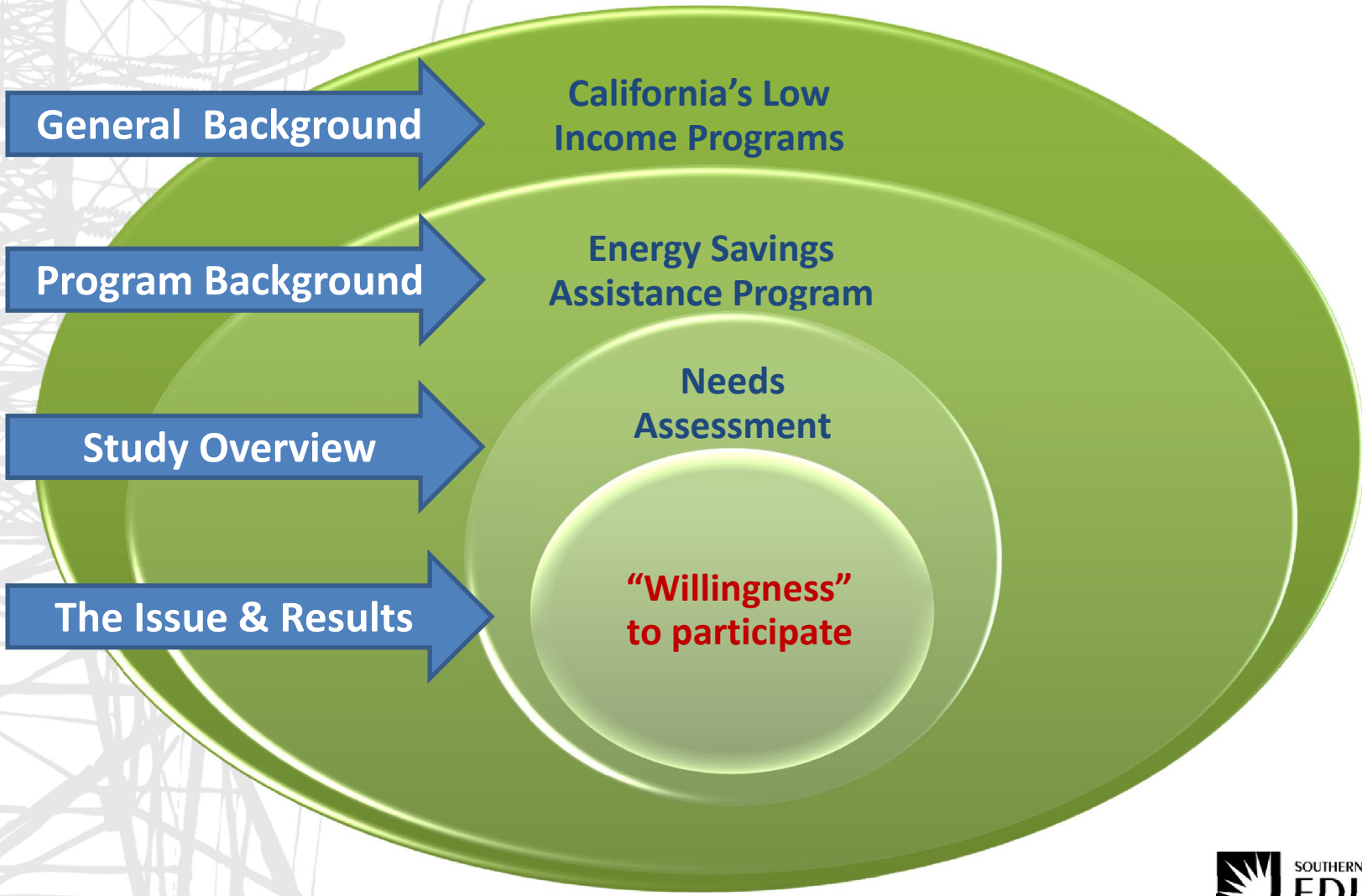


Beyond Traditional Methods to Understand Customers' Willingness to Participate in a Low Income Energy Efficiency Program

