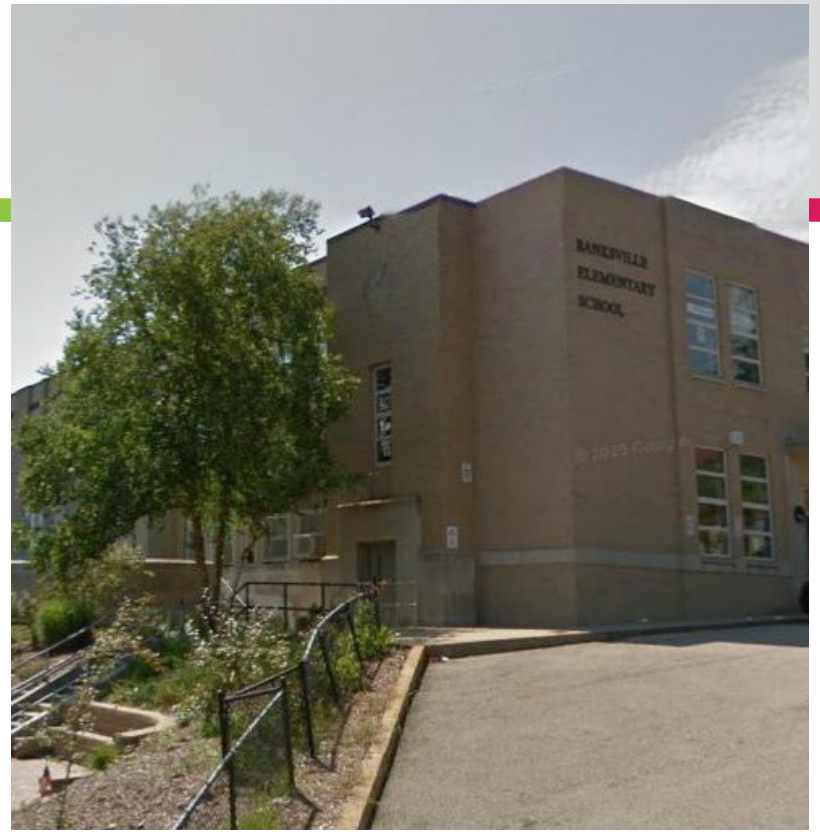






Pittsburgh Public Schools Facilities Department

October 10, 2022, Business and Finance Committee Meeting

Expect great things.

Agenda

- **Introduction** & Warm up
- **Capital planning and budgeting** basics
- Capital project overview
- 2022 Capital project review
- Proposed 2023 **capital plan** projects
- **2023/29 Capital budget Summary**
- Vision for PPS 2050
- Facilities ESSER overview
- ESSER I, II, & III projects
- Board engagement, Comments/Questions

Expect great things.

Introduction of Team

Chief Operations Officer - Michael McNamara

Director of Facilities – Stephen Connell

Assistant Director of Facilities, Design and Planning – Damian Link

Assistant Director of Facilities, Construction and Planning – Vacant

Facilities Finance and Contract Manager – Ashley Kozikoski

Expect great things.

Warm Up

How many OPEN school buildings operate during the school year?

58

What is the total square footage of all PPS buildings?

6,935,715

What is the age of our oldest building?

155 – Original portion of Conroy

What is the average age of our school buildings?

89 years

How many new buildings has the district constructed in the last 50 years?

Only 6 – Brashear (1976), Greenway (1974), King (1973), South Brook (2001), Faison (2004), CAPA (2003)

What is the average number of years since a Major Renovation for our buildings? (Functional Age)

41 years old

Expect great things.

District Facilities Challenges & Strengths

Challenges

- Aging infrastructure
- Restricted budgets
- Underutilization of facilities (57%, October 2021 enrollment)
- Accommodation of additional and changing programs
- Building code changes
- Safety improvements
- Technology upgrades
- Multiple grade and school configurations
- Limited timeframe for construction projects

Strengths

- Buildings in good locations all over the City
- Beautiful historic buildings
- Ability to consolidate without shrinking overall footprint
- Well maintained infrastructure for the age
- Dedicated Facilities and Operations groups
- Communities interested in school facilities

Expect great things.

