



DTE Equity & Inclusion Study
Phase Three Kickoff Meeting
8/30/2022

- ❖ [Karen Ehrhardt-Martinez, PhD](#) – Director, Behavioral Science and Customer Insights
- ❖ [Thomas Glendening](#) – Director, Residential Programs
- ❖ [Noah Purcell](#) – Project Management



→ **ICF Team**

- ❖ Kevin Bilyeu
- ❖ Josh Martens
- ❖ Jose Goncalves
- ❖ David Becker

DTE

→ **DTE Team**

- ❖ Chinyere Osuala – Earthjustice
- ❖ Cassandra McCrae – Earthjustice
- ❖ Sharonda Williams-Tack – Sierra Club
- ❖ Elena Saxonhouse – Sierra Club



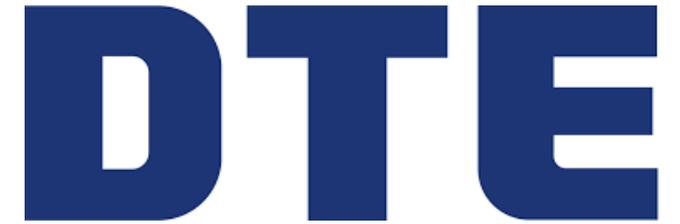
→ **Stakeholders**

1. Equity Insights Progress to Date (10 Minutes)
2. Phase III Work
 - a) Task 1: Targeting and Tailoring Strategy (10 Minutes)
 - b) Task 2: Behavior Optimization (15 Mins)
 - c) Task 3: Implementation Strategy (10 Mins)
3. Phase 3 Draft Plan (15 Mins)
4. Q&A and Next Steps (30 Minutes)

→ **Agenda**

DTE Equity Insights Study Snapshot:

- **Phase One: Equity Metrics**
 - Geographic Targeting data evaluated for survey delivery
- **Phase Two: Community Surveys**
 - 600 Target Completes
 - 5/26: Survey One fielded begin
 - 7/11: Summary of Surveys 1–3 completed
 - 8/1: Surveys Six concluded
 - End of August: Summary of all surveys

The logo for DTE Energy Services, consisting of the letters "DTE" in a bold, dark blue, sans-serif font.

→ **Equity Insights Progress-to-Date Recap**



Phase Two All Surveys Snapshot:

- 2,090 unique respondents
- 122 Questions including Intake Survey and Contingent Questions

600 Target Completes

| | Survey 1 | Survey 2 | Survey 3 | Survey 4 | Survey 5 | Survey 6 |
|-------------------------------|------------|-------------|------------|-------------|------------|------------|
| Fielding Dates | 5/6 – 5/18 | 5/23 – 5/30 | 6/8 – 6/17 | 6/22 – 6/30 | 7/8 – 7/17 | 7/22 – 8/1 |
| Postcard Invitation | 15,541* | N/A | N/A | N/A | N/A | N/A |
| Email Invitation | N/A | 13,083 | 13,056 | 13,051 | 13,050 | 13,047 |
| First Email Reminder | 13,056 | 811* | 12,509 | 12,514 | 12,547 | 12,503 |
| Second Email Reminder | 12,469 | N/A | 12,434 | N/A | 469** | 1,261** |
| Response Rate | 7.2% | 5.6% | 5.4% | 5.9% | 6.1% | 5.9% |
| Total Completions | 1,118 | 737 | 709 | 771 | 792 | 776 |
| Completed All Surveys To-Date | | 433 | 431 | 416 | 389 | 377 |

