STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter, on the Commission’s own motion, regarding the regulatory reviews, revisions, determinations, and/or approvals necessary for DTE ELECTRIC COMPANY to fully comply with Public Act 295 of 2008, as amended by Public Act 342 or 2016.

TESTIMONY OF JAMAL LEWIS

ON BEHALF OF

SIERRA CLUB, THE ECOLOGY CENTER, AND NATURAL RESOURCES DEFENSE COUNCIL

October 6, 2021
# TABLE OF CONTENTS

I. INTRODUCTION & QUALIFICATIONS ........................................................................................................ 1

II. TESTIMONY OVERVIEW ...................................................................................................................... 4

III. BARRIERS TO EQUITABLE PARTICIPATION IN ENERGY EFFICIENCY PROGRAMS ...................................... 6

IV. DTE SHOULD INCORPORATE NEIGHBORHOOD-BASED DELIVERY AS PART OF ITS EWR PROGRAM ...... 17
I. INTRODUCTION & QUALIFICATIONS

Q. Please state for the record your name and business address.
A. My name is Jamal Lewis. My business address is 2714 Hudson St. Baltimore, MD 21224.

Q. By whom are you employed and in what position?
A. I am the Director of Energy, Climate and Health at the Green & Healthy Homes Initiative (“GHHI”). In that capacity, I provide technical assistance to federal, state, and local agencies, nonprofit organizations, and public utilities to develop and implement policies and programs that support healthy, energy efficient, and decarbonized housing.

Q. On whose behalf are you testifying in this proceeding?
A. I am testifying on behalf of the Sierra Club, Natural Resources Defense Council (“NRDC”), and the Ecology Center.

Q. Please describe your educational background.
A. I received a Master in Public Health from Columbia University’s Department of Environmental Health Sciences in 2018 and Bachelor of Arts in Environmental Studies from the University of Pennsylvania in 2016.

Q. Please describe your professional background.
A. My work focuses on ensuring that all Americans have access to a safe, healthy, energy efficient, decarbonized, and affordable housing. In my current role as Director of Energy, Climate, and Health, I participate in the development and implementation of policies and programs that exist at the intersection of healthy housing, energy efficiency and climate change. This involves working with the federal government as well as state
and local governments and agencies, energy efficiency and healthy housing program administrators and implementers, and other non-profit organizations to incorporate best practices into their hazard remediation and energy efficiency policies and programs. I have provided technical assistance to fifteen states, including Michigan, and over thirty-three local jurisdictions. This includes working with Penn Medicine Lancaster General Health to design the nation’s first program dedicated to addressing lead-based paint hazards in existing housing stock. I have also published multiple papers outlining the importance of and pathways to promoting health and social equity by increasing access to and improving the design of programs that advance healthy, energy efficient housing. I also co-authored GHHI’s Lead Funding Toolkit, which was designed to help state and local jurisdictions increase the number of resources available to remediate lead hazards by listing the various programs that have been used to fund lead remediation and providing a step-by-step guide to accessing these funding sources, and a white paper outlining the potential for healthcare to invest in improving housing quality to help older adults age in place. A copy of my curriculum vitae is attached as Exhibit SC-8.

Q: Have you previously filed expert witness testimony in other proceedings before the Commission or before other regulatory commissions?

A: Yes. As described below, I have assisted with planning Energy Efficiency programs in multiple states.

Q: Please explain your previous work on energy efficiency planning.

A. I have participated in the planning and rulemaking of several Energy Efficiency programs. These include the Empower program in Maryland, ACT 129 in Pennsylvania, the low- and moderate-income (“LMI”) program proceeding and the energy affordability
program ("EAP") proceeding in New York, and the Integrated Resource Planning process in New Orleans. I have also led the facilitation of an Equity Working Group for National Grid in Rhode Island, designed to seek feedback from community organizations on ways that National Grid’s programs can better serve under-served customer segments.

Currently, I am part of the team working to establish a Whole House Pilot in New Jersey, a pilot program designed to provide resources through the state’s low-income energy efficiency programs. The aim of the pilot is to design the service delivery such that all New Jersey residents can access the benefits of energy efficiency, while leveraging resources from other healthy homes programs in the state.

In addition, I was appointed by the State of New York to serve on the Energy Efficiency and Housing Advisory Panel to advise the state on ways to design policies and programs that enable the achievement of the state’s climate and equity goals laid out in the Climate Leadership and Community Protection Act. I have participated in Maryland climate action planning process as well.

Q. What is the purpose of your testimony?

A. I am offering this testimony to

- Explain that current programming is insufficient to meet the needs of all DTE Electric Company ("DTE" or the “Company”) customers, particularly limited income, Black and Brown customers, and high energy burdened customers (customers that pay more than 6% of their income on energy costs).

- Propose a neighborhood-based delivery program for targeted census tracts and explain how the proposed program can overcome existing barriers of access to energy efficiency programs among residents of underserved communities.

- Highlight program examples that exist in other parts of the country that DTE could use to model components of a neighborhood-based targeting and delivery program.
Q. Are you sponsoring any exhibits?

A. Yes, I am sponsoring the following exhibits:

1. Exhibit SC-8: Curriculum Vitae of Jamal Lewis
2. Exhibit SC-9: Case No. U-20876, Responses to SCDE
3. Exhibit SC-10: Great Lakes Environmental Law Center. Comment Re. U-20633 – Incorporating Environmental Justice Considerations in Future IRP Cases
4. Exhibit SC-11: Attachment SCDE 3.21-03 PTCI Presentations (July 9, 2021)
5. Exhibit SC-12: Attachment SCDE 3.21-02 PTCI Presentations (Apr. 9, 2021)
7. Exhibit SC-14: Case No. U-20876, Responses to AGDE
8. Exhibit SC-15: Case No. U-20876, Responses to NRDCNHTECDE

II. TESTIMONY OVERVIEW

Q. Please summarize your recommendations

A. I recommend that DTE implement a neighborhood-based delivery program that incorporates a large-scale marketing and outreach campaign in partnership with local community-based organizations, eases the eligibility and qualification process by automatically qualifying all households in these target areas, provides flexible audit scheduling hours, leverages additional sources of funding to address health and safety issues and reduce weatherization walkways, and advances local workforce development training and certification programs and opportunities to increase capacity to meet the need for weatherization services that exists in the target census tracts. As a starting point,
I recommend that DTE target specific priority census tracts that are high need and could particularly benefit from these shifts in approach. These are census tract numbers: 5141, 5139, 5136, 5043, 5311 and 5314, as illustrated in Figure 1 below.

In addition, to support DTE’s efforts to serve its diverse customer base and to maximize occupant health and well-being, I recommend that DTE regularly report on diverse suppliers that provide Energy Waste Reduction (“EWR”) measures and incorporate the use of healthy building materials into its retrofit pilots and programs, beginning with the Health and Safety Pilot. I also recommend that as part of the continuation of the Health and Safety Pilot or as part of the expansion of the Pilot to a full program, DTE should include specific budget carve outs for both single-family (including renter occupied), and multifamily households.

Finally, I recommend that DTE consider sponsoring the training and certification for some prospective workers, incorporate explicit provisions within its plan to train energy
DIRECT TESTIMONY OF JAMAL LEWIS
CASE NO. U-20876

auditors to identify health and safety hazards during in-home assessment, requiring
auditors to conduct a health and safety assessment, and communicating presence and
impact of hazards to the occupant, and invest in cross-training energy efficiency
contractors to address health and safety hazards such as lead, mold, and asbestos.

III. BARRIERS TO EQUITABLE PARTICIPATION IN ENERGY EFFICIENCY
PROGRAMS

Q. Please explain the key takeaways from your involvement with the development and
implementation of other energy efficiency programs that are relevant to this
proceeding.

A. Through my work with energy efficiency programs—both utility- and government-funded—I have found that limited income customers often do not receive a proportionate
share of the benefits of energy efficiency programs. Energy efficiency programs,
especially ratepayer-funded programs, are typically evaluated by the ability to meet
predetermined energy consumption savings targets. Often, utilities are required to meet
these targets by statute and, thus, design their programs to best meet these targets as
cheaply as possible. (I am advised by counsel that DTE Electric Company is not required
to demonstrate that its low-income residential EWR program offerings are cost
effective.1). While all utilities are different, I have found that generally they utilize the
same framework when it comes to their energy efficiency program portfolio. Typically,
the portfolio is made up of residential programs, commercial and industrial programs for
businesses and companies, and behavioral programs. The residential portion of the

1 MCL 460.1071(4)(g).
portfolio features programs for all customers and separate programs specifically for low-income customers and includes services like appliance rebates, in home energy audits, and, for low-income customers, little to no cost energy efficiency building upgrades often referred to as weatherization. I have found in my work that typically the energy consumption savings, as required by statute, are largely driven by non-low-income programs or programs that are not specifically targeting limited income customers. I suspect that this phenomenon occurs because non-low-income programs are largely cost-effective as that term is typically defined, meaning that the energy consumption savings benefits outweigh the cost of achieving those benefits. For example, every year new appliance technologies hit the market that are increasingly more efficient than the last model. Providing a full or partial rebate to incentivize a customer to purchase the newer, more efficient appliance can cost a utility a few hundred dollars [per customer] but may result in significant energy consumption savings.

