## Net-to-Gross: Comparison of Approaches

**Presentation by:** 

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**Presentation to:** 

**EE SAG Technical Advisory Committee** 

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## Comparison of ADM and Navigant Overall Approaches

### ADM's approach

- Focuses on what would happen in absence of program
- Allows for influence of program when other factors also influenced decision

### Navigant's approach

- Focuses on specific program factors and overall program and non-program influence
- Takes a relative approach to program influence (higher nonprogram influence implies lower program influence)

### Mini-study to compare approaches

 Results indicate differences in methods account for difference in assessed levels of free ridership

| Mini-Study<br>(n=20) | EPY3<br>Approach<br>(Navigant) | EPY4<br>Approach<br>(ADM) |
|----------------------|--------------------------------|---------------------------|
| NTG                  | 69%                            | 93%                       |



## Comparison of ADM and Navigant Factors Assessed

### ADM Factors

- Financial ability
- Prior plans and intentions
- Previous experience with measure
- Influence of past experience with program or program staff recommendation

### Navigant Factors

- Influence of five specific aspects of the program
- Apportionment of overall program and non-program influence
- Overall influence of non-program factors



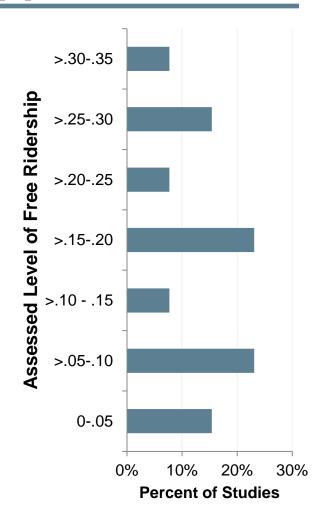
# Comparison of ADM and Navigant Survey Methodologies

|   |  | EPY3<br>(Navigant) | EPY4<br>(ADM) |
|---|--|--------------------|---------------|
| Data Collection                         | Self-report  | ✓                  | ✓             |
| Response Scales                         | Numeric with verbal anchors (0-10, 0-100)                          | ✓                  |               |
|   | Verbal descriptions  |                    | ✓             |
| Weighting                               | Variable weights tied to numerical ratings provided by respondents | ✓                  |               |
|   | Fixed weights assigned to combinations of responses                |                    | ✓             |
| Checks on<br>Inconsistent<br>Reponses   | Follow up questions triggered by inconsistent responses            | ✓                  |               |
|   | Multi-stage screening process                                      |                    | ✓             |
| Multiple Questions to<br>Assess Factors | One of three factors assessed with multiple questions              | ✓                  |               |
|   | Three of four factors assessed with multiple questions             |                    | ✓             |



## Perceived Pros with ADM Approach

- Used and accepted in multiple jurisdictions
- Results in a range of free ridership scores
- Focuses on practical issues that affect likelihood of project without program (e.g., financial ability, plans)
- Recognizes that program can be critical to a decision while external factors also very important
- Verbal descriptors used in response scales





## Perceived Pros with Navigant Approach

- Asks about program and non-program influences
- Used and accepted in multiple jurisdictions
- Applies consistency checks and asks for clarification
  - However, question is leading:
    - You just gave <RESPONSE> points to the importance of the program. I would interpret that to mean that the program was not very important to your decision to install this equipment. Earlier, when I asked about the importance of individual elements of the program I recorded some answers that would imply that they were very important to you. Just to make sure I understand, would you explain why the program was not very important in your decision to install this equipment?
  - Would prefer more neutral wording:
    - » ASK IF C4a < 8) You said that you would have installed the same quantity and efficiency of equipment at that same time, but you also just said that there was a (FILL WITH C4a SCORE) in 10 likelihood of you paying the additional incentive provided by the <PA> program. Which of these is more accurate?
      - From: Massachusetts Program Administrators Cross-Cutting C&I Free-Ridership and Spillover Methodology Report. April 2011.



## Perceived Cons with ADM Approach

- Financial Ability Screen (FAS) is based on a single question
  - Financial ability is a key factor in assessing likelihood that a project would occur without a program incentive
  - Sensitivity analysis shows that if FAS was not included NTGR would only decrease 5.6%
- Viewed by Navigant as an un-tested approach
  - ADM approach has been used and accepted in multiple jurisdictions
    - » (e.g., Indiana, Missouri, Oklahoma, West Virginia)



## Perceived Cons with Navigant Approach

- Uses leading questions as consistency checks
  - Reportedly some respondents felt badgered into indicating they were a free rider
- Numerical response options less reliable<sup>1</sup>
- Uses single question to assess complex judgments
  - I.e., influence of program on decision, influence of other factors on decision
- Assumes that the more influential other factors are, the less important the program was to the decision
  - E.g., program influence question asks respondents to apportion points to influence of program and other factors



<sup>1.</sup> Krosnick, J. A., & Berent, M. K. (1993). Comparisons of party identification and policy preferences: The impact of survey question format. *American Journal of Political Science*, 3, 941-964.

## Can approaches be harmonized?

#### Similar overall

- Use of multiple questions
- Assessment of program influences
- Assessment of non-program influences

### But different in the specifics

- Response scales employed
- Weighting/Scoring algorithm
- Differences in consistency checks