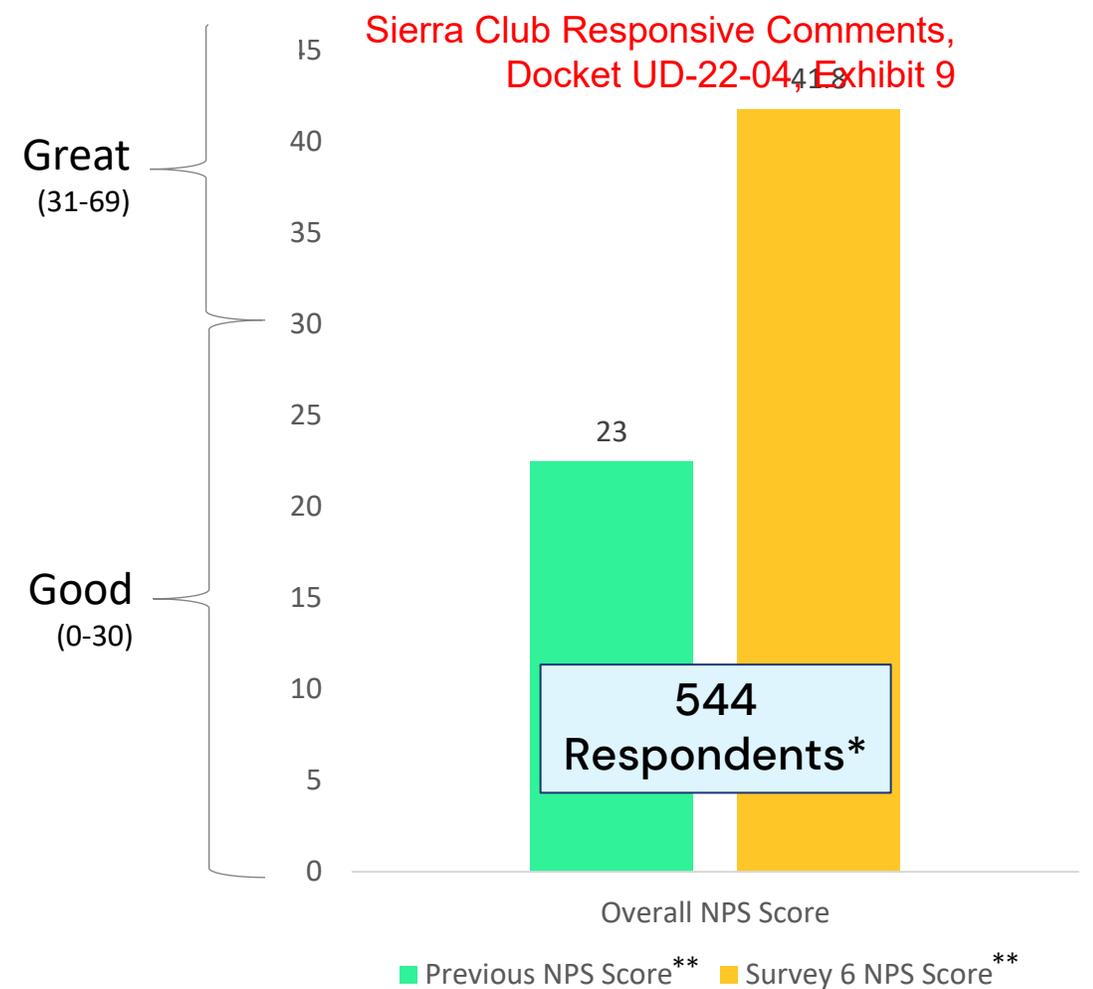
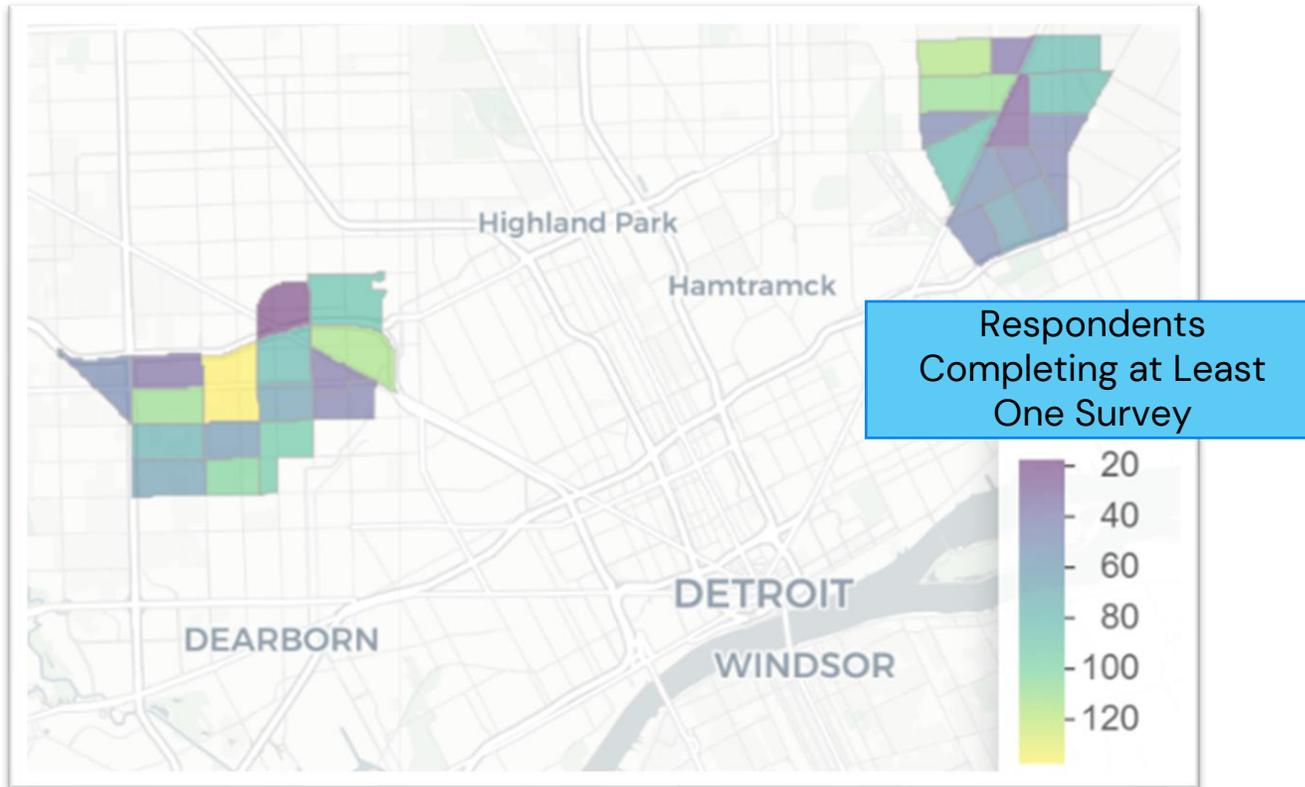
*Postcards were sent to all potential respondents, including those without email addresses

** Sent to nonrespondents who completed a prior survey

Equity Insights Progress-to-Date Recap

Phase Two All Surveys Findings Snapshot:

- Net Promoter Scores increased 82% among the respondents between Surveys 1-3 and Survey 6.



NPS6. How likely you are to recommend DTE to a friend or family member?

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

| | July | Aug | Sept | Oct | Nov | Dec |
|--|------|-----|------|-----|-----|-----|
| Phase 3: Targeted, Behavioral Science Based Engagement | | | | | | |
| 1 Develop Targeting and Tailoring Strategy | █ | | | | | |
| 2 Draft Targeting and Tailoring Strategy | | █ | | | | |
| 3 Behavioral Optimization through Choice Architecture and Nudges | | | █ | | | |
| 4 Contractor Interviews | | | █ | █ | | |
| 5 CAA/Stakeholder Workshop Prep and Delivery | | █ | █ | █ | | |
| 6 Finalization of Strategy | | | | █ | █ | |
| 7 Implementation Planning and Coordination | | | | | █ | █ |

→ **Phase Three Timeline**



DTE Equity & Inclusion Study

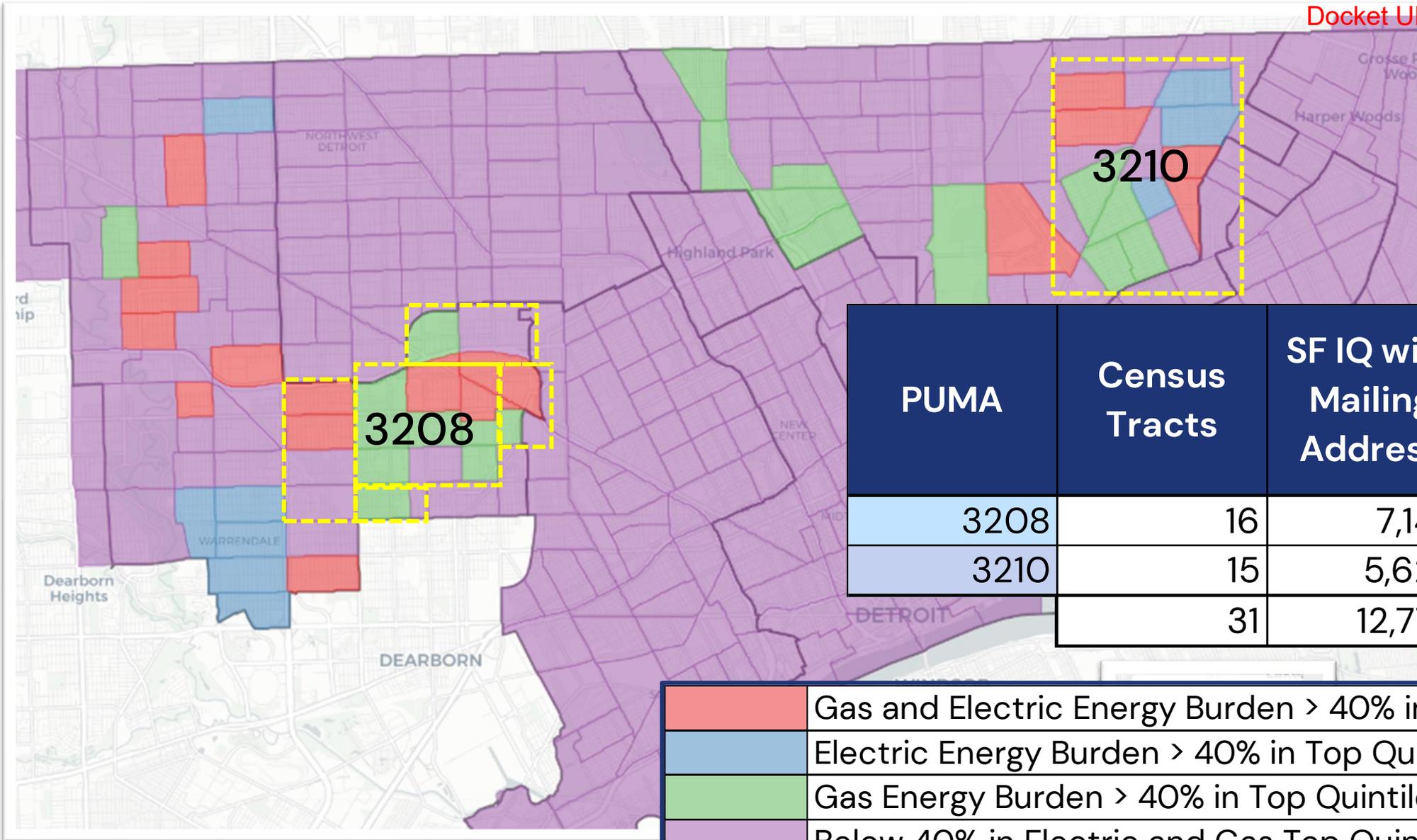
Phase Three: Targeting and Tailoring Strategy