Capital Planning and Budgeting Basics

Expect great things.

Capital Plan Definitions

Major Maintenance Fund (303): These funds account for financial resources that are designated for Improvements and Maintenance of existing sites, including capital expenditures that are incurred in the purchasing of service systems and built-in equipment to bring the asset to a state of usefulness.

Capital Projects Fund (304): These funds account for financial resources that are restricted, committed, or assigned to capital outlays which include facilities acquisition and construction of existing or new sites and any capital expenditures and incidental costs which extend the useful life of the asset.

General Obligation Bonds: Bonds typically used to fund the Capital Plan.

7-Year Capital Plan: The 7-year Capital Plan is the current budget document approved by the Board that contains all the Facilities Capital Projects and Major Maintenance items separated by building over the next 7 years.

Expect great things.

Capital Plan Budget Process Overview

Developing the capital budget plan is an ongoing process which constantly changes based upon feedback of many stakeholders. Facilities collaborates with Maintenance, Plant Operations, Food Service, Executive Staff and School-Based Leaders to compile capital project requests and assess the need, urgency, code compliance, cost and timeline for new projects.

Standpoint of the current budget plan being drafted

- First year/column: Project designs are finalized, reviewed and getting ready to go out to bid. Budget estimates are updated before Board approval.
- Second year/column of the capital plan: Facilities is requesting proposals from architects and engineers for projects in the second year of the plan.
- Third year and beyond/columns: Facilities collaborates with all stakeholders to compile Capital Project Requests and assess the need, urgency and timeline for new projects and those already in the plan. Facilities personnel meet with Principals and other stakeholders at the site to determine scope and develop preliminary budgets.

Board actions

- The detailed capital budget is included in the annual budget book submitted in December of each year for Board approval.
- In December of each year the Board approves:
  - A resolution to establish the next years Major Maintenance Fund and Capital Projects Fund
  - A capital reimbursement resolution for expenditure advancements

Expect great things.

Capital Plan Categories & Contracting

Project Categories:

- BE – Building Exterior: roofing, windows, masonry, doors etc.
- BI – Building Interior: flooring, ceilings, finishes, restrooms, bleachers, signage
- EI – Educational Improvements: Building renovations, classroom & lab renovations, libraries, food service
- ES – Electrical Systems: Service, switchgear, distribution, lighting, generators, and systems including PA/intercom, security (access control & surveillance), fire alarm.
- GI – Grounds Improvements: Sidewalks, parking lots, landscaping
- MS – Mechanical Systems: HVAC systems, plumbing systems, elevators
- PD – Planning Design: Architectural and engineering design services for capital plan projects in following years

Expect great things.

Capital Plan: Funding Sources

- Typically, the District funds the capital plan with General Obligation Bonds, both short-term and long-term.
- Other past sources have included the sale proceeds of closed buildings, transfers from the general fund and grant funding.
- The estimated 2022 General Obligation Bonds that will be issued in December of 2022 to fund the plan total $35,857,971.77
  - Major Maintenance: $24,813,305.64 thru 8/2022
  - Capital Improvement: $7,445,838.00 thru 8/2022
  - Anticipated Expenditures to end of year: $3,082,681.84
  - Bond Issuance Cost: $516,146.30
- Other past sources have included the sale proceeds of closed buildings, transfers from the general fund and grant funding.

