



Green Schools

June 2024

Green Schools Agenda

Agenda Item

1 Snapshot - CPS Footprint

Efforts & Initiatives

- Environmental Health & Safety
- Energy & Sustainability
- Facility Operations – Healthy Green Schools & Colleges
- Student Nutrition
- Career Readiness

3 Moving Forward



Building Portfolio Footprint



Portfolio Summary

CPS has significant facility needs because of the size and age of the building portfolio



62 Million
Square Feet



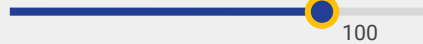
\$14.4 billion*
Total facility deferred need
\$3.2 billion of critical need



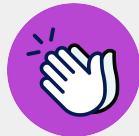
522
Campuses



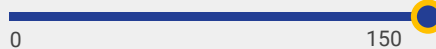
84 years
Average campus age



803
Buildings



150 years
Oldest campus age



\$9.3 Billion
Outstanding Capital Bonds

\$540 Million
Operating Funded Bond Payments

\$95 Million
Annual Energy Costs



62 + 3
Completed + In-Process
LEED Certified Buildings

Note: Data calculated from CPS owned and leased campuses (excludes all non-CPS buildings) *The Facilities Department classifies the portfolio based on campuses as opposed to schools because in a number of cases, there are multiple schools sharing a single campus.

Environmental Health & Safety

CPS is continuously striving to ensure our students, teachers and staff experience a healthy and safe learning environment



Drinking Water Testing



- CPS program exceeds state and federal testing requirements
- CPS utilizes the IDPH lead standard, which is more stringent than the federal standard
- CPS developed water flushing protocols for drinking water fixtures
- Lead sample results shared with the school and posted on CPS website
- New Initiatives:
 - Automatic Flushing Fixtures Pilot Program
 - “H2O on the Go” Program: installing free water bottle filler fixtures

<https://www.cps.edu/services-and-supports/school-facilities/water-quality-testing/>



Indoor Air Quality Assessments



Conducted annually by independent environmental consultants consisting of:

- A visual inspection in 100% of offices and classrooms
- Direct read monitoring in 20% of classrooms and offices per campus:
 - Temperature
 - Relative Humidity
 - Carbon Monoxide (winter only)
 - Carbon Dioxide
 - Particulates
- Reports posted on CPS website

CPS provided Building Engineers with handheld air monitoring devices

<https://www.cps.edu/services-and-supports/school-facilities/air-quality-testing/>



Environmental Concerns



Asbestos Containing Materials (ACM)

- The District has an ongoing ACM management and reporting program that includes the following:
 - Annual Asbestos Awareness Training for facilities and custodial staff
 - 3 Year Reinspections
 - 6 Month Surveys
- CPS utilizes only IDPH licensed asbestos project managers, air sampling professionals, inspectors, project designers, contractors and management planners.
- IDPH provided notification of abatement projects, as applicable.



Environmental Concerns



Lead-Based Paint (LBP)

- CPS has an extensive management program to address LBP in the schools:
 - Building Engineer or Building Manager submits Request for Environmental Services regarding environmental concerns;
 - Independent Managing Environmental Consultant utilizes IDPH licensed inspectors and risk assessors;
 - Facilities team assesses root cause of concerns;
 - IDPH licensed abatement contractors, supervisors and workers are utilized as needed.

Chemical Hygiene Program



Chemical Hygiene

- Chemical Hygiene Plan (and associated training)
- Hazard Assessments
- Chemical Removal and Disposal
- Emergency Response Activities
 - Mercury Detector (EMP-3)
 - Radiation Detector (PRD)

New Initiatives

- Light Bulb Recycling
- Bi-annual Chemical Waste Pickups
- Battery Recycling



Energy & Sustainability

CPS understands the need to reduce emissions & waste

The District is actively working on improving energy efficiency, adopting renewable energy, expanding electric vehicle usage & charging capabilities and increasing access to composting and recycling services

Energy Efficiency

The most effective way to reduce the District's energy consumption and greenhouse gas (GHG) emissions is through energy efficiency.

The cheapest, greenest energy is the energy we don't use.

