



KANSAS CITY
KANSAS
PUBLIC SCHOOLS

***Championing Energy Efficiency for a
Brighter Future***

Team Description: KCKPS – A Snapshot

Uniquely *historic* and **MODERN**



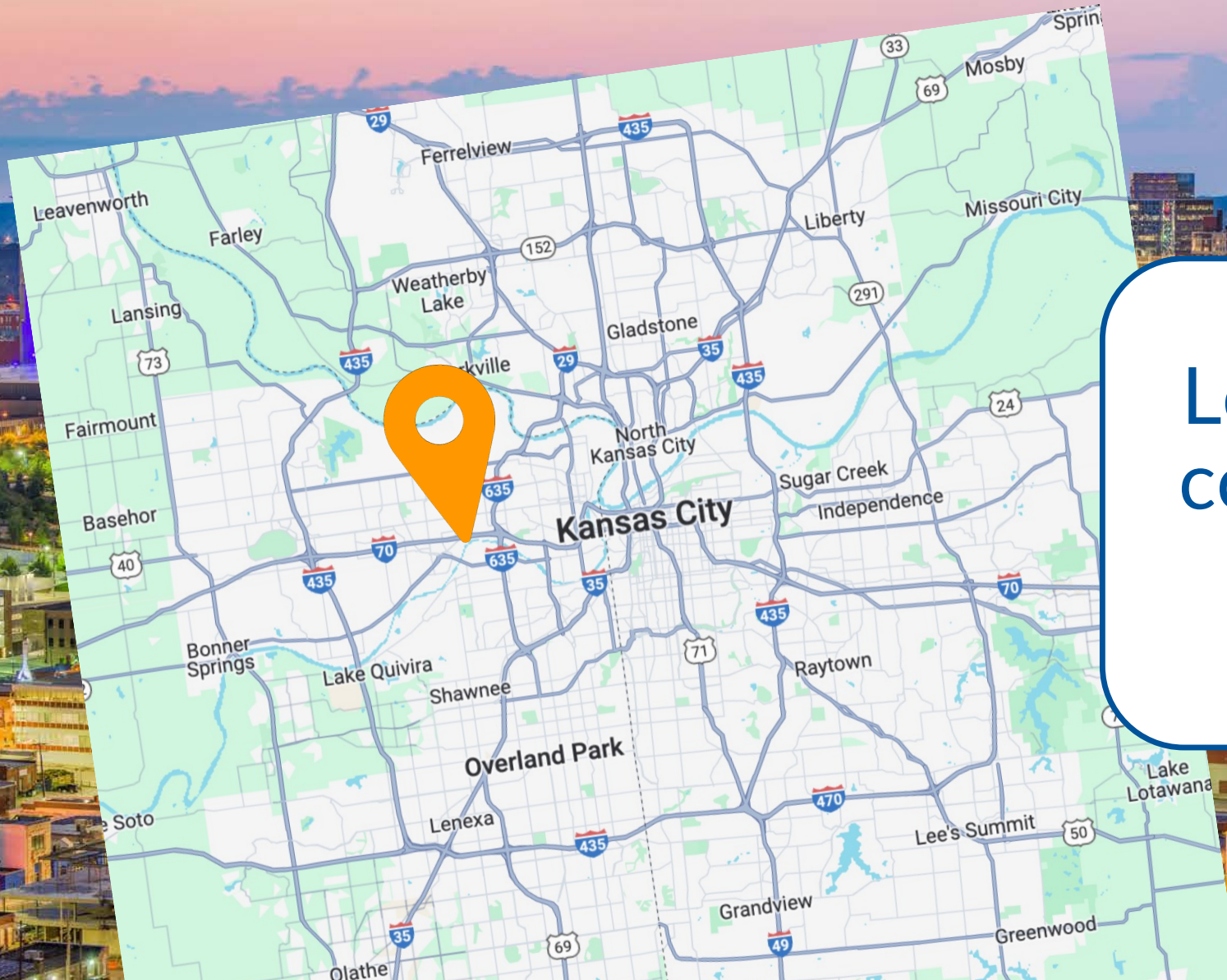
1st free public school in Kansas on the native lands of the Kaw/Kansa people



Today: 62 buildings ranging from 3 to 109 years old

Average age of 60.

