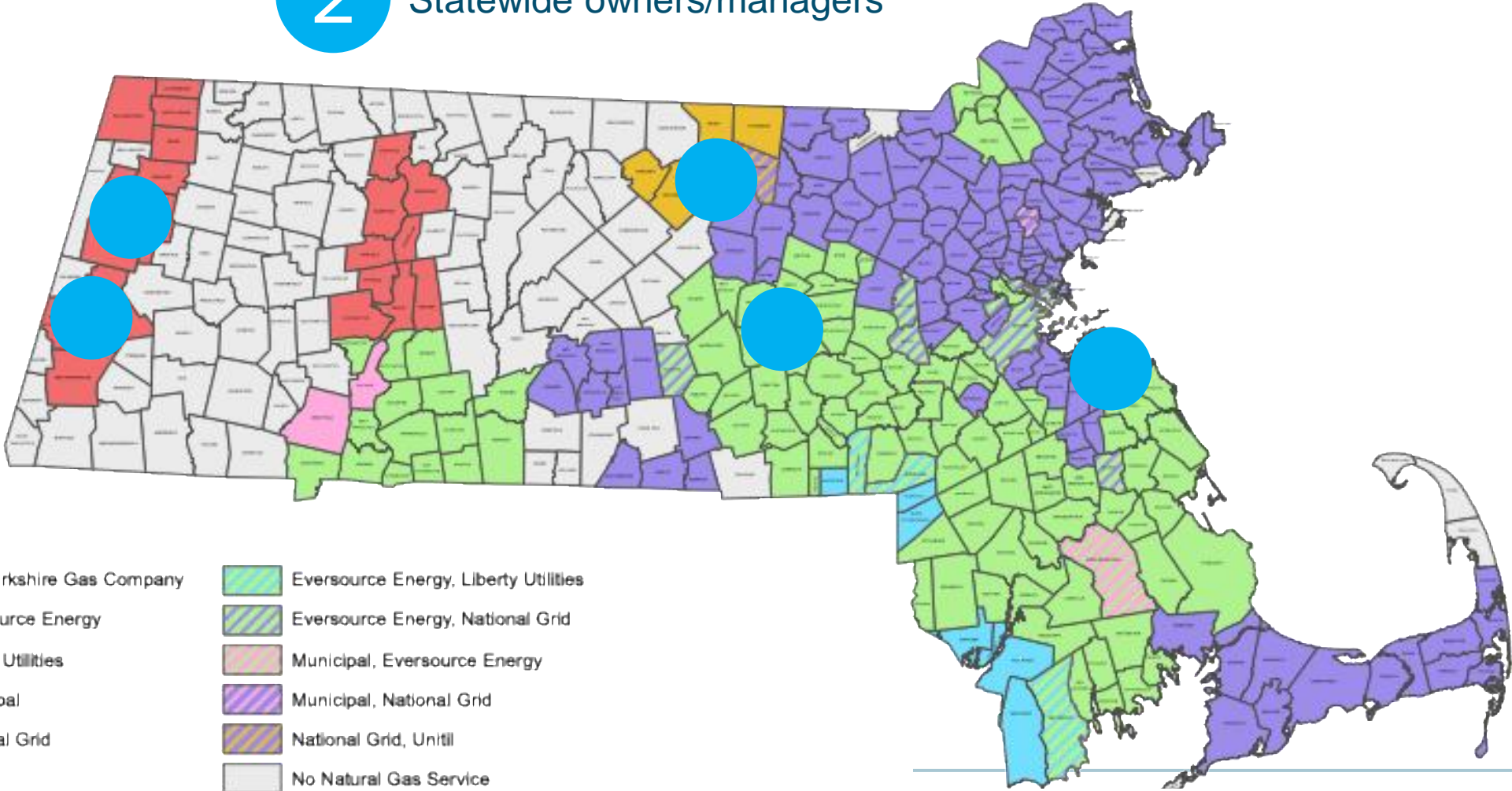
**When** 30-minute Zoom interviews, completed November 13 – January 10