Q. **How does this approach to energy efficiency program design and implementation impact limited income customers?**

A. This sort of approach leaves limited income customers behind. By definition, when household income is limited—in the short or longer term—customers likely do not have the disposable income to invest in newer, more efficient technologies and thus need full subsidization of energy efficiency products and services. In addition, research shows that limited income customers often occupy old and severely deteriorated homes that may not be able to support new appliance technologies. Such homes may have structural defects or breaches in the building shell that lead to wasted energy and severe energy
inefficiencies.21 This means customers are paying higher energy bills and it will cost a lot more to reduce energy consumption in their homes. This reality creates a situation where utilities are incentivized to invest more in non-low-income energy efficiency programming because they are more likely to achieve their savings targets as cheaply as possible.

Still, like DTE, utilities are also usually statutorily required to provide opportunities for participation in energy efficiency programs for all customers since all customers, including limited income customers, pay into the fund that supports the programs. Therefore, most utilities offer programs for limited income customers that often entail a free energy audit and the free installation of energy efficient appliances and weatherization measures. However, I have found that simply providing opportunities for participation is not enough to promote actual participation in energy efficiency and weatherization programs among limited income customers.3

---

2 United States Census Bureau, American Housing Survey (AHS) Table Creator, https://www.census.gov/programssurveys/ahs/data/interactive/ahstablecreator.html?areas=a00000&year=n2015&tableName=Table5&byGroup1=a7&byGroup2=a1&filterGroup1=t1&filterGroup2=g1&show=S (last visited Oct. 5, 2021). Using the AHS Table Creator to evaluate ‘Housing Quality’ data by the ‘Household Income’ variable, it is clear that, generally speaking, as the household incomes decrease the number of severely inadequate and moderately inadequate households increases.; see also Freddie Mac Single-Family, Where is the Aging Housing Stock in the United States?, (June 1, 2021), https://sf.freddiemac.com/articles/news/where-is-the-aging-housing-stock-in-the-united-states; Jerusalem Demszas, America’s houses are old. Low-income renters are suffering because of it, Vox (July 22, 2021), https://www.vox.com/2021/7/22/22586701/housing-aging-public-housing-section-8.

Similarly, the DTE's stated objective for its low-income energy efficiency programs is simply to provide opportunities for participation for its customers.\textsuperscript{4} The company has not examined the ratio between actual participation and participation opportunities.\textsuperscript{5} An analysis of actual participation to participation opportunities could shed light on the most efficient and effective program design elements that result in maximum participation among limited income customers. Limited income customers often have the most to gain from energy efficiency, but have the least access to energy efficiency programs. This reality has perpetuated existing inequities that leave these customers with the highest bills and the least means to meet their basic energy needs.

Q. In your experience, are there other populations that are traditionally underserved by energy efficiency programs?

A. Yes. While most utilities’ energy efficiency programs have not, to date, collected data on race, making it difficult to study racial inequities, anecdotal evidence suggests that Black and Brown residents are also underserved by energy efficiency. African Americans have the greatest likelihood of residing in older homes with compromised energy systems, aging or ineffective appliances and other assorted structural deficiencies, all of which contribute to making the home energy inefficient.\textsuperscript{6} The often substandard state of such deprived households, specifically those in historically residentially segregated areas, are

\textsuperscript{4} Qualifications and Revised Direct Test. of Kevin L. Bilyeu, at 8–9, Case No. U-20876 (Sept. 29, 2021) (“Bilyeu Direct, Electric”); Ex. SC-9, Case No. U-20876, Responses to SCDE-1.32a, -1.32c; Case No. U-20881, Responses to SCDG-1.12a, -1.12c.
\textsuperscript{5} Ex. SC-9, Case No. U-20876, Response to SCDE 1.32e.
typically compromised in ways directly related to a home’s energy inefficiency status. These include but are not limited to, inadequately maintained and inefficient ventilation, cooling and heating (“HVAC”) systems, drafts or air leaks, and poor insulation. These structural conditions, coupled with a household’s inability to afford energy all contribute to inefficient household energy usage and decreased access to energy efficiency program services among Black households.

**Q. How are these structural conditions impacting black and brown residents?**

**A.** In 2019, I co-authored a paper, published in *Energy Efficiency*, that listed nine areas related to substandard housing and residential energy inefficiencies. These areas are:

1. Racial residential segregation, which refers to the clustering of Black and Brown residents in low-resource neighborhoods while being denied access to additional resources to address deferred maintenance, which has led to structural deficiencies, health and safety hazards, and energy inefficiencies.

2. Housing burden refers to the dynamic that exists around the shortage of affordable housing, which forces many limited income households and households with limited options, such as Black and Brown residents, to settle for more affordable, low-quality housing. Even though housing costs may be more affordable for low-quality housing, the costs may still be high as a percentage of household income and residents may end up paying more because of hidden costs that manifest in

---


9 Id.

issues like frequent moves, overcrowding, and lack of easy access to necessary amenities.  

3. Energy burden refers to the percentage of income spent on utilities. A high energy burden references a household that pays more than six percent of income on utilities. Black households spend upwards of 4.1% of income on utilities, which is more than the median of 3.1% for all households and among the highest of any racial group. Also, the median energy burden for Black households is 43% higher than the median for white households.

4. Bundled burdens, economic trade-offs, and materials hardships refer to other related hardships and burdens that often appear in the same areas and neighborhoods that experience high energy burden. African Americans are also more likely to forgo food and medicine in order to pay for energy.

5. Disparate health vulnerabilities refer to the health impacts of substandard, inefficient housing and can include direct impacts like lead poisoning, asthma and other respiratory diseases, and trip and falls hazards—all of which disproportionately impact Black and Brown individuals. One study also found that poor thermal comfort and difficulty paying energy bills were associated with increased stress levels that can contribute to chronic, long term health impacts like diabetes, hypertension, stroke, and coronary heart disease, which also disproportionately impact Black and Brown individuals. Combined, and in addition to other environmental, social, and health factors, African Americans have the worst life expectancy among other racial groups.

6. Extreme weather and climate impacts refers to various acute and chronic manifestations of climate change. This includes extreme weather events like hurricanes, earthquakes, and wildfires as well as drought and extreme heat and cold that can last a while and impact the daily lives of community members.

---

Several studies have shown that Black and Brown communities are disproportionately impacted by climate change.\(^\text{15}\)

7. Depletion of the resilience reserve refers to a framework that describes the resilience capacity that any individual has to respond to stressors and maintain a healthy level of psychological and physical functioning. As the individual faces stressful events, they are required to utilize resilience resources from their reserve. Facing too many stressors or stressors that are significant in magnitude can deplete the resilience reserve, thereby impacting an individual’s ability to maintain healthy levels of functioning. For example, one study pointed out that Hurricane Sandy—an extreme weather event that impacted the northeastern United States, New York city in particular—caused longstanding difficulties and emotional trauma, which delayed recovery even years after the storm.\(^\text{16}\)

8. Energy transitions refers to the transition away from a fossil-fuel economy to a cleaner, more efficient economy powered by renewable energy and electricity. In large part, clean energy technologies are considered luxury items that are only accessible to those than can afford them. Furthermore, as my colleagues and I articulate in another recent report, many households that occupy older, substandard housing such as Black and Brown residents, are not at the starting line for the transition to cleaner technologies and therefore are unable to access the many benefits.\(^\text{17}\) As an example, one study highlights that uptake of solar in African American communities is among the slowest when compared to other groups.\(^\text{18}\)

9. Gentrification and displacement refer to the “pricing out” of Black and Brown residents as newer, significant investments occur in the same historically Black and Brown communities that endured historical disinvestment as a result of racist and discriminatory housing policies. One study suggests that gentrification may be an unintended consequence of long-desired and much-needed energy upgrades.\(^\text{19}\)


Q. Are there ways to counteract these structural patterns?

A. Yes. I believe it is important to recognize that these structural patterns are the result of generations of intentional, racist, discriminatory, and unjust policies that have resulted in the disparities in housing quality and energy inefficiency experienced by Black and Brown households and limited income households. To counteract these patterns, I believe it will take equally intentional action to reverse these impacts and promote energy justice. In the same 2019 paper referenced above, my co-authors and I utilize an energy justice framework, anchored in four forms of justice (recognition, procedural, distributional, and restorative) that I believe can help counteract these structural patterns. Recognition justice is first the acknowledgement that current disparities are a result of the historical legacy of injustices. Procedural justice refers to the opportunity for impacted communities to participate meaningfully in the design and implementation of policies and programs. Distributional justice is the equal distribution of benefits and burdens among all social groups. Restorative justice refers to the intentional design of policies and programs that address the root causes of the current inequities and disparities that exist.

With thoughtful design and effective targeting of energy efficiency and energy waste reduction programs to disproportionately impacted residents, it is possible to counteract the otherwise perpetual cycle of poor housing and energy outcomes and promote energy justice. Practically speaking, energy efficiency program administrators and regulators

---

should direct more resources into comprehensive income-eligible weatherization as opposed to minor, free direct install measures that include light bulb replacement and low flow faucet and shower heads. Weatherization is the practice of protecting a building and its interior from the elements, particularly from sunlight, precipitation, and wind, and of modifying the building to reduce energy consumption and optimize energy efficiency.

