



# **Evaluation Practices Nationwide Survey: Results and Implications**

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Marty Kushler

Seth Nowak

# TOPICS

- Background for the ACEEE national survey
- Highlight results from the survey
- Some practical observations and recommendations regarding key evaluation issues observed in the survey

# BACKGROUND FOR ACEEE NATIONAL SURVEY

## THE CONCERN

- Each state is its own “kingdom” when it comes to regulating utilities and utility (ratepayer funded) energy efficiency programs
- Evaluation requirements, methodologies and assumptions vary considerably from state to state
- Difficult to make comparisons across states in terms of energy efficiency program results..... and state “performance”
- Some have called for the establishment of a “national standard” for energy efficiency program evaluation

# THE ACEEE STUDY

- ACEEE completed a national survey to identify and document state approaches to energy efficiency program evaluation
- Surveyed appropriate persons (typically regulatory staff) in each of the 50 states plus D.C.\*
- Detailed results available in the full report:

*A National Survey of State Policies and Practices for the Evaluation of Ratepayer-Funded Energy Efficiency Programs*

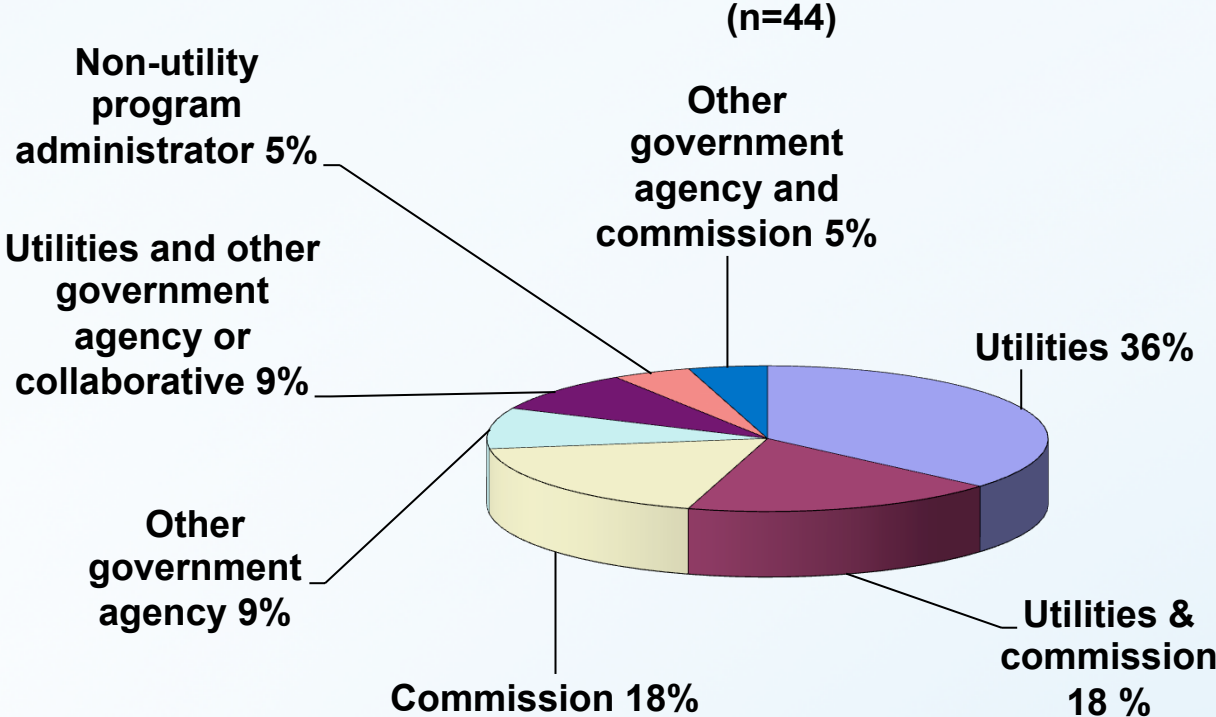
<http://www.aceee.org/research-report/u122>

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- \* 6 states were found to not have formally approved utility energy efficiency programs, resulting in a final population of 44 states

# ONE BROAD CONCLUSION

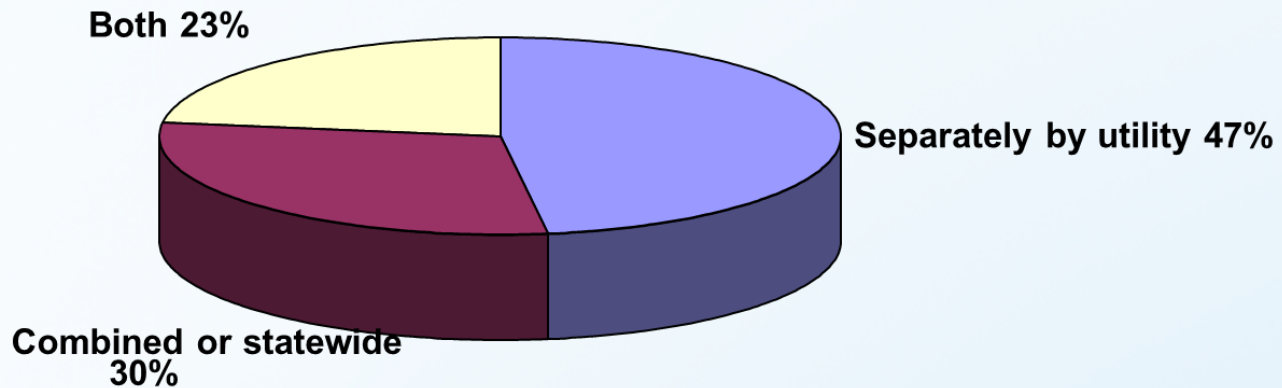
*There is indeed a great deal of variation across the states in terms of how they approach the issue of evaluating ratepayer-funded energy efficiency programs*

# Evaluation Administration



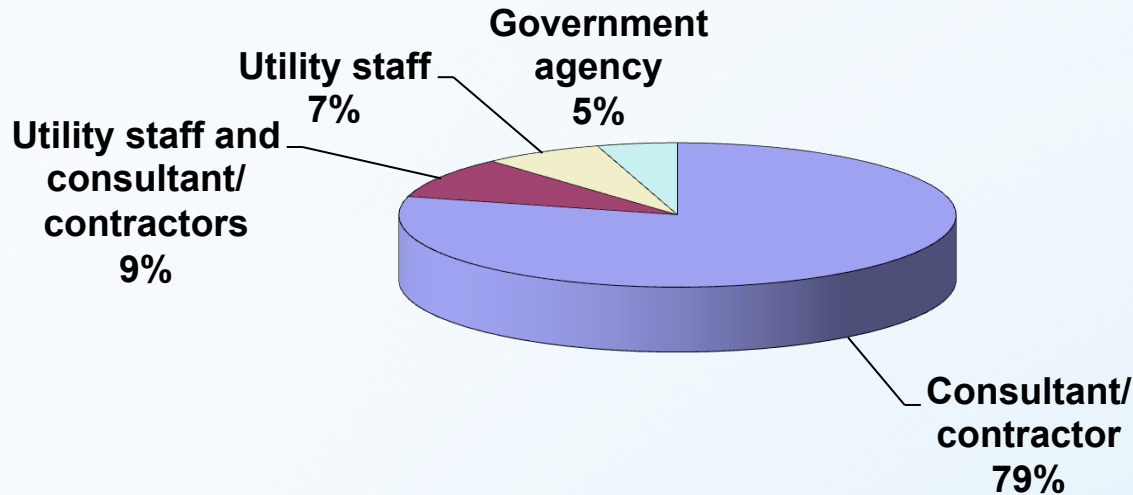
# Combined/Statewide or Separate Evaluation

