IL EE STAKEHOLDER ADVISORY GROUP

NON-ENERGY IMPACTS WORKING GROUP

FEBRUARY 4, 2019



AGENDA

Recap of Last SAG NEI Working Group Meeting – August 29, 2018

Illinois Statewide Job Impact Analysis Coordination

Economic Impact Assessment Methodology

- IMPLAN Software
- Methodology Overview
- Impact Analysis Framework
- Geography of Impacts

Timeline

Discussion and Q&A



RECAP OF LAST SAG NEI WORKING GROUP MEETING - AUGUST 29, 2018

- The Ameren Illinois and ComEd evaluation teams presented the outlines of our approaches to estimating job impacts from Illinois energy efficiency portfolios during the August 29, 2018 SAG NEI Working Group meeting as part of the larger discussion of methodologies to estimate non-energy impacts.
- The two evaluation teams agreed to have a consistent evaluation approach to economic impacts across the two utilities and discussed the scope of the analysis.
- Economic impacts from ComEd programs will be estimated by Navigant and impacts from AIC programs will be estimated by Opinion Dynamics, but the approach will be consistent between the two utilities.
 - The teams agreed that results for both utilities should include all impacts realized in Illinois (rather than being limited to only the effects seen in a given service territory), but that impacts outside of Illinois are outside of the scope of the analysis.
 - The teams also agreed to explore whether estimating localized economic impacts at a community level would be possible.
- Results for the first year (2018) analysis will be presented at the portfolio level and we will explore the benefits and tradeoffs around producing more granular results in future years.



ILLINOIS STATEWIDE JOB IMPACT ANALYSIS COORDINATION

- Goal: To develop and document standard techniques and practices across utilities within Illinois
- Coordination across economic impact analyses in Illinois
 - Navigant: ComEd's independent evaluator
 - Opinion Dynamics: Ameren's independent evaluator
 - Nicor Gas
- Consensus on use of IMPLAN software to estimate economic impacts
 - Aligns many of the underlying model assumptions and data used in the analysis.
- Current Focus: Documentation to address technical details relating to the way utility program impacts are handled within IMPLAN









ECONOMIC IMPACT ASSESSMENT METHODOLOGY - IMPLAN SOFTWARE

IMPLAN is the leading solution for economic impact analysis.

- Commonly used to estimate the impacts of business activity, economic development, and policy changes.

Methodology:

- Input-Output ("I/O") analysis, a form of economic analysis based on the interdependencies between economic sectors.
- Estimate the impacts of "shocks" to an economy and their resulting ripple effects.
- Relies on regional economic base data (provided by IMPLAN) and information about economic changes (the "shock").

Data Sources:

- IMPLAN provides economic data for the United States at the National, State, County, Congressional District, and Zip Code levels
- IMPLAN's data includes economic indicators of industry production, employment, and final demand in a selected region along with trade flow information with other regions to provide insight into how goods and services move between economies.
- Users input data describing the <u>initial</u> economic changes (jobs created, labor income, production, etc.) by industry within a defined region (e.g., state, county, etc.)

Output

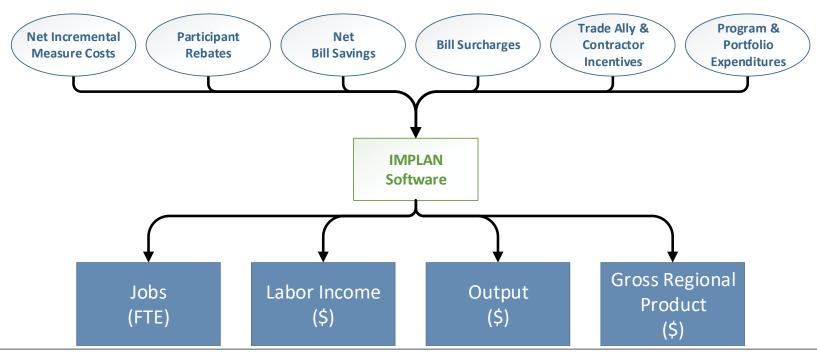
- Net impacts on employment (FTE), labor income, production, and gross regional product