Weatherization, which consists of insulation, air and duct sealing, heating and cooling system repair or replacement, and other building shell measures, can be effective in reducing energy consumption, improving housing conditions, and promoting occupant comfort—particularly for occupants of substandard, inefficient housing. Programs that offer weatherization should be accessible and targeted to households most in need, particularly limited income, Black and Brown, and high-energy burdened households.

Q. Have you looked specifically at DTE’s energy waste program?

A. Yes, in this proceeding, I reviewed and analyzed DTE’s existing programs and approach to providing their customers with opportunities to reduce their energy waste and increase home efficiency.

Q. From your analysis, does DTE’s energy waste reduction program sufficiently meet the needs of customers in underserved communities?

A. As shown in Figure 2 below, there is a severe energy burden problem in DTE’s service territory, particularly (though not exclusively) in the Detroit area. Energy waste reduction can help households reduce their energy bills, helping to alleviate this problem while also providing greater comfort and home health benefits. While DTE has incorporated programs, such as the Income-Qualified Multifamily program and Energy Efficiency Assistance program—both of which offer weatherization—and pilots, such as
the Payment Troubled Customer Initiative and the Health and Safety Pilot, that do
increase access to energy efficiency among those that need it most, I believe that there is
still more that DTE can do to meet the needs of customers in underserved communities,
particularly as DTE proposes to terminate its Payment Troubled Customer Initiative.21 In
addition, I will also note and reinforce Roger Colton’s testimony from 2019 that
articulates the various market barriers for low-income household participation in DTE’s
energy efficiency programs.22 Those barriers include high initial capital costs, lack of
access to capital, high implicit discount rates/payback periods, high proportion of low-
income renters, split incentives between landlords and tenants, and high mobility rate of
low-income renters.23

21 Ex. SC-9, Case No. U-20876, Response to SCDE-1.16b (“[H]as DTE decided to discontinue [the PTCI]
program?” “Yes”).
22 Direct Test. of Roger D. Colton on Behalf of Sierra Club and NRDC, at 12–14, Case No. U-20373
(Oct. 28, 2019).
23 Id.
Q. How can DTE increase access to and participation in energy waste reduction programs among its traditionally underserved communities and customers?

A. DTE can better design and implement its programs to overcome barriers to access and to best meet the needs of limited income residents and Black and Brown residents. I am proposing that DTE initiate a neighborhood-based delivery program that delivers comprehensive, building shell energy waste reduction services and weatherization measures. A neighborhood-based delivery program would overcome existing barriers to access and participation and help direct resources to households who can most benefit. Prioritizing weatherization measures would help reduce energy burden and improve occupant comfort, thereby maximizing benefits to these households.
IV. DTE SHOULD INCORPORATE NEIGHBORHOOD-BASED DELIVERY AS PART OF ITS LOW-INCOME EWR PROGRAM

Q. Please describe the design of the above referenced neighborhood-based delivery program.

A. As a part of a neighborhood-based delivery program, DTE would focus on heavily energy burdened areas of their service territory and implement program design elements that would increase participation, especially among limited income customers and customers of color. In these focus areas, determined by select criteria discussed below, customers would automatically qualify for DTE’s income-qualified energy waste reduction programs and, upon signing up, would receive an energy audit from the program implementer serving that neighborhood, and access to the weatherization upgrades recommended by the audit. In addition, DTE and its implementing partners would coordinate with local administrators of any non-utility funded or administered housing and energy programs (described in more detail below), to address health and safety hazards that would enable qualifying households to receive energy waste reduction services. The goal of this neighborhood-based delivery program would be to take a holistic and neighborhood-based approach to DTE’s Energy Waste Reduction programming—an approach that would alleviate existing barriers to participation in historically underserved communities.

Q. What barriers exist that prevent participation and benefits among underserved customer classes?

A. Barriers exist at several steps in the process. These barriers include 1) initial awareness of the availability of programs; 2) the inaccessibility of the application process; 3) the
challenges with scheduling energy audits; 4) the results of the energy audit; 5) the saturation (or lack thereof) of qualified and available contractors; and 6) client satisfaction with program outcomes. These barriers are described more in-depth below.

Q. Do these barriers exist in the context of DTE’s low-income EWR programs?
A. Yes, DTE has acknowledged that certain of these barriers exist, as noted below, and I expect based on my experience with similar utility programs that others do as well.

Q. Please describe the barriers that exist with initial awareness of energy efficiency programs.
A. The first step is initial awareness and education about the availability of programs. Most ratepayer-funded energy efficiency programs require an application by customers to enroll in the program. Before customers can apply, there first must be awareness of the program. It has been my experience that, despite marketing and outreach efforts, limited income residents and Black and Brown residents largely are not aware that there are programs that exist that can help improve the energy efficiency of their home. I have come to this conclusion by hosting and participating in community outreach events for energy efficiency programs in majority low-income communities and/or communities of color, where community members were largely unaware of the existence of such programs despite marketing and outreach efforts by the program administrators and subcontractors.

Q. Please describe the barriers that exist at the application stage of the process.
A. The second step is the application process, which can be time consuming and can require the compilation of documents that verify eligibility. According to GHHI’s experience
administering and implementing federal, state and local energy efficiency and healthy

housing programs that have often specific documentation and eligibility requirements, we

have found that an application process can deter prospective applicants if they perceive

that it is too onerous and time consuming.

Q. Please describe the barriers that exist at the energy audit scheduling phase.

A. The third step occurs if and when the application is approved, and it is time to schedule

an energy audit to home energy audit to determine opportunities to improve efficiency.

To schedule an energy audit, the resident must be home at the time, which often requires

participants to take off work and which may be difficult for participants that already have

limited disposable income and that tend to occupy low-wage jobs, which are less likely to

provide flexibility in work hours or paid time off. In addition, energy audits can take

several hours that participants may not be able to afford and that can further compromise

earning potential.

Q. Please describe the barrier(s) that exist after the audit and scope of work phase.

A. The fourth step is at the energy audit. During the audit process, in addition to identifying

opportunities to improve efficiency, the energy auditor will also identify health and safety

hazards and/or structural defects that must be addressed before energy waste reduction

measures can be performed or installed. Inherently, the most inefficient homes in DTE’s

territory have the greatest potential for energy use reduction, which can be achieved with

the installation of comprehensive, building shell measures such as air sealing, insulation,

and replacement or repair of windows and HVAC systems. Unfortunately, energy

efficiency programs are often unable to install these measures because of health and

safety hazards in the home, such as mold or moisture, knob and tube wiring, structural
issues, pest infestation, and roof leaks. Without first remediating these hazards, the
installation of comprehensive measures can exacerbate and worsen dangerous indoor
environmental conditions (e.g., installing insulation which would trap mold in the house
and worsen indoor air quality) or threaten the effectiveness of the comprehensive
measures (e.g., a roof leak which could lead to deficiencies in the building shell).
Therefore, health and safety hazards must be addressed concurrently with comprehensive
energy efficiency measures. DTE has also acknowledged this barrier with the adoption
of their Health and Safety pilot.

Typically, in situations where a household is unable to receive building shell measures
like insulation, air sealing, window replacements because of health and safety hazards,
DTE’s implementing partners may perform minor, free direct install measures. These
minor, free direct install measures refer to light bulb replacement and low flow faucet and
shower heads. Such measures typically do not have as significant an impact on energy
consumption and occupant well-being. As noted by Mr. Neme’s testimony, only 11% of
DTE’s energy efficiency rebates in its single-family income qualified program and 0% of
such rebates in its multifamily income qualified program were for building shell
measures such as air sealing, insulation, and efficient window replacements.\(^{24}\)

DTE’s Health and Safety Pilot allocates up to $10,000 per household to address health
and safety issues that prevent weatherization and comprehensive energy efficiency.\(^{25}\) If
the cost to address the hazards and defects exceeds this allowable budget or if the local

\(^{24}\) Direct Test. of Chris Neme, at 12–13, Case No. U-20881 (Oct. 6, 2021) ("Neme Test., Gas").
\(^{25}\) Direct Test. of Jeffrey C. Lebrun, at JCL-19, Case No. U-20876 (June 30, 2021) ("Lebrun Test."); id. at
JCL-17.
partner organization is not participating in the Health and Safety Pilot, then the implementation contractor will either not provide measures as part of income-qualified program or will provide minor, free, direct install measures that are not impacted by conditions of the home in these situations.

If comprehensive weatherization measures are not provided as part of the income-qualified program due to the presence of health and safety hazards, then the implementation contractor will defer the installation of these measures or walk away from the project until the issues that are preventing the measures are addressed. Deferral/walkaway technically means that the services will be delivered eventually but most deferred cases never get the upgrades because income-eligible customers don’t have the disposable income to address these issues themselves and there are no additional resources to help these households address the hazards themselves. These circumstances characterize a significant inequity that exists in the system, which prevents those most in need of assistance with energy waste reduction measures from accessing comprehensive energy saving weatherization services. These customers typically, and thus, never actually receive no-cost weatherization improvements that they qualified for though the income-eligible programs.

