Illinois NTG Working Group Update

Presentation to
Stakeholder Advisory Group – September 28, 2015

Objective

Create agreed upon protocols for calculating NTG to ensure consistency across Illinois program administrators and programs.

Background

NTG Protocols initiated in response to ICC directive

TRM Version 4.0 began process

- Appliance Recycling drafted
- Residential Upstream Lighting drafted
- Initiated Commercial & Industrial agreements

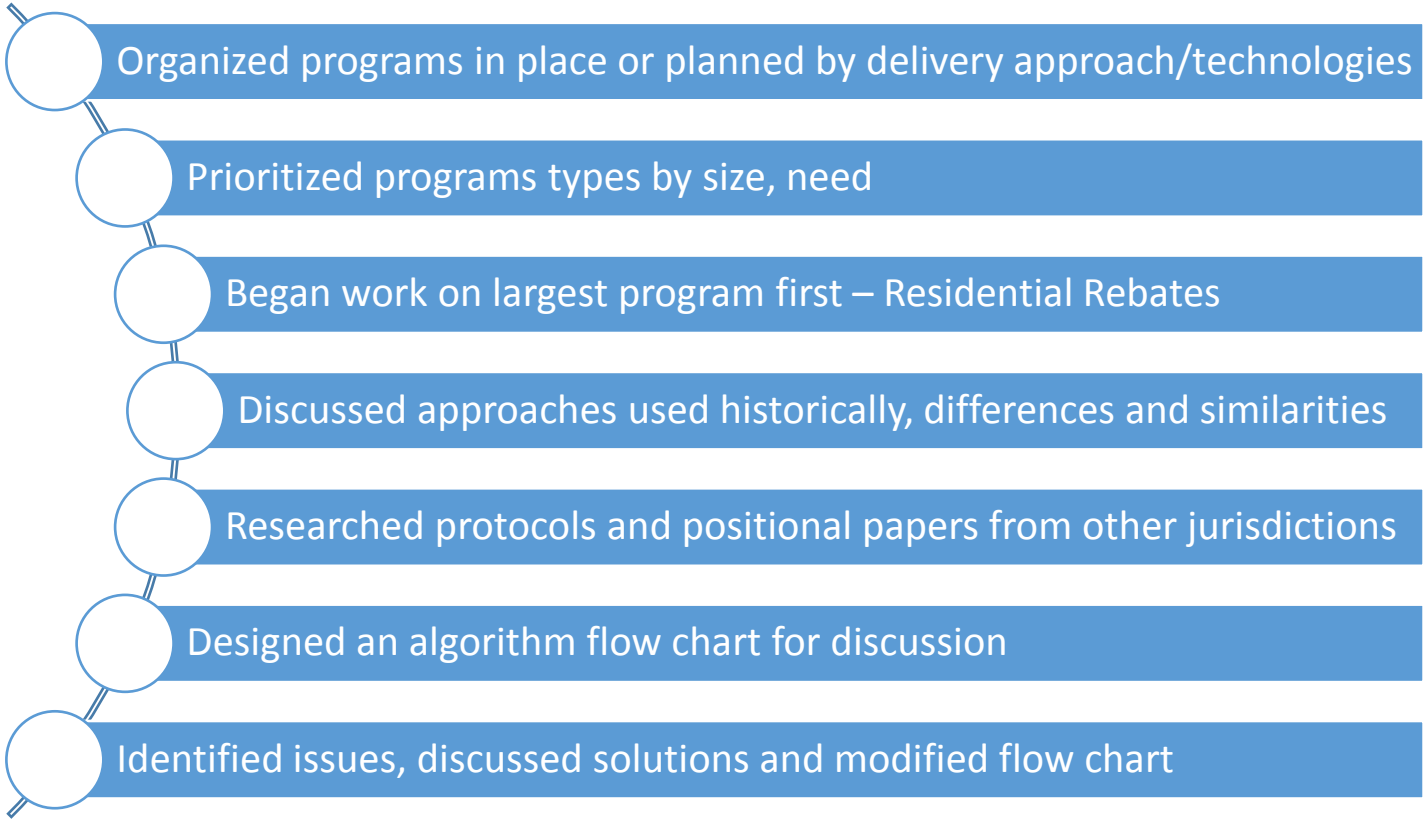
Goal for TRM Version 5.0

- Complete full draft

Overall Process*

*Additional materials related to missing components of the protocols may be released on October 23rd for stakeholder comment.

