# 2023 Orange County Home Preservation Coalition Evaluation Report

Prepared by UNC Chapel Hill Department of Health Sciences Community Practice Lab

## AUGUST 2023

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# **Executive Summary**

# **Housing and Health**

Housing is recognized as a key **social determinant of health**. Housing affordability, stability, quality, safety, and neighborhood environment all affect the physical and mental health of residents.

## Home Repairs and Weatherization

Home repairs and weatherization are important tools to improve home environments and support health. **Weatherization** (Wx) refers to modifications made to homes that insulate, control moisture, reduce air leakage, improve ventilation, and increase energy efficiency. Weatherizing a home can reduce **energy burden**, or the amount of money households must spend on heating and cooling their homes. Higher energy burden is associated with poorer health outcomes.

Some populations, like households with older adults and people with low incomes, are at higher risk of negative health effects from unhealthy home environments. Additionally, households of color, specifically Black households, are disproportionately affected by energy burden and poor housing conditions due to historical and ongoing racist housing policies.

## OCHPC's Role

We know that (1) people require home repairs for better health and living conditions and (2) navigating home repair services can be complex. To tackle these issues, the Orange County Home Preservation Coalition (OCHPC) works to increase access to repair services and improve collaboration among home repair groups.

# **Program Evaluation Findings**

In this program evaluation, OCHPC aims to understand successes and challenges of their home repair program.

#### OCHPC Database

Since the 2021 Program Evaluation, the coalition more than doubled the number of homeowners supported from 123 to 276 homeowners in 2023 Program Evaluation period.

Who was served?

OCHPC primarily supported and served Orange County homeowners that were:

- Black or African American (71% of served homes)
- Extremely and Very Low-income (48% and 30% of served homes)
- Older adults (89% of served homes)

Most households supported and served were:

• 1-person households (59% of served homes)

- Occupied by at least one person with a disability (56.7% of served homes)
- Detached homes (64% of served homes)
- Built prior to 1978 (33% of served homes)

## Who Experienced Barriers to Service?

Across groups with higher sample sizes, usually between **25-45% of households experienced barriers to service** -the case was closed without **any** OCHPC partner being able to offer direct repair service. The groups that were more likely to experience barriers to service were:

- Moderate to high income (46%)
- Homes built between 1978-1990 (44%)
- White (43%)
- Households with children (42%)
- Households without a disability (40%)
- In Carrboro (40%)

For a detailed breakdown of subgroups served, who experienced barriers to service, and those still waiting for service, see *Tables for Selected Characteristics* in Appendix 1B.

## Gaps

- o The Coalition underserved Asian and Latine homeowners in Orange County.
- There are fewer financial resources available to serve mobile home owners on rented land.
- The database is missing many "Year Structure Built" dates.

## Where were they served?

- Homes were served across Orange County, but there were key service hot spots within Chapel Hill, Hillsborough, and Efland (east of Mebane).
- Hillsborough and Chapel Hill had the highest proportion of homeowners served vs supported.
- The county had a lower percentage of homeowners who were eventually served than Town of Hillsborough and Town of Chapel Hill.

## **Opportunity Areas**

 North Cedar Grove, North Bingham, and some areas of Eno could be priority areas for the Coalition to engage with moving forward. While they are low density, they have high proportions of older adults, older homes, and low-income households (Appendix 2B).

## **Project Details**

- The most common trades for completed specs were carpentry, Wx, plumbing, and roofing.
- 25% of completed specs were considered Wx.
- Accessibility modifications remain an important element of OCHPC work, accounting for 9.1% of the total specs completed.

The average number of specs identified among closed cases was 8.8.

#### **Data Limitation**

 The database does not capture all work completed by Coalition partners. The amount of work completed by the coalition in both the 2021 and 2023 evaluation are likely undercounts.

## **Project Timeline**

- It typically took a long time for a case to move through the Coalition's system from screening to completion.
  - Screening to assessment: Average 4.1 months
  - Assessment to earliest workscope opened: Average 6.6 months
  - Earliest workscope opened to last workscope completed (closed cases): Average
     7.8 months
  - From Screening to closing the case: Approx. 1.5 2 years.

### **Data Limitation**

 Based on missing dates from the database and personal reflections from Coalition partner organizations, we estimate that many homeowners experience a slower timeline to completion than the estimates listed above.

#### Partner Interviews

We organized findings from 10 OCHPC partner interviews into four key categories:

- Coalition Processes and Tools
- Completing Home Repairs
- Communication with Homeowners
- Communication among OCHPC Partners

The interviews highlighted successes of the Coalition, such as the benefits of using the five collaborative tools and increased coordination and sequencing of home repairs and Wx. They also identified challenges, like a mismatch between the demand for home repairs and the Coalition's resources, issues associated with cases lingering in the Coalition database, and a need for more defined decision-making processes.

#### **Data Limitation**

 While we spoke with partners that function in different roles within the Coalition, such as town and county government officials and direct service providers, we were not able to interview all partner organizations.

# Recommendations

Based on the Program Evaluation findings, we identified recommendations for how to better serve Orange County homeowners. While some recommendations are focused on the Coalition's internal processes, some are focused on local, regional, and state-level advocacy efforts.

# **Definitions and Abbreviations**

**Closed Case:** A home that has been served and closed out of the OCHPC system. A closed case does not necessarily mean OCHPC was able to provide all needed services, but that the OCHPC has served the homeowner to the fullest extent of the Coalition's current resources.

**Energy Burden:** The percentage of household income that is spent on home energy costs, like heating, cooling, and electricity. <sup>1,2</sup>

**Orange County Home Preservation Coalition (OCHPC)**: a collaborative of organizations that provide home repairs and modifications for Orange County homeowners. For in-depth information about OCHPC's history, please see pg. 12 of the 2021 Program Evaluation.<sup>3</sup>

**Social Determinants of Health:** The social, economic, cultural, and environmental factors that influence an individual's health outcomes.<sup>4</sup>

**Spec:** An individual home repair or weatherization project included in a workscope. The initial home assessment generates these specs as a list of potential projects to be completed by OCHPC partners.

**Weatherization (Wx)**: Modifications made to homes that help to insulate, control moisture and temperature, reduce air leakage, improve ventilation, and increase energy efficiency within the home.<sup>5</sup>

**Workscope:** A list of projects that is or is likely to be claimed by an OCHPC partner to bring the home up to health and safety standards, weatherize and improve energy efficiency, or modify for accessibility. Multiple workscopes can be identified per household from the original assessment.

# Introduction

# **Report Roadmap**

In this report, we will **contextualize** the need for home repair and weatherization assistance in Orange County, NC. We will discuss:

- the connection between housing and health,
- the importance of home weatherization, and
- the role and purpose of the Orange County Home Preservation Coalition (OCHPC)

Next, we will **evaluate** OCHPC's home repair program. We will highlight findings from:

- The OCHPC shared database, asking questions like: Who was served? Where were the homes located? What types of projects were identified and delivered?
- OCHPC partner interviews, exploring: What is working well with OCHPC tools and processes, communication with homeowners, service delivery, and partner collaboration? What is a challenge?

Based on these findings, we will **develop recommendations** for the Coalition and local and regional policy makers.

# Housing and Health <sup>11</sup>

Housing is recognized as a key **social determinant of health**. Housing affordability, stability, quality, safety, and neighborhood environment all affect the physical and mental health of residents.

Social determinants of health, or the social, economic, cultural, and environmental factors that influence an individual's health outcomes, have greater influence on health outcomes than genetics alone. <sup>6,7</sup> Because people living in the U.S. spend an average of 90% of their time indoors, building conditions have significant influence on the health of the building residents.<sup>8</sup>



Housing conditions like chronic dampness; presence of mold, asbestos, or lead; poor ventilation; roof leaks; and lack of sufficient heating and cooling can create living environments that negatively impact resident health. For example, poor housing conditions can lead to "thermal discomfort as well as pest infestation, both of which can exacerbate existing chronic health conditions such as arthritis and asthma, respectively".

## Older Adults, Housing, and Health

Home repair, accessibility, and safety are concerns for many older adults. Plumbing, electrical, heating, and cooling systems often require maintenance to make sure the home is safe and comfortable. Accessible design modifications, such as ramps, grab bars, and railings, can support the health of older adults and help them maintain independence and stay in their homes for longer.<sup>10</sup>

## **Key Takeaways:**

- Housing and health are intrinsically linked; Healthy home environments are essential to support the health of those living within the home.
- For older adults, home repair and accessible design modifications help people maintain their health and independence.

# The Importance of Weatherization

Leveraging federal funding provided by the Bipartisan Infrastructure Law, North Carolina's Department of Environmental Quality is initiating a major expansion of weatherization assistance programs across the state to increase the provision of this service to North Carolinians. This initiative has two prongs:

- 1) Developing home repair collaboratives within 7 regions to increase identification of and connection to homeowners who could benefit from weatherization services and
- 2) Expanding direct weatherization provision to North Carolina residents.

This initiative has instigated a focus on weatherization and its influence on housing and health within this 2023 evaluation of the Coalition.

# Weatherization and Energy Burden 11

**Weatherization** (Wx) refers to modifications made to homes that insulate, control moisture, reduce air leakage, improve ventilation, and increase energy efficiency. Weatherizing a home can reduce **energy burden**, or the amount of money households must spend on heating and cooling their homes. Higher energy burden is associated with poorer health outcomes because money spent on energy cannot be used for other essentials such as food, medicine, and healthcare. Treating housing quality as a public health issue and mitigating unhealthy home conditions can improve individual and community health outcomes.

## Weatherization and Health 11

The condition of home environments directly affects the health and well-being of residents.

### **Cold Home Environment**

Inadequate warmth in homes can lead to various health problems, especially for older adults, young children, and others who spend a significant amount of time indoors. Extreme winter temperatures can worsen these issues. Wx can address structural deficiencies like insufficient insulation and air leaks, which improves thermal comfort and health outcomes for residents.

#### Hot Home Environment

Rising temperatures in home environments can have detrimental effects on health. Wx can help cool indoor temperatures and reduce heat-related health issues, particularly benefiting older adults and children whose bodies struggle with temperature regulation. Weatherization improves thermal comfort, mitigates health impacts, and enhances energy efficiency in cooling homes.

## Ventilation and Air Quality

Indoor air quality has significant effects on resident health. Indoor and outdoor factors influence indoor air quality, including ventilation systems, building materials, air pollution, and behaviors like smoking and cooking. Weatherizing a home without proper ventilation can

worsen indoor air quality and harm residents' health, highlighting the need for a holistic approach to weatherization and ventilation.

# Vulnerable Populations 11

Some populations are disproportionately burdened by negative health effects from unhealthy home environments. This analysis focuses on elderly, low-income, and Black households because these groups are major recipients of Orange County Home Preservation Coalition (OCHPC) services.

#### Older Adults

Older adults face a higher risk of health issues from extreme temperatures and indoor air pollution. The bodies of older adults are less responsive to heat and humidity changes and they often spend more time at home than other population groups, making them more susceptible to home health risks. Additionally, low-income older adults experience the highest energy burden in the United States.

### Low-Income Households

Low-income individuals are more likely to inhabit older homes that lack insulation and are more difficult and expensive to heat or cool. Higher energy burden limits the household's resources for other essentials like food and healthcare.

### **Black Residents**

Black residents are disproportionately affected by energy burden and poor housing conditions due to historical and ongoing racist housing policies. Structural racism has led Black families to be more likely to live in less energy-efficient homes and to be located near pollution emitting facilities than white families. Addressing racial equity is crucial in housing and Wx policies and programs to rectify these disparities.

### **Key Takeaways:**

- Proper weatherization and ventilation are important for supporting health.
- Some populations are disproportionately burdened by negative health effects from unhealthy home environments.
- Understanding the specific needs and challenges of Orange County homeowners will guide OCHPC's efforts to improve housing quality and reduce energy burden.

# **Weatherization in North Carolina**

# North Carolina Context 11

# Demographics

The state's population is aging and becoming more racially diverse. Because older adults and households of color are more at risk for adverse health and housing situations, increasing access to and volume of Wx is important for North Carolina's future.

