THE STARS ARE ALIGNED:
QUANTIFYING NON-ENERGY
IMPACTS IN COMED'S
INCOME ELIGIBLE
PROGRAMS

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**DECEMBER 4, 2018** 



#### **PRESENTATION OVERVIEW**

- •BACKGROUND QUANTIFYING NON-ENERGY IMPACTS (NEIS) IN ILLINOIS
- FUTURE ENERGY JOBS ACT
- •RESEARCH PLAN TO QUANTIFY NEIS
- PARTICIPANT AND SOCIETAL NEIS
- •QUANTIFYING PARTICIPANT AND SOCIETAL NEIS
- LINKING ENERGY EFFICIENCY MEASURES TO NEIS
- •NEI EXPECTED OUTCOMES
- LESSONS LEARNED
- Partners & Collaborators

# ILLINOIS STAKEHOLDER ADVISORY GROUP ATTEMPT TO QUANTIFY NEIS



2015 - 2016

# January 2016Memo

#### No Consensus on Methods

#### Identified Barriers:

- Lack of Primary IL-Data
- Lack of transparency

#### **MEMORANDUM**

TO: TECHNICAL ADVISORY COMMITTEE

FROM: CHERYL JENKINS, PROJECT MANAGER and SAM DENT, TECHNICAL LEAD - VEIC

SUBJECT: DOCUMENTATION OF TAC REVIEW OF NON ENERGY BENEFITS

**DATE:** 01/08/2016

Cc: ANNETTE BEITEL, SAG

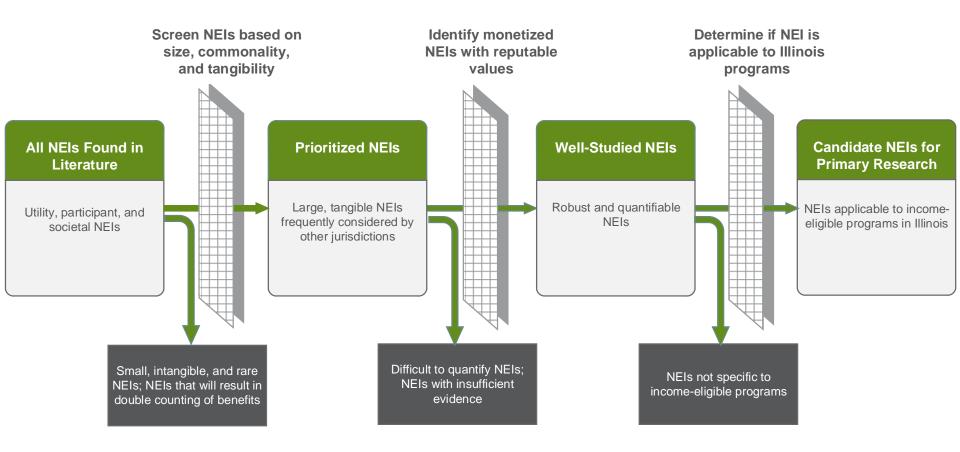
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#### DECEMBER 2016: ILLINOIS FUTURE ENERGY JOBS ACT INCLUDED PROVISION TO QUANTIFY NEIS



# 2018: RESEARCH PLAN TO QUANTIFY NEIS ASSOCIATED WITH COMED INCOME ELIGIBLE EE PROGRAMS IN PHASE 1 AND OTHER PORTFOLIO PROGRAMS IN PHASE 2



COLLECT NEI
DATA VIA INCOME
-ELIGIBLE EE
PROGRAM
PARTICIPANT
SURVEYS



# INCLUDE NEIS IN ILLINOIS TECHNICAL REFERENCE MANUAL AND TOTAL RESOURCE COST TEST CALCULATIONS

Illinois Statewide Technical Reference
Manual for Energy Efficiency
Version 6.0

Volume 2: Commercial and Industrial
Measures

FINAL
February 8th, 2017

Effective:
January 1st, 2018

Illinois Statewide Technical Reference

Manual for Energy Efficiency

Version 6.0

Volume 3: Residential Measures

FINAL
February 8<sup>th</sup>, 2017

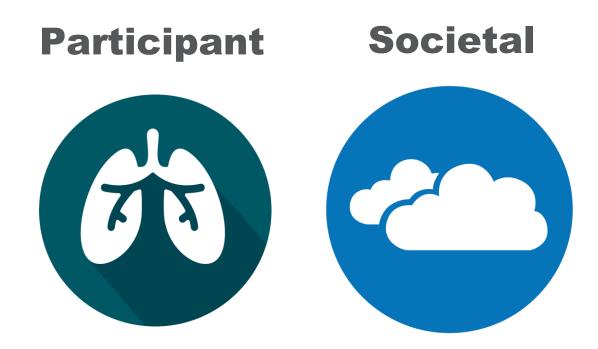
Effective:
January 1<sup>st</sup>, 2018

**Total Resource Cost Test** Energy Other Fuel Security Impacts Impacts Jobs & Econ Water Development Impacts Impacts Utility System **Public Health Impacts Participant** Impacts Impacts **Environmental** Low Income Participant Impacts Impacts Low Income Societal Impacts

Practice Manual for Assessing Cost-Effectiveness of Energy Efficiency Resources EDITION 1 Spring 2017