Team Description: KCKPS – A Snapshot



Located in the urban core of Metropolitan Kansas City



Team Description: KCKPS – A Snapshot



Expansive, Diverse Population

- Over **21,000** Students
- **91.3%** of students from traditionally underrepresented populations
- **39.6%** emerging bilingual learners
- More than **65** languages



Team Description: KCKPS – A Snapshot

Economic Challenges



79.4% of students qualify for free or reduced lunches



17.7% of residents live below the poverty level



9.6% of children until 19 lack health insurance



Team Description: ENERGY CHAMPIONS

Steve Lilly - Chief of Operations

Doug Clements - Director of Physical Properties

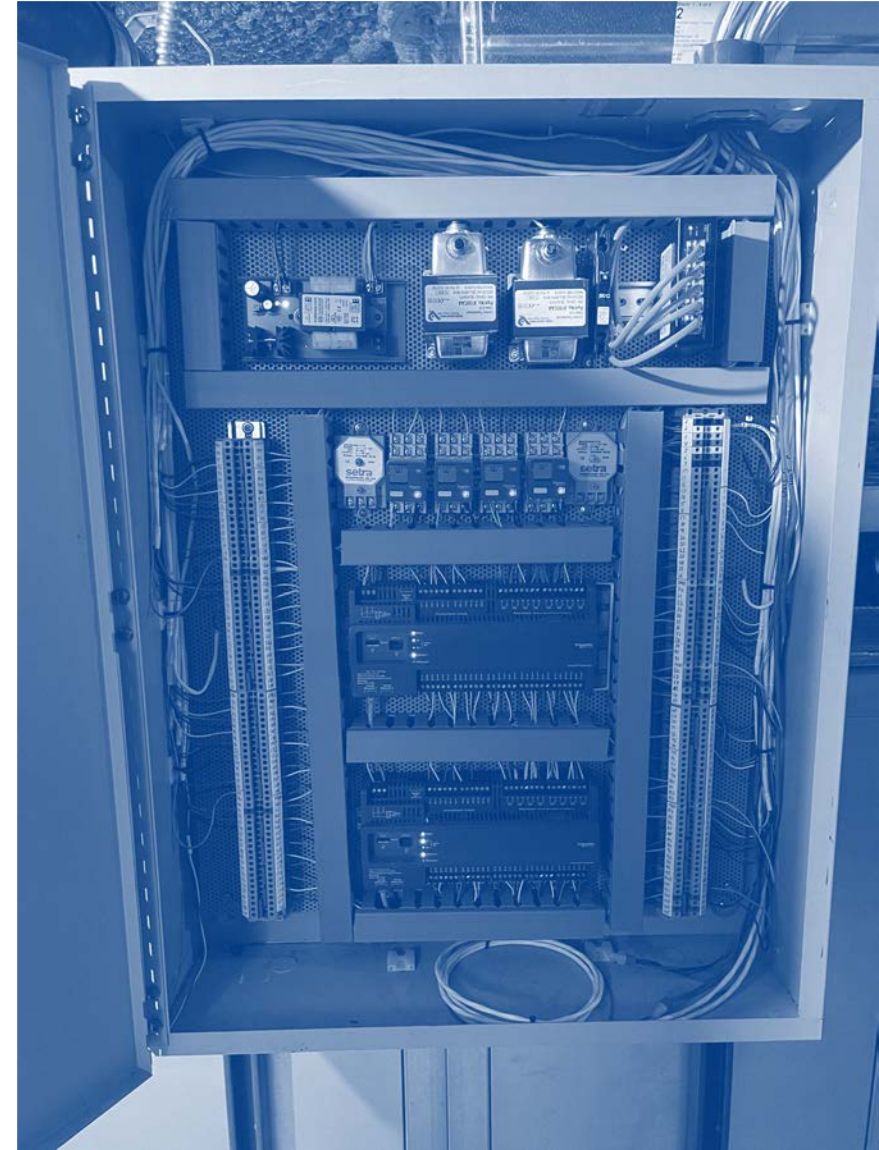
Kurt Wagner - Assistant Director of Physical Properties