Ongoing Efforts

- **Over 600** Lighting Upgrades of Gym, Auditoriums and Exteriors plus **(4)** full facility LED lighting retrofit pilot projects happening this summer that will **upgrading 6,700+ fixtures**
- **Cyclical Boiler Tune-ups (560)** and **Steam Traps replaced (3,840)** through annual facility maintenance programs.
- **105** Capital HVAC Efficiency Projects, Recently Completed or In-Process
 - **70 projects** this summer improving energy efficiency including Boiler Upgrades / Chiller Replacements / Major System Upgrades
- **250 & counting** Facility Assessments from ComEd & Peoples Gas



Energy Efficiency

ComEd Incentive Programs

700+

Capital and Facilities HVAC and other facility improvement projects that have received ComEd rebates

\$4,000,000+

Incentives received or expected

16,000 MWh

Reduced energy consumption from upgrade projects representing almost 5% of our annual usage

\$1,700,000

Avoided energy costs resulting from upgrades



Renewable Energy

CPS is keenly aware of the role that renewable energy, especially solar PV, will play in helping CPS reduce greenhouse gas emissions.

Ongoing Efforts

- **Rooftop Solar**
 - New construction will incorporate onsite solar, starting with the **88 kW system** being installed on new **Dett ES Annex roof**
- **Partnership Engagement**
 - Continuous enrollment in **ComEd's Public Schools Carbon Free Assessment** program to identify and analyze solar feasibility at school campuses, **150 schools and counting**
 - Local 134 Electrical Union existing solar system inspection initiative
- **Off-Site Renewable Energy Retail Contract**
 - Only way for CPS to achieve **100% renewable energy usage**



Electric Vehicles and Charging

- Awarded \$20 million for 50 buses from EPA's Clean Bus Program in partnership with CTU and other stakeholders
- On-going adoption of EVs and charging stations
 - 5, out of 20, drivers ed range programs with EVs and charging
 - 15 charging stations available to CPS teachers and staff across the district

Recycling & Composting

Ongoing Efforts

- 23.7% of District's waste is diverted from landfills (*City* = 9.7%)
- 20+ schools with current composting programs
- **\$400k grant funding awarded from the USDA to establish a district-wide composting program, and recycling expansion, over the next two years**



Supplemental Funding

Competitive Federal Grants

D.O.E's Renew America's Schools Grant

(Bipartisan Infrastructure Act)

2023 Round #1

Applied to update building controls at 32 schools (not awarded)

2024 Round #2

Funding to create Resiliency Centers (submitted on June 13th, 2024)

EPA's Climate Pollution Reduction Grant (CPRG)

(Inflation Reduction Act)

(submitted April 2024)

EPA Grant to Address Indoor Air Quality

(Inflation Reduction Act)

(submitted March 2024)

EPA's Community Change Grant Program

(end of 2024)

Other Federal & State Programs

Dett ES Annex & Renewable Energy Funding

- **Direct Pay** Federal Investment Tax Credit for Renewable Energy
- **Illinois Shines** Renewable Energy Credit program
- **Smart Inverter** Rebate program from ComEd

Facility Operations - Healthy Green Schools & Colleges



Healthy Green Schools Program Standard

- First national standard for healthy & sustainable facility maintenance
- Developed by Healthy Green Schools Campaign & Green Seal
- Prioritizes low / no-cost maintenance practices
- Leverages Green Seal's globally recognized credibility in science-based standard development

Green Seal Standard

- Global nonprofit with mission to create a greener world
- Provides rigorous standards for health, environment & sustainability.
- Provides rigorous standard for sustainable and healthy product performance.



[Healthy Green Schools & Colleges Website](#)
[Healthy Green School Standard Document Link](#)

HGSC Standard Overview

STANDARD FOCUS AREAS

Procurement	Supplies & Equipment
Facility Ops. & Maint.	Cleaning, Waste & Recycling, Equip. Maint, Pest Control
Bldg. System Ops & Maint.	HVAC O&M, Ventilation, CMMS/Work Order Tracking
Monitoring, Evaluation & Training	IAQ Planning, Monitoring, & Reporting Training Standards

