



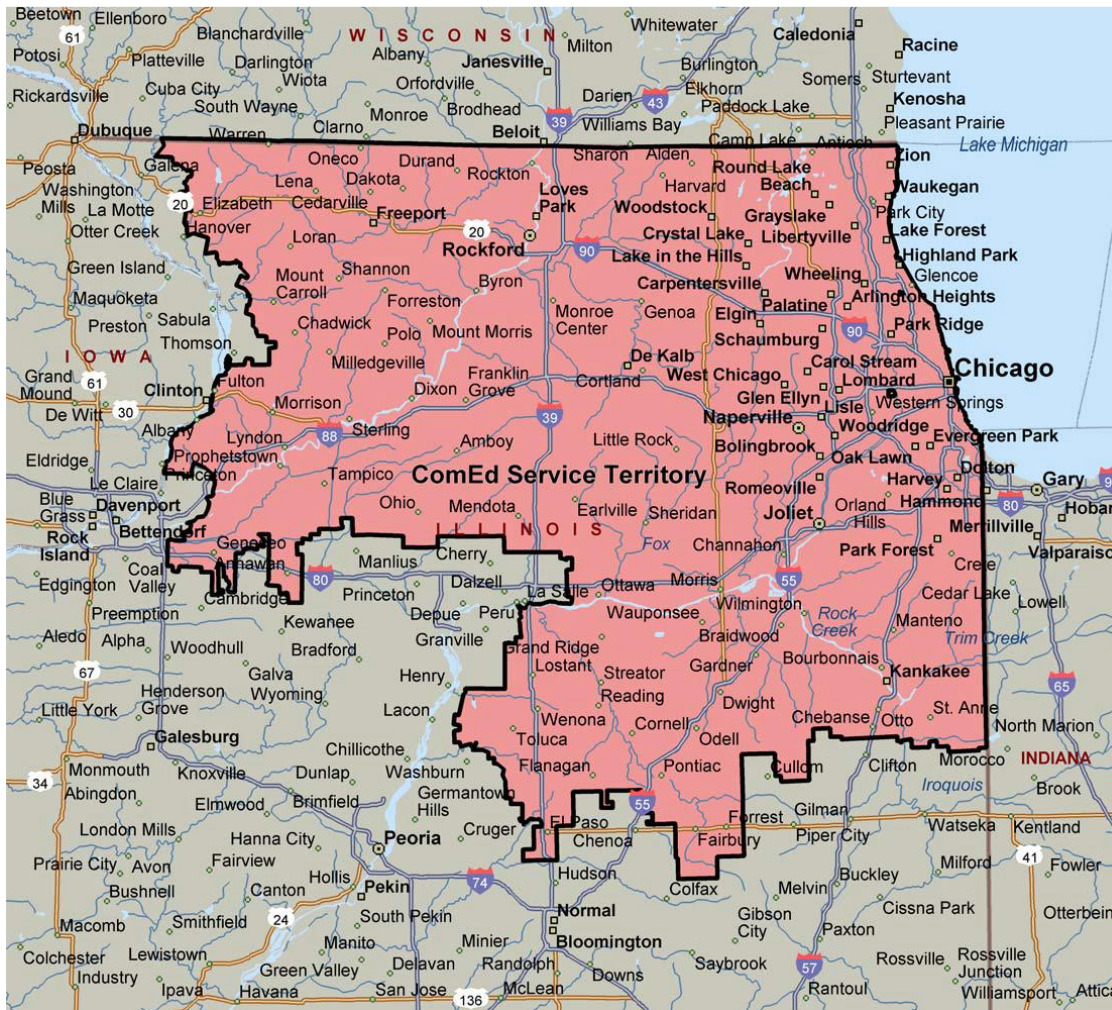
Realizing the Potential for Market Transformation in Illinois

