DTE Equity Insights and Engagement
Study Community Surveys Results

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Six Mini-Surveys designed as a series
  • Aiming for 10 questions per survey
  • $10 incentive per survey
  • Sweepstakes for additional incentives

Mini-Survey Goals
  • **Build rapport and understanding** of survey respondents
  • **Increase DTE’s empathy and strengthen insights** about customer perspectives, values, challenges, sense of community, resources, etc.
  • **Enhance cultural sensitivity** of program design, outreach, and implementation strategies
Mini-Survey Themes

1. Awareness, Experiences, and Perceptions of DTE and IQ Programs (5/6 – 5/18)
2. Home Related Challenges and Joys (5/23 – 5/30)
3. HVAC Concerns, Maintenance, and Temp Settings (6/8 – 6/17)
5. Security of Food, Health, Housing, and Energy (7/8 – 7/17)
6. Household Insights, Interests, and Characteristics* (7/22 – 8/1)

Each survey respondent also completed a short entry-point survey.

*Originally titled: Household Composition, Demographics, and Home Use
Focused surveys on Census Tracts analyzed according to Energy Burden, Intensity, and a Composite Score which also included Income.
### DTE Equity Study Surveys 1 – 6 Summary Results

- 2,090 unique respondents
- 6% response rate overall
- 122 Questions including Intake Survey and Contingent Questions

<table>
<thead>
<tr>
<th></th>
<th>Survey 1</th>
<th>Survey 2</th>
<th>Survey 3</th>
<th>Survey 4</th>
<th>Survey 5</th>
<th>Survey 6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Postcard Invitation</strong></td>
<td>15,541</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Email Invitation</strong></td>
<td>N/A</td>
<td>13,083</td>
<td>13,056</td>
<td>13,051</td>
<td>13,050</td>
<td>13,047</td>
</tr>
<tr>
<td><strong>First Email Reminder</strong></td>
<td>13,056</td>
<td>811*</td>
<td>12,509</td>
<td>12,514</td>
<td>12,547</td>
<td>12,503</td>
</tr>
<tr>
<td><strong>Second Email Reminder</strong></td>
<td>12,469</td>
<td>N/A</td>
<td>12,434</td>
<td>N/A</td>
<td>469**</td>
<td>1,261**</td>
</tr>
<tr>
<td><strong>Response Rate</strong></td>
<td>7.2%</td>
<td>5.6%</td>
<td>5.4%</td>
<td>5.9%</td>
<td>6.1%</td>
<td>5.9%</td>
</tr>
<tr>
<td><strong>Total Completions</strong></td>
<td>1,118</td>
<td>737</td>
<td>709</td>
<td>771</td>
<td>792</td>
<td>776</td>
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<tr>
<td><strong>Completed All Surveys To-Date</strong></td>
<td>433</td>
<td>431</td>
<td>416</td>
<td>389</td>
<td>377</td>
<td></td>
</tr>
</tbody>
</table>

*Sent to nonrespondents who completed Survey 1

**Sent to nonrespondents who completed a prior survey

Source: ICF analysis
**Demographics**

- **90%** Black or African American Respondents
- **28%** Less than $10,000 Annual Income
- **41%** High School/GED Education Level or Less

Relatively even split between PUMAs

- **51%** Owners
- **44%** Renters
Net Promoter Score (NPS) for All Respondents

On a scale of 0 to 10, the average Net Promoter score was 22, indicating customers are passive, suggesting customers are satisfied but there’s room for improvement. Customers in older age groups, very low household income (<$10k), and renters are more likely to recommend DTE to friends and family.

NPS by Demographics

Groups with NPS Scores above 22
- 45–54 Years old, 55–64 Years old & 65 years or older
- Households with less than $10,000 annual income
- Residents of PUMA 3210
- Renters

Groups with NPS Scores below 22
- 18–34 years old & 35–44 years old
- Households with more than $10,000 annual income
- Residents of PUMA 3208
- Homeowners

Source: ICF analysis

Net Promoter Score (NPS) is a widely used metric that asks respondents to rate the likelihood that they would recommend a company to family or friends on a scale of 0 (not likely) to 10 (extremely likely).

NPS = % of Promoters (9–10 on scale) – % of Detractors (0–6 on scale)
Change in NPS Score

Respondents who participated in Survey 6 who also participated in Surveys 1, 2, or 3 were asked NPS rating again in Survey 6. This is a total of 544 customers. Among these customers, the overall NPS scores increased by 82%.

NPS is a common metric used in customer experience programs to measure loyalty of customers to a company.

NPS = % of Promoters (9-10 on scale) – % of Detractors (0-6 on scale)

*Only Survey Respondents from 1 – 3 were asked on Survey 6
**NPS Score not connected to scoring conducted for other DTE or program evaluator efforts
Customers Sentiments about DTE are Largely Positive: 73% of respondent expressed some level of satisfaction with DTE, 56% are satisfied, 41% are highly satisfied, and 30% rated their satisfaction as 10 out of 10. Only 14% of customers expressed dissatisfaction. Net promoter scores are similar. These positive sentiments provide a positive backdrop for future work in selected communities and indicate customer receptiveness to working with DTE.

Customer Engagement is High, but Awareness is Low: Customers have had high levels of engagement with the survey and have displayed high levels of authenticity in sharing their thoughts and recommendations, indicating a high level of self-efficacy among respondents. Customers have low levels of awareness and engagement in energy efficiency and DR programs but have expressed interest in practical and actionable solutions. Customers appear to be well poised to expand their engagement in accessible efficiency and DR programs.

Customers Desire Better Communications, Expanded Programs, and Compassion: Some of the most noteworthy customer feedback focuses on the need for better communications about programs as well as more program opportunities for income qualified residents and seniors as well as compassion when interacting with DTE representatives.

Bills and Community Organizations are Important Information Resources: Customers are most likely to learn about new opportunities when reviewing their utility bills and through interactions with community organizations. These communications strategies will be important means for delivering semi-tailored messaging to the Income Qualified Customer segment.
Survey 2 Customer Insights: Home Related Challenges and Joys

Customers Largely Feel Good about Their Homes: Customers associate their homes with family, relaxation, and rest. They are largely satisfied with their level of comfort in their home and homeowners are particularly satisfied with the affordability of their monthly mortgage. Customers are less satisfied with health, safety, and security considerations and least satisfied with the location of their home.

About Half of Customers Need/Desire Major Changes in Their Home: About half of customers believe the size (square footage) of their home is just right, while 36% think it is a bit too small. And while many customers seem happy with the condition of their home (56%) - suggesting only a few changes are needed – 45% are facing some notable challenges or desire major changes. Many of the desired home upgrades are aligned with services provided by DTE, including windows, roofs, and heating equipment. Other upgrades of interest to customers could be leveraged if valued.

Ability to Keep Homes Warm is a Challenge: Half (50%) of customers have difficulty keeping their home warm at an affordable cost, highlighting the importance of the energy efficiency work DTE is providing.

Housing Location is Driven by Cost and Affordability: Customers’ decision on housing location is largely driven by cost & affordability (38%). Safety and security is also a top priority for many (18%). It is important for DTE to recognize these constraints and emphasize the added comfort that can be attained while maintaining the affordability.
Survey 3 Customer Insights: HVAC Concerns, Maintenance, and Temp Settings

Customers Recognize Need for Air Sealing and Insulation: Approximately ¼ of customers report they are too cold in the winter while 30% report that people in their home have mixed temperature preferences. Nearly 90% of customers experience some draftiness and 22% describe their home as very drafty. Half think their insulation is inadequate and most rely on DIY approaches for air sealing and insulation. Most respondents are aware of the need for major home improvements but have limited resources to address them. These insights point to the value of highlighting the opportunity to have air sealing and insulation work performed and have it done by professional contractors. Strategies for addressing mixed thermal comfort preferences would be valuable as well.

HVAC Controls are Antiquated: Most customers have analog thermostats, some have programmable thermostats and only 6% have smart thermostats. There is an opportunity to replace and program thermostats for winter and summer settings and potentially install smart thermostats while encouraging customers to participate in DR programs.

HVAC Maintenance is Neglected: Customers rarely have their heating systems serviced, about ¼ are experiencing system failures at least once per year, and very few are changing their furnace filters regularly. These point to opportunities for service/maintenance plans, direct installs or limited time offers on furnace filters, and education about the value and timing of changing filters.
Customers are deeply rooted in their communities with strong connections to their neighbors. A large majority of customers said they are familiar with their neighbors with 86% knowing the names of next-door neighbors and 67% speaking to neighbors at least once per week. This familiarity may be the product of living in the community for many years. For example, half of all respondents have lived in their current community for at least 11 years. Despite the connections with neighbors, feelings about the community are mixed with only half of customers saying they are satisfied, 30% neutral and 20% dissatisfied.

Customers help their neighbors and actively share information. Approximately two-thirds of respondents reported helping neighbors with yardwork, providing neighbors with food, or shoveling snow. When talking with neighbors, home repairs are a popular topic – a subject of discussion for half (51%) of respondents in targeted communities in the past year. Health and safety issues (38%) and the cost of their energy bill (34%) are also topics of discussion. Younger customers are slightly more likely than older customers to discuss their experiences with DTE with neighbors (25%). Overall, 52% of respondents indicate DTE is their source of heating and cooling information, followed by family (34%), looking online (28%), friends or neighbors (22%), and contractors (14%).

Awareness and use of community programs varies: When asked about their familiarity with the top six widely known community programs, familiarity was greatest for Women, Infants, and Children (WIC) (80%), The Heat and Warmth Fund (THAW) (76%), and Service. Employment. Redevelopment. Metro–Detroit (SER) (67%). Use of programs was much lower than awareness. Only 28% of respondents received services from WIC, 16% from THAW, and 38% from SER. More than one-third of respondents (36%) receive no services from listed organizations.
Survey 5 Customer Insights: Security of Food, Health, Housing, and Energy

Paying bills, physical health, and neighborhood safety are the most frequent concerns for respondents. Focus of household concerns varies with age and income level. Paying bills is biggest concern particularly for younger and lower-income households. Physical health and neighborhood safety are most frequent concerns for older households and higher income households ($>40k). Respondents fear mold the most as a potential danger in their home but are personally most concerned with water leaks and drafts and are most likely to have experienced these problems as well.

Lowest income households are least likely to have fire safety measures and to use inefficient & risky heating practices. Overall, 50% of customers do not have a CO detector or fire extinguisher in their home; 22% do not have a smoke detector on each floor; and 8.4% have none of the safety items listed. Younger households and those with the lowest incomes are least likely to have fire safety measures. Half of households typically use space heaters (21% have 1; 28% have >1). Nearly one half of customers (44%) close doors and vents to unused rooms making furnaces run less efficiently than otherwise; while 28% have used their oven to heat their homes during the most recent winter – 8% of respondents use their oven frequently and 13% use it sometimes. Lowest income households are most likely to use the oven as a supplemental heating source.

Financial strain causes half of customers to put off paying bills and utility bills among those that are most often deferred: 54% of households reported frequently putting off purchases or avoiding paying bills due to financial strain. Groceries are also frequently deferred. Renters, young people, and low-income among most impacted. Bill payment is highly difficult for 38% of customers and utility bills are most likely to be 60+ days overdue.
Survey 6 Customer Insights: Communications and Utility Relations

Priority customers have lived in Detroit for many years, have a high level of interest in learning more about DTE’s community programs, and face few cultural and technology barriers for communications. Nearly three-quarters (73%) of respondents have lived in greater Detroit for more than 30 years, while 93% of respondents are eager to learn more. Wi-Fi and language barriers are minimal with 94% of respondents indicating that they have Wi-Fi at home, and 99% reporting English as their primary language.