ECONOMIC IMPACT ASSESSMENT METHODOLOGY – OVERVIEW

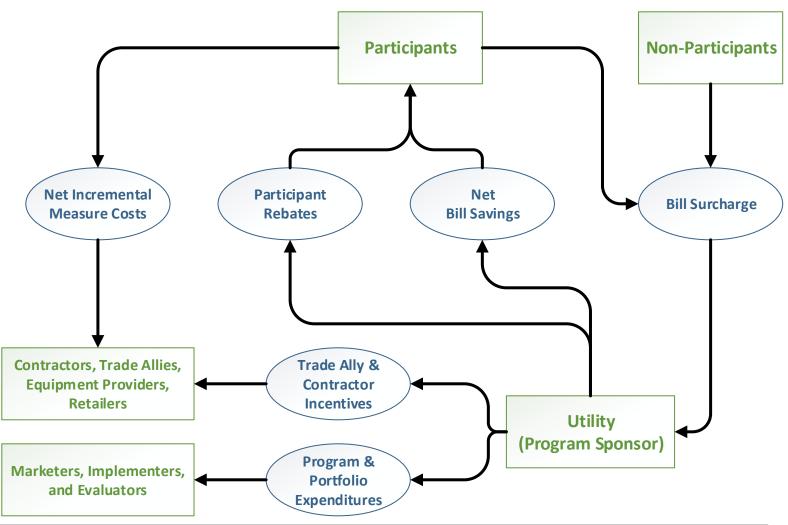
Three Step Process:

- 1. Data Collection Economic activities of EE programs
- 2. Modeling IMPLAN Software
- 3. Analysis of Output Summarize and assess IMPLAN model output (Jobs, Income, Output, and Gross Regional Product)



ECONOMIC IMPACT ASSESSMENT METHODOLOGY – IMPACT FRAMEWORK

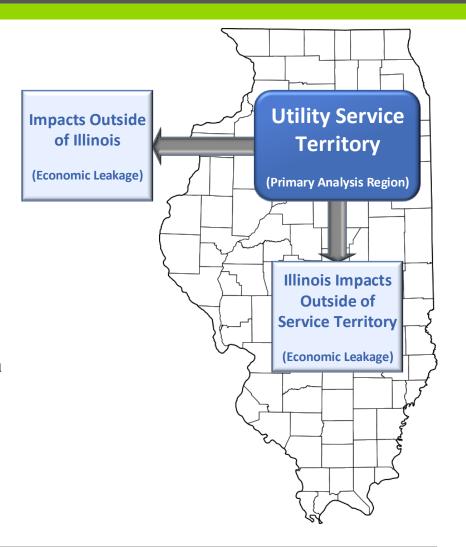
- Comprehensive approach to the economic transactions throughout the lifecycle of EE programs
- Includes positive economic impacts (e.g., Net Bill Savings) and negative economic impacts (e.g., Bill Surcharge)
- Economic impacts are associated with the applicable industry classification





ECONOMIC IMPACT ASSESSMENT METHODOLOGY – GEOGRAPHY OF IMPACTS

- For utility EE programs, economic impacts occur in one of three locations:
 - 1. Within the utility's service territory
 - 2. Outside the utility's service territory but within Illinois
 - 3. Outside of Illinois
- Analysis will implement a Multi-Regional Input-Output (MRIO) within IMPLAN to estimate impacts that happen within the utility service territory (#1) and elsewhere in Illinois (#2).
- The MRIO approach simplifies the aggregation of impacts across utilities within Illinois by standardizing the defined geographies
- A portion of the total economic impacts happen outside of Illinois, but are not explicitly estimated within the modeling framework due to the additional costs for economic data covering regions outside of Illinois
- Approaches for estimating impacts at the community level have been explored, but
 would require localized inputs that go far beyond the level of detail that is required
 other analysis. It is also more expensive to acquire the underlying economic data for
 more granular regions. Due to these factors, it is not feasible within the current scope.



TIMELINE

Q1 2019

Agreement and Documentation of Methods

Q2-Q3 2019

Economic Impact Modeling Analysis

Q3-Q4 2019

Economic Impact
Reporting as part of
Portfolio Evaluation
Reporting

Q1-Q2 2020

Document economic impact analysis methodology for inclusion in IL TRM





QUESTIONS & FEEDBACK