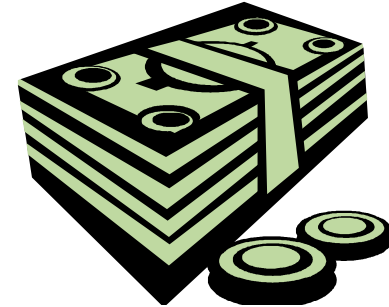
Carol M. Edwards, Ph.D., Southern California Edison
Tami Rasmussen, Evergreen Economics

Behavior Energy Climate Change Conference
Washington DC
December 2014

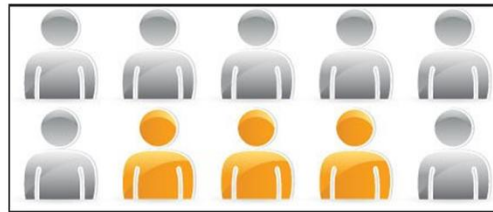
Today's Discussion



Commission approved
\$5 BILLION
for 2012-14 programs



California's Income Qualified Programs



1/3 of California's residents qualify
for the programs
5.3 MILLION customers

Background

- ✓ Rate Payer Funded Direct Install Program
- ✓ Serves Low Income Customers
- ✓ Provided via Investor Owned Utilities
 - Pacific Gas & Electric
 - Southern California Edison
 - Southern California Gas
 - San Diego Gas & Electric
- ✓ Oversight via California Public Utilities Commission
- ✓ In 2012 \$275 million spent on ESA

Energy Savings Assistance Program

Purpose

- ✓ Reduce financial burden of energy bills
- ✓ Provide measures customers may not be able to afford
- ✓ Health, comfort and safety
- ✓ Assist in reduction of GHG for State

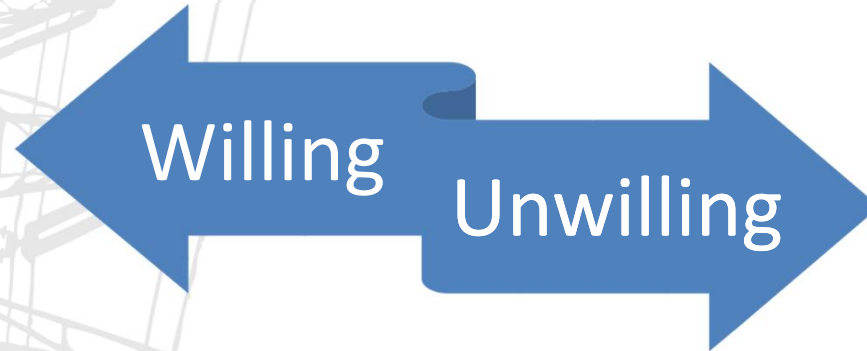
The Issue...

2005 data suggest 95% of eligible customers are “willing” to participate

HOWEVER....

2013 results suggest **ONLY 52%** are “willing” to participate in this “free” program

Why do we care?



PROGRAM GOALS, FUNDING, and ACHIEVEMENTS are based on reaching **ALL (100%!!)** of the eligible **AND willing** customers by 2020.

2013 Research

Energy Savings Assistance Program Statewide Studies

- ✓ Impact Evaluation
- ✓ Multifamily Segment Study
- ✓ Energy Education Study
- ✓ **Needs Assessment**

The 2013 Needs Assessment

Research Objectives

- ✓ Report on eligible households
- ✓ Explore program accessibility
- ✓ Obtain participant perceptions of the programs
- ✓ **Assess willingness and barriers to participate**
- ✓ Assess energy-related needs
- ✓ Provide data to support savings potential updates
- ✓ Examine energy burden
- ✓ Assess non-energy benefits

The 2013 Needs Assessment

Research Methods & Approach

- ✓ Literature Review
- ✓ Program staff and contractor interviews
- ✓ Customer telephone surveys (n=1028)
- ✓ Participation statistical models
- ✓ Conjoint analysis
- ✓ In-home visits (n=88)
- ✓ Low-income program review

Understanding “willingness”

The phone survey included...