Combined/Statewide or Separate Evaluation  
(n=44)



# Who Conducts Actual Evaluation Studies

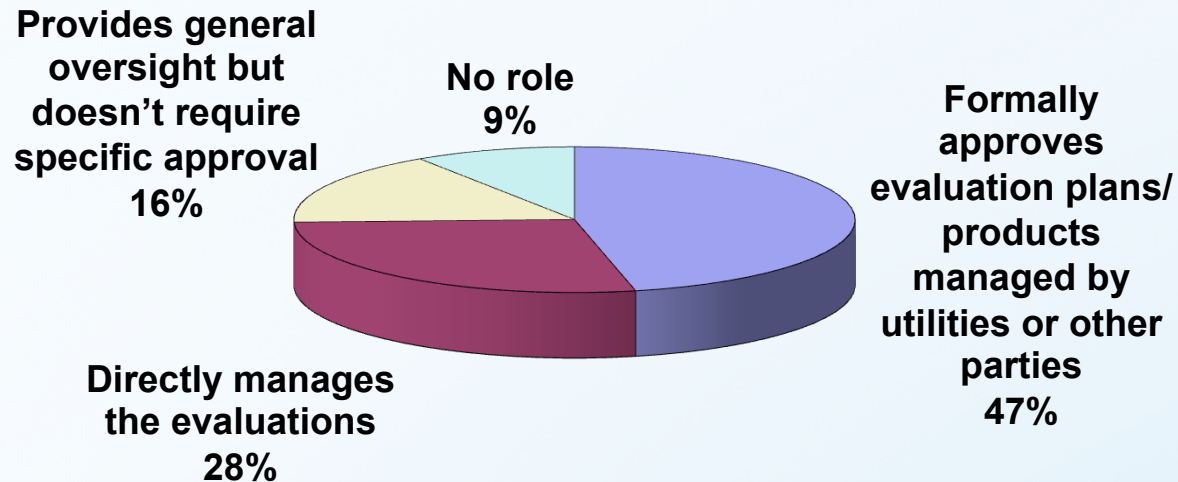
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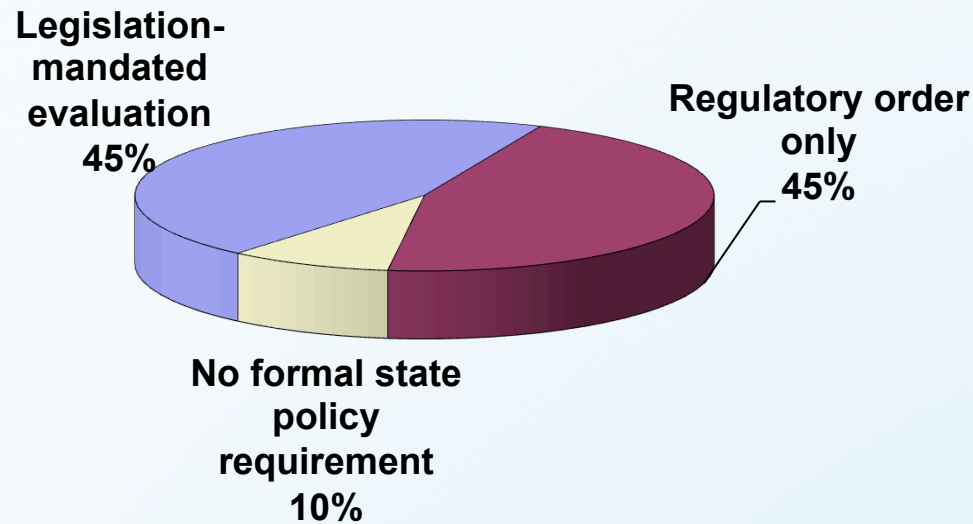
# Commission Roles with respect to Evaluation Process

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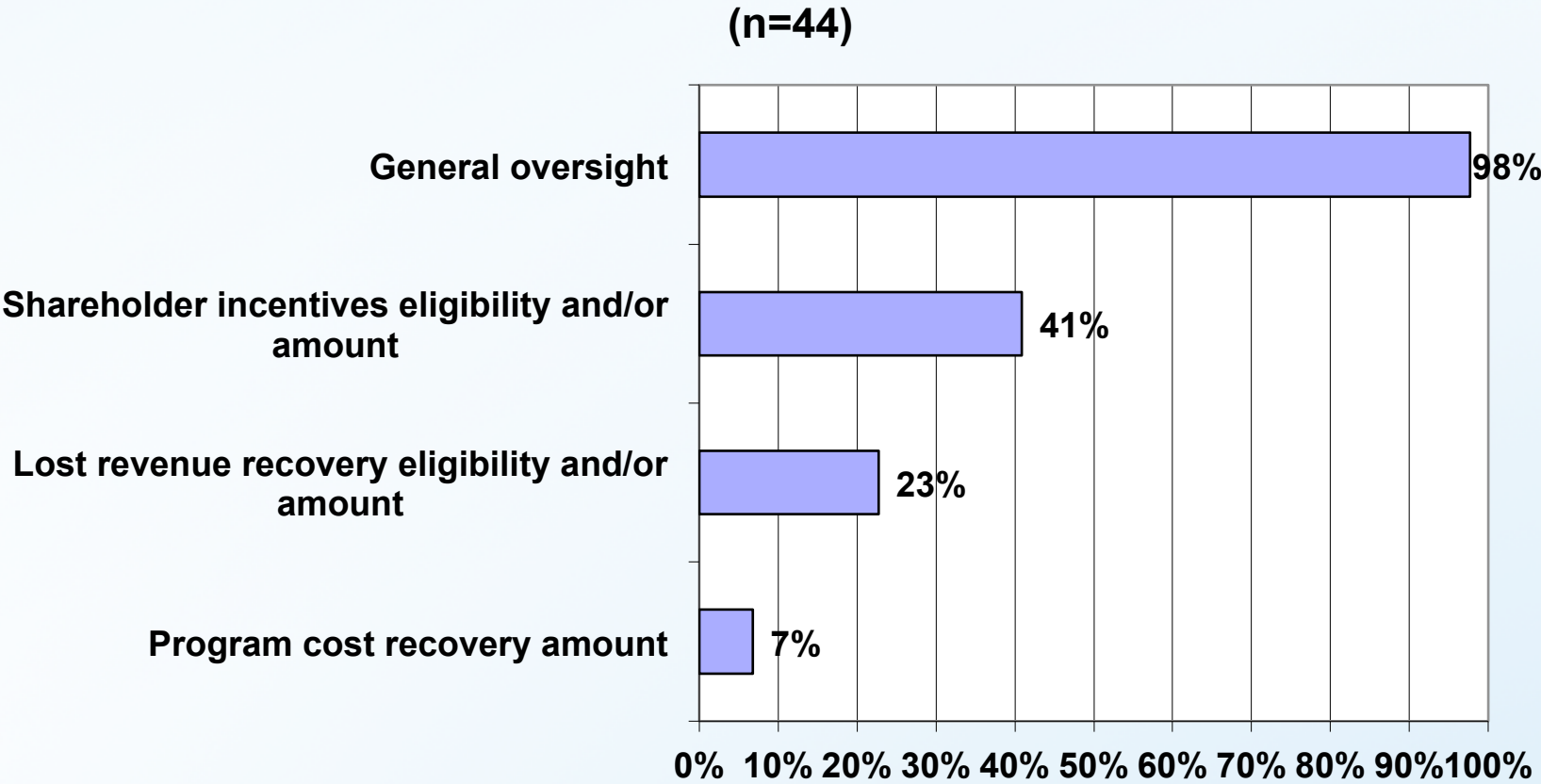


