

# Xcel Energy - Colorado 2020 DSM Evaluation Findings



PRESENTATION  
TO COLORADO  
ROUNDTABLE

February 10, 2021





# 2020 EVALUATIONS

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1

**Energy Efficient Showerheads**

2

Refrigerator and Freezer Recycling

3

Small Business Lighting

4

Business LED Instant Rebate

# RESEARCH METHODS

## ENERGY EFFICIENT SHOWERHEADS

Primary Research Topics	Participant Survey (n=72)	Non-Participant Survey (n=68)	Peer Benchmarking (n=4)
Product influence (NTG)	✓	✓	
Total program benefits	✓	✓	
Customer decision-making and barriers to participation	✓	✓	
Product experience and satisfaction	✓	✓	
Effectiveness of program marketing	✓	✓	
Comparison to peer utility programs			✓

# KEY FINDINGS

## ENERGY EFFICIENT SHOWERHEADS

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- Retrospective NTGR estimated to be 0.94.
  - Free ridership driven by some participants already in the market for showerheads.
  - Evidence of participant spillover.
- Participants found the product easy to participate in and reported high levels of satisfaction.
- Participants reported the free or subsidized equipment kit offer was their main motivation for participation.
- Participants and non-participants reported the products' main benefit was the opportunity to save money on energy and water bills.
- Participating customers were least satisfied with energy savings realized.
- Non-participants reported lack of product awareness.

# RECOMMENDATIONS

## ENERGY EFFICIENT SHOWERHEADS

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- Recommended a prospective NTGR of 0.94 (same as retrospective).
- Improve energy efficiency information on marketing materials.
- Provide more information on additional Xcel Energy products to participants.
- Increase information in marketing materials about both the premium and standard equipment options.
- Increase information and resources on documentation provided with key equipment.
- Amend current multi-product follow-up surveys to include questions on installation issues and barriers participating customers are facing.
- Consider providing options to help customers recycle or donate unused kit measures.
- Conduct further research to better understand what baseline should be used to calculate savings.



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# RESEARCH METHODS

## REFRIGERATOR AND FREEZER RECYCLING

Primary Research Topics	Participant Survey (n=71)	Non-Participant Survey (n=73)	Peer Benchmarking (n=5)	Secondary Market Interviews (n=8)
Product influence (NTG)	✓	✓		✓
Product awareness	✓	✓	✓	✓
Product participation	✓		✓	
Customer experience	✓			

# KEY FINDINGS

## REFRIGERATOR AND FREEZER RECYCLING

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- Retrospective NTGR estimated to be 0.73.
  - 49% participants reported they would have discarded their appliance in a way that would have removed it from the electric grid.
  - But 50% participants reported that would have waited six or more months.
- Participants reported high satisfaction with all elements of their product experience.
- Participants reported a need to conduct additional research about product eligibility requirements before deciding to participate.
- Nonparticipating customers who were aware of the product tended to have higher incomes than those who were not aware.



# RECOMMENDATIONS

## REFRIGERATOR AND FREEZER RECYCLING

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- Apply the retrospective NTGR of 0.73 prospectively if no product changes OR apply a prospective NTGR of 0.80 if marketing recommendations implemented.
- Revisit marketing messaging to include prominent references to the eligibility requirements, the convenience and ease of participation relative to alternatives, and the environmental benefits.
- Conduct additional outreach to low-income customers (through partnership with other Xcel Energy low-income products).
- Conduct focus groups with non-participating customers about their decision-making.
- Maintain the current product implementation approach and continue to track product satisfaction to identify any threats to product satisfaction.