# Federal Poverty Level (FPL)

Many North Carolinians meet the FPL income threshold to be eligible for Wx, but this percentage is highest for the Hispanic/Latinx, American Indian/Alaska Native, and Black/African American populations. This indicates that there are many households that could benefit from Wx support, and increasing provision of Wx could reduce racial disparities in home quality, especially for the populations listed above.

#### Climate

North Carolina's daytime and nighttime temperatures and relative humidity are projected to increase. Wx retrofits to regulate and cool indoor temperatures and reduce relative humidity will become increasingly important for North Carolina.

# **Funding for Home Weatherization**

There are a variety of programs and funding streams available to support delivery of residential Wx at the national, state, and local levels, however more are always needed.<sup>11</sup>

# **Key Takeaway:**

• Wx is important for North Carolina to support groups most at risk for negative health outcomes of poor home conditions, adapt to climate change, and improve racial and economic equity in the state.

# The Problems Addressed by OCHPC

## People need assistance repairing and preserving their homes

Housing quality is determined by many factors, including income level, housing stock age and availability. Some populations are disproportionately impacted by unhealthy home environments, such as older adults, low-income households, and Black households. <sup>11</sup> Individuals with limited financial resources and increased exposure to racism are more likely to experience a higher home energy burden and poorer health outcomes. <sup>2,11</sup>

## Home repair services are difficult to navigate and obtain

Home repair services are complicated to understand, and many service organizations have difficulty working together. In North Carolina, energy efficiency, weatherization, and home repair programs are managed separately by multiple agencies. Homeowners submit applications to individual service providers who review and approve them based on eligibility. However, applicants are only considered for the specific program they applied to, even if they qualify for others. This fragmented approach creates inefficiencies, leaving funds underutilized and causing delays and expenses for both service providers and homeowners.<sup>3</sup>

## OCHPC's Role

The Orange County Home Preservation Coalition aims to address these challenges and improve access to services for low-income residents by fostering collaboration among home repair organizations and local governments using collaborative tools and processes.

#### Five Collaborative Tools



- Unified Screening and Intake Process: This is the universal gateway to the coalition. It
  determines the eligibility of applicants for a variety of home repair and Wx programs.
  The tool aims to reduce the amount of paperwork a homeowner has to complete to
  apply for these programs. Based on the screening, the Coalition may refer homeowners
  to human and social services for extra support.
  - Information Collected: Basic household and income information, ownership status, veteran status, information about special needs and emergency concerns.

- **Shared Database:** OCHPC uses a shared database to manage homeowner case information, like the unified screening tool responses, home assessment findings, work progress, and other ongoing notes about each case.
- **Centralized Home Assessment**: A centralized home assessment, conducted by a Home Assessment Manager, identifies a list of projects (scope of work) needed to bring the home to health and safety standards that meet the everyday needs of the family.
- **Collaborative Case Management**: OCHPC partners meet regularly to manage cases, address homeowner needs, and coordinate home repairs and Wx.
- **Unified Evaluation:** The evaluation looks at how well the Coalition works together and finds ways to improve the Coalition or influence local/state policies.

# **OCHPC** Partners

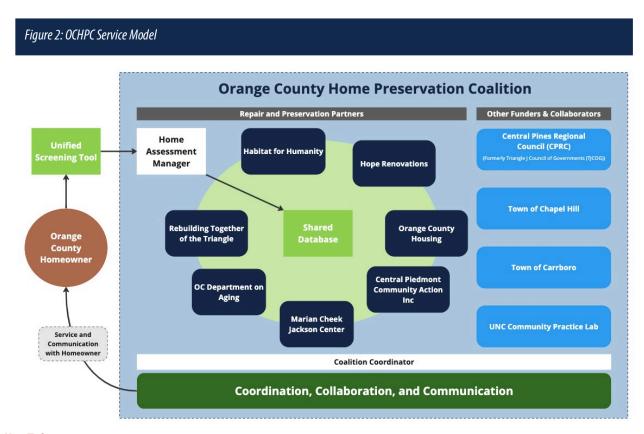
There are many organizations that support the Coalition's work to repair homes in Orange County. Table 1 outlines the partner organizations and their roles within OCHPC.

Table 1: OCHPC Partner Organizations and Roles

OCHPC Partner Organizations	Coalition Coordination	Community Engagement + Navigation	Direct Service Provision	Funding
Central Piedmont Community Action, Inc. (CPCA)			х	
Central Pines Regional Council (CPRC) (Formerly Triangle J Council of Governments (TJCOG))	х			
Habitat for Humanity of Orange County, NC (Habitat)			x	
Hope Renovation (Hope)			х	
Orange County Department on Aging (OCDOA)			х	
Orange County Housing Department (OC Housing)			х	х
Rebuilding Together of the Triangle (RTT)	х		х	х
The Marian Cheek Jackson Center		х	х	
Town of Carrboro				х
Town of Chapel Hill				х
UNC Community Practice Lab	х	х		х

## OCHPC Service Model

Figure 2 shows how the Coalition works, starting with screening and ending with providing services. Homeowners benefit from teamwork among OCHPC partners. The Coalition's structure helps partners use their resources more efficiently, offer more services, manage finances, and collaboratively problem solve.



## **Key Takeaway:**

Using collaborative tools and processes, the Orange County Home Preservation
 Coalition aims to improve access to home repairs for people across Orange County and
 expand the reach of repair and preservation service providers.

# **Home Preservation Program Evaluation**

# **Purpose**

By analyzing OCHPC's data for FY22-23 (July 1, 2021-June 30, 2023) and conducting partner interviews, we aim to understand:

- 1. Among <u>Homeowners</u>, who is receiving support or services from OCHPC? What repairs do they receive?
  - a. Are repairs delivered equitably?
- 2. Among <u>Coalition Partners</u>, what are OCHPC's successes and challenges related to home repair service delivery, communication, and collaboration among coalition partners?
  - a. How efficiently are repairs delivered?
  - b. How are Wx projects defined and delivered?

Given the significant race-based disparities within the housing sector, a racial equity lens is used throughout this analysis. The findings will guide OCHPC in improving how they provide services and manage home repairs and Wx in the future. Ensuring groups that have been historically marginalized in the housing sector have access to these services improves access for all community members.

# OCHPC's Community Impact

Through OCHPC's work, the coalition aims to Improve the health, safety, and energy efficiency of existing homes within Orange County and support the following community impacts:

- Help people age in place comfortably and safely.
- Maintain Orange County's naturally occurring affordable housing (NOAH) stock.
- Reduce disparities in home quality and health for households of color in Orange County.

# **Approach**

# **Data Sources and Methodology**

## OCHPC and Census Data

Administrative data from the Coalition database and census data were analyzed to understand OCHPC client demographic, home, and repair characteristics. We approach this evaluation from two angles:

- 1) Comparison to the 2021 Program Evaluation, and
- 2) Comparison between homes that were active cases at the start of FY22 or were newly screened within the FY22-23 evaluation period, and homes that received direct home repair services from the coalition during the FY22-23 evaluation period.

# Categories of Analysis

Within the analysis, we use the following categories to describe findings.

Table 2: Categories of Analysis

Categories of Analysis	Description	Details	
2023 Program Eval: Waiting for Service	This category includes any homes that were still active in the OCHPC database at the end of the evaluation period but have not received any repairs.	This could be a home that has been screened or assessed, but no direct repairs have been made.	
2023 Program Eval: Barrier to Service	This category includes homes that the Coalition was unable to serve due to a barrier to service	Some examples of barriers to service could be that the homeowner's income is too high to receive Coalition support, the homeowner is renting, there is no funding stream available to service the home, or the Coalition cannot get in contact with the homeowner.	
2023 Program Eval: Homeowners Served	This category includes any homes with completed workscopes (a.k.a. homeowners that received direct services that were completed during the evaluation period)	The comprehensiveness of work completed within this category varies greatly. This could range from a minor home repair all the way to a comprehensive rehab of the home.  Therefore, "served" does not always mean the coalition has provided all needed services, just that it has provided at least some.  Additionally, some homes that were "served" are still considered open cases and may receive additional services in the future.	
2023 Program Eval: Homeowners Supported	This category includes any homes that were active cases at the start of FY22 or were newly screened within the 2023 evaluation period.	These categories include homeowners that completed a screening, were assessed, received direct home repair or Wx services, of their case was closed out of the OCHPC system. For the 2023 category, many of these homes were screened and potentially assessed prior to the evaluation period, but were still being considered by the coalition during FY22 23.	
2021 Program Eval: Homeowners Supported	This category includes any homes that were active cases at the start of FY22 or were newly screened within the 2021 evaluation period.		
Orange County Census Data	Census data establishes a <b>baseline for comparison</b> with the Coalition's database information.	5-year American Community Survey (2017- 2021)	

## Partner Interviews

We conducted 10 interviews with OCHPC partner organizations exploring the following areas:

- Coalition processes and tools
- Completing home repairs
- Communication with homeowners
- Communication among OCHPC partners

A detailed data methodology table and interview guide can be found in Appendix A.

# **Racial Equity**

Data are not neutral. The decisions we make about which data are collected and how they are analyzed are influenced by the assumptions, biases, and interests of the people involved. Many communities, especially communities of color, have been harmed through misinterpretation, misuse, or abuse of their data. <sup>13</sup> In the context of OCHPC's home repair program evaluation, we will use a lens of racial equity to frame our approach to data collection and analysis and our interpretation of findings, as outlined in **Appendix A**.

# **Data Accuracy and Limitations**

The accuracy of the OCHPC database is dependent on OCHPC organizations reporting and updating case information. From partner interviews and direct observation during Coalition meetings, we know that the database is not always up to date. Therefore, the information that we report here is (1) likely influenced by this lack of reporting accuracy and (2) an undercount of the existing home repair and Wx work happening across Orange County.

## Considering the 2021 Program Evaluation

The 2021 Program Evaluation took place during the first two years of the coalition's development of the 5 formal collaborative tools. Data collection during this time was less consistent compared to the 2023 evaluation period. Although we aimed for the 2021 evaluation to serve as a baseline, the 2023 evaluation will likely provide a more accurate baseline of the coalition's performance. In this evaluation, we primarily look at how the coalition works internally, and to avoid overestimating improvements made over the past two years, we only briefly compare it to 2021.

### Other Limitations

- It is challenging to compare the 2023 findings to the 2021 Program Evaluation findings because the database was not as heavily used or updated in the 2021 Evaluation as it is today.
  - Impact: The increase in homes supported and served is likely not as extreme as it may seem.
- While the database is being used more consistently today, there is still missing data within it, especially related to identified and completed specs and workscopes, and project status updates.
  - Impact: The extent of support and services provided to Orange County homeowners is likely undercounted due to reporting gaps and inconsistencies.
- There are many dates of key project milestones missing (e.g. date of screening, date of assessment, etc.)

- o *Impact*: The timeline from home screening to completion of home repairs likely underestimates how long it takes to move through the Coalition's system.
- The Airtable database is flexible and new fields are added as needs are identified.
  - Impact: This can lead to data gaps as new fields may have been added at different times.
- While work may have occurred at a property, the Coalition does not effectively track if OCHPC solved the original problem that the homeowner was concerned about.
  - o *Impact:* The coalition does not have a good measure of how regularly it resolves the original concerns of the homeowner.

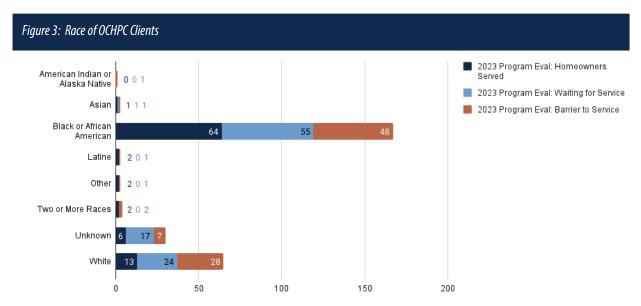
# What We Learned: OCHPC Database

## Who was Served?

Since the 2021 Program Evaluation, the Coalition more than doubled the number of homeowners supported from 123 to 276 homeowners in 2023 Program Evaluation period. Of the 276 homeowners that were supported by the Coalition, 90 (33%) of those received direct repairs or Wx services. Of the 276 homeowners who were active in the database, 89 (32%) experienced barriers to service and were not served. For a detailed breakdown of OCHPC data, see Appendix B.