# Statutory and Regulatory Requirements for Evaluation

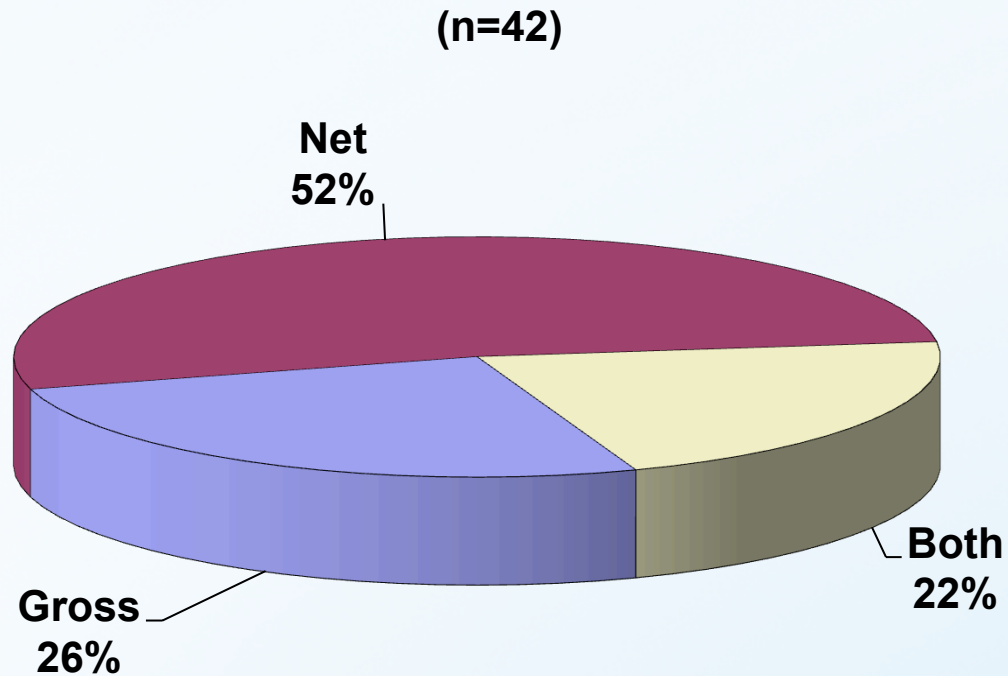
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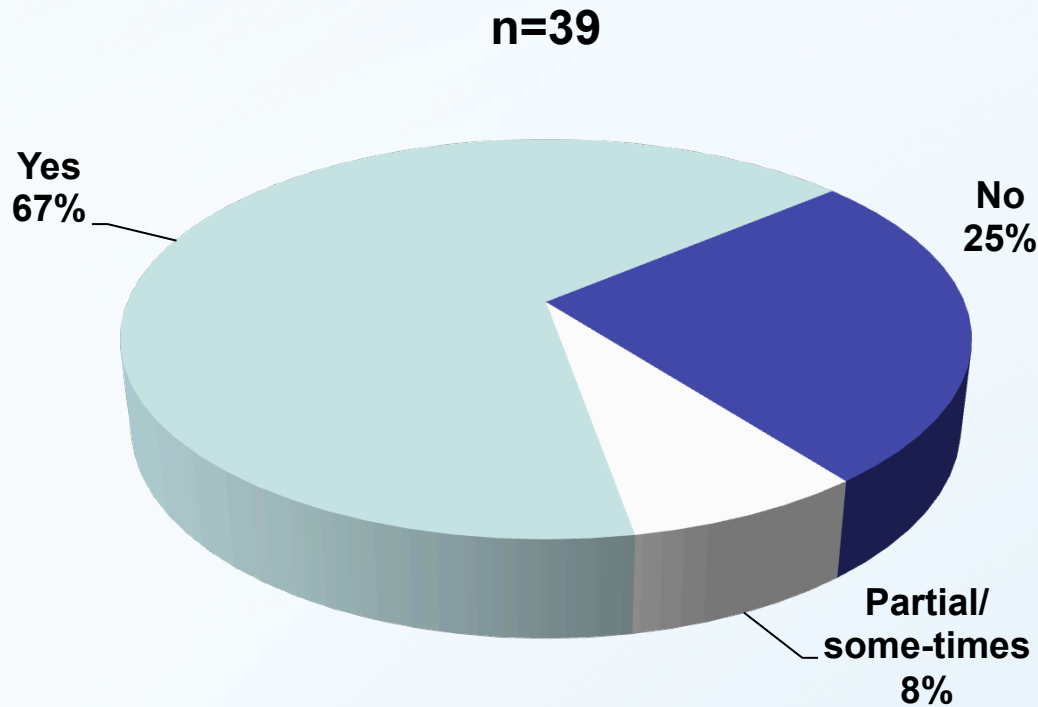
# Uses of Evaluation Results