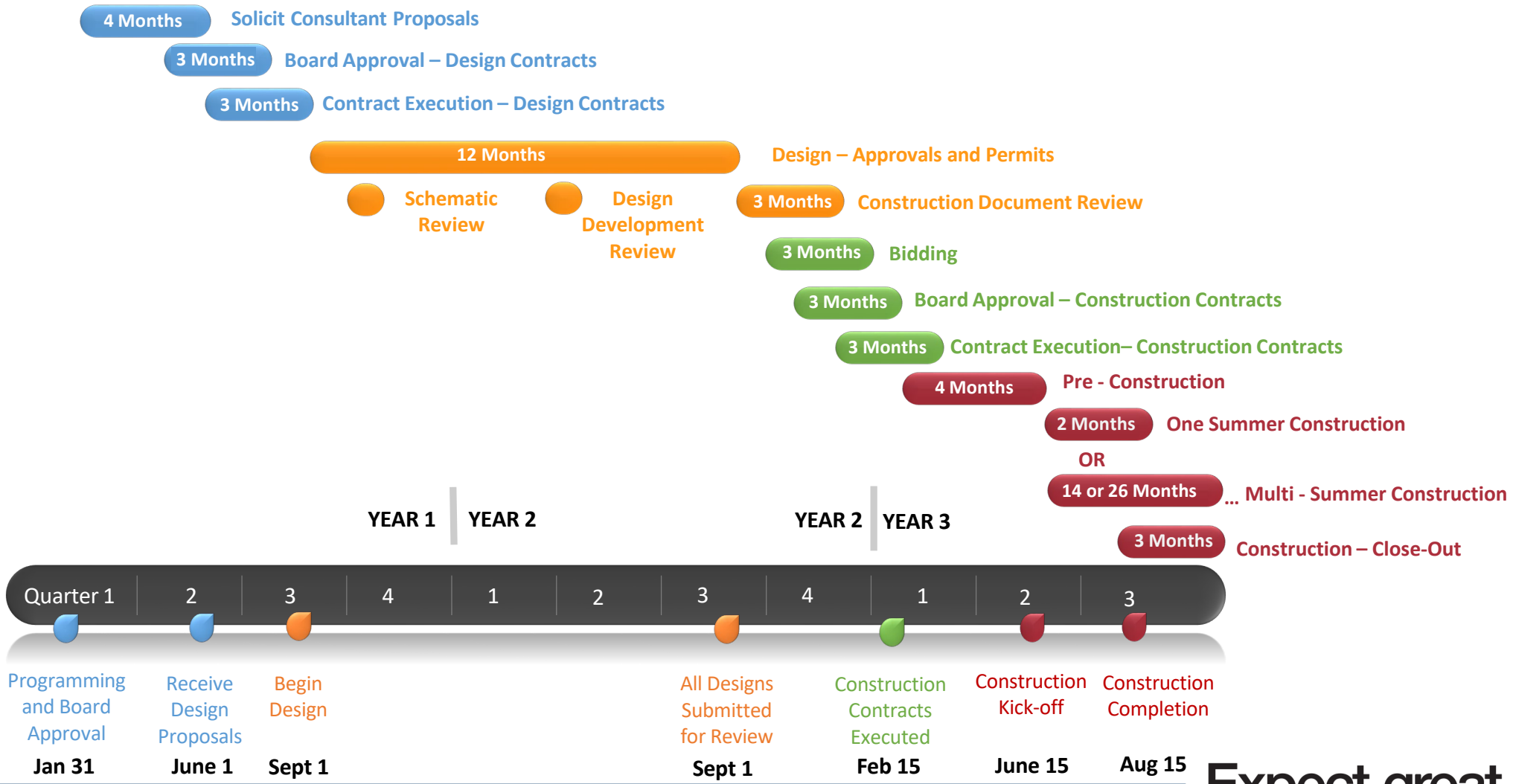
Comments/Questions?

Expect great things.

Capital Projects Overview

Expect great things.

Project Timeline



Expect great things.

Project Contracting

Contracting types:

- Design/Bid/Build: Typical Process with consulting A/E, public bidding, award to low bid contractor(s).
  - Single Prime
  - Multiple Prime: General – 31, Plumbing – 32, Mechanical – 33, Electrical –34, Abatement – 35
- Extraordinary Maintenance: Two-year contracts publicly bid for use on emergency and smaller projects.
  - General, Electrical, Masonry, Roofing
- Cooperative Purchasing: "Pre-bid" by organizations or public agencies that provide fixed price or discount. Examples include Costars, Keystone Purchasing Network, Omnia Partners, etc.
- Guaranteed Energy Savings Act (GESA): Design-Build process authorized by PA Guaranteed Energy Savings Act. Project costs are paid for by reduction of utility costs.