#### Race

OCHPC primarily supported and served the Black or African American population in Orange County. Most homeowners served by the coalition identified as Black or African American (71.1%) (Figure 3). The white population constituted the second largest racial group served by the Coalition (14.4%).



The distribution of support and services among these racial groups during the evaluation period is as follows:

- Black or African American population: Of the 167 Black or African American households 64 (38.3%) were served, 48 (29%) experienced barriers to service, and 55 (33%) are still waiting for potential service.
- White population: Of the 65 white households, 13 (20%) were served, 28 (43%) experienced barriers to service, and 24 (37%) are still waiting for service.

We do not include analysis of other racial categorizations because their sample sizes were too small to yield meaningful results.

*Comparison to the 2021 Program Evaluation:* In the 2021 evaluation, 73.2% of homeowners supported by the Coalition identified as Black or African American.

## **Spotlighting Racial Equity**

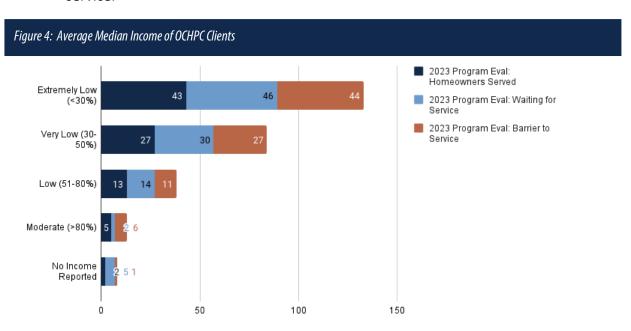
The racial composition of clients seeking services from the OCHPC is not representative of the general Orange County population, highlighting racial disparity in home repair and Wx needs. The disproportionately large number of Black of African American people seeking home repair services through OCHPC is expected given the legacy of racism in the housing sector. <sup>14–16</sup>

While the Coalition met the increased need for home repairs among Black households, it underserved other households of color. Notably, the Orange County census data shows that 7.9% of the population is of Asian descent but only 1.1% of all homeowners supported by the Coalition within the 2023 evaluation period identified as Asian. Similarly, Orange County's population is 8.6% Latine, but the Coalition only supported 1.1% of homeowners of Latine descent. Further exploration is needed to identify how to bridge this gap in service.

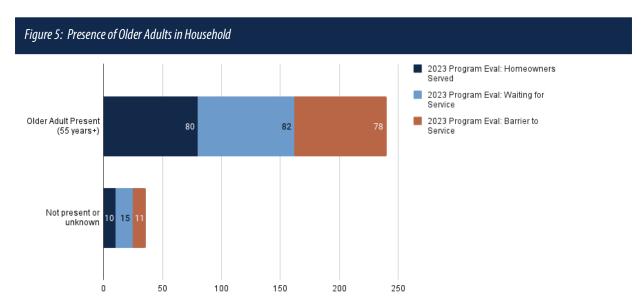
#### Income

Over 75% of homeowners supported or served by the Coalition were considered extremely (<30% AMI) or very low (30-59% AMI) income. This matches the income standards set by the funding sources used by Coalition partners and reflects the high demand for home repairs among low-income households. Across all income levels:

- The coalition regularly provided direct home repair services to between 30-36% of those who were screened by the coalition.
- Between 30-40% of homeowners experienced barriers to service.
- Around 30% of homeowners across most income levels are still waiting for potential service.



Age



**OCHPC predominantly supported an older adult population** (Figure 5). Most homeowners (87%) that were supported by the coalition had an adult aged 55 or older living in the home; This is not representative of the general Orange County population, highlighting the **disproportionate need for home repair services among older adults.** 

The prevalence of older adults requesting support from the Coalition highlights the importance of Orange County Department on Aging (OCDOA) as a partner. This demand also aligns with the age-based criteria prioritized by various funding sources for home repairs and Wx utilized by Coalition partners.

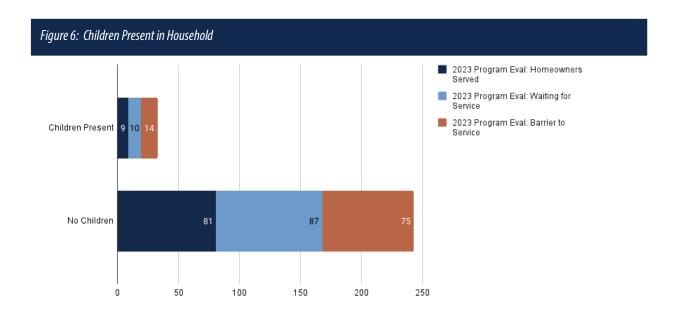
- Of the 240 households with older adults present who were supported by the coalition, partners provided direct home repair services to 80 of those households, or about 33%.
- Around 33% of households with older adults experienced barriers to service and the OCHPC was not able to provide services.
- A third of households with older adults are still waiting for potential services.

### Homes with children were less commonly supported by the Coalition (12%) (Figure 6).

- During the evaluation period, OCHPC partners directly repaired around 27% of households supported by the Coalition.
- Around 30% of households with children are still waiting for potential services
- Around 42% experienced barriers to service.

It should be noted that the sample for this group is quite small – only 33 homes.

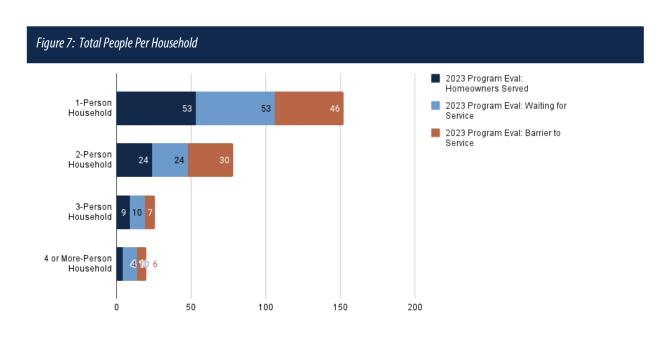
Comparison to the 2021 Program Evaluation: In the 2021 Evaluation, most homeowners (80.1%) supported by the Coalition within the evaluation period were aged 55 or older, and 10.6% of the households had children present.



## People Per Household

More than half of the homeowners who received support or assistance from the Coalition were living alone. This emphasizes the necessity for repairs and enhancements that ensure well-being, safety, and independence, especially for those with limited home support.

- Among households with 1-3 members, between 30-35% received direct home repair services from OCHPC partners, while a similar percentage faced obstacles in obtaining service. The rest of the households are still in line for potential service.
- For households with more than 4 members, the service percentage dropped to about 20%, although the number of such households was relatively small.



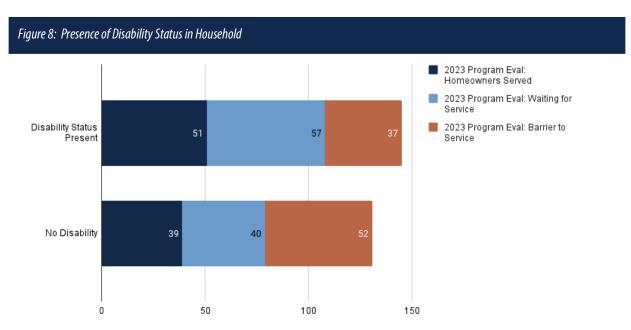
Comparison to the 2021 Program Evaluation: The 2021 Evaluation found that most (57.7%) of those supported by OCHPC lived in 1-person households.

## **Disability Status**

Over half of households that were supported by OCHPC were occupied by at least one person that has a disability (52.5%).

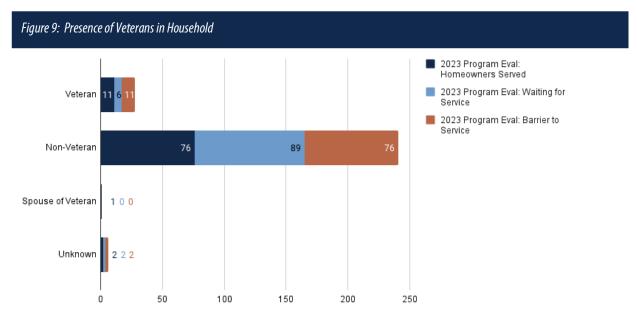
- Out of those 145 households, OCHPC directly addressed home repairs for 35% of them, while only 26% faced obstacles in receiving service.
- Among households that did not resport a disability, OCHPC partners provided direct home repair services to around 30%, but approximately 40% encountered barriers in accessing service.
- These findings suggest that the coalition found it comparatively easier to serve
  households with disabilities, which aligns with program priorities and eligibility
  standards. However, considering historical disparities and exclusion of people with
  disabilities in housing, the coalition should explore ways to improve access to home
  repairs and Wx for a broader range of people with disabilities.

Comparison to the 2021 Program Evaluation: In the 2021 Evaluation, the Coalition supported similar proportions of homes with (48%) and without (52%) residents with disabilities.



#### **Veterans**

The majority of households supported by the Coalition were not occupied by Veterans.



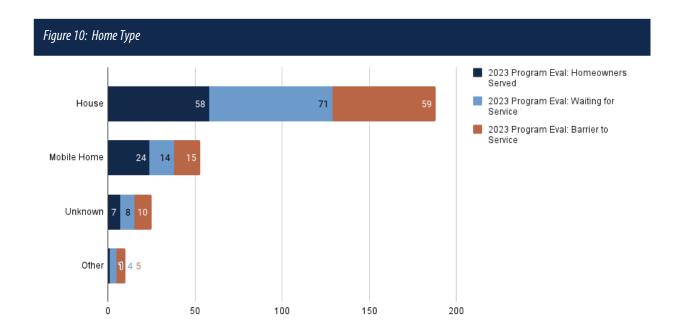
Veterans, who make up 4.8% of the general Orange County population, make up around 10% of households supported by OCHPC. This indicates veterans are disproportiately requesting home repair and Wx services. Among the 28 households with veterans (a relatively small sample) supported by the coalition, 39% faced barriers to service, while an equal percentage received direct repair or weatherization services from OCHPC. This was one of the highest service percentages within this evaluation. These findings indicate that the Coalition is relatively successful in aiding veterans in Orange County compared to certain other groups. However, it's worth noting that some veterans still encounter significant barriers to receiving assistance.

# What Types of Dwellings Were Served?

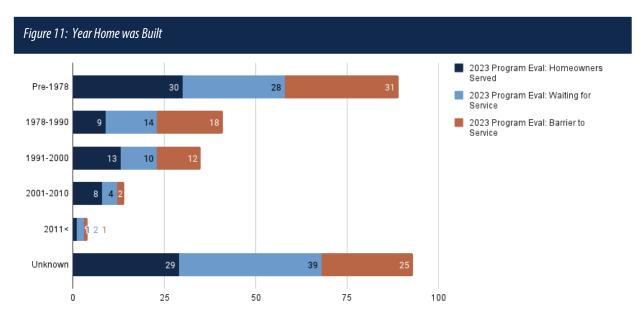
**Detached homes were the most common type of dwelling supported and served by the Coalition.** Among the homes supported, approximately 30% of detached homes received direct services, while a similar percentage faced barriers to receiving services. Around 38% of homes are still awaiting potential services.

Around 45% of mobile homes received services, with 28% encountering service barriers. Approximately 27% of mobile homes are still in line for services. This higher service percentage might stem from pre-screening processes. Many providers and community advocates are aware of the limited eligibility and resources for mobile homes, especially those on rented land. Consequently, the homes that enter the coalition likely meet eligibility criteria more readily.

Among mobile homes served within the evaluation period, none were in the Town of Carrboro. This could either be due to missing data or there is an existing gap in service to mobile homes in Carrboro.



Of the properties that received support or service during the evaluation period, more than one-third were built before 1978 (Figure 11). Due to regulations around lead paint, homes constructed before December 31, 1977, require repairs from contractors certified by the Environmental Protection Agency's Renovation, Repair and Painting Program (RRP).



Across different decades, the homes are evenly distributed between the served, waiting for service, or barrier to service categories.

