

# 2022-2025 Nicor Gas Evaluation Plan

Presentation to SAG

December 6, 2023

# Agenda

- Introduction to 2022-2025 evaluation activities and timeline
  - Key 2024 evaluation activities
- Program-Level Research
  - Impact
  - Net-to-Gross (NTG)
  - Process
  - Income Eligible / Income Qualified
  - Market Transformation
- Portfolio-Level Research
- Budget Allocation
- Coordination
- Q&A + feedback

# Introduction

2022 to 2025 Portfolio Evaluation

# The Nicor Gas 2024 Portfolio

Sector / Category	2024	
	Program Budget	Net Therms
Income Eligible	28%	10%
Residential	26%	38%
Small Business	4%	8%
C&I and Public Sector	20%	44%
Portfolio Functions	21%	0%
<b>Portfolio Total</b>	<b>\$45,705,000</b>	<b>14,059,000</b>

# Introduction to 2022-2025 Evaluation

Program-Level Research	Portfolio-Level Research and Activities	<i>Key Activities for 2024</i>
<p><b>Gross Impact Research</b></p> <ul style="list-style-type: none"><li>• Conducted annually, all* programs</li></ul> <p><b>Net-to-Gross (NTG) Research</b></p> <ul style="list-style-type: none"><li>• Conducted once per cycle for most programs</li></ul> <p><b>Process Research</b></p> <ul style="list-style-type: none"><li>• Conducted based on program need, cost, and joint opportunities</li></ul> <p><b>Market Transformation (MT)</b></p> <ul style="list-style-type: none"><li>• Advise statewide efforts</li><li>• Research and verification of implemented initiatives</li></ul> <p><b>Income Eligible</b></p> <ul style="list-style-type: none"><li>• Explore joint research opportunities targeting program outreach and delivery</li><li>• Conduct research</li></ul>	<p><b>TRM Update Support</b></p> <ul style="list-style-type: none"><li>• TRM v13, Q1 through Q3</li><li>• Prioritize support for future updates</li><li>• Refine NTG and MT protocols</li></ul> <p><b>Non-Energy Impacts (NEIs)</b></p> <ul style="list-style-type: none"><li>• Joint research on Societal, Utility, and Participant NEIs</li></ul> <p><b>Annual Reporting</b></p> <ul style="list-style-type: none"><li>• Verified savings and TRC</li><li>• Economic impacts</li></ul> <p><b>Collaboration</b></p> <ul style="list-style-type: none"><li>• With ComEd on joint programs and research</li><li>• Statewide</li></ul>	<p><b>Program-Level</b></p> <ul style="list-style-type: none"><li>• Gross impact on 2024 programs, starting mid-year,<ul style="list-style-type: none"><li>• Custom sampling in 2024 Q3/Q4</li><li>• End-of Year in 2025 Q1/Q2</li></ul></li><li>• NTG for selected programs starting 2024 Q1</li></ul> <p><b>Portfolio-Level/Statewide</b></p> <ul style="list-style-type: none"><li>• Finish 2023</li><li>• 2025 Planning</li><li>• TRM v13 update participation</li><li>• Other research is under consideration and could begin 2024</li></ul>

\* A program that accounts for less than 3% of portfolio savings and has a history of consistent verified savings realization rates with values close to 100% at both the measure level and program level will be considered for applying the previous year's realization rates

