



AC REPLACEMENT CONSUMER RESEARCH FINDINGS

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Acknowledgements and Goals

Funders and partners:

- Minnesota Department of Commerce Division of Energy Resources
- Leede Research

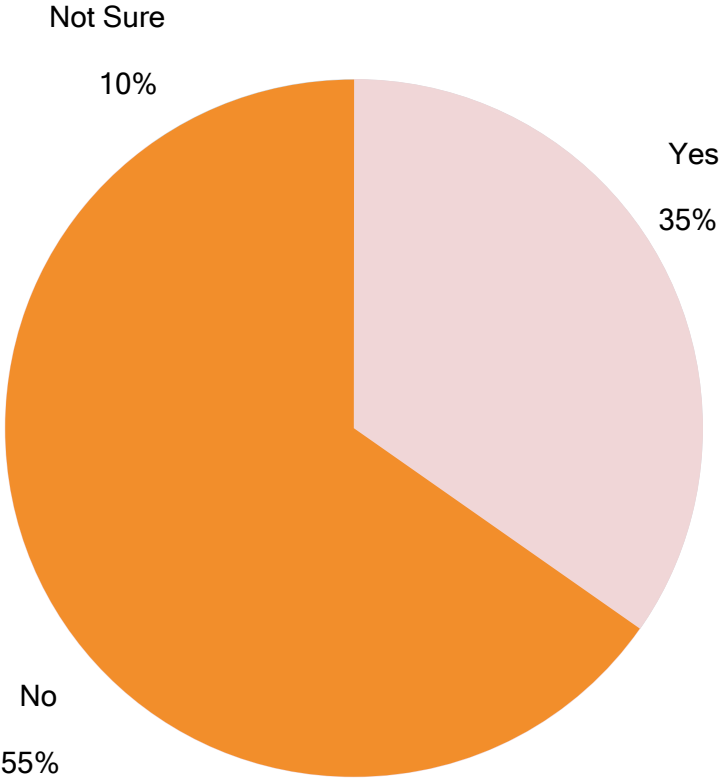
Goals:

- Uncover homeowner perceptions and interests around AC replacement:
 - Find out what customers value (price, features, and benefits)
 - Determine drivers of replacement (e.g., end of life or proactive)
 - Uncover current awareness levels

Market Research Interviews

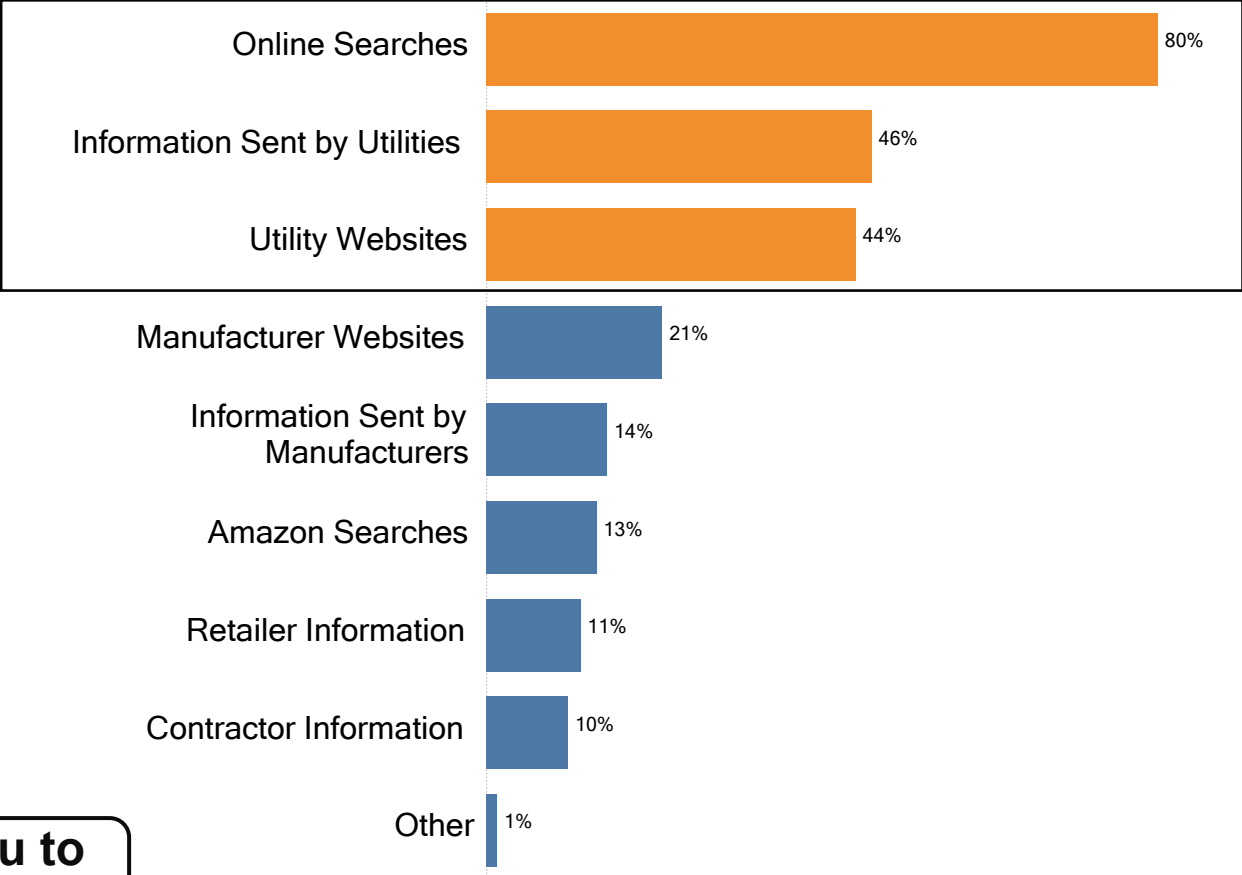
- 438 Minnesota Households – Online survey
- Homeowners with AC and furnace
- Both new purchasers and those that intend to purchase