Targeting and Tailoring Strategy Goals

- Reflect insights from Phase One Geographic Targeting and Phase Two Engagement Surveys to:
 - determine potential of Neighborhood-based approach
 - specify how best to select and engage households
 - determine range of measures

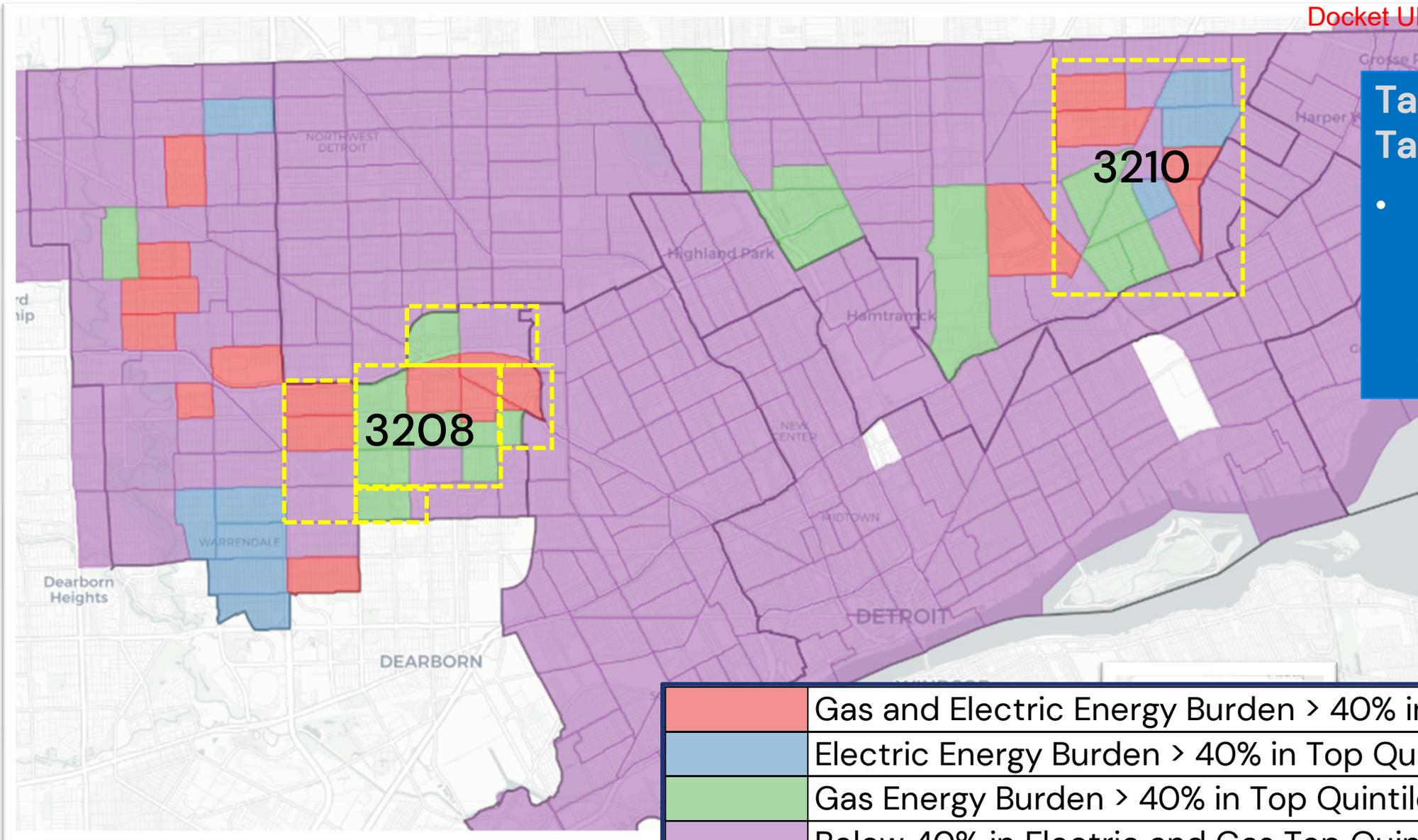
| | July | Aug | Sept | Oct | Nov | Dec |
|--|------|-----|------|-----|-----|-----|
| Phase 3: Targeted, Behavioral Science Based Engagement | | | | | | |
| 1 Develop Targeting and Tailoring Strategy | | | | | | |
| 2 Draft Targeting and Tailoring Strategy | | | | | | |
| 3 Behavioral Optimization through Choice Architecture and Nudges | | | | | | |
| 4 Contractor Interviews | | | | | | |
| 5 CAA/Stakeholder Workshop Prep and Delivery | | | | | | |
| 6 Finalization of Strategy | | | | | | |
| 7 Implementation Planning and Coordination | | | | | | |

→ **Targeting and Tailoring Strategy**



| PUMA | Census Tracts | SF IQ with Mailing Address | SF IQ with Email |
|------|---------------|----------------------------|------------------|
| 3208 | 16 | 7,145 | 5,545 |
| 3210 | 15 | 5,628 | 4,380 |
| | 31 | 12,773 | 9,925 |