Q. What explains this structural barrier in DTE’s service territory?

A. The presence of health and safety hazards is frequently the result of historical disinvestment in the southeast Michigan’s housing stock, which has restricted many low-income homeowners and renters from acquiring the resources needed to maintain their homes. A group of environmental justice advocates articulated this issue in their April
28, 2021 comments in docket U-20633. While this circumstance impacts many customers, Black families have the greatest likelihood of residing in older homes with compromised energy systems, aging or ineffective appliances, and other assorted structural deficiencies—all of which contribute to making the home energy inefficient.

The often substandard state of such homes, specifically considering those in historically residentially segregated areas, typically contain compromised components directly related to a home’s energy inefficiency. These include, but are not limited to, inadequately maintained and inefficient ventilation, cooling and heating systems, drafts or air leaks, and poor insulation. These structural conditions, contribute to significantly higher utility costs such as cooling, heating, and lighting through inefficient household energy usage. To promote greater energy equity in DTE’s territory, I believe that it is essential to eliminate health and safety issues as a barrier to comprehensive energy efficiency upgrades.

Q. Does DTE’s Health and Safety Pilot currently overcome this barrier?

A. With the continuation of the Health and Safety Pilot, DTE will be able to overcome this barrier for a subset of their high-energy burdened customers. For example, in 2020, twenty-two customers identified through DTE’s Payment Troubled Customers’ initiative were referred to the Health and Safety pilot and were able to receive energy waste reduction measures instead of being deferred as “walkaways.” This demonstrates the

---

26 Ex. SC-10, Great Lakes Env’t Law Center, Comment Re. U-20633 – Incorporating Environmental Justice Considerations in Future IRP Cases (Apr. 28, 2021).
28 Ex. SC-11, Case No. U-20876, Attachment SCDE 3.21-03 PTCI Presentations, at 36 (July 9, 2021); Ex. SC-12, Case No. U-20876, Attachment SCDE 3.21-02 PTCI Presentations, at 39 (Apr. 9, 2021); Ex. SC-9, Case No. U-20876, Response to SCDE 3.5.
success of the concept. Still, there are almost certainly far more households that could
benefit from energy waste reduction if health and safety issues were addressed that DTE
has not yet enrolled in its income-qualified EWR programs.\(^{29}\) This is especially true as
DTE does not actively target customers for the Health and Safety pilot, has not developed
a methodology for doing so, and has not evaluated the distribution of its Health and
Safety investments by income or energy burden.\(^{30}\) Nor has DTE considered the need to
provide information and education on health and safety measures differently depending
on the targeted population.\(^{31}\) I believe expanding the pilot to a program, and beginning
neighborhood-based targeting as discussed below, will help to increase access to
comprehensive energy efficiency for households that are impacted by deferred
maintenance and that require the elimination of health and safety hazards. Furthermore,
as part of the continuation of the Health and Safety Pilot or as part of the expansion of the
Pilot to a full program, DTE should include specific budget carve outs for both single
family (including renter occupied), and multifamily households.

\(^{29}\) For example, DTE’s estimated participation in income-qualified EWR programs in 2022 is 5,496
participants in the EEA program and 2,450 participants in the multi-family program out of approximately
92,585 gas customers currently enrolled in DTE low-income assistance and tariff programs, an estimated
377,000 total low-income gas customers, and an estimated 389,000 low-income electric customers. (Some
of these gas and electric customers may overlap as dual-fuel customers). See Lebrun Test., Ex. A-9, at
44, 50; Ex. SC-13, Case No. U-20881, Response to AGDG-1.4 (DTE’s estimated number of low-income
gas customers); Ex. SC-14, Case No. U-20876, Response to AGDE-1.4 (DTE’s estimated number of low-
income electric customers); Ex. SC-13, Case No. U-20881, Response to AGDG-1.6 (gas customers
enrolled in low-income assistance and tariff programs); Ex. SC-14, Case No. U-20876, Response to
AGDE-1.6 (electric customers enrolled in low-income assistance and tariff programs).

\(^{30}\) Ex. SC-9, Case No. U-20876, Responses to SCDE-2.4t, -2.4u, -2.4z.2, -2.4z.3.

\(^{31}\) Ex. SC-9, Case No. U-20876, Response to SCDE-2.7.
Q. Please describe the barrier(s) that exist at the contractor selection phase of the process.

A. The fifth step occurs after the energy audit is completed and there is a scope of work developed. A scope of work is a list of proposed measures that would reduce energy waste and improve home energy efficiency. Once the scope of work is developed, the program administrator will then bid the work out for contractors, who are interested and have the capacity to complete the task, can bid on the work. For some programs, there is a shortage of contractors in limited income communities and Black and Brown communities that have the skill, availability, and willfulness to travel to perform necessary energy efficiency and weatherization upgrades that result in maximum energy waste reduction.

According to its discovery responses, DTE acknowledges that not every home with efficiency potential will receive measures as part of the EEA program and cited several reasons related to this phase of the process. DTE notes that:

- Certain partner organizations may not be interested in providing multiple measures for all customers it serves and may instead focus on specific measures such as refrigerators.
- Partner organizations may choose to not install measures to address every opportunity for energy efficiency identified in the customers home, and that ultimately, this is their choice.
- Partner organizations may not have the contractor network to provide specific measures.
- Partner organizations may not have requested allocations for specific measures and/or the partner organization may not have allocations to provide specific measures.
- Partner organizations may not have the capacity to address every measure.

---

32 Ex. SC-15, Case No. U-20876, Response to NRDCNHTECDE-1.20f.
Partner organizations that also participate in state and/or federal weatherization programs may choose to only utilize specific EEA program measures.

Not all partner organizations conduct an initial assessment to identify all opportunities for energy efficiency.

Each of these scenarios likely results in some program participants not receiving comprehensive building shell measures and the maximum benefits resulting from these measures. While acknowledgement of these barriers does not mean that limited income households and Black and Brown households are disproportionately subject to these barriers, there is evidence to suggest so, as discussed in Mr. Colton’s testimony. Further, it suggests that improving capacity among partner organizations and allocating more resources to building shell measures could help DTE reach more households with weatherization. For example, only 8 of the 21 EEA participating organizations currently deliver state and/or federal weatherization programs. In addition, as noted in Mr. Neme’s testimony, DTE currently allocates significantly more funding for the replacement of gas furnaces compared to the funding allocated for building shell measures like insulation and infiltration reduction.

Q. Please describe the barrier(s) that exist at the end of the project when the client evaluates their satisfaction with program outcomes.

A. The sixth set of barriers occur once the energy efficiency measures are performed and is related to the barrier of lack of awareness. Once engagement with the client has ended—whether that is when the work is completed, if a determination is made that the applicant cannot receive energy efficiency services, if the application if never submitted, etc.—the

---

33 Ex. SC-15, Case No. U-20876, Response to NRDCNHTECDE-1.20a (Corrected).
34 Neme Test., Gas, at Sec. III.A.
client then can spread the word about the energy efficiency upgrades they received. However, if the engagement or work does not meet the client’s needs and/or expectations, then the client may not feel inclined to share information about the program to their network or community, which then contributes to the lack of awareness of the program.

Q. Please describe how the above-referenced neighborhood-based delivery program can help address the barriers that exist at each of these stages.

A. The proposed neighborhood-based delivery program would increase access and participation among high energy burdened households by facilitating a neighborhood-based approach to residential energy efficiency and by delivering holistic, comprehensive weatherization measures. By utilizing this approach, DTE can 1) direct resources where they are needed most; 2) partner with community-based organizations that serve the target area and utilize these local relationships to increase awareness of energy efficiency programs; 3) automatically qualify all households that live in the target area; 4) provide flexible audit scheduling hours; 5) leverage additional state and local funding to address health and safety issues and reduce deferrals; and 6) sponsor local workforce development training and certification programs and opportunities for community members. Each of these components is described in more detail below.

Q. Please describe the proposed criteria for determining the target areas of the neighborhood-based delivery program.

A. The neighborhood-based delivery program, as proposed, would be administered at the census tract level and would target census tracts with the most significant need. I propose that energy burden, or the percentage of income spent on utility bills, be one of the
criteria used to determine the most significant need. Using the U.S. Department of
Energy (“DOE”) Low-Income Energy Affordability Data (“LEAD”) Tool, which lists
energy burden metrics at as detailed as the census tract level, it is possible to determine
areas with high energy burden. I recommend focusing on certain census tracts with
severe energy burden (equal to or greater than 10%), along with census tracts that meet at
least six of the seven following characteristics identified in Mr. Colton’s accompanying
testimony: (1) the percentage of population with income at or below 200% of the Federal
Poverty Line is more than 25% higher than the average percentage for the DTE service
territory as a whole; (2) the percentage of SNAP (formerly known as Food Stamps)
recipients in the Census Tract is more than 25% higher than the percentage in the DTE
service territory as a whole; (3) the percentage of households with housing burdens more
than 40% of income is more than 25% higher than the percentage in the DTE service
territory as a whole; (4) the median income for the Census Tract is lower than 75% of the
average median incomes for the DTE service territory as a whole; (5) the average First
Quintile income is less than $10,000; (6) the percentage of households with annual
income below $15,000 is more than 25% higher than the percentage in the DTE service
territory as a whole; and (7) whether the percentage of housing units built before 1970 is
more than 25% higher than the percentage in the DTE service territory as a whole.35

35 Direct Test. of Roger Colton on Behalf of Sierra Club, the Ecology Center, and NRDC, at 29–30, Case
No. U-20876 (Oct. 6, 2021) (“Colton Direct, Electric”); Direct Test. of Roger Colton on Behalf of Sierra
Club, the Ecology Center, and NRDC, at 29–30, Case No. U-20881 (“Colton Direct, Gas”).
Q. Are there other data points that can help identify target areas?