Curtis Stevenson - Workplace Safety Facilitator, Energy Manager

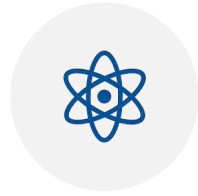
Steve Knight - Pipefitter Foreman

Brad Hoffman - Electrician Foreman

Lloyd Collins - Painting and Glass Foreman



Team Description: TRAININGS COMPLETED



Fundamental
Building Science



Benchmarking &
Energy
Management



Institutionalizing
Continuous
Improvement



Indoor Air Quality



Procurement



Addressing
Climate Resilience
in Schools



Stakeholder
Engagement



Business and
Communication
Skills



2023 FACILITY MASTER PLAN REPORT



FIVE-STEP LONG RANGE / FACILITY MASTER PLANNING PROCESS



Step 1 | Game Plan

The most critical step in the process to ensure success is to establish a comprehensive plan and schedule. **It is critical to utilize our proprietary stakeholder engagement model to define specific strategies and when to engage all stakeholders.**



Step 2 | Collect Data

Before we ask the stakeholders their needs/goals, we must have a clear understanding of what Kansas Public Schools already has. **By assessing the condition of existing facilities and current programs, we will be prepared to share with the stakeholders the specifics and goals of the long range plan.**



Step 3 | Planning Priorities

At the visioning stage, we define your educational goals for current and future generations of students and staff. **Working together through stakeholder collaboration, we co-create a realistic vision for the future of your facilities, programming and curriculum.**



Step 4 | Explore Options

Using the information we gathered from steps two and three by creating drawings and models of the programming/curriculum they will facilitate. The drawings will show options for each

Phase 2 Progress

Comprehensive Facility Assessment and Master Plan

A white and blue air quality sensor is mounted on a light-colored wall. The sensor has a white top section with a blue crosshair and a blue bottom section. A black cable is visible at the bottom.

Phase 2 Progress

Collaboration with Kansas Department
of Health and Environment

Grant-funded indoor and outdoor air quality
sensors, and monitoring program
subscription for each KCKPS building