- ✓ Brief Program Description
- ✓ The Question
- ✓ The Response

2005

Your utility offers a program that helps households use less energy. The program does this by sealing air leaks, insulating attics, and fixing or replacing equipment or

72% = "very willing"
20% = "somewhat willing"
3% = "only a little willing"
5% = "not at all willing"

Assuming your household was eligible, how willing would you be to participate in the program?

2013

Energy Savings Assistance, provides free home improvements to income-qualified households. It offers information on safety and ways to save energy, energy efficient light bulbs, and sometimes improvements such as refrigerators or attic insulation....

If you sign up for Energy Savings Assistance, a contractor will come to your home to fill out the program. If you are eligible, you will see a contractor for, sometimes weather stripping around doors and windows, and sometimes new appliances or equipment to replace old or broken ones. Some of these home improvements would be installed by another contractor during another visit or two to your home.

36% = "very willing"
35% = "somewhat willing"
29% = "not at all willing"

Why such different results?

More explanation of what participation requires

- ✓ Time involved
- ✓ Measures you may/may not get
- ✓ Number of visits
- ✓ People in your home

Keep in mind....Only non-participants are surveyed

- ✓ Results apply REMAINING eligible population

Additional data sources



Triangulation
provided additional data
& perspective on the issue

Additional data sources

In-Home Interviews with eligible nonparticipants

Conjoint survey

Interviews with program staff

Modeling of participation data

Interviews with contractors

Examination of program tracking data

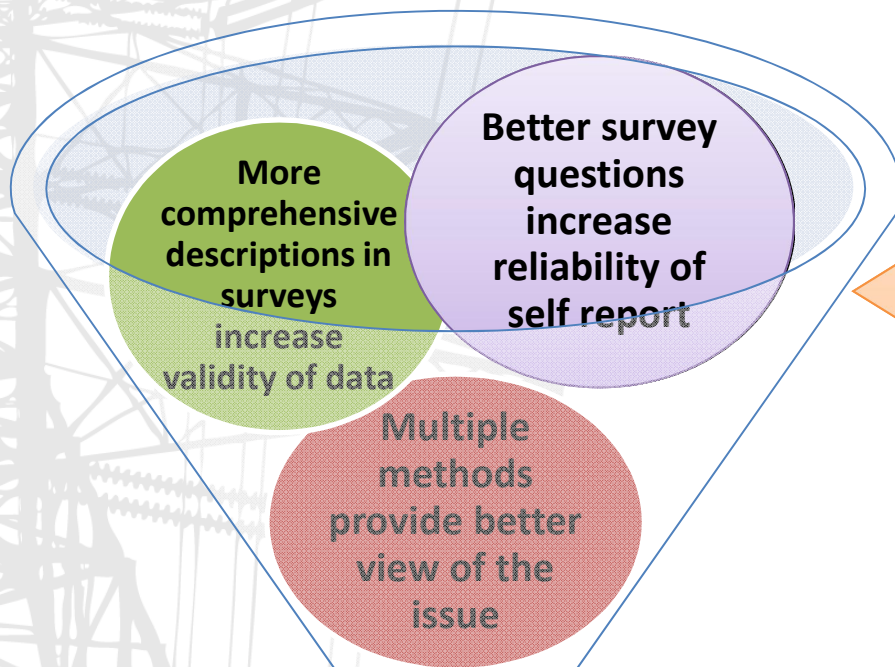
Consider Non-response bias

Conclusion

“Based on multiple methods, we estimate that the willingness to participate in ESA among non-participants is 52 percent.”



Key Take-Aways



- ✓ Evaluations Matter!
- ✓ Evaluation budgets commensurate with issues
- ✓ Data collection and analysis suit issue
- ✓ Interpretation of results includes relevant context

What we KNOW about behavior & our ability to influence behavior

Significant Program & Policy Issues

For More Information

The Low Income Needs Assessment
Full report (3 Volumes) publically available at

<http://www.calmac.org>

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