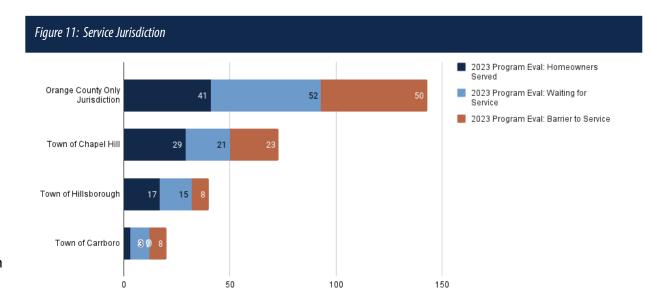
There are many cases in the database without a recorded home construction year. As partners use and update the database, we'll gain a better understanding of the ages of homes seeking and receiving home repair support.

# Where Were the Homes Located?

## Service Jurisdictions

Orange County homeowners living within Chapel Hill, Hillsborough, or Carrboro town limits fall under each town's jurisdiction. Homes outside these boundaries are categorized as Orange County Only jurisdiction.

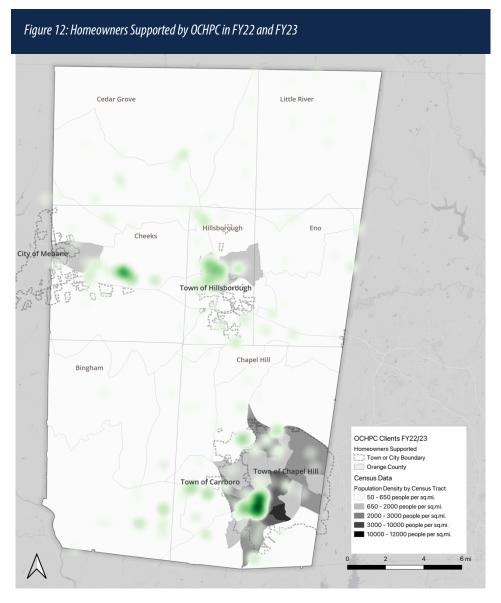
Given its larger coverage area, it's logical that most homeowners were in the Orange County Only jurisdiction.



The proportion of homes served varied by jurisdiction. Among supported homeowners, OCHPC provided direct home repairs to around 43% of homes in Hillsborough, 40% in Chapel Hill, 29% in Orange County Only, and 15% in Carrboro. Among those with service barriers, 40% were in Carrboro, 35% in Orange County Only, 32% in Chapel Hill, and 20% in Hillsborough.

# **Funding**

It is likely that Orange County and Habitat funding and programs heavily served Hillsborough. Habitat has focused developments in Hillsborough and Efland which may offer some resources for repair outside local government funds. While Chapel Hill and Carrboro have dedicated home repair funding for repairs within their jurisdictions, Hillsborough does not. Therefore, because Orange County is the only jurisdiction with local government funds that can serve Hillsborough, there were fewer county funds available to serve other areas of the county only jurisdiction, potentially creating a disparity in rural service. If the Town of Hillsborough were to dedicate funding for home repairs, they could further support home repairs in their area while also freeing up OC Housing resources for rural Orange County residents.



# Home Repair Hotspots

Despite much of Orange County having low population density, OCHPC clients are represented in each region of the county (Figure 12). The concentration of homeowners supported within town jurisdictions may be explained by the denser population and larger proportion of lower income households in these areas (Appendix 2B).

Figures 13 and 14 depict homeowners served and cases closed within the 2023 evaluation period, many of which are concentrated near the town jurisdictions and Efland. The townships or Bingham, Cedar Grove, Eno, and Little River have very few served homes or closed cases.

## Differences in Service Areas

Beyond the demographic characteristics, support from local organizations may be contributing to OCHPC support and service hotspots.

# **Strong Community Ties**

The strong Habitat for Humanity presence in Hillsborough and the Jackson Center's advocacy efforts in Chapel Hill may be contributing to the higher rates of service within these jurisdictions (Figure 11, Figure 12).

The Jackson Center, a prominent advocate in Chapel Hill, helps families access home repair resources, as shown in the provided quote.

In addition to Habitat's work in Hillsborough, the organization has been working with various communities in eastern Mebane areas along U.S. 70, offering home repairs and home building services. Local churches have

"I think the Jackson Center does a really good job of helping to advocate for their families...that is their role in the neighborhood...and they are very equity centered...There are probably some areas in the county that don't have the same support systems as in the towns." — Chapel Hill

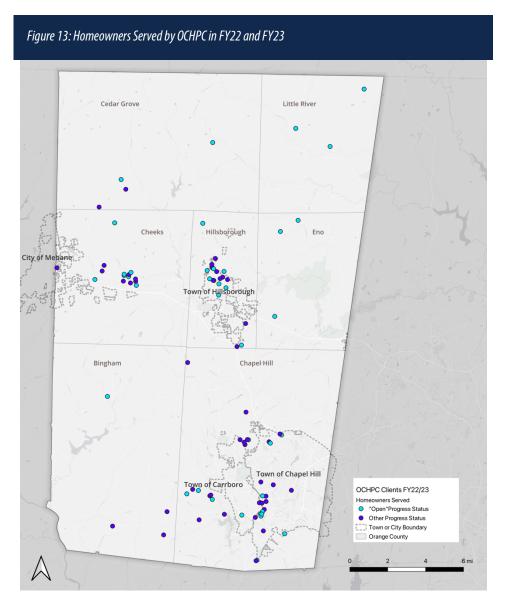
partnered closely with Habitat to refer homeowners to the Coalition (Figure 12). This coordinated effort led to a high number of homeowners supported in this area.

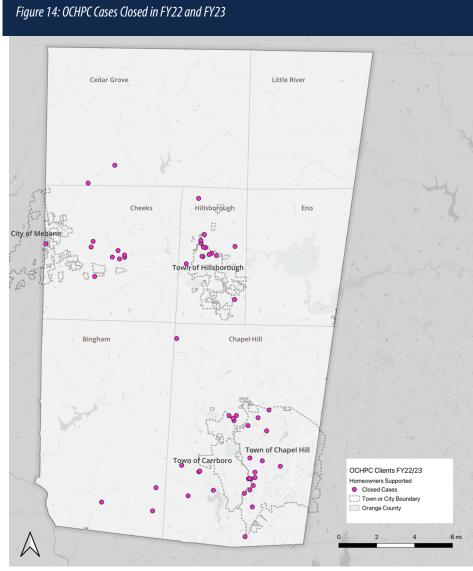
# Opportunities for Future Support

North Cedar Grove, north Bingham, and some areas of Eno could be priority areas for the Coalition to engage with moving forward. While they are low density, they have high proportions of older adults, older homes, and low-income households (Appendix 2B). These areas have received less support from the Coalition and may benefit from more homeowner outreach.

## **Key Takeaways:**

- OCHPC partner referrals and community advocates helped the Coalition identify and deliver more home repairs.
- The more rural areas of Orange County may benefit from the Town of Hillsborough creating a dedicated home repair funding source.





# What Types of Projects were Identified and Delivered by the Coalition?

There were 372 reported specs completed throughout the evaluation period for households served. This is over a 300% increase from the 2021 program evaluation (n=88). The dramatic increase in specs completed is partially due to the increased tracking and reporting of specs within the database.

The top four categories of completed specs by trade are:

- 1. Carpentry (33.1%)
- 2. Weatherization (25%)
- 3. Plumbing (11.3%)
- 4. Roofing (10.5%)

Accessibility modifications were an important element of OCHPC work, accounting for 9.1% of the total specs completed. However, this is likely an undercount of accessibility modifications made, as some of the carpentry projects, such as repairing handrails, may provide accessibility benefits to the homeowner.

"Things like roofing, HVAC, water heaters, those kinds of tasks tend to be easier for the group to complete... Projects that either involve multiple trades or require more specialized skills, you know, masonry septic, that kind of thing, those tend to sit a lot longer." - RTT

Table 3: Types of Specs Completed by Trade

	2023 Program Evaluation: Specs for Households Served	
Types of Specs Completed by Trade*	Specs (n=372)	%
Carpentry	123	33.1%
Weatherization**	93	25.0%
Plumbing	42	11.3%
Roofing	39	10.5%
Thermal & Moisture	38	10.2%
Accessibility Modifications	34	9.1%
Electrical	34	9.1%
Flooring	28	7.5%
HVAC	19	5.1%
Drywall	16	4.3%
Site Work	13	3.5%
Appliances	10	2.7%
Painting	7	1.9%
Fire Protection	4	1.1%
General	3	0.8%
Environmental Rehab	2	0.5%
Unknown	2	0.5%
Masonry	1	0.3%

<sup>\*</sup>Some specs fall in multiple trade categories

<sup>\*\*</sup>Weatherization includes specs that help seal the building envelope and improve energy efficiency, heating, air conditioning, and ventilation.

#### Weatherization

Of all specs completed within the evaluation period, **93 specs (25%) were considered** weatherization projects. This represents a **116% increase in number of completed Wx specs** from the previous program evaluation (43 specs).

## Projects Identified per Household

Among closed cases, the average number of specs identified among closed cases was 8.8. Most households (middle 50%) had between 2.5 to 11 specs identified for repair. This indicates that the amount of work is variable among those requesting services. The coalition may not be providing consistently comprehensive repairs. More in depth analysis of specs could reveal other trends, however more consistent and accurate spec tracking will be necessary first.

## **Project Status**

For homeowners supported by OCHPC during FY22 and FY23, most projects fall within the "Open" progress status categories, meaning for most homeowners work is ongoing or expected at the property. Over a third of projects experience a barrier to service, such as losing contact with the homeowner or a homeowner's income being too high to receive Coalition services. Additional barriers to services can be found in the *Project Progress* section of Appendix 1B.

Table 4: Homes by Project Status

Category	п	%
Ready for Assessment	12	4.3%
Assessed	53	19.2%
Open	65	23.6%
Closed and was served	55	19.9%
Barriers to service	91	33%

# Comparison to the 2021 Program Evaluation:

There is a much larger number of homes that have been served and marked as "Closed" within the database in 2023 compared to the 2021 evaluation (55 versus 6 homes). While this may indicate an increase in service provision, it also is very likely that this is a data limitation within the OCHPC database.

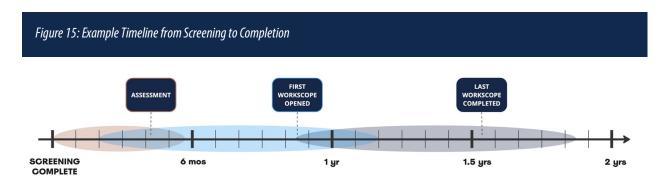
In the 2021 baseline, many people that were served were not included in the database; the coalition was not effectively tracking many of their services at that time.

### **Key Takeaways:**

- The larger number of homes that have been served and marked as closed indicates an
  increased use of the database, but it does not necessarily mean that there has been this
  drastic of a change in the number of households served by the coalition.
- Both the 2021 evaluation and 2023 evaluation counts of "closed" cases are undercounts of work completed because (1) the database does not capture all work completed by Coalition partners and (2) for cases with logged specs and workscopes, the project status is not always updated from "open" to "closed".

## **Project Timeline**

Figure 15 is an example timeline of moving through the OCHPC pipeline. The timeline is based on the average milestone dates outlined below, but this is likely an optimistic timeline. Between the many missing dates from the database and personal reflections from Coalition partner organizations, we estimate that many homeowners experienced a slower timeline to completion than what is shown below.



Time from Screening to Assessment (n=141)

For most clients (middle 50%), it typically took 1 to 5 months for assessment after a homeowner completes the OCHPC screening. **On average, the period from assessment to screening was about 4.1 months.** 

Time from Assessment to Earliest Workscope Opened (n=71)

For most clients (middle 50%) it usually took 1 to 10 months to start a workscope after the property is assessed. On average, partners took about 6.6 months to begin a workscope after assessment.

Time from Earliest Workscope Opened to Last Workscope Completed among Closed Cases (n=30)\*

For most clients (middle 50%), the time from opening a workscope to closing the case was typically 1 to 13 months. On average, it took about 7.8 months from the first workscope being opened to the final workscope completion date.