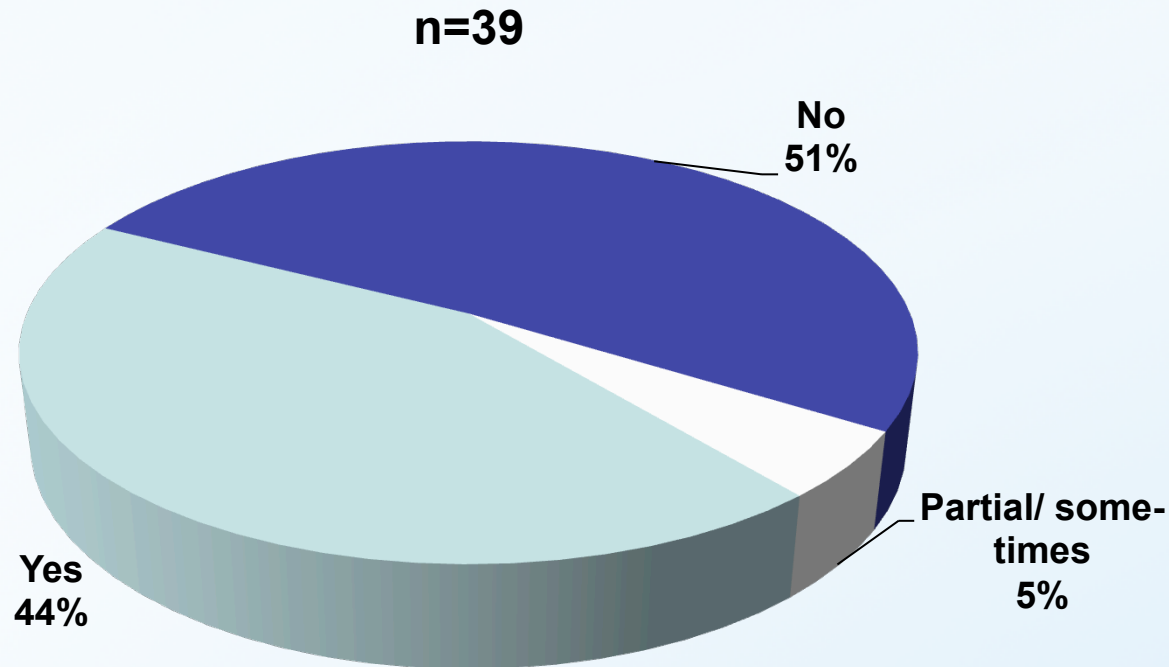
# Savings Reported as Net or Gross



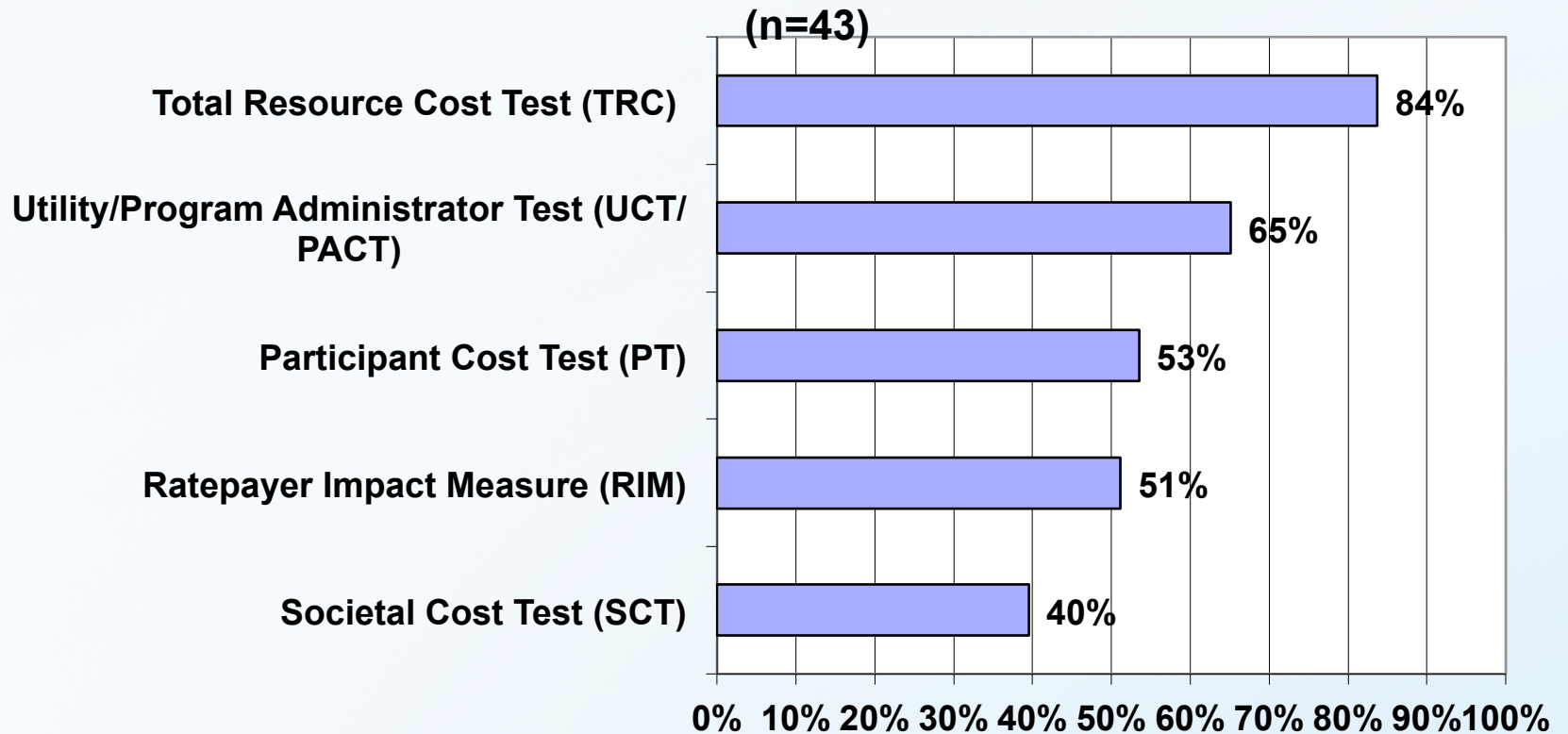
# Adjustments of Energy Savings Attributable to Programs for Free Riders



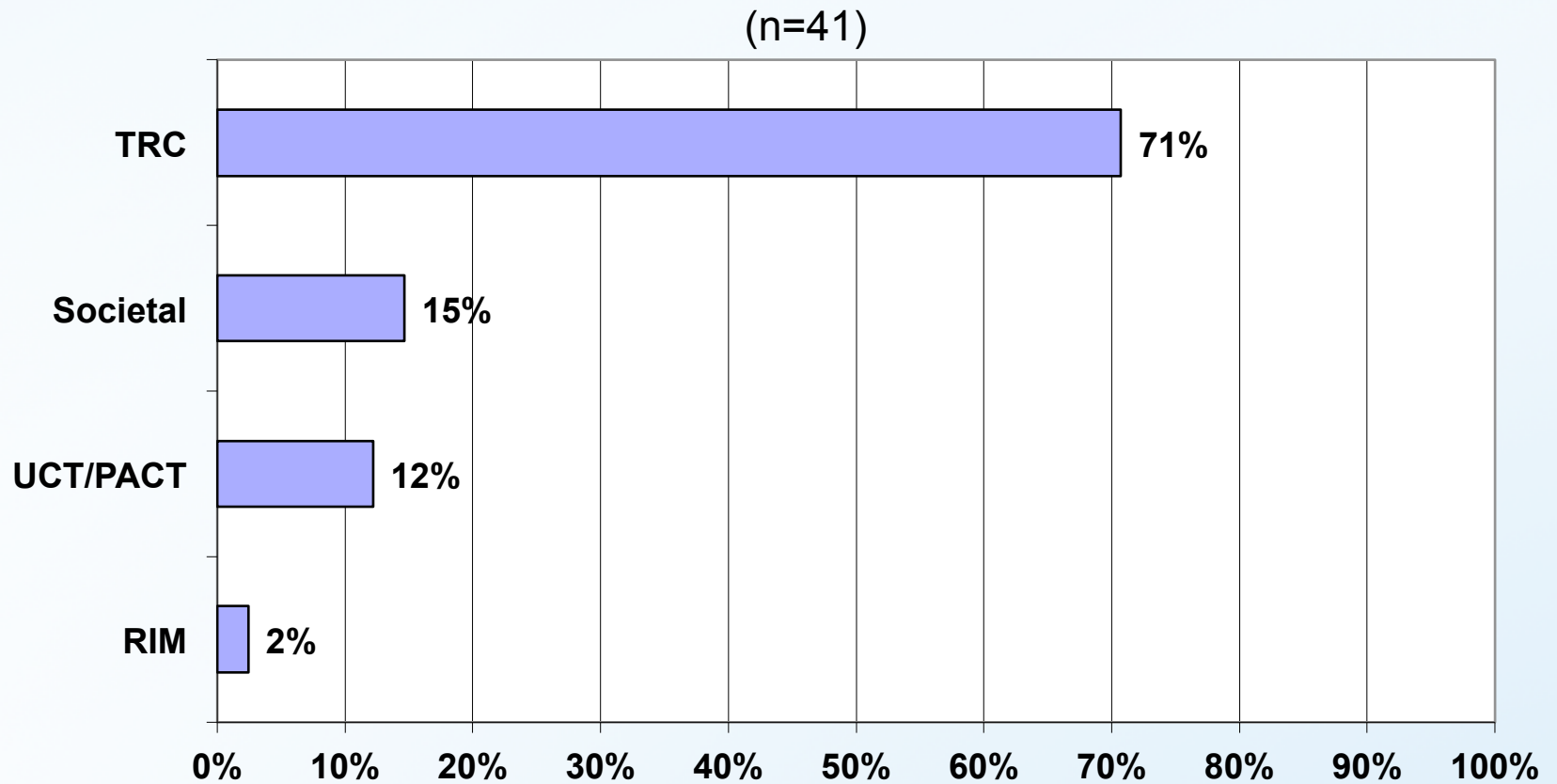
# Adjustments of Energy Savings Attributable to Programs for Free Drivers/Spillover



