

Facilities Master Planning Phase Two

December 3-4, 2024

BUILDING TEAM MEETING #1



Agenda – Building Team Meeting #1

- ▶ 0:00 – 0:15 Welcome and introductions
- 0:15 – 0:30 Work completed during phase one
- 0:30 – 0:45 Educational and Physical Adequacy Assessment summaries
- 0:45 – 1:15 Small group work
- Questions to consider:
- Did anything about the educational or physical assessments surprise you?
 - What building-specific items would you add to the established parameters?
 - Prioritize your top programmatic needs
- 1:15 – 1:30 Small group reports / next steps





Your Voice Matters

FACILITIES MASTER PLANNING: PHASE TWO

ASSESSMENT PHASE

JUL 2024 ———> DEC 2024

OPTIONS PHASE

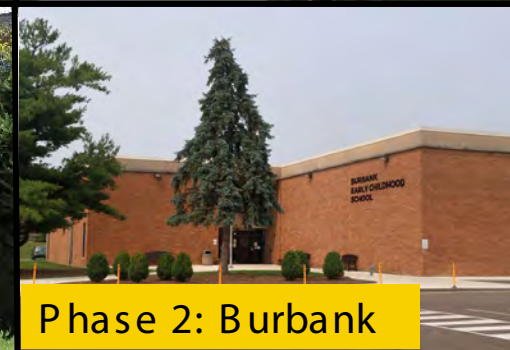
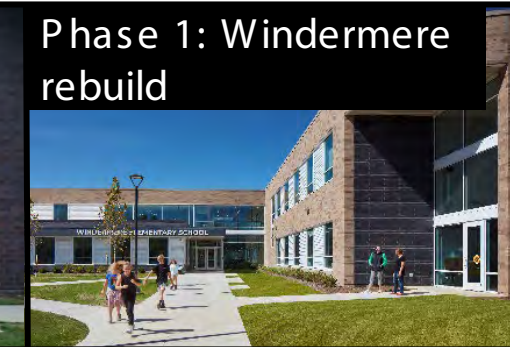
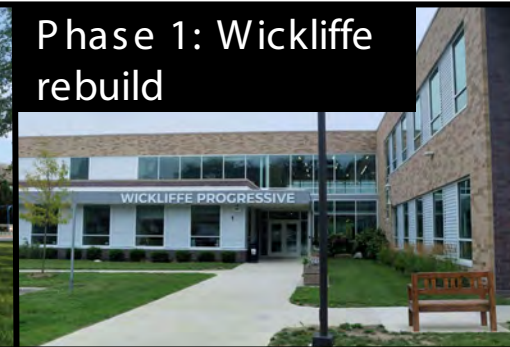
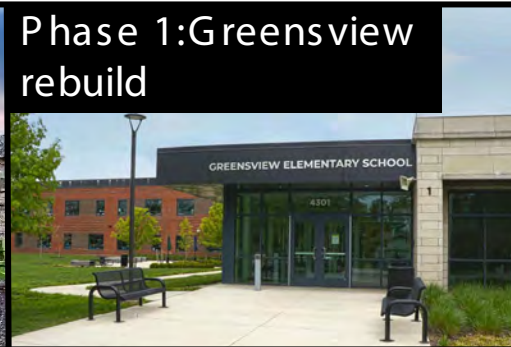
DEC 2024 ———> JUN 2025