Residential Approach



Residential Protocols

Rebates	Audit/Direct Install	Behavior Modification
Multifamily	Kits	Building Codes
Appliance Recycling	Upstream Lighting	Nonparticipant Spillover

Basic Residential Method

Two-part scoring: average results	• Program Influence • Non-Program (Counterfactual) • (where applicable)
0-10 Scores	• Degree of Program Influence • Likelihood of counterfactual • Threshold for specific adjustments
Consistency Checks	• Minimum of open-ended question • Document if evaluator adjusts score
Spillover	• General utility marketing and education can create spillover not specific to program theory • Ensure spillover does not get double counted
Basic/Enhanced Methods	• Where applicable, enhanced methods allow for use of trade allies or secondary method to provide further information

Recommended Revisions to TRM V4

- Appliance Recycling
  - Change spillover restriction

Non-Residential Approach

Differences between Historical Non-Residential Self-Report Methods

IOU Nonresidential

- Three program attribution indices averaged
- Basic (most customers) and Standard or Enhanced (large customers) rigor levels
- Respondent numeric responses used as direct inputs to algorithm
- Range of possible NTGR tends to be spread out

DCEO Nonresidential

- Matrix scoring approach
- Financial ability sets the stage for application of other information from survey
- Possibility of different levels of questioning
- Range of possible NTGR is “chunky”

Core Non-Residential Method

Free Ridership

Scoring Components	• Program Components Score • (Relative) Program Influence Score • No-Program Score (Counterfactual)
0-10 Scores	• Degree of influence of individual factors on decision • Likelihood of implementation in absence of program • Exception: 0 – 100 Program Influence Score
Consistency Checks	• Respondent rescores in some cases • Document if evaluator adjusts score

Spillover

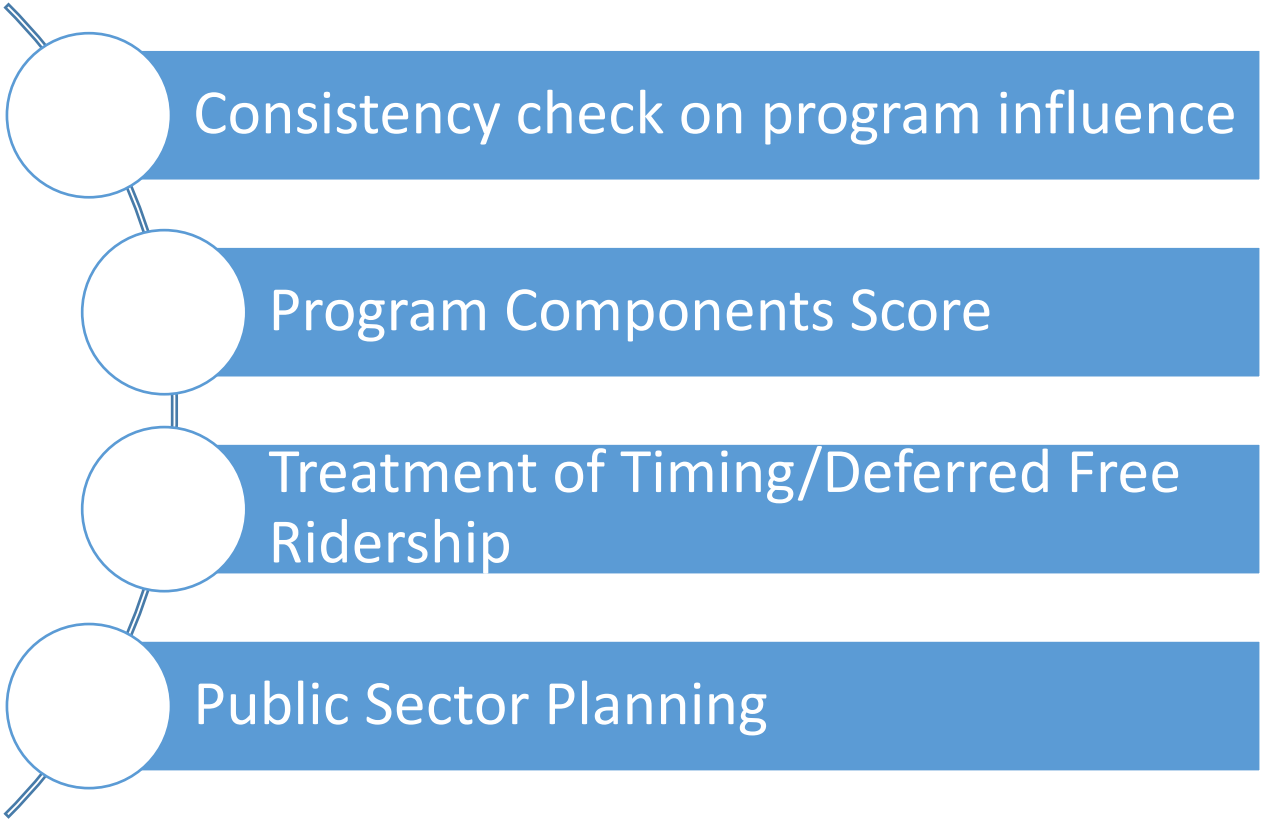
Participant Spillover	•General program marketing and education may cause spillover not specific to program theory •Ensure spillover does not get double counted