A. Yes. Other data points that can help identify target areas include income, access to health insurance, prevalence of chronic disease such as asthma, and energy efficiency deferrals or walkaways. Energy burden is a characteristic that often overlaps with these other burdens or indicators of need. Said another way, someone with a high energy burden is likely also experiencing other burdens in their life such as high housing cost burden, substandard housing quality, food insecurity, lack of access to healthcare, and chronic health conditions as examples. At the core of these burdens is the reality that many of these households have limited incomes that are not able to be stretched much, thus leading to trade-offs. Because many of these burdens often appear together, other indicators of these burdens, such as the ones listed above, can also be helpful in determining areas with the highest need for energy efficiency.

Q. Based on the information provided above, do you have recommendations on specific target areas that DTE should focus a neighborhood-based delivery program?

A. Yes, I propose that the neighborhood-based delivery program focus on the following census tracts: 5141, 5139, 5136, 5043, 5311, and 5314. These census tracts represent areas within DTE’s service territory that have severe energy burden (>9.7% minimum average energy burden; >22% average energy burden among low-income households) and also meet at least six out of the seven characteristics noted in Mr. Colton’s testimony and discussed above. Historic DTE EEA spending in each of these census tracts is also
relatively low, with the possible exception of census tract 5141. While census tract 5141 received comparatively high EWR spending in 2021, the need in this neighborhood is significant, which I think justifies the current level of investment and highlights the need for even further investment. These census tracts may also contain non-DTE funding that could be leveraged to maximize the impact of DTE’s EWR weatherization programs. To get a sense of scale, there are approximately 1,966 households in census tracts 5141, 5139, and 5136 (the St. Jean and Foch neighborhoods), approximately 692 households in census tract 5043 (the Connor neighborhood), and approximately 1,110 households in census tracts 5311 and 5314 (the Durfee neighborhood).

Q. Please describe the proposed partnerships with community-based organizations to help improve local awareness of energy efficiency programs.

A. Currently, there are already upwards of ninety-one local community-based organizations that partner with DTE to provide energy efficiency measures to eligible residents in the service territory. As part of the proposed neighborhood-based delivery program, DTE would continue their existing partnerships with local community-based organizations to initiate a community-scale marketing and outreach campaigns that are rooted in the needs of communities as communicated by the community-based organization partners and that may include yard signs, local media, additional partnerships with local businesses and community centers, and community events. DTE already has a model for this type of geographically-targeted community outreach for its Home Energy Consultation program.

---

According to DTE: “The HEC program markets to low income customers using zip codes that fall inside HUD Qualified census tracts using a variety of methods including email, direct mail, social media, outbound calling, bill insert and e-bill messaging. Pre-COVID, the program participated annually in over 300 events at churches, food banks, legislator coffee and conversations, community events, etc. within the low-income areas. The Company will continue this when the pandemic is over. The program works with community groups with a referral program so they can earn money for their church or organization by referring their constituents for an HEC.”  

However, as DTE acknowledges, the Home Energy Consultation program itself is only “the beginning of their energy efficiency journey” and does not always lead to significant energy savings. DTE should expand on this neighborhood-based targeting model to ensure follow-through and participation in EEA and income-qualified multi-family programs.

Q. How does this differ from DTE’s current approach to marketing its low-income EWR programs?

A. I envision scale of investment as the primary difference between the proposed approach and DTE’s approach. In terms of marketing and outreach strategies, there may not be a significant difference in what DTE currently supports. As noted above, DTE currently supports a variety of marketing and outreach strategies including, but not limited to, email, direct mail, social media, outbound calling, bill inserts and e-bill messaging, community events in partnership with churches and food banks, and referrals from community organizations and other existing programs and services. I envision that the

37 Ex. SC-14, Case No. U-20876, Response to AGDE-1.16.
38 Ex. SC-13, Case No. U-20881, Response to AGDG-1.23.
proposed approach would also utilize many of these same strategies but would have
access to additional and increased levels of funding to support these initiatives in the
target neighborhoods.

Q. Please describe the proposed automatic eligibility process.
A. As part of the neighborhood-based delivery program, I am proposing that DTE continue
to allow applicants to qualify for energy efficiency assistance simply by showing proof of
receipt of another means-tested program. According to the 2021 Income Qualification
Form, DTE currently allows customers to qualify for their EWR programs by showing
documentation and proof-of-receipt of other means-tested programs. Going forward, I
would encourage DTE to continue to add additional means-tested, including HUD
programs such as the Lead Hazard Control program.\textsuperscript{39} This is important since applying
for means-tested programs can be time consuming and resource intensive as applicants
often have to provide a filled-out application, bank statements, proof of income, and
sometimes other documents. Individuals with a limited income may not be able to spare
additional time to complete the application to participate in DTE’s program given that
time is often a scarce resource in itself.

\textsuperscript{39} Around the time of the American Recovery and Reinvestment Act, there was a memorandum of
understanding between HUD and DOE to set aside some income eligibility requirements for certain
multi-family buildings and fast-tracked Medicaid enrollment for SNAP and WIC recipients during
Affordable Care Act (“ACA”) rollout. More recently, in 2020, HUD released the Healthy Homes and
Weatherization Cooperation Demonstration Notice of Funding Availability, designed to encourage and
provide resources for HUD’s Lead Hazard Control grantees to partner with DOE Weatherization
Assistance Program (“WAP”) subgrantees to deliver holistic healthy homes and energy efficiency to
qualifying households. This program allows for funding to be used for families that are eligible either
through the HUD Lead Hazard Control program or the DOE WAP.
Q. Are there examples to highlight from other places?

A. Yes, the State of Pennsylvania launched a platform that helps income-eligible residents to more easily access assistance programs. The Resource Information and Services Enterprise or RISE PA provides a person-centered, no-wrong-door approach to accessing critical assistance and benefits.\textsuperscript{40} With the platform, participating providers from local non-profits, healthcare organizations, local government, and faith-based organizations can work together to coordinate care, making it easier for families and individuals to access the help they need. DTE can and should support the development of a similar platform(s) within its service territory as well as help to connect its customers to other programs that might be helpful to them.

Q. Are there other ways to expedite the eligibility process through the neighborhood-based delivery program?

A. Yes, I believe the ideal scenario would be for any household located in the target area to qualify for services simply by living in the target area. However, using this approach would create some challenges when seeking to leverage additional funding from other available means-tested programs that do require verifying documentation. I recommend DTE explore this possibility as part of the neighborhood-based initiative I am recommending.

Q. Please describe how the neighborhood-based delivery program can utilize additional healthy housing programs to address health and safety hazards and reduce deferrals.

A. GHHI has been on the frontlines of holistic healthy, energy efficient housing for over three decades. It has a nationally recognized direct service program based in Maryland and dozens of active jurisdictions nationally, including Detroit, that are currently implementing our model for holistic housing interventions. These interventions are supported by workforce development and policy best practices to advance racial and health equity and long-term success by improving housing conditions. Our model, which was established in 2009 through a partnership with HUD, the Center for Disease Control, the Council on Foundations, and the White House Office of Recovery Implementation, leverages lead hazard control, healthy homes, and energy efficiency and weatherization efforts. The goal of these coordinated services is to holistically address housing, health, and safety risks such as lead, asthma, and injury hazards as well as energy inefficiencies that drive up utility bills and reduce housing affordability. The key to this coordinated service delivery model is the availability of federal, state, and local housing, health, and energy funding programs that can be leveraged with utility programs to advance healthy, energy efficient homes.

As an example, GHHI worked with an energy nonprofit, utility company, and health clinic in Chattanooga, Tennessee, to map the gaps and assets of healthy housing services in the city. GHHI collected publicly available health data from the Department of Health and analyzed health outcomes by zip code. We also performed a landscape analysis of funding, programming, and other healthy housing resources locally. It was identified that
while resources existed, especially from the utility company, they were not being adequately deployed to meet the health and safety needs of the community. GHHI worked with the partners to align and coordinate services and funding streams to create a comprehensive program where households that qualify for the utility’s energy efficiency program and the health clinic’s healthy housing program receive coordinated services—the utility’s energy auditor provides a full comprehensive home assessment (for energy and health) and the clinic’s community health workers provide home visiting services. The utility prioritizes applications from households referred from the healthy housing program and the community health workers help families through the utility’s energy efficiency application process. DTE can and should explore this type of partnership as part of the neighborhood-based delivery program to help historically underserved households access improved energy efficiency.

