American Council for an Energy-Efficient Economy

Beyond Carrots for Utilities:

A National Review of Performance Incentives for Energy Efficiency

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ACEEE Utility Business Models and Regulation Research 2015

1 project, 3 publications: utility performance incentives, lost revenue adjustment mechanisms, and business models overview

Issues:

- Cost recovery
- Profits / earning a return
- Throughput incentive

Defining the Problem

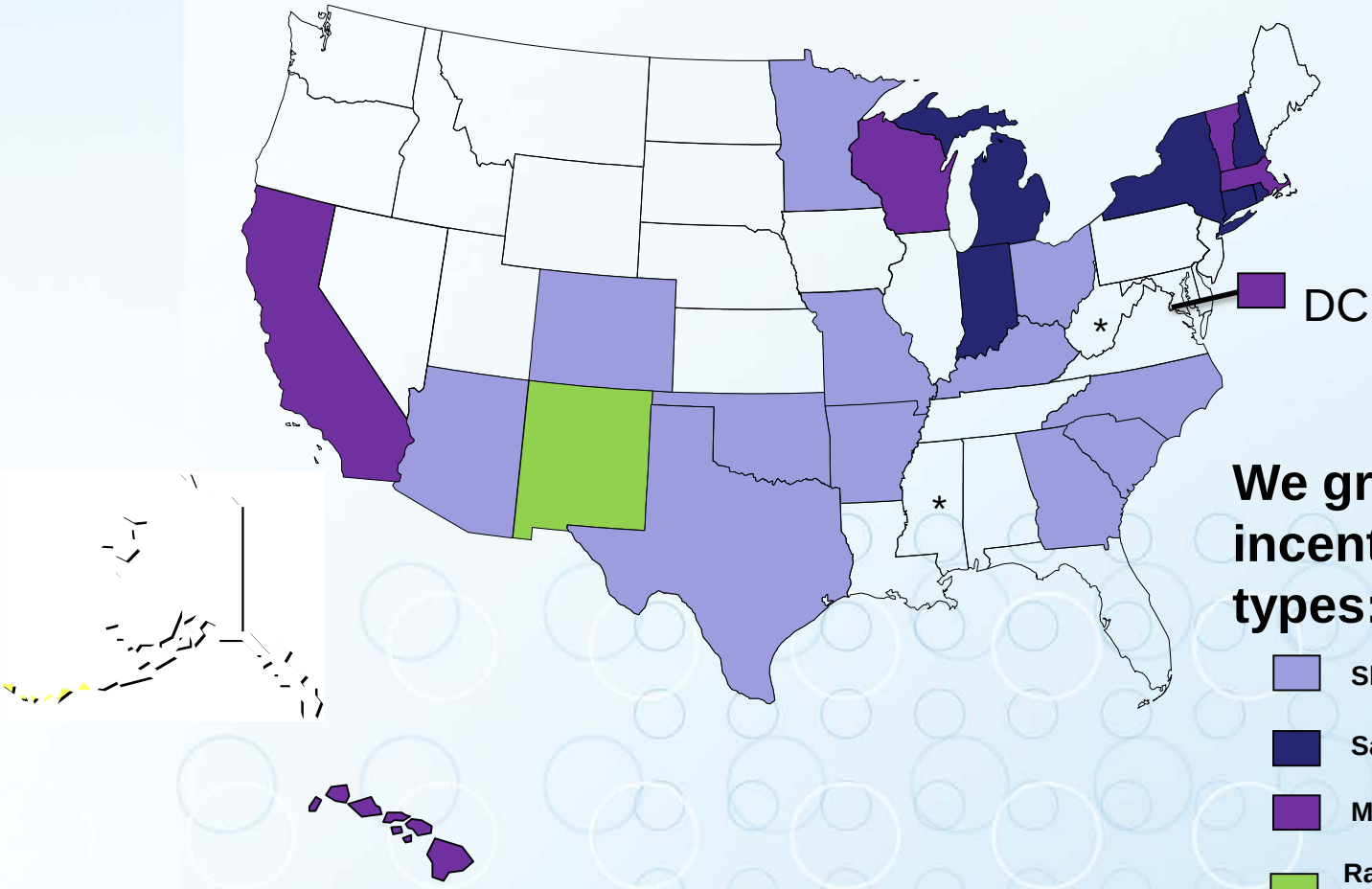
1. The costs of efficiency programs constitute financial losses to utilities unless they are able to recover those costs through rates or fees.

2. Investments in capital assets like power plants provide a return on investment under the traditional utility business model. **Expenditures on energy efficiency programs avoid the need for these capital investments but do not provide a return.**

3. The traditional utility business model is based on a throughput incentive, whereby utilities earn more profits by selling more electricity. Investments in energy efficiency drive down energy use and therefore utility revenues. However efficiency does not reduce the short-term, fixed costs of providing service.

