

# **Epic Savers Kits Pilot Impact Evaluation Report**

**Energy Efficiency Plan: Program Year 2024  
(1/1/2024-12/31/2024)**

**Prepared for:  
North Shore Gas  
FINAL**

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**Prepared by:**  
Eric Ogbe  
Guidehouse

[guidehouse.com](https://www.guidehouse.com)

**Submitted to:**

Peoples Gas  
North Shore Gas  
200 East Randolph Street  
Chicago, IL 60601

**Submitted by:**

Guidehouse  
150 N. Riverside Plaza, Suite 2100  
Chicago, IL 60606

**Contact:**

Ed Balbis  
Partner  
561.644.9407  
**ebalbis@guidehouse.com**

Jeff Erickson  
Director  
802.526.5113  
**jeff.erickson@guidehouse.com**

Laura Agapay-Read  
Associate Director  
312.583.4178  
**laura.agapay.read@guidehouse.com**

Charles Ampong  
Associate Director  
608.446.3172  
**charles.ampong@guidehouse.com**

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## Introduction

This report presents the results of the impact evaluation of the North Shore Gas (NSG) 2024 Epic Savers Kits pilot program. It presents a summary of the energy impacts for the total program and broken out by relevant measures and program structure details. The appendix presents the impact analysis methodology and Illinois total resource cost (TRC) inputs. Program year (PY) 2024 covers January 1, 2024 through December 31, 2024.

## Program Description

The Epic Savers Kits program is a pilot initiative that focuses on single-family homes with the highest energy usage through a targeted marketing campaign. The kits include a showerhead, adhesive backed door sweep, bathroom aerator (1.0 GPM), water heater temperature setback, and a coupon to redeem a smart thermostat from an online store. The goal of the pilot was to test Epic Savers in 2024 for its potential as a lever to drive market rate residential savings in 2025 and beyond.

The program distributed 1,012 kits in 2024, and 143 customers used the coupon in the kits to get a smart thermostat from the North Shore Gas online store, as shown in the following table.

**Table 1. 2024 Volumetric Summary for NSG**

Participation	Total
Number of Kits Distributed (four measures per kit)*	1,012
Smart Thermostat	143

\* Distributed measures refer to the total quantity of measures distributed within the kit.

Source: North Shore Gas tracking data.

Table 2 summarizes the installed measure quantities that are the basis for verified energy savings.

**Table 2. 2024 Installed Measure Quantities for NSG**

Measure	Quantity Unit	Quantity Per Kit	Total Quantity Distributed
Low Flow Aerators (Bathroom)	Each	1	1,012
Low Flow Showerheads	Each	1	1,012
Self-Adhesive Door Sweep	Each	1	1,012
Water Heater Temperature Setback	Each	1	1,012
Smart Thermostat	Each	1	143

Source: North Shore Gas tracking data.

## Program Savings Detail

Table 3. summarizes the energy savings the NSG Epic Savers Kits Pilot Program achieved in 2024.

**Table 3. 2024 Annual Energy Savings Summary for NSG**

Program Category	Ex Ante Gross Savings (Therms)	Verified Gross RR*	Verified Gross Savings (Therms)	NTG†	NSPO‡	Verified Net Savings (Therms)
Epic Savers Kits	13,911	88%	12,286	Varies	1.083	12,338
Smart Thermostat	12,999	94%	12,216	0.95	1.083	12,568
<b>Total</b>	<b>26,910</b>	<b>91%</b>	<b>24,502</b>			<b>24,906</b>

\* Realization Rate (RR) is the ratio of verified gross savings to ex ante gross savings, based on evaluation research findings.

† NTG, Net to Gross is the deemed value available on the SAG website: <https://www.ilsag.info/evaluator-ntg-recommendations-for-2024/>.

‡ The market rate net savings were multiplied by a deemed non-participant spillover (NSPO) factor of 1.083.  
Source: Evaluation team analysis.

## Program Savings by Measure

The program includes five measures, as shown in the following table. The smart thermostat and low flow showerheads contributed the most savings.

**Table 4. 2024 Annual Energy Savings by Measure for NSG**

Savings Category	Ex Ante Gross Savings (Therms)	Verified Gross RR*	Verified Gross Savings (Therms)	NTG†	NSPO‡	Verified Net Savings (Therms)
Low Flow Aerators (Bathroom)	591	82%	486	1.00	1.083	526
Low Flow Showerheads	8,481	86%	7,332	1.00	1.083	7,941
Self-Adhesive Door Sweep	4,563	92%	4,213	0.80	1.083	3,650
Water Heater Temperature Setback	277	92%	255	0.80	1.083	221
Smart Thermostat	12,999	94%	12,216	0.95	1.083	12,568
<b>Total</b>	<b>26,910</b>	<b>91%</b>	<b>24,502</b>			<b>24,906</b>

\* Realization Rate (RR) is the ratio of verified gross savings to ex ante gross savings, based on evaluation research findings.

† NTG, Net to Gross is the deemed value available on the SAG website: <https://www.ilsag.info/evaluator-ntg-recommendations-for-2024/>.

‡ The market rate net savings were multiplied by a deemed non-participant spillover (NSPO) factor of 1.083.  
Source: Evaluation team analysis.