Only a small majority of priority customers report being satisfied with DTE program information. Slightly more than half of respondents (55%) rate their satisfaction with information they have received on DTE’s EWR programs, payment assistance programs, and ways to save through shifts in behavior at 9/10 or higher, while only 13% report being dissatisfied, with the rest being neutral.

Email and Facebook are leading pathways for communicating with priority customers. A surprisingly large percent of priority respondents (94%) say they have access to Wi-Fi in their homes and 82% prefer to receive communications via email (compared to U.S. mail and text messages). Facebook stands out as the most popular social media network used by 65% of respondents in target areas (65% use it at least once per week but 19% don’t use any social media).

Nearly one-in-five priority customers are contacting DTE every month or more often. A relatively large proportion of respondents (nearly 20%) are contacting DTE monthly or more often due to concerns about billing questions or power outages. 13% of customers have questions about their bill every month.

Positive experiences with community polls build rapport. Nearly all customers (98%) said their experience with the community polls was positive and this was reflected in a dramatic increase in net promoter score ratings which rose from 23 to 41 among respondents who participated in at least one of the first three polls as well as the last poll.
Links to Survey Sections

1. Awareness, Experiences, and Perceptions of DTE and IQ Programs
2. Home Related Challenges and Joys
3. HVAC Concerns, Maintenance, and Temp Settings
4. Resilience, Self-Reliance, and Community Connections
5. Security of Food, Health, Housing, and Energy
6. Household Insights, Interests, and Characteristics*

Each survey respondent also completed a short entry-point survey.

*Originally titled: Household Composition, Demographics, and Home Use
Survey 1
Awareness, Experiences and Perceptions of DTE and IQ Programs
Survey 1: Key Findings
Awareness, Experiences and Perceptions of DTE and IQ Programs

Satisfaction Metrics: Customer satisfaction with DTE is moderate (7.3/10); as is the NPS score (7.6/10). Both scores are higher among older respondents and among the lowest income households.

Customer Sentiments: Customer sentiments (a composite measure) about DTE are relatively positive with 68% of customers rating their overall level of trust, impression of services, equitable treatment and care for customer needs.

Perceptions of DTE: Customers state they are generally supported (63%) by DTE when asked how DTE could improve its service to customers.

Program Awareness & Participation: When asked about their awareness of DTE programs, customers were most aware of the Shutoff Protection program (75%). Sixty-three percent of customers said they had participated in the program.

Information Resources: Utility bills are the main place customers see or hear about DTE (62%), followed by advertisements (25%). Fifteen percent of customers learned about DTE through community organizations and events, (7+% each).
Satisfaction and NPS

Customer satisfaction was rated relatively lower than NPS. Both satisfaction and NPS increased with age and decreased with income.

### NPS Average Rating and Satisfaction by Demographics

<table>
<thead>
<tr>
<th>Survey 1</th>
<th>Age</th>
<th>Income</th>
<th>PUMA</th>
<th>Own or Rent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>18-34 years old</td>
<td>Less than $10,000</td>
<td>3208</td>
<td>Own or Rent</td>
</tr>
<tr>
<td></td>
<td>35-44 years old</td>
<td>$10,000 to $39,999</td>
<td>3210</td>
<td>Own</td>
</tr>
<tr>
<td></td>
<td>45-54 years old</td>
<td>$40,000 or more</td>
<td></td>
<td>Rent</td>
</tr>
<tr>
<td></td>
<td>65 years or older</td>
<td></td>
<td></td>
<td>Other Arrangement</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SAT.</th>
<th>Age</th>
<th>Income</th>
<th>PUMA</th>
<th>Own or Rent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score Rating: 7.6</td>
<td>18-34 years old</td>
<td>Less than $10,000</td>
<td>3208</td>
<td>Own or Rent</td>
</tr>
<tr>
<td></td>
<td>35-44 years old</td>
<td>$10,000 to $39,999</td>
<td>3210</td>
<td>Own</td>
</tr>
<tr>
<td></td>
<td>45-54 years old</td>
<td>$40,000 or more</td>
<td></td>
<td>Rent</td>
</tr>
<tr>
<td></td>
<td>65 years or older</td>
<td></td>
<td></td>
<td>Other Arrangement</td>
</tr>
</tbody>
</table>

### Survey 1

*Average NPS Score Rating: 7.6*

*Average Satisfaction Score: 7.3*

(Scale from 0 to 10)

Source: ICF analysis

NPS. On a scale of 0 to 10, how likely are you to recommend DTE to a friend or family member? (N=1,118)

SAT. On a scale of 0 to 10, how satisfied are you overall with DTE as a utility? (N=1,095)
Customer satisfaction was rated relatively lower than NPS. Both satisfaction and NPS increased with age and decreased with income.

**Satisfaction Ratings:**
- 73% rated 6 or above
- 56% rated 8 or above
- 41% rated DTE 9 or above (Top Box)
- 30% gave DTE a 10 out of 10!
- Only 14% expressed dissatisfaction (<5)

**NPS Ratings:**
- 52% are extremely likely to recommend DTE (Promoters)
- 14% are not likely (Dis–promoters)
Perceptions of DTE Qualities: Trust, Service, Satisfaction, Equity, and Need

Customers rated their level of trust in DTE and its program partners to perform work in their home moderately high with a median score of 8 out of 10. Customer views on equitable treatment and care for customer needs ranked lowest with median scores of 7.2.

<table>
<thead>
<tr>
<th>Perception</th>
<th>Mean Score (Our of 10)</th>
<th>Median</th>
<th>% of Responses above Six</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of trust in DTE and its program partners to perform work in their home</td>
<td>7.4</td>
<td>8</td>
<td>85%</td>
</tr>
<tr>
<td>Overall impression of the services provided by DTE</td>
<td>7.2</td>
<td>7.6</td>
<td>86%</td>
</tr>
<tr>
<td>Overall level of satisfaction with DTE’s efforts to support the needs of customers in Detroit</td>
<td>7</td>
<td>7.4</td>
<td>79%</td>
</tr>
<tr>
<td>DTE treats all of its customers equitably</td>
<td>6.8</td>
<td>7.2</td>
<td>78%</td>
</tr>
<tr>
<td>DTE cares about the needs of customers in Detroit</td>
<td>6.6</td>
<td>7.2</td>
<td>75%</td>
</tr>
</tbody>
</table>

Source: ICF analysis
Customer perceptions of DTE are relatively positive, with almost a quarter (23%) of customers rating their sentiment with DTE services, despite the depth of need seen in the population.

23% DTE is knocking it out of the park – they are a great resource to their customers and provide high-quality programs and services. [score between 63–70]

45% DTE is doing good work – they are providing important resources and services to their customers but still have room to improve. [screen between 56–62]

31% DTE is taking some actions to help customers, but I wish they were doing more. [score between 43–55]

0% DTE really needs to do more to support the needs of its customers. [score between 0–42]

68%* of customers surveyed gave DTE a score 8/10 or higher

*Note: Percentages do not total to 100% due to rounding.
## Awareness and Participation

Awareness of DTE’s Shutoff Protection program (75.4%) is double the awareness of the Energy Efficiency Assistance program—with 62.6% of respondents having participated in the Shutoff Protection program.

### Awareness of and Participation in DTE and IQ Programs*

<table>
<thead>
<tr>
<th>Program</th>
<th>Awareness</th>
<th>Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shutoff Protection</td>
<td>75.4%</td>
<td>62.6%</td>
</tr>
<tr>
<td>Autopay</td>
<td>8.2%</td>
<td>52.5%</td>
</tr>
<tr>
<td>Budget Wise Billing</td>
<td>29.2%</td>
<td>45.8%</td>
</tr>
<tr>
<td>Energy Efficiency Assistance (EEA)</td>
<td>8.6%</td>
<td>31.6%</td>
</tr>
<tr>
<td>Home Energy Consultation (HEC)</td>
<td>10.1%</td>
<td>27.0%</td>
</tr>
<tr>
<td>Other DTE Program</td>
<td>6.2%</td>
<td>5.2%</td>
</tr>
<tr>
<td>None of the above</td>
<td>7.0%</td>
<td>15.9%</td>
</tr>
</tbody>
</table>

*In this question, we added a fictional program called, “Pay now save later.” Approximately, 10.2% of respondents stated they were aware of the fictional program and 1.6% said they participated in it.

Average customer familiarity with DTE programs and services was a 3.3 out of 5, on a scale of 0 to 5.

Source: ICF analysis

FAMI. On a scale of 0 to 5, how familiar are you with the programs and services offered by DTE? (N=1,092)

KNOW. Please indicate which of the following DTE programs you had heard of before today? Select all that apply (N=2,783)

PART. Which of the following DTE programs have you participated in during the past 10 years? Select all that apply. (N=1,430)
Sources of Information

The main sources customers stated seeing or hearing about DTE is on their bill (62%) and advertisements (25%). Fifteen percent of customers learned about DTE through community organizations and events, respectively 7% each. Close to 9% of customers do not see or hear about DTE.

<table>
<thead>
<tr>
<th>Sources Respondents See or Hear about DTE</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bills</td>
<td>62.2%</td>
</tr>
<tr>
<td>Advertisements</td>
<td>24.7%</td>
</tr>
<tr>
<td>DTE Programs (EEA, HEC)</td>
<td>13.9%</td>
</tr>
<tr>
<td>Online advertisements</td>
<td>11.3%</td>
</tr>
<tr>
<td>Social media</td>
<td>10.8%</td>
</tr>
<tr>
<td>Community organizations</td>
<td>7.5%</td>
</tr>
<tr>
<td>Events in the community</td>
<td>7.0%</td>
</tr>
<tr>
<td>Other</td>
<td>2.5%</td>
</tr>
<tr>
<td>I don’t see or hear about DTE</td>
<td>8.7%</td>
</tr>
</tbody>
</table>

Source: ICF analysis
### Customer’s Recommendation to Help DTE Improve its Service to Customers

<table>
<thead>
<tr>
<th>Theme</th>
<th>Respondent Feedback</th>
<th>Mentions</th>
<th>% of Total Mentions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Support</strong></td>
<td><strong>General support / helping people in need</strong></td>
<td>286</td>
<td>63%</td>
</tr>
<tr>
<td></td>
<td>“get connected with the assistance you need”, “allow time for people that have fallen on hard times”</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>General positive comment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>“good job”, “I’m satisfied”, “keep up the good work”</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>No Critique</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Suggested Program Improvements</strong></td>
<td><strong>Cost / affordability / discounts</strong></td>
<td>182</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Customer service/communication</strong></td>
<td>174</td>
<td></td>
</tr>
<tr>
<td><strong>Issues and Non EWR</strong></td>
<td><strong>Power shutoffs / turning power back on</strong></td>
<td>37</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Wait times / speed of processes</strong></td>
<td>32</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Don’t know / not sure</strong></td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>General negative comment</strong></td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>“everything”, “it’s better that I don’t answer this question”)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Infrastructure/Non-EWR Issues</strong></td>
<td>114</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** ICF analysis
Survey 2
Home Related Challenges and Joys
Survey 2: Key Findings

Home Related Challenges and Joys

**Home Related Metrics:** Customers are most satisfied with their level of comfort in their home (7.7 out of 10), and least satisfied and challenged with the location of their home (5.4).