## PARTICIPANT AND SOCIETAL NEIS IN INCOME ELIGIBLE PROGRAMS

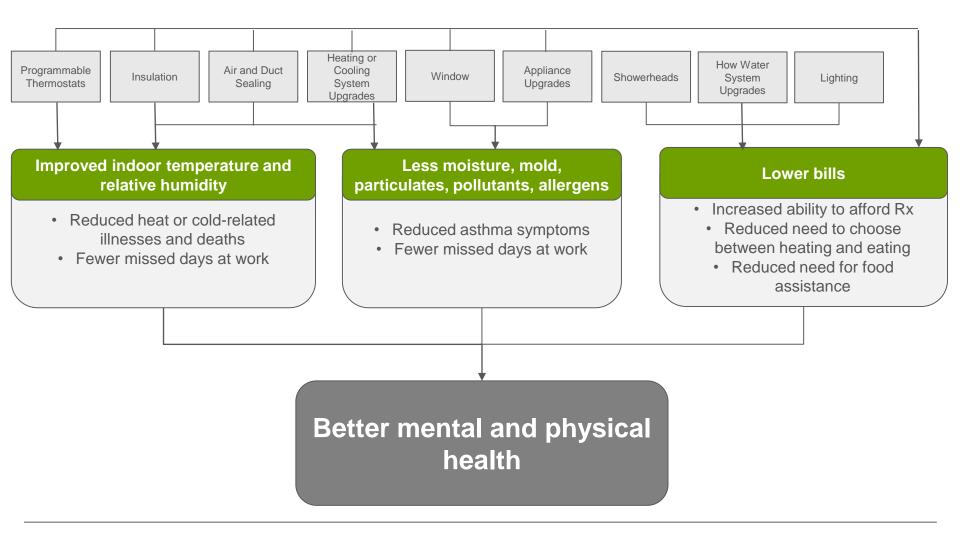
In addition to utility NEIs, Navigant is quantifying participant and societal NEIs which contain health and environment benefits.



### OVERVIEW OF EXPECTED AND POSSIBLE NEIS ASSOCIATED WITH INCOME ELIGIBLE PROGRAMS

#### **Participant** Societal Reduced Reduced Reduced Need for short term loans Asthma Need for food assistance Odors Thermal Stress (cold/heat) Need to choose btwn heating Vacancy Food poisoning and eating Maintenance **Diabetes Improved Tenant Complaints Arthritis** Community Resilience **Improved** Need for public assistance Ability to afford prescriptions Home productivity Missed days at work / school Work/School Productivity Sleep COPD Marketability CVD Durability of property Trips and Falls **Improved** Mental Health

#### LINKING ENERGY EFFICIENCY MEASURES TO NEIS



### QUANTIFYING PARTICIPANT AND SOCIETAL NEIS IN INCOME ELIGIBLE PROGRAMS

# **Quantification Methodology**

- Online / Telephone Surveys
  - SF IE Customers
  - MF IE Customers
  - MF IE Property Managers
- Survey design
  - Pre-weatherization survey
  - One-year post-weatherization survey

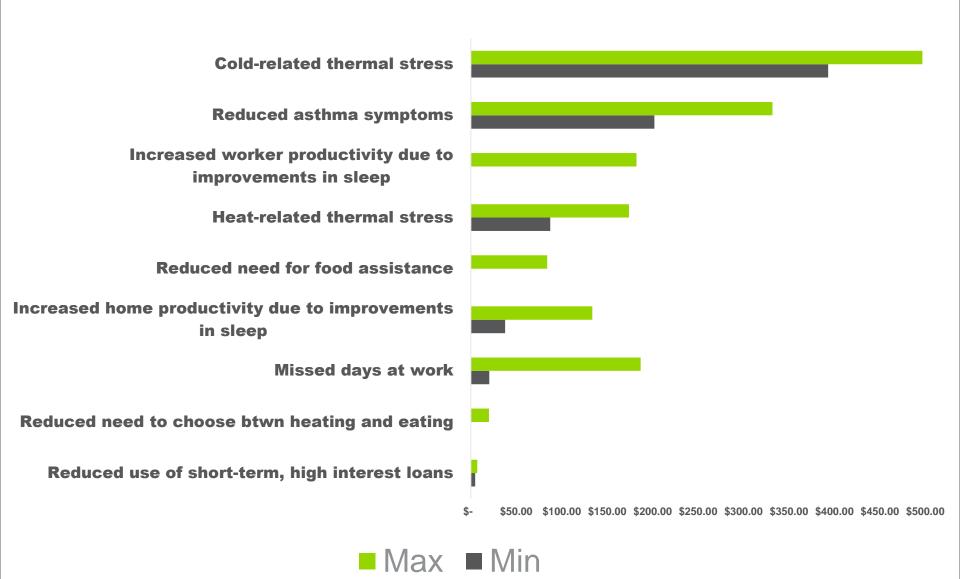
## **Monetization Methodology**

- Collect Illinois specific cost data
- Quantify the reduction in hospitalizations, ED, and physician office visits avoided
- Quantify the cost for participants
- Quantify the cost for society

Outcome: % reduction in health issue

Outcome: \$ value benefit / household weatherized / year

#### **NEI EXPECTED OUTCOMES (PER HOUSEHOLD/YEAR)**



#### **LESSONS LEARNED**

- Researching longer term health impacts (e.g., cancer, cardiovascular disease, lead exposure, chronic respiratory illness) is challenging for utilities.
- Linking utility customer information to hospital information to confirm health incidence is unlikely
- Accessing health data in state databases is unlikely
- Acquiring contact information for multifamily tenants where building owner is program participant may not be feasible
- Lack of consistent methodologies requires significant secondary research

#### PARTNERS & COLLABORATORS



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#### Illinois Energy Efficiency Stakeholder Advisory Group

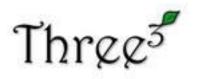
















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