Time from Screening to Completion among Closed Cases  $(n=30)^*$ 

For most clients (middle 50%), it took between 10 and 19 months from screening to the decision to close the case. **The average time from screening to completion was 15.5 months.** 

<sup>\*</sup> Estimated from a small sample size (30 cases out of the 55 closed cases in the database). 25 of the closed cases had missing dates for key project milestones, preventing us from estimating their project timeline.

# **Key Takeaways:**

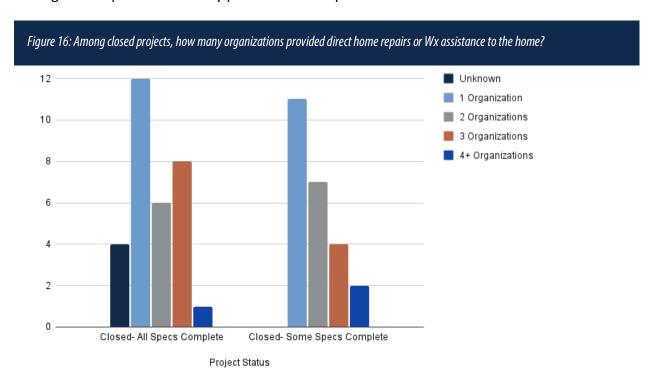
- The database is being used more than it was during the 2021 Program Evaluation, but there are **still many data gaps** within the system.
- It takes a long time to move through the Coalition's system and receive repairs.
- Screening and assessment information becomes less reliable and requires validation after sitting within the system for months or years.

"Getting the screening and assessment done seems like that happens pretty efficiently, but for the folks with...projects that aren't easy to find funding for, I think the long wait is [a challenge]." - Hope

## OCHPC Partner Collaboration

The success of the coalition is grounded in the strong spirit of collaboration and partnership among its members. The OCHPC partners collaborate through the five tools: streamlined intake, centralized home assessment processes, coordinated case management, collaborative sharing mechanisms, and a unified data collection and evaluation process. **Therefore, each household that is screened by the coalition receives a baseline level of collaboration and engagement from partners.** 

Beyond these baseline collaborative practices, Figure 16 gauges the extent of collaboration among service providers as they provide direct repairs or Wx to homeowners.



Among closed cases where all specs were complete, one service provider was sometimes able to fulfill all project needs at a home. However, many homes required coordination between 2, 3, or more partners to finish all specs. This highlights the importance of OCHPC's role in coordinating home repairs between various partner organizations.

In closed cases where not all specs were completed, there can be robust collaboration between partners and the coalition still may not be able to fulfil all the homeowner's needs. This indicates that there were unmet home repair needs for people in Orange County beyond the scope of the Coalition's resources.

Overall, more cases received support from 2+ organizations than a single organization. This means collaboration and referral continue to be valuable aspects of the coalition's process.

# **What We Learned: Partner Interviews**

## **OCHPC Processes and Tools**

What is working well?

- Coalition Database
  - Helps track case history and manage projects.
  - Aids advocacy by demonstrating service gaps and community impact.
  - Enhances partner communication.
- Meetings
  - Helps partners communicate and create workplans.
  - Regular checkpoint for updating database information.
- Unified Screening
  - Streamline communication with homeowners and Coalition partners.
  - Efficiently assess eligibility for Coalition services and funding.
- Unified Assessment
  - Offers partners an initial insight into necessary home projects, saving time even if a more detailed assessment is conducted later.
  - Flags homes suitable for Wx improvements.

## What is a challenge?

- Coalition Database
  - o Can't view Airtable case summary page on cell phones.
  - Updating specs and workscopes is cumbersome.
  - Spec details vary, and there are duplicated and overlapping categories.
- Unified Screening and Assessment
  - Organizations within the Coalition have different income verification requirements. (e.g. for Habitat, need income verification within last 6 months.)

## What is the Impact?

- Unclear project status or database accuracy.
- Hard to use and update the database on mobile devices.

### Recommendations

- Improve spec literacy among partners.
- Collaborate with OCHPC partners to improve application screening questions and align processes.
- Enable mobile access to the database Case Summary page.

"If we see that Orange County
Housing Department is the only
path forward, we will prioritize
helping that property" - CPRC

# **Completing Home Repairs**

## What is working well?

- Properties with the clearest path to completion move through the system faster.
- More flexibility to complete projects through local or donated funds.
- Home repairs help maintain and preserve naturally occurring affordable housing in Orange County.

"if we can't meet the rehab specs [for ESFR], we can't do it" - OC Housing

## What is a challenge?

- Complex projects that require multiple skilled trades linger in the system.
- There is limited funding with strict rules for how funding can be used (i.e. ESFR).
- Shortage of skilled workers, few RRP certified contractors.
- Permitting process can be lengthy.

## What is the Impact?

- More repair requests than Coalition can handle.
- Delays for tough projects; slower progress.
  - Lagging projects need income re-checks and new assessments
- Inequitable service provision
  - Priority given to vocal requests or referrals.
  - Houses with the most complicated repairs or highest need are not always served.
- Ineffective use of funds (i.e. costly repairs when demolishing and rebuilding is cheaper).

"The thing that [the homeowner is] most concerned about is not always the thing that's easiest to solve, and so they may get a new roof that they didn't realize they needed, but now they still can't get the shower they want... We have to figure out how we think about prioritization, not just based on what we know how to do or want to do, but what... the homeowner needs or wants."- RTT

### Recommendations

- Create a clear process for advancing and closing cases.
- Reduce delays between screening, assessment, and service.
- Enhance navigation assistance for homeowners applying for OCHPC support.
- Build a shared Orange County contractor/vendor list.
- Advocate for additional workforce development support to train new contractors.

"Sometimes a home just needs to be demolished and a new structure needs to be built. For the money used to repair some homes, this could have been accomplished with a better outcome for the homeowner" - OC Housing

- Advocate for funding for home demolition and rebuilds.
- Work with the Orange County permit office to expedite the permitting process for projects funded through the Urgent Repair Program (URP).

#### Communication with Homeowners

What is working well?

- OCHPC helps build rapport and trust with homeowners.
- Improved ongoing communication and the ability to smoothly connect the client to another Coalition partner.

What is a challenge?

- No singluar person managing all Coalition cases.
- Unclear project timeline for homeowners.
- Hard to manage homeowner expectations.
- Homeowners are confused by complicated rules for fund use.
- Limited multilingual staff.

It is helpful knowing there is a group of folks working on this. If we can't serve a homeowner, that is not the end of the story. We can refer them to the Coalition for another option - Handy Helpers

#### What is the Impact?

- Homeowners confused and frustrated by lack of clarity on timeline.
- Challenges in communication reduce trust in coalition.
- Service gap for homeowners that do not speak English.

#### Recommendations

- Increase centralized support for Coalition case management.
- Clarify the Coalition's limitations and typical areas of work for potential clients.
- Invest in multilingual staff and translated Coalition materials.

## Communication among OCHPC Partners

What is working well?

- Cooperation among partners helps sequence repairs and use resources more effectively.
- Partners are responsive and collaborative.

#### What is a challenge?

- Partners are busy.
- The process to close cases is unclear.
- The Coalition's collaborative approach sometimes causes lack of clarity or diffusion of responsibility among partners.

"We used to barely meet our [target] numbers in Orange County. After we joined the Coalition, we've been able to do it" - CPCA

## What is the Impact?

- Homes move slowly through the Coalition's system, leading to long wait times.
- Confusion about next steps.

#### **Recommendations**

- Establish a clear process to close cases the Coalition can't assist with anymore.
- Codify important decision-making procedures.
- Develop a partner contact list detailing common project specifications.

"it's been challenging that we haven't codified some of the procedures, or been willing to collectively agree to follow procedures about what information gets collected. Like knowing when something gets moved from one status to the next." - RTT

## Recommendations

#### **Coalition Processes**

- Improve spec literacy among partners.
- Collaborate with OCHPC partners to improve application screening questions and align processes.
- Enable mobile access to the database Case Summary page.

## **Completing Home Repairs**

- Create a clear process for advancing and closing cases.
- Reduce delays between screening, assessment, and service.
- Enhance navigation assistance for homeowners applying for OCHPC support.
- Build a shared Orange County contractor/vendor list.
- Reach out to key areas of Orange County that could benefit from additional home repair support (Figures 12-14, Appendix 2B)
- Enhance outreach to demographic groups underrepresented in the OCHPC database, especially Asian and Latine populations.
- Expand service to mobile homes on rented land\*
- Advocate for additional workforce development support to train new contractors.
- Advocate for funding for home demolition and rebuilds.
- Work with the Orange County permit office to expedite the permitting process for projects funded through the Urgent Repair Program (URP).
- Work with Town of Hillsborough to develop a dedicated home repair funding source.

### Communication with Homeowners

- Increase centralized support for Coalition case management.
- Clarify the Coalition's limitations and typical areas of work for potential clients.
- Invest in multilingual staff and translated Coalition materials.

## **Communication among OCHPC Partners**

- Establish a clear process to close cases the Coalition can't assist with anymore.
- Codify important decision-making procedures.
- Develop a partner contact list detailing common project specifications.

<sup>\*</sup> Because of the Coalition's work to understand obstacles to accessing home repairs, Habitat for Humanity has changed its policy and now can serve mobile homes on rented land.

## Weatherization

### **Orange County Home Preservation Coalition**

- Conduct a Wx evaluation to confirm Wx and HVAC improvements equitably evaluated and deployed.\*
- Identify strategies to streamline delivery of Wx and HVAC that can be modeled across
  the state, especially for populations that are disproportionally burdened by unhealthy
  home environments.

#### State of North Carolina Weatherization Recommendations

- Create a Weatherization Working Group (like seen in Minnesota) to assess barriers to service and suggest changes for North Carolina's Legislature and State WAP leaders.<sup>17</sup>
  - Members could include lawmakers, advocates, utility providers, home repair and Wx service providers, community leaders, and others.
- Join the National Association for State Community Services Programs (NASCSP) Racial Equity Work Group (REWG).<sup>18</sup>
- Focus areas:
  - Boost Wx funding for historically underserved communities.
  - o Increase funding for homes in areas with poor air quality.
  - Expand Wx upgrades that improve cooling and lower humidity.
  - Target Wx upgrades in areas of the state projected to experience the most extreme changes in temperature.

\* OCHPC is equitably serving elderly, low-income, veteran, and Black households with home repairs. Because Wx is a subset of this home repair evaluation, we are assuming that Wx improvements are distributed equally. However, the Coalition could benefit from a more specific Wx evaluation to confirm this assumption.

## Conclusion

## How is the Coalition Doing?

The Orange County Home Preservation Coalition is improving access to home repairs and weatherization improvements across the county, especially for low-income, older adult, veteran, and Black households. Between the 2021 and 2023 Program Evaluation periods, we have seen an increased level of coordination among partners, more efficient use of partner resources, improved data collection, and responsive policy changes to better meet the needs of Orange County homeowners. While there are persistent gaps in service and areas for improvement, homeowners are receiving more comprehensive repairs and Wx services than they would if the Coalition did not exist.

### Why it Matters

OCHPC plays a critical role in Orange County. The quality of someone's home environment has significant impacts on their physical, mental, and economic health. Ensuring residents can safely and healthily stay in their homes supports stable communities and social cohesion across neighborhoods. By coordinating and delivering more comprehensive home repairs and Wx services to homeowners across the county, OCHPC is:

- Preserving naturally occurring affordable housing
- Improving health outcomes
- Maintaining social networks
- Supporting aging in place by improving accessibility and reducing energy burden
- o Reducing racial disparities in home quality and energy burden

OCHPC's structure is unique and serves as a model for home repair coordination for other communities across North Carolina.