# Program-Level Research

Summary of 2022-2025 evaluation activities  
and timelines

# Overview of 2022-2025 Evaluation

Program-Level Research		
Gross Impact Evaluation Research	NTG Research	Process and Other Research
<p><b>Timing</b></p> <ul style="list-style-type: none"> <li>End-of-Year on most programs                             <ul style="list-style-type: none"> <li>Small programs with history of realization rates consistently near 1.0 receive 2023 RR</li> </ul> </li> <li>Larger programs and new measures receive mid-year review</li> <li>Large or complex custom projects receive parallel path / early review</li> </ul> <p><b>Methodology</b></p> <ul style="list-style-type: none"> <li>TRM-based measure verification</li> <li>Custom projects M&amp;V protocols</li> <li>Consumption data regression</li> </ul> <p><b>Approach</b></p> <ul style="list-style-type: none"> <li>TRM measures: Census review</li> <li>Custom Projects: File review on a sample, site M&amp;V for a subset</li> <li>Consumption Data Regression: single project or population</li> </ul>	<p><b>Timing</b></p> <ul style="list-style-type: none"> <li>Once per cycle for most programs</li> <li>Change in program or market</li> <li>Prioritize need</li> </ul> <p><b>Methodology</b></p> <ul style="list-style-type: none"> <li>Apply statewide protocol in TRM or approved by SAG NTG Working Group</li> </ul> <p><b>Approach</b></p> <ul style="list-style-type: none"> <li>On-line survey and/or telephone</li> <li>Free-Ridership survey close to participation</li> <li>Spillover survey 12+ months after participation to allow for actions</li> </ul> <p><b>Target</b></p> <ul style="list-style-type: none"> <li>Participating Customers</li> <li>Trade Allies</li> <li>Non-Participants</li> </ul>	<p><b>Timing</b></p> <ul style="list-style-type: none"> <li>Conduct based on program need, cost, and joint opportunities</li> <li>Can combine with NTG surveys</li> </ul> <p><b>Methodology</b></p> <ul style="list-style-type: none"> <li>Evaluation best practices</li> </ul> <p><b>Approach</b></p> <ul style="list-style-type: none"> <li>Review program materials</li> <li>Often use survey research, on-line and/or telephone</li> <li>Interviews and focus groups</li> <li>Benchmarking</li> <li>Secondary research</li> </ul> <p><b>Target</b></p> <ul style="list-style-type: none"> <li>Program managers, contractors</li> <li>Customers and Trade Allies</li> <li>Non-Participants</li> </ul>

# Impact Evaluation Timeline, 2024 Programs

Activity	Target	2024				2025			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Interim Impact Review and Reporting	TRM-Based Measures			Interim Data					
	Sampled Custom Projects			Wave 1	Wave 2				
Annual Impact Evaluation and Reporting	Program-Level Impacts					2024 End of Year			
	Verified Portfolio Cost and Savings Results							2024	
Parallel Path Review	Large or Complex Projects in Pre-App Stage	Reviews occur when program brings project to evaluators							

# Impact Evaluation - Residential

Program/Market Offering	Gross Impact Evaluation Approach	Custom Project Parallel Path Review	Interim Review Type
<b>Residential Programs</b>			
<b>Energy Education &amp; Outreach</b>			
Energy Education Kits*	2023 RR		TRM†
Energy-Saving Kits	2023 RR		TRM†
Home Energy Reports	RCT Pop. Consumption Data Analysis		
<b>Home Energy Savings*</b>			
Assessments and Direct Install	TRM		TRM
Advanced Thermostats	TRM		TRM
Weatherization Rebates	TRM		TRM
<b>Home Energy Efficiency Rebates</b>			
Space & Water Heating Rebates	TRM		TRM
Advanced Thermostats	TRM		TRM
<b>Residential New Construction</b>	TRM		TRM
<b>Multi-Family Program</b>			
Assessments and Direct Install	TRM		TRM
Rebates: Prescriptive	TRM		TRM
Rebates: Custom	Custom	If Requested	Q3, Q4 Samples
Central Plant Optimization	TRM		TRM

\*Jointly implemented with ComEd.

†Interim review will be conducted only if our review of the tracking database finds substantial changes from 2023.

Source: Guidehouse

# Impact Evaluation - Income Qualified

Program/Market Offering	Gross Impact Evaluation Approach	Custom Project Parallel Path Review	Interim Review Type
<b>Income Qualified Programs</b>			
<b>Single Family Weatherization*</b>			
IHWAP, Contractor Channel and Healthy Home	TRM		TRM
<b>Multi-Family Weatherization*</b>			
IHWAP, Contractor Channel and Healthy Home	TRM & Custom	If Requested	TRM
<b>Public Housing Authority</b>	2023 RR	If Requested	TRM†
<b>Affordable Housing New Construction</b>	Custom	If Requested	
<b>Energy Saving Kits</b>	2023 RR		TRM†

\*Jointly implemented with ComEd.

† Interim review will be conducted only if our review of the tracking database finds substantial changes from 2023.