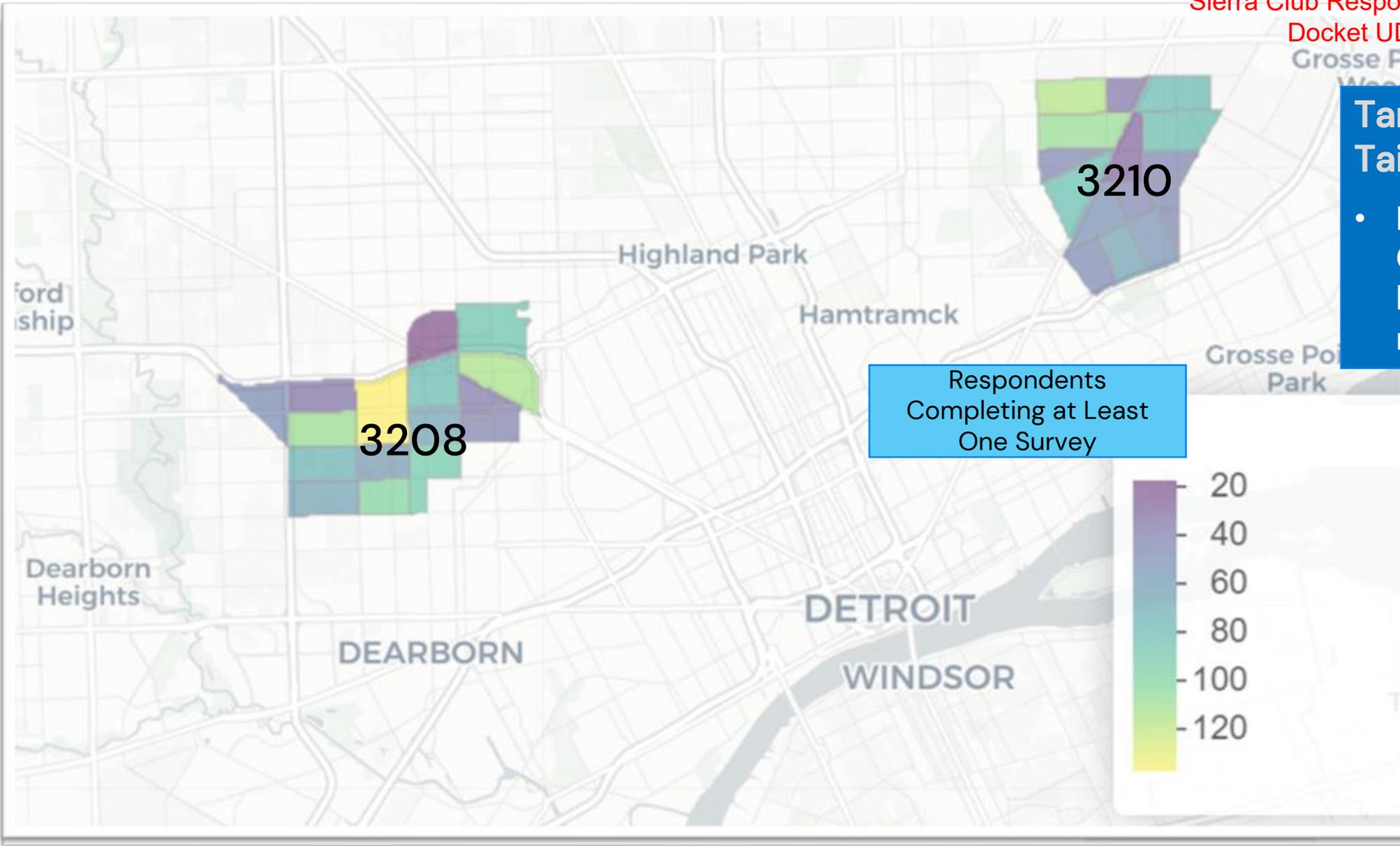
| | |
|--|--|
| | Gas and Electric Energy Burden > 40% in Top Quintile |
| | Electric Energy Burden > 40% in Top Quintile |
| | Gas Energy Burden > 40% in Top Quintile |
| | Below 40% in Electric and Gas Top Quintile Energy Burden |



Targeting and Tailoring Next Step:

- Survey Respondents mapped by census tract within each PUMA

| | |
|---|--|
|  | Gas and Electric Energy Burden > 40% in Top Quintile |
|  | Electric Energy Burden > 40% in Top Quintile |
|  | Gas Energy Burden > 40% in Top Quintile |
|  | Below 40% in Electric and Gas Top Quintile Energy Burden |



Targeting and Tailoring Next Step:

- Deeper analysis of Census Tracts to best focus resources

Targeting and Tailoring Challenges and Opportunities

- Challenge of balancing limited funds available for Whole Home Approach with depth of community reach
- Opportunity to leverage and integrate information from Community Surveys
- Opportunity to leverage insights from other Phase 3 tasks (e.g., contractor/CAA interviews and behavioral science insights)



→ Targeting and Tailoring Strategy

Targeting and Tailoring Challenges and Opportunities

- Challenge of balancing limited funds available for Whole Home Approach with depth of community reach
- Opportunity to leverage and integrate information from Community Surveys
- Opportunity to leverage insights from other Phase 3 tasks (e.g., contractor/CAA interviews and behavioral science insights)



Items of Focus:

- Air Sealing and Insulation
- Workforce Development contractor involvement

Under Consideration:

- Neighborhood Direct Install Blitz Campaign – potential measures: Smart or programmable Tstats and/or furnace filters
- Safety Measure partnerships
- Neighbor to Neighbor Education Opportunities

→ **Targeting and Tailoring Strategy**



DTE Equity & Inclusion Study
Phase Three: Behavioral Optimization
through Nudges and Choice
Architecture

Behavioral Optimization Goals

Weave social and behavioral science insights from Community Surveys with EEA program design to create recommendations to shape:

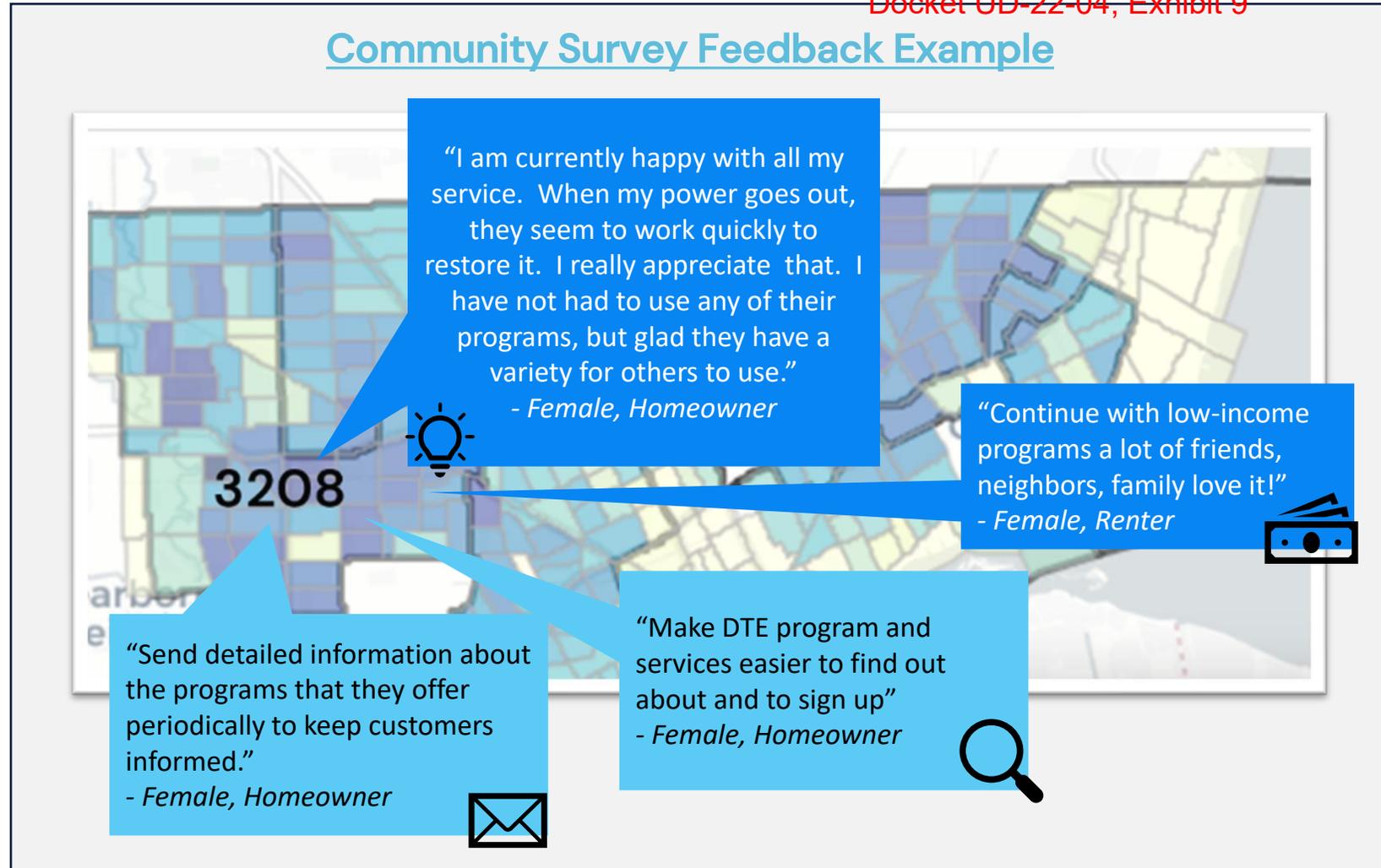
- customer behavior and engagement
- contractors, CAAs, and other program stakeholder’s interactions

| | July | Aug | Sept | Oct | Nov | Dec |
|--|------|-----|------|-----|-----|-----|
| Phase 3: Targeted, Behavioral Science Based Engagement | | | | | | |
| 1 Develop Targeting and Tailoring Strategy | █ | | | | | |
| 2 Draft Targeting and Tailoring Strategy | | █ | | | | |
| 3 Behavioral Optimization through Choice Architecture and Nudges | | | █ | | | |
| 4 Contractor Interviews | | | █ | █ | | |
| 5 CAA/Stakeholder Workshop Prep and Delivery | | █ | █ | █ | | |
| 6 Finalization of Strategy | | | | █ | █ | |
| 7 Implementation Planning and Coordination | | | | | █ | █ |

→ Behavioral Optimization

Behavioral Optimization Strategy

- Addresses key challenges and barriers associated with program design and those identified in community surveys
- Maximizes program participation, customer engagement, and program impact



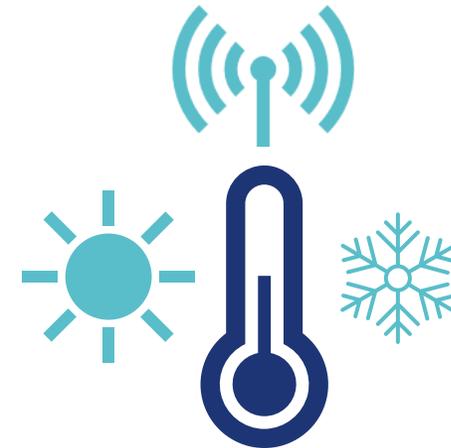
→ Behavioral Optimization

Survey results to drive behavioral nudges and choice architecture to maximize customer engagement, good will, and energy savings impact

Survey Three Results:

• Thermostat Settings

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



→ Behavioral Optimization Process Example

Survey results to drive behavioral nudges and choice architecture to maximize customer engagement, good will, and energy savings impact

Survey Three Results:

- HVAC System Air Filters
 - Over half (58%) of respondents are only changing their furnace filters twice a year or less.
- Air Sealing
 - The majority (88%) 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.



→ Behavioral Optimization Process Example



DTE Equity & Inclusion Study
Phase Three: Implementation
Strategy, Planning, and Coordination

Implementation Strategy, Planning, and Coordination Goals

Work with DTE and stakeholders to develop:

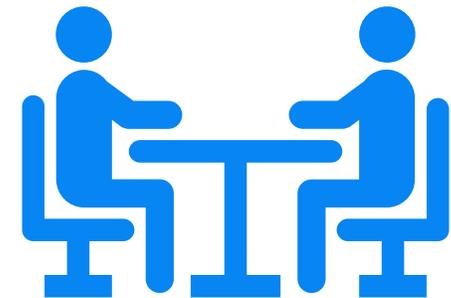
- implementation strategy with DTE and stakeholders.
- participation goals and metrics for Geographic Targeting Approach.
- insights for program updates (e.g., planning for updates, collateral modifications, etc.).

| | July | Aug | Sept | Oct | Nov | Dec |
|--|------|-----|------|-----|-----|-----|
| Phase 3: Targeted, Behavioral Science Based Engagement | | | | | | |
| 1 Develop Targeting and Tailoring Strategy | █ | | | | | |
| 2 Draft Targeting and Tailoring Strategy | | █ | | | | |
| 3 Behavioral Optimization through Choice Architecture and Nudges | | | █ | | | |
| 4 Contractor Interviews | | | | █ | | |
| 5 CAA/Stakeholder Workshop Prep and Delivery | | | █ | █ | | |
| 6 Finalization of Strategy | | | | █ | █ | |
| 7 Implementation Planning and Coordination | | | | | █ | █ |

→ **Implementation Strategy, Planning, and Coordination**

Implementation Strategy, Planning, and Coordination Next Steps

- Contractor and Program Partner Interviews
 - Current and Upcoming contractors
- Learning from Contractor and Program Partner interviews rolled into Program Partner/Stakeholder Workshop
 - Focus on groups near PUMAs 3208 and 3210 (e.g., Matrix, Wayne–Metro)



→ **Implementation Strategy, Planning, and Coordination**



DTE Equity & Inclusion Study Phase Three Draft Plan



Homes within identified community offered energy assessment with direct install measures.