Q. **What additional resources are available in DTE’s service territory that could be leveraged through the neighborhood-based delivery program?**

A. I think it’s important to acknowledge the existence of DTE’s Health and Safety Pilot, whose goal is to provide resources to address health and safety issues and reduce deferrals, which has been effective in reducing deferrals or walkways. The neighborhood-based delivery program should also leverage resources from the existing Health and Safety Pilot, which should be transitioned into a full program and should include specific budget carve outs for both single-family and multifamily households. In addition, below is a list of programs and resources that are available in DTE’s service territory that could also be leveraged. This is likely not an exhaustive list and is intended to provide example programs. It is also important to note that, to date, most of the
funding to improve housing conditions can be grouped under lead poisoning prevention. Lead poisoning is a health condition that is generally accepted to have a housing solution and most of the funding for health-based housing repairs fall under that bucket. There is a growing realization that there are other healthy housing hazards that could use resources to help address as evident by HUD’s Office of Lead Hazard Control and Healthy Homes releasing funding opportunities to help older adults age in place and, most recently in 2021, to address other healthy homes hazards through standalone healthy homes grants.41

- HUD Lead Hazard Control Grant Program: HUD releases funding every year through the Office of Lead Hazard Control and Healthy Homes to support remediation of lead and other residential health hazards. Lead hazards are among the primary reasons that comprehensive energy waste reduction measures cannot be performed and are subsequently deferred. States and localities can apply for funding through this grant program, which represents the single largest funding opportunity to support the improvement of substandard housing conditions. There are currently six jurisdictions in Michigan with Lead Hazard Reduction Program funding (Flint, Lansing, Battle Creek, Grand Rapids, Detroit, and Warren). The City of Detroit’s funding was awarded through HUD’s High Impact Neighborhoods program, which provides funding to address lead and healthy homes hazards in four contiguous census tracts. The census tracts of focus are 5238, 5240, 5241, and 5242, which are all located in the 48209 zip code of Detroit.42 These census tracts also have high energy burdens of 15.6%, 20.9%, 19.8%, and 20.9% respectively.43

- HUD Lead Based Paint Capital Fund: The HUD Lead Based Paint Capital Fund provides financial resources to public housing authorities to identify lead hazards in public housing and perform lead abatement work to eliminate those hazards. I don’t believe there are any such grants in DTE’s service territory, currently. However,

DTE can work to leverage resources in the event that any of the public housing authorities receive any funding to address lead-based paint hazards.

- HUD Community Development Block Grant: The Community Development Block Grant (“CDBG”) is a flexible source of funding that states and local jurisdictions receive in order to advance community development. Any activity that is performed through CDBG must meet at least one of the following national objectives: benefit low- and moderate-income residents, prevent or eliminate blight or areas of distressed housing, or address urgent community development needs, where these conditions pose a serious threat to the health or welfare of the community, and for which other funding is not available. In addition, over the lifetime of the grant, which may be one, two, or three-years, at least 70% of CDBG funds must be used to benefit low- and moderate-income persons. If these two requirements are met, CDBG funds can be used flexibly.

The allowable uses for CDBG funds are broad and include the creation or rehabilitation of affordable housing and the remediation of residential health and safety hazards. The primary CDBG programs to target for hazard remediation funding are the CDBG Entitlement Programs and the CDBG State Programs. The CDBG Entitlement Programs are often operated by local City and County housing departments where applicants can apply for hazard remediation funding directly through the annual CDBG application and award process. Applicants should monitor the CDBG public announcements of the local application period for any such funding.

This fiscal year, the state of Michigan and Michigan’s local jurisdictions received $126,352,569 in CDBG funding, with $35,529,517 going to Detroit.

- HUD HOME: The HOME Investment Partnerships Program (“HOME”) is a formula block grant program administered by HUD and provided to States and local jurisdictions to fund affordable housing activities. The participating jurisdiction provides funding primarily to local nonprofit housing development organizations with a mission of constructing or rehabbing affordable housing units to eligible low-to moderate-income individuals and families. HOME is the largest federal block grant to state and local governments designed exclusively to create affordable housing for low-income households. Funding allocated to states is typically disseminated to local jurisdictions or non-profit partners via a request for proposals or a grant application. Like CDBG, HOME funds may also be awarded directly to participating jurisdictions. HOME funding can be used for acquisition, demolition, rehabilitation, and construction of residential properties. HUD requires that 15% of HOME funds in a participating jurisdiction be set aside for affordable housing development activities of Community Housing Development Organizations (“CDHOs”). CDHOs are private, non-profit community-based service organizations that develop affordable housing in the community that they serve. In 2021, the state of Michigan and Michigan’s local jurisdictions received $41,168,907 in HOME funding, with $7,334,820 going to Detroit.
• United States Department of Agriculture (“USDA”) Housing Preservation Grants: USDA Housing Preservation Grants (also called Section 533 Housing Preservation Grants) provide money to organizations for the rehabilitation of tribal or rural housing for low-income families (50–80% of the Area Median Income) or very low-income families (less than 50% of the Area Median Income). This grant program defines rural areas as towns or jurisdictions with no more than 20,000 people. State and local governments, as well as non-profit organizations are eligible to apply. The national total for the grant allocation is up to $10 million.  

The grant is designated for properties owned by low- or very low-income individuals, or rental properties where the landlord agrees to rent to low- or very low-income households. The money can be used for various housing preservation activities including the installation of energy conservation measures, roof replacement, relocation costs, and for the removal of health and safety hazards to bring properties in compliance with federal and local codes.

• CHIP Health Services Initiative: The Children’s Health Insurance Plan (“CHIP”) uses federal and state funds to provide health coverage to over 9 million eligible children through Medicaid and other CHIP-specific programs. Originally created in 1997, CHIP is administered at the state level through the state Medicaid program, as a standalone program, or as a combination of the two. States partially fund CHIP out of their state budgets and receive a federal match that varies by state. The eligible federal match is based on the Medicaid Federal Medical Assistance Percentage formula that has ranged from 65% to 81%, compared to 50% to 73% for children in Medicaid. However, federal spending in CHIP is capped and states must provide matching funds to get their full federal funding allotment.

CHIP presents an excellent opportunity for states to address lead because, through Health Services Initiatives (“HSIs”), they can launch public health initiatives and take advantage of a match rate for federal funds that is significantly higher than the rate for general Medicaid programs. The enhanced CHIP match rate for Pennsylvania is 66.54% in FY21, meaning that for every $1 invested in CHIP activities, the federal government pays 66.54 cents. With this match rate, Pennsylvania can leverage significant federal funding with a relatively small allocation, though total expenditures for non-coverage services must not exceed 10% of the state’s total amount spent on CHIP health benefits. Another benefit of HSIs are that they do not require a Medicaid waiver, but only a state plan amendment (“SPA”). The SPA submission and approval process is generally less burdensome and time-consuming than it is for a waiver. HSIs are designed by states and must directly improve the health of low-income children under age 19 who are eligible for CHIP or Medicaid.

The Centers for Medicaid and Medicare Services (“CMS”) specifically calls out lead poisoning screening and prevention services as a suitable application for HSIs in its

---

HSI FAQ document. The FAQ document states the following regarding lead abatement activities, among other requirements, “Any state pursuing a lead abatement HSI would need to demonstrate the need for the initiative and must meet the following criteria: individuals performing abatement service must be properly certified by the state; performance of the abatement must be demonstrated to be effective in removing all lead hazards; the program must be time limited; and the state must work with CMS to develop metrics to measure the effectiveness of the lead abatement activities. Any HSI focused on water-based lead abatement must demonstrate how the strategies, either alone or in combination with other resources or state and local efforts, ensure complete and not partial abatement of service lines and other related fixtures.”

Several states have obtained approval for HSIs to provide lead abatement or follow-up services. In 2016, Michigan was approved for an HSI focused on lead abatement in relation to the Flint water crisis and the state’s Medicaid 1115 Waiver (see Section 1115 Waivers section) for $119 million in funding over five years. Funding from the HSI was authorized to be used in Flint as well as in other parts of the state, where children on Medicaid and/or CHIP have elevated blood lead levels greater than or equal to 5 micrograms per deciliter. DTE could work with local health departments to share information on children with elevated lead levels and perform weatherization services in conjunction with lead-based paint remediation activities.

- Weatherization Assistance Program (“WAP”): WAP is administered by the DOE and seeks to reduce energy costs for income-eligible households by increasing the energy efficiency of their homes. The DOE WAP program received $290 million dollars for FY 2020 to be funneled through all 50 states, the District of Columbia, Native American Tribes, and the five U.S. territories to local agencies that implement the program. For the most recent program year, Michigan is requesting over $33 million for WAP. The opportunities for using weatherization funds to address lead hazards in the home lie in using funds for health and safety measures. Up to 15% of a state’s weatherization fund can be used for eligible health and safety measures, outlined in the 2017 Weatherization Program Notice 17-7 for Weatherization Health and Safety Guidance which supersedes the WAP 11-6 Health and Safety Guidance.

---

46 Id.
day%20the%20Centers%20for%20and%20other%20areas%20within%20the%20state%20of%20Michigan.
According to the guidance document, WAP Grantees are allowed to perform health and safety measures if actions are needed to perform energy efficiency measures and costs of performing such measures are reasonable, as decided by DOE.\textsuperscript{51} While it is not required, grantees are encouraged to budget the health and safety measures separately from energy efficiency measures so that costs for the former do not have to be cost-justified and can be excluded from cost-benefit calculations in program evaluations.\textsuperscript{52}

Furthermore, some states do coordinate and leverage WAP funding with utility ratepayer funded programs to help address gaps in either program. For example, in the second half of 2020, there were 144 completed weatherization jobs using both WAP funding and Empower funding. Empower is the ratepayer-funded energy efficiency initiative in Maryland.\textsuperscript{53} Similarly, in Michigan, some DTE EWR participating organizations also deliver WAP services and may be coordinating both programs. If so, it is important that this coordination continues and is expanded to holistically serve DTE’s high energy burdened customers.

