

CHATTANOOGA, TN

# Connectivity and Health in Orchard Knob: A Smart Community Model for Equitable Access to Services for the 21<sup>st</sup> Century

Orchard Knob Collaborative, a multi-stakeholder partnership, exists to help the historic Orchard Knob neighborhood become more healthy, safe and economically viable. This pilot unites broadband connectivity with energy efficient improvements in the built environment to improve the quality of life for Orchard Knob residents.



## Background



### A Barrier to Success and Health

As technology further integrates into every aspect of society, the digital divide can hinder success and even affect the health of those who do not have access.

#### THE OPPORTUNITY

### Remove the Digital Divide

Providing broadband access and digital learning opportunities to residents can erode systemic barriers.

#### NEIGHBORHOOD DATA

**54%**

of residents identify as African American

**26%**

poverty rate in Orchard Knob

**34%**

of Orchard Knob households are without broadband

## Scope



### Increase Broadband and Smart Home Infrastructure

with the addition of 21 public WiFi spots and Smart Home retrofits and household building upgrades.



### Offer Community Support and Storytelling

through a new online community resource hub to host a community calendar and other local resources.



### Provide Program and Activity Interventions

through digital literacy training and no-cost telehealth services.

#### THE GOAL

### Improve Health and Well-Being

Addressing the social determinants of health through improvements to physical infrastructure, social infrastructure and healthy living.

#### QUANTITY

**24**

retrofits:

- HVAC upgrades
- IoT integration
- Energy efficiency home repairs

**12**

digital literacy classes conducted

**1,000**

telehealth visits





# Performance

## Key Performance Indicators

- Houses upgraded with energy efficiency measures
- Residents trained
- Public WiFi user sessions
- Telehealth visits
- Users and average length of time spent on the community resource hub

# The Value

## Residents

- Access to home and public connectivity
- Increased digital literacy of participants, resulting in improvements to educational and workforce outcomes
- Better health outcomes from built environment upgrades
- Access to health services
- Improved transit experience
- Improved overall quality of life for residents

## The Neighborhood

- Quality community data through resident feedback, program evaluation, platform usage and sensor deployment
- Economic development through increased home valuation

## Other Communities

- A model for localizable replicability and scale

# Key Partners

The Enterprise Center Inc.

Electric Power Board  
Chattanooga

Parkridge Medical Center

Orchard Knob Neighborhood  
Association

green|spaces

Habitat for Humanity of  
Greater Chattanooga Area

Tennessee Valley Authority

# Timeline

## Broadband and Smart Home Infrastructure

- Broadband deployment (3 months)
- Infrastructure improvements will occur concurrently with Smart Home upgrades (3-4 per quarter)

## Programs and Activity Interventions

- Tech Goes Home digital literacy classes (up to 2 per quarter)
- Health screenings and wellness telehealth visits to residents (ongoing)

## Ongoing Community Support and Storytelling

- Develop and launch community resource hub (4 months)
- Resource guide and playbook to share learnings with other communities (released yearly)