- Health and Safety Issues referred to Health and Safety Pilot process
- Electrically heated homes identified as potential candidates for heat pump installation

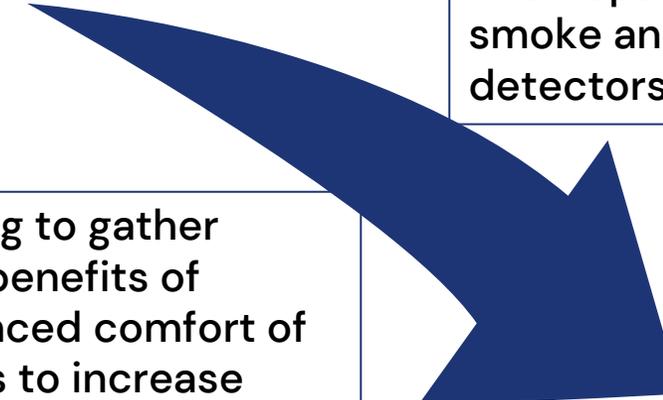


Currently assessing reach of resources to determine number of houses receiving Assessment and Wx measures



Host community meeting to gather feedback and highlight benefits of energy efficiency, enhanced comfort of home, and opportunities to increase savings.

Exploring opportunities to partner with other community focused efforts (e.g., Detroit Fire Department provision of smoke and carbon monoxide detectors)





DTE Equity & Inclusion Study Q&A and Next Steps



Questions & Answer



Next Steps

DTE

- Phase 2 Survey Summaries Presentation
- Phase Three Draft Plan Workshop



→ **Next Steps**



Appendix

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.



45.0%
Non-Programmable

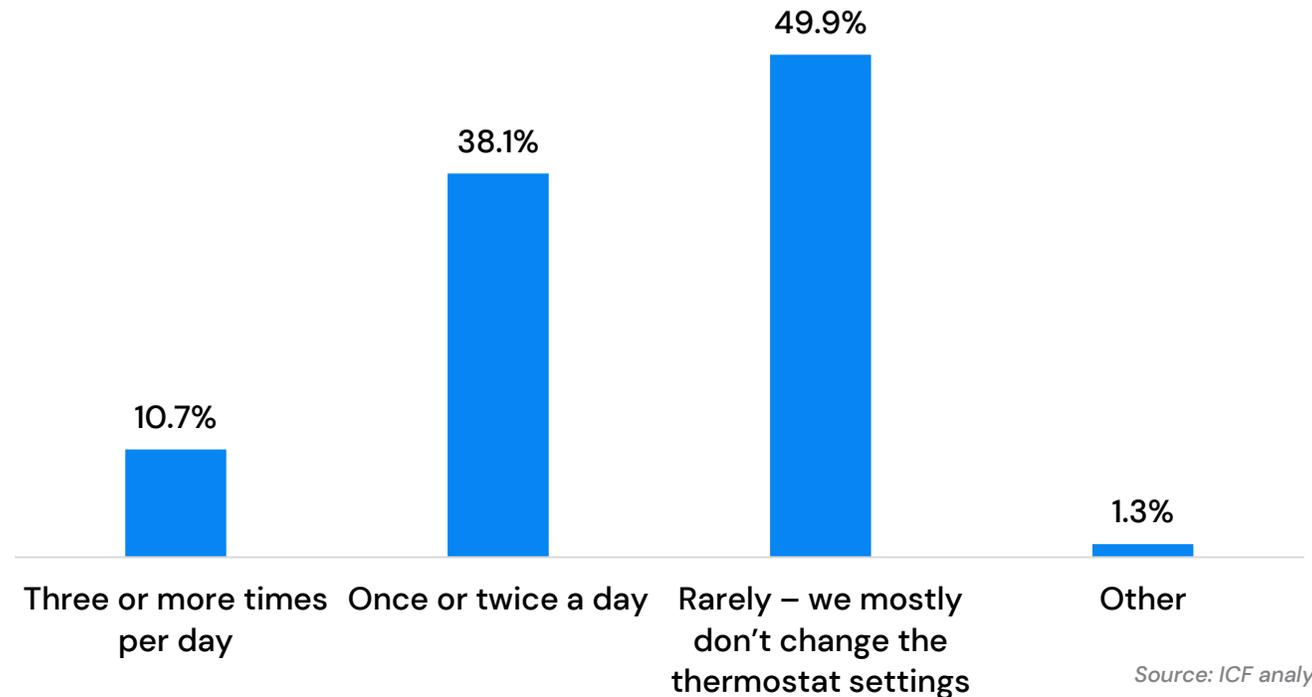


40.6%
Programmable



6.8%
Smart or WiFi-Enabled
1.0% Other
6.6% Don't know

Number of Times per Day Customers Change the Thermostat Setting



THERM. What kind of thermostat do you have in your home? (N+701)

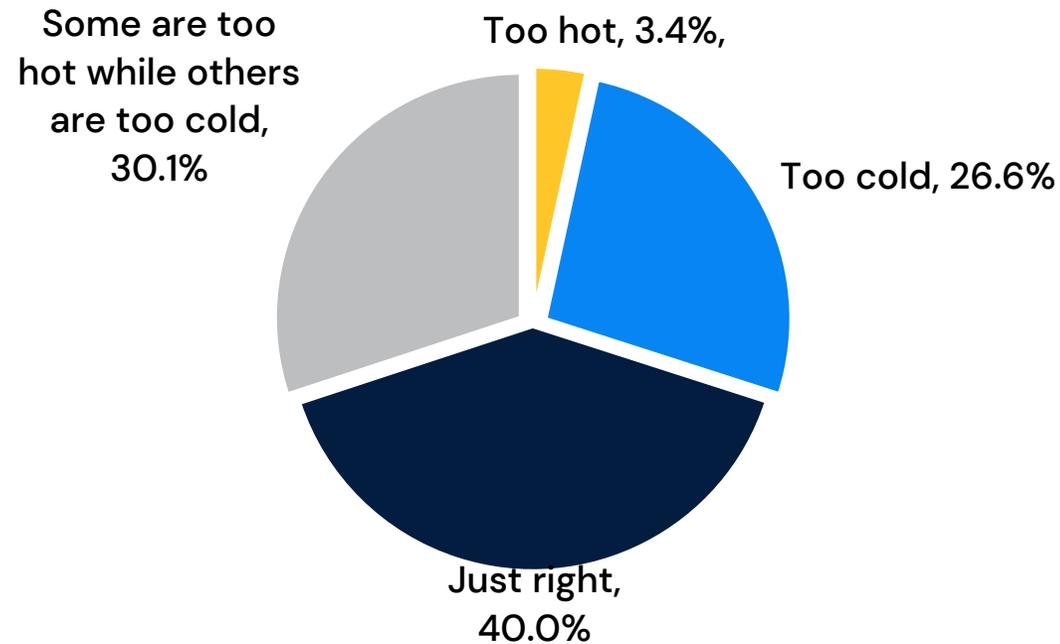
TEMP3. During the winter, how many times per day do you or other people in your home make changes to the temperature on the thermostat (either by changing the settings on the thermostat or with preset changes)? (N=706)

Source: ICF analysis

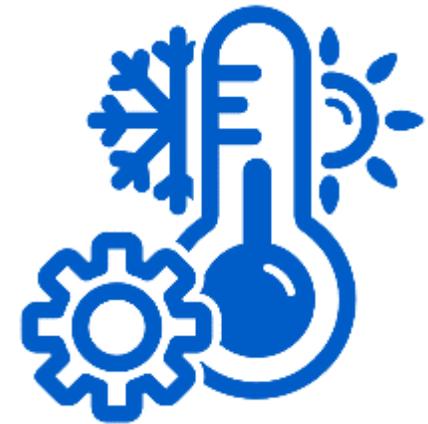
Temperature Settings

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?