Larger projects are often completed over multiple years due to the limited availability of the buildings during the school year. Some projects are bid once for a multi-year project and others are bid in multiple phases over several years.

Comments/Questions?

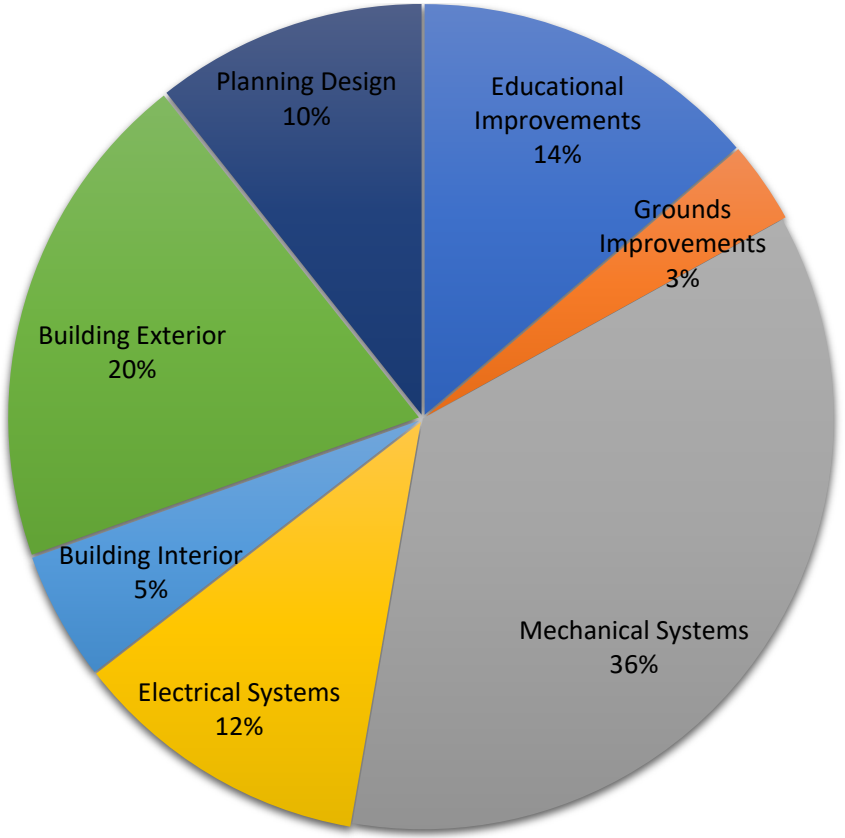
Expect great things.

2022 Capital Plan Project Review

Expect great things.

2022 Capital Plan by Category

CATEGORY		TYPE TOTALS
Educational Improvements	$	5,941,500
Grounds Improvements	$	1,395,000
Mechanical Systems	$	15,490,895
Electrical Systems	$	5,090,568
Building Interior	$	2,192,000
Building Exterior	$	8,550,515
Planning, Design, Construction Management	$	4,616,260
TOTALS	$	43,276,738
Grants	$	8,518,200
GRAND TOTAL	$	34,758,538



Expect great things.

2022 Facilities Capital Projects

- **Allderdice:** Room 182 Floor Repairs (ex. general)
- **Allegheny:** HVAC renovation with air conditioning, ceilings, and lighting (GESA, year 2 of 2)
- **Brashear:** Electrical Distribution (year 1 of 2), Flooring replacement, Locker bay removal (ex. general)
- **Carmalt:** Roof replacement, partial (old building, co-op)
- **Chartiers:** Parking lot & greenspace, Walk-in cooler replacement (co-op)
- **Central Food Kitchen:** Walk-in cooler repairs (co-op)
- **Colfax:** Electrical distribution (year 2 of 2)
- **Dilworth:** Playground safety upgrade (extraordinary general & co-op)
- **Grandview:** Window & exterior door replacement including masonry restoration, Domestic water booster pump
- **Greenway:** Electrical Distribution (year 2 of 2), Gym/Stage floor refinishing (co-op)
- **King:** Steam and Chilled water supply line replacement
- **Liberty:** Masonry Repairs (ex. masonry)

continued

Expect great things.