# Zoom Interviews Property Owner/Manager Firmographics

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Statewide owners/managers



Source: Massachusetts Department of Public Utilities, September 2021



# Zoom Interviews **Property Owner/Manager Firmographics**

Region	Title	Organization Type	Number of properties	Number of units
<b>Statewide</b>	Energy and Sustainability Manager	Private developer of affordable, mixed income, and market-rate multifamily properties	76	9,800
<b>Statewide</b>	Asset Manager	Religiously-affiliated non-profit developer of affordable multifamily properties for families, the elderly, and people with special needs	24	3,000
<b>Berkshire</b>	Director of Real Estate Operations	Non-profit developer of affordable housing	80	868
<b>Berkshire</b>	Owner and Manager	Owner of naturally occurring affordable housing	11	23
<b>Hingham</b>	Community Manager	Manager of regulated affordable housing	1	220 (55 affordable)
<b>Hudson</b>	Property Manager	Mgr. of naturally occurring affordable housing	1	76
<b>Fitchburg</b>	Owner and Manager	Owner of naturally occurring affordable housing	1	3

## A few emerging themes

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### **Cost is key**

EJ owners and renters can tolerate little, if any, increase in costs, especially utility costs

### **Electrification benefits are marginal**

EJ owners and renters may appreciate better AC and air quality, but it is not something most would be willing to pay more for

### **Electric heat is acceptable to most**

Some awareness of heat pump technology (less for geothermal) and only minor concerns about it

### **Trust utility but need confirmation from friends/family**

Positive word-of-mouth will be critical for gaining trust and getting the go-ahead to electrify

# Step 1: Create NPA typology to identify key decision-makers

Homeowners

Rental  
property  
owners

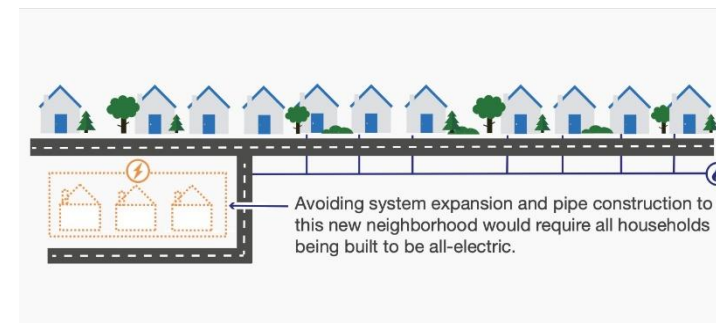
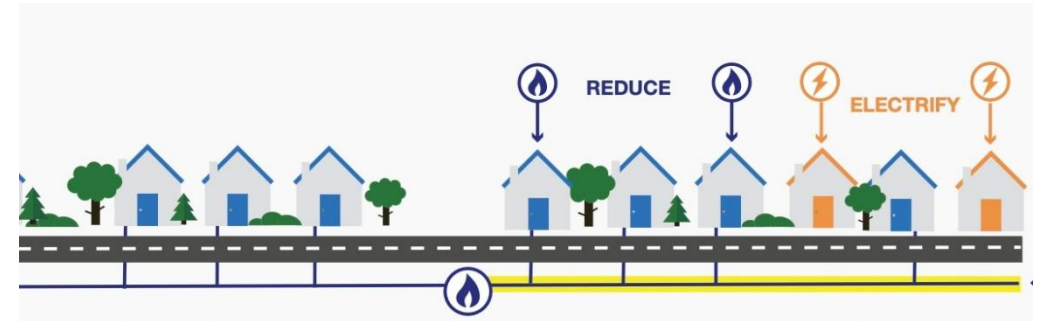
Renters

**Type #1**  
**Avoid replacing pipes**  
**Electrify whole homes**

**Type #1b**  
**Avoid capacity increase**  
**Electrify + gas efficiency**

Property  
developers

**Type #2**  
**Avoid system expansion**  
**Build all-electric**





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# Affordability Discussion – Jenifer Bosco