5 indoor, 1 outdoor per building

Installation in progress

Phase 2 Progress

- New RTU at Quindaro Elementary School



BANNER ELEMENTARY
2026 N 4TH ST

Phase 2 Progress

Banneker Elementary
HVAC system scheduled for
Summer 2024



Phase 2 Progress

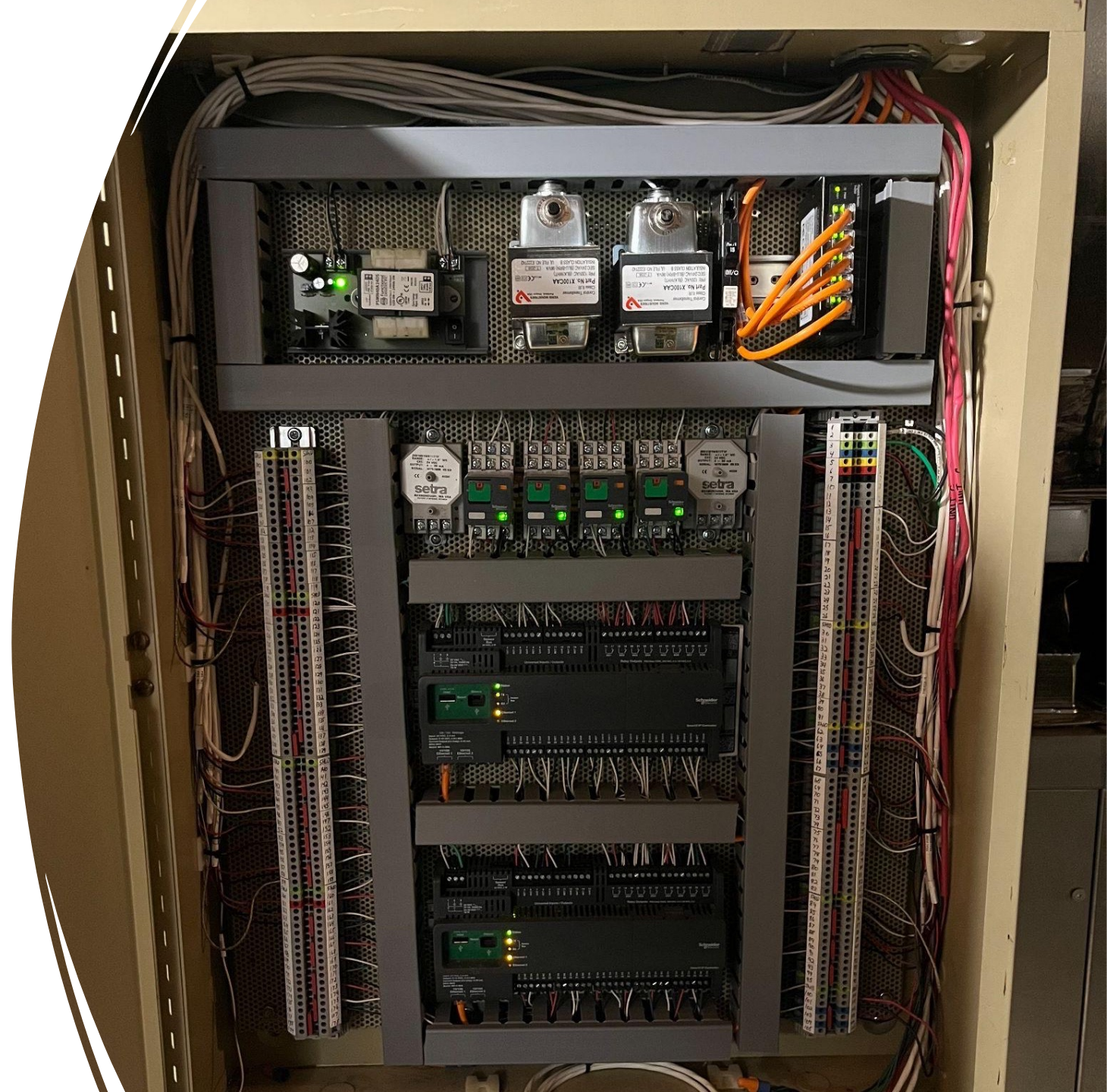


J.C. Harmon High School

Switchgear replacement of original
electric switchgear (1972)
scheduled May 24, 2024

Phase 2 Progress

Upgraded UNC at
25 locations.



Phase 2 Progress

Knowledge Gained



Highlighted need for additional resources



Brought the size and scope of needs forward



Exposed some challenges and possible solutions in collaborating with energy providers



Facilities assessment results provided in-depth needs for every building and a strategy for addressing them

Whittier Elementary School

- Built in 1991
- 71,514 Square Feet
- Serves 526 Students

Proposed Building Upgrades

- Heat Exchanger Replacement
- Replace Water Source Heat Pump Units
- Current System is original to building
- Complete demo and replacement of heat exchanger





Eisenhower Middle School

- Built in 1973
- 123,800 Square Feet
- Serves 778 Students

Proposed Building Upgrades

- Electric service switchgear replacement
- 1973 vintage electrical system is old, inefficient
- Complete demo and removal of outdated electrical switchgear and replacement with new units

F.L. Schlagle High School

- Built in 1973
- 198,500 Square Feet
- Serves 1,043 Students

Proposed Building Upgrades

- Electric Service Switchgear replacement
- 1973 vintage electrical system is old, inefficient
- Complete demo and removal of outdated electrical switchgear and replacement with new units





Anticipated Cost Savings



Heat Exchanger Replacement at Whittier Elementary School

- 5-15% increase in thermal efficiency
- Contributes to decarbonization

Switchgear Replacement at Eisenhower Middle and F.L. Schlagle High Schools

- 40% reduction of energy consumption

Next Steps for KCKPS

CONTINUE TO
PRIORITIZE AND
COMPLETE PROJECTS

FUNDING STRATEGY

COMMUNITY
ENGAGEMENT

- Bond project election
- Renew America's Schools phase 2 application
- Exploring renewable energy tax credits

- Continue to survey community to gather input
- Website and social media coverage of projects completed
- Regular communication with the KCKPS Board of Education, information provided at public meetings