DECISIONS PHASE

JUN 2025 ———> OCT 2025

PHASE ONE: WORK COMPLETED

PHASE TWO: WORK AHEAD OF US



**YOUR
VOICE
MATTERS**





Your Voice Matters

FACILITIES MASTER PLANNING: PHASE TWO

UPPER ARLINGTON COMMUNITY

BOARD OF EDUCATION

OVERSIGHT COMMITTEE

FACILITIES TASK FORCE

BUILDING TEAMS

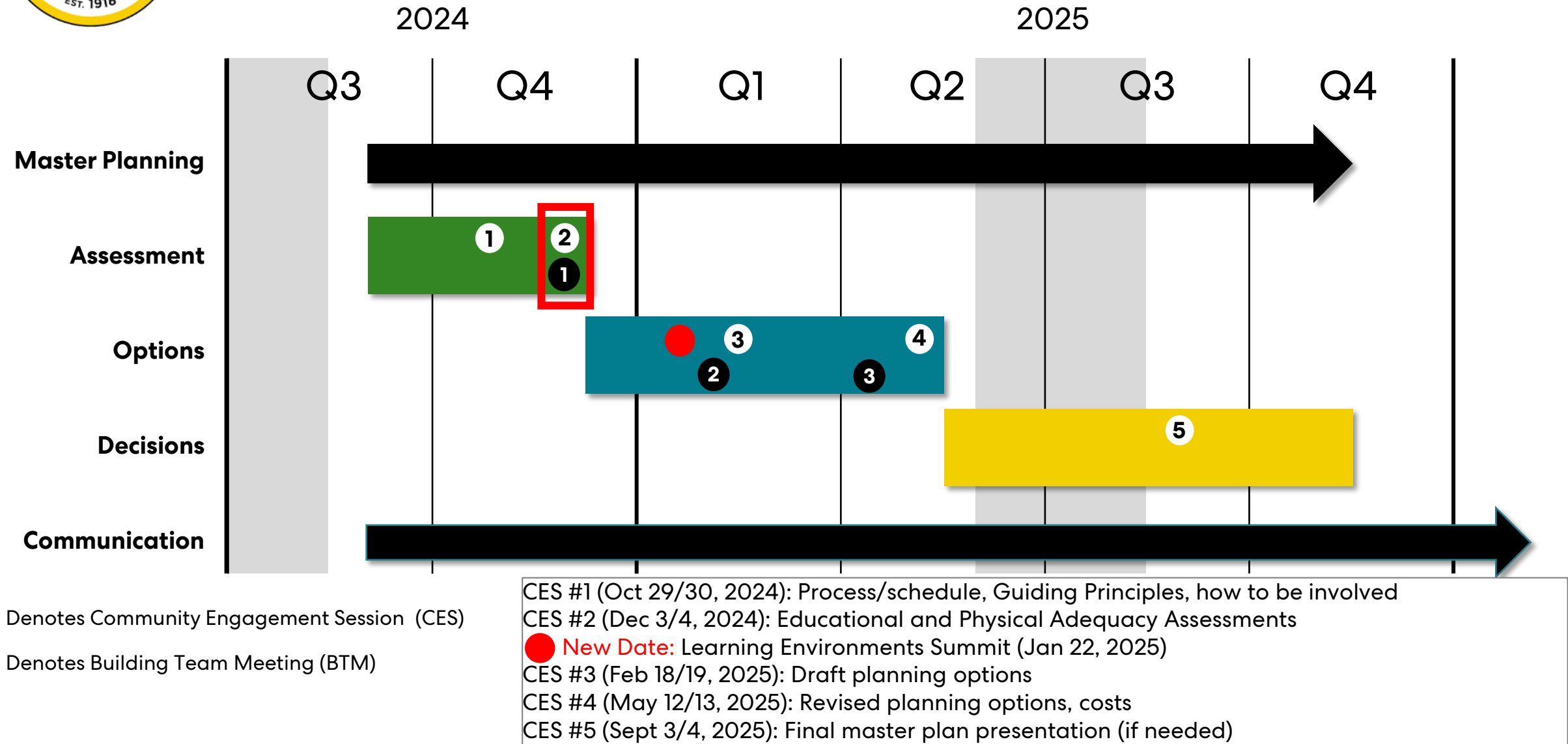
FINANCIAL ADVISORY BOARD

STUDENT TEAMS

UPPER ARLINGTON COMMUNITY



Phase II - Facilities Master Plan Schedule



How Will Decisions Be Made?

Inform

Upper Arlington Community
Building & Student Teams
Facilities Task Force
Financial Advisory Board
Surveys / Feedback Forms



Recommend

Oversight Committee /
Superintendent



Decide

Board of Education

Guiding Principles (2024)

Our district's educational environments will:

1. Champion uniquely accomplished learners
2. Be fiscally responsible and community responsive
3. Foster and engage relationships
4. Bolster collaboration and creativity
5. Recognize the need for a safe place to learn and work



Planning Parameters

- Maximize community involvement in a process to create a sensible long-term plan for Hastings Middle School, Jones Middle School and Burbank Early Childhood School.
- Ensure a transparent process with no preconceived plans.
- Address current and future enrollment as well as possible future program requirements.
- Retain a two-middle school model; no redistricting.
- Any new construction or renovations should include modern-day, future-ready learning environments.
- Balance initial costs and lifecycle costs in construction standards to ensure any renovations or new construction will be long lasting and reasonable.
- Include easily accessible gender-specific and gender-neutral restroom facilities in each school.
- New or renovated facilities should provide spaces for learning, gathering, arts, athletics and activities that are comparable to both the current facility and other facilities in the same grade-level band.



Educational Adequacy Assessment



Educational Assessment

What do we look at?

Lighting

Daylighting

Materials

Room
Size & Shape

Furniture/
Ergonomics

Circulation /
Adjacencies

Safety &
Security

Technology

Thermal
Comfort

Acoustics

Indoor Air
Quality

Flexibility

Supports
Collaboration



Educational Assessment

How do we do it?