2022 Facilities Capital Projects

- **Perry:** Roof replacement (phase 1, co-op), Electrical distribution (year 2 of 2), Gym wall safety pad repairs (co-op)
- **Pioneer:** Concrete and asphalt repairs (ex. general)
- **Roosevelt (Old, the Boulevard):** Walk-in cooler replacement (co-op)
- **Science and Technology:** Ground floor labs flooring replacement (ex. general)
- **South Annex:** Fire Alarm system replacement
- **University Prep at Milliones:** Masonry restoration & window replacement (year 3 of 3)
- **Weil:** Masonry repairs (ex. Masonry)
- **West Liberty:** Paving and concrete repairs
- **Westinghouse:** Greenhouse floor repairs, Security doors (ex. General)
- **Whittier:** Play area safety upgrades

continued

Expect great things.

2022 Facilities Capital Projects

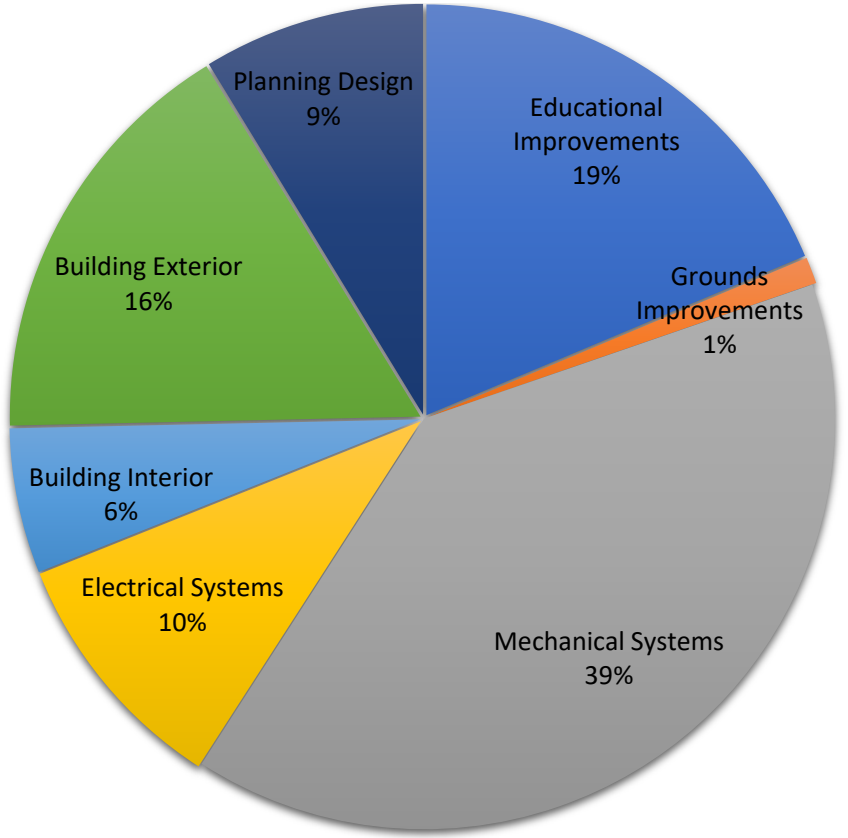
Various Projects

- **Stage Equipment & Rigging Safety Repairs:** Allegheny, Arsenal, Carmalt, Langley, Student Achievement Center (co-op)
- **Playground Surfacing Repairs:** Arlington, Banksville, Clayton, Crescent, Classical, King, Liberty, Linden, Manchester, Miller, Minadeo, Pioneer, Spring Garden, Spring Hill, Westwood (co-op)
- **CO (Carbon Monoxide) Detectors, Phase 4:** Banksville, CAPA, Carrick, Chartiers, Concord, Grandview, Linden, Manchester, Minadeo, Schiller, SciTech, Spring Garden, Spring Hill
- **Water Cooler Replacement, Phase 5:** Allegheny, Clayton, Colfax, Faison, Grandview, King, Langley, Liberty, Manchester, Oliver, Sterrett
- **Security System Upgrades:** Allegheny, Brashear, Brookline, Carmalt, Chartiers, Dilworth, Greenway/Classical, Langley, Liberty, Manchester, Mifflin, Miller, Minadeo, Obama, Schiller (co-op)
- **Public Address (PA) system Upgrades:** Brashear, Brookline, Roosevelt (new, Cherryhill), Manchester, Mifflin, Oliver, South Annex, University Prep at Milliones, Westinghouse
- **Fire Alarm System Upgrades:** Brookline, Obama, Pioneer, Woolslair
- **Whiteboards:** Carrick, Concord, Roosevelt primary & intermediate (phase 1); Conroy, Spring Garden, Spring Hill, Schiller (phase 2); Dilworth, Fulton, Lincoln, Linden, Sterrett (phase 3)