States with Performance Incentives

(2014) Includes both gas and electric
Total of 27 states



We grouped incentives into four types:

- **Share of net benefits (12 states)**
- **Savings based (6 states)**
- **Multi-factor (5 states & DC)**
- **Rate of return (1 state)**

* Performance incentives that have been authorized but not implemented

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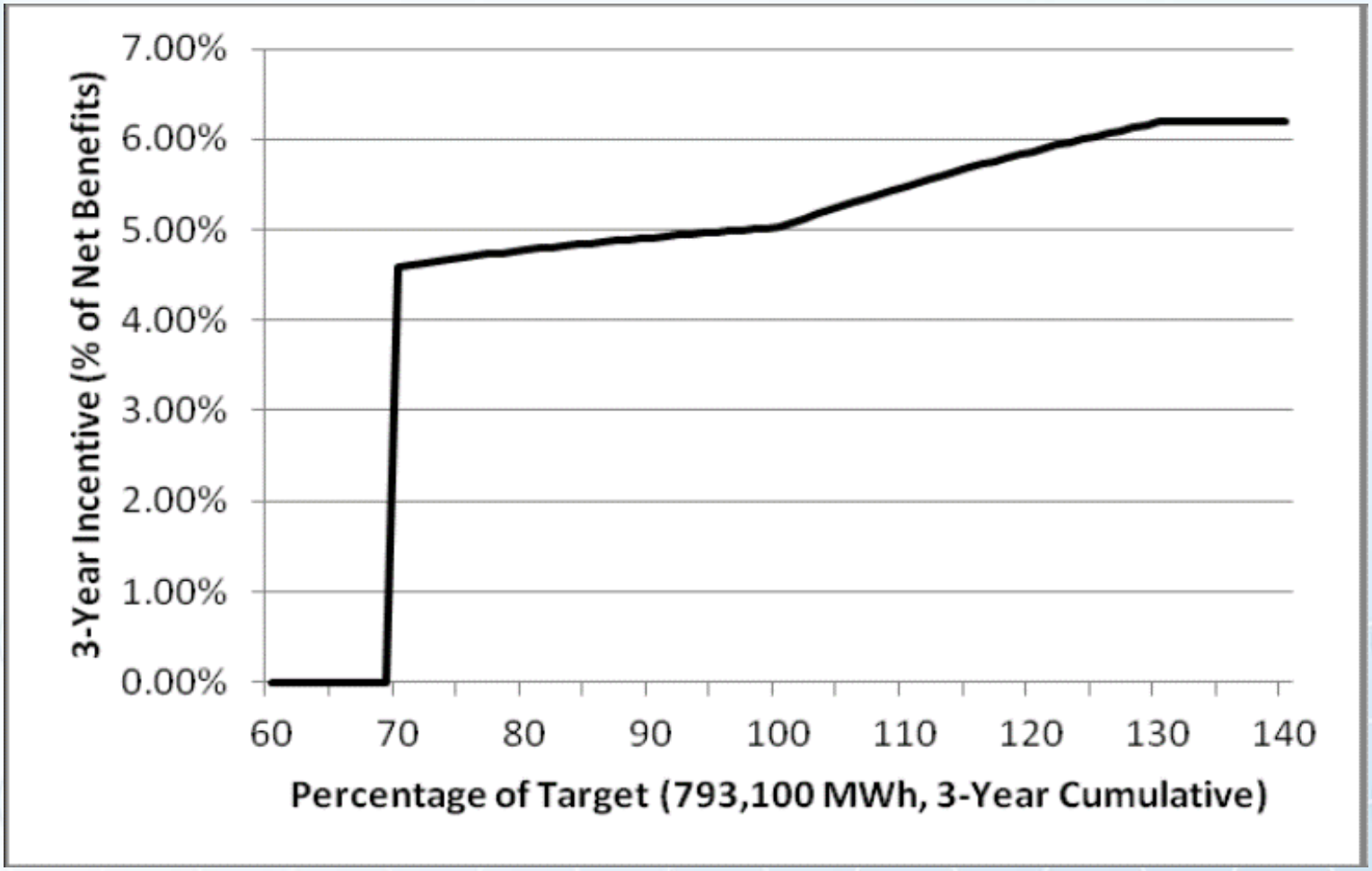
3 easy pieces (threshold, structure, cap)



Ameren Missouri performance incentive schedule as percentage of net benefits.
Source: Missouri Public Service Commission.