- 1 > Getting Started**
 - 1.1 Define a Performance Period
 - 1.2 Determine a Representative Sample
 - 1.3 Plan Development
 - 1.4 Onboarding Training for Cleaning Personnel
 - 1.5 Communications
- 2 > Procurement of Facility Operations and Maintenance Products**
 - 2.1 Consumable Goods
 - 2.2 Durable Goods
 - 2.3 Powered Equipment
- 3 > Facility Operations and Maintenance**
 - 3.1 √ Facility Cleaning
 - 3.2 √ Location Specific Cleaning Requirements
 - 3.3 √ Floor Maintenance
 - 3.4 √ Carpet Cleaning and Maintenance
 - 3.5 √ Waste, Recycling, and Composting Handling
 - 3.6 √ Material Handling and Storage
 - 3.7 √ Powered Equipment Maintenance
 - 3.8 Pest Management
- 4 > Building System Operations and Maintenance**
 - 4.1 √ HVAC Systems
 - 4.2 √ Water and Plumbing Systems
 - 4.3 √ Sidewalk, Pavement, and Grounds Maintenance
- 5 > Ongoing Monitoring, Evaluation, and Training**
 - 5.1 √ Indoor Air Quality Planning, Monitoring, and Reporting
 - 5.2 Performance Measurement, Metrics and Data Tracking
 - 5.3 Staffing Formulas
 - 5.4 √ Ongoing Training

Why HGSC Standard is Good for CPS?

Develop a sustainable facility maintenance strategy that ensures healthy environments, supports continual improvement, and enables expansion of our success.

- Provides clear green maintenance standards aligned with Green Seal
- Provides roadmap to standardize green facility maintenance practices
- Creates transparency around green maintenance standards
- Provides 3rd party validation of practices instituted by CPS
- Focus on best practices for green building operation & maintenance
- Allows CPS to more easily collaborate and share of ideas with other K-12 districts and universities
- Provides ability to achieve green school certification
- Hosting Healthy Green Schools & Colleges Summer Summit July 18 & 19



Student Nutrition

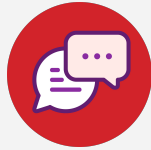


Student Nutrition



33

student tastings



45,000+

responses to school food survey

Participation

Breakfast: **34.5%** vs **32%** PY

Lunch: **60%** vs **54%** PY

Breakfast After The Bell Policy Update — Scheduled for the July Board meeting, this mandate ensures all schools offer breakfast after the start of the school day, supporting academic learning and student well-being.



Student Nutrition

- Three models of service: Cooking (433), Warming (100) and Receiving (42)
- In SY24, 5 schools offer from scratch items (most items made from a raw state). Currently assessing how to scale scratch items across the district but over 425 schools cook some items from a raw state already
- 100 warming kitchens managed by Open Kitchens (local, woman-owned company). Food prepared at a central facility, often using other smaller locally owned organizations. Bulk hot pilot at Von Linne increased lunch counts from 200 to over 500
- Culturally responsive meals: Menus have been created based on student engagement efforts and feature student/Chicago Chef inspired recipes. 8 schools currently offer Halal menus. 10 schools of Kosher meals per request. Daily vegetarian options and pork-free menus district wide
- Ongoing student engagement efforts, 8 Food Focus Committee meetings with school dining managers, 15+ student meetings
- All food service agreements follow state/federal rules and regulations



Student Nutrition

- 33 student tastings, 45,000+ responses to school food survey
- Participation - Breakfast 34.5% vs 32% PY, Lunch 60% vs 54% PY
- Breakfast After The Bell Policy Update - Policy revision going to July Board. Mandate that requires all schools to offer students breakfast after the start of the school day. This supports academic learning
- 100 warming kitchens managed by Open Kitchens (local, woman-owned company). Food prepared at a central facility, often using other smaller locally owned organizations. Bulk hot pilot at Von Linne increased lunch counts from 200 to over 500
- Culturally responsive meals: Menus have been created based on student engagement efforts and feature student/Chicago Chef inspired recipes. Collaborating with Josephine (Mother) Wade next year. 8 schools currently offer Halal menus. 10 schools of Kosher meals per request. Daily vegetarian options and pork-free menus district wide.
- In SY24 - 5 schools offer from scratch items. Currently assessing how to scale scratch items across the district
- Aramark contract follows procurement rules and regulations and cannot be terminated
- Ongoing student engagement efforts, 8 Food Focus Committee meetings with school dining managers, 15+ student meetings