**Home Size:** About 50% of customers think the size (square footage) of their home is just right, with 36% feeling that their home is too small and 17% stating their home is too big.

**Comfort Factors:** Important factors in making customers comfortable in their home include home security and privacy (17%) and the features of their homes (14%).

**Home Improvement:** Renovating the kitchen (20%), new windows (19%), new roof or repair (15%) and bathroom renovations are the top major improvements customers would make to their home.

**Warmth & Cost Challenges:** Half of customers expressed difficulty in keeping their home warm at an affordable cost.

**Purchasing or Renting Factors:** When deciding where to purchase or rent a home, customers are most concerned with the cost & affordability (38%), location (22%) and safety/security (18%) considerations. Transportation considerations were last (2%).

**Sentiments about Home:** While some customers seem pretty happy with their homes (56%)—suggesting only a few changes are needed, 45% are facing some notable challenges or desire major changes.
Customers are most satisfied with their level of comfort in their home (7.7 out of 10), and least satisfied with the location of their home (5.4).

<table>
<thead>
<tr>
<th>Satisfaction with Home Attributes</th>
<th>Average</th>
<th>Homeowner</th>
<th>Renter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of comfort</td>
<td>7.7</td>
<td>7.9</td>
<td>7.7</td>
</tr>
<tr>
<td>Affordability of monthly (mortgage / rent) payment</td>
<td>7.5</td>
<td>8.4</td>
<td>6.6</td>
</tr>
<tr>
<td>Overall satisfaction with their home</td>
<td>6.8</td>
<td>7.1</td>
<td>6.5</td>
</tr>
<tr>
<td>Satisfaction with the health and safety conditions</td>
<td>6.3</td>
<td>6.5</td>
<td>6.3</td>
</tr>
<tr>
<td>Sense of safety and security in their home</td>
<td>6.3</td>
<td>6.6</td>
<td>6.2</td>
</tr>
<tr>
<td>Quality of construction of their home</td>
<td>6.0</td>
<td>6.6</td>
<td>5.6</td>
</tr>
<tr>
<td>Satisfaction with the location of their home</td>
<td>5.4</td>
<td>5.6</td>
<td>5.2</td>
</tr>
</tbody>
</table>

Source: ICF analysis

HSAT1. How would you rate your overall level of satisfaction with your home? N: 737
HSAT2. How would you rate your overall level of comfort when spending time in your home? N: 734
HSAT3. How would you rate the affordability of your monthly [if HOME2 or HOME2_EN = 1 insert mortgage payment] [if HOME2 or HOME2_EN = 2 insert rent payment] [if HOME2 or HOME2_EN = 3 insert mortgage/rent payment]? N: 729
HSAT4. How would you rate the adequacy of the size (square footage) of your home? N: 729
HSAT5. How would you rate your level of satisfaction with the location of your home? N: 728
HSAT6. How would you rate your overall sense of safety and security in your home? N: 728
HSAT7. How would you rate the quality of construction of your home? N: 726
HSAT8. How would you rate your overall satisfaction with the health and safety conditions of your home? (Your response should consider potential health risks associated with the presence of mold, carbon monoxide poisoning, and pests among other health and safety considerations.) N: 725
About 50% of customers state their size (square footage) of their home is just right, with 36% feeling that their home is too small and 17% stating their home is too big.

### HOW WOULD YOU RATE THE ADEQUACY OF THE SIZE (SQUARE FOOTAGE) OF YOUR HOME?

<table>
<thead>
<tr>
<th>Rating</th>
<th>0-Too Small</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5-Just Right</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10-Too Big</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>7.9%</td>
<td>1.8%</td>
<td>3.7%</td>
<td>8.0%</td>
<td>14.6%</td>
<td>3.7%</td>
<td>5.9%</td>
<td>4.0%</td>
<td>1.2%</td>
<td>2.2%</td>
<td></td>
</tr>
</tbody>
</table>

Average Score: 4.6

### Resident Status

<table>
<thead>
<tr>
<th>Resident Status</th>
<th>Avg. Sat regarding Sq. Ft of Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own</td>
<td>4.7</td>
</tr>
<tr>
<td>Rent</td>
<td>4.4</td>
</tr>
<tr>
<td>Other arrangement</td>
<td>4.3</td>
</tr>
<tr>
<td>Total</td>
<td>4.6</td>
</tr>
</tbody>
</table>

Return to Insights
Customers stated that cost & affordability (38%), location (22%) and safety/security (18%) are the most important factors when deciding to purchase or rent a home selecting the factor. The least important factor is transportation (2%).
## Home Comfort Factors

Top factors respondents list as increasing comfort in their homes include **Security/Privacy (16.9%)** and **Features of the House (13.9%)**.

<table>
<thead>
<tr>
<th>Themes</th>
<th>Mentions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security / Privacy</td>
<td>16.9%</td>
</tr>
<tr>
<td>Features of house (i.e. layout)</td>
<td>13.9%</td>
</tr>
<tr>
<td>Members of home (i.e. family, self, pets)</td>
<td>9.3%</td>
</tr>
<tr>
<td>General comfort</td>
<td>8.6%</td>
</tr>
<tr>
<td>Temperature / Heat / A/C</td>
<td>7.4%</td>
</tr>
<tr>
<td>Neighborhood / Neighbors</td>
<td>6.3%</td>
</tr>
<tr>
<td>Control / Ownership (i.e. “it’s mine”, I make decisions, having my own room)</td>
<td>5.7%</td>
</tr>
<tr>
<td>Elements inside of home (i.e. decoration / aesthetic)</td>
<td>5.5%</td>
</tr>
<tr>
<td>Finances / Financial security / Cost</td>
<td>4.4%</td>
</tr>
<tr>
<td>General location</td>
<td>3.7%</td>
</tr>
<tr>
<td>Technology (i.e. TV) / Appliances</td>
<td>3.5%</td>
</tr>
<tr>
<td>Cleanliness</td>
<td>3.1%</td>
</tr>
<tr>
<td>Utilities (i.e. lights, gas)</td>
<td>2.8%</td>
</tr>
<tr>
<td>Quietness</td>
<td>2.5%</td>
</tr>
<tr>
<td>Maintenance / Repairs / Upgrades</td>
<td>1.9%</td>
</tr>
<tr>
<td>Length of time in home (i.e. family home)</td>
<td>1.8%</td>
</tr>
<tr>
<td>Food / Cooking</td>
<td>1.4%</td>
</tr>
<tr>
<td>Yard / Land / Garden</td>
<td>0.9%</td>
</tr>
<tr>
<td>None</td>
<td>0.3%</td>
</tr>
<tr>
<td>Don’t know / not sure</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

Source: ICF analysis

"What makes me comfortable in my home is home security, and excellent neighbors."

- DTE Customer

"When all components of the home are in good working condition such as gas, light fixtures, plumbing, and stairs are usable, and in good repaired condition."

- DTE Customer

"Because it’s my home I am comfortable. I’m comfortable because I have a place to call home."

- DTE Customer

"Peace and quiet."

- DTE Customer
Renovating the kitchen (20%), new windows (19%), new roof or repair (15%) and bathroom renovations (12%) are the top major improvements customers would make to their home; water heating is the lowest priority for home improvements (2%).

### Top Major Home Improvements

- **Kitchen renovation**: 19.9%
- **New windows**: 18.5%
- **New roof / roof repair**: 15%
- **Bathroom renovation**: 12.3%
- **Insulation**: 7.1%
- **Heating system**: 6.3%
- **New flooring**: 3.3%
- **New kitchen appliances**: 1.6%
- **Water heating**: 1.4%
- **Other**: 14.7%

### Other Home Improvements

<table>
<thead>
<tr>
<th>Other Home Improvements</th>
<th>Number of Mentions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basement upgrades</td>
<td>13</td>
</tr>
<tr>
<td>Bathroom repairs</td>
<td>6</td>
</tr>
<tr>
<td>Plumbing or piping upgrades</td>
<td>5</td>
</tr>
<tr>
<td>Structure or foundation repairs</td>
<td>5</td>
</tr>
<tr>
<td>Everything</td>
<td>5</td>
</tr>
<tr>
<td>Porch upgrades</td>
<td>4</td>
</tr>
<tr>
<td>Kitchen repairs</td>
<td>4</td>
</tr>
<tr>
<td>Sliding upgrades</td>
<td>3</td>
</tr>
<tr>
<td>Gating or fencing repairs</td>
<td>3</td>
</tr>
<tr>
<td>Flooring or carpet upgrades</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: ICF analysis
Home Comfort

When asked about the ease of *keeping their home warm at an affordable cost during the winter*, half (50%) of customers have difficulty.

![Ease or Difficulty Keeping the Home Comfortable at an Affordable Cost](chart)

*Source: ICF analysis*

**Ease or Difficulty Keeping the Home Comfortable at an Affordable Cost**

- Very easy: 9.7%
- Somewhat easy: 20.6%
- Neither easy nor difficult: 19.9%
- Somewhat difficult: 32.1%
- Very difficult: 17.7%

*Source: ICF analysis*

Return to Insights
Renters seldomly contact their property owner or manager.

How often do you typically contact the property owner or manager for any type of maintenance?
- Every week: 3.9%
- Every other week: 4.8%
- Once a month: 17.5%
- Several times a year: 31.2%
- Rarely or never: 42.6%

How quickly does the property owner or manager typically respond to a maintenance request?
- Within the same day: 27.9%
- Within the same week: 30.2%
- After more than a week: 8.6%
- Within two weeks: 6.7%
- Within a month: 5.7%
- Within a few months: 4.4%
- Rarely or never: 16.5%

Source: ICF analysis

Sierra Club Responsive Comments, Docket UD-22-04, Exhibit 10
Survey 3
Temperature Settings, Maintenance, and HVAC Concerns
Survey 3: Key Findings
HVAC Concerns, Maintenance, and Temperature Setting

Thermostat Type: A large portion (41%) of customers have programmable thermostats while close to half of customers (45%) have traditional analog thermostats. A small percentage of customers (7%) have a smart or WiFi–enabled thermostat.

Temperature Settings: On average, customers set their temperature to roughly 71 degrees, with little difference between daytime and night-time settings. 27% report being too cold in the winter.

Home Maintenance: Most customers (88%) state their homes have a draft. More customers checked for air leaks (39%) than for adequate insulation (22%) during the past 2 years. DIY repairs are main strategy.

HVAC Maintenance: The majority (58%) of respondents only change their furnace filter twice a year or less frequently. 64% of respondents fail to service their furnaces regularly.

Level of Comfort: Most customers are very comfortable (48%) or somewhat comfortable (27%) with a DTE employee or program partner in their home. Only 6% indicate they would be uncomfortable.

Home Comfort & HVAC Reliability: More than half of customers (61% – composite measure) experience home comfort issues due to air drafts and poor insulation and have relatively reliable or unreliable home heating and cooling systems.
Thermostat Type and Adjustment

A large portion (41%) of respondents reported having programmable thermostats but close to half of customers (45%) have non-programmable thermostats while only a small amount (7%) of customers reported having a smart or WiFi-enabled thermostat in their home. About half (49.9%) of customers rarely change the temperature on the thermostat throughout the day.