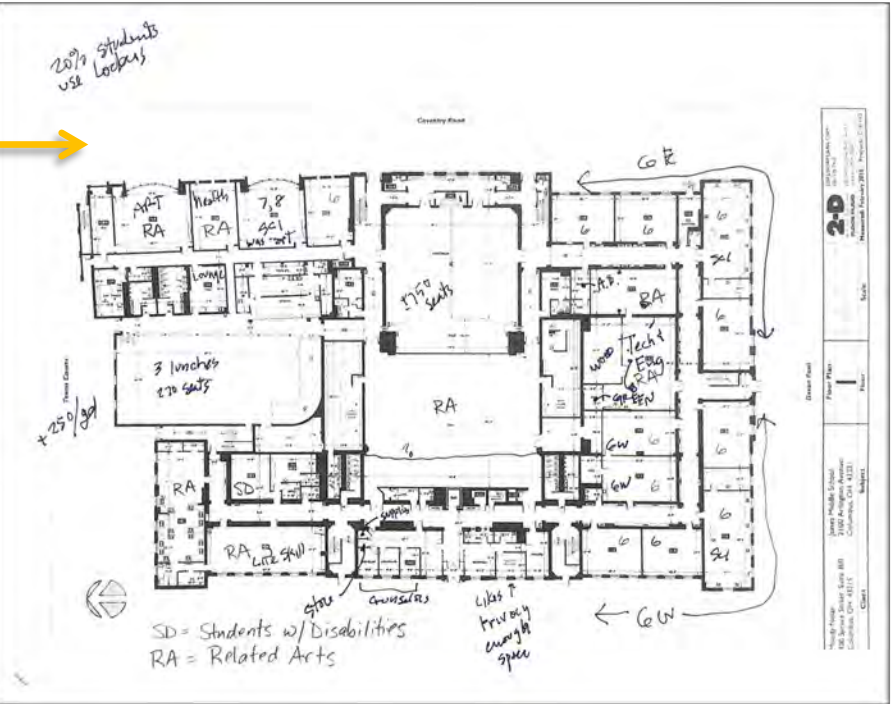
Student
Focus Groups



Principal
Meetings +
Site Visits

Building
Team
Meetings

Jones Middle School								
Completed October 29, 2024								
1- Guiding Principles: Does this UA School Facility:							Comments	
1.1a	Support a personalized learning experience so each student succeeds	2					Do this in spite of	2
1.1b	Maintain a steadfast commitment to the arts			4				4
1.1c	Promote the continued importance of service learning					0	part of building culture	0
1.1d	Support extracurricular activities and athletics	2						2
1.1e	Pursue excellence by supporting collaborative, creative, flexible, engaging and authentic learning environments for all	1						1
2- Guiding Principles: Does this UA School Facility:							Comments	2.25
2.1a	Provide the best return on investment, both financially and academically	2					Old	2
2.1b	Honor our past with a focus on the future	2					Honor past well, not focus on future	2
2.1c	Reflect what our community values			5			People love this building	5
2.1d	Be environmentally sustainable	1						1
3- Guiding Principles: Does this UA School Facility:							Comments	2.5
3.1a	Serve as a center of the school community			5				5
3.1b	Advance leadership at all levels, for students and educators, within the community and nationally					0	Do in spite of	0
3.1c	Cultivate relationships between the students, educators, parents and the community					0	Yes, Not sure facility has much to do with	0
3.1d	Encourage collaboration with community organizations, business, universities and other school districts	2						2
4- Guiding Principles: Does this UA School Facility:							Comments	3.5
4.1a	Support social, emotional and academic learning options and opportunities within and beyond the classroom	2						2



Student Workshop Summary



Visual & Performing Arts

- Like bigger/better theater
- Clean/modern tech spaces
- Question need for music practice rooms

Fitness and Wellness Spaces

- Need better bathrooms!
- Like larger gym, weight room w/windows
- Like sensory/"chill" space

Project Based Spaces

- Like fun, interesting, "cool" space (i.e. robotics test area)

Dining / Multi-Purpose Spaces

- Like café style, visually clean, "store feeling", cozy
- Big windows, variety, "cool vibe"
- Have more than one function

Student Workshop Summary



Independent and Collaborative Spaces

- Like collaborative spaces
- Incorporate study and small group spaces
- Like natural light, chill spaces, "Panara vibe"

Library/Media Spaces

- Like light/windows, learning stair
- Large independent spaces, open
- Need quiet and study space

Environmental Stewardship

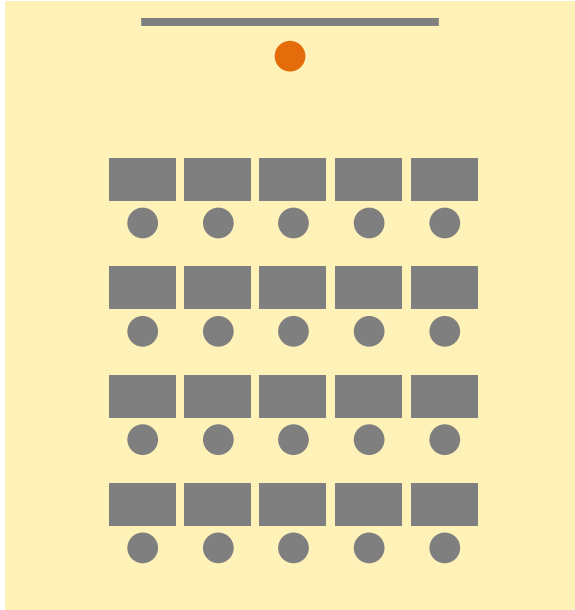
- Like outdoor learning room
- Like solar – could be part of tech. ed.
- Green is good, avoid clutter

Flexibility & Transparency

- Like color and simplicity
- Like room to spread out
- Simple operable walls, multipurpose space
- Some concerns about garage doors and safety

