

# Remote Assessment and Quality Assurance Research – Home Energy Score

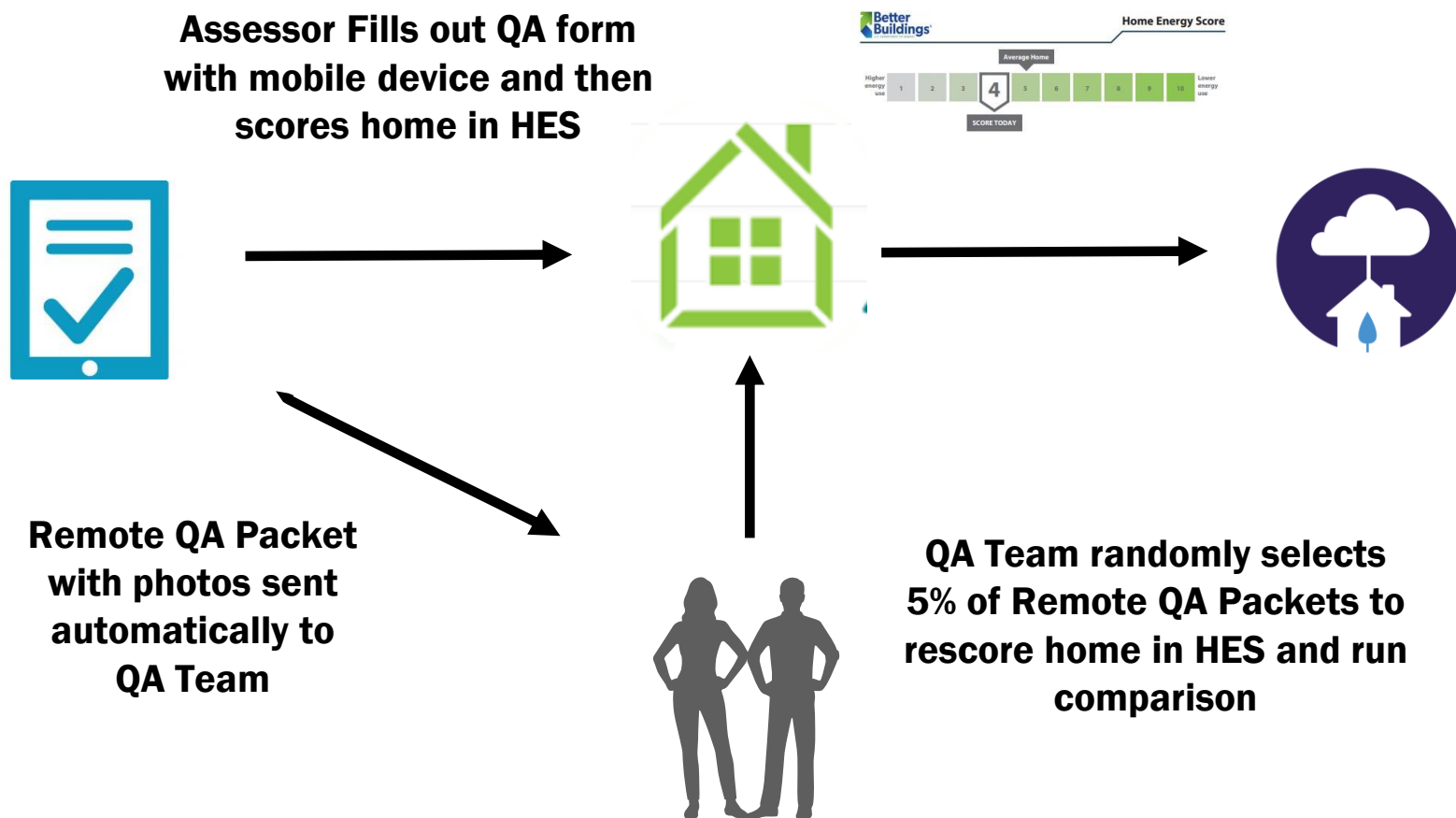
Jason Elton

Earth Advantage - HES Quality Assurance, Training and Mentoring



# Remote Systems: Current Practices

- EA supports Home Energy Score Programs in OR and NY
- Currently using Remote Quality Assurance Systems



## Examples of Remote QA Data and Photo Upload

Verizon

11:42 AM

86%

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HES Remote QA Form\_v013119\_1234...

