



Performance
Services



Covington Independent Public Schools Year 5 Energy Savings Report

February 8, 2024





Year 5 Energy Savings Report

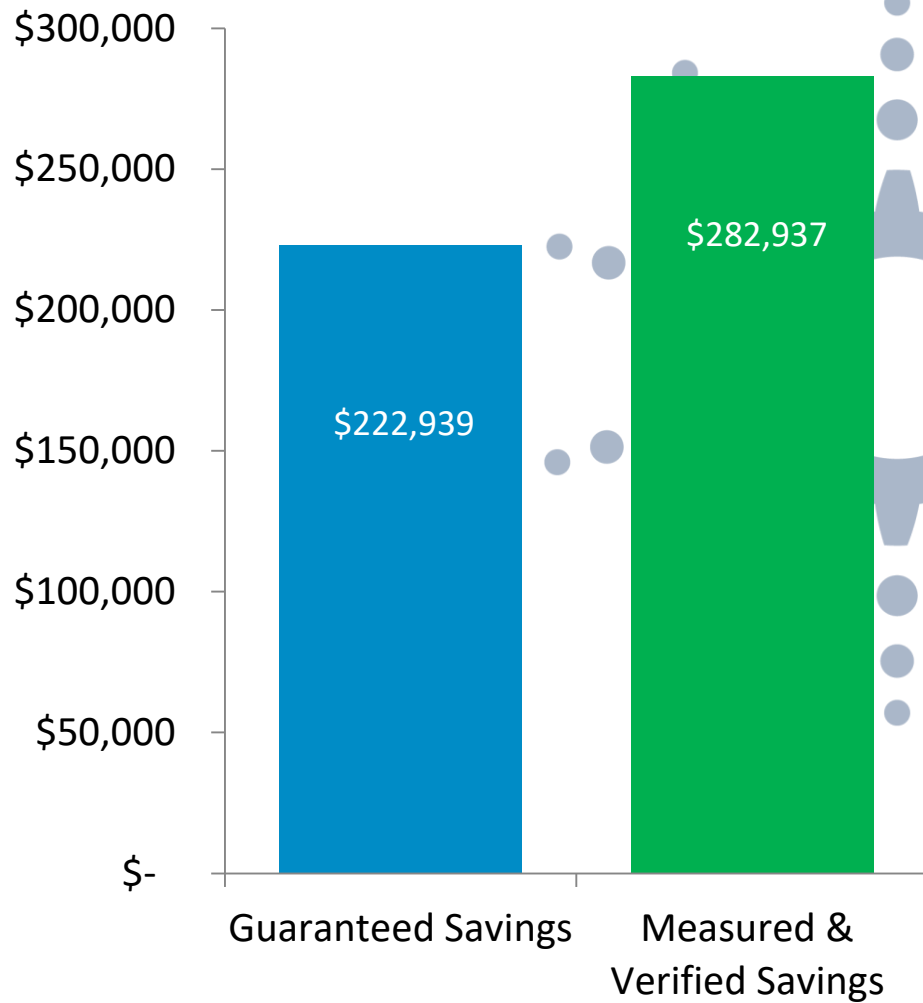
- Phase 1 Scope of Work - 2017 Project
 - Lighting conversion to LED
 - Solar system installations at Carlisle ES and Chapman Ed Center at the Holmes Campus
 - Complete HVAC (heating, ventilation, and air-conditioning) retrofit of Ninth District ES
 - Targeted upgrades of select HVAC Systems
 - Digital Control of HVAC Systems