# Percent of States Using Each Benefit-Cost Test

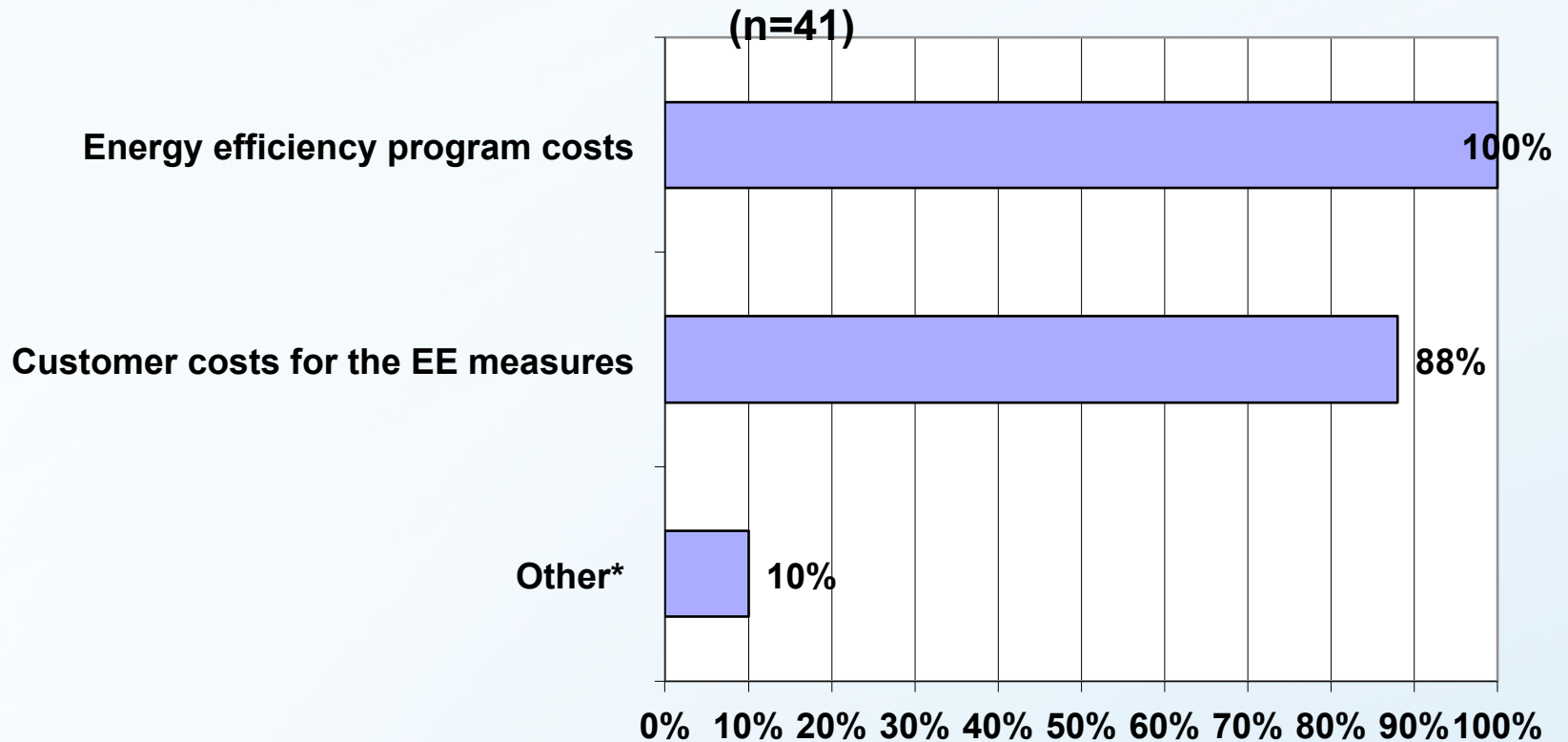


# Primary Benefit-Cost Test



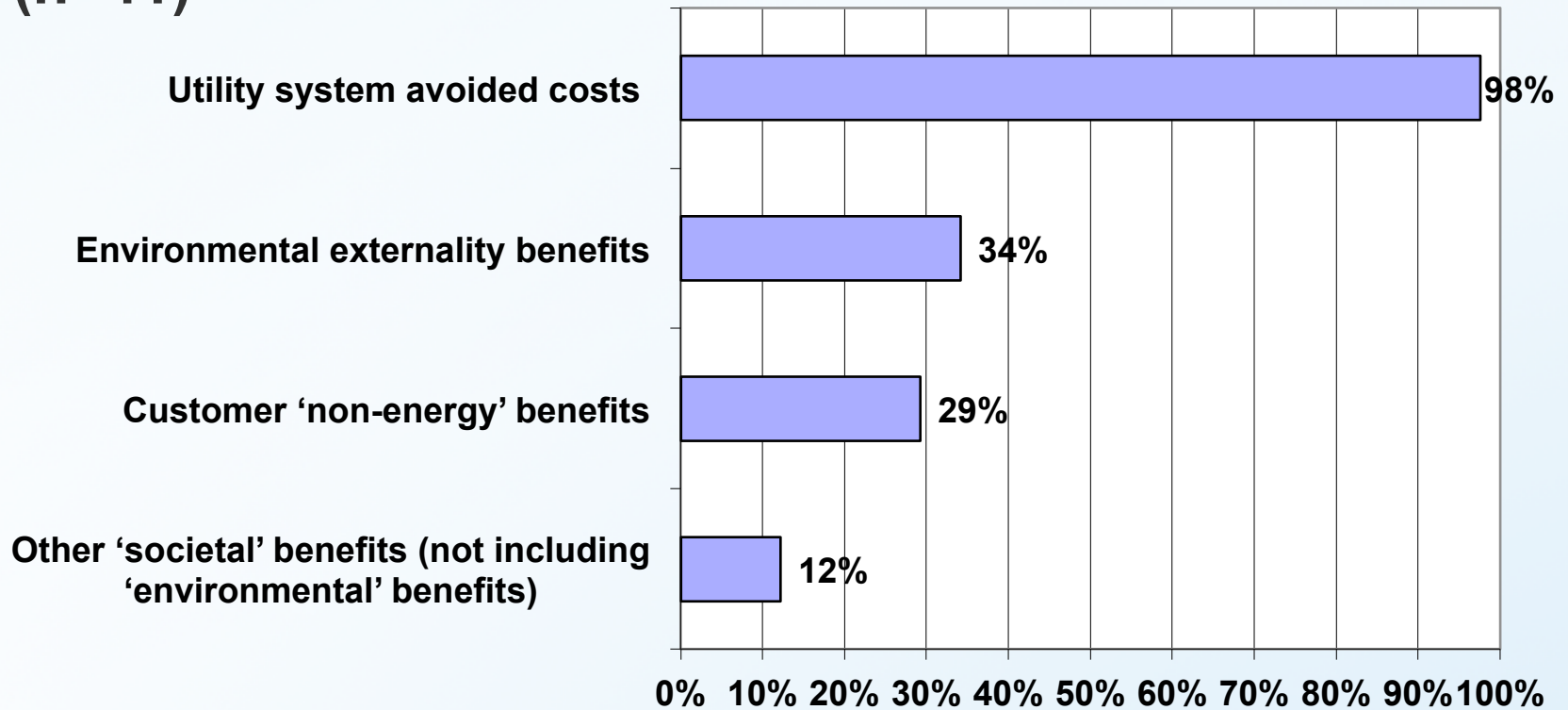