### Remote QA Photo Documentation Section

**Instructions:**  
This form must be completed for every assessment conducted by an Assessor operating under a Remote Quality Assurance Agreement with Earth Advantage. This form has 25 images that must be included and options for additional images. Figure 1 must be completed.

**Floor Plan:** Provide a legible scan or photo of a drawing/sketch showing the footprint of the home with dimensions. Note "unconditioned" areas and include North arrow.

Photo or Sketch of floor plan

Form

List

...


Complete

# Remote Systems: Current Practices



## Examples of Remote QA Data and Photo Upload

Verizon 12:31 PM 75%

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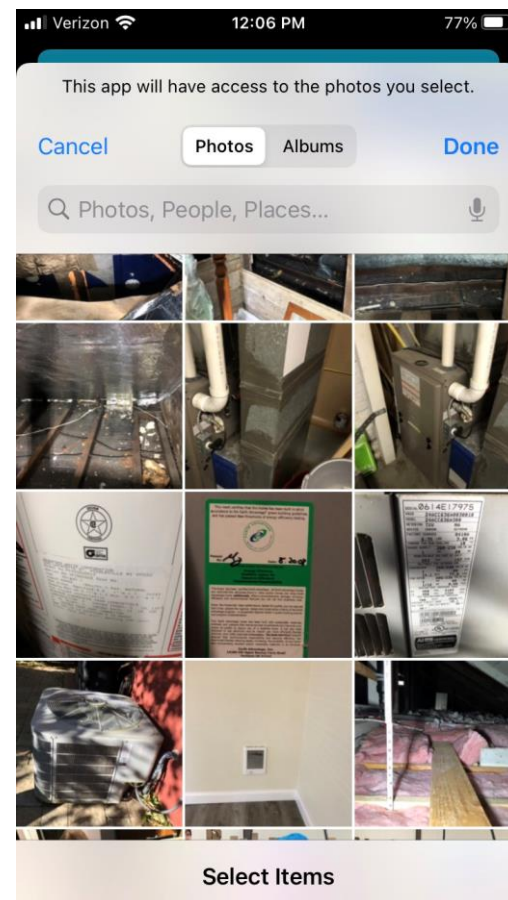
**Attic (Insulation levels)** Ruler inserted to show insulation depth in 2-4 , including some away from central locations.

Insulation Section:  

Notes:  Notes:

Insulation Section (Optional):  Insulation Section (Optional):