Look for Information



H5. Do you currently look for information to help you to improve the comfort or energy efficiency of your home?

If Yes: Please check any of the following sources that you would typically use for this type of information:



Replacement Motivators

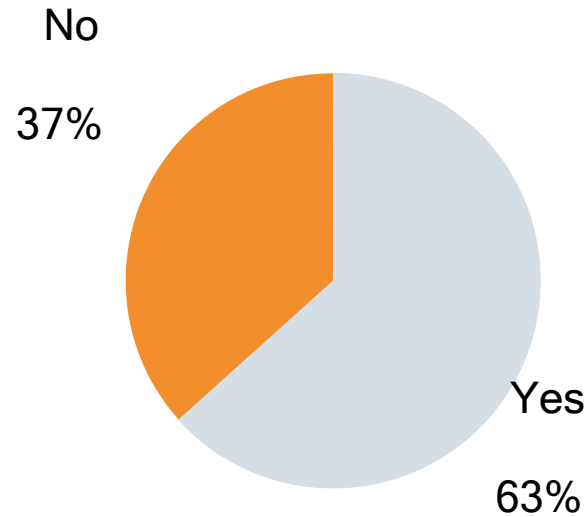
Please select the TOP 5 items that would create the strongest interest in considering a new AC system:

Abridged list – items scoring at least 10% for any ranking

	1	2	3	4	5
Current AC Unit Fails	65%	6%	3%	3%	0%
Replacement of Furnace or Heating System	3%	10%	8%	7%	5%
Ongoing Problems with AC Unit	5%	33%	11%	5%	6%
AC System is Old	4%	6%	12%	8%	6%
New AC is More Energy Efficient	3%	8%	11%	11%	11%
Money Savings on New AC System	2%	7%	13%	14%	9%
Greater Home Comfort Overall	3%	4%	5%	7%	12%

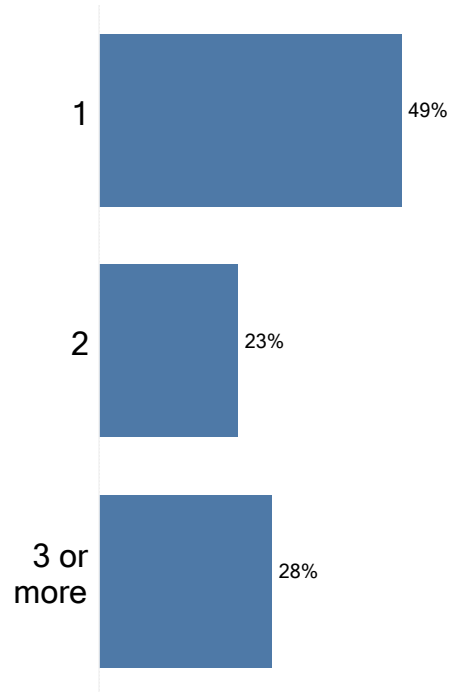
System Replacement Trends – Recent Purchasers

P1a. In the installation process did you replace your heating system at the same time?