Source: Guidehouse

# Impact Evaluation- Business and Public Sector

Program/Market Offering	Gross Impact Evaluation Approach	Custom Project Parallel Path Review	Interim Review Type
<b>Business and Public Sector Programs</b>			
<b>Business Energy Efficiency Rebates</b>			
Assessment and Direct Install	TRM		TRM
Rebates	TRM		TRM
Business Optimization	TRM		TRM
Commercial Food Service	TRM		TRM
<b>Coordinated† New Construction</b>	Custom		Q3 Sample
<b>Business Custom</b>			
Custom Incentives	Custom	If Requested	Q3, Q4 Samples
Combined Heat and Power	Custom	If Requested	
Stand-Alone Retro-Commissioning	Custom	If Requested	Q3, Q4 Samples
Coordinated† Retro-Commissioning	Custom		Quarterly Sample
<b>Small Business</b>			
Assessments and Direct Install	TRM		TRM
Rebates: Prescriptive	TRM		TRM
Rebates: Custom	Custom		Q3, Q4 Samples
<b>Strategic Energy Management*</b>	Custom	If Requested	
<b>Building Operator Certification</b>	TRM		

\*Jointly implemented with ComEd

†Coordinated with ComEd

Source: Guidehouse

# NTG Evaluation Timeline

Activity	Timing	2023			2024												2025
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
Interview program staff, design survey instruments. Two months per program	October 1 to January 15	█	█	█	█												
Prepare survey for fielding and launch. Field data collection lasts 4 weeks up to 5 to 6 months when rolling interviews are employed	January 15 to April 30				█	█	█	█									
Evaluators analyze data and report NTG results	May 1 to July 15								█	█	█						
Finalize all NTG research memos	July 15 to August 31										█	█					
Evaluators present NTG recommendations to SAG and Utilities, and make best effort to reach consensus	September 1 to September 30												█				
Final consensus NTG ratios deemed	October 1													█			
New consensus NTG ratios in effect	January 1																█

# NTG Evaluation Draft Timeline

Program (s)	Target/Measures	Research	2022				2023				2024				2025				2026
			Q1	Q2	Q3	Q4	Q1												
<b>Residential Sector</b>	<b>All Measures</b>	<b>NPSO</b>																	
Home Energy Efficiency Rebates	Direct Install	FR, PSO																	
Residential (Home Energy Savings)	Advanced Thermostats	FR, PSO																	
Coordinated NRNC	All C&I and Public Sector	FR, PSO																	
Non-Residential Sector	All Measures	NPSO																	
Res New Construction	All Measures	FR, PSO																	
HEER / Online Marketplace	Advanced Thermostats	FR, TA																	
Home Energy Savings	Weatherization	FR, PSO, TA																	
Multi-Family	All Measures and Offerings	FR, PSO, TA																	
Business Energy Efficiency Rebates	All Measures except Commercial Food Service	FR, PSO, TA																	
Coordinated RCx	All C&I and Public Sector	FR, PSO, TA																	
Nicor Gas RCx (Standalone)	All C&I and Public Sector	FR, PSO, TA																	
Business Energy Efficiency Rebates (Commercial Food Service)	Commercial Food Service	FR, PSO, TA																	
Home Energy Rebates	HVAC, Water Htg	FR, PSO																	
Energy Saving Kits	All Measures	FR, PSO																	
Small Business	All Measures	FR, PSO																	
Coordinated NRNC	All C&I and Public Sector	FR, PSO																	
Business Custom	All Measures	FR, PSO																	
<b>Net-to-Gross Key</b>		Survey Design/Sample Prep																	
FR= Free-rideship		Fielding																	
PSO = Participant Spillover		NTG Analysis and Reporting																	
NPSO=Non-Participant Spillover		Year NTG Effective																	
TA= Trade Allies																			

# Market Transformation

## 1. The Evaluator's role in MT depends on the maturity of the initiative and the Companies' involvement

- **Company and stakeholders are engaged in MT concept and strategy development of an initiative**
  - Evaluators provide “as needed” support to the effort
  - Evaluators advise on key elements of the MT savings protocol of promising initiatives
    - Program Theory and Logic Model, Natural Market Baseline, Savings per Unit / Gross Market Potential, Market Progress Indicators, Data Collection, Attribution and Allocation
- **Company implements an initiative and expects to claim savings**
  - Evaluators conduct research and verification to estimate savings attributable to the Company following IL TRM Attachment C

# Market Transformation

## 2. Nicor Gas is engaged in

- Building Performance Standards
- Stretch Energy Codes

## 3. MT is coordinated with PGL/NSG, ComEd, Ameren Illinois, Third-Parties, SAG

- Other initiatives are being developed, led by other parties
- Coordination is within Illinois and Nationally
- Evaluation for PGL and NSG will be coordinated with other evaluation teams