Midwest Energy Solutions Conference

Jim Fay, Rick Tonielli & Vince Gutierrez, ComEd

February 1, 2023

ComEd Territory Profile

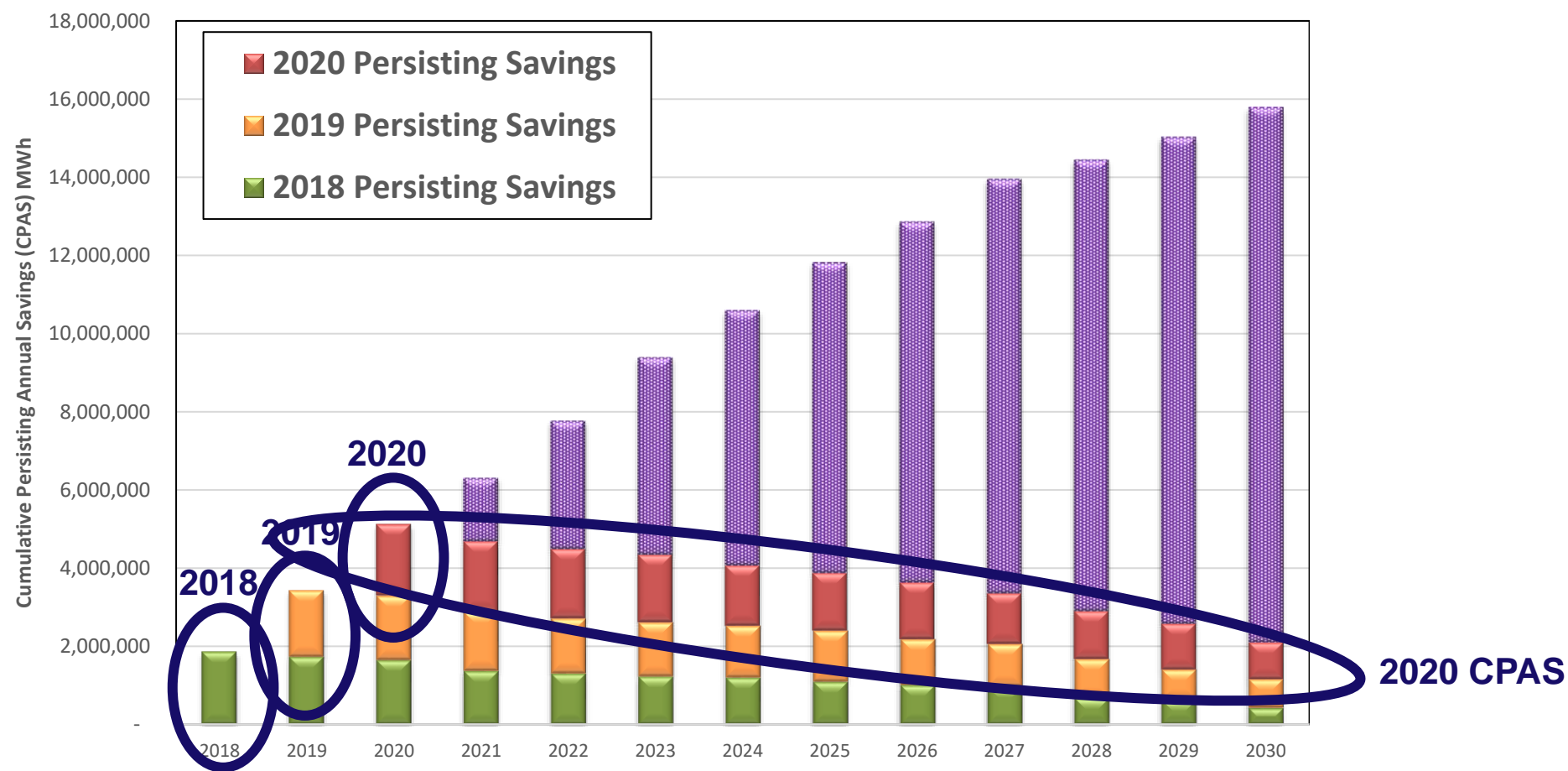


Quick Facts

- » Service Area: 11,300 square miles
- » Customers: 3.8 million electric
- » Employees: Nearly 6,000
- » Substations: 1,300
- » Distribution & Transmission Power Lines: more than 70,000 miles