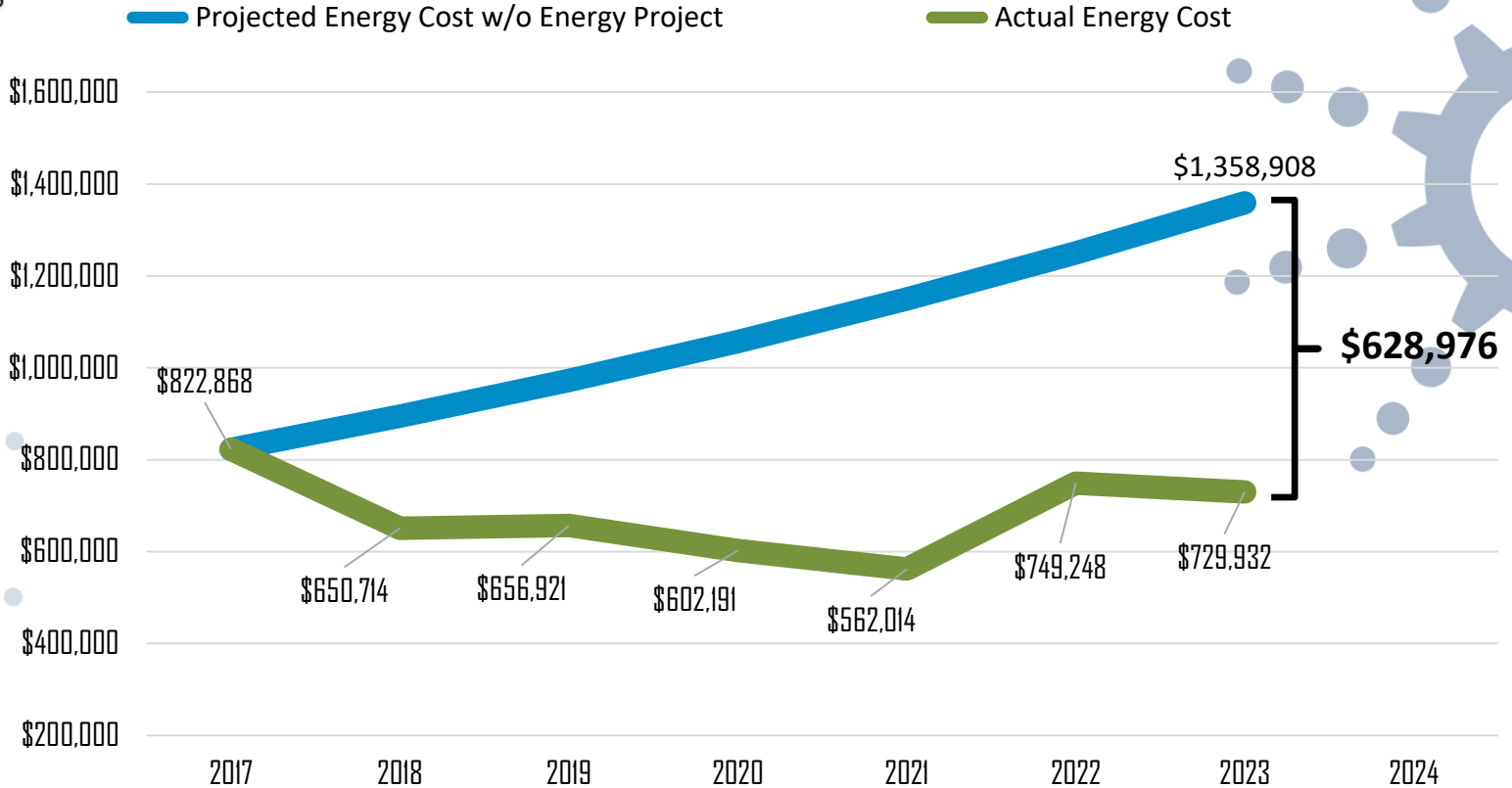
Year 5 Savings: \$282,937

❖ Exceeds the Guarantee by \$59,997 (27%)