# Costs Included in Primary Benefit-Cost Test

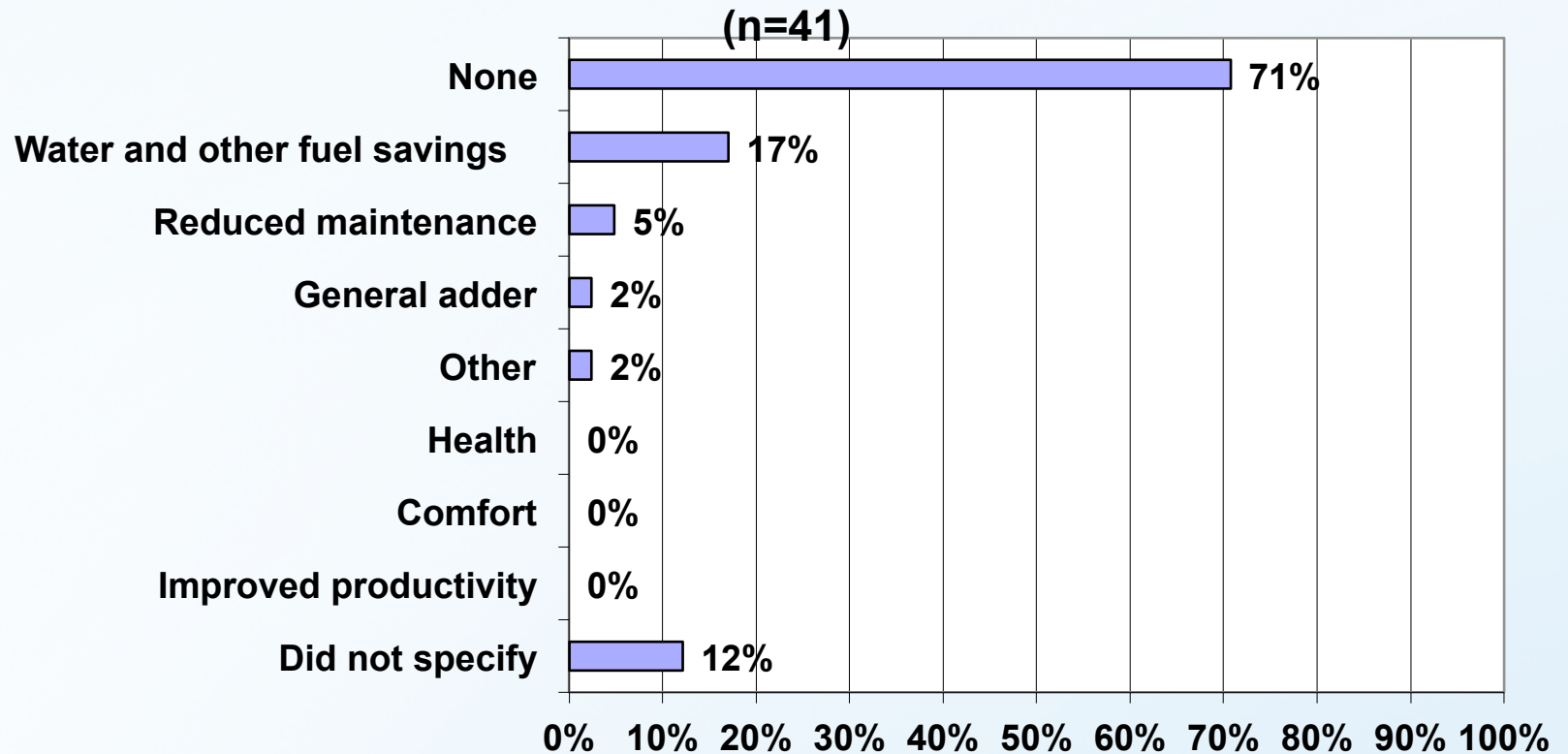


# Benefits Quantified in Primary Benefit-Cost Test (or the TRC, if no primary)

(n=41)