Expect great things.

2023 Capital Plan by Category

CATEGORY		TYPE TOTALS
Educational Improvements	$	11,152,000
Grounds Improvements	$	624,000
Mechanical Systems	$	23,547,000
Electrical Systems	$	5,872,400
Building Interior	$	3,414,000
Building Exterior	$	9,929,840
Planning, Design, Construction Management	$	5,217,680
TOTALS	$	59,756,920
Grants (ESSER 2)	$	7,018,200
Grants (ESSER 3)	$	15,300,000
GRAND TOTAL	$	37,438,720



Expect great things.

2023 - Facilities Capital Projects

- **Allderdice:** Steam Line Replacement (L-Wing)
- **Allegheny:** Emergency Generator Replacement
- **Banksville:** HVAC and AC/Boiler (ESSER)
- **Brashear:** Electrical Distribution (year 2 of 2), Elevator Modernization (co-op)
- **Brookline:** UV Replacement
- **CAPA:** Emergency Generator Replacement
- **Carmalt:** Window Replacement / Exterior Envelope and Masonry Restoration (year 1 of 2)
- **Grandview:** Sewage Ejector replacement, Heat Exchanger replacement
- **Greenway:** Walk-in Coolers, Roof Restoration (year 1 of 2, co-op)
- **King:** Emergency Generator Replacement
- **Langley:** Classroom Flooring Replacement (year 1 of 3)
- **Liberty:** Boiler Replacement
- **Lincoln:** HVAC and AC/Boiler (ESSER)

continued

Expect great things.

2023 - Facilities Capital Projects

- **Manchester:** Window Replacement / Front Entrance ADA and Safety Upgrades
- **Mifflin:** Lockers (co-op)
- **Miller:** Cycle Painting / Plaster Repairs (year 1 of 2)
- **Obama:** Pool Boiler, Kitchen Exhaust Hoods, Chiller Replacement
- **Perry:** Greenhouse Renovation, Roof Replacement, phase 2 (co-op)
- **Phillips:** HVAC and AC (ESSER)
- **Pioneer:** Therapy Pool (ESSER)
- **Schiller:** Flooring Replacement
- **Sci-Tech:** Ground floor Flooring Repairs, phase 2 (ex. general)
- **Service Center:** Gas Pump and Underground Tanks, RTU Replacement
- **South Hills:** Carpet Removal / Tile Installation, (year 2 of 2, co-op)
- **Student Achievement Center:** Elevator Installation (2)

continued

Expect great things.

2023 - Facilities Capital Projects

- **Sunnyside:** Boiler room Sump Pit
- **University Prep:** Roof Replacement (year 1 of 2, co-op)
- **Westwood:** Roof Replacement (co-op)
- **Whittier:** HVAC and AC (ESSER)
- **Various:**
  - CO detectors, phase 5,
  - Fire Alarm System Upgrade
  - HVAC controls Upgrade (ESSER)
  - PA System Upgrades
  - Security System Upgrades,
  - Water Cooler replacement, phase 6
  - Whiteboards and projectors, phases 4+ (ESSER)

Expect great things.

2023/29 Capital Program Summary

Expect great things.