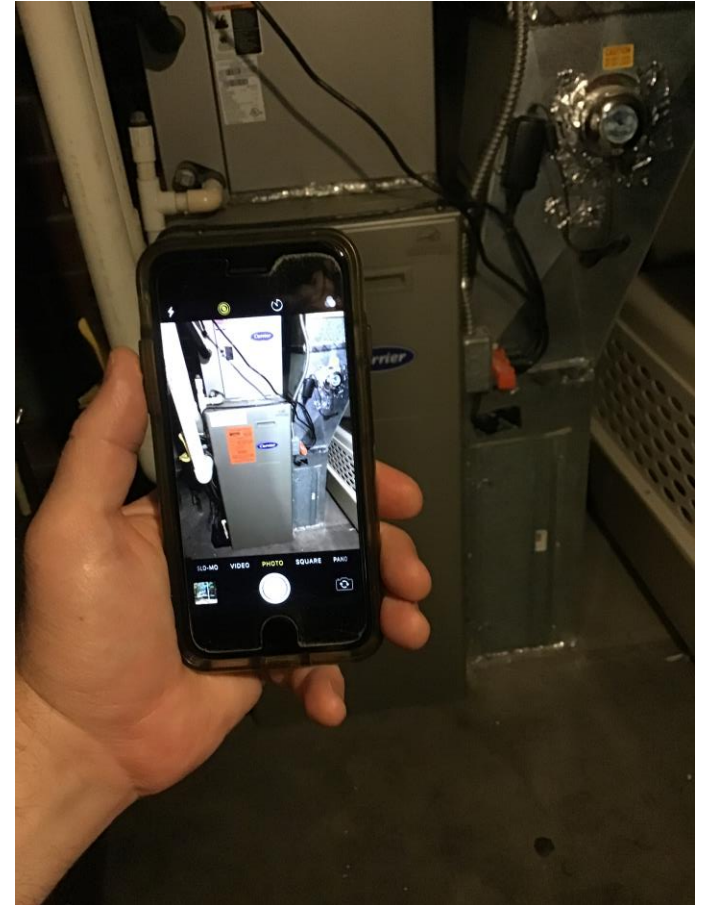
Form List ... Complete





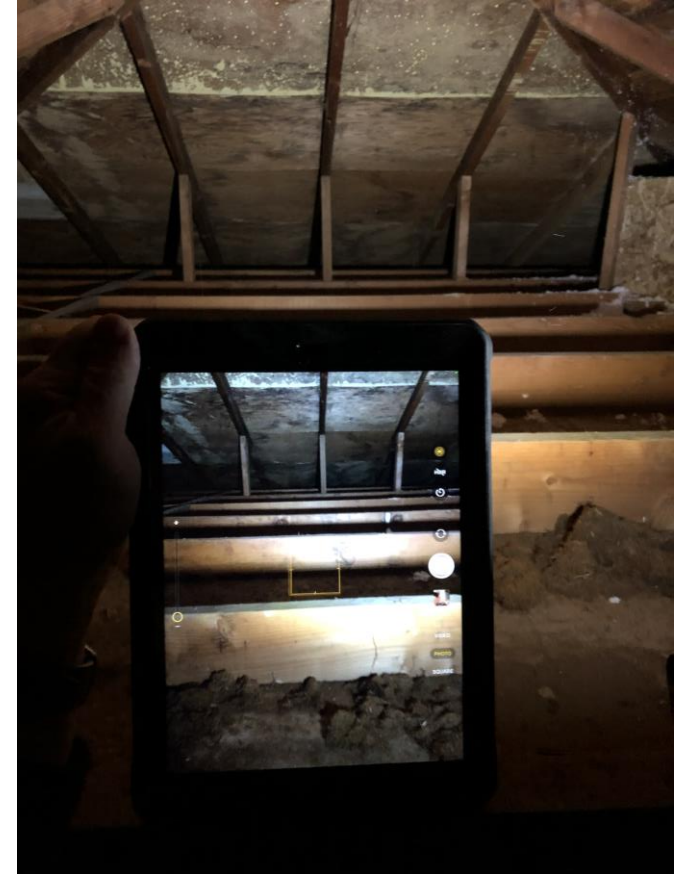
# Home Energy Score Remote Systems Research

- Remote QA and Remote Assessment Tests
- Solving issues with accessing homes
- Testing additional Remote Applications
- Identify cost savings and time reducing strategies