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# RESEARCH METHODS

## SMALL BUSINESS LIGHTING

Primary Research Topics	Participant Survey (n=70)	Near-Participant Interviews (n=13)	Peer Utility Interviews (n=5)	Trade Partner Interviews (n=14)
Product Influence (NTG)	✓			✓
Customer Awareness and Motivations	✓	✓		
Product Experience/ Satisfaction	✓	✓		✓
Cross Product Participation	✓	✓		✓
Trade Partner Training Experiences				✓
Peer Utility Identification of Small Businesses			✓	

# KEY FINDINGS

## SMALL BUSINESS LIGHTING

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- Retrospective NTGR estimated to be 0.92.
  - 69% participants reported they would not have installed the equipment if the product didn't exist.
  - High spillover savings.
- Participants learned about the product through trade partners and were motivated to participate due to upfront and long-term cost savings.
- Customers and trade partners were satisfied with their experiences with the product; however, some expressed a desire for more support from the implementer during the application and installation process.
- Few customers participated in other Xcel Energy products. Trade partners, however, reported it was easy to navigate between products.
- Trade partners appreciated training events, and those that hadn't would like to do so in the future.
- Peer utilities only focused on energy use to determine customer eligibility.
- Peer utilities used a variety of tactics to market to small businesses but relied more heavily on door knocking compared to Xcel Energy.

# RECOMMENDATIONS

## SMALL BUSINESS LIGHTING

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- Use prospective NTGR of 0.94 if recommendations are met:
  - Increase number of smaller businesses participating in the product.
  - Increase the number of energy assessments and/or direct installations performed.
- Continue to plan for future scenarios when its ability to influence small businesses to install LEDs decreases due to larger market changes.
- Provide additional training to trade partners and direct engagement with less-engaged trade partners.
- Provide trade partners with marketing tools and rewards to help them market to their smallest customers.
- Embed language in the Lighting Efficiency application to identify the implementer as a resource.
- Consider developing an Xcel Energy small business energy assessment.
- Increase outreach to qualifying businesses by canvassing areas and asking for references.
- Clarify language and pricing in energy assessment reports to better inform customers of the availability to self-install equipment and its related costs.
- Ensure customers that receive energy assessments receive follow-up calls to better support customers implementing project recommendations.



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# RESEARCH METHODS

## BUSINESS LED INSTANT REBATE

Primary Research Topics	Participant Survey (n=140)	Trade Partner Interviews (n=42)	Peer Utility Interviews (n=5)
Product Influence (NTG)	✓		
Perceptions/Awareness	✓	✓	
Customer Decision-Making and Barriers	✓	✓	
Product Experience and Satisfaction	✓	✓	
Participation in Related Programs	✓		
Peer products, incentives, and best practices			✓

# KEY FINDINGS

## BUSINESS LED INSTANT REBATE

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- Retrospective NTGR estimated to be 0.69.
  - Free ridership highest with screw-based lamps.
  - Trade allies continue to report that the product influences their sales strategies.
- Customers and trade partners satisfied with program experiences.
- Trade ally portal benchmarks well compared to peers, but distributors struggled to validate customers and measures.
- A small percentage of customers voiced dissatisfaction around lack of energy efficiency education and not seeing a reduction in overall electric bill after installation.



# RECOMMENDATIONS

## BUSINESS LED INSTANT REBATE

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- Use prospective NTGR of 0.69 if product remains the same.
  - If Xcel Energy shifts product mix away from screw-based lamps, the NTGR could increase according to recommended calculation:
$$\text{Free Ridership} = 0.358 \times \text{Screw-Based Unit Sales Share} + 0.198$$
  - Perform additional NTGR research for the additional direct-to-manufacturer channel
- Update the portal to allow for “fuzzy matching” in customer eligibility search tool.
- Conduct a usability study of the trade ally portal to find additional technical issues and opportunities for in-portal information.
- Help customers understand what to expect for their energy bill.
- Continue to utilize short-term bonus periods to promote upticks in project completion.
- Where possible, add more lighting types: HIDs, high/low bay lights, troffers, retrofit kits, parking garage, exteriors, controls, integrated fixtures.
- Conduct an additional C&I baseline study to understand the greatest opportunities for marketing and promotion of the product.