2023/29 Capital Program Summary

- Plan Priorities:
  - Warm: HVAC, Building Envelope
  - Safe: Life Safety System Upgrades, HVAC, Abatement
  - Dry: Building envelope, windows, roofing
  - Clean: Abatement, flooring, finishes

- Additional Considerations:
  - Sustainability
  - Energy Efficiency
  - Air Conditioning

- Targeted Renovations:
  - Proposed for buildings with substantial identified capital needs
    - Manchester
    - Montessori @ Friendship
    - Westwood
    - Woolslair

Expect great things.

2023/29 Capital Program Summary

- The total 7-year costs in the 2023-2029 capital plan budget is $261,689,360

- Buildings which have no major projects (<$1M) included in the 2023-2029 Capital Plan:
  - Administration, Arlington, CAPA, Faison, Fulton, Mifflin, Morrow Intermediate, Roosevelt Intermediate, Service Center, South Brook, South Hills, Spring Garden, Spring Hill, West Liberty, Westinghouse

- 10 buildings with the least costly scheduled major projects (>$1M):
  - Beechwood, Clayton, Concord, Conroy, Crescent, Cupples, Minadeo, Roosevelt Primary, Online Academy, Sunnyside

- 10 buildings with the costliest scheduled major projects:
  - Allderdice, Arsenal, Brashear, Carrick, Greenway, Manchester, Montessori, Weil, Westwood, Woolslair

- The various major maintenance costs total $79,768,200 and supports all locations

Comments/Questions?

Expect great things.

Vision 2050 for PPS Educational Spaces



Expect great things.

Vision 2050: Facilities Goals

- 21st Century Learning Environments – Technology, STEAM etc.
- Air condition every building
- Remove hazardous material
- Provide fresh building stock
- Remove demountables
- Consolidate for efficiency
- Energy savings projects
- Bring all buildings up to established standards of condition and educational adequacy

Expect great things.

Vision 2050

PPS Facilities Vision for 2050: Modern and updated school facilities that will meet the needs of the next generation of learners & support the teachers, staff, and school communities.

- Buildings are a substantial investment that need to meet the long-term needs of the district and the school communities, students, parents, teachers, administrators, staff, and the community at large.
- Obstacles to overcome and needs to be met:
  - Aging Infrastructure with deferred maintenance backlog
  - Underutilization/declining enrollment
  - Evolving Technology
  - Changing societal needs
  - New educational methods
- Possible strategies:
  - Targeted renovations, additions, consolidations, and building replacements
  - Future-proof planning for flexible and easily upgradable spaces

Comments/Questions/Discussion

Expect great things.

Facilities ESSER Overview

Expect great things.

Elementary and Secondary School Emergency Relief (ESSER)

- ESSER I (CARES Act) – Emergency relief to address the impact of COVID-19.

- ESSER II (CRRSA Act) – Relief to safely reopen schools, measure and effectively address significant learning loss, and to continue mitigating the impact of COVID-19.

- ESSER III (ARP Act) – Relief to reopen schools safely, sustain their safe operation, and address students' social, emotional, mental health, and academic needs related to the impact of COVID-19.

Expect great things.

ESSER Summary of Funding

- ESSER I (CARES Act) – District's Allocation = $11,146,817
  - Purchase student and staff computers/devices, personal protective equipment, and sanitary supplies

- ESSER II (CRRSA Act) – District's Allocation = $49,541,438
  - Sustain and enhance its current investments by expanding its wireless technology infrastructure and assets, improving indoor air quality, and advancing summer learning programming.

- ESSER III (ARP Act) – District's Allocation = $100,207,995
  - Unfinished learning and acceleration; social-emotional learning and mental health supports; capital and equipment costs; and other proposals, supporting 34 initiatives developed by a 21-member Public Stakeholder Advisory Committee.

Expect great things.

ESSER I - Facilities

Facilities Covid Response Initiatives:

- Analysis of Social Distancing implications on school occupancy and creation of social distancing 'toolkit' to support safe return of students to the classrooms.
- Preparation of isolation areas and nurses' offices to support student and staff health.
- Provided protective screens for equipment, counters, and tables to protect students and staff where social distancing was not achievable.
- Provided upgraded HVAC filters
- Optimized HVAC system operations to provide increased indoor air quality: Flushing systems pre- and post-occupancy, increased outside air to maximum extent feasible based on site and weather conditions

Expect great things.