## References

- 1. Hernández D, Bird S. Energy Burden and the Need for Integrated Low-Income Housing and Energy Policy. *Poverty Public Policy*. 2010;2(4):5-25. doi:10.2202/1944-2858.1095
- Lewis J, Hernández D, Geronimus AT. Energy Efficiency as Energy Justice: Addressing Racial Inequities through Investments in People and Places. *Energy Efficiency*. 2019;13(3):419-432. doi:10.1007/s12053-019-09820-z
- 3. Cooper M, Lavalley R, Rosemond C. *Partners in Home Preservation Program Report*. Orange County Department on Aging; 2021.
- Centers for Disease Control and Prevention. Social Determinants of Health at CDC. December 8, 2022. Accessed March 6, 2023. https://www.cdc.gov/about/sdoh/index.html
- 5. U.S. Department of Energy. Weatherization. Accessed May 23, 2023. https://www.energy.gov/energysaver/weatherization
- 6. U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Social Determinants of Health. Healthy People 2030. Accessed February 1, 2023. https://health.gov/healthypeople/priority-areas/social-determinants-health
- 7. Whitman A, De Lew N, Chappel A, Aysola V, Zuckerman R, Sommers B. Addressing Social Determinants of Health: Examples of Successful Evidence-Based Strategies and Current Federal Efforts. April 1, 2022.
- 8. Indoor Air Quality. Accessed May 29, 2023. https://www.epa.gov/report-environment/indoor-air-quality
- 9. U.S. Department of Health and Human Services. Quality of Housing. Accessed May 29, 2023. https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/quality-housing
- 10. Orange County North Carolina. Handy Helpers. Accessed August 13, 2023. https://www.orangecountync.gov/2374/Handy-Helpers
- 11. Farris J. Housing, Weatherization, and Health. UNC Chapel Hill Department of Health Sciences Community Practice Lab; 2023. Accessed July 27, 2023. https://www.med.unc.edu/healthsciences/cpl/wp-content/uploads/sites/1281/2023/07/WeatherizationMemo\_2023.pdf

- 12. Howden-Chapman P, Matheson A, Crane J, et al. Effect of insulating existing houses on health inequality: cluster randomised study in the community. *BMJ*. 2007;334(7591):460. doi:10.1136/bmj.39070.573032.80
- 13. Gaddy M, Scott K. *Principles for Advancing Equitable Data Practice*. Urban Institute; 2020.
- 14. Rothstein R. *The Color of Law: A Forgotten History of How OurGovernment Segregated America*. 1st ed. Liveright Publishing; 2017.
- 15. Kahrl AW. The power to destroy: discriminatory property assessments and the struggle for tax justice in mississippi. *Journal of Southern History*. 2016;82(3):579-616. doi:10.1353/soh.2016.0165
- 16. Van Dam A. Black families pay significantly higher property taxes. The Washington Post. July 2, 2020. Accessed April 13, 2023. https://www.washingtonpost.com/business/2020/07/02/black-property-tax/
- 17. Minnesota Department of Commerce: Energy & Utilities. Weatherization Assistance Program. Accessed June 21, 2023. https://mn.gov/commerce/energy/consumerassistance/wap/
- 18. National Association for State Community Services Programs (NASCSP). Racial Equity Work Group. Accessed June 21, 2023. https://nascsp.org/rewg-group-members/
- 19. Chicago Beyond. Why Am I Always Being Researched? Chicago Beyond; 2019.
- 20. Jawetz A, Mishraky-Javier L, Hand R. *Our Identities, Ourselves: An Anti-Racist Review on Collecting Accurate Data on Race and Ethnicity*. The Center for the Study of Social Policy; 2021.
- 21. Hawn Nelson A, Jenkins D, Zanti S, et al. *A Toolkit for Centering Racial Equity Throughout Data Integration*. Actionable Intelligence for Social Policy, University of Pennsylvania; 2020.

# **Appendices**

# **Appendix A: Approach**

# 1A. Data Collection Methodology Table

Outcome	Indicator(s)	Measurement	Source of Data	Method of Data Collection						
	HOMEOWNERS									
<ul> <li>Help people age in place comfortably and safely.</li> <li>Maintain Orange County's affordable housing stock.</li> </ul>	1	ntified		Administrative data via Airtable						
Reduce disparities in home quality and health among households of color in Orange County.	Eliminate service gaps based on race in Orange County from 2021-2023	Description of service recipients by racial identity. Administrative data will be compared with 2021 ACS 5-year data  Percentage of service recipients by race exceeds:  11.1% Black/African American 7.9% Asian 5.0% two or more races 2.2% other race 0.6% American Indian/Alaska Native	OCHPC Records, Census	Administrative data via Airtable						

Additional Descriptive Star Demographic Characteristi	tistics: cs of Home Repair Applicants			Administrative data via Airtable, Census Data
<ul><li>Average Median I</li><li>Total People in ho</li><li>Presence of older</li></ul>				
Home Characteristics of Ho	ome Repair Applicants			
• Location, Home ty	pe, Year home was built			
		COALITION		
<ul> <li>Help people age in place comfortably and safely.</li> <li>Maintain Orange County's affordable</li> </ul>	Increase number of "Closed" cases by 15% in Orange County from 2021-2023 compared to the previous evaluation period.	Number of cases with a progress status of "closed (all or some specs complete", Compare 2023 numbers with 2021 baseline evaluation results	OCHPC Records	Administrative data via Airtable
housing stock.	Reduce number of days from the client application to the time of entry into the OCHPC database, assessment, and first completion of a workscope by 10% from 2021-2023	Compare 2023 numbers with 2021 baseline evaluation results:  - Time from screening to evaluation - Time from evaluation to first workscope opened - Time from first workscope opened to project close	OCHPC Records	Administrative data via Airtable
		Calculate the minimum, average, and maximum days from the date of application to three progress milestones for OCHPC		

cases.

Increase delivery of weatherization projects by 10% from 2021-2023	Compare 2023 number of Wx projects delivered with 2021 baseline evaluation results.	OCHPC Records, Coalition partners	Administrative data via Airtable, Partner interviews
Improved interagency collaboration among coalition partners. Level of high, medium, and low collaboration exceeds 2021 levels of:  • 6%: 4 or more organizations  • 14%: 3 organizations  • 42%: 2 organizations	In addition to the baseline collaboration homeowners experience by applying for OCHPC services, calculate the number of organizations with completed or claimed workscopes per property.  Scale:  4 or more organizations= high collaboration 3 partners engaging= medium collaboration 2 partners engaging= low collaboration 4 <=1 partner engaging= n/a (no collaboration	Coalition partners, OCHPC Records	Direct observation, Partner interviews, Administrative data via Airtable

#### 2A. OCHPC Partner Interviews

In addition to the information gathered from the OCHPC Database, interviews with OCHPC partners will help us understand how the Coalition is functioning, successes of the Coalition, and opportunities to further develop the Coalition in the future.

**We want to know:** What are OCHPC's **successes and challenges** related to home repair service delivery and communication/collaboration among coalition partners?

#### Interview Guide

#### **OCHPC Processes and Tools**

- How do different OCHPC processes and tools (meetings, shared database, assessments, intake/unified screening tool) bring value to your organization's work?
  - Probe: Which element(s) are most useful to your organization?

#### Home Repair Service Delivery

- What is working well for the coalition in delivering home repairs?
- How does delivery of weatherization projects differ from delivery of other home repairs?
  - Probe: What is your definition of a weatherization project? Can you provide some examples of these projects?
- What are challenges faced by the coalition in delivering collaborative home repairs?

#### Communication with Homeowners

- What is working well for the coalition's communication with homeowners?
- What are challenges faced by the coalition in communicating with homeowners?
  - Probe: If you were a homeowner, which parts of the process do you think would be difficult or frustrating to navigate?

#### Communication with OCHPC Partners

- What is working well for the coalition's communication with other coalition partners?
  - o Probe: Can you describe a time when collaboration worked really well among partners?
- What are challenges faced by the coalition in communicating among coalition partners?

#### **Additional**

- Is there something else that you hoped I would have asked about but have not?
  - o Probe: What else is working well with the coalition? For your organization?
  - o *Probe*: What else is a challenge for the coalition? For your organization?
  - o Probe: Do you have any recommendations or ideas to address these issues?

## 3A. Incorporating Racial Equity in the Program Evaluation

Below are strategies OCHPC can utilize in this data collection methodology to incorporate racial equity into data collection, process and analysis, and dissemination of findings. Beyond these strategies, there are other best practices to incorporate equity into this process that the coalition does not have capacity for. OCHPC could consider incorporating additional approaches in future iterations of the OCHPC home repair program and biannual program evaluation.

"Is the correlation between race and outcomes, or class and outcomes, changed as a result of your organization's work? This is one way to look at impact for equity." <sup>19</sup>

### Data Collection, Processing, and Analysis

- Prioritize self-identification and self-report during the data collection process.<sup>20,21</sup>
- Intentionally collect information and engage with partners and community members to avoid undue burden<sup>13</sup>
- Disaggregate reported numbers by race and ethnicity; Separate out possibilities within "multiracial" category. <sup>19–21</sup>
- Intentionally select which population or measurement is used as a point of comparison.<sup>19</sup>
- Where possible, incorporate qualitative stories to contextualize quantitative data (e.g. through quotes, surveys)<sup>21</sup>
- Be transparent about the limitations of the data<sup>13</sup>
- Clearly document the process used for making analytical decisions<sup>13</sup>

"Averages hide whether participants most forced to the margins are left further behind, unaffected, or helped by a program." 19

#### **Sharing Results**

- Provide historical context
- Ensure the findings are useful and accessible to the community.<sup>13,19</sup>
  - Findings are explained in clear language.
  - o Findings are packaged in a useful format.
  - Findings are made public (when possible)

## **Appendix B: OCHPC Data**

1B: Tables

## Demographics

	Pro Eval Wai Se	2023 ogram luation: ting for ervice n=97)	Eva Hom	Program luation: leowners ed (n=90)	Pro Eval Bai Se	2023 ogram uation: rier to ervice n=89)	Evalı Home Sup <sub>l</sub>	Program uation: cowners ported =276)	Eval Home Sup	Program uation: eowners ported =123)	Orange C Census Da 2017-2021 (n=147,	ta (ACS . 5-year)
	n	%	n	%	n	%	n	%	n	%	n	%
Race												
American Indian or Alaska Native	0	0.0%	0	0.0%	1	1.1%	1	0.4%	0	0.0%	934	0.6%
Asian	1	1.0%	1	1.1%	1	1.1%	3	1.1%	15	12.2%	11,607	7.9%
Black of African American	55	56.7%	64	71.1%	48	53.9%	167	60.5%	90	73.2%	16,286	11.1%
Latine	0	0.0%	2	2.2%	1	1.1%	3	1.1%	6	4.9%	*	
Other	0	0.0%	2	2.2%	1	1.1%	3	1.1%	1	0.8%	3,241	2.2%
Two or More Races	0	0.0%	2	2.2%	2	2.2%	4	1.4%	0	0.0%	7,421	5.0%
Unknown	17	17.5%	6	6.7%	7	7.9%	30	10.9%	1	0.8%		
White	24	24.7%	13	14.4%	28	31.5%	65	23.6%	10	8.1%	107,887	73.2%

<sup>\*</sup>Note: People who identify as Hispanic or Latine may be of any race, so also are included in applicable race categories in Figure 2. According to the ACS 2017-2021 5-year data (A04001), the Hispanic or Latine population in Orange County, NC was 12,675, or 8.6% of the population.