Scoring Components Detail

Free Ridership

Program Components Score	• Degree of influence of individual factors on decision • Comprehensive list of Program and Non-Program factors
(Relative) Program Influence Score	• Relative influence of Program and Non-Program factors taken as a whole • Higher level than Program Components; considers weight of combined program elements and combined non-program elements
Counterfactual – No Program Score	• 0-to-10 likelihood of implementing the same energy efficiency project in absence of program
Counterfactual – Timing Adjustment	• Reflects effect of delayed installation timing in the absence of the program • Under historical IOU approach, projects that would have been installed 4 or more years later get No Program Free Ridership Score of 0.

Updated Elements of NTG Framework



Consistency Check on Program Influence

Triggered if respondent reports learning of a program *after* decision to implement was made and also reports strong influence on decision by the program.

Alternative Specifications of Program Components Score

Historical IOU Approach

- Score based on highest rated program factor
- Tended to produce outlier program components score (lower free ridership estimate).

Modified California Approach

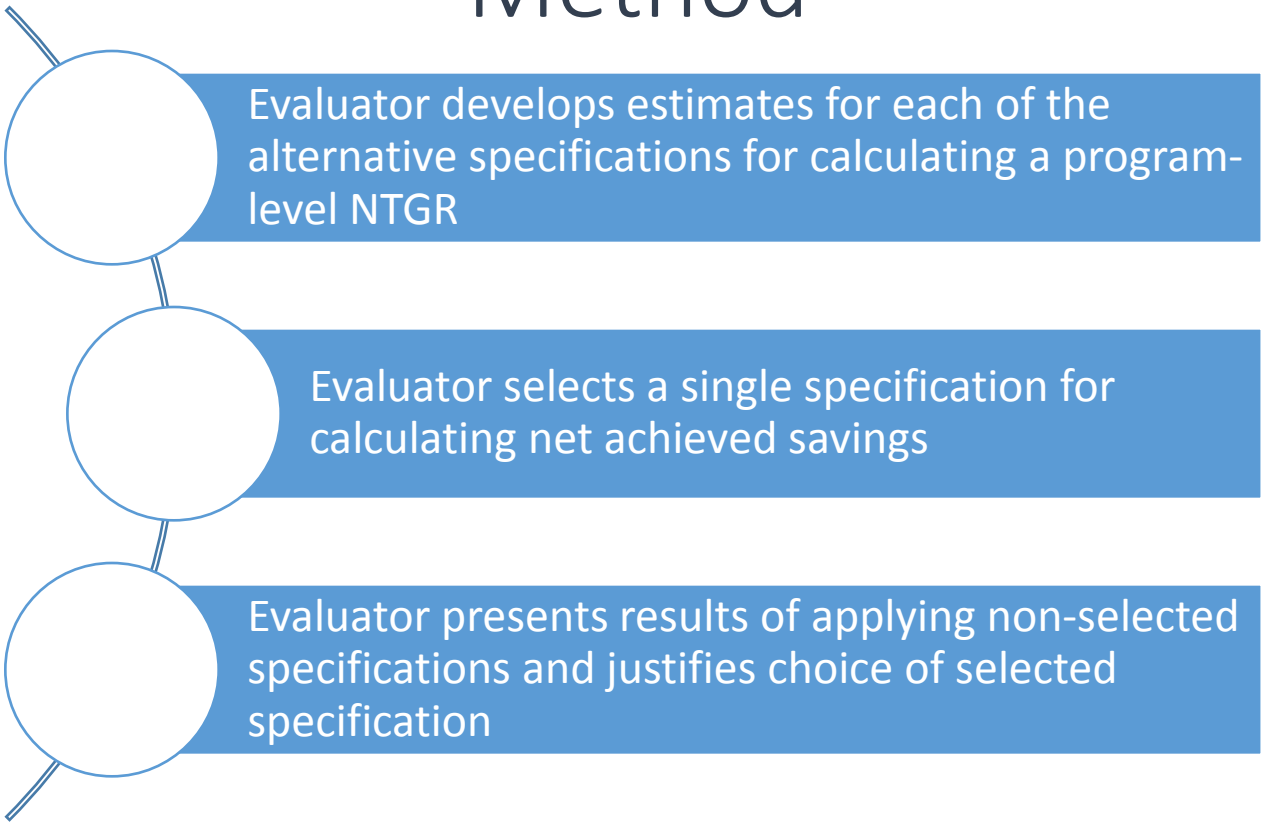
- Score based on highest rated program factor divided by the sum of the highest rated program and non-program factors
- Preliminary data analysis suggests low variability in scores (i.e., most fall between 4 and 6) compared with other scoring components.