Number of Times per Day Customers Change the Thermostat Setting

- 45.0% Non-Programmable
- 40.6% Programmable
- 6.8% Smart or WiFi-Enabled
- 1.0% Other
- 6.6% Don’t know

Three or more times per day: 10.7%
Once or twice a day: 38.1%
Rarely – we mostly don’t change the thermostat settings: 49.9%
Other: 1.3%

Source: ICF analysis
Temperature Settings

On average, customers set their temperature to roughly 71 degrees, with little difference between day and night temperature settings.

During the winter, are most members of your household generally too hot, too cold, or perfectly comfortable?

- **Too hot, 3.4%**
- **Too cold, 26.6%**
- **Just right, 40.0%**
- **Some are too hot while others are too cold, 30.1%**

Average Temperature Settings

- **Average set point: 71 degrees**
- **During the day: 71.5 degrees**
- **At night: 72.2 degrees**

On average, customers set their temperature to roughly 71 degrees, with little difference between day and night temperature settings.
Drafts and Air Leaks

The majority (88.1%) of customers state their homes have a draft. If customers need to caulk around windows or install weather stripping to reduce air leaks, close to half of customers (42.5%) said they would do the work themselves.

Home Draftiness

- Very drafty, 22.2%
- Somewhat drafty, 29.9%
- A little drafty, 36.0%
- Not drafty at all, 11.9%

What Customers Would Do to Caulk Around Windows or Install Weather Stripping

- Do the work yourself 42.5%
- Get a friend/family member to make repairs 25.7%
- Hire a contractor or professional 12.5%
- Do nothing due to cost considerations 9.8%
- Do nothing due to other factors 2.1%
- Other, please specify 2.4%
- I don’t know 4.9%

Source: ICF analysis
Insulation and Air Leaks

Insulation is checked less often than air leaks with 38.9% of customers saying they checked for air leaks less than 2 years ago, whereas 22.2% checked insulation.

Last Time Air Leaks and Insulation Checked

- Air Leaks
- Insulation

<table>
<thead>
<tr>
<th>Time</th>
<th>Air Leaks</th>
<th>Insulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 2 years</td>
<td>38.9%</td>
<td>22.2%</td>
</tr>
<tr>
<td>3–5 years ago</td>
<td>15.8%</td>
<td>14.2%</td>
</tr>
<tr>
<td>More than 5 years</td>
<td>17.9%</td>
<td>20.6%</td>
</tr>
<tr>
<td>Never</td>
<td>15.5%</td>
<td>27.4%</td>
</tr>
<tr>
<td>I don’t know</td>
<td>11.9%</td>
<td>15.7%</td>
</tr>
</tbody>
</table>

Source: ICF analysis

AIR2. When is the last time you (or someone else) checked for or repaired any air leaks and gaps in your windows and doorways that might cause air drafts? (N=698)
Comfort Levels Related to Home Insulation

Over a quarter of customers (26.5%) would avoid adding home insulation due to cost considerations or other factors even as 47% had a poor or very poor view of their home’s current amount of insulation.

<table>
<thead>
<tr>
<th>Installing Insulation</th>
<th>Respondent’s Rating of Current Amount of Insulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hire a contractor or professional</td>
<td>Excellent 5.4%</td>
</tr>
<tr>
<td>Avoid doing this work due to cost considerations or other factors</td>
<td>Good 39.5%</td>
</tr>
<tr>
<td>Get a friend/family member to add insulation</td>
<td>Poor 33.2%</td>
</tr>
<tr>
<td>Add insulation yourself</td>
<td>Very Poor 13.6%</td>
</tr>
<tr>
<td>Other</td>
<td>Don’t Know 8.3%</td>
</tr>
</tbody>
</table>

Source: ICF analysis

INS3. When it comes to your home’s insulation, are you most likely to... (N=699)

INS. Given the day-to-day comfort level in your home, how would you rate the current amount of insulation in your home? (N=697)
Home Heating and Cooling Maintenance

The majority of customers (64%) do not service their heating equipment regularly. A large amount (38%) of customers have not had issues with their Heating or Cooling system not working in the past few years but 22% of customers have had equipment failures annually or more often.

<table>
<thead>
<tr>
<th>Equipment Serviced Every Year or Two (not including repair work)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the options</td>
<td>47.5%</td>
</tr>
<tr>
<td>Heating equipment (furnace, boiler, or other central heating equipment)</td>
<td>35.9%</td>
</tr>
<tr>
<td>Water heater</td>
<td>11.3%</td>
</tr>
<tr>
<td>Central air conditioning equipment</td>
<td>9.0%</td>
</tr>
<tr>
<td>I don’t know</td>
<td>11.7%</td>
</tr>
</tbody>
</table>

Source: ICF analysis

Frequency of Heating or Cooling System Not Working

- Several times per month: 3.6%
- Once every month or two: 2.1%
- Several times over the past 2 years: 15.8%
- Maybe once in the past few years: 32.8%
- No issues in the past few years: 38.1%
- I don’t know: 7.6%

Source: ICF analysis
Home Heating and Cooling Maintenance

Over half (58%) of respondents are only changing their furnace filters twice a year or less.

Frequency of Cleaning or Changing the Furnace Filter

- 8.2% Every month
- 33.3% Every 2-3 months
- 19.0% Twice a year
- 22.7% Once a year
- 16.7% Less than once per year

Source: ICF analysis
Level of comfort with DTE in Customer’s Homes

Three in four (75%) are very comfortable or somewhat comfortable with having DTE employees, representatives, or contractors entering to do work in their home.

Comfort with having **DTE employees, representatives, or contractors** entering and working in their home.

- Very comfortable, 48.3%
- Somewhat comfortable, 27.0%
- Neither comfortable nor uncomfortable, 18.9%
- Somewhat uncomfortable, 3.5%
- Very uncomfortable, 2.3%
Survey 4
Resilience, Self-Reliance, and Community Connections
Survey 4: Key Findings
Resilience, Self-Reliance, and Community Connections

Longevity and Satisfaction in Community: The median time spent in the current community is 11 years (avg. = 17.5 yrs.) Only about half of customers say they are satisfied with their community; 30% are neutral; 20% are dissatisfied. Findings are consistent across PUMAs.

Strong Connection to Neighbors: Respondents are familiar with their neighbors with 86% knowing the names of next door neighbors and 67% speaking to neighbors at least once per week. Findings similar across PUMAs and renters/owners. Older respondents more likely to know neighbors.

Home Repairs and Maintenance Discussed Often: 51% of respondents discussed home repairs with neighbors in the past year; 38% health and safety issues and 34% the cost of their energy bill. Younger respondents are more likely to talk about their experiences with DTE (26% vs. 21%). Community resources and experiences with DTE were more prevalent topics for households in 3208 than 3210.

Heating and Cooling Information: Overall, 52% of respondents indicate DTE is their source of heating and cooling information, followed by family (34%), looking online (28%), friends or neighbors (22%), and contractors (14%).

Neighbors are Helping Neighbors: 67% of respondents help neighbors with yardwork, providing food or shoveling snow.

Safety: 2/3 feel safe walking in their neighborhood alone.

Recognized Community Programs: WIC, THAW, and SER are most widely known community programs. Renters are more familiar with SER; Owners are more familiar with WAP. SER, WIC and LIHEAP are the most widely used programs although 36% receive no services from listed organizations.
About 50% of customers are satisfied with their local communities, 30% are neutral and 19% are dissatisfied. Satisfaction is the same across PUMAs and higher for renters and younger respondents.

Source: ICF analysis
The average respondent has lived in their current community for 17.5 years. Owners tend to live in their communities longer than renters.

Average length in years that respondents have lived in their current community

<table>
<thead>
<tr>
<th>Category</th>
<th>Subcategory</th>
<th>Average (years)</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Average</td>
<td></td>
<td>17.5</td>
<td>11</td>
</tr>
<tr>
<td>Household income</td>
<td>Less than $10,000</td>
<td>13.2</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>$10,000 to $39,999</td>
<td>18.0</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>$40,000 or more</td>
<td>21.1</td>
<td>20</td>
</tr>
<tr>
<td>Age</td>
<td>18-34 years old</td>
<td>8.4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>35-44 years old</td>
<td>11.9</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>45-54 years old</td>
<td>15.5</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>55-64 years old</td>
<td>22.7</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>65 years or older</td>
<td>32.7</td>
<td>35</td>
</tr>
<tr>
<td>Own or Rent</td>
<td>Own</td>
<td>22.5</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Rent</td>
<td>11.4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Other Arrangement</td>
<td>16.6</td>
<td>14</td>
</tr>
</tbody>
</table>

Source: ICF analysis

GEN1. Approximately, how long, in years, have you lived in your current community? (N = 798)

Return to Insights
Overall, the majority of respondents (86%) know at least some of their next-door neighbors. Home-owners and older respondents are more likely than renters and younger respondents to know at least some of their neighbors.

**Do you know the names of your next-door neighbors?**

- Yes, all of them
- Yes, most of them
- Yes, some of them
- No, none of them

<table>
<thead>
<tr>
<th></th>
<th>Overall</th>
<th>Owner vs. Renter*</th>
<th>Age*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>18-34</td>
</tr>
<tr>
<td>Own</td>
<td></td>
<td></td>
<td>16.4%</td>
</tr>
<tr>
<td>Rent</td>
<td></td>
<td></td>
<td>18.6%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>29.2%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>32.7%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>24.2%</td>
</tr>
<tr>
<td>PUMA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3208</td>
<td>25.3%</td>
<td>20.1%</td>
<td>41.4%</td>
</tr>
<tr>
<td>3210</td>
<td>22.9%</td>
<td>19.3%</td>
<td>41.9%</td>
</tr>
</tbody>
</table>

*Significant at p=0.05

NEIGH. Do you know the names of your next-door neighbors? (N = 800)
## Interacting With Neighbors

Two-thirds (67%) of respondents speak with their neighbors at least once per week. These trends were similar for owners and renters. Over half of respondents in both PUMAs interact with their neighbors every day or several times per week.

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every day (or nearly every day)</td>
<td>21.9%</td>
</tr>
<tr>
<td>Several times per week</td>
<td>32.5%</td>
</tr>
<tr>
<td>Once per week</td>
<td>12.9%</td>
</tr>
<tr>
<td>Once or twice per month</td>
<td>12.8%</td>
</tr>
<tr>
<td>Every few months</td>
<td>4.4%</td>
</tr>
<tr>
<td>A few times per year</td>
<td>4.9%</td>
</tr>
<tr>
<td>Never or almost never</td>
<td>10.6%</td>
</tr>
</tbody>
</table>

Source: ICF analysis

Sierra Club Responsive Comments, Docket UD-22-04, Exhibit 10
Interacting With Neighbors, by Age

For all age groups, 50% or more of respondents speak with their neighbors every day or several times per week.