Gender Identity of Applicant												
Female	81	83.5%	67	74.4%	56	62.9%	204	73.9%	90	73.2%	77,048	52.3%
Male	16	16.5%	23	25.6%	33	37.1%	72	25.4%	31	25.2%	70,328	47.7%
Unknown									2	1.6%		
AMI Categories												
Extremely Low (<30%)	46	47.4%	43	47.8%	44	49.4%	133	48.2%				

Very Low (30-50%)	30	30.9%	27	30.0%	27	30.3%	84	30.4%				
Low (51-80%)	14	14.4%	13	14.4%	11	12.4%	38	13.8%				
Moderate (>80%)	2	2.1%	5	5.6%	6	6.7%	13	4.7%				
No Income Reported	5	5.2%	2	2.2%	1	1.1%	8	2.9%				
Older Adult Present (>=55 years)												
Older Adult Present	82	84.5%	80	88.9%	78	87.6%	240	87.0%	99	80.5%	39,015	26.5%
Not present or unknown	15	15.5%	10	11.1%	11	12.4%	36	13.0%	24	19.5%	108,361	73.5%
Disability Present												
Disability Status Present	57	58.8%	51	56.7%	37	41.6%	145	52.5%	59	48.0%		
No Disability	40	41.2%	39	43.3%	52	58.4%	131	47.5%	64	52.0%		
Children Present												
Children Present	10	10.3%	9	10.0%	14	15.7%	33	12.0%	13	10.6%		
No Children	87	89.7%	81	90.0%	75	84.3%	243	88.0%	110	89.4%		
Type of Home												
House	71	73.2%	58	64.4%	59	66.3%	188	68.1%	69	56.1%		
Mobile Home	14	14.4%	24	26.7%	15	16.9%	53	19.2%	18	14.6%		
Unknown	8	8.2%	7	7.8%	10	11.2%	25	9.1%	36	29.3%		
Other	4	4.1%	1	1.1%	5	5.6%	10	3.6%				
Total People in Household (# Households)												
1-Person Household	53	54.6%	53	58.9%	46	51.7%	152	55.1%	71	57.7%		
2-Person Household	24	24.7%	24	26.7%	30	33.7%	78	28.3%	31	25.2%		
3-Person Household	10	10.3%	9	10.0%	7	7.9%	26	9.4%	13	10.6%		
4-or more Person Household	10	10.3%	4	4.4%	6	6.7%	20	7.2%	8	6.5%		
Year Built												
Unknown	39	40.2%	29	32.2%	25	28.1%	93	33.7%				
Pre-1978	28	28.9%	30	33.3%	31	34.8%	89	32.2%				
1978-1990	14	14.4%	9	10.0%	18	20.2%	41	14.9%				
1991-2000	10	10.3%	13	14.4%	12	13.5%	35	12.7%				

2001-2010	4	4.1%	8	8.9%	2	2.2%	14	5.1%				
2011<	2	2.1%	1	1.1%	1	1.1%	4	1.4%				
	Pro Eval Wai Se	2023 ogram uation: ting for ervice n=97)	Eva Hom	Program luation: neowners ed (n=90)	Pro Eval Bai Se	2023 ogram luation: rrier to ervice n=89)	Evalı Home Sup <sub>l</sub>	Program uation: eowners ported =276)	Eval Hom Sup	Program luation: eowners ported =123)	Orange C Census Da 2017-2021 (n=118,	ta (ACS 5-year)
	n	%	n	%	n	%	n	%	n	%	n	%
Veteran Status												
Veteran	6	6.2%	11	12.2%	11	12.4%	28	10.1%			5,735	4.8%
Non-Veteran	89	91.8%	76	84.4%	76	85.4%	241	87.3%			112,993	95.2%
Spouse of Veteran	0	0.0%	1	1.1%	0	0.0%	1	0.4%				
Unknown	2	2.1%	2	2.2%	2	2.2%	6	2.2%				

## Service Jurisdictions

	2023 Pi Evaluation for Se	n: Waiting	2023 Program Evaluation: Homeowners Served		_	m Evaluation: to Service	2023 Program Evaluation: Homeowners Supported		
	n=65	%	n =90	%	n=89	%	n=276	%	
Jurisdiction									
Orange County Only Jurisdiction	52	80.0%	41	45.6%	50	56.2%	143	51.8%	
Town of Chapel Hill	21	32.3%	29	32.2%	23	25.8%	73	26.4%	
Town of Hillsborough	15	23.1%	17	18.9%	8	9.0%	40	14.5%	
Town of Carrboro	9	13.8%	3	3.3%	8	9.0%	20	7.2%	
Jurisdictions Serving Mobile Homes	Mobile Hon	nes n=14	Mobile Hom	es n=24	Mobile Home	es n=15	Mobile Homes n=53		
Orange County Only Jurisdiction	6	42.9%	13	54.2%	9	60.0%	28	52.8%	
Town of Chapel Hill	3	21.4%	7	29.2%	4	26.7%	14	26.4%	
Town of Hillsborough	3	21.4%	4	16.7%	1	6.7%	8	15.1%	
Town of Carrboro	2	14.3%	0	0.0%	1	6.7%	3	5.7%	
Jurisdictions Serving Black Households	Black House n=55	eholds	Black House	holds n=64	Black Househ	nolds n=48	Black Households n=167		
Orange County Only Jurisdiction	30	83.3%	28	43.8%	26	54.2%	84	50.3%	
Town of Chapel Hill	9	25.0%	18	28.1%	12	25.0%	39	23.4%	
Town of Hillsborough	10	27.8%	15	23.4%	3	6.3%	28	16.8%	
Town of Carrboro	6	16.7%	3	4.7%	7	14.6%	16	9.6%	

## Service Jurisdictions by Race

	2023 Program Evaluation	n: Homeowners Supporte	d (n=276)	
	Orange County Only	Town of Carrboro	Town of Chapel Hill	Town of Hillsborough
American Indian or Alaska Native	1	0	0	0
Asian	1	0	2	0
Black or African American	83	17	46	24
Latine	2	1	1	0
Other	1	0	1	0
Two or More Races	2	1	0	1
Unknown	19	1	4	4
White	34	0	19	11
	2023 Program Evaluat	ion: Homeowners Served	(n=90)	
	Orange County Only	Town of Carrboro	Town of Chapel Hill	Town of Hillsborough
American Indian or Alaska Native	0	0	0	0
Asian	1	0	1	0
Black or African American	26	2	21	7
Latine	0	1	0	0
Other	0	0	0	0
Two or More Races	1	0	0	1
Unknown	4	0	0	2
White	9	0	7	7

## Percent Served for Selected Characteristics

Of the homeowners and home types supported during the evaluation, how many of them were served (received direct home repairs or Wx) within the evaluation?

	2023 Program Eval: Homeowners Served	2023 Program Eval: Homeowners Supported	% Served
Race			
Black	64	167	38.3%
White	13	65	20.0%
АМІ			
Extremely Low (<30%)	43	133	32.3%
Very Low (30-50%)	27	84	32.1%
Low (51-80%)	13	38	34.2%
Moderate (>80%)	5	13	38.5%
Older Adult Present (>=55 years)			
Older Adult Present	80	240	33.3%
Not present or unknown	10	36	27.8%
Disability Present			
Disability Status Present	51	145	35.2%
No Disability	39	131	29.8%
Children Present			
Children Present	9	33	27.3%
No Children Present	81	243	33.3%
Veteran Status			
Veteran	11	28	39.3%

Non-Veteran	76	241	31.5%
Total People in Household (# Households)			
1-Person Household	53	152	34.9%
2-Person Household	24	78	30.8%
3-Person Household	9	26	34.6%
4-or more Person Household	4	20	20.0%
Year Built			
Unknown	29	93	31.2%
Pre-1978	30	89	33.7%
1978-1990	9	41	22.0%
1991-2000	13	35	37.1%
2001-2010	8	14	57.1%
2011<	1	4	25.0%
Type of Home			
House	58	188	30.9%
Mobile Home	24	53	45.3%
Jurisdiction			
Orange County Only Jurisdiction	41	143	28.7%
Town of Chapel Hill	29	73	39.7%
Town of Hillsborough	17	40	42.5%
Town of Carrboro	3	20	15.0%
Jurisdictions Serving Mobile Homes			
Orange County Only Jurisdiction	13	28	46.4%

Town of Chapel Hill	7	14	50.0%
Town of Hillsborough	4	8	50.0%
Town of Carrboro	0	3	0.0%
Jurisdictions Serving Black Households			
Orange County Only Jurisdiction	28	84	33.3%
Town of Chapel Hill	18	39	46.2%
Town of Hillsborough	15	28	53.6%
Town of Carrboro	3	16	18.8%

## Percent Waiting for Service for Selected Characteristics

Of the homeowners and home types supported during the evaluation, how many of them were waiting to receive services within the evaluation?

	2023 Program Eval: Waiting for Service	2023 Program Eval: Homeowners Supported	% Waiting
Race			
Black	55	167	32.9%
White	24	65	36.9%
АМІ			
Extremely Low (<30%)	46	133	34.6%
Very Low (30-50%)	30	84	35.7%
Low (51-80%)	14	38	36.8%
Moderate (>80%)	2	13	15.4%
Older Adult Present (>=55 years)			
Older Adult Present	82	240	34.2%
Not present or unknown	15	36	41.7%
<b>Disability Present</b>			
Disability Status Present	57	145	39.3%
No Disability	40	131	30.5%
Children Present			
Children Present	10	33	30.3%
No Children Present	87	243	35.8%
Veteran Status			
Veteran	6	28	21.4%

Non-Veteran	89	241	36.9%
Total People in Household (# Households)			
1-Person Household	53	152	34.9%
2-Person Household	24	78	30.8%
3-Person Household	10	26	38.5%
4-or more Person Household	10	20	50.0%
Year Built			
Unknown	39	93	41.9%
Pre-1978	28	89	31.5%
1978-1990	14	41	34.1%
1991-2000	10	35	28.6%
2001-2010	4	14	28.6%
2011<	2	4	50.0%
Type of Home			
House	71	188	37.8%
Mobile Home	14	53	26.4%
Jurisdiction			
Orange County Only Jurisdiction	52	143	36.4%
Town of Chapel Hill	21	73	28.8%
Town of Hillsborough	15	40	37.5%
Town of Carrboro	9	20	45.0%
Jurisdictions Serving Mobile Homes			
Orange County Only Jurisdiction	6	28	21.4%

Town of Chapel Hill	3	14	21.4%
Town of Hillsborough	3	8	37.5%
Town of Carrboro	2	3	66.7%
Jurisdictions Serving Black Households			
Orange County Only Jurisdiction	30	84	35.7%
Town of Chapel Hill	9	39	23.1%
Town of Hillsborough	10	28	35.7%
Town of Carrboro	6	16	37.5%

### Percent of Cases with a Barrier to Service for Selected Characteristics

Of the homeowners and home types supported during the evaluation, how many of them experienced a barrier to service within the evaluation?

	2023 Program Eval: Barrier to Service	2023 Program Eval: Homeowners Supported	% Barrier to Service
Race			
Black	48	167	28.7%
White	28	65	43.1%
AMI			
Extremely Low (<30%)	44	133	33.1%
Very Low (30-50%)	27	84	32.1%
Low (51-80%)	11	38	28.9%
Moderate (>80%)	6	13	46.2%
Older Adult Present (>=55 years)			
Older Adult Present	78	240	32.5%
Not present or unknown	11	36	30.6%
Disability Present			
Disability Status Present	37	145	25.5%
No Disability	52	131	39.7%
Children Present			
Children Present	14	33	42.4%
No Children Present	75	243	30.9%
Veteran Status			
Veteran	11	28	39.3%

Non-Veteran	76	241	31.5%
Total People in Household (# Households)			
1-Person Household	46	152	30.3%
2-Person Household	30	78	38.5%
3-Person Household	7	26	26.9%
4-or more Person Household	6	20	30.0%
Year Built			
Unknown	25	93	26.9%
Pre-1978	31	89	34.8%
1978-1990	18	41	43.9%
1991-2000	12	35	34.3%
2001-2010	2	14	14.3%
2011<	1	4	25.0%
Type of Home			
House	59	188	31.4%
Mobile Home	15	53	28.3%
Jurisdiction			
Orange County Only Jurisdiction	50	143	35.0%
Town of Chapel Hill	23	73	31.5%
Town of Hillsborough	8	40	20.0%
Town of Carrboro	8	20	40.0%
Jurisdictions Serving Mobile Homes			
Orange County Only Jurisdiction	9	28	32.1%

Town of Chapel Hill	4	14	28.6%
Town of Hillsborough	1	8	12.5%
Town of Carrboro	1	3	33.3%
Jurisdictions Serving Black Households			
Orange County Only Jurisdiction	26	84	31.0%
Town of Chapel Hill	12	39	30.8%
Town of Hillsborough	3	28	10.7%
Town of Carrboro	7	16	43.8%

## Project Progress

Project Progress	_	nm Evaluation: ers Supported	2021 Program Eva Homeowners Su	
	n	%	n	%
Screened	n=201		n=99	
Total Within Evaluation Period	201	100.0%	92	100%
FY22	121	60.2%		
FY23	80	39.8%		
Assessed	n=112		n=91	
Total Within Evaluation Period	112	100.0%	91	100.0%
FY22	80	71.4%		
FY23	32	28.6%		
Of properties assessed in FY22/23, how many were screened prior to the evaluation period?	16	14.3%		
Earliest Workscope Opened (first service touchpoint)	n=85			
Total Within Evaluation Period	85	100.0%		
FY22	33	38.8%		
FY23	52	61.2%		
Of properties that had their earliest workscope opened in in FY22/23, how many were assessed prior to the evaluation period?	40	47.1%		
Last Workscope Completed	n=90			
Total Within Evaluation Period	90	100.0%		
FY22	55	61.1%		
FY23	35	38.9%		
Of properties that had any workscope completed in FY22/23, how many had their earliest workscope opened prior to the evaluation period?	36	40.0%		

	2023 Program Evaluation: Homeowners Supported		2021 Program Evaluation: Homeowners Sup	
	n=276	%	n=123	%
Project Progress				
Ready for Assessment	12	4.3%	9	7.3%
Assessed	53	19.2%	34	27.6%
Open	65	23.6%	61	49.6%
Closed and Was Served	55	19.9%	6	4.9%
All Specs Complete	31	11.2%	4	3.3%
Some Specs Complete	24	8.7%	2	1.6%
Barriers to Service*	91	33.0%	13	10.6%
Duplicate Application	6	2.2%		
Limited Eligibility Not Assessed**	16	5.8%		
Missing Information	25	9.1%	5	4.1%
Need Alternative Option	3	1.1%		
Permanent Close- Unable to Complete	31	11.2%	8	6.5%
Renting	10	3.6%		

<sup>\*</sup>May be due to eligibility issue, repairs are too complicated, lost contact with homeowner, no available funding source, etc

<sup>\*\*</sup> Typically a high income older adult. These cases are often referred directly to Handy Helpers or Hope Renovation for repair assistance.