# NPA Working Group – Utility Affordability



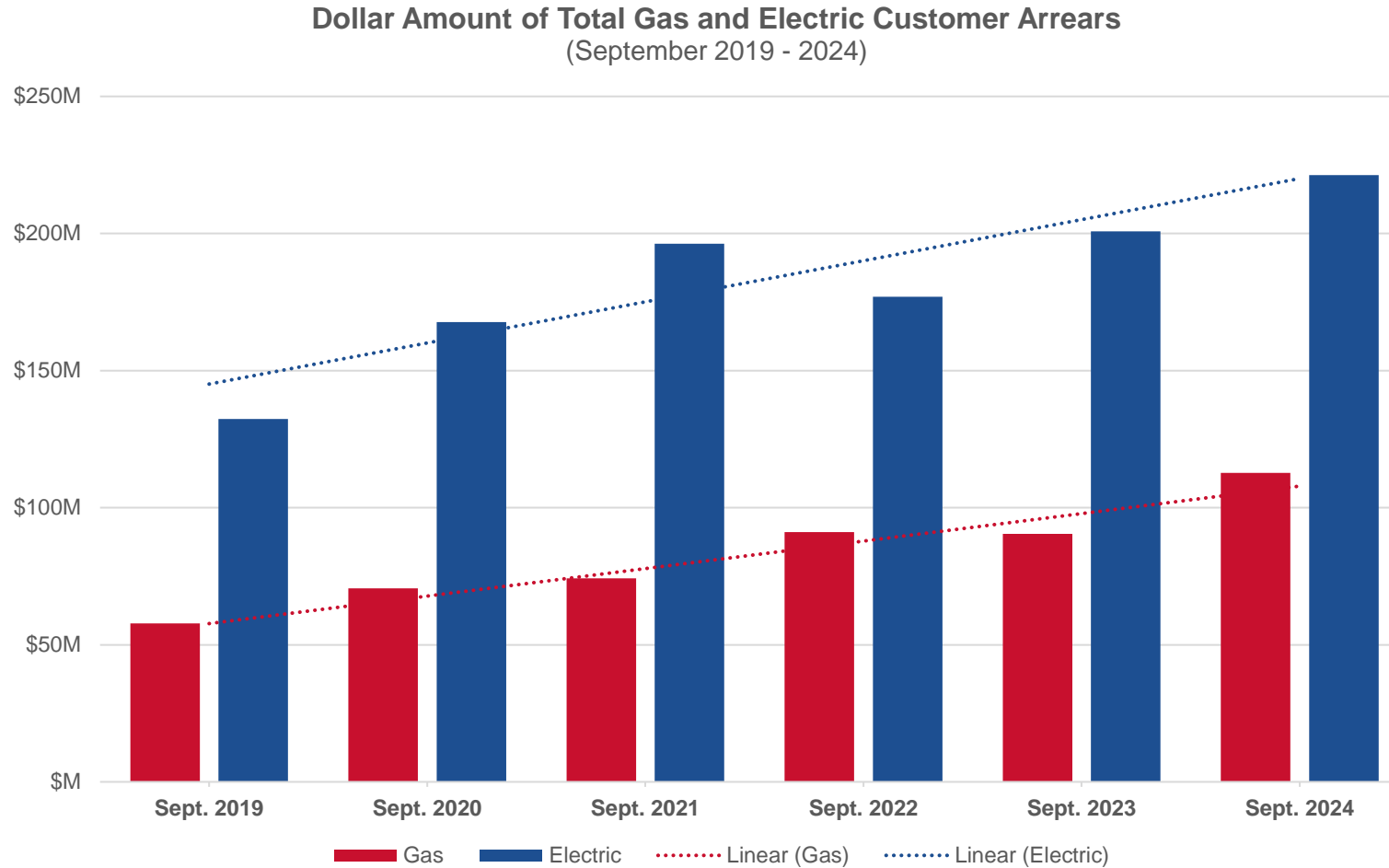
Jenifer Bosco, Senior Attorney  
jbosco@nclc.org  
January 15, 2025