---

**Every day (or nearly every day)**

- 18-34: 18.8%
- 35-44: 24.2%
- 45-54: 21.1%
- 55-64: 27.2%
- 65 or older: 18.9%

**Several times per week**

- 18-34: 34.5%
- 35-44: 30.4%
- 45-54: 35.7%
- 55-64: 27.8%
- 65 or older: 31.8%

**Once per week**

- 18-34: 14.5%
- 35-44: 9.3%
- 45-54: 13.5%
- 55-64: 13.0%
- 65 or older: 12.9%

**Once or twice per month**

- 18-34: 13.9%
- 35-44: 13.7%
- 45-54: 4.7%
- 55-64: 15.4%
- 65 or older: 18.2%

---

Source: ICF analysis
Topics Discussed with Neighbors or Friends in the Past Year

Home Repairs or Maintenance was the top topic respondents reported discussing with their neighbors or friends.

Which of the following have you discussed with your friends or neighbors in the past year or so? (N = 713)

- Home repairs or maintenance: 50.5%
- Health and safety issues: 37.7%
- The cost of your energy bill: 33.7%
- Community resources: 27.9%
- Your experiences with DTE: 21.2%
- None of the above: 18.8%
- Ways of reducing your energy bill: 17.1%
- Other, please specify: 3.4%

Source: ICF analysis
Topics Discussed with Neighbors or Friends in the Past Year, Rent vs. Own

Compared to renters, more home-owners’ discussions with their neighbor of friends focused on home repairs or maintenance (63% vs. 33%) and the cost of their energy bill (30% vs. 39%).

Source: ICF analysis
Topics Discussed with Neighbors or Friends in the Past Year, by Age

Topics discussed with neighbor or friends varied by age. Nearly half (45%) of the 18–34 demographic discussed Cost of Energy Bills. Over half of both the 55–64 (55%) and 65 or older (56%) demographics discuss Home Repairs or Maintenance.

Which of the following have you discussed with your friends or neighbors in the past year or so? (N = 704)

- Home repairs or maintenance
- Healthy and safety issues
- The cost of your energy bill
- Community resources
- Your experience with DTE
- None of the above
- Ways of reducing your energy bill
- Other
Half of respondents from both PUMAs selected Home Repairs or Maintenance as a topic discussed with neighbors or friends.
Helping Neighbors

Of the respondents who reported having helped their neighbors, 67% did one action, 36% did two, 15% did three, and 6% did more than three. Home-owners and renters were similar in their responses to how they have helped their neighbors.

Which of the following things have you done recently for one of your neighbors?

- Helped with yardwork: 60.3%
- Provided food: 39.3%
- Shoveled snow: 34.0%
- Picked up their mail: 27.6%
- Watched their kids: 14.5%
- Watched their pet: 8.6%
- Other: 6.1%

Source: ICF analysis
Helping Neighbors, by Age

Activities to help neighbors varied by age. Seniors were more likely than other age groups to report providing food. Younger respondents (18–34 years old) were more likely to report shoveling snow (27%), picking up mail (26%), and watching neighborhood kids (20%).

<table>
<thead>
<tr>
<th>Activity</th>
<th>18–34</th>
<th>35–44</th>
<th>45–54</th>
<th>55–64</th>
<th>65 or older</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provided food</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>61.6%</td>
</tr>
<tr>
<td>Helped with yardwork</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>66.1%</td>
</tr>
<tr>
<td>Watched their pet</td>
<td>1.3%</td>
<td>10.7%</td>
<td></td>
<td>13.4%</td>
<td>46.8%</td>
</tr>
<tr>
<td>Watched their kids</td>
<td>1.3%</td>
<td>12.4%</td>
<td>18.8%</td>
<td></td>
<td>23.2%</td>
</tr>
<tr>
<td>Picked up their mail</td>
<td>1.3%</td>
<td></td>
<td>23.2%</td>
<td></td>
<td>34.8%</td>
</tr>
<tr>
<td>Shoveled snow</td>
<td></td>
<td></td>
<td></td>
<td>31.0%</td>
<td>41.1%</td>
</tr>
<tr>
<td>Other</td>
<td>2.6%</td>
<td>15.2%</td>
<td>15.2%</td>
<td>27.8%</td>
<td>38.3%</td>
</tr>
</tbody>
</table>

Source: ICF analysis

Sierra Club Responsive Comments, Docket UD-22-04, Exhibit 10
Helping Neighbors, by PUMA

Respondent selections across PUMAs were similar with slightly more respondents in PUMA 3208 selecting Provided Food (41% vs 37%) and Watched their Kids (17% vs 11%) than in PUMA 3210.

<table>
<thead>
<tr>
<th>Activity</th>
<th>PUMA 3208</th>
<th>PUMA 3210</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helped with yardwork</td>
<td>60.6%</td>
<td>60.0%</td>
</tr>
<tr>
<td>Provided food</td>
<td>37.4%</td>
<td>40.7%</td>
</tr>
<tr>
<td>Shoveled snow</td>
<td>34.9%</td>
<td>34.8%</td>
</tr>
<tr>
<td>Picked up their mail</td>
<td>25.2%</td>
<td>29.3%</td>
</tr>
<tr>
<td>Watched their kids</td>
<td>10.9%</td>
<td>17.3%</td>
</tr>
<tr>
<td>Watched their pet</td>
<td>7.2%</td>
<td>10.4%</td>
</tr>
<tr>
<td>Other</td>
<td>6.8%</td>
<td></td>
</tr>
</tbody>
</table>

Have Kids by PUMA:
3208 = 54%
3210 = 62%
Neighborhood Safety

More than half of respondents (65.2%) indicate they feel somewhat or very safe walking around in their neighborhood alone. Almost a quarter (23.3%) report feeling somewhat unsafe, and 11.6% feel very unsafe. Results were similar for both PUMAs.

How safe or unsafe do you feel walking around your neighborhood alone?

<table>
<thead>
<tr>
<th></th>
<th>Very safe</th>
<th>Somewhat safe</th>
<th>Somewhat unsafe</th>
<th>Very unsafe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>16.1%</td>
<td>49.1%</td>
<td>23.3%</td>
<td>11.6%</td>
</tr>
<tr>
<td>3208</td>
<td>17.5%</td>
<td>51.0%</td>
<td>20.7%</td>
<td>10.8%</td>
</tr>
<tr>
<td>3210</td>
<td>16.1%</td>
<td>49.1%</td>
<td>23.3%</td>
<td>11.6%</td>
</tr>
<tr>
<td>Female</td>
<td>14.4%</td>
<td>49.9%</td>
<td>23.2%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Male</td>
<td>23.0%</td>
<td>45.5%</td>
<td>23.6%</td>
<td>7.9%</td>
</tr>
</tbody>
</table>

Source: ICF analysis
Neighborhood Safety, by Age

Over 60% of all demographic groups felt their neighborhoods were Very Safe of Somewhat Safe.

<table>
<thead>
<tr>
<th>Age</th>
<th>Very safe</th>
<th>Somewhat safe</th>
<th>Somewhat unsafe</th>
<th>Very unsafe</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-34</td>
<td>22.0%</td>
<td>46.3%</td>
<td>20.1%</td>
<td>11.6%</td>
</tr>
<tr>
<td>35-44</td>
<td>11.9%</td>
<td>51.2%</td>
<td>22.5%</td>
<td>14.4%</td>
</tr>
<tr>
<td>45-54</td>
<td>20.0%</td>
<td>45.3%</td>
<td>23.5%</td>
<td>11.2%</td>
</tr>
<tr>
<td>55-64</td>
<td>14.4%</td>
<td>52.5%</td>
<td>21.9%</td>
<td>11.3%</td>
</tr>
<tr>
<td>65 or older</td>
<td>12.1%</td>
<td>50.0%</td>
<td>28.0%</td>
<td>9.8%</td>
</tr>
</tbody>
</table>

Source: ICF analysis
Information About Home Heating and Cooling Solutions

Overall, 52.1% of respondents indicate DTE is their source of heating and cooling information, followed by family (34.4%), looking online (28.5%), friends or neighbors (22.2%), and contractors (14.0%).

Source: ICF analysis

Sierra Club Responsive Comments, Docket UD-22-04, Exhibit 10
Information About Home Heating and Cooling Solutions, by Age

All demographics respondents were most likely to ask DTE about Home Heating and Cooling Solutions but relatively more 18–34-year-olds (56%) go to DTE for this information. All demographics were nearly as likely to ask for information from either Family and Friends or Neighbors as there were to reach out to DTE.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>DTE</th>
<th>Family</th>
<th>Look online</th>
<th>Friends or neighbors</th>
<th>Contractor</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>18–34</td>
<td>33.5%</td>
<td>30.5%</td>
<td>22.0%</td>
<td>6.7%</td>
<td>0.6%</td>
<td></td>
</tr>
<tr>
<td>35–44</td>
<td>35.8%</td>
<td>26.4%</td>
<td>20.8%</td>
<td>17.0%</td>
<td>1.9%</td>
<td></td>
</tr>
<tr>
<td>45–54</td>
<td>30.8%</td>
<td>27.2%</td>
<td>24.3%</td>
<td>11.8%</td>
<td>0.6%</td>
<td></td>
</tr>
<tr>
<td>55–64</td>
<td>33.5%</td>
<td>28.0%</td>
<td>23.6%</td>
<td>17.4%</td>
<td>1.2%</td>
<td></td>
</tr>
<tr>
<td>65 or older</td>
<td>43.9%</td>
<td>48.5%</td>
<td>18.2%</td>
<td>19.7%</td>
<td>3.0%</td>
<td></td>
</tr>
</tbody>
</table>

Source: ICF analysis

Sierra Club Responsive Comments, Docket UD-22-04, Exhibit 10
WIC, THAW and SER outpaced other Community Focused Programs in term of recognition. Renters and homeowners showed similar awareness of Community Focused Program with the exception of SER with 79% of renters responding they were aware of this program compared to 57% of homeowners. While awareness across demographics was similar for WIC, THAW and SER, less respondents in the 18–34 demographics reported being aware of LIHEAP, WAP, and WRAP compared to the other demographics. Awareness of Community Focused Programs varied very little between PUMA 3208 and PUMA 3210.

<table>
<thead>
<tr>
<th>Program</th>
<th>Awareness (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WIC (n = 632)</td>
<td>79.9%</td>
</tr>
<tr>
<td>THAW (n = 601)</td>
<td>76.0%</td>
</tr>
<tr>
<td>SER (n = 530)</td>
<td>67.0%</td>
</tr>
<tr>
<td>LIHEAP (n = 414)</td>
<td>52.3%</td>
</tr>
<tr>
<td>WAP (n = 365)</td>
<td>46.1%</td>
</tr>
<tr>
<td>WRAP (n = 309)</td>
<td>39.1%</td>
</tr>
<tr>
<td>None of the above (n = 41)</td>
<td>5.2%</td>
</tr>
<tr>
<td>Other (n = 3)</td>
<td>0%</td>
</tr>
</tbody>
</table>

Community Focused Programs
- **WIC** – Women, Infants, and Children
- **THAW** – The Heat and Warmth Fund
- **SER** – State Emergency Relief
- **LIHEAP** – Low Income Home Energy Assistance Program
- **WAP** – Weatherization Assistance Program
- **WRAP** – Water Residential Assistance Program

Source: ICF analysis
Among Community Focused Program, State Emergency Relief was third in terms of awareness (67%) but was first in Use as a source (45%) and Received services (38%).

