EVALUATION SUCCESS STORIES

Kim Sherman, Xcel Energy
Mat Gates, Residential Science Resources
EPA REQUEST

- Sample of 75 Homes
- Participating in the ENERGY STAR Homes Program by Xcel Energy
- Same Basic Size
- Same City/County
EPA REQUEST

- Sample of 75 Homes
- Participating in the ENERGY STAR Homes Program by Xcel Energy
  - Same Basic Size
  - Same City/County
- Different Builders
- Energy Modeling
- Blower Door Results
- Actual Customer Energy Usage
- Corresponding Weather data
POTENTIAL BARRIERS

- Privacy Issues
  - Prohibit utilities from releasing proprietary customer and builder information
POTENTIAL BARRIERS

▷ Privacy Issues
  ▷ Prohibit utilities from releasing proprietary customer and builder information

▷ Pulling Accurate Billing Data
  ▷ Overcoming issues of varying billing cycles, multiple readings for the same consumption

▷ Aligning Modeling Data
  ▷ To the energy usage data

▷ Providing Weather Data
POTENTIAL BARRIERS

Privacy Issues
- Prohibit utilities from releasing proprietary customer and builder information

Pulling Accurate Billing Data
- Overcoming issues of varying billing cycles, multiple readings for the same consumption

Aligning Modeling Data
- To the energy usage data

Providing Weather Data

Resources Commitment
SOLUTIONS

- Eliminate Proprietary Information
  - Use a naming convention the files 1 – 75.
- Use Invoice Data
  - Not meter read data for usage.
- Align Blind Data
  - Using 1 – 75 naming convention.
- Energy Forecasting Dept.
  - For weather data.
PROCESS

› Identified homes based on location and size
› Pulled the REMRate and blower door test files
› Removed proprietary information from the files
› Renamed the files using a naming system of 1 – 75
PROCESS

- Pulled 13 months worth invoice data for kWh and Therms to provide a full year of energy usage to overcome varying billing dates
  - Removed proprietary information from energy usage data
  - Named files using the same naming scheme 1 - 75
- Energy Forecasting department was able to provide weather for the same time period
  - Monthly weather summary data and daily average temperature graphs
- Submitted all Information
TIME COMMITMENT

- 4 hours
- 12 hours