# 2020 EVALUATIONS NTG APPENDIX

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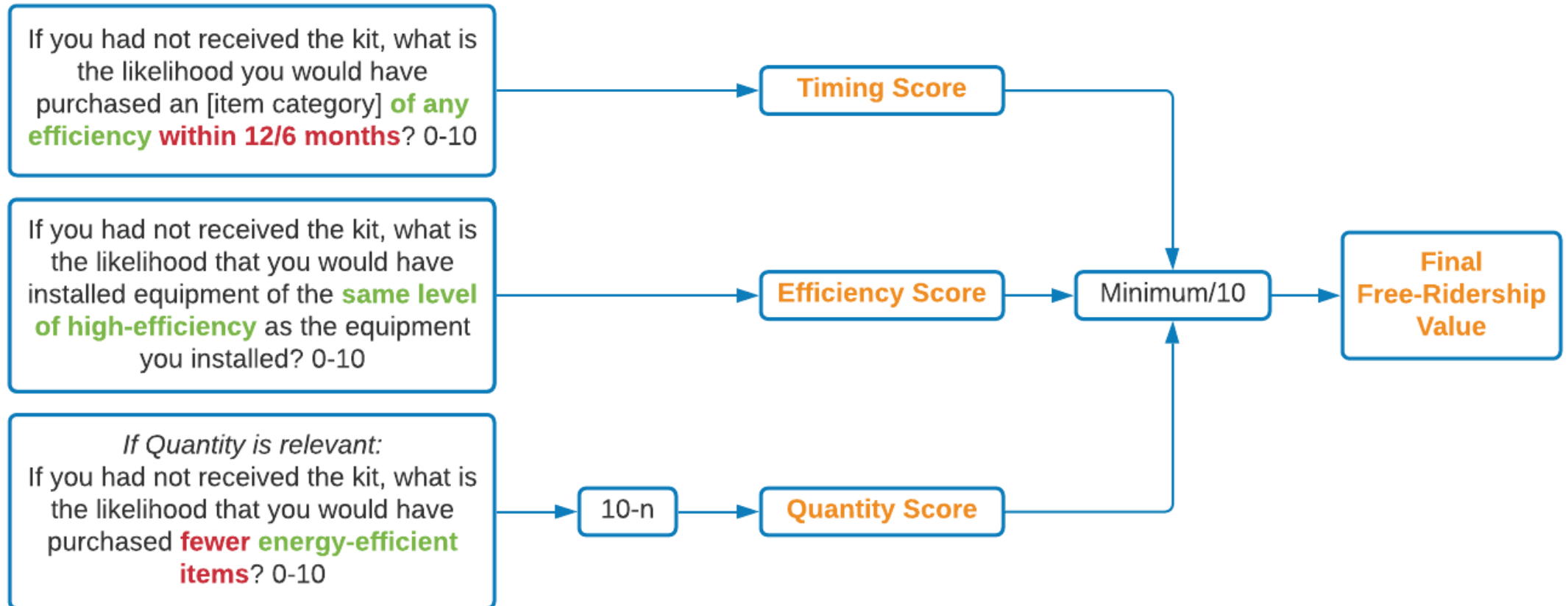