<table>
<thead>
<tr>
<th>Community Focused Programs</th>
<th>Awareness</th>
<th>Use as source</th>
<th>Received services</th>
</tr>
</thead>
<tbody>
<tr>
<td>WIC – Women, Infants, and Children</td>
<td>27.7%</td>
<td>34.8%</td>
<td>79.9%</td>
</tr>
<tr>
<td>LIHEAP – Low Income Home Energy Assistance Program</td>
<td>18.2%</td>
<td>22.4%</td>
<td>52.3%</td>
</tr>
<tr>
<td>WAP – Weatherization Assistance Program</td>
<td>9.0%</td>
<td>14.7%</td>
<td>46.1%</td>
</tr>
<tr>
<td>THAW – The Heat and Warmth Fund</td>
<td>16.5%</td>
<td>26.3%</td>
<td>76.0%</td>
</tr>
<tr>
<td>WRAP – Water Residential Assistance Program</td>
<td>11.8%</td>
<td>16.5%</td>
<td>39.1%</td>
</tr>
<tr>
<td>SER – State Emergency Relief</td>
<td>11.8%</td>
<td>16.5%</td>
<td>45.3%</td>
</tr>
<tr>
<td>Other</td>
<td>0.4%</td>
<td>0.4%</td>
<td>0.3%</td>
</tr>
<tr>
<td>None of the above</td>
<td>5.2%</td>
<td>26.7%</td>
<td>36.0%</td>
</tr>
</tbody>
</table>
Survey 5
Security of Food, Health, Housing, and Energy
Survey 5: Key Findings
Security of Food, Health, Housing, and Energy

**Most Frequent Concerns:** Paying bills, physical health, and level of neighborhood safety. Paying bills is biggest concern particularly for younger and lower-income households. Physical health and neighborhood safety is most frequent concern for older households and higher income households (> $40k). (Two-thirds feel safe walking alone)

**Dangers in Home:** Respondents fear mold the most as a potential danger but are personally most concerned with water leaks and drafts and are most likely to have experienced these problems as well.

**Fire Safety:** Overall, 50% of customers do not have a CO detector or fire extinguisher in their home; 22% do not have a smoke detector on each floor; and 8.4% have none of the safety items listed. Younger households and those with the lowest incomes are least likely to have fire safety measures.

**Inefficient & Risky Heating Practices:** Half of households typically use space heaters (21% have 1; 28% have >1). Nearly one half of customers (44%) close doors and vents to unused rooms making furnaces run less efficiently than otherwise; while 28% have used their oven to heat their homes during the most recent winter – 8% of respondents use their oven frequently and 13% use it sometimes. Lowest income households are most likely to use the oven as a supplemental heating source.

**Financial Strain:** 54% of households reported frequently putting off purchases or avoiding paying bills due to financial strain. Groceries and utilities bills most frequently deferred. Renters, young people, and low-income among most impacted. 38% report a high level of difficulty in paying bills. Utility bills most likely to be 60+ days overdue.
Respondents chief concern was Ability to Pay Bills both in terms of frequent concerns (78%) and worry about the most (48%) selections.
Concerns of Customers by Income

As income increased, so did the concern with their physical health and/or their family members, and the level of safety in their neighborhood. Lower income respondents were worried most about the ability to pay bills.

Frequent Concerns by Income

Worry About the Most by Income

As income increased, so did the concern with their physical health and/or their family members, and the level of safety in their neighborhood. Lower income respondents were worried most about the ability to pay bills.
Concerns of Customers by Age

As age increased, the concern of their physical health and/or their family members increased, with 51% of young adults frequently concerned about physical health compared to 81% of respondents ages 65 years or older. A similar increase was observed in the level of safety in their home (49% vs 65%) and their neighborhood (54% vs 78%). Additionally, as age increased the worry about the ability to pay bills decreased (70% of young adults vs 23% of ages 65 years or older).

Frequent Concerns by Age

<table>
<thead>
<tr>
<th>Concern</th>
<th>18-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55-64</th>
<th>65 or older</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to pay your bills</td>
<td>81.4%</td>
<td>80.3%</td>
<td>78.4%</td>
<td>76.8%</td>
<td>70.7%</td>
</tr>
<tr>
<td>The mental health of you and/or a family member</td>
<td>64.7%</td>
<td>51.5%</td>
<td>59.0%</td>
<td>60.6%</td>
<td>70.7%</td>
</tr>
<tr>
<td>The physical health of you and/or a family member</td>
<td>48.7%</td>
<td>47.5%</td>
<td>51.4%</td>
<td>54.1%</td>
<td>57.8%</td>
</tr>
<tr>
<td>The level of safety in your home</td>
<td>55.0%</td>
<td>57.5%</td>
<td>57.5%</td>
<td>56.0%</td>
<td>50.6%</td>
</tr>
<tr>
<td>The level of safety in your neighborhood</td>
<td>60.6%</td>
<td>65.2%</td>
<td>70.0%</td>
<td>60.6%</td>
<td>77.8%</td>
</tr>
</tbody>
</table>

Worry About the Most by Age

<table>
<thead>
<tr>
<th>Concern</th>
<th>18-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55-64</th>
<th>65 or older</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to pay your bills</td>
<td>69.7%</td>
<td>53.1%</td>
<td>50.6%</td>
<td>3.4%</td>
<td>7.9%</td>
</tr>
<tr>
<td>The mental health of you and/or a family member</td>
<td>22.7%</td>
<td>11.2%</td>
<td>9.6%</td>
<td>12.0%</td>
<td>7.2%</td>
</tr>
<tr>
<td>The physical health of you and/or a family member</td>
<td>11.1%</td>
<td>11.1%</td>
<td>12.0%</td>
<td>11.1%</td>
<td>11.1%</td>
</tr>
<tr>
<td>The level of safety in your home</td>
<td>9.2%</td>
<td>3.4%</td>
<td>3.4%</td>
<td>4.0%</td>
<td>4.0%</td>
</tr>
<tr>
<td>The level of safety in your neighborhood</td>
<td>9.2%</td>
<td>9.2%</td>
<td>9.2%</td>
<td>9.2%</td>
<td>9.2%</td>
</tr>
</tbody>
</table>

Other, please specify | 2.7%  | 17.3% | 41.0% | 6.4%  | 41.0%       |
None of the above    | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%        |
Concerns of Customers by Own/Rent

Renters were relatively more concerned and worried about their ability pay their bills, whereas the homeowners and respondents with another arrangement were not only concerned about paying bills but also their physical health and level of safety in their neighborhood.
Health Hazards Experienced and of Concern

Over half of respondents reported noticing or experiencing Water leaks or water damage (56%) or Cold drafts in the winter (53%) as well as listing these hazards as what they were most concerned about (47% and 33% respectively). More respondents consider mold a danger (78%) compared to all other options presented.
## Health Hazards Experienced and of Concern by Own/Rent

### Problems Noticed/Experienced

<table>
<thead>
<tr>
<th>Problem</th>
<th>Own</th>
<th>Rent</th>
<th>Other Arrangement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water leaks or water damage</td>
<td>67.1%</td>
<td>52.8%</td>
<td>58.1%</td>
</tr>
<tr>
<td>Mold</td>
<td>31.8%</td>
<td>32.4%</td>
<td>25.8%</td>
</tr>
<tr>
<td>Flaking or scaling paint</td>
<td>28.2%</td>
<td>36.3%</td>
<td>35.5%</td>
</tr>
<tr>
<td>Insect infestation</td>
<td>8.3%</td>
<td>12.5%</td>
<td>9.7%</td>
</tr>
<tr>
<td>Mice/Rodents</td>
<td>14.0%</td>
<td>32.3%</td>
<td>61.3%</td>
</tr>
<tr>
<td>Cold drafts in the winter</td>
<td>54.0%</td>
<td>52.3%</td>
<td>61.3%</td>
</tr>
<tr>
<td>Broken window(s)</td>
<td>24.9%</td>
<td>15.7%</td>
<td>32.3%</td>
</tr>
<tr>
<td>Other</td>
<td>5.9%</td>
<td>3.7%</td>
<td>3.2%</td>
</tr>
<tr>
<td>None of the above</td>
<td>9.3%</td>
<td>14.8%</td>
<td>16.1%</td>
</tr>
</tbody>
</table>

### Problems of Most Concern

<table>
<thead>
<tr>
<th>Problem</th>
<th>Own</th>
<th>Rent</th>
<th>Other Arrangement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water leaks or water damage</td>
<td>67.1%</td>
<td>52.8%</td>
<td>58.1%</td>
</tr>
<tr>
<td>Mold</td>
<td>31.8%</td>
<td>32.4%</td>
<td>25.8%</td>
</tr>
<tr>
<td>Flaking or scaling paint</td>
<td>28.2%</td>
<td>36.3%</td>
<td>35.5%</td>
</tr>
<tr>
<td>Insect infestation</td>
<td>8.3%</td>
<td>12.5%</td>
<td>9.7%</td>
</tr>
<tr>
<td>Mice/Rodents</td>
<td>14.0%</td>
<td>32.3%</td>
<td>61.3%</td>
</tr>
<tr>
<td>Cold drafts in the winter</td>
<td>54.0%</td>
<td>52.3%</td>
<td>61.3%</td>
</tr>
<tr>
<td>Broken window(s)</td>
<td>24.9%</td>
<td>15.7%</td>
<td>32.3%</td>
</tr>
<tr>
<td>Other</td>
<td>5.9%</td>
<td>3.7%</td>
<td>3.2%</td>
</tr>
<tr>
<td>None of the above</td>
<td>9.3%</td>
<td>14.8%</td>
<td>16.1%</td>
</tr>
</tbody>
</table>

### Problems Considered a Danger

<table>
<thead>
<tr>
<th>Problem</th>
<th>Own</th>
<th>Rent</th>
<th>Other Arrangement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water leaks or water damage</td>
<td>67.1%</td>
<td>52.8%</td>
<td>58.1%</td>
</tr>
<tr>
<td>Mold</td>
<td>31.8%</td>
<td>32.4%</td>
<td>25.8%</td>
</tr>
<tr>
<td>Flaking or scaling paint</td>
<td>28.2%</td>
<td>36.3%</td>
<td>35.5%</td>
</tr>
<tr>
<td>Insect infestation</td>
<td>8.3%</td>
<td>12.5%</td>
<td>9.7%</td>
</tr>
<tr>
<td>Mice/Rodents</td>
<td>14.0%</td>
<td>32.3%</td>
<td>61.3%</td>
</tr>
<tr>
<td>Cold drafts in the winter</td>
<td>54.0%</td>
<td>52.3%</td>
<td>61.3%</td>
</tr>
<tr>
<td>Broken window(s)</td>
<td>24.9%</td>
<td>15.7%</td>
<td>32.3%</td>
</tr>
<tr>
<td>Other</td>
<td>5.9%</td>
<td>3.7%</td>
<td>3.2%</td>
</tr>
<tr>
<td>None of the above</td>
<td>9.3%</td>
<td>14.8%</td>
<td>16.1%</td>
</tr>
</tbody>
</table>

PROBS. In the past year, which of the following things have you noticed or experienced in your home? Select all that apply. (N=795)

CONC. Of the items you selected, which of the following are of the most concern? Select up to two items (N=483)

DANG. Which of the following problems would you consider to be a danger to your health if you found them to be present in your home? Select all that apply. (N=791)
Current Safety Items in the Home

While 78% of respondents reported having a Smoke detector on each floor less than half selected having a Carbon monoxide detector (47%) or a Fire Extinguisher (35%).
Current Safety Items in the Home by Income