Alternative Treatments of Timing/ Deferred Free Ridership

Free Ridership

1. Historical IOU Method (Adjust No Program Score for Timing)	• First, adjust the Counterfactual-No Program Score with Timing Adjustment • Then average Program Component, Program Influence and Counterfactual-No Program Scores
2. Adjust Overall FR for Timing	• First, average the Program Component, Program Influence and Counterfactual-No Program Scores • Then adjust the result with the Timing Adjustment
3. Average No-Program Score with Timing Score	• First, average the Program Components and Program Influence Scores • Then average the Counterfactual-No Program Score with the Timing Adjustment Score • Then average the 2 results

Alternative Specifications within Core Method



Public Sector Planning

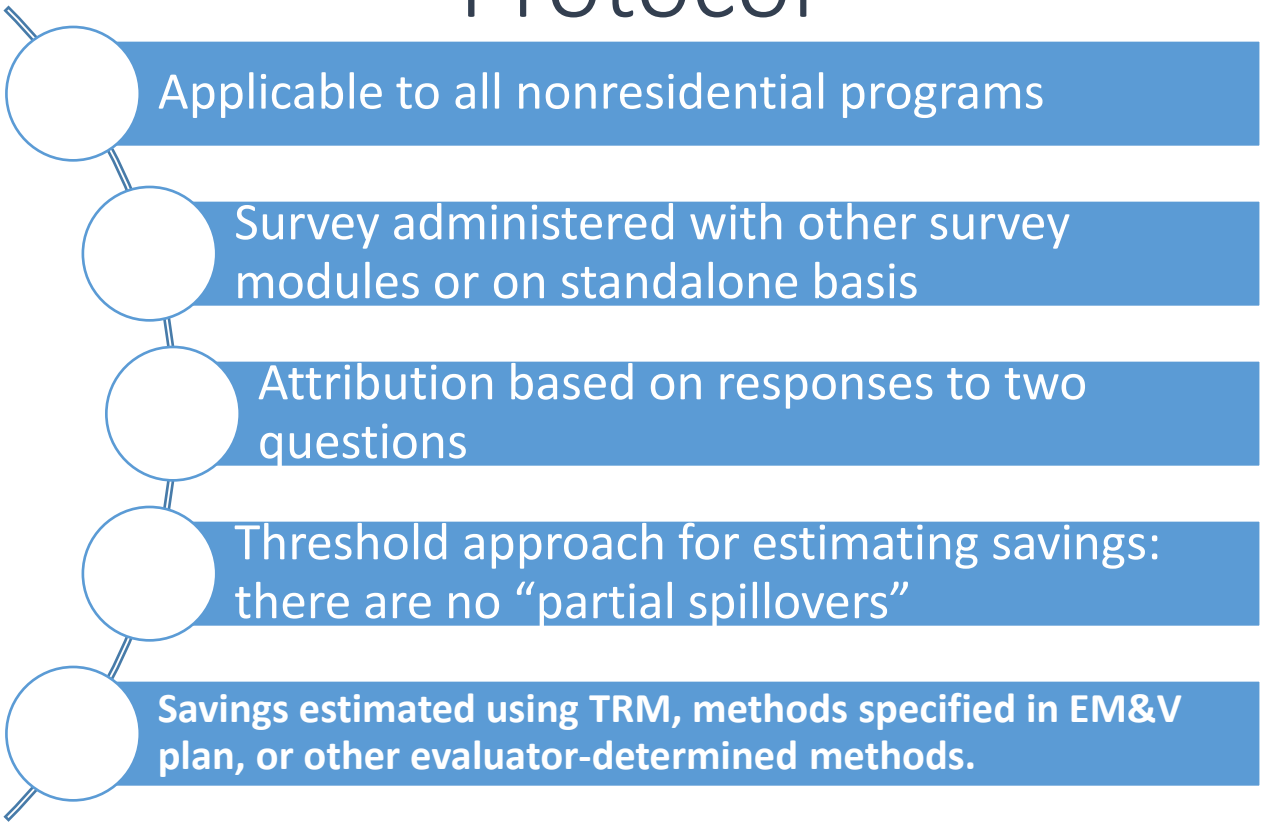
ICC Final Order, Docket 11-0593

- "All parties, including DCEO, are cautioned that, with respect to a determination regarding 'free ridership', the person or entity in question should have actual energy efficiency plans before they are to be considered to be 'free riders', as opposed to persons who have some goal to be met in the distant future regarding energy efficiency products and services."

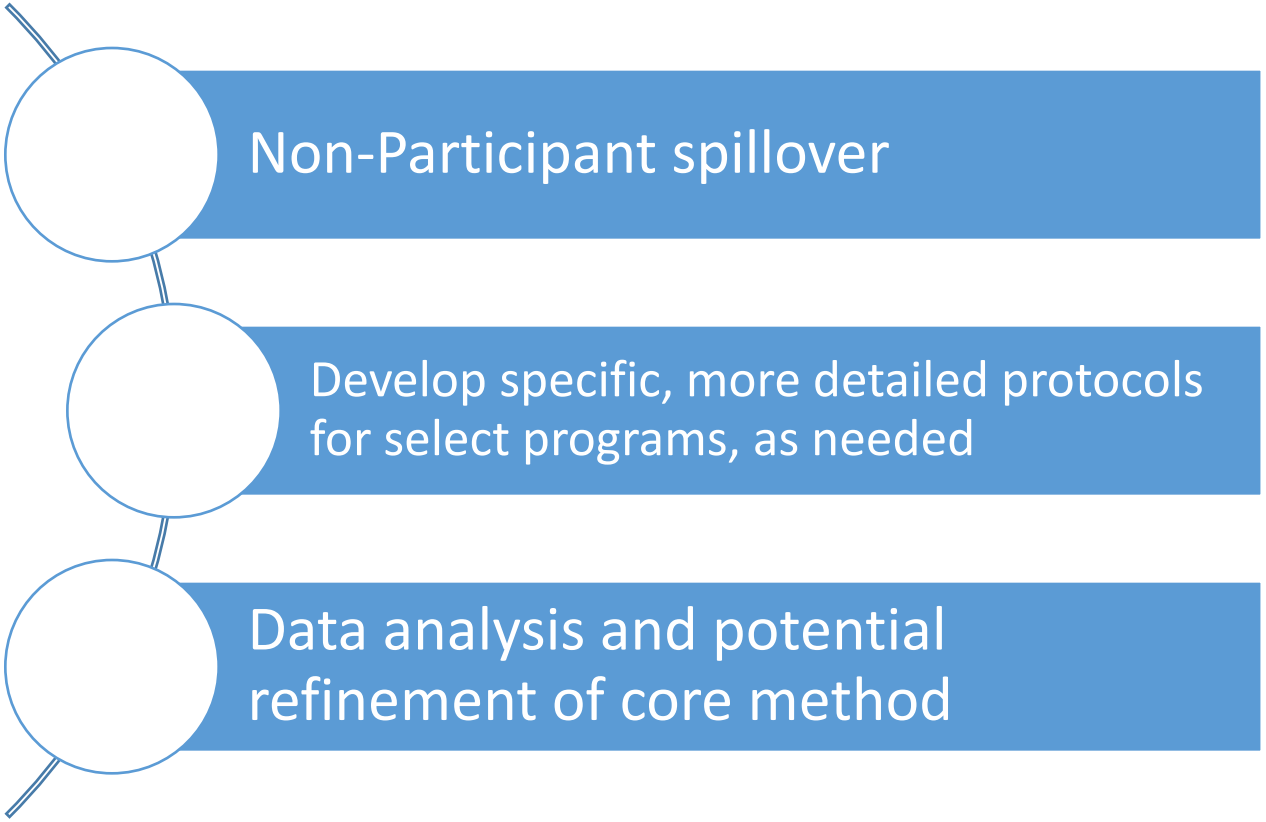
Draft Protocol Language

- Protocol content, if any, subject to NTG Working Group discussion prior to SAG meeting