Customers replace heating system at same time at a ratio of 2:1

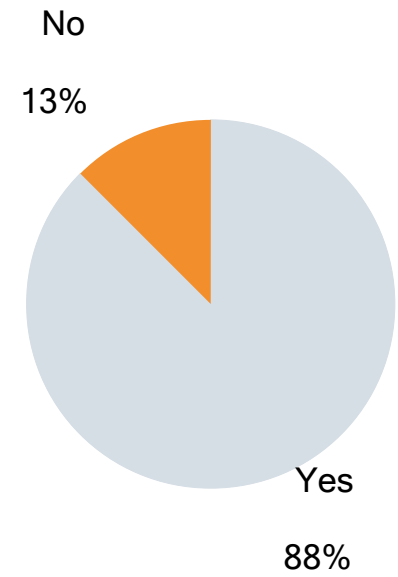
AC Unit Selection Process – Recent Purchaser



P2. How many different AC units or systems did you consider in that process?

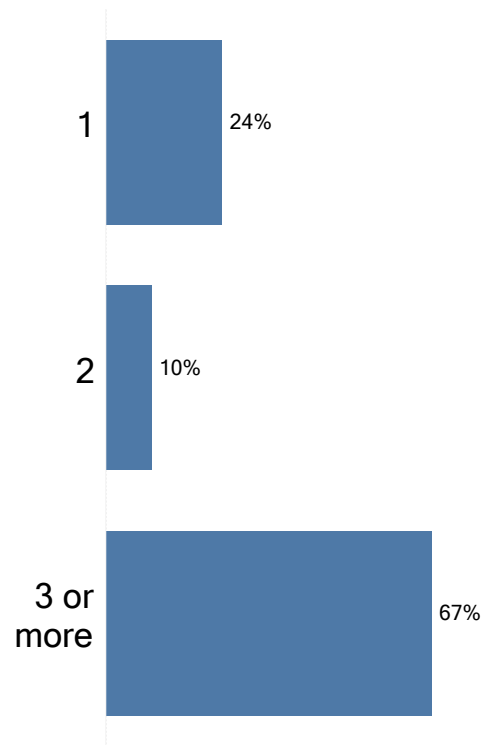
P2a. Were you offered a high-efficiency option in these units?

Yes 68%
No 11%
Not Sure 21%



If Yes: Did you purchase the high-efficiency option?

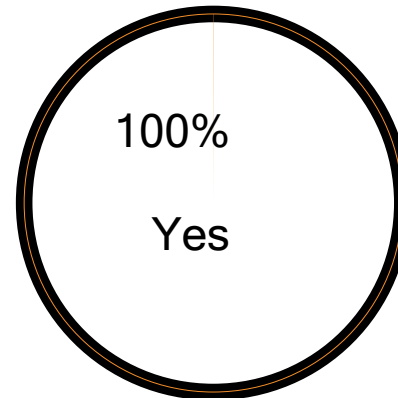
AC Unit Selection Process – Intender



PP2a. Would you consider a high-efficiency option in these units if offered?