## Project Timeline

Date of Screening to Assessment in Months among Homeowners Supported (n=141)		
Measure	Months	
Average	4.1	
Minimum	<1	
Maximum	33	
25th Percentile (Q1)	1	
75th Percentile (Q3)	5	
Median (Q2)	2	
Finding: For most clients (middle FOV) with recorded screening and assessment dates it takes between 1 and 5 menths to get assessed after a homeowner		

**Finding:** For most clients (middle 50%) with recorded screening and assessment dates, it takes between 1 and 5 months to get assessed after a homeowner completes the OCHPC screening

Date of Assessment to Earliest Workscope Opened among Homeowners Supported (n=71)	
Measure	Months
Average	6.6
Minimum	<1
Maximum	32
25th Percentile (Q1)	1
75th Percentile (Q3)	10
Median (Q2)	5
Finding: For most clients (middle E0%) with recorded assessment and earliest workscope enemed dates, it takes between 1 and 10 menths to open a	

**Finding**: For most clients (middle 50%) with recorded assessment and earliest workscope opened dates, it takes between 1 and 10 months to open a workscope (some kind of work claimed by a partner) after a property is assessed.

Months 7.8
7.8
<1
20
1
13
8.5

**Finding:** For most clients (middle 50%) with recorded Earliest Workscope Opened and Latest Workscope Completed dates, it takes between 1 and 13 months from the first moment a workscope is opened to the decision to close the case.

Screening to Completion among Closed Cases (n=30)	
Measure	Months
Average	15.5
Minimum	1
Maximum	47
25th Percentile (Q1)	10
75th Percentile (Q3)	19
Median (Q2)	14

**Finding:** For most clients (middle 50%) with recorded Screening and Latest Workscope Completed dates, it takes between 10 and 19 months from screening to the decision to close the case

## Specs per Household

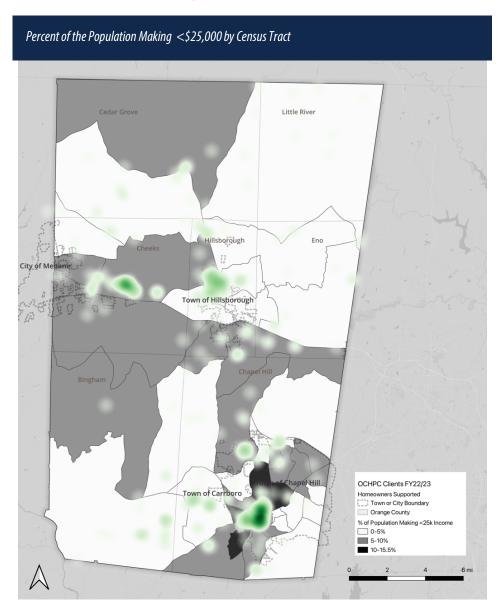
	2023 Program Evaluation: Number of Specs Identified per Household Among Closed Cases	2021 Program Evaluation: Number of Specs Identified per Household Among Households Supported
Measure	Number of Specs	Number of Specs
Min	0	
Max	42	
Average	8.8	13.4
Median (Q2)	7	12
75th Percentils (Q3)	11	
25th Percentile (Q1)	2.5	
Findings:	Among households with a closed project status, most homeowners (middle 50%) had 2.5 to 11 specs identified for repair. The average number of repairs identified for closed cases was 8.8.	The average number of repairs identified for all projects was 13.4

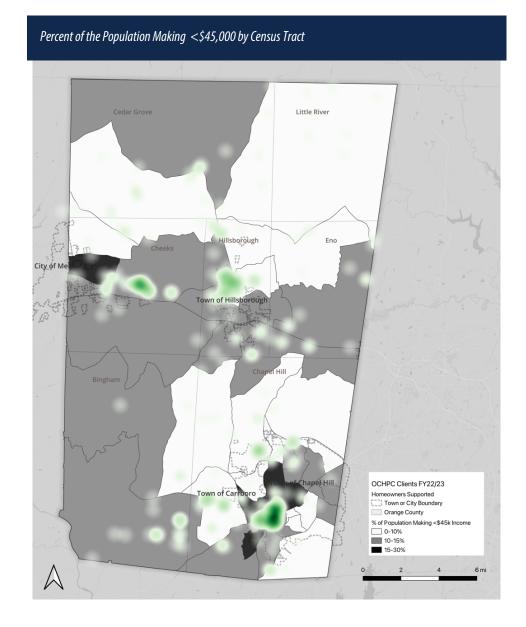
## Coalition Collaboration

In addition to baseline collaboration among coalition partner organizations, how many organizations *claimed* or *completed* a workscope per household?

	2023 Program Evaluation: Households Supported		2021 Program Evaluation	
# of organizations	n=276	%	n=65	%
Unknown	158	57.2%	2	3.1%
1	69	25.0%	23	35.4%
2	30	10.9%	27	41.5%
3	15	5.4%	9	13.8%
4 or more	4	1.4%	4	6.2%
2023 Program Evaluation: Households Served				
# of organizations	n=90	%		
1	44	48.9%		
2	27	30.0%		
3	15	16.7%		
4 or more	4	4.4%		
	2023 Program Evalua	ation: Closed Cases		
# of organizations	n=55	%		
0	4	7.3%		
1	23	41.8%		
2	13	23.6%		
3	12	21.8%		
4	3	5.5%		

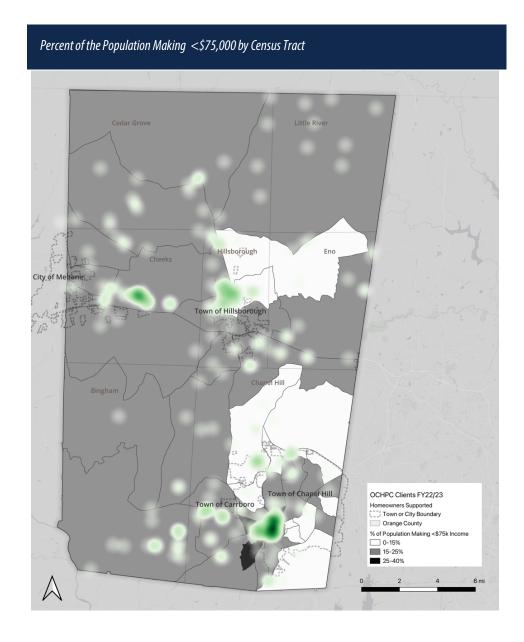
## 2B: Additional Maps

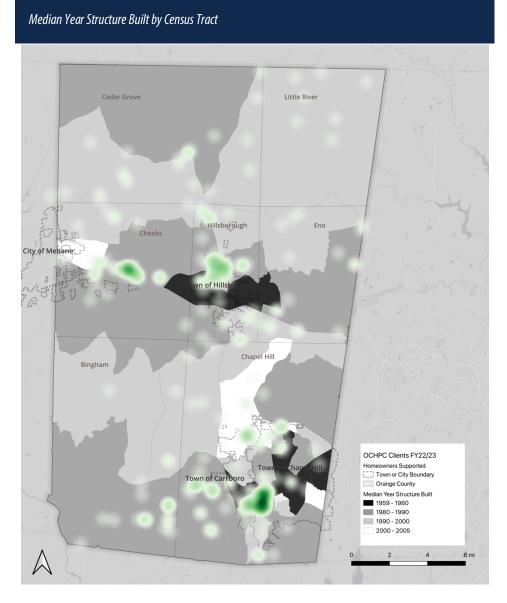




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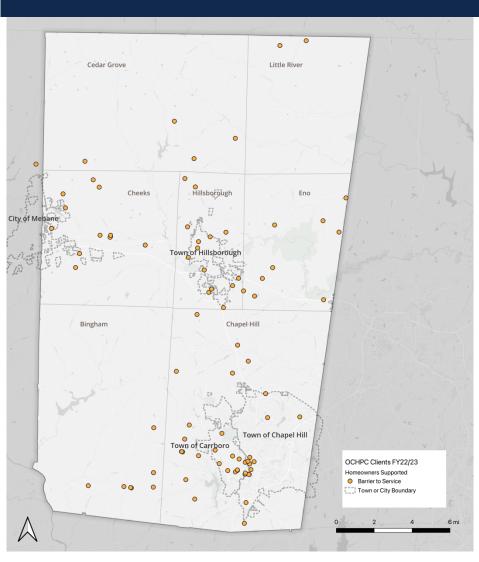




## Percent of the Population Aged 55 or Older by Census Tract



### Cases with Barriers to Service



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# 2C: Project Types

Project Type	Example Projects		
	Grab bar installation; tub to shower conversion; handrail installation; new		
Accessibility Modifications	ramp build		
	Replacements of: heat pump or water heater; oven or stove; dishwasher;		
Appliances	clothes washer or dryer		
	Repairing: cabinets; ceiling tiles; countertops; decks, doors; drywall; siding;		
Carpentry	railings; steps; subfloor and plank flooring; windows (including replacement)		
Drywall	Drywall repair or replacement		
	Certifying distribution; dryer circuit; install or replace bath or ceiling fan;		
	replace light fixtures and switches; recirculating range hood; venting range		
Electrical	hood; install or replace receptacles; rewiring		
	Asbestos abatement; lead and asbestos testing; mold remediation; roach		
Environmental Rehab	control		
	CO/smoke detector battery replacement or installation; hard wiring;		
Fire Protection	installing smoke alarm		
Flooring	Repair damaged subfloor		
General	Supply storage container; dispose of old stove; replace chimney caps		
	Repair ductwork and air distribution; replace electrical or gas heat pump;		
	HVAC service; clean and adjust HVAC turbine exhaust; general mechanic		
HVAC	work on HVAC		
Masonry	Remove chimney; repair concrete steps; repoint masonry		
Painting	Paint new drywall; Paint over water stain after patch		
	Hook up washing machine; crawl space drain and sump pump; install faucet;		
	investigate and repair leaks; septic tank; shower head and diverter; replace		
Plumbing	toilet; inspect and repair waste lines		
	Fascia; metal roof repair; rubber roof installation; reroof fiberglass shingles;		
Roofing	repair soffit (including vinyl and wood)		
	Grade driveway gravel; rake crawl space; remove tree and grind stump; site		
Site Work	grading; trim overgrowth; yard maintenance and trimming		
Thermal & Moisture	Caulk, downspouts and gutter cleaning and replacing; dryer vents;		
	Attic insulation; attic and crawlspace weatherization; weatherstrip doors;		
	insulate walls; caulk windows; HVAC service; replace old appliance with		
Weatherization	energy efficient appliance		

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