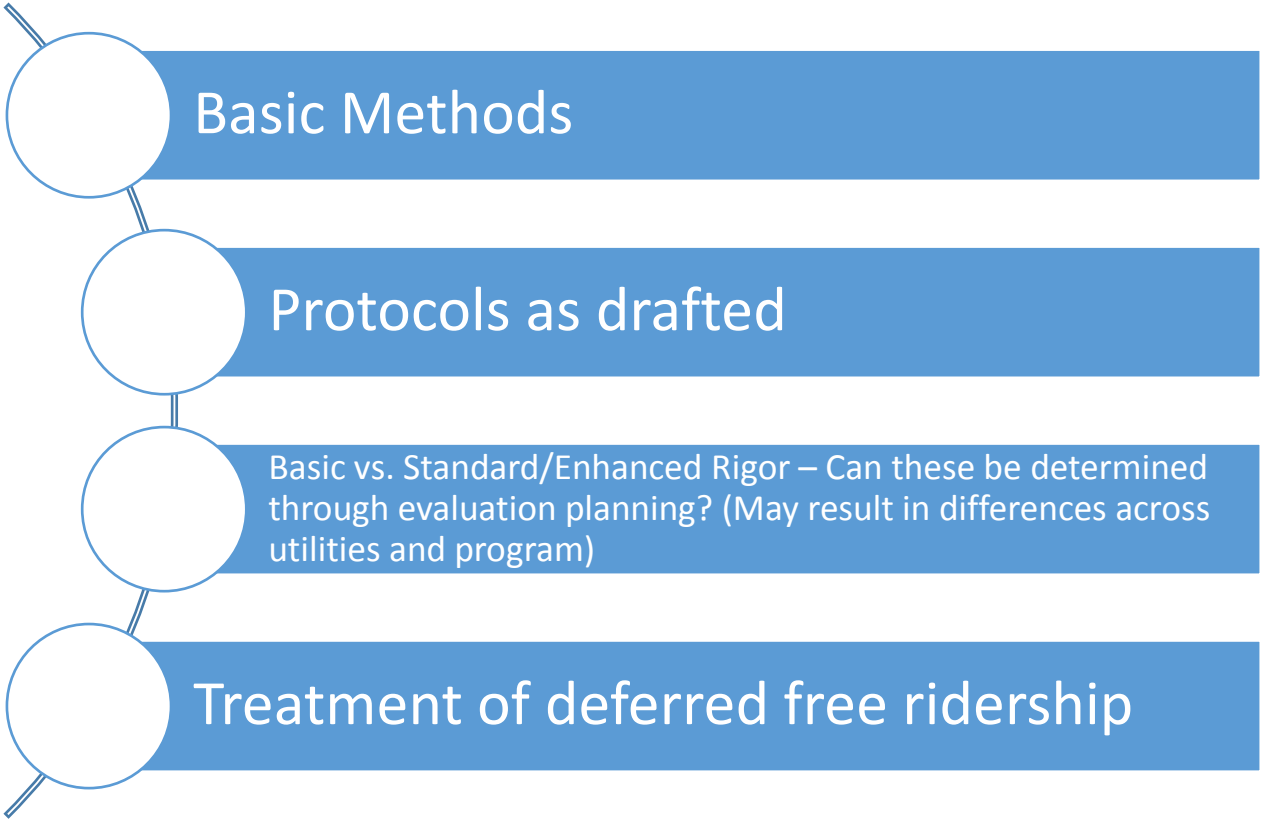
Non-Residential Participant Spillover Protocol



Forthcoming Group Activities



Stakeholder Feedback Requested



Forthcoming Meetings of NTG Working Group

To participate in forthcoming group meetings, contact:

Full Working Group: Hannah Arnold (harnold@opiniondynamics.com)
Residential Group: Jane Colby (jane.colby@cadmusgroup.com)
Non-Residential Group: David Diebel (david@admenergy.com)