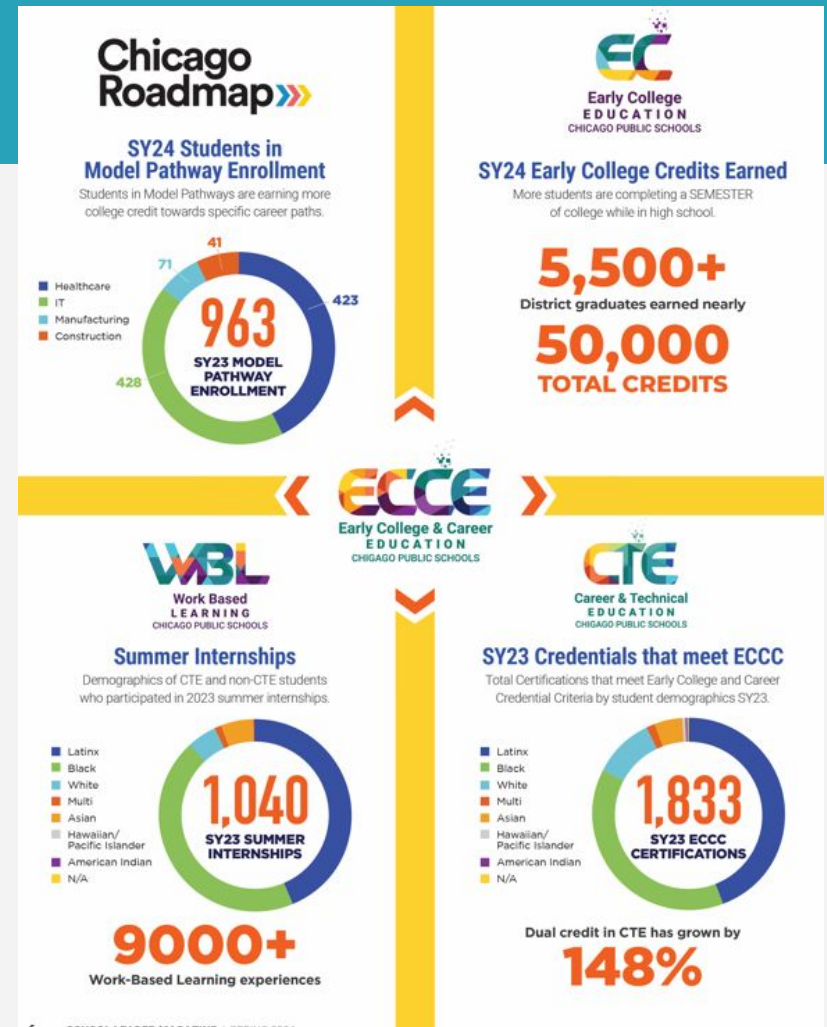


Career Readiness

CTE, Skilled Trades Pipeline

Career Readiness

- **Career & Technical Education**
 - 34 Career Pathways
 - 12,783 Students
 - 80 Schools with 1+ program
 - 12 Schools with 5+ programs
- **Early College STEM**
 - STEM, Early College, CTE
 - 7,769 Students
 - 13 Schools



Skilled Trades Pipeline

- Pre-apprenticeship bridge programs with students who are interested in a career in trades. Programs include: solar, electrical, plumbing, operating engineers, and construction trades
- Nearly 250 Seniors in new Trades Apprenticeship Bridge Programs. Current Partners: Laborers 1001, IUOE Local 399, IBEW Local 134, Plumbers, JAC 150
- 226 Counselors visited Union Training Centers to build advising knowledge for careers in the trades
- Feature: City of Chicago Streets and Sanitation partnered with CPS, Hire360, and Laborers 1001 to create 100 new positions with direct hires and Union membership!



Moving Forward



Moving Forward

- **Increased collaboration** with the Chicago Teachers Union, and other stakeholders, towards advancing shared interests and goals to include sustainable capital revenue
- **Perpetual exceedance of water quality and asbestos testing requirements** with adherence to the most stringent standards
- **Greater utilization** of renewable energy, electric vehicles and building electrification
- **Continued HVAC upgrades** focused on energy efficiency, GHG emission reduction and participation in energy efficiency rebate program
- **Expanded composting and recycling** capabilities for schools
- **Implement district-wide operational green maintenance standards** in alignment with Healthy Green Schools (HGSC) standard & strive to achieve HGSC certification status





Chicago
Public
Schools