# Portfolio-Level Topics

Research, Budget, Coordination

# Overview of 2022-2025 Evaluation

## Portfolio-Level Topics

### TRM Support and Research

#### TRM Update Support

- TRM v13, Q1 through Q3 2023
- Submit / review workpapers
- Participate in subcommittees
- Participate in late October “Evaluation Priorities” discussion led by TRM Administrator
- Refine NTG and MT protocols via Working Groups

#### TRM Research

- Prioritize by need, impact, and cost
- Additional evaluation priorities are being considered: modest scope and budget, meaningful impact

### Other Research Planned or Under Consideration

#### Opportunities to conduct joint research with ComEd, Ameren, Peoples & North Shore Gas

- NEIs: Research on Societal, Utility, and Participant NEIs
- Commercial Food Service Process Research
- Stretch Energy Codes MT
- Building Performance Standards MT

**If non-joint, ensure that natural gas related topics are considered if appropriate**

### Annual Reporting

#### Annual Reporting

- Verified savings and program costs
- Water savings, CO<sub>2</sub> reduction
- High Impact Measures for TRM
- Cost-effectiveness TRC / PACT
- Joint-program TRC
- Economic impacts

#### Timing

- Q3 each year, when final data is available
- Q2 / Q3 2026 four-year summary

#### Ad Hoc Reporting

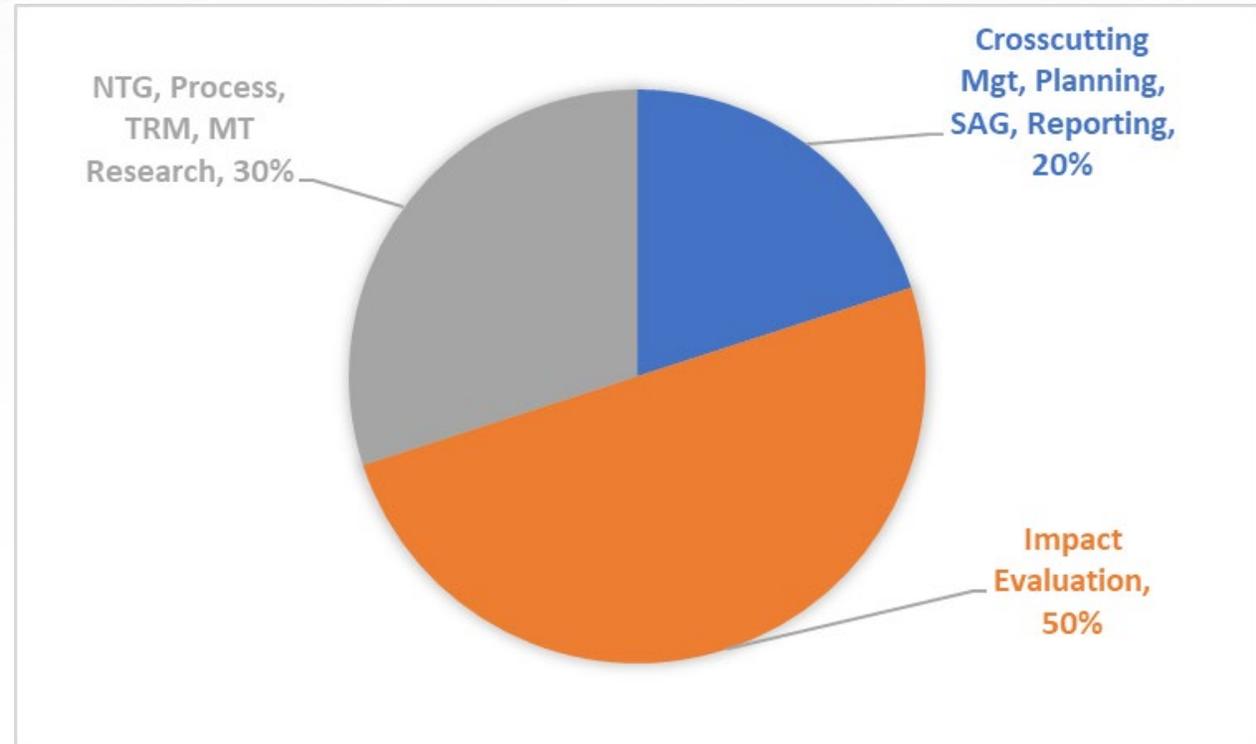
# Evaluation Budget

## 1. Overall Budget is split between

- Impact Evaluation
- Crosscutting Activities (Management, Planning, and Reporting)
- Research (NTG, Process, MT, Other)