- The Low-Income Heating and Energy Assistance Program (“LIHEAP”): LIHEAP is a federal program, administered by the Pennsylvania Department of Human Services,\textsuperscript{54} that helps residents pay their utility bills. There are three components to LIHEAP: (1) cash benefits to help eligible households pay for their home-heating fuel; (2) crisis payments to resolve weather-related, supply shortage, and other household energy-related emergencies; and (3) energy conservation and weatherization measures to address long-range solutions to the home-heating problems of low-income households. In Michigan, the funding for weatherization services are transferred to and administered by the Michigan Department of Health and Human Services and the portion of LIHEAP transferred to weatherization is typically used to address health and safety hazards to prevent deferrals. According to Michigan’s FY 22 LIHEAP State Plan, mold remediation, moisture control, knob and tube wiring issues, other electrical issues, grading, roof repair, pest control, and others are all allowable measures that can be performed using LIHEAP funding.\textsuperscript{55} Similarly, in Maryland, up to $2,225,000 or 3% of total LIHEAP allocation can be used to for weatherization services.\textsuperscript{56}

\textsuperscript{51} Id.
\textsuperscript{52} Id.
Michigan’s Lead Poisoning Prevention Fund and Minor Repair Fund: Recently, on September 21, 2021, Governor Whitmer signed the $70 billion state budget that included $10 million in funding for the Lead Poisoning Prevention Fund and $5 million for the Minor Home Repair Fund.\(^5\) The Lead Poisoning Prevention Fund leverages support from foundations and lending institutions to provide low-interest loans to homeowners and landlords to remediate lead hazards. The Minor Home Repair Fund provides critical dollars that can be used by local agencies to address health and safety hazards that prevent residents from accessing weatherization services.

Q. Is there other funding that could be leveraged to increase access to energy efficiency?

A. Yes. Anchor institutions such as universities and hospitals often impact the landscape of communities in numerous ways, including construction of facilities, workforce development, and gentrification. These institutions also rely on their communities and the wellbeing of the people who live there to support their workforce and growth. State and local leaders should convene anchor institutions to develop plans for community development in safe, healthy, affordable housing. Below are some potential ways to funnel anchor institution resources into healthy housing:

Hospital Community Benefits

The Hospital Community Benefits program, established under the 2010 ACA, requires nonprofit hospitals to invest in their local communities through population health initiatives, as a requirement for retaining the hospital or health system’s tax-exempt status with the federal government. Section 501(r) of the Internal Revenue Code lays out the requirement in more detail, including the following provisions that nonprofit hospitals must meet:

• Conduct a Community Health Needs Assessment on an every-three-year basis, and create an implementation strategy for the top priority needs;

• Establish a written financial assistance policy for medically necessary and emergency care;

• Comply with specified limitations on hospital charges for those eligible for financial assistance; and

• Comply with specified billing and collections requirements.

In many cases, hospitals and health systems direct the majority of their Community Benefits dollars to medically necessary and emergency care for patients who cannot qualify for Medical Assistance. However, according to the guidelines of the ACA, Community Benefit funds can be used to address the upstream causes of poor health outcomes, or social determinants of health. These include housing conditions, as well as capacity building and workforce development for programs that promote healthy and affordable housing. In order to invest in healthy housing, the hospital’s community needs health assessments must identify residential lead exposure as a local health priority in the community that the hospital or health system serves.

University Endowment Funds

Substandard and unstable housing has a direct impact on academic achievement over the life course, including children’s ability to graduate from high school and gain the skills needed to be successful, productive members of the state’s workforce. As an example, in 2020, the University of Pennsylvania pledged $100 million over ten years to the school
district of Philadelphia to address environmental hazards in schools such as lead and asbestos.58

Q. What should DTE do with the knowledge of programs that can be leveraged with their own?

A. To complement and increase the effectiveness of the neighborhood-based delivery program, which could be implemented immediately with respect to outreach and marketing, DTE should convene a working group designed to bring together the administrators of various home repair and healthy housing programs that are available and located in DTE’s service territory, specifically in the neighborhood-based delivery program target area. The goal of the working group should be to discuss and increase coordination with these programs to support increased access to more holistic healthy housing and energy efficiency programming as well as support any effort to implement a neighborhood-based delivery program. Convening a working group focused on delivering energy efficiency programming to specific census tracts increases program effectiveness ensuring that high energy burdened customers receive all of the benefits of energy efficiency measures. In addition, focusing on specific census tracts can also be helpful in concentrating resources to overcome barriers to program coordination. The model developed could then be scaled up and expanded to incorporate other high-energy burdened areas.

Q. Are there examples of innovations and programs that can be used as models to
increase access to energy waste reduction programs by addressing health and safety
hazards?

A. Yes, there are numerous examples of efforts to increase access to energy efficiency
programs by addressing health and safety hazards. At the federal level, HUD has a
demonstration program that supports coordination between its Lead Hazard Control
Grantees and DOE’s WAP subgrantees. The goal is of this program is to maximize the
benefits of both programs and reduce deferrals for the weatherization program.

At the state level, the New York State Energy Research & Development Authority
designed a $6.1 million value-based payment pilot to invest in improving housing quality
for homes of New York Medicaid members with health conditions that are connected to
housing conditions with the goal of leveraging Medicaid Dollars.59 In addition,
Washington State established a Weatherization Plus Health program, which expanded its
weatherization program to also support improvements such as mold and moisture and
ventilation improvements that help children and adults combat asthma and also reduce
weatherization deferrals.60 More recently, the New Jersey Board of Public Utilities
embarked on a process to create a Whole House Pilot to leverage federal, state, and local

---

ww.nyserda.ny.gov/-/media/Files/Publications/Annual-Reports-and-Financial-Statements/2021-june-
nyserdasemi-annual-report.pdf.
60 Wash. State Dep’t of Com., Weatherization Plus Health (Wx+H), https://www.commerce.wa.gov/gro
wing-the-economy/energy/weatherization-and-energy-efficiency/matchmaker/weatherization-plus-health-
wxh#:~:text=Weatherization%20Plus%20Health%20(Wx%20H)
%20This%20initiative%20is%20Weatherization%20Plus%20Health (last
visited October 5, 2021).
resources to address household health and safety concerns and reduce deferrals in its rate-
payer funded utility energy efficiency programs.  

There are a couple examples to point to at the local level as well. In 2012, the Maryland 
Public Service Commission created the $113 million Customer Investment Fund (“CIF”) 
out of the Exelon Corporation and Constellation Energy merger. The fund was created 
to provide energy efficiency and low-income rate assistance to customers of the 
Baltimore Gas & Electric Company territory. The funds from CIF were awarded directly 
to five entities: Baltimore City, Baltimore County, The Fuel Fund of Maryland, 
Comprehensive Housing, and the Maryland Energy Administration. With this new 
investment, the previously deferred homes were targeted for energy efficiency 
 improvements first. Initially, the total budget for energy efficiency projects funded by 
CIF was $21,700, with $15,000 allotted for health and safety and $6,700 for energy 
efficiency measures. However, this amount for health and safety was doubled after 
realizing that the original amount was insufficient in addressing health and safety hazards 
needed to perform energy efficiency upgrades in more at-risk housing. A more recent 
example in Milwaukee points to the leveraging of American Rescue Plan funding to 
invest $5 million in a Climate, Energy, and Equity Upgrade program to help households

---

The design of the program has not been determined yet but I think it’s worth following.

Finally, I’ll point to a couple of examples of private healthcare entity efforts to improve housing conditions. In August 2021, Penn Medicine Lancaster General Health launched a first of its kind initiative that is funded and led by a health system to identify and remEDIATE lead hazards in Lancaster County. While this initiative is focused on remediating household lead hazards, the establishment of this program presents an opportunity coordination with other local healthy housing and energy efficiency programs and efforts. Similarly, ProMedica, which is both a health plan and health system, is embarking on an effort to address social determinants of health in communities that they serve by launching an Impact Fund that will fund and develop social intervention programs that improve health. Their initiative involves an effort to improve the quality of existing housing by addressing problems like broken windows, trip and falls hazards, mold, and lead-based paint—all of which can be sources of deferral for energy efficiency programs.

In mentioning these programs, I recognize that DTE may not have the authority or jurisdiction to implement programs like these. However, to date, DTE has failed to meet

---


the need for significant, comprehensive weatherization services in underserved communities and should consider thinking outside of the box to leverage additional resources, such as the ones listed above, that can be helpful in meeting the need. As one idea, DTE can convene working groups with entities within its service territory, that are similar to the ones mentioned above, to design coordinated programs that more holistically advance healthy and energy efficient housing for residents of underserved communities. Prior to convening a working group, DTE should start to map the availability of these funds, starting with the census tracts recommended above, as well as list the most significant barriers and funding coordination opportunities to building shell, weatherization measures for high energy burdened neighborhoods.

Q. Please describe how the neighborhood-based delivery program can promote training and certification for residents and community members to build capacity to provide energy efficiency upgrades in their communities.