Energy Efficiency Program Administrators in Illinois: - ComEd, Ameren, Nicor Gas, Peoples Gas & North Shore Gas

Illinois Electric Utilities: Transitioning to Cumulative Persisting Annual Savings Goal



Traditional Resource Acquisition (RA) Program: Program Administrator/Evaluator Roles

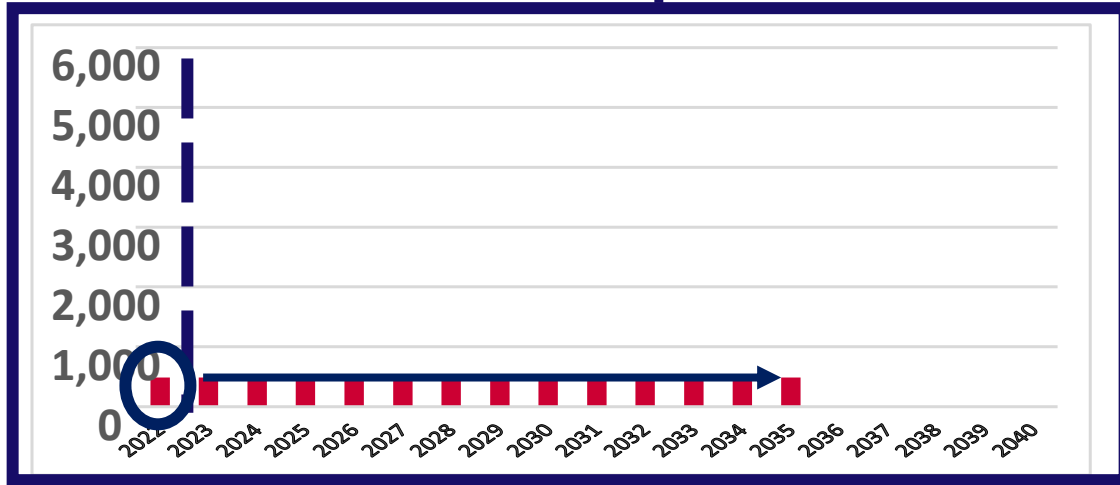


- Deemed NTG values
 - Energy Savings per Install (ILTRM)
- 
- Track Sales/Installs
- 
- Review & Validate Installs
 - Determine Realization Rate

- NTG and Savings (ILTRM) Changes are made prospectively to future program years
- Program risk is limited largely to variation in # installs
- Results can be quickly closed and filed on a program year

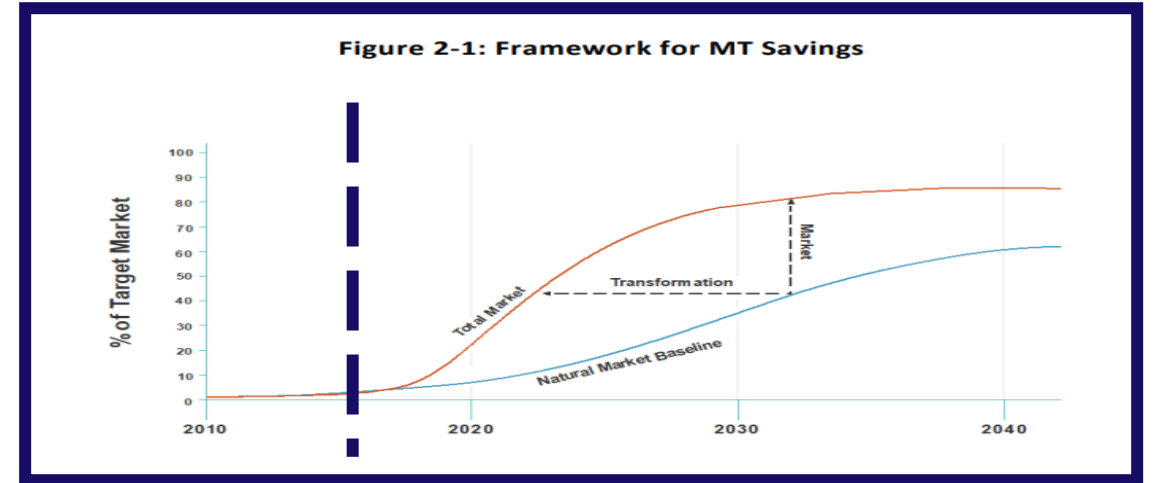
Key Differences – Resource Acquisition vs. Market Transformation