Types of Performance Incentives

1. Shared Net Benefits

Percentage of the positive difference between costs (efficiency program spending) and benefits (in dollars)

2. Savings Based

Reward utilities for achieving pre-established kWh or therm energy savings goals

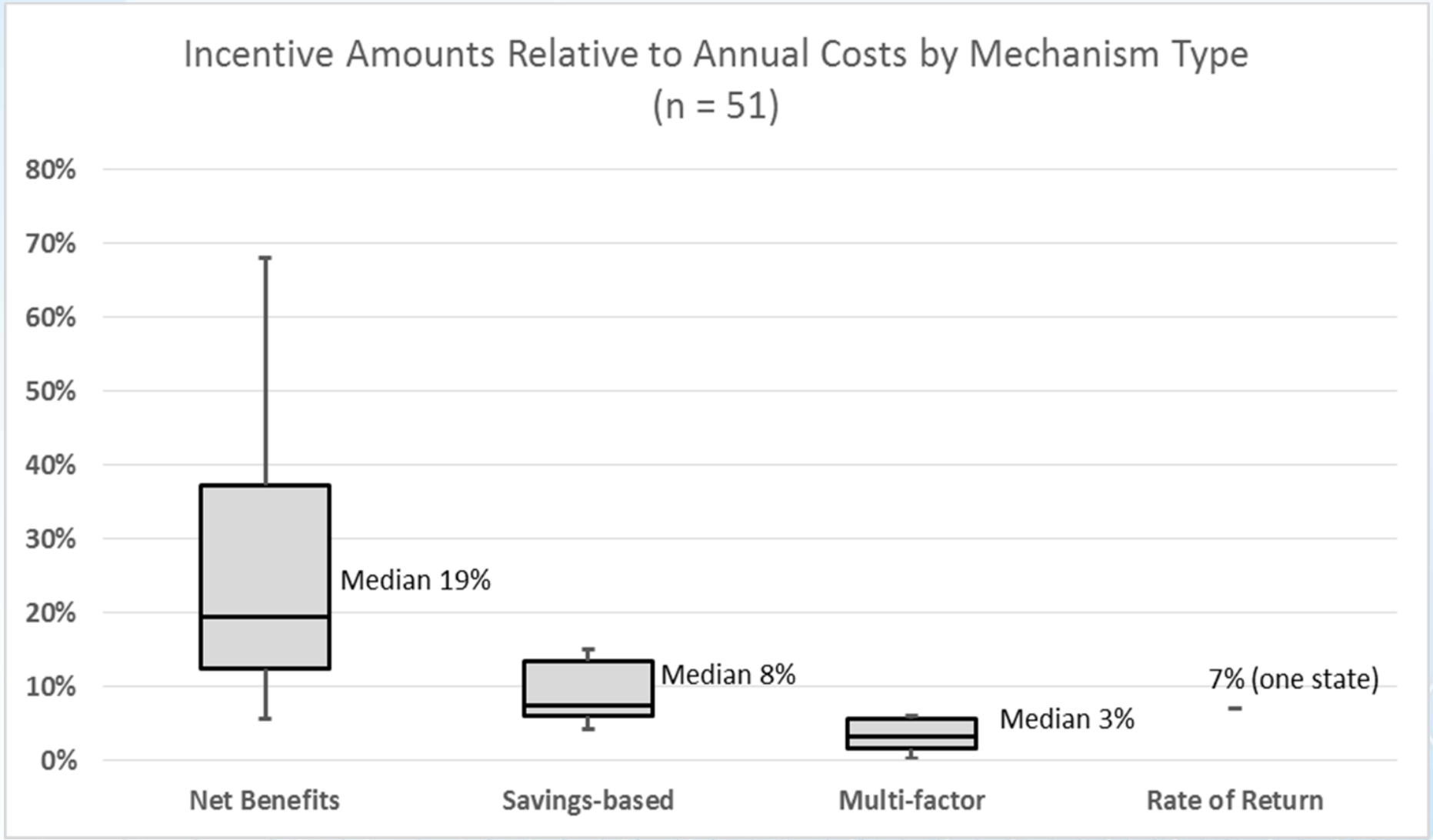
Types of Performance Incentives

3. Multi-factor

Energy savings are one of several metrics that are used to determine the amount of incentive earned

4. Rate of Return

Analogous to return on capital investment, rewards utility for energy efficiency spending


Incentive Amounts Relative to Annual Costs by Mechanism Type
(n = 51)
80%
70%
60%
50%
40%
30%
20%
10%
0%
Median 19%
Median 8%
Median 3%
7% (one state)
Net Benefits
Savings-based
Multi-factor
Rate of Return

Trends since 2011 ACEEE report

- More states have incentives based on cost-effective achievement of energy savings targets
- Several states changed incentive mechanisms
- Utilities achieved savings goals and earned incentives in **all** states that have them*
- Experts interviewed still say performance incentives influence utility behavior and decision making. Performance incentives are most effective in combination with savings targets/EERS

* (for which we have data).

Thank You!

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download here:

http://aceee.org/beyond-carrots-utilities-national-review