



ANN ARBOR PUBLIC SCHOOLS
LEAD. CARE. INSPIRE.



Ann Arbor Public Schools Capital Program 2021-22 Annual Report

December 21, 2022

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Capital Program and Physical Properties

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Capital Program 2021-22 Annual Report

Executive Summary

Phase 1 Early Work

- Focus on Facility Condition Assessment – FCA building needs.
- Air conditioning to school buildings
- Updating lighting systems with LED with high performance solutions that reduce energy consumption, provide dimming capabilities and end-user control, and
- Installation of window treatments to reduce glare in classrooms.

Phase 1 Ongoing Capital Improvements

- Roof replacements and upgrades
- Rooftop solar arrays
- Paving and stormwater improvements
- Two large scale geothermal systems to promote electrification and building decarbonization.
- Improving learning environments

FAST FACTS

67

average age of AAPS school buildings

5

number of schools 100 years old in 2023

35

number of projects in 2022 -
increased from 22 projects in 2021

35

school buildings that have received
Improvements to date

\$94 Million

capital expenditures to date

Capital Program 2021-22 Annual Report

Capital Improvement Projects

Air Conditioning and LED Lighting – Completed:

Angell Elementary School
Burns Park Elementary School
Carpenter Elementary School
Dickens Elementary School
Lakewood Elementary School
Mitchell Elementary School
Pioneer High School Selective LED Lighting

Air Conditioning and LED Lighting - In Progress:

Bach Elementary School (*Complete Spring 2023*)
Clague Middle School (*Complete Summer 2023*)
Community High School (*Complete Spring 2023*)
Eberwhite Elementary School (*Complete Spring 2023*)
Forsythe Middle School (*Complete Summer 2023*)
Pioneer Theater Lighting Upgrade (Continue in Summer 2023)
Pittsfield Elementary School (*Complete Summer 2023*)
Scarlett Middle School (*Complete Spring 2023*)
Tappan Middle School (*Complete Spring 2023*)
Wines Elementary School (*Complete Summer 2023*)

FAST FACTS

147,426

square feet of roof replacements

84,433

square feet of roof coating improvements

311,893

square feet of ceiling tile replacement

29,221

lineal feet of fire suppression piping installed

2,464,615

square feet of air conditioning
provided at 24 schools

Capital Program 2021-22 Annual Report

Capital Improvement Projects

Theater Rigging Improvements - Completed:

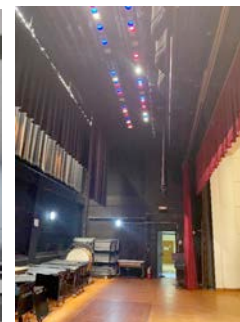
Clague Middle School
Pioneer High School Schreiber and Little Theaters
Slauson Middle School
Scarlett Middle School

Playground Projects - Completed:

Bryant Elementary School
Eberwhite Elementary School
Westerman Preschool Natural Play Area

Paving - Completed:

Allen Elementary School
Dicken Elementary School
Logan Elementary School (Patch/Repair)
Pattengill Elementary School (Patch/Repair)
Pittsfield Elementary School (Patch/Repair)
Wines Elementary School (Patch/Repair)



Capital Program 2021-22 Annual Report

Capital Improvement Projects

Roofing – Completed:

Bryant Elementary School
Huron High School
King Elementary School
Mitchell Elementary School
Pioneer High School
Pattengill Elementary School
Westerman Preschool



Solar Projects - Completed:

A2 STEAM School
Bryant Elementary School
Forsythe Middle School
Haisley Elementary School
Huron High School
Pattengill Elementary School
Pioneer High School
Westerman Preschool



Capital Program 2021-22 Annual Report

Capital Improvement Projects

Other Improvement Projects:

Art, Music, & Science Furnishings & Equipment
Athletic Field Improvements
Boiler and heating system improvements
Carpenter Stormwater Repair
Ceiling Tile Replacement
Converted underutilized spaces into classrooms
Collaboration spaces at Scarlett Middle School
Entry improvements at Clague Middle School
Nixon Road Demolition
Pioneer High School Theater Improvements
Scarlett Exterior Column Repair
Skyline Stormwater & Irrigation