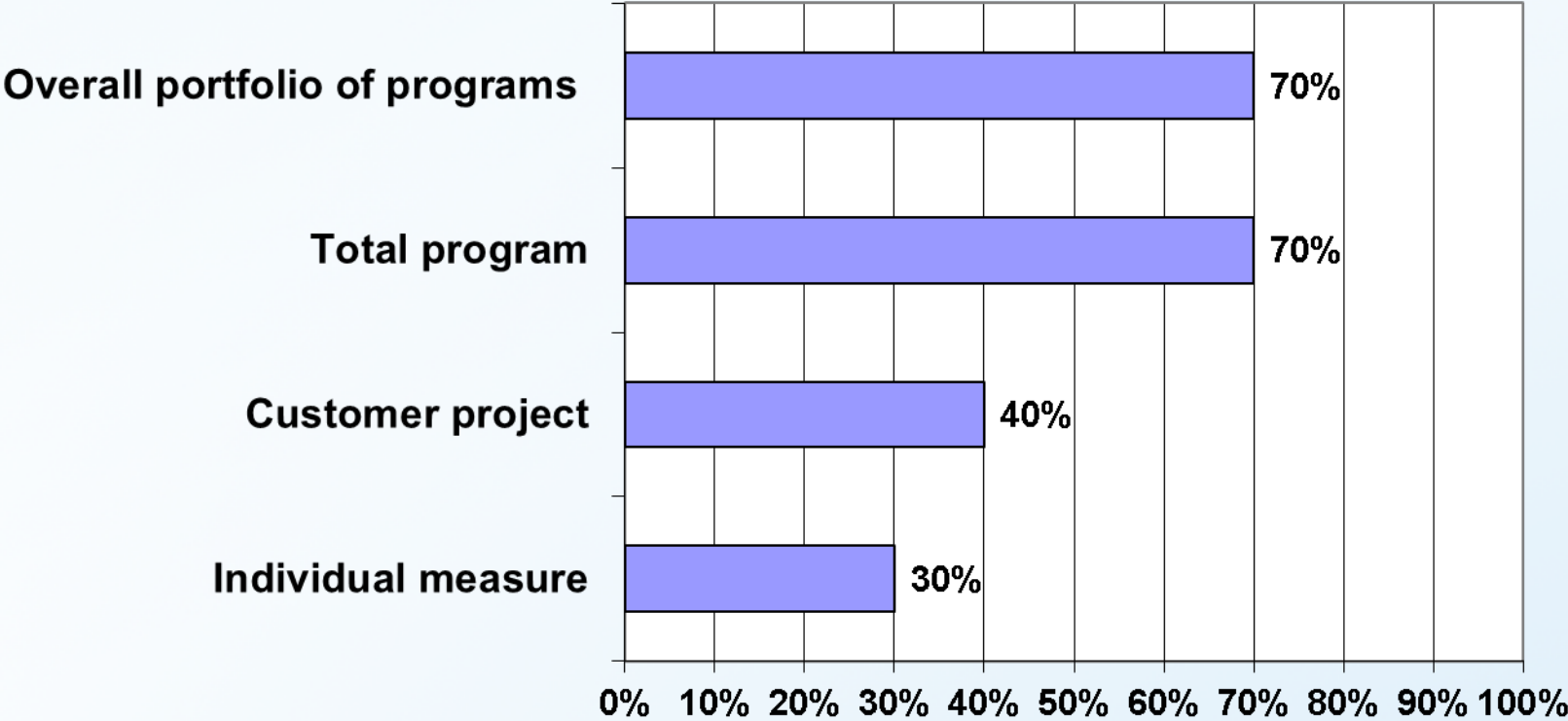


# Percent of States Including Customer Non-Energy Benefits

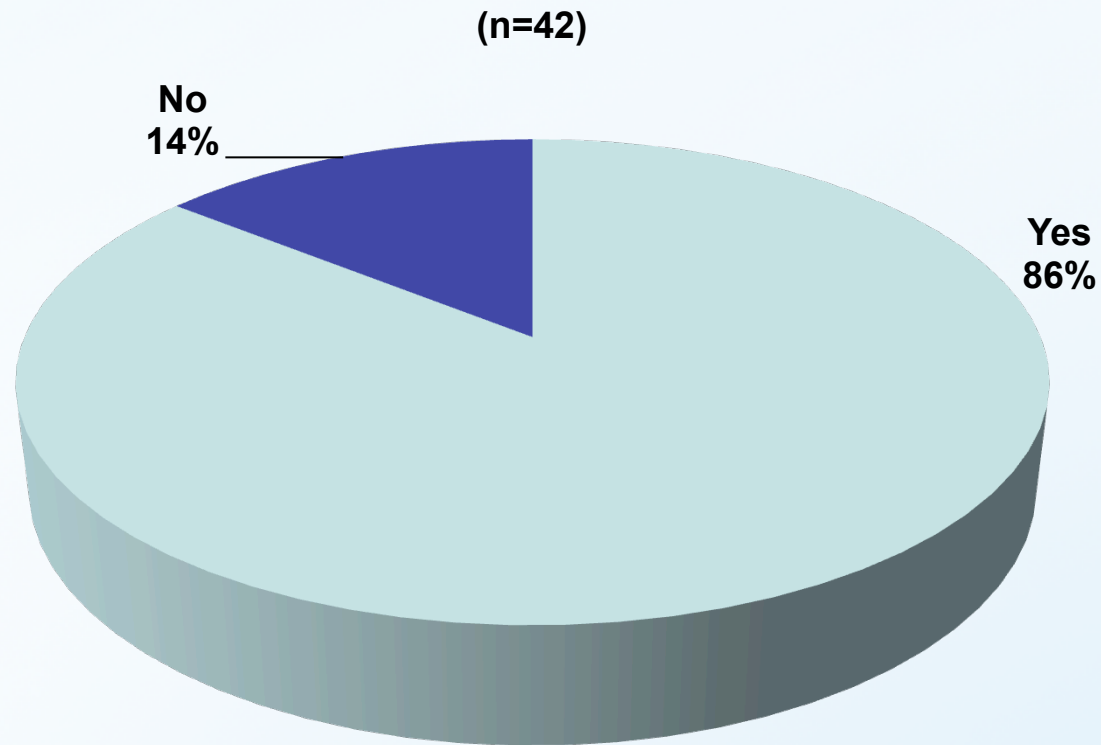


# Benefit-Cost Screening Level

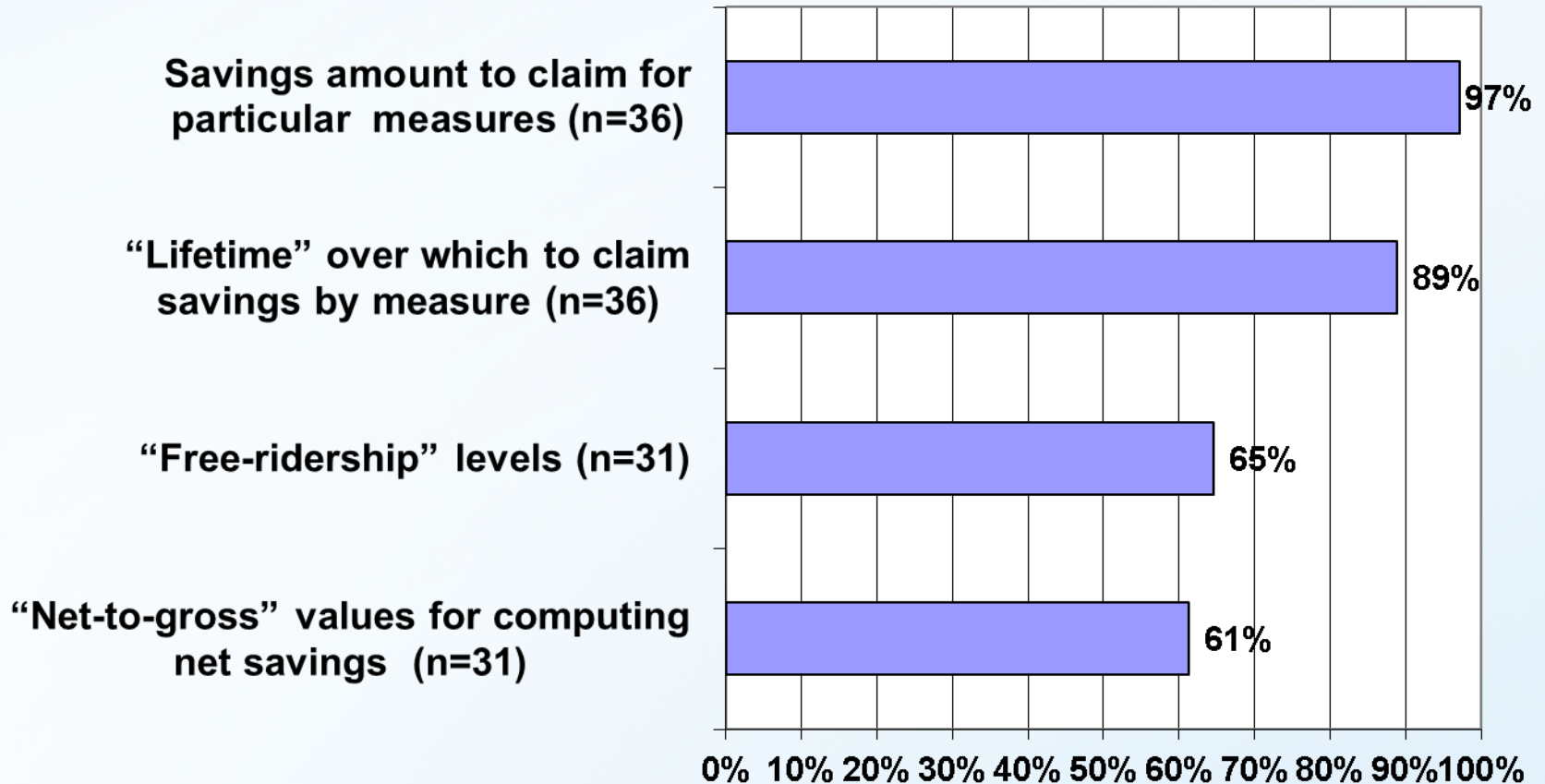
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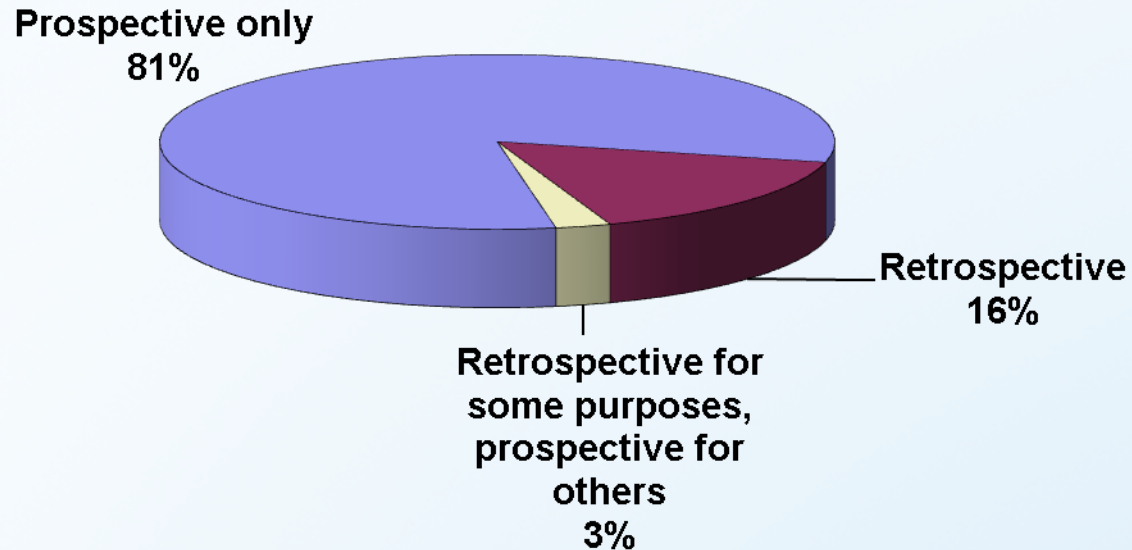
# States Using Deemed Values to Calculate Savings



# Prevalence of Key Variables “Deemed” (% of States Responding)



# Application of Evaluation Results to Program-related Input Variables



***SOME PRACTICAL OBSERVATIONS/RECOMMENDATIONS  
REGARDING EVALUATION OF RATEPAYER-FUNDED  
ENERGY EFFICIENCY PROGRAMS***



# ADMINISTRATION AND LEGAL FRAMEWORK

- No basis for recommending any particular legal or administrative structure
- Is helpful to have some statutory authority for regulators to require program evaluations
- Leave *details* of evaluation rules and procedures to the regulatory setting
  - More expertise and experience with utility matters
  - Ability to more thoroughly examine the issue

# ROLE OF OUTSIDE PARTIES

- Can be beneficial to have a structure to involve outside parties in the evaluation process
  - Secure “buy-in” on the front end, help reduce objections and legal challenges on the back end
  - But try to ensure that such processes don’t result in unnecessary delay or obstruction
  - Some good state examples exist

# USE OF EVALUATION RESULTS

- Use for “general oversight” is ubiquitous
- Less need for statistical precision and methodological rigor when used for purposes of oversight and prudence
- Need for methodological rigor and precision increases when discretionary monetary allocations are at stake  
(e.g., performance incentives, “lost revenue” recovery, etc.)
- Don’t forget *process evaluation*

# COST-EFFECTIVENESS TESTS

- A major issue of discussion these days
- Concerns about “imbalance” of the currently dominant test (TRC)
- Apply B/C screen at the program and portfolio level
- Don't use RIM test as a screen

# USE OF 'DEEMED SAVINGS'

- Very widespread practice
- Some legitimate rationale for this, for EM&V time and cost savings
- Needs to be accompanied by, and updated by, periodic rigorous, full-scale program evaluations