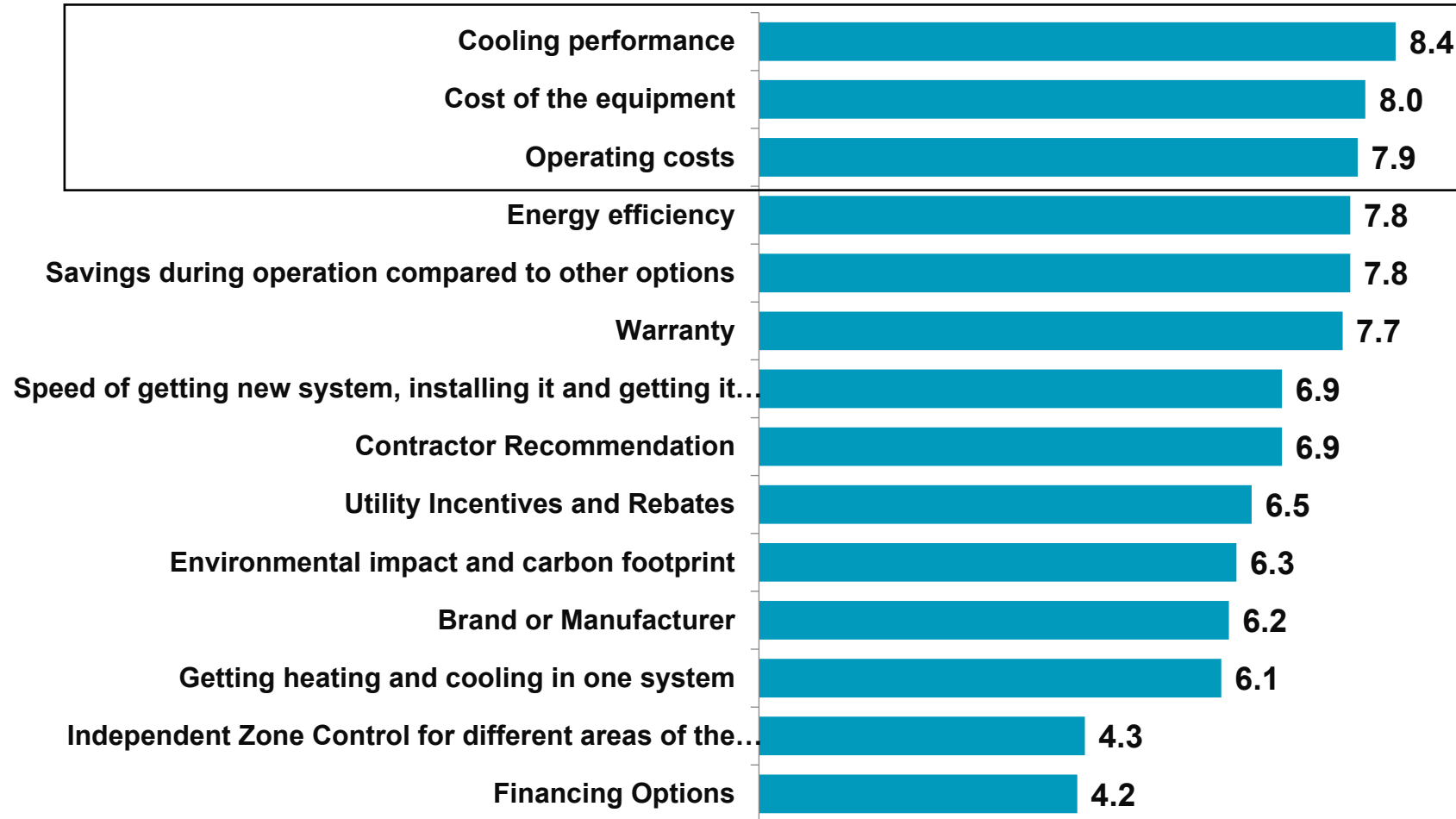
Yes 96%
No 1%
Not Sure 2%

If Yes: Would you purchase the high-efficiency option?



