



# **Connecticut R2029 Single-Family Weatherization Assessment and Update**

### **Kickoff Presentation**

Jared Powell, Ari Stern, Eugene McGowan, Jerrad Pierce, NMR March 17, 2022



NMR Group, Inc.

# Background

2011: CT goal of weatherizing 80% of homes by 2030 2012: EEB developed draft Wx standard 2014: R5 Wx baseline showed limited progress 2015: Home Energy Score path added to draft standard 2020: DEEP memo lays out alternative standards

**NMR** 

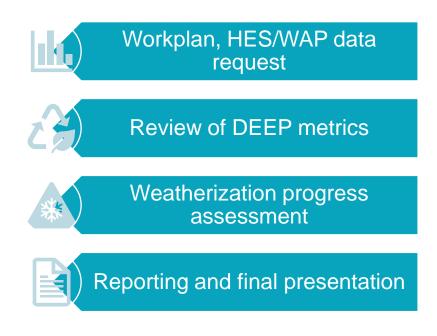
# Study Objectives

NMR Group, Inc.

- 1. Assess pros/cons of standards proposed by DEEP, suggest adjustments as appropriate
- 2. Estimate the percentage of single-family homes that are weatherized based on the proposed metrics that can be assessed via available data
- 3. Provide recommendations on how to make progress towards the 80% weatherization goal and suggest future research on metrics and methods



<u>NMR</u>



# Workplan and Data Request

# Shared data request (R1983)

- HES/IE tracking data (measure-level, pre- and post-retrofit)
- WAP tracking data
- HES/IE QA/QC data and reports

Workplan

**Kickoff** 



### 4

# Home Energy Solutions (HES/HES-IE) Pathway

 Participation in the HES or HES-IE programs, with confirmation that core services were performed

# Prescriptive Pathway

 Home meets 5+ criteria from a list of prescriptive requirements (similar to 2012 draft standard)

## Flexible Pathway

- a. REM/Rate model demonstrating compliance
- b. DOE Home Energy Score of 5 or higher
- c. Participation in federal WAP
- d. Constructed later than January 2000



**DEEP Proposed Metrics** 

# Review of DEEP

# NMR Group, Inc.

# Review each metric and assess its reasonableness as a measurement of weatherization

Suggest adjustments as appropriate

Describe relative difficulty of measuring metrics now or in future studies

Determine which metrics can be readily measured with available data

6

# Assess weatherization progress in existing housing stock

 Primarily via R1706 RASS data and other supplemental data sources

## Assess the number of homes weatherized each year

 From a mix of sources (HES/IE tracking data, WAP participation, new construction permits, etc.)

### Weatherization assessment calculator

- Algorithm to estimate Wx progress in a given year
- Inputs: new homes, HES participation, WAP participation, etc.

NMR

Wx Progress Assessment

# eporting and Presentation



# Wx progress findings

- Revise DEEP's weatherization standard?
- Progress against relevant standard(s)

## Key recommendations

- For *measuring* weatherization progress, including database improvements
- For *making* weatherization progress

# **Timing**

• Draft for public review - Fall 2022

# Budget



Task	Budget
Task 1: Workplan, Data Request, Kickoff Meeting, and Management	\$16,800
Task 2: Review of DEEP Metrics	\$16,800
Task 3: Weatherization Assessment	\$33,600
Task 4: Analysis and Reporting	\$16,800
Remaining Budget	\$84,000
Total Budget	\$135,000

NMR



# Questions?