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



TEMP1. During the winter, are most members of your household generally too hot, too cold, or perfectly comfortable? (N=706)

TEMP2. When it is cold outside, what temperature is your thermostat typically set to? (N=706)

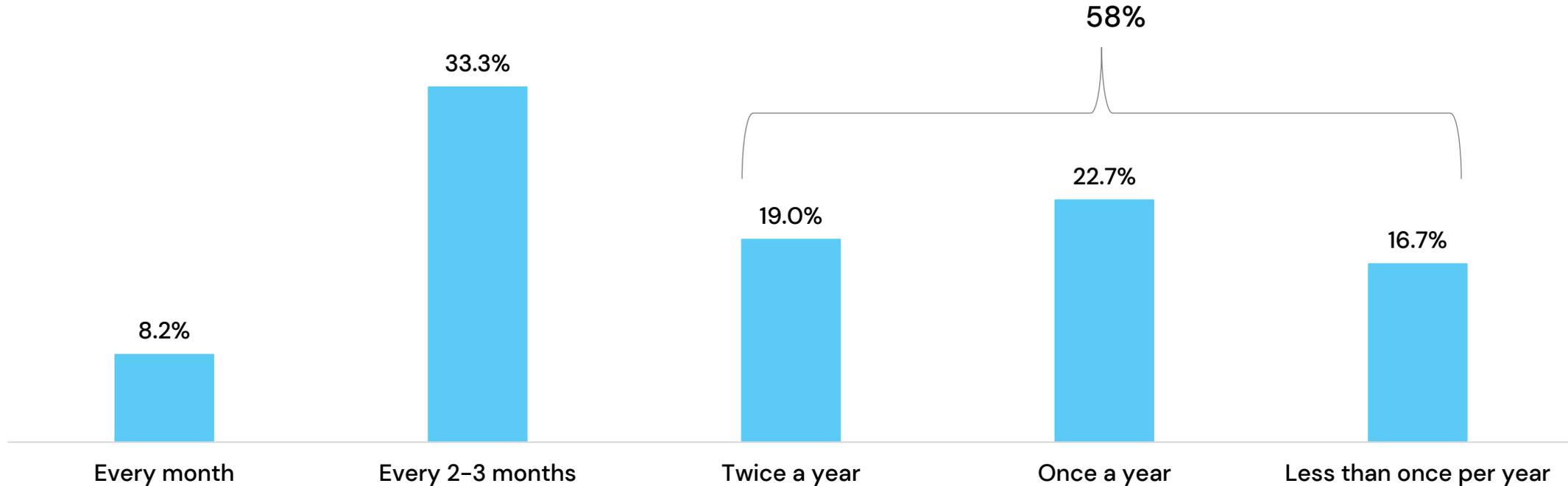
TEMP2_1. During the day? (N=706)

TEMP2_2. At night? (N=706)

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



Source: ICF analysis



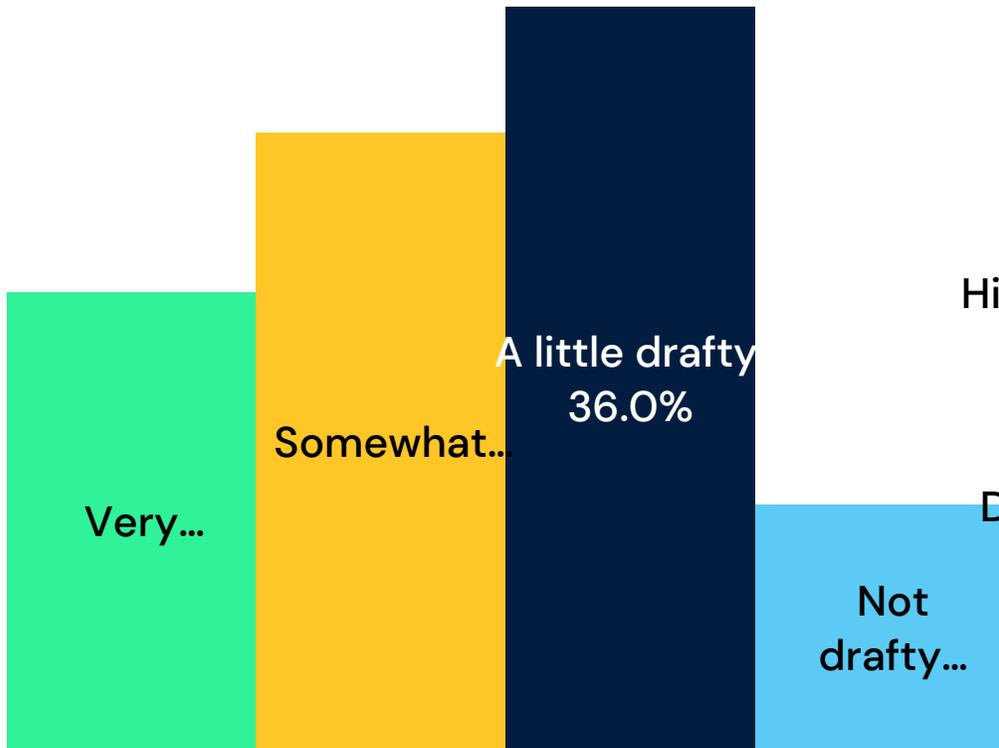
MEQUIP. Which of the following equipment do you have serviced every year or two (not including repair work)? Select all that apply. (N=705)
FILTER. How often do you (or someone else) typically clean/change your furnace filter during the heating season? (N=697)
MECH. In the past few years, how often has either your heating or cooling system stopped working? (N=697)