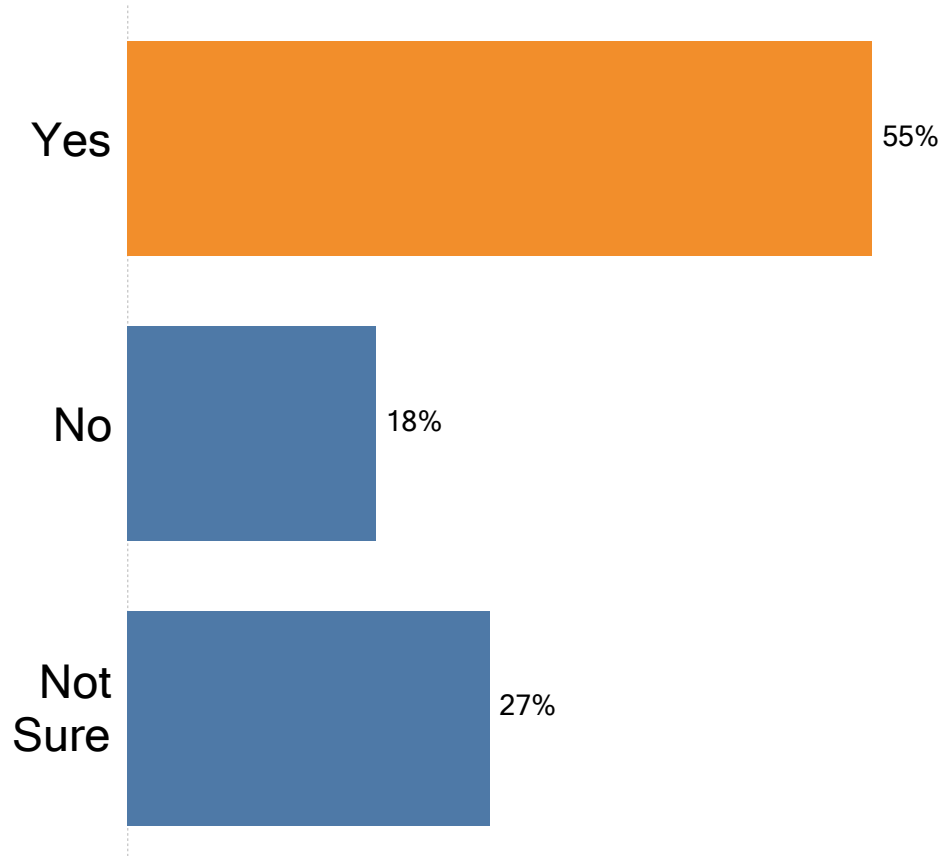
PP2. How many different AC units or systems would you likely consider in that process?

Attribute Importance – Recent Purchasers



P6. The following are a list of attributes that you considered in the purchase of a new air conditioning unit or system. Please rate the importance of each item from 1 to 10, with 1 being Not at All Important, to 10 being Very Important in your selection of an AC unit:

AC Unit Upgrades – Recent Purchasers



Would you be willing to pay more for an air conditioning system that offered a lower cost to operate on an ongoing basis?

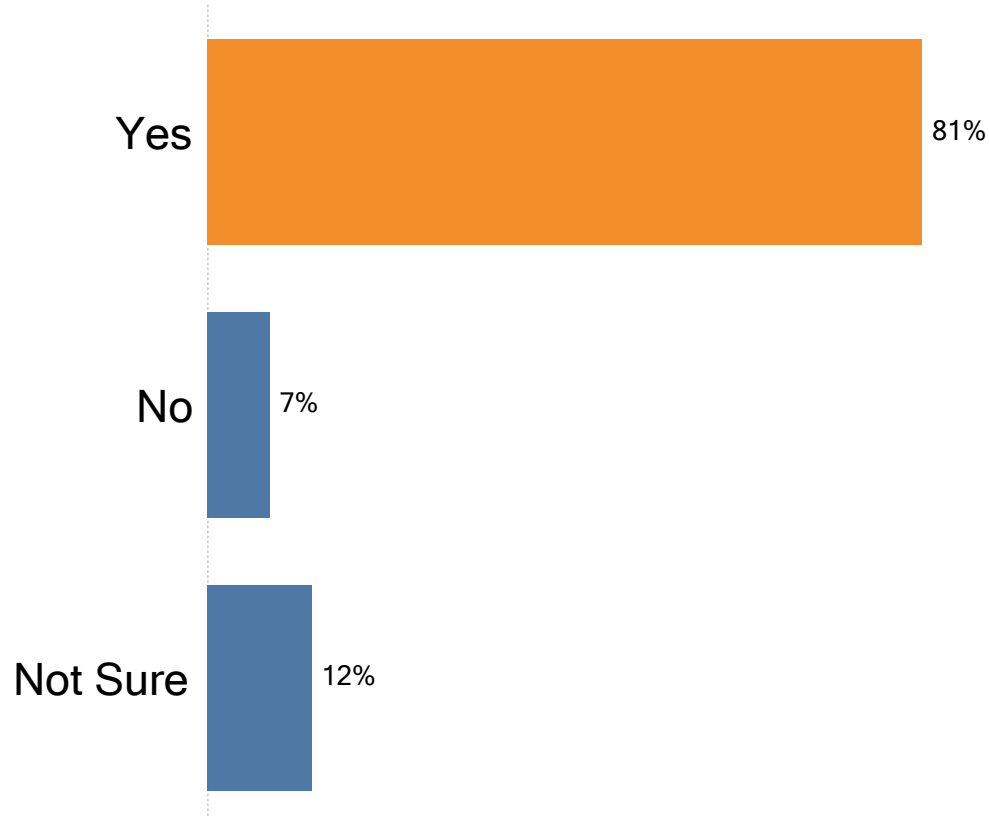
Mean: 14.5% more

If Yes: What percent more would you be willing to pay for a more efficient option?