## 2. Prioritizing Resources

- Meet requirements for savings verification and reporting
- ICC Orders and SAG Input
- Program contribution to portfolio net savings
- Program / Implementer needs and effectiveness
- Opportunities to leverage joint research with other utilities



**Evaluation Budget – 4 Year: \$5,483,359**  
Per Program Year: \$1,370,840

# Evaluation Coordination

1. **Guidehouse coordinates with the other utilities and their evaluation teams on an ongoing basis – this includes Ameren, ComEd, and Peoples and North Shore Gas**
2. **Gas / Electric Joint Program Evaluations**
  - Some jointly delivered programs are evaluated by a single-team, producing a single report
  - Joint or coordinated programs and measures are evaluated separately in some cases
  - Evaluators calculate and report joint TRCs
  - Monthly evaluation coordination meetings with all evaluation teams

# Evaluation Coordination

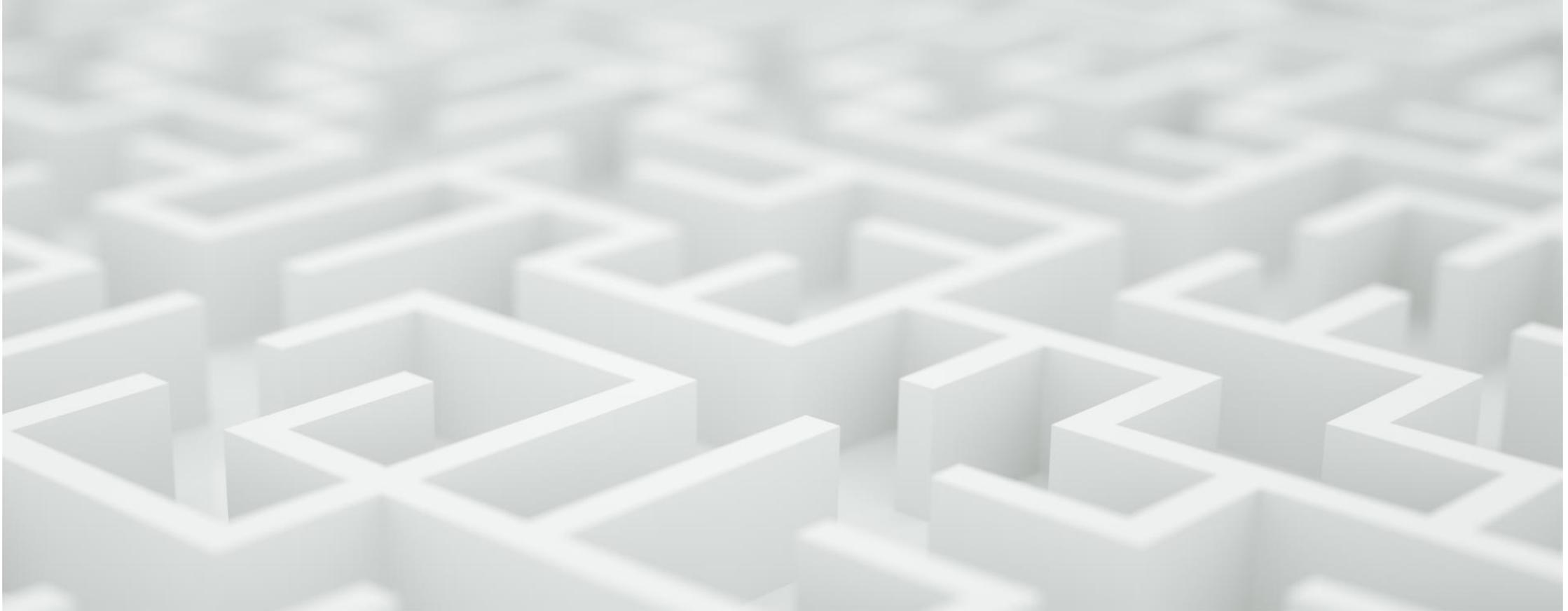
## 3. Coordination on NTG, Process, and TRM Research

- TRM measure research considered on a case-by-case basis
- Process research is done jointly when it is beneficial to do so
- 2024 collaborative research planned
  - Compressed Air Leak Repair EUL Study
  - Statewide Midstream Food Service NTG Research

## 4. Coordination beyond specific programs occurs as follows

- SAG meetings, Illinois-wide issues
- Illinois NTG Framework and Protocol Working Group
- Illinois TRM Technical Advisory Committee
- Evaluator coordination calls (monthly)

# Questions, Feedback



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