# RETROSPECTIVE VS. PROSPECTIVE APPLICATION OF EVALUATION RESULTS

- Some variability across states, with ‘prospective’ being the predominant approach
- Application should be tailored to fit the intended use

Examples:

- ‘prospective’ for purposes related to judging ‘performance’ of program implementer
- ‘retrospective’ for purposes related to system planning

# NET VS. GROSS

- Substantial variation across states in treatment of this issue (including definition of “net”)
- Increasingly difficult to parse out attribution in a complex world with multiple entities promoting energy efficiency
- If using net, be balanced (both freeriders & freedrivers/spillover)
- Merit in tailoring the approach to the intended use of the data
  - ‘net’ for purposes of program improvement
  - ‘net’ for purposes of calculating lost revenues (decoupling avoids the problem)
  - ‘net-gross’ hybrid for determining performance incentives
  - perhaps ‘gross’ for purposes of gauging state progress toward overall efficiency and environmental goals

# THOUGHTS ON A NATIONAL EVALUATION STANDARD

- ❖ Would certainly help with cross-state comparisons
- ❖ Would help “raise the floor” on evaluation quality in some states
- ❖ May help improve the perception of energy efficiency as a reliable resource
- Runs counter to the tradition of state sovereignty on utility regulation
- May be contentious/difficult to get consensus
- May inhibit certain types of programs
- May be difficult to implement and enforce



# CONCLUSIONS

- Clearly much variability across states in approaches to evaluation
- Certainly desirable to improve transparency and consistency in reporting of results
- Desirable to ‘raise the floor’ of evaluation practice in lagging states
- But some parties are using the lack of consistent standards to discount or impugn the validity of energy efficiency as a resource.

We reject that notion

- ❖ Much excellent evaluation work has been done, and results robustly demonstrate that EE is a very cost-effective resource
- ❖ Regulators routinely deal with much uncertainty in decision-making on supply-side utility system resources
- A national evaluation standard may be helpful, but there is no crisis. No need to delay use of EE as a resource.