Mean: 6.0 years

How many years would you expect it to take to recoup the difference in cost by savings?

AC Unit Upgrades – Intenders

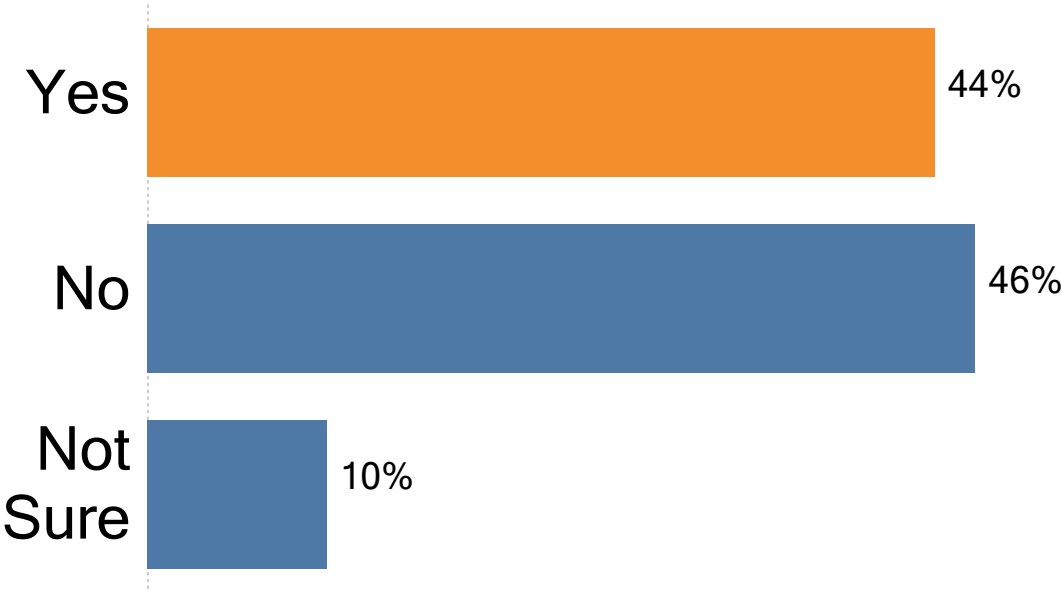


Mean: 20.8% more

If Yes: What percent more would you be willing to pay for a more efficient option?

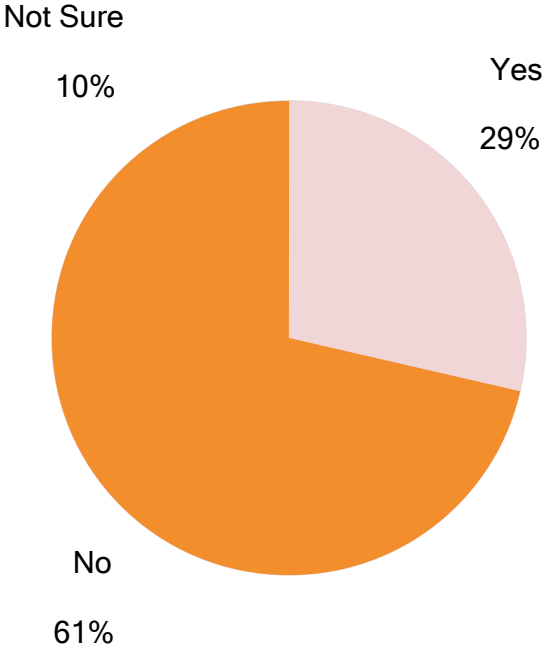
Would you be willing to pay more for an air conditioning system that offered a lower cost to operate on an ongoing basis?