Resource Acquisition



- Program intent is to influence the outcome of specific decisions *within a program year*
- Program Budget Allocation and Savings Impact happen *in the same year*
- Evaluation validates program year *actual customer decisions and appliance installs*

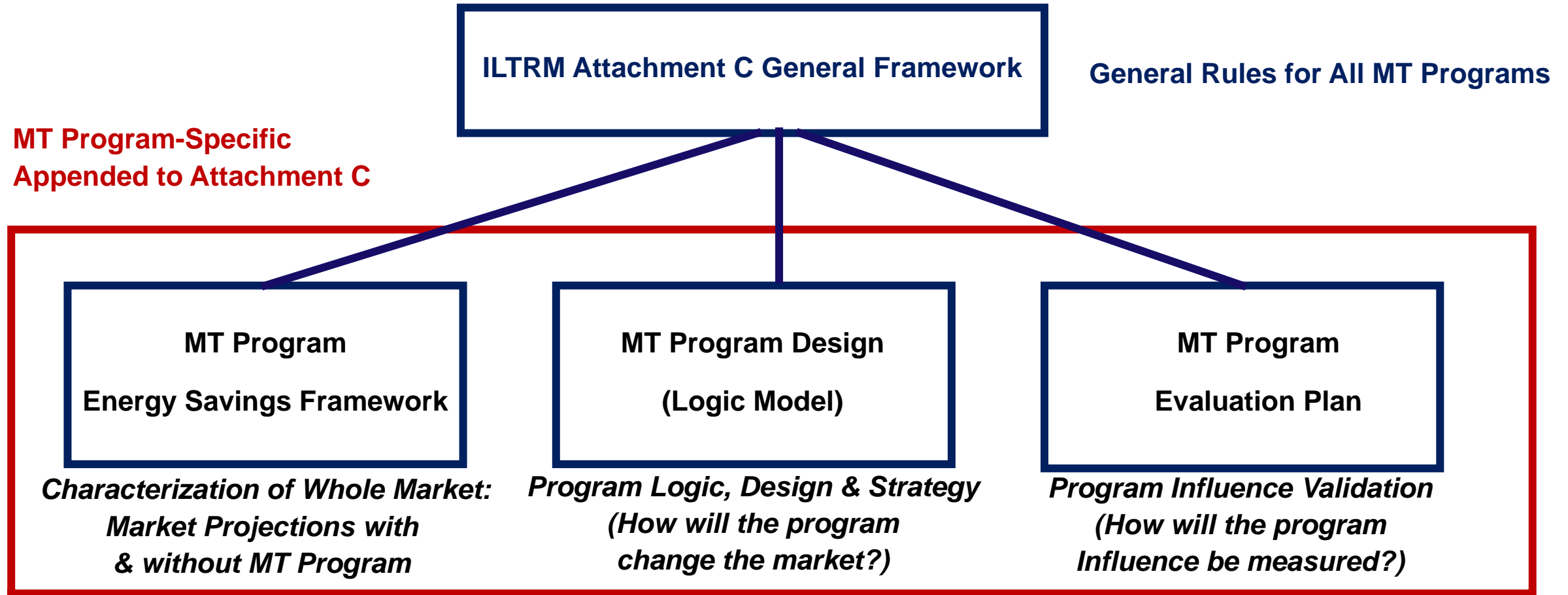
Market Transformation



- Program intent is to influence the trajectory of market adoptions *in the future*
- Program budget is allocated *before* savings impact occurs
- Evaluation validates market decisions and actions *that are projected to occur*