Which of the following do you currently have in your home? Select all that apply. (N=773)

- Smoke detector on each floor of your home
- Carbon monoxide detector
- Fire extinguisher
- First aid kit
- Nightlight(s)
- None of the above
- I don't know

Current Safety Items in the Home by Income

<table>
<thead>
<tr>
<th>Item</th>
<th>Less than 10,000</th>
<th>10,000 to 39,999</th>
<th>40,000 or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoke detector on each floor of your home</td>
<td>71.5%</td>
<td>79.5%</td>
<td>81.1%</td>
</tr>
<tr>
<td>Carbon monoxide detector</td>
<td>41.5%</td>
<td>48.3%</td>
<td>56.8%</td>
</tr>
<tr>
<td>Fire extinguisher</td>
<td>28.5%</td>
<td>32.4%</td>
<td>47.7%</td>
</tr>
<tr>
<td>First aid kit</td>
<td>46.2%</td>
<td>52.5%</td>
<td>63.6%</td>
</tr>
<tr>
<td>Nightlight(s)</td>
<td>56.2%</td>
<td>56.4%</td>
<td>71.2%</td>
</tr>
<tr>
<td>None of the above</td>
<td>13.8%</td>
<td>6.0%</td>
<td>5.3%</td>
</tr>
<tr>
<td>I don't know</td>
<td>1.5%</td>
<td>1.5%</td>
<td>8%</td>
</tr>
</tbody>
</table>
Current Safety Items in the Home by Age

Which of the following do you currently have in your home? Select all that apply. (N=790)

- Smoke detector on each floor of your home
- Carbon monoxide detector
- Fire extinguisher
- First aid kit
- Nightlight(s)
- None of the above
- I don’t know
Current Safety Items in the Home by Own/Rent

- Smoke detector on each floor of your home:
  - Own: 81.8%
  - Rent: 76.7%
  - Other Arrangement: 67.7%

- Carbon monoxide detector:
  - Own: 52.1%
  - Rent: 45.8%
  - Other Arrangement: 38.7%

- Fire extinguisher:
  - Own: 40.6%
  - Rent: 29.0%
  - Other Arrangement: 32.3%

- First aid kit:
  - Own: 59.0%
  - Rent: 46.7%
  - Other Arrangement: 48.4%

- Nightlight(s):
  - Own: 63.9%
  - Rent: 54.7%
  - Other Arrangement: 51.6%

- None of the above:
  - Own: 6.6%
  - Rent: 7.0%
  - Other Arrangement: 12.9%

- I don't know:
  - Own: 0.0%
  - Rent: 0.0%
  - Other Arrangement: 3.2%
Ways to heat their home

Nearly half of respondents (~50%) reported using space heaters as a strategy to stay warm during the winter aside from their central heating system. Just over a quarter (28%) of respondents selected Use of an oven to help warm their home.

<table>
<thead>
<tr>
<th>Action</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use space heaters</td>
<td>49.7%</td>
</tr>
<tr>
<td>Close doors and vents to unused rooms</td>
<td>43.8%</td>
</tr>
<tr>
<td>Use the oven to help warm your home</td>
<td>27.6%</td>
</tr>
<tr>
<td>Use a fireplace to help warm your home</td>
<td>14.3%</td>
</tr>
<tr>
<td>Other, please specify</td>
<td>4.4%</td>
</tr>
<tr>
<td>None of the above</td>
<td>19.3%</td>
</tr>
</tbody>
</table>

*Almost one-quarter of respondents (28%) selected using an oven to help warm their home during the winter.*
Ways to heat their home by Age

Ways to heat their home by Income

**Actions:** Aside from using central heating (furnace, boiler, heat pump), sometimes people use other strategies to stay warm in the winter. Which of the following actions have you taken to help keep your home warm this past winter? Select all that apply. (N=780)
Ways to heat their home by Income

As part of their winter preparations, people use various methods to keep their homes warm. Which of the following actions have you taken to help keep your home warm this past winter? Select all that apply.

- Use space heaters
- Close doors and vents to unused rooms in your home
- Use the oven to help warm your home
- Use a fireplace to help warm your home
- Other, please specify
- None of the above

![Bar chart showing the percentage of people using different methods to heat their homes by income.](chart.png)
Ways to heat their home by Own/Rent

Ways to heat their home by Income

- Use space heaters
- Close doors and vents to unused rooms in your home
- Use the oven to help warm your home
- Use a fireplace to help warm your home
- Other, please specify
- None of the above
Of the 396 respondents who reported using a space heater as a supplementary heating source, 56% use two or more space heaters.
Number of space heaters typically used in winter by Income

Respondents with higher incomes ($40,000 or more) were more likely to use only one space heater while respondents with income levels below $40,000 indicated using more than one space heater more frequently.
Ways frequently used to heat their home

Of the 218 respondents who reported using their oven as a supplementary heating source, 28% described this as being Always/almost always or Frequently. Of the 348 respondents who close off parts of their home, 71% take this action Always/almost always or Frequently.

SAVE1. How often did you close off parts of your home to save on heating costs? (N=348)
SAVE2. How often did you use the oven to help warm your home? (N=218)
Bill Challenges

Over half of respondents (54%) indicated they are frequently putting off purchases due to financial concerns. Most frequently respondents reported they are delaying purchases for Utility Bills (53%), Groceries (52%), and Gasoline (36%).

**Frequency of Putting off Purchases due to Financial Concerns**

- Always or nearly always: 28.3%
- Very often: 35.6%
- Sometimes: 52.4%
- Rarely: 53.1%
- Never: 17.9%
- I don’t know: 10.3%

**Purchases Delayed**

- Medicine/Medical Care: 28.3%
- Gasoline: 35.6%
- Groceries: 52.4%
- Utility Bills: 53.1%
- School Supplies: 17.9%
- Other, please specify: 13.0%
- None of the above: 10.3%

FIN1. In the past 12 months, how often have you or other people in your household put off buying something that you or they needed due to financial concern? (N=777)

FIN1A. What did you put off buying or paying for due to financial constraints (Select all that apply)? (N=731)
Bill Challenges by Own/Rent

Frequency of Putting off Purchases due to Financial Concerns by Own/Rent

Purchases Delayed by Own/Rent

FIN1. In the past 12 months, how often have you or other people in your household put off buying something that you or they needed due to financial concerns? (N=777)

FIN1A. What did you put off buying or paying for due to financial constraints (Select all that apply)? (N=717)
**Bill Challenges by Income**

### Frequency of Putting off Purchases due to Financial Concerns by Income

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Always or nearly always</th>
<th>Very often</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
<th>I don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $10,000</td>
<td>27.8%</td>
<td>27.8%</td>
<td>27.6%</td>
<td>27.5%</td>
<td>27.8%</td>
<td>27.5%</td>
</tr>
<tr>
<td>$10,000 to $39,999</td>
<td>24.5%</td>
<td>37.9%</td>
<td>37.0%</td>
<td>36.3%</td>
<td>37.0%</td>
<td>36.3%</td>
</tr>
<tr>
<td>$40,000 or more</td>
<td>21.2%</td>
<td>21.2%</td>
<td>21.2%</td>
<td>21.2%</td>
<td>21.2%</td>
<td>21.2%</td>
</tr>
</tbody>
</table>

### Purchases Delayed by Income

- **Medicine/Medical Care**
  - Less than $10,000: 34.9%
  - $10,000 to $39,999: 39.1%
  - $40,000 or more: 45.0%

- **Gasoline**
  - Less than $10,000: 38.4%
  - $10,000 to $39,999: 39.1%
  - $40,000 or more: 57.1%

- **Groceries**
  - Less than $10,000: 51.6%
  - $10,000 to $39,999: 54.3%
  - $40,000 or more: 58.2%

- **Utility Bills**
  - Less than $10,000: 54.3%
  - $10,000 to $39,999: 41.4%
  - $40,000 or more: 54.3%

- **School Supplies**
  - Less than $10,000: 23.4%
  - $10,000 to $39,999: 10.7%
  - $40,000 or more: 18.2%

- **Other**
  - Less than $10,000: 14.1%
  - $10,000 to $39,999: 11.9%
  - $40,000 or more: 14.2%

- **None of the above**
  - Less than $10,000: 9.4%
  - $10,000 to $39,999: 9.4%
  - $40,000 or more: 15.4%

---

**FIN1.** In the past 12 months, how often have you or other people in your household put off buying something that you or they needed due to financial concerns? (N=762)

**FIN1A.** What did you put off buying or paying for due to financial constraints (Select all that apply)? (N=705)
FIN1. In the past 12 months, how often have you or other people in your household put off buying something that you or they needed due to financial concerns? (N=777)

FIN1A. What did you put off buying or paying for due to financial constraints (Select all that apply)? (N=718)
Level of difficulties paying bills

Over a third of survey respondents (38%) ranked their difficulty to pay bills as being an 8 or more on a ten-point scale. Utility bills (48%) were the most common response to which bills had been 60 days late.

Mean = 6.1
Median = 6.5
# Level of difficulty paying household bills by PUMA, Own/Rent, Age, Income

<table>
<thead>
<tr>
<th>Category</th>
<th>PUMA (N=792)</th>
<th>Mean</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3208</td>
<td>6.0</td>
<td>6.4</td>
</tr>
<tr>
<td></td>
<td>3210</td>
<td>6.2</td>
<td>6.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Own/Rent (N=777)</th>
<th>Mean</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Own</td>
<td>5.4</td>
<td>5.7</td>
</tr>
<tr>
<td></td>
<td>Rent</td>
<td>6.9</td>
<td>7.4</td>
</tr>
<tr>
<td></td>
<td>Other arrangement</td>
<td>6.9</td>
<td>7.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Age (N=792)</th>
<th>Mean</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>18–34</td>
<td>7.2</td>
<td>7.6</td>
</tr>
<tr>
<td></td>
<td>35–44</td>
<td>6.5</td>
<td>6.9</td>
</tr>
<tr>
<td></td>
<td>45–54</td>
<td>6.3</td>
<td>6.5</td>
</tr>
<tr>
<td></td>
<td>55–64</td>
<td>5.9</td>
<td>6.2</td>
</tr>
<tr>
<td></td>
<td>65 or older</td>
<td>4.2</td>
<td>3.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Income (N=761)</th>
<th>Mean</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less than $10,000</td>
<td>7.2</td>
<td>8.2</td>
</tr>
<tr>
<td></td>
<td>$10,000 to $39,999</td>
<td>6.4</td>
<td>6.7</td>
</tr>
<tr>
<td></td>
<td>$40,000 or more</td>
<td>4.4</td>
<td>4.4</td>
</tr>
</tbody>
</table>

FIN2. In the past 12 months, how much difficulty have you or other people in your household had paying household bills?
FIN3. In the past 12 months, have you been 60 days late in paying any of the following types of bills. Select all that apply.

For Bills that were 60 days late by Income, the chart shows the percentage of respondents in different income brackets who were 60 days late paying various types of bills.

For Bills that were 60 days late by Age, the chart shows the percentage of respondents in different age groups who were 60 days late paying various types of bills.
Survey 6
Household Insights, Interests, and Characteristics
Survey 6: Key Findings
Household Insights, Interests, and Characteristics

Longstanding Connection to Greater Detroit: 73% of respondents have lived in greater Detroit more than 30 years (77% of owners & 61% of renters).