# Massachusetts energy affordability

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- Over 500,000 electric and gas low-income or R-2 accounts, actual number of households is much smaller since most have both electric and gas accounts
- HEAP (fuel assistance) = 149,778 households served in FY2024
  - Source: Mass. EOHLC, HEAP Weekly Summary, Jan. 6, 2024
  - Many other low-income households not eligible due to federal program rules
- Unpaid utility bills are one of the most common sources of household debt
  - See, e.g., Board of Governors of the Federal Reserve, *Report on the Economic Well-Being of U.S. Households in 2023 - May 2024*; Center for Survivor Agency & Justice, *Domestic Violence and Economic Well-being Study*, Service Provider Report, April 2021 (nationally, 54% of DV survivors surveyed reported utility debt)

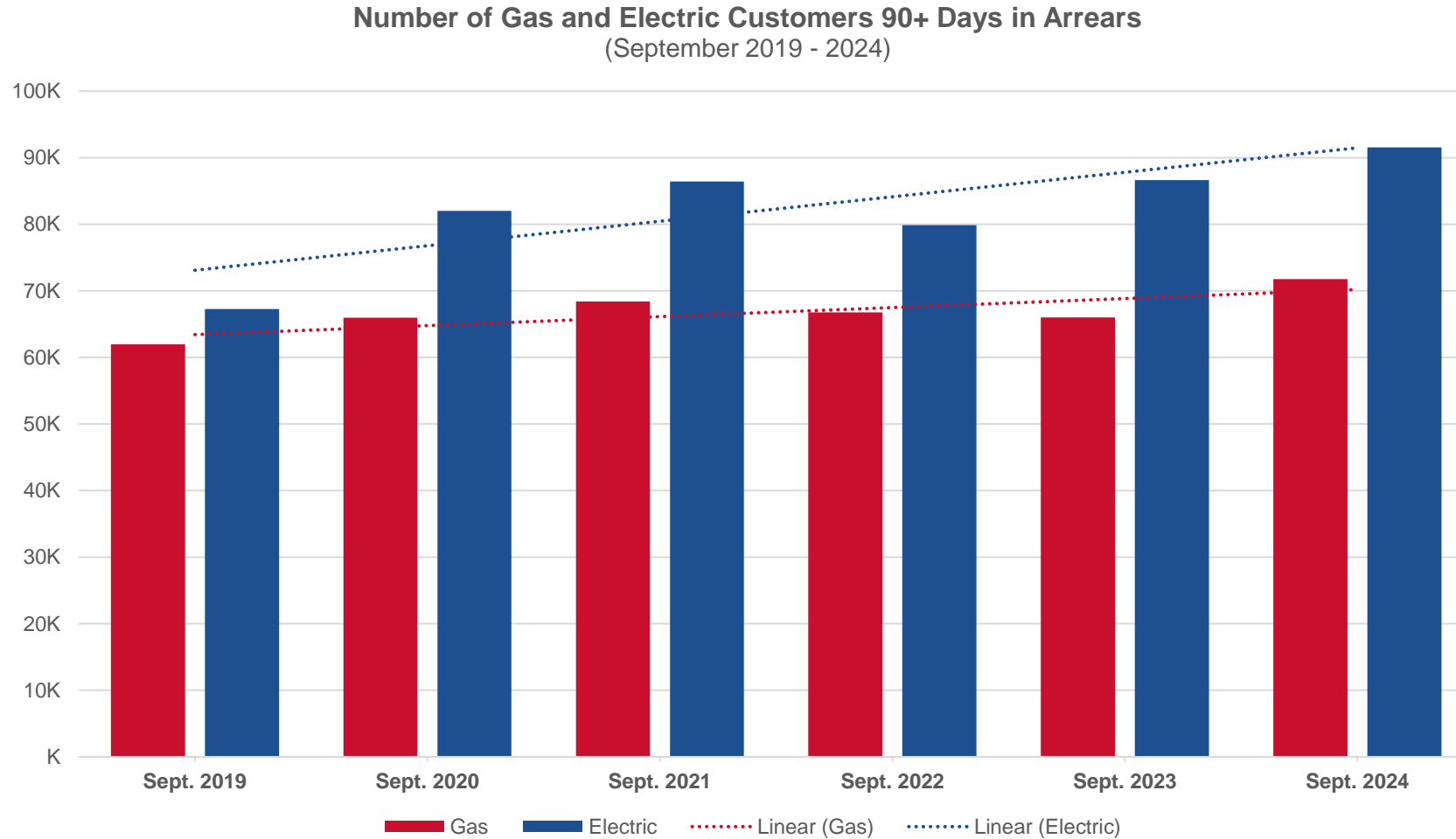
# R-2 customers' utility debt has risen to \$333,993,571