Market Transformation 3 Principal Program Documents

3 Documents Embody MT Program Savings Information, Program Strategy and Evaluation Approach

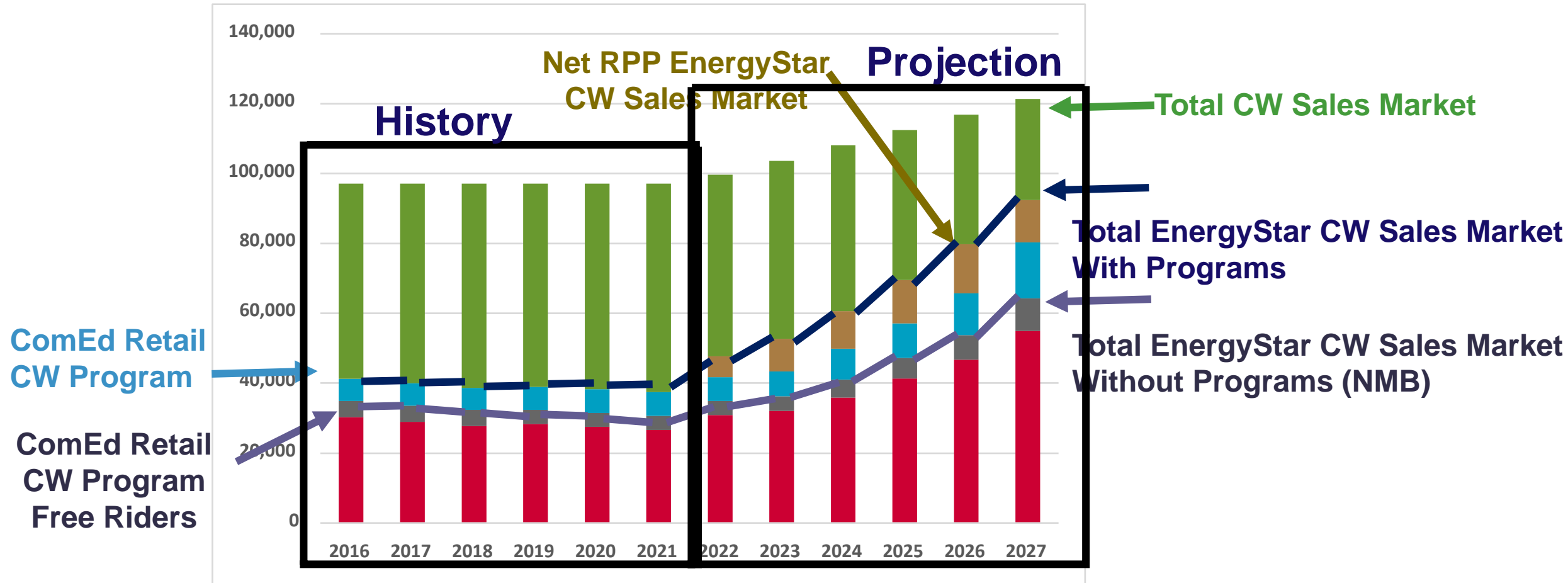


The MT Energy Savings Framework

- **Market Characterization for MT Measure - Contents**
 - **How Big Is the Market (Stock & Sales)?**
 - **Recent Trends for EE & Market**
 - **Future Projection of Market without the Program (Natural Market Baseline)**
 - **Program Market Impact (Sales & Energy Savings)**
 - **All of the Narrative Supporting the Numbers**
- **Role in Program Evaluation**
 - **Multiple Party Agreement on Energy Savings Protocol**
 - **Depth of Analysis**
- **Working Document**
 - **Updated with Actual Market Data Annually**
 - **To Be “Redesigned” as Market Fundamentals Change**