## Impact Analysis Findings and Recommendations

The Epic Savers Kits Pilot program achieved a 91% realization rate (RR) for PY2024. The realization rate was primarily driven by the application of an NPSO of 1.083 to calculate gross savings, as well as numerous occurrences where gross savings were incorrectly replaced with net savings in the program tracking data.

### Impact Parameter Estimates

Table 5. shows the therm savings and RR findings by measure from our review. Following the table, we provide findings and recommendations. Appendix A provides a description of the impact analysis methodology.

**Table 5. Verified Gross Savings Parameters**

Measure	Unit Basis	Ex Ante Gross (therms/unit)	Verified Gross (therms/unit)	Realization Rate	Data Source(s)
Low Flow Aerators (Bathroom)	Each	0.58	0.48	82%	IL TRM v12.0 Section 5.4.4†, PTD*
Low Flow Showerheads	Each	8.38	7.25	86%	IL TRM v12.0 Section 5.4.5, PTD
Self-Adhesive Door Sweep	Each	4.51	4.16	92%	IL TRM v12.0 Section 5.6.1, PTD
Water Heater Temperature Setback	Each	0.27	0.25	92%	IL TRM v12.0 Section 5.4.6, PTD
Smart Thermostat	Each	90.90	85.42	94%	IL TRM v12.0 Section 5.3.16, PTD

\* Program Tracking Data (PTD) provided by North Shore Gas; extract dated January 30, 2025.

† State of Illinois Technical Reference Manual version 12.0 from <http://www.ilsag.info/technical-reference-manual.html>.

Source: Evaluation team analysis.

## Findings and Recommendations

**Finding 1.** Guidehouse found that reported gross and net savings values were inverted in fifty instances, including examples such as WO-6772352, WO-6780243, WO-6780331, WO-6780981, and WO-6781884. The ex ante gross savings of 92.52 Therms and ex ante net savings of 87.89 Therms were swapped, resulting in net savings being reported as gross and vice versa.

**Recommendation 1.** Ensure that gross and net savings are reported correctly in their respective fields in the tracking data.

**Finding 2.** Guidehouse found the non-participant spillover (NPSO) factor of 1.083 was applied to ex ante gross savings for kits and thermostats. Evaluation excluded the NPSO from the verified gross savings calculation but applied to the net savings.

**Recommendation 2.** Ensure the non-participant spillover is only applied to reported ex ante net savings (not ex ante gross savings).

## Appendix A. Impact Analysis Methodology

The evaluation team verified unit savings for each program measure using the impact algorithm sources found in the Illinois Statewide Technical Reference Manual v12.0 (IL-TRM). Table A-1 presents the key parameters and the references used in the verified gross and net savings calculations.

**Table A-1. Impact Parameters**

Gross savings input parameters	Deemed Input Parameters	TRM Section*
Smart Thermostat	%FossilHeat , Gas_Heating_Consumption, Heating_Reduction, HF, Eff_ISR_Heat	IL-TRM, v12.0, Section 5.3.16
Low Flow Showerheads	GPM_base, GPM_low, L_base, L_low, Showerheads per household (SPH), showers per capita per day (SPCD), EPG_gas, %FossilDHW, Household, ISR, %SF	IL-TRM, v12.0, Section 5.4.5
Low Flow Aerators (Bathroom)	GPM_base, GPM_low, L_base, L_low, faucets per household (FPH), drain factor (DF), EPG_gas, %FossilDHW, Household, ISR, %SF	IL-TRM, v12.0, Section 5.4.4
Self-Adhesive Door Sweep	ADJRxAirsealing, ISR, %FossilHeat, $\Delta$ therms_sweep, %SF	IL-TRM, v12.0, Section 5.6.1
Water Heater Temperature Setback	U, A, Tpre, Tpost, Hours, ISR, RE_gas, %SF	IL-TRM, v12.0, Section 5.4.6

\* State of Illinois Technical Reference Manual version 12.0 from <http://www.ilsag.info/technical-reference-manual.html>

GPH – Gallons per hour

DHW – Domestic hot water

GPM – Gallons per minute

SF – Single family

ISR – In-service rate

Source: Evaluation team analysis.

**Appendix B. Program Specific Inputs for the Illinois TRC**

Table B-1 show the Total Resource Cost (TRC) cost-effectiveness analysis inputs available at the time of producing this impact evaluation report. Currently, additional required cost data (e.g., measure costs, program level incentive, and non-incentive costs) are not included in this table and will be provided to the evaluation team later. Guidehouse will include annual and lifetime water savings and greenhouse gas reductions in the end of year summary report.

**Table B-1. Verified Cost Effectiveness Inputs – NSG**

Savings Category	Units	DAC Project	Quantity	Effective Useful Life	Early replacement Flag	Ex Ante Gross Savings (Therms)	Verified Gross Savings (Therms)	Verified Net Savings (Therms)
Low Flow Aerators (Bathroom)	Each	No	1,012	10.0	No	591	486	526
Low Flow Showerheads	Each	No	1,012	10.0	No	8,481	7,332	7,941
Self-Adhesive Door Sweep	Each	No	1,012	20.0	No	4,563	4,213	3,650
Water Heater Temperature Setback	Each	No	1,012	2.0	No	277	255	221
Smart Thermostat	Each	No	143	11.0	No	12,999	12,216	12,568
<b>Total or Weighted Average</b>				<b>12.1</b>		<b>26,910</b>	<b>24,502</b>	<b>24,906</b>

Source: Evaluation team analysis.