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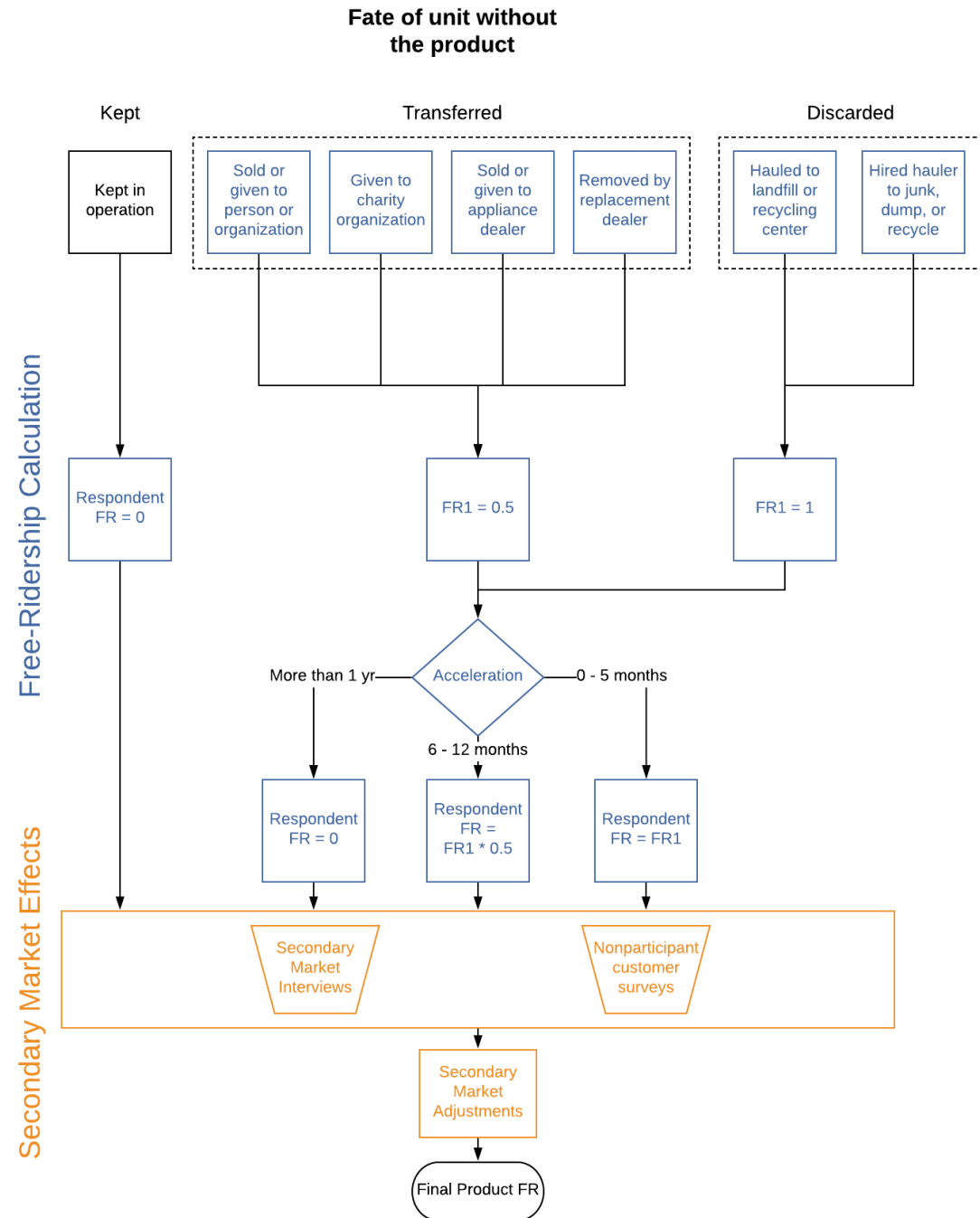
# FREE RIDERSHIP ALGORITHM