The MT Program Energy Savings Framework

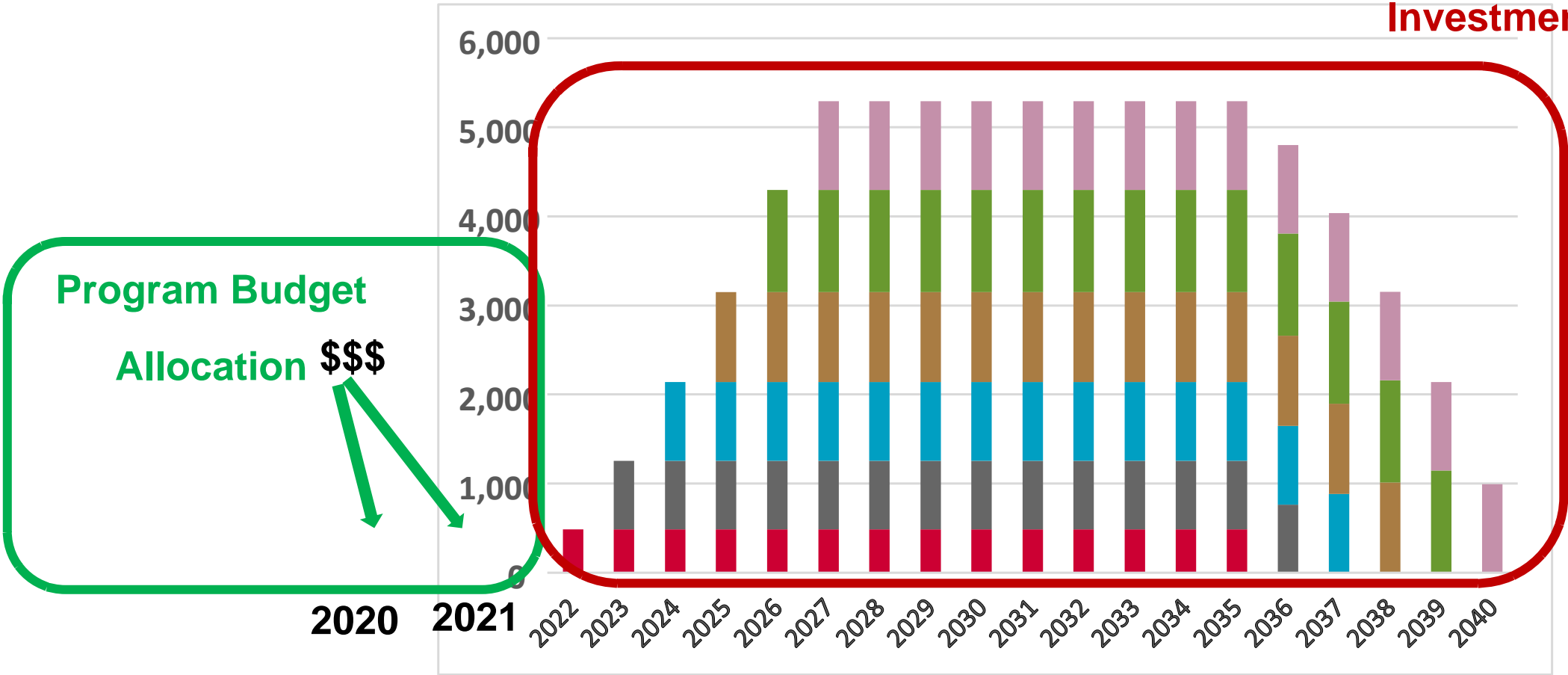
Northern Illinois Energy Efficient Clothes Washer Market – Top Loaders at RPP Participating Retailers