Source: NCLC analysis of data filed by utility companies in D.P.U. 20-58

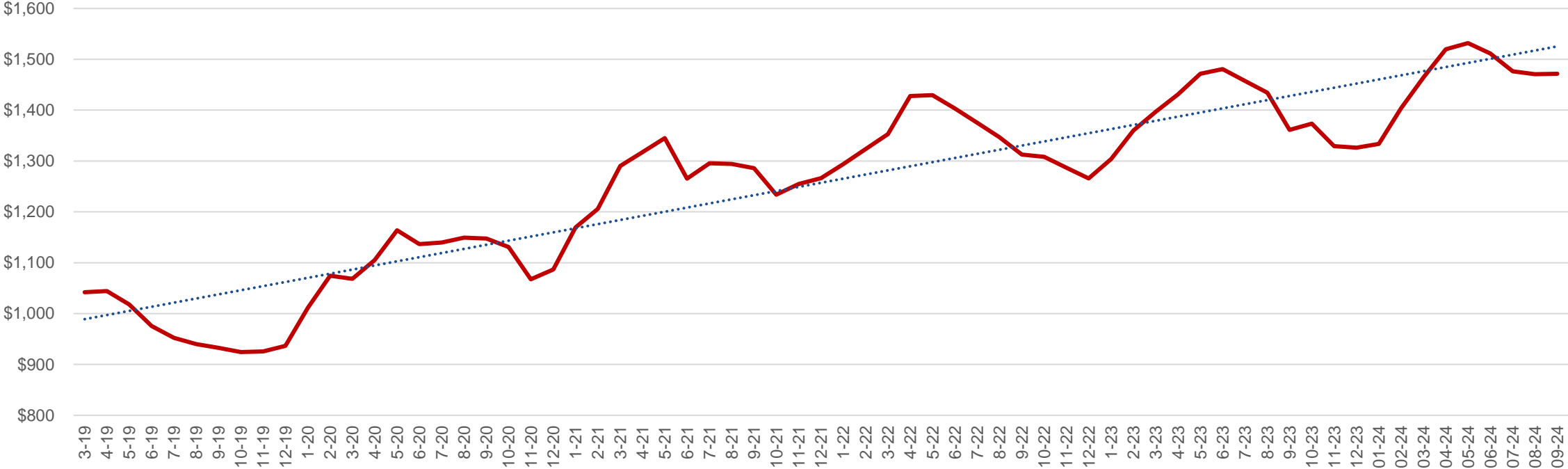


# R-2 customers with utility debt 90+ days increased



# Average R-2 utility debt = \$1,471 per account

Dollar Value of Average Arrears Held Per Discount Rate (R-2) Gas and Electric Customer Account by Month



# Affordability concerns and strategies

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- Low-income consumers current affordability crisis, even before the gas transition is fully underway
- Multiple Massachusetts efforts seek to address affordability concerns, e.g., DPU 24-15, IRWG, 3-year Energy Efficiency Plan
- Priorities to improve affordability:
  - Improvement of R-2 discount rates – underway in DPU 24-15, tiered discount adopted in DPU 23-150
  - Better protections from utility disconnection – also underway in DPU 24-15
  - Continued and expanded support for zero-cost electrification and efficiency for low-income households
  - Sources of funding other than additional ratepayer funds
  - Avoid adding further debt to the already heavy debt burden of low-income families
  - Re-examine and unwind failed programs that increase ratepayer costs without providing benefits to customers