Total Energy Cost Avoidance



5 Years of Solar Production

❖ Cumulative production within 4% of projected production



3,020,000

2,820,000

2,620,000

2,420,000

2,220,000

2,020,000

2,986,846

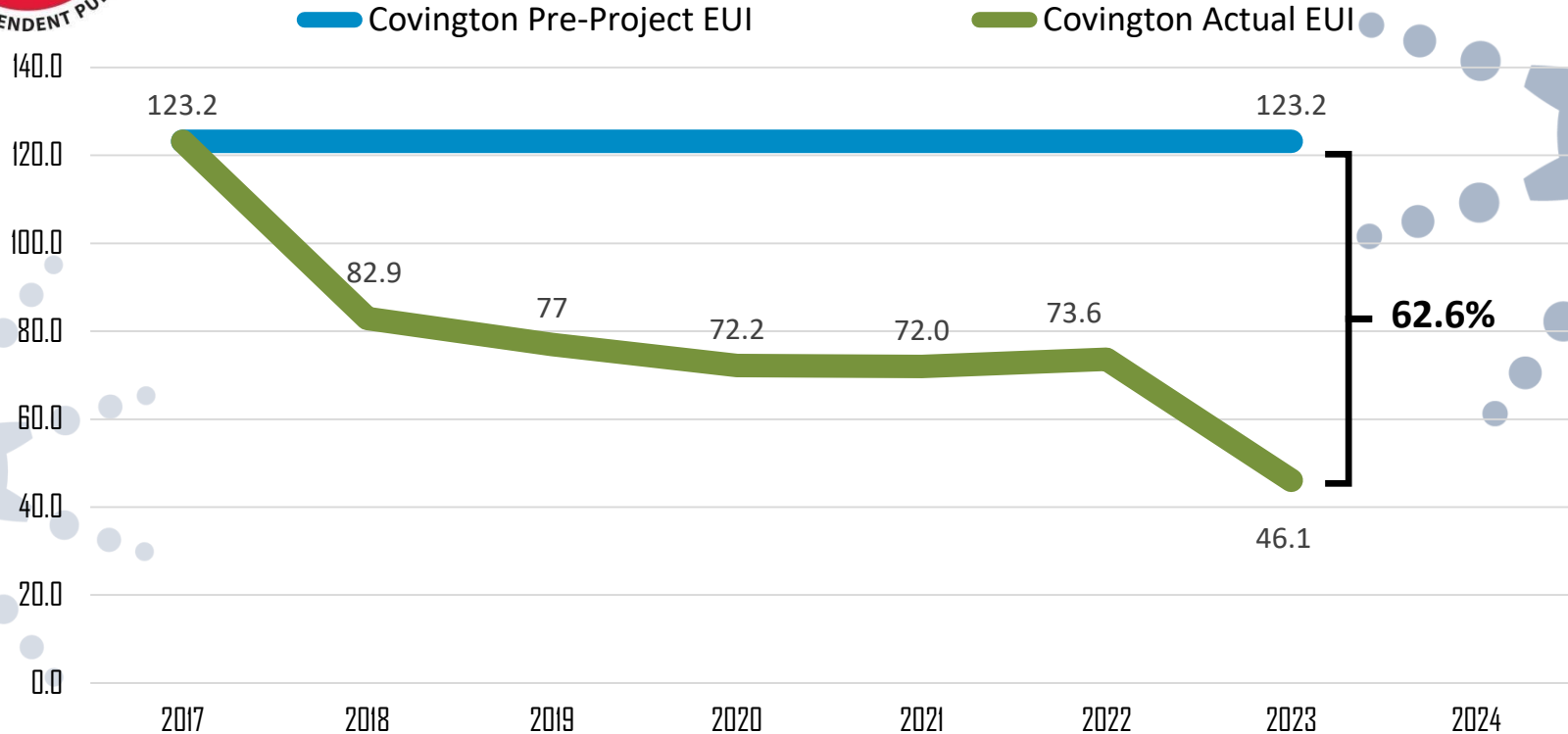
2,881,857

Projected kWh

Actual kWh

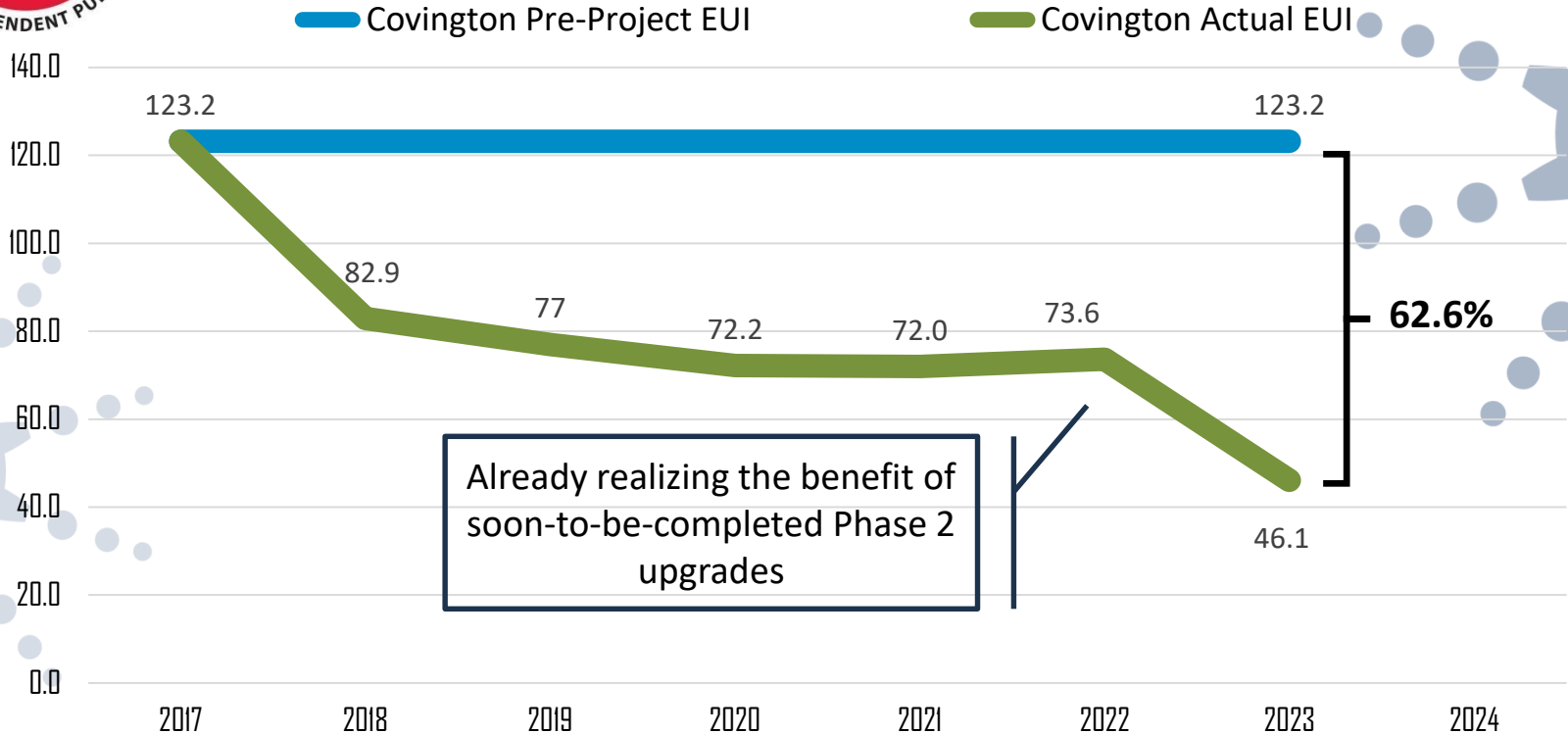


Energy Use Intensity Reduction





Energy Use Intensity Reduction



Already realizing the benefit of soon-to-be-completed Phase 2 upgrades

62.6%



Energy Star Qualifiers

- Chapman Fieldhouse
- Latonia Elementary
- Ninth District Elementary
- Sixth District Elementary



Phase 2 Update



- **Phase 2 Scope of Work, 2022 Project**
 - Interior LED lighting improvements
 - Telecommunications upgrade
 - Building envelope weatherization improvements
 - New energy-efficient transformers
 - Replaced boilers and pumps
 - Replaced rooftop units
 - New windows
 - New exterior doors
 - Complete HVAC Retrofit of James E. Biggs Early Childhood Education Center
 - Solar PV Systems at Sixth District, Latonia, and Glenn O. Swing



Phase 2 Update



- **Current Status**

- On Budget
- All base work complete except interconnection to Customer's switchgear at the (3) locations that had roof solar systems. Estimated completion end of February.
- Solar SRECs & ITC Rebates in progress
- Utility rebates processed
- Expected Owner Turnover meeting and as-builts end of February.





Phase 2 Projected Energy Impact

- Phase 2 Guaranteed Energy Savings \$125,102
- Projected ~20% reduction in energy intensity
- Savings **during construction**
 - **\$134,782** in additional utility savings compared to previous year
 - **37%** decrease in energy intensity





Other Improvement Potentials

- Carlisle ES HVAC – New HVAC to provide outside air and resolve humidity/comfort issues - GESC
- Homes Campus Ventilation Upgrades (Next Phase) – AC for the HS & MS – Design Build potential
- Energy Management/ Leadership Services
- Other Update:
 - District Controls – All buildings centralized on a single Tridium system – (already completed)