EE Product Market Sales to CPAS Savings (MWh) by Funding Year

Program Impact
Of Multi-Year

Investment



Market Transformation (MT) Program: Program Administrator/Evaluator Roles

Program Planning *~4 Months*

Program Execution *~12 Months*

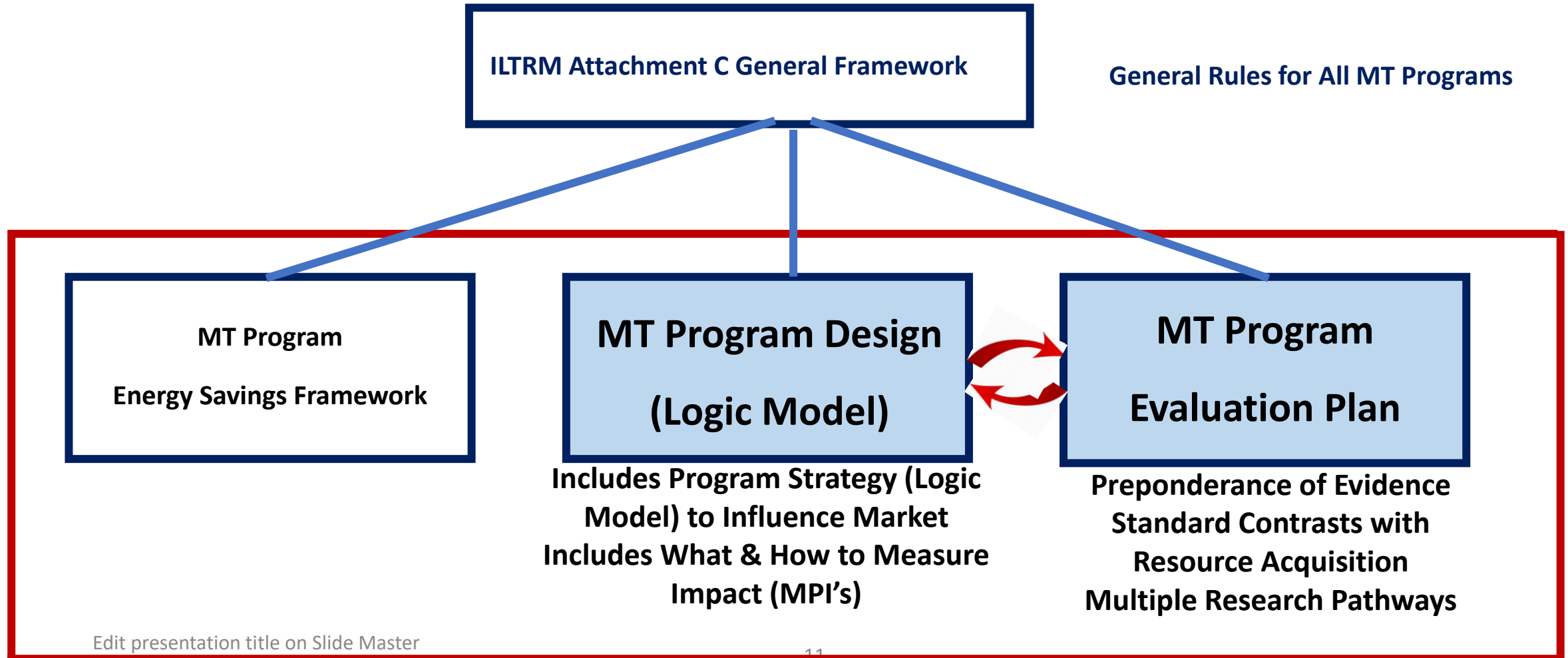
Program Evaluation *~4 Months*

- Deemed NMB (ESF)
- Energy Savings per Install (ILTRM)
- Review Market Data & Adjust Project for Completed Year
- Evaluate ESF Applicability