Drafts and Air Leaks

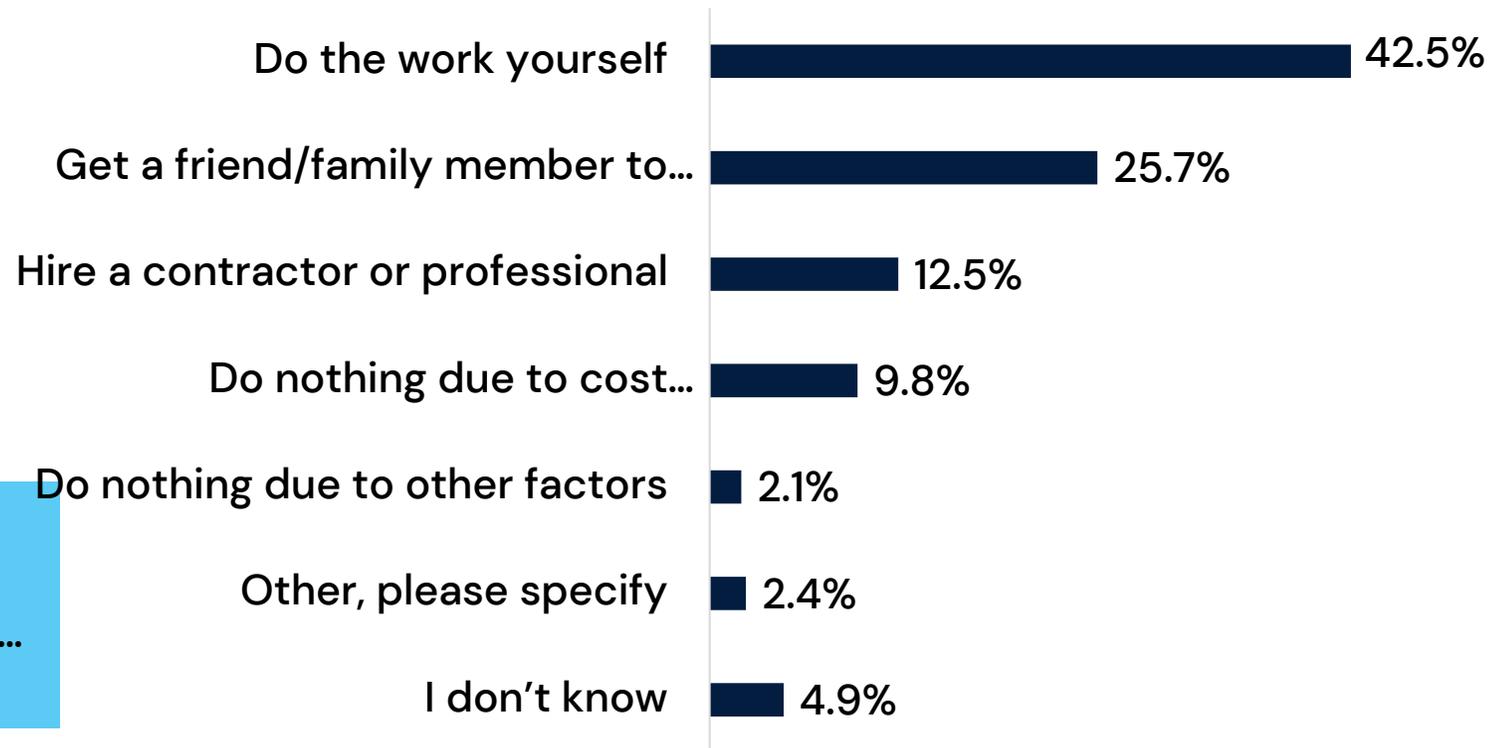
The majority (88.1%) of customers state their [homes have a draft](#).

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



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



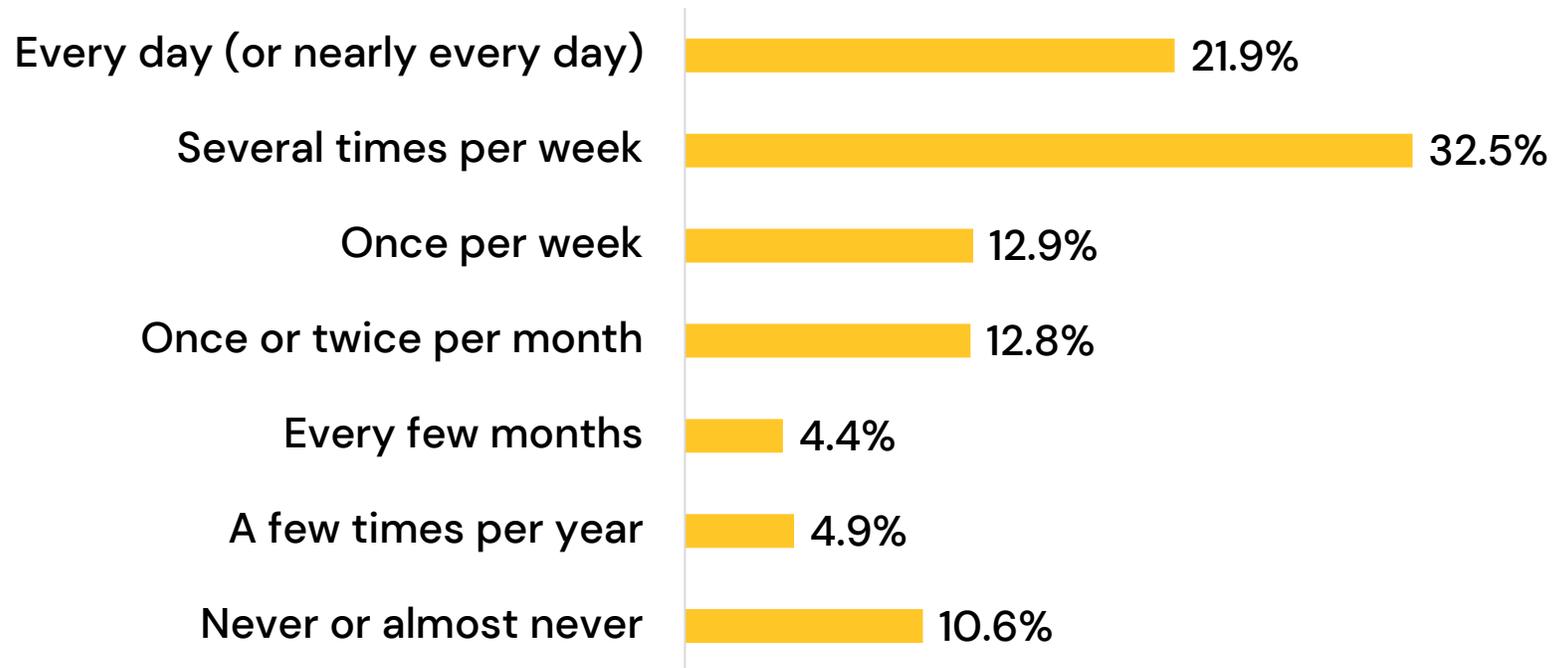
[Return to Insights](#)



Interacting With Neighbors

Over half (54%) of respondents speak with their neighbors every day or several times per week.

How often do you talk to any of your neighbors living on the same street or nearby?





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 Composition, Demographics, and Home Use

*Each survey respondent will also complete a short entry-point survey

→ **Behavioral Optimization: Community Survey Themes**