ESSER II - Facilities

- HVAC Retro-commissioning Project:
  - Systematic analysis and effort to ensure all HVAC systems are operating properly and optimize systems
    - Mechanical Engineer provides survey, analysis, and recommendations
    - HVAC Maintenance Contractor to implement recommendations
    - Ongoing effort: 25 sites addressed to date
    - $2.5M ESSER II
- HVAC Controls Upgrade Contract
  - District-wide effort to upgrade HVAC controls and provide standard control system;
    - Mechanical Engineer provides survey, analysis, and recommendations
    - HVAC and Controls contractors implement upgrades
    - Ongoing effort: Auto-matrix Replacement (4 sites), Metasys Replacement (13 sites), Central Plant DDC conversion
    - $3M ESSER II
- Whiteboard installation
  - District-wide effort to provide whiteboards in all classrooms and replace all existing chalkboards
    - Staff survey of all classrooms in all buildings
    - On-call Architect developing plans and details
    - Multi-phase project. Bid package for Phase 1 scheduled for October 2022
- Projectors / Smart Display installation
  - District-wide effort to provide projectors or interactive panel displays in all classrooms
    - Staff survey of all classrooms to quantify existing equipment and determine location for installation
    - Final stages of coordination with IT and evaluation with Principals

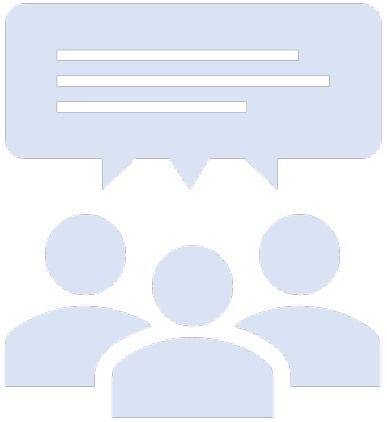
Expect great things.

ESSER III - Facilities

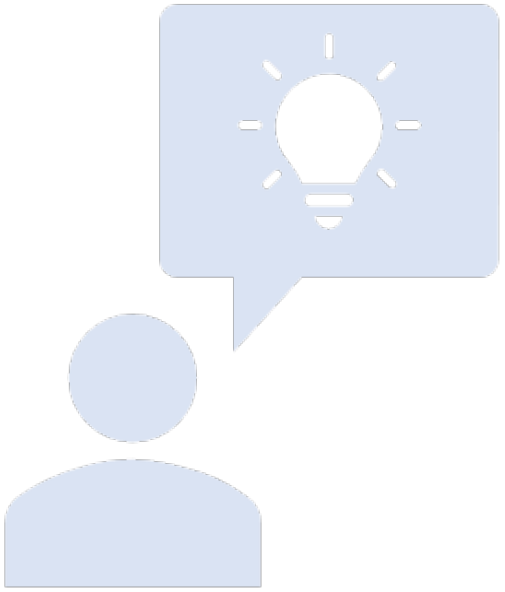
- HVAC and Air Conditioning Upgrades
  - $12.85M for Air Conditioning installation and associated HVAC improvements at four locations.
  - Projects will provide improved indoor air quality and provide locations to support summer programming to address learning loss and expanded programming at Banksville, Lincoln, Phillips and Whittier.
    - Final review of design proposals
- Therapy Pool at Pioneer
  - $3.75M to provide therapy pool and associated spaces and equipment in building addition
    - Conceptual design & feasibility study completed, budget analysis in process, RFP for project consultants scheduled for October 2022
- HVAC Retro-commissioning Project:
  - Continuation of ESSER II project to provide systematic analysis and effort to ensure all HVAC systems are operating properly and optimize of systems
    - Ongoing, $2.5M ESSER III
- Facility Assessment Consulting Services & Software
  - $400,000 to support the Facilities Department effort to assess and quantify needs district-wide
    - Evaluation of systems underway

Expect great things.

Board Engagement



Questions/Comment/Discussion



Expect great things.