A. Directing energy efficiency resources to certain target areas can build the demand needed to build and sustain energy efficiency jobs. One of the barriers that we hear often is that housing rehab workers that are trained and certified sometimes have trouble getting hired—presumably because of the lack of demand for services. With a targeted investment in certain communities, demand for energy efficiency services should increase therefore increasing job placement.

Q. Are there key components that should be a part of the neighborhood-based delivery program workforce development training and certification effort?

A. Yes, DTE should ensure that there are training and certification centers located in the target area to increase accessibility for interested community members. DTE should also
consider sponsoring the training and certification for some prospective workers. One of
the major barriers of entry into the energy efficiency workforce is the upfront cost of
training and certification as well as tools and materials needed for the job. DTE has
noted that some partner organizations may not have the capacity to address every
measure and others may not have the contractor network with the capacity to provide
specific measures. DTE could help increase capacity by supporting and covering the
upfront cost of becoming a participating contractor.66 In addition, DTE should
incorporate explicit provisions within its plan to train energy auditors to identify health
and safety hazards during in-home assessment, requiring auditors to conduct a health and
safety assessment, and communicating presence and impact of hazards to the occupant.
DTE should also invest in cross-training energy efficiency contractors to address health
and safety hazards such as lead, mold, and asbestos. DTE has noted that, in some cases,
the same contractor that performs energy efficiency measures may also perform health
and safety upgrades, while in other cases partnering organizations may subcontract the
health and safety measures if they do not have the capacity in-house. DTE could help to
increase capacity within partnering organizations or in the larger contractor market for
contractors to develop the ability to perform energy efficiency measures and address
health and safety hazards. With the potential to leverage funding and resources from
healthy housing programs, it’s important that the energy efficiency workforce is able to
identify and address health and safety issues, which would enable companies and firms to
take advantage of additional leveraged funding that may have additional healthy housing

66 DTE states that “[t]he company does not have examples of efforts to improve capacity among
contractors for implementing weatherization measures with its Education [program] funding.” Ex. SC-9,
Case No. U-20876, Response to SCDE-1.18.
training and certification requirements. Currently, DTE does not require their contractors to undergo any healthy homes trainings.67

Q. Are there examples of neighborhood-based workforce development programs that can be viewed as models?

A. Yes, I’ll highlight three. The first is the Master Home Environmentalist Program in Memphis, where neighborhood leaders nominated community members to participate in a two-day training to conduct Home Environmental Assessments and then six training participants were hired as Master Home Environmentalist Assessors.68 Incorporated in the program are workforce development opportunities to participant in additional trainings to learn skills such as installing flood lights, programmable thermostats, weatherstripping, and weatherization.

The second is a partnership between GHHI’s Rhode Island site and the Rhode Island Builders Association Latino Advisory Board to provide bilingual workforce development trainings for healthy homes assessments and asthma specific housing interventions for registered Latino contractors in the state. The partnership aims to increase healthy housing workforce capacity for Latino construction business owners to start their pathway as healthy homes environmental assessors and contractors that will yield higher production of comprehensive housing interventions in the Rhode Island community.

67 Ex. SC-9, Case No. U-20876, Response to SCDE-2.4k.
Also, recently in September 2021, Governor Kathy Hochul of New York announced a $36 million new initiative to establish Regional Clean Energy Hubs that will serve as centers of outreach, awareness, education, and workforce development and training, and improve community engagement of energy and climate programs.69 The initiative will connect residents of these communities to workforce training and development opportunities in the clean energy workforce, with a focus and priority on career pathways for populations in disadvantaged and underserved communities.

Q. Are there any additional recommendations for DTE with regard to any of its programs or pilots?

A. Yes. DTE should regularly report on diverse suppliers that provide EWR measures. In his testimony, Kevin Bilyeu stated that “[u]pdates regarding the level of investment with minority- and women-owned firms will be provided in... future EWR reconciliation filings.”70 DTE should be required to report such updates in its annual reconciliation filings and the low-income EWR working group to ensure that the Company is equitably providing opportunities to diverse suppliers and ensuring a diverse EWR contractor workforce.


Q. Are there any additional recommendations for DTE with regard to any of its programs or pilots?

A. Yes. DTE should incorporate the use of healthy building materials into the design of its health and safety pilot and any health and safety pilot should be designed to conform to best practices including the use of healthy building materials.

Q. Does the use of healthy building materials in health and safety and energy efficiency measures conform to best practices for implementing these measures?

A. Yes. While we know that health and safety measures, weatherization and energy efficiency upgrades can improve health outcomes, it is also true that certain building materials can create adverse health impacts as a result of chemical emissions from some of the materials commonly used for these upgrades, such as insulation and air sealing materials that are often used in many energy efficiency retrofit programs. These materials often contain persistent, bioaccumulative, or toxic (“PBT”) chemicals. These chemicals are often asthmagens, reproductive or developmental toxicants, endocrine disruptors, or carcinogens.

A detailed report published by Energy Efficiency For All (“EEFA”),71 includes recommendations of materials to avoid when installing energy efficiency measures, and also offers detailed recommendations of safer alternatives, many of which are comparable.

---

in cost. Additionally, an EEFA, Elevate Energy, NRDC, and Three Inc. case study, demonstrates that safer insulation materials perform well in affordable multi-family retrofits through a look at thirteen Chicago metropolitan-area multifamily properties. As DTE’s pilot is developed to address health and safety issues in low-income homes, materials that are potential toxicants that can lead to adverse health outcomes should be avoided.

For insulation materials, spray foam insulation, polystyrene, and polyisocyanurate should be avoided because they contain halogenated flame retardants which are known PBT chemicals, as well as reproductive and developmental toxicants. Mineral wool batts and boards should also be avoided because they contain formaldehyde, a known carcinogen and asthmagen. Safer alternatives include cellulose based or fiberglass insulation.

For air sealant materials, polyurethane and modified polymer sealants should be avoided because they contain isocyanate and phthalates, which have been linked to respiratory issues and can act as developmental toxicants. Safer materials include acrylic sealants and non-combustible sodium silicate caulk. DTE can look to the EEFA Healthy Building Materials report for additional recommendations for how to avoid these toxic materials and choose better, cost-effective materials for its proposed health and safety pilot.

In addition to avoiding building materials containing potential toxicants and utilizing cost-effective healthy building materials, an annual reporting requirement should be put in place as part of any health and safety pilot or program. Retrofit installers should be

72 Ex. SC-17, EEFA et al., Case Study: Energy Performance of Chicago Properties Retrofit with Fiber Glass Insulation (Aug. 2019), https://assets.ctfassets.net/ntcn17ss1ow9/2QzVAhrRCOziSkQ6g2y1Wl/87ed9764e2c9d1bda72fed4571c9b95/EE_Chicago_report_FINAL.pdf.
required to provide information on the top three materials being used in low-income retrofits for:

1. Insulation
2. Caulks/sealants (all applications except HVAC/ducts)
3. Caulks/sealants (for HVAC/ducts)

Current information generally indicates that materials containing chemicals of concern and safer materials are both utilized in energy efficiency retrofits. Requiring reporting will provide the data to better understand material performance and the scope of usage of materials containing chemicals of concern. It may also help to increase the non-energy benefits, and associated data, on Income Qualified Single Family and Multifamily Retrofit work.

Q. Please summarize your conclusions and recommendations to the Commission.

A. On behalf of Sierra Club, NRDC, and the Ecology Center, I recommend that the Commission require DTE to implement a neighborhood-based delivery program with the goal of increasing access to DTE’s EWR programs and alleviating the energy burden of households located in high-energy burdened neighborhoods. The neighborhood-based delivery program should incorporate a large-scale marketing and outreach campaign in partnership with local community-based organizations; ease the eligibility and qualification process by automatically qualifying all households in these target areas; provide flexible audit scheduling hours; leverages additional sources of funding to address health and safety issues and reduce weatherization walkways, including but not limited to DTE’s own Health and Safety Pilot; and advance local workforce development.
training and certification programs and opportunities to increase capacity to meet the
need for weatherization services that exists in the target census tracts. As a starting point,
the program should target the 5141, 5139, 5136, 5043, 5311 and 5314 census tracts,
which are areas of high need, or use the criteria discussed above to identify other
appropriate targets.

Additionally, the Commission should require DTE to regularly report on diverse
suppliers that provide EWR measures and incorporate the use of healthy building
materials into its retrofit pilots and programs, beginning with the Health and Safety Pilot.
I also recommend that as part of the continuation of the Health and Safety Pilot or as part
of the expansion of the Pilot to a full program, the Commission should require DTE to
include specific budget carve outs for both single family (including renter occupied), and
multifamily households.

Finally, I recommend that the Commission require DTE sponsor energy efficiency
workforce development training and certification programs in underserved communities
that include cross-training auditors and contractors to identify and address health and
safety hazards such as mold, lead, and asbestos. DTE should ensure that there are
training and certification centers located in the target area to increase accessibility for
interested community members. DTE should also consider sponsoring the training and
certification for some prospective workers. DTE should incorporate explicit provisions
within its plan to train energy auditors to identify health and safety hazards during in-
home assessment, requiring auditors to conduct a health and safety assessment, and
communicating presence and impact of hazards to the occupant. DTE should also invest
in cross-training energy efficiency contractors to address health and safety hazards such
as lead, mold, and asbestos.

Q. Does that complete your testimony?

A. Yes.