# Affordability and Energy Burden

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- Energy Burden: Percent of monthly income dedicated to electric and heating bills
- Monthly energy burden targets
  - 6% frequently used but now too high considering increased housing costs
  - New National Grid electric tiered discount uses 3.4% target for electricity only
  - NJ: 2% for electric, 2% for gas, or 4% for all-electric customers
  - NV: target burden is the same as burden for average median income household

## Comparison of Gas and Electric R-2 Customers in September (2019-2024) [Source: D.P.U. 20-58]

		Sep-24	Sep-23	Sep-22	Sep-21	Sep-20	Sep-19
<b>G A S</b>	Number of customers	203,472	197,734	186,551	172,501	157,224	146,484
	Number of customers in arrears	85,946	78,700	76,677	86,270	86,845	84,744
	Dollar amount of customer arrears*	\$112,664,892	\$90,458,451	\$91,046,237	\$74,246,827	\$70,607,152	\$57,739,666
	Number of customers 90+ days in arrears*	71,770	66,016	66,750	68,392	65,977	61,985
	Dollar amount of customer arrears 90+ days late*	\$107,166,141	\$84,760,717	\$84,599,709	\$68,926,807	\$66,846,578	\$53,941,633
	Average amount owed per customer 90+ days late	\$1,493	\$1,284	\$1,267	\$1,008	\$1,013	\$870
	Number of disconnections	670	774	546	654	Moratorium	1,377
<b>E L E C T R I C</b>	Number of customers	315,777	317,025	295,688	280,783	272,008	256,247
	Number of customers in arrears	141,030	135,217	127,481	124,154	120,837	119,086
	Dollar amount of customer arrears*	\$221,328,679	\$200,761,137	\$176,936,018	\$196,297,957	\$167,726,111	\$132,325,276
	Number of customers 90+ days in arrears*	91,543	86,639	79,869	86,448	82,022	67,256
	Dollar amount of customer arrears 90+ days late*	\$180,812,884	\$167,885,848	\$147,540,975	\$172,280,149	\$142,980,594	\$111,566,904
	Average amount owed per customer 90+ days late*	\$1,975	\$1,938	\$1,847	\$1,993	\$1,743	\$1,659
	Customer disconnections	1,622	1,200	393	494	Moratorium	1,900

\* Highest value within the reporting period occurred in 2024.





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# LDC's NPA Framework Presentation



