

**DAVIDSON COUNTY, TENNESSEE** residents have a higher energy burden than the national average.¹ Energy burden is calculated as the percent of earnings going toward utility bills. Low-income households often occupy older, less efficient housing stock, and have an energy burden three times greater than higher-income groups (see reverse).² Devoting a larger share of earnings to energy costs means less disposable income for healthcare, as well as transportation, food, and childcare. In addition to physical health impacts from poor indoor air quality, high energy burdens can negatively impact mental health outcomes due to an inability to pay electric bills.

In Nashville, the Office of Mayor David Briley partnered with Nashville Electric Service (NES) and the Tennessee Valley Authority (TVA) in the spring of 2018 to launch Home Uplift in Davidson County.<sup>4</sup> Home Uplift helps ease low-income homeowners' energy burden through retrofits at no cost to residents. Only single-family, owner-occupied structures are eligible; qualifying households are subject to certain income restrictions.<sup>5</sup> Standard upgrades, valued at about \$8,000 per home, comprise a mixture of: weatherization, HVAC repair and replacement, ENERGY STAR windows and appliances, lighting, and insulation.<sup>6</sup> Recipients of the upgrades save an average of 25% on their utility bills after completion.<sup>7</sup>

Home Uplift was implemented in specific locations within the Nashville Promise Zones, high poverty communities that receive government support to improve socio-economic outcomes. The coordinating organizations mapped the energy burdens of the Promise Zones to pinpoint zip codes with the greatest need and number of potential participants.<sup>8</sup>

Unlike temporary relief programs such as price adjustments, Home Uplift is designed to make permanent changes that impact overall quality of life. The goal is to create a sustainable program that leverages multiple partnerships and sources of funding to help these Valley residents lower their utility expenditures through upgrades they would never otherwise be able to afford. Home Uplift's mission is not just about weatherization - the upgrades allow families to "have their home back," as many of them were confined to living in one room of the house because that is all they could afford to heat or cool.<sup>8</sup>

While still in its infancy, Home Uplift is growing rapidly; by August 2019, contractors upgraded two hundred homes. $^7$ 

# **PROJECT GOALS**

- Reduce energy bills for low-income customers
- Increase energy efficiency of older buildings
- Improve health of residents
- Calculate non-energy benefits
- Enhance overall quality of life

# TENNESSEE HOME ENERGY EFFICIENCY POTENTIAL<sup>9</sup>



8.8 million kWh electricity reduction per year



26% energy conserved per household



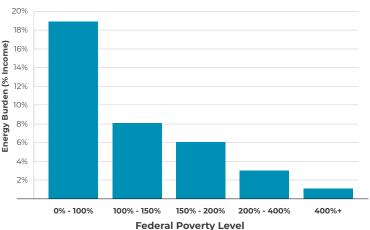
\$1.1 billion annual utility bill savings



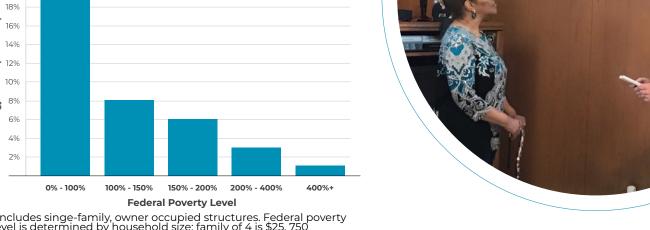
1.5 million cars worth of reduction in air pollution



# ANNUAL ENERGY BURDEN FOR TENNESSEE HOUSEHOLDS<sup>10</sup>



\*Includes singe-family, owner occupied structures. Federal poverty level is determined by household size; family of 4 is \$25, 750



## LEADERSHIP AND COLLABORATION

The Home Uplift pilot in Davidson County received an initial funding amount of \$1.125 million from TVA.8 The Metropolitan Development and Housing Agency offered \$500,000 in additional funding by way of a Federal Home Loan Bank of Cincinnati grant. TVA and NES collaborated with CLEAResult and AmeriCorps VISTA to determine target areas for the pilot program using statistical analysis and door-to-door canvasing.8 In one of the first comprehensive evaluations in the Southeastern US, TVA is working with Knoxville-based firm Three<sup>3</sup> to investigate how weatherization and energy savings can reduce chronic respiratory problems and improve livelihoods using Davidson County household data.6

SOCIAL MISSION Americorps VISTA (D, I)

BUSINESS CLEAResult (E, I) Three<sup>3</sup> (E) Home Depot (I) American Home S Pinnacle Bank (F) e Shield (I)

GOVERNMENT
Nashville Electric Service (A, C, D, F, I)
Tennessee Valley Authority (A, C, E, F)
Office of Mayor David Briley (A, C, F)
Federal Home Loan Bank of Cincinnati (F)
Metropolitan Development and Housing Agency (F)

A: Advocacy, C: Champion, D: Design, E: Evaluation, F: Funding, I: Implementation

# **CLIMATE AND RESILIENCE BENEFITS**







RESILIENCE BENEFITS









# REPLICATION

The Davidson County Home Uplift partnership is just one of five pilot programs implemented by TVA within the Tennessee Valley region since the spring of 2018. In addition to Davidson County, one Home Uplift initiative currently operates in Huntsville, Alabama, and three others exist in the Tennessee cities of Memphis, Knoxville, and Chattanooga. Additional pilot locations included rural Western Kentucky and East Central Mississippi.<sup>6</sup> TVA worked with the respective local power companies to design a pilot that leveraged partnerships as well as matched existing policies and sources of funding. All five have been highly successful.<sup>12</sup>

Starting in October 2019, TVA will begin rolling out Home Uplift to all 154 local power companies that receive their electricity from TVA.8 The final program design takes features from several of the pilots.

# **OTHER BENEFITS**



**JOBS & ASSETS** HEALTH, WELLBEING, & SAFETY CONNECTION **ENERGY & MOBILITY RESILIENCE** 

### **CONTACT INFORMATION**

Julia T Settles, Program Manager, Middle TN Home Uplift TVA Energy Right

itsettles@tva.gov Tel: 615-232-6168