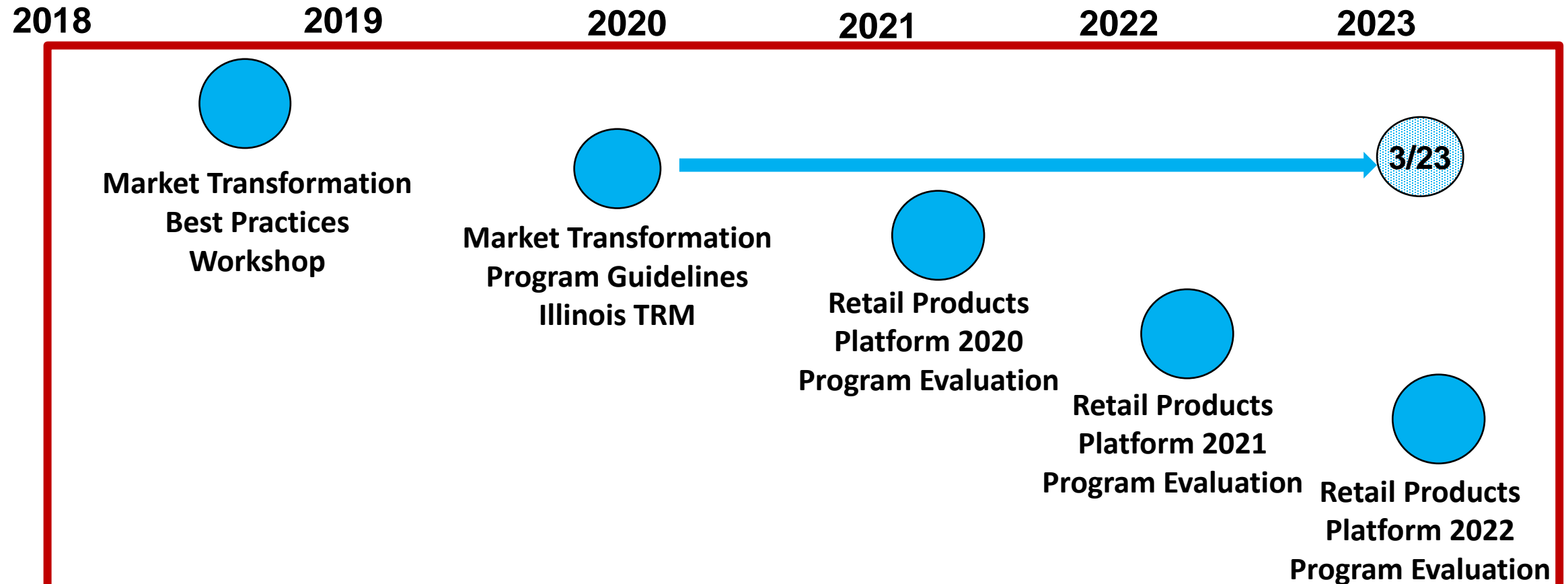
- Energy Savings Framework (NMB and Program Savings) – prospective changes
- All future savings are at risk
- Results can only be closed out for the most recently completed year

Market Transformation Program Information

Logic Model & Evaluation Plan: Influencing and Validating Influence in Entire Market is Harder



Illinois Market Transformation Program Evaluation Progress



www.guidehouse.com/experience/energy/2019/energy-efficiency-market-transformation-summit

[IL-TRM_Effective_010122_v10.0_Vol_4_X-Cutting_Measures_and_Attach_09242021.pdf](#)

[ComEd-RPP-CY2020-Impact-Evaluation-Report-2021-04-27-Final.pdf](#)

[ComEd-ENERGY-STAR-Retail-Products-Platform-CY2021-Impact-Evaluation-Report-2022-04-28-Final.pdf](#)

Market Transformation Programs in Illinois

Lessons Learned

1. Portfolio Investment Profile

- **Designing Programs to alter entire markets is ambitious**
- **It is a high risk/high reward program**
- **Portfolios should consider these complementary investments**

2. Front-End Market Characterization

- **Programs designed to alter the trajectory of an entire market should get a deeper up-front analysis**
- **Institutionalize process of learning how to improve effectiveness of program design**

Market Transformation Programs in Illinois

Lessons Learned

3. Ways to minimize risk:

- Do your homework up front
- Involve evaluators/stakeholders up-front
- How good is your projection?

4. Evaluation

- Merged responsibilities
- Multiply and diversify evaluation research approaches
- Einstellung

5. Program Design

- Hybrid designs

Thank you!

Questions & Follow up: James.Fay@ComEd.com

Future Research Needs

1. Short-term

- 1. We need to benchmark our description of the market and the program impact with appliance industry market experts.**
- 2. We need to have a better working understanding of appliance supply chains, drivers and information flow**

2. Long-term

- 1. We need to have a better working understanding of energy efficient product market diffusion patterns**
 - Under what circumstances should the natural market penetration be expected to deviate from a standard “S” curve**