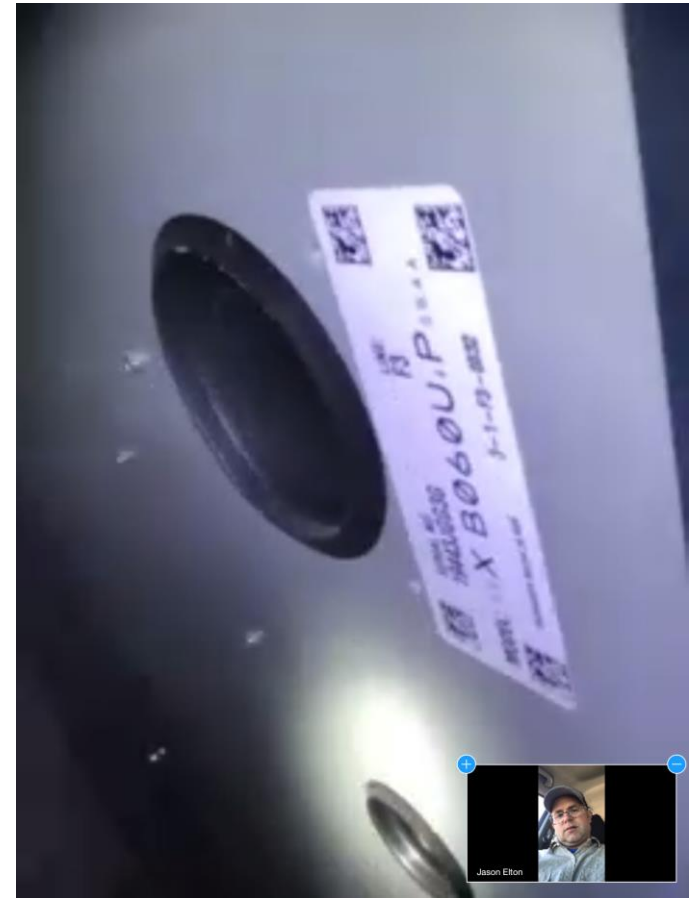
# HES Remote Assessment and QA Research

- Develop methodology
- Utilize relationships with current HES Partnerships
- Evaluate software applications
- Test Live stream video applications
- Test on various house configurations and scenarios
- Compare remote data to onsite assessment
- Document results and feedback
- Develop Remote Assessment Guidelines



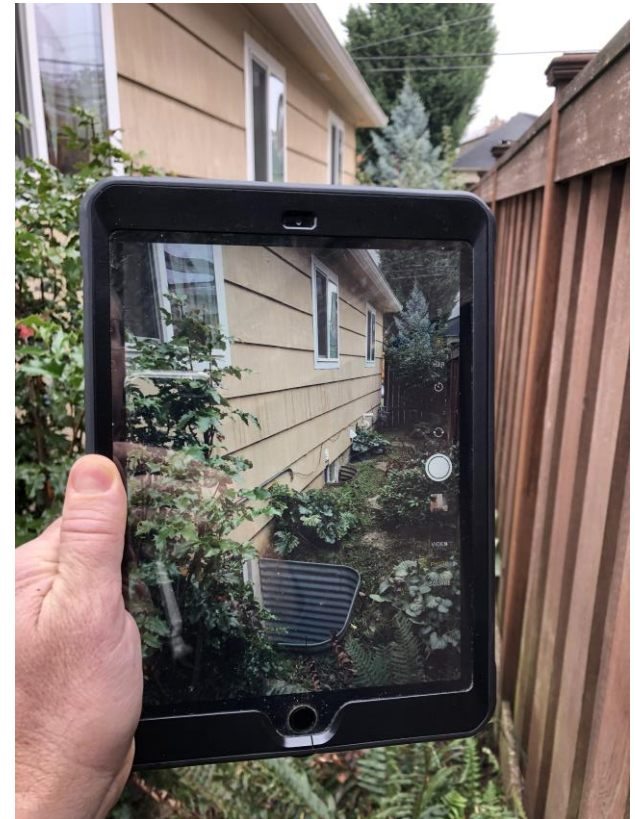
# Livestream Applications

## Examples of Live Stream Photo Capture



# Considerations for Remote Assessment

- What data can be gathered online?
- How much data can be collected remotely?
- Prepping homeowner and Assessor
- Geographical location
- Homeowner demographics
- Application or device issues
- House configuration complexity
- Homeowner or Assessor challenges
- Low light scenarios





# HES Remote Assessment and QA Research

- Developing methodology with PNNL
- Identify HES Assessors
- Conduct 30 Remote Assessment Sessions
- Conduct 10 Remote QA Sessions
- Record Session Data and Feedback
- Conduct data analysis
- Conduct Comparison of live stream session to Current QA Process



# Research Outcomes

- How accurate is the Remote Assessment approach?
- Do live stream applications work in place of photo upload?
- Identify barriers and limitations
- Identify key application features
- Establish baseline criteria
- Provide Summary Report and make recommendations



# **Thank You**

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