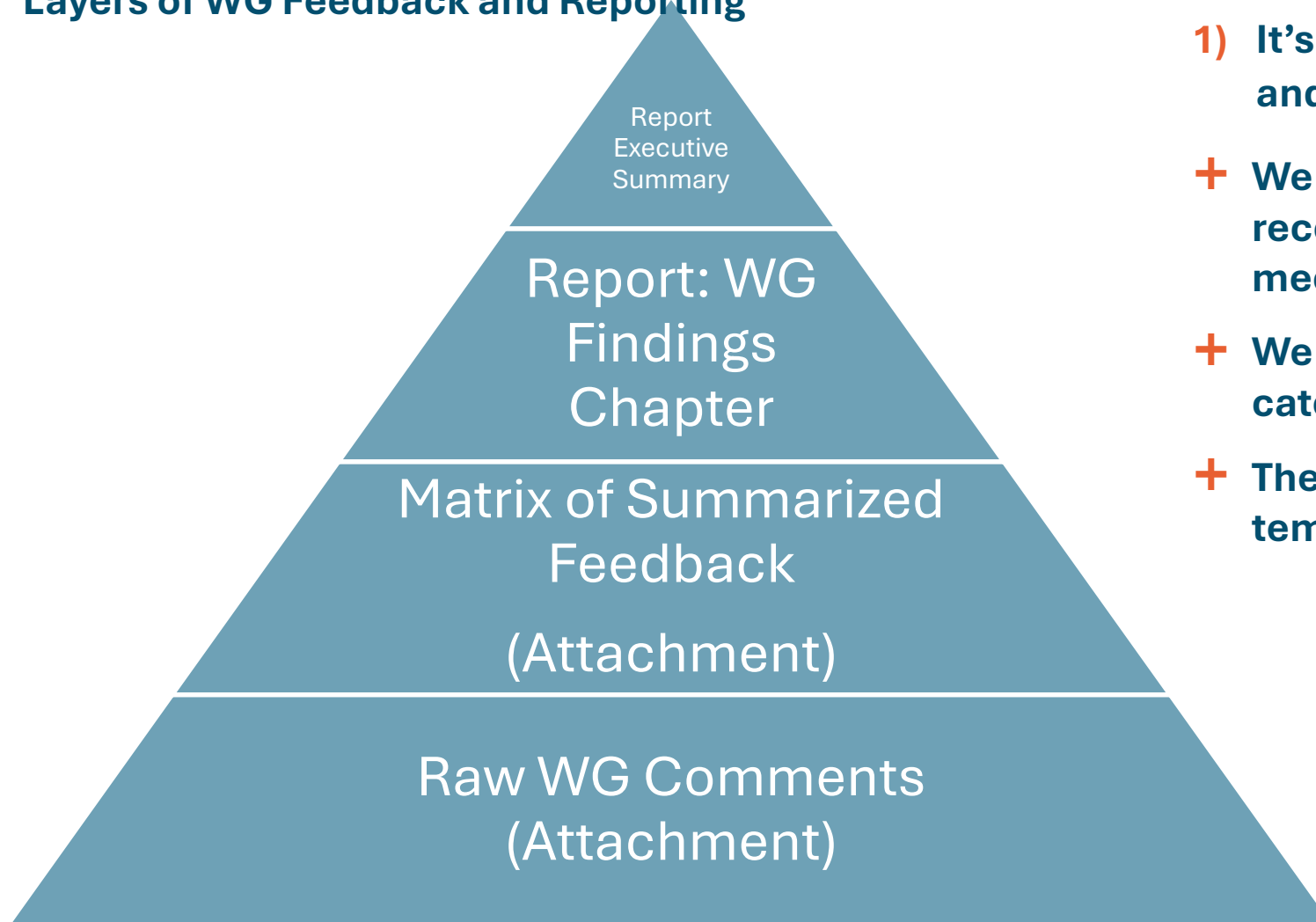
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**Next Steps**

# Working Group Feedback Approach

## Layers of WG Feedback and Reporting



- 1) It's important to us that we accurately capture and summarize your feedback
- + We have an extremely tight timeline from receiving your comments (Jan 29) to Feb 5<sup>th</sup> meeting and reporting deadlines
  - + We can be most effective if you can help us categorize and summarize your key points
  - + Therefore, we created a Word document template

# Next Steps

## + Next meeting will February 5<sup>th</sup>

- 10:00 AM-3:00 PM at 75 State Street

## + Expected topics for next meeting

- Discussion of stakeholder feedback – discussion on the elements to inform the next iteration of the NPA framework
  - **LDCs to provide written report version of framework by Jan 22**
  - **Stakeholders to provide written feedback by Jan 29**

## + Technical Subcommittee

- Technical Subcommittee Jan 22<sup>nd</sup> – let us know if any questions

## + Materials

- All of today's materials will be posted to the working group website (<https://npaworkinggroup.com/>)

### Feedback from Today?

- Email us at:

[npaworkinggroup@apexanalyticsllc.com](mailto:npaworkinggroup@apexanalyticsllc.com)

(We will assume internal/informal feedback; specify if you prefer public posting)

- Formal, Public Comment:

Submit written comments on <https://npaworkinggroup.com/> through contact us at bottom of page