Moderate Satisfaction with Information about DTE Programs: A slim majority of customers (55%) rated their satisfaction with DTE program information at 9 or above for EWR programs, payment assistance programs, and ways to save through shifts in behavior. Thirteen percent were dissatisfied.

High Level of Interest in Learning More about DTE Initiatives in the Community: 93% interested in learning more; 82% prefer email communications; 25% prefer text messaging; 32% prefer U.S. mail.

Facebook is Most Used Social Media Platform: 65% of respondents use Facebook at least once per week. Youtube was second most popular social media resource while 19% don’t use any social media.

English is the Predominant Language and WIFI is Ubiquitous: 99% of households speak English as their primary language and 94% of WIFI in their home.

Communications with DTE Infrequent for Most but Regular for Others: 73% of households contact DTE a few times per year or less; 19% reach contact DTE monthly or more often.

Surveys Build Rapport: The NPS nearly doubled for customers who took surveys 1, 2 or 3 AND 6.
Change in NPS Score

Respondents who participated in Survey 6 who also participated in Surveys 1, 2, or 3 were asked the NPS rating again in Survey 6. This is a total of 544 customers. Among these customers, the overall NPS scores increased by 82%.

NPS = % of Promoters (9-10 on scale) – % of Detractors (0-6 on scale)

NPS6. Thanks for taking this final community poll! We hope your experience has been positive. We would like to start this poll by asking how likely you are to recommend DTE to a friend or family member? (N=544)
Change in NPS Rating from Surveys 1, 2, or 3 to Survey 6 NPS Score

Approximately, 37% of respondents who completed surveys 1, 2, or 3 had a positive change in NPS Rating, and 10% moved to a promoter (rating DTE either a 9 or 10).
How long respondents have lived in Detroit

More than two thirds of respondents (73%) have lived in the greater Detroit area for over 30 years.

![Bar chart showing how long respondents have lived in the greater Detroit area.](chart.png)
How long respondents have lived in Detroit by Own/Rent

How long respondents have lived in the greater Detroit area

- Less than 5 years
- 5-10 years
- 11-20 years
- 21-30 years
- 31-40 years
- 41-50 years
- 50+ years
- I don’t know

GENR. How long have you lived in the greater Detroit area? (N=800)
How long respondents have lived in Detroit by Age

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Less than 5 years</th>
<th>5-10 years</th>
<th>11-20 years</th>
<th>21-30 years</th>
<th>31-40 years</th>
<th>41-50 years</th>
<th>51-64 years</th>
<th>65 or older</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-34</td>
<td>7%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>3.7%</td>
<td>2.0%</td>
<td>1%</td>
<td>10%</td>
</tr>
<tr>
<td>35-44</td>
<td>5%</td>
<td>5%</td>
<td>6%</td>
<td>4%</td>
<td>6.8%</td>
<td>2.0%</td>
<td>7%</td>
<td>8.8%</td>
</tr>
<tr>
<td>45-54</td>
<td>26%</td>
<td>3.7%</td>
<td>4.9%</td>
<td>6.8%</td>
<td>33.3%</td>
<td>8.1%</td>
<td>4.7%</td>
<td>7.3%</td>
</tr>
<tr>
<td>55-64</td>
<td>37.7%</td>
<td>1%</td>
<td>6.8%</td>
<td>4.9%</td>
<td>4.7%</td>
<td>8.1%</td>
<td>8.8%</td>
<td>7.3%</td>
</tr>
<tr>
<td>65 or older</td>
<td>40%</td>
<td>7%</td>
<td>1%</td>
<td>1%</td>
<td>7.3%</td>
<td>8.8%</td>
<td>2.2%</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

GENR. How long have you lived in the greater Detroit area? (N=800)
Nearly half (46%) of respondents listed themselves as being the household member who fidgets with the thermostat temperature the most.
Satisfaction and Recall with DTE program information

The majority of respondents (82%–84%) have received information about the energy-efficiency programs, payment assistance programs, and bill savings communications. Approximately 55% gave a satisfaction score of 9 or 10 for these programs.
Satisfaction with DTE program information

Of the participants who recalled receiving information about select DTE programs, 40–43% were extremely satisfied with the information provided about the program.

**Energy-Efficiency Programs Satisfaction Ratings:**
- 85% rated 6 or above
- 68% rated 8 or above
- 54% rated DTE 9 or above (Top Box)
- 40% gave DTE a 10 out of 10!
- Only 15% expressed dissatisfaction (<5)

**Bill Savings Programs Satisfaction Ratings:**
- 84% rated 6 or above
- 69% rated 8 or above
- 56% rated DTE 9 or above (Top Box)
- 42% gave DTE a 10 out of 10!
- Only 14% expressed dissatisfaction (<5)

**Payment Assistance Programs Satisfaction Ratings:**
- 83% rated 6 or above
- 69% rated 8 or above
- 56% rated DTE 9 or above (Top Box)
- 43% gave DTE a 10 out of 10!
- Only 15% expressed dissatisfaction (<5)

Mean = 8.07  
Median = 8.76  
Mean = 8.10  
Median = 9.02  
Mean = 8.15  
Median = 9.99
A large number of respondents (93%) expressed interest in learning more about DTE initiatives in their community with over 80% of respondents listing Email as preferred method of contact.
Facebook (65%) is the most popular social media channel used by respondents with YouTube (36%) and Instagram (29%) up next.

Social media used at least once per week

YouTube: 36.20%
TikTok: 19.30%
Instagram: 28.70%
Facebook: 65.20%
Twitter: 8.20%
Snapchat: 7.00%
Nextdoor: 5.70%
Other, please specify: 1.60%
I don’t use social media: 18.50%

Which types of social media do you use at least once per week? Select all that apply.
Language Spoken at Home

The grand majority of respondents (99%) said English was the primary language spoken in their home.

**Primary Language Spoken in the Home**
- English = 98.9%
- Spanish = 0.4%
- Arabic = 0.5%
- Other = 0.3%

**Secondary Language Spoken in the Home**
- English = 0.7%
- Spanish = 4%
- Arabic = 0.5%
- Other = 2%
- None = 94%
Nearly all respondents (94%) reported having Wi-Fi in their homes. Of the people who have WiFi in their home, only 8% have a Smart or WiFi-enabled thermostat.

**WiFi in the Home**

- **94%** Yes
- **6%** No

**Type of Thermostat and WiFi in the Home**

- **40.3%** Non-programmable
- **44.2%** Programmable
- **8.3%** Smart or WiFi-enabled
- **0.8%** Other
- **6.5%** I don't know

N=790

**WIFI. DO YOU HAVE WI-FI IN YOUR HOME?**

**THERM. What kind of thermostat do you have in your home?**

N=387

Return to Insights
How often respondents have contacted DTE in the past year

Nearly ¾ of respondents (72%) contacted DTE more than once during the past year while 28% contacted DTE once or not at all. Half (50%) of customers reported contacting DTE to resolve billing questions, address a late payment, or to address a disconnection/reconnection issue.

RESO2. How often have you (or others in your household) contacted (by phone or email) DTE in the past year? (N=781)
RESO3. Which of the following things have you contacted DTE about in the past year? Select all that apply. (N=717)
How often respondents have contacted DTE in the past year by Own/Rent

How often respondents have contacted DTE in the past year by Own/Rent

Why they contacted DTE in the past year by Own/Rent

Every week | Every other week | Once a month | A few times during the year | Once this year | Never
--- | --- | --- | --- | --- | ---
Own | 12.1% | 6.0% | 17.8% | 3.6% | 7.1%
Rent | 23.1% | 16.3% | 10.7% | 10.1% | 17.9%
Other arrangement | 54.8% | 51.0% | 60.7% | 60.7% | 60.7%

Billing question | Power outage | Energy efficiency program | Late payment | Disconnection/reconnection | Other
--- | --- | --- | --- | --- | ---
Own | 49.5% | 56.1% | 25.1% | 16.8% | 11.4%
Rent | 44.7% | 46.7% | 28.6% | 42.1% | 18.8%
Other arrangement | 59.1% | 68.4% | 42.1% | 30.4% | 15.8%

RESO2. How often have you (or others in your household) contacted (by phone or email) DTE in the past year? (N=772)

RESO3. Which of the following things have you contacted DTE about in the past year? Select all that apply. (N=712)
How often respondents have contacted DTE in the past year by PUMA

How often respondents have contacted DTE in the past year by PUMA

- Every week: 55.1% (3208), 51.7% (3210)
- Every other week: 19.7% (3208), 20.4% (3210)
- Once a month: 13.6% (3208), 14.8% (3210)
- A few times during the year: 2.4% (3208), 2.2% (3210)
- Once this year: 8.7% (3210)
- Never: 6.8% (3208), 8.7% (3210)

Why they contacted DTE in the past year by PUMA

- Billing question: 53.2% (3208), 53.0% (3210)
- Power outage: 48.8% (3208), 58.5% (3210)
- Energy efficiency program: 27.9% (3208), 26.8% (3210)
- Late payment: 21.9% (3208), 23.0% (3210)
- Disconnection/reconnection: 14.7% (3208), 14.4% (3210)
- Other: 11.2% (3208), 7.0% (3210)

RESO2. How often have you (or others in your household) contacted (by phone or email) DTE in the past year? (N=781)
RESO3. Which of the following things have you contacted DTE about in the past year? Select all that apply. (N=717)
Most respondents (62%) contacted DTE about their bill once per year or less with 31% of this group not reporting any concerns about their bill. When contacting DTE, the leading reason reported was Bill Amount Higher than Expected (65%) followed by Inability to Pay Bill (45%).

**Questions or Concerns with DTE Bill**

**BARR1.** How often do you have questions or concerns with your DTE bill, regardless of whether you have contacted DTE about these concerns? (N=780)

- 13.0% Monthly
- 24.8% Several times per year
- 15.4% Once per year
- 16.3% Less than once per year
- 30.6% I haven’t had issues or concerns with my bill

**BARR2.** What type of questions or concerns about your DTE bill have you experienced in the past year? Select all that apply. (N=541)

- 64.5% Bill amount was higher than expected
- 44.5% Unable to pay my bill
- 20.7% Didn’t understand the bill
- 8.9% Other

Sierra Club Responsive Comments, Docket UD-22-04, Exhibit 10
Questions or Concerns with DTE Bill and the Type of Concerns

Frequency of having bill concerns and the type of concern

- Didn't understand the bill
- Bill amount was higher than expected
- Unable to pay my bill
- Other

Monthly:
- 74.3% Didn't understand the bill
- 22.8% Bill amount was higher than expected
- 4.0% Unable to pay my bill
- 0.0% Other

Several times per year:
- 72.0% Didn't understand the bill
- 23.3% Bill amount was higher than expected
- 9.8% Unable to pay my bill
- 0.0% Other

Once per year:
- 60.0% Didn't understand the bill
- 16.7% Bill amount was higher than expected
- 10.0% Unable to pay my bill
- 0.0% Other

Less than once per year:
- 49.6% Didn't understand the bill
- 18.9% Bill amount was higher than expected
- 10.0% Unable to pay my bill
- 10.2% Other

BARR2. What type of questions or concerns about your DTE bill have you experienced in the past year? Select all that apply. (N=541)
98% of participants rated their experience with the DTE Community Polls as positive or somewhat positive.