Heat Pumps – Awareness



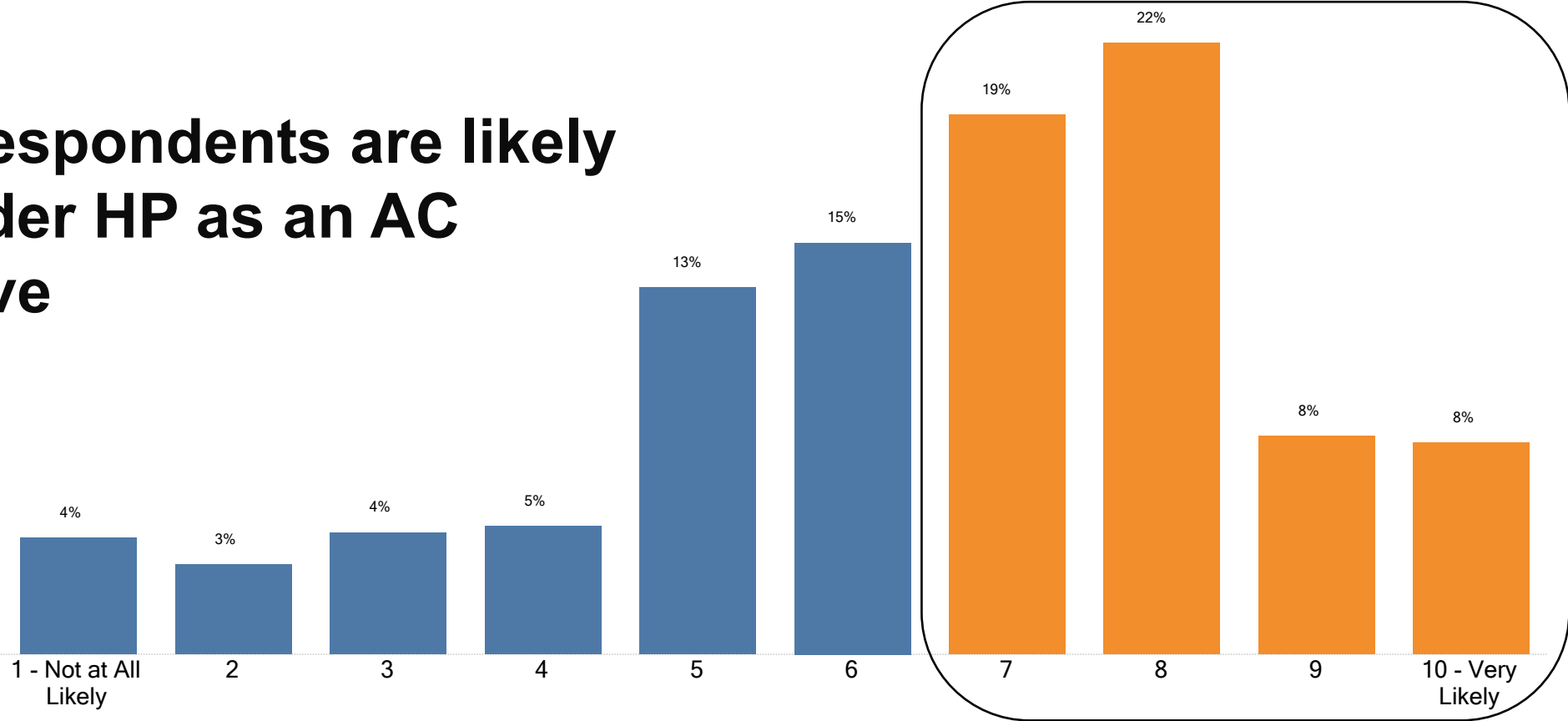
Have you heard of Heat Pumps as it relates to heating and air conditioning?

Do you personally know anyone that has this as their HVAC system?



Consider vs. Traditional Central Air

57% of respondents are likely to consider HP as an AC alternative



How likely would you be to consider this technology as an alternative to AC?

Key Takeaways – Offer Choices

- Most customers replace on failure, they want to shop carefully but may not have time to
- Most customers want to replace their AC and furnace together, BUT some prefer not to
- Be prepared to offer choices and options

Key Takeaways - Common Sense Upgrades Are Attractive

- Cooling performance, upfront cost, and operating cost are important
- Customers are willing to pay more upfront to lower their operating costs and a 6-year payback is attractive
- Rebates and financing are important tools for customers, be prepared to offer these financial tools.

Key Takeaways – General Awareness Is Needed As Well As An Education-based Sales Process

- Awareness of this technology is low to moderate
- Utilities and customer word-of-mouth can play a powerful role in increasing awareness
- Customers need to know that it will work in our climate and that the technology will make economic sense.