## ENERGY EFFICIENT SHOWERHEADS



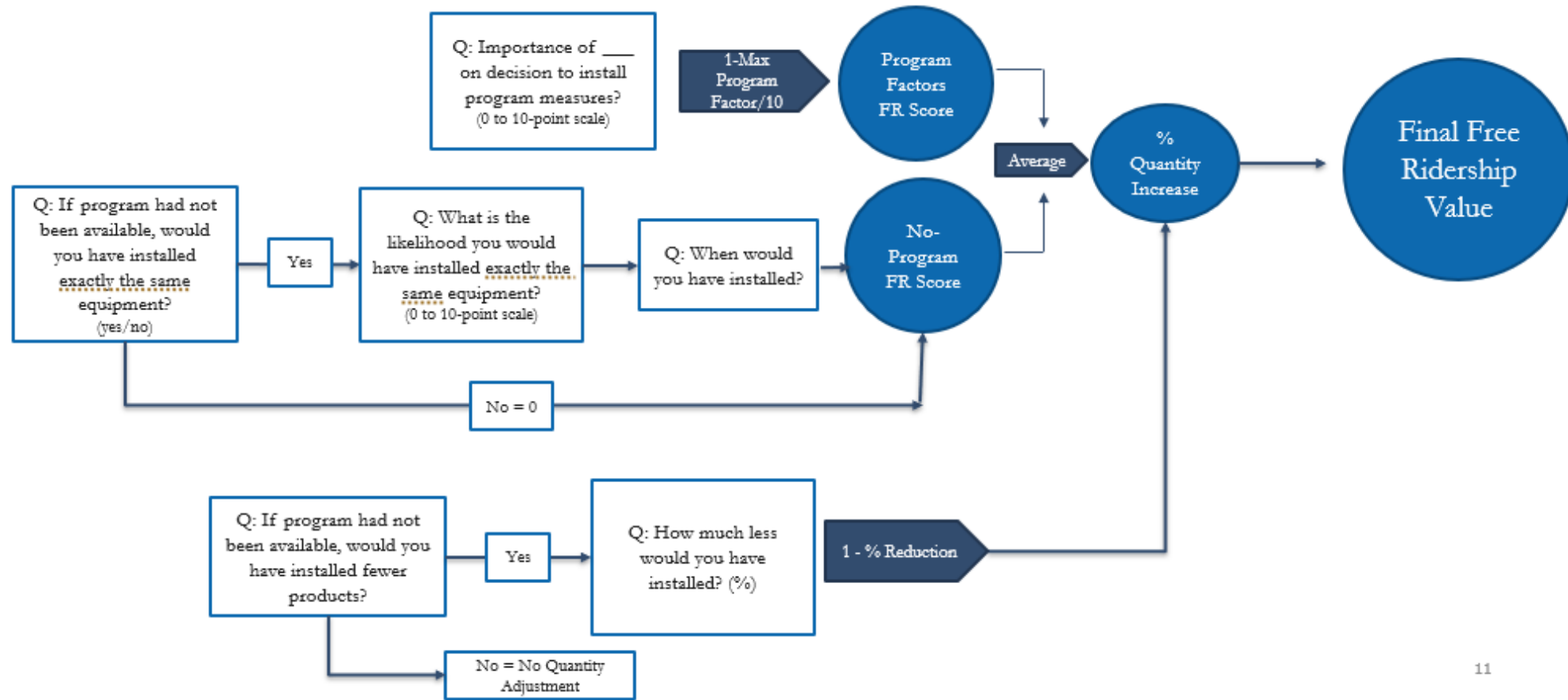
# FREE RIDERSHIP ALGORITHM

## REFRIGERATOR AND RECYCLING



# FREE RIDERSHIP ALGORITHM

## SMALL BUSINESS LIGHTING



# FREE RIDERSHIP ALGORITHM

## BUSINESS LED INSTANT REBATE

Q: What sales strategies have you employed to sell more high efficiency lighting products? (Upsell contractors, training workshops, increased marketing, price reductions, increased stocking, work with design professionals)

Q: How much influence was Midstream Product elements on sales strategies to sell more high efficiency lighting products? (0 to 10-point scale)

Incentives

Sales staff training

Other program factors

Q: Without the Midstream Product, what is the likelihood you would have pursued the same sales strategies to sell more high efficiency lighting products? (0 to 10-point scale)

10 - Maximum

n

Program  
Components  
Score

No-  
Program  
Score

Average

Final Free-  
Ridership  
Value