Skyline Envelope Improvements
Tappan Masonry Parapet Restoration
Thurston Nature Center Storm Water Repair
3 New Classrooms & Student Service Center at Scarlett
New window shades
Safe Drinking Water
New storage rooms at Community High School
New access for HVAC maintenance at Community High School
Cross corridor doors at Tappan Middle School
Music room acoustical improvements at Clague, Forsythe and Scarlett Middle Schools
Social/Emotional spaces at Scarlett Middle School



Capital Program 2021-22 Annual Report

Upcoming Capital Improvement Projects

Air Conditioning and LED Lighting –Start Summer 2023:

Ann Arbor Open School
Ann Arbor STEAM School
Lawton Elementary School
Transportation Building

Air Conditioning and LED Lighting – Design Stage:

Abbot Elementary (Summer 2024)
Haisley Elementary (Summer 2024)
Huron High School LED Lighting (Summer 2024)
King Elementary LED Lighting (Summer 2024)

Other Upcoming Improvement Projects in 2023:

Entry improvements at Tappan Middle School (*Winter 2023*)
Huron High School Pool Filtration Improvement (*Summer 2023*)
Community, Early Childhood, & Staff Campus (*Starts 2023*)
Add Band Room at Ann Arbor Open (*Summer 2023*)
Hollway Bleacher Stabilization (*Summer 2023*)
Elevator Improvements at Burns Park & Scarlett
Elevator Improvements at Tappan & Community (*Summer 2023*)
Elevator Improvements at Clague and Slauson (*Summer 2023-2024*)

Roofing - Start Summer 2023:

Abbot Elementary School
Scarlett Middle School
Wines Middle School
Tappan Middle School

Solar Projects – Start Summer 2023:

Scarlett Middle School
Tappan Middle School

Theater Rigging Improvements - Start Summer 2023:

Forsythe Middle School
Huron High School

Individual Project Highlights

New Mitchell Elementary School

Examples of the Mitchell Engagement Process, from Fall 2022 Engagements:

Engagement Workshop | Design Patterns Feedback

Community Priorities

- To the right, the number represents how many stakeholders voted for a specific pattern. Clear priorities rose to the top of importance for moving forward with the design:

Community

- Space for community/ family to connect to the school

Outdoor connections

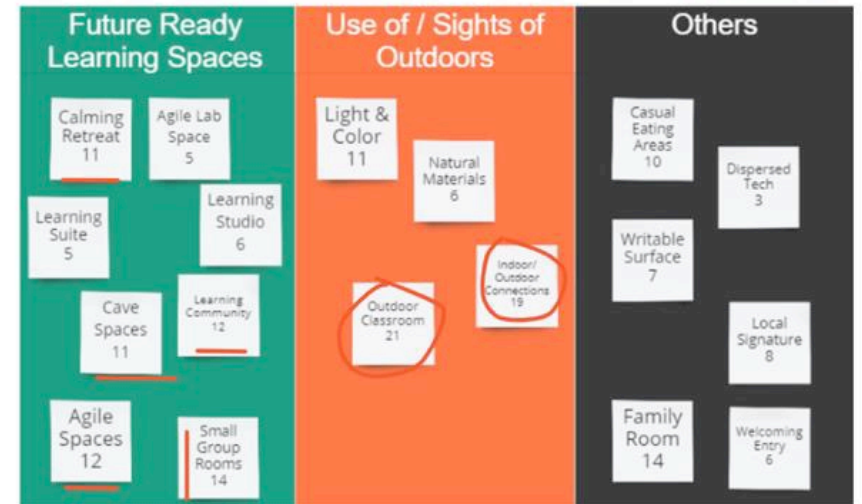
- Indoor / outdoor connected learning
- Natural light and color to greater engage students

Calming / flexible space

- Agile and variable environments for calming, tactile, and small group spaces

EMERGING QUESTIONS (Examples)

1. What might informal and formal outdoor learning experiences look like? What type of resources and space allocations could be helpful to associate with outdoor learning?



Capital Program 2021-22 Annual Report

Individual Project Highlights

New Mitchell Elementary School

Examples of the Mitchell Engagement Process, from Fall 2022 Engagements

Engagement Workshop | Student Feedback

Student Priorities

- Below are tallied results from students based on their desire for new spaces in a new school. Clear priorities rose to the top of importance for moving forward with the design.

Results from Student Drawings

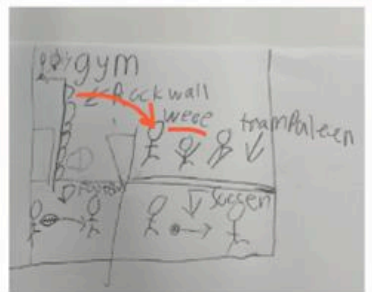
Calming Retreat	3	Dispersed Technology	1
Indoor Outdoor Connections	4	Light and Color	9
Cave Space	8	Outdoor Classrooms	2

Two clear patterns emerged from student drawings:

- Cozy independent nooks next to friends
- Space for Movement

EMERGING QUESTIONS (Examples)

1. As the design develops, how might the design team incorporate small nooks and spaces for movement in the new Mitchell elementary?



Capital Program 2021-22 Annual Report

Individual Project Highlights

Examples of the Pathways to Success Engagement Process, from Fall 2022 Engagements

Engagement Workshop | Design Patterns Feedback

Community Priorities

To the right, the number represents how many stakeholders voted for a specific pattern. Clear priorities rose to the top of importance for moving forward with the design:

Calming / flexible space

- Agile and variable environments for calming, tactile, and small group spaces

Community

- Space for community/ family to connect to the school

Outdoor connections

- Indoor / outdoor connected learning
- Natural light and color to greater engage students

EMERGING QUESTIONS (Examples)

1. How might honor student need for calming, quiet areas by embedding them into the design of Pathways?
2. What might it look like to have outdoor learning experiences for high school students? In what other ways might we connect students with the outdoors?



Flexible & Collaborative Learning

Learning Suite
6

Learning Community
12

Agile Lab Space
6

Small Group Rooms
8

Calming Spaces & Outdoor Connections

The Family Room
10

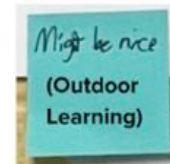
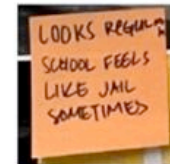
Cave Space
11

Outdoor Classroom
9

Indoor-Outdoor Connections
5

Calming Retreat
10

Natural Daylight / Use of Color
5



Capital Program 2021-22 Annual Report

Individual Project Highlights

Examples of the Pathways for Success Engagement Process, from Fall 2022 Engagements

Engagement Workshop | Student Feedback

Student Priorities

- Below are the most common results from students based on their desire for new spaces in a new school. Clear priorities rose to the top of importance for moving forward with the design.

Top Preferences in Space

Quality	Type
- Bright Lighting / Strong Daylighting	- Art / Performance / Creative Spaces
- Larger/open spaces	- More bathrooms; gender neutral
- Soft furniture in classrooms	- Small group rooms
	- Hangout spots

Beyond Space:

- Students have expression, equality, respect.

EMERGING QUESTIONS (Examples)

1. How might we design the building so that the outdoors are closer to the indoors? **Natural light, natural beauty
2. The performing arts are a focus for many students. What might be the specific needs of a PA Hub at Pathways?

New Pathways to Success Academic Campus



Capital Program 2021-22 Annual Report

Capital Program Sustainability Update

Rooftop Solar Arrays Completed

Pattengill Elementary (110 kW) – 2020
Haisley Elementary (112 kW) – 2021
A2 STEAM at Northside (150 kW) – 2021
Forsythe Middle School (150 kW) - 2021
Huron High School (133 kW) – 2021
Bryant Elementary (150 kW) – 2022
Pioneer High School (150 kW) – 2022
Westerman Preschool (150 kW) – 2022

Geothermal Electrical Heating and Cooling Currently In Construction Progress:

Forsythe Middle School
Clague Middle School



**1.12 MW (AC output) of
rooftop solar**

In 2022 will be equivalent to offsetting carbon of:

- 2,900,000 miles driven by cars; or
- 1,280,000 pounds of coal burned; or
- 212 homes annual electricity usage

FAST FACTS

8,254

light fixtures replaced with high efficiency LED fixtures

25%

average annual electrical reduction per building from installation of LED lighting

\$180,000

anticipated annual savings per year from solar

6%

anticipated AAPS annual electric consumption saving from solar

237

number of geothermal vertical bores drilled to support high performance mechanical HVAC systems

240

lineal feet of vertical bore piping installed = 45.5 miles of piping!

Capital Program 2021-22 Annual Report

Operations Update

Transportation

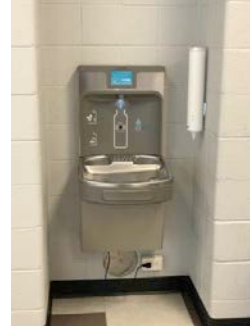
Electric Bus Charging Station Infrastructure

Food Service

Scarlett Walk-In Refrigeration
Community HS Café Improvements
Carpenter Server Line Improvements
King Server Line Improvements
Mitchell Server Line Improvements
Pioneer HS Café & Cafeteria Improvements

Facilities

Building Controls Management System
Enhanced Ventilation & Filtration System
Hydration Stations
Touchless Fixtures
Athletic Field & Track Improvements
Playground Improvements
Shade Tree Program
Clock and PA System Improvements



The DTE rebate incentives are a result of energy efficiency reduction efforts related to building HVAC controls management system upgrades and the installation of more efficient LED lights in our Phase 1 early work.

FAST FACTS

\$421,745

received in rebates from electrical utility to date

10

number of elementary schools that have received playground improvements in last 2 years

180

number of filtered Hydration Stations installed in the district

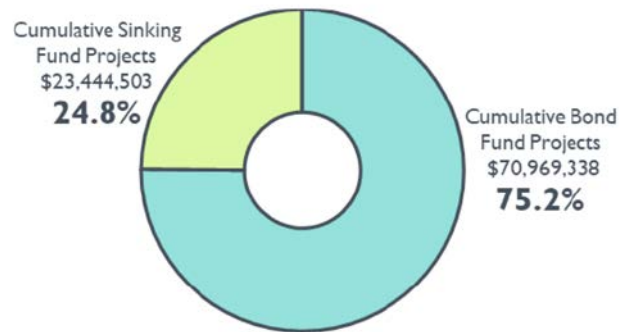
500

number of shade trees planted throughout the district



Capital Program 2021-22 Annual Report

Capital Program Financial Update



**TOTAL CAPITAL PROGRAM
EXPENDITURES
\$94,413,841**

Capital Program Investments by Fund - Cumulative

Capital Program Funding Source	Expenditures FY21/22	Expenditures FY20/21	Total Cumulative Expenditures	% Total
Bond Fund	\$54,035,972	\$16,933,366	\$70,969,338	75.2%
Sinking Fund	\$8,828,868	\$14,615,635	\$23,444,503	24.8%
Total All Capital Program	\$62,864,840	\$31,549,001	\$94,413,841	100%

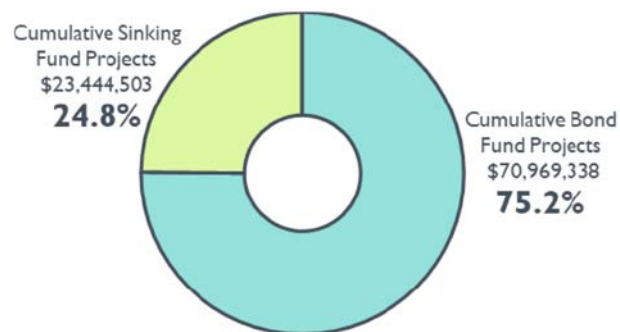
Bond Fund Projects	FY21/22	FY20/21	Total	% Total
Construction	\$37,305,914	\$10,783,633	\$48,089,547	67.8%
Professional Fees	\$10,115,640	\$3,144,516	\$13,260,155	18.7%
IT Infrastructure	\$3,508,670	\$0	\$3,508,670	4.9%
Land	\$1,008,096	\$0	\$1,008,096	1.4%
Legal, Permits, Other Fees	\$1,385,063	\$129,170	\$1,514,233	2.1%
Site Improvements	\$460,461	\$0	\$460,461	0.6%
Solar Installations	\$129,177	\$0	\$129,177	0.2%
Roofing	\$42,707	\$0	\$42,707	0.1%
Furniture, Fixtures & Equipment	\$80,245	\$0	\$80,245	0.1%
Buses	\$0	\$2,876,048	\$2,876,048	4.1%
Total Bond Fund Projects	\$54,035,972	\$16,933,366	\$70,969,338	100.0%

Sinking Fund Projects	FY21/22	FY20/21	Total	% Total
Construction	\$2,748,952	\$4,397,222	\$7,146,174	30.5%
Theater Improvements	\$2,382,473	\$0	\$2,382,473	10.2%
Roofing	\$1,748,459	\$1,897,263	\$3,645,722	15.6%
Site Improvements	\$1,215,248	\$5,781,285	\$6,996,532	29.8%
Solar Installations	\$374,456	\$840,227	\$1,214,683	5.2%
Professional Fees	\$359,280	\$1,032,034	\$1,391,314	5.9%
Land	\$0	\$636,183	\$636,183	2.7%
Legal, Permits, Other Fees	\$0	\$31,422	\$31,422	0.1%
Total Sinking Fund Projects	\$8,828,868	\$14,615,635	\$23,444,503	100%



Capital Program 2021-22 Annual Report

Capital Program Financial Update



**TOTAL CAPITAL PROGRAM
EXPENDITURES
\$94,413,841**

Capital Program Investments by Category – Cumulative

Capital Program Expenditures: FY21 & FY22				
Expense Category	Bond Fund	Sinking Fund	Total	% Total
Construction	\$48,089,547	\$7,146,174	\$55,235,721	58.5%
Professional Fees	\$13,260,155	\$1,391,314	\$14,651,469	15.5%
IT Infrastructure	\$3,508,670	Not Allowed	\$3,508,670	3.7%
Theater Improvements	\$0	\$2,382,473	\$2,382,473	2.5%
Land	\$1,008,096	\$636,183	\$1,644,279	1.7%
Legal, Permits, Other Fees	\$1,514,233	\$31,422	\$1,545,655	1.6%
Site Improvements	\$460,461	\$6,996,532	\$7,456,994	7.9%
Solar Installations	\$129,177	\$1,214,683	\$1,343,860	1.4%
Roofing	\$42,707	\$3,645,722	\$3,688,428	3.9%
Furniture, Fixtures and Equipment	\$80,245	Not Allowed	\$80,245	0.1%
Buses	\$2,876,048	Not Allowed	\$2,876,048	3.0%
Totals By Fund	\$70,969,338	\$23,444,503	\$94,413,841	100%

Capital Improvement Program	
Two Year Cumulative Total Investments 7/1/2020 – 6/30/2022	
Bond Funds	\$70,969,338
Sinking Funds	<u>\$23,444,503</u>
Subtotal Capital Investment	\$94,413,841
Ongoing Repairs from Sinking Funds	<u>\$32,378,733</u>
Cumulative Total Investments	<u>\$126,792,574</u>



Capital Program Property Acquisitions Update

Property acquisition play an important role in meeting the commitments of the Capital Program.

During the course of due diligence to date, the following property acquisitions were deemed to provide the most value to the district.

3700 Earhart Road Property This acquisition fulfills a critical District need for additional space in the northeast sector for District and Community functions dedicated to Children, Families and Community. Functions will include Early Childhood and Family Programs, Rec / Ed Early Childhood Programs, Parenting and Family Classes, Adult Enrichment Classes, a Parent Welcome Center, dedicated Professional Development space, Meeting and Training space for Staff and the Community, and Office Space.

Total Acres: 16.64
Purchase Amount: \$17,000,000
Closing Date: 12/5/2022



2862 Stone School Road Property is located adjacent to the existing Pathways to Success Academic Campus. This strategic property acquisition will be utilized for the new building, scheduled for a construction start in 2024.

Total Acres: 2.65
Purchase Amount: \$965,000
Closing Date: 12/2/2021





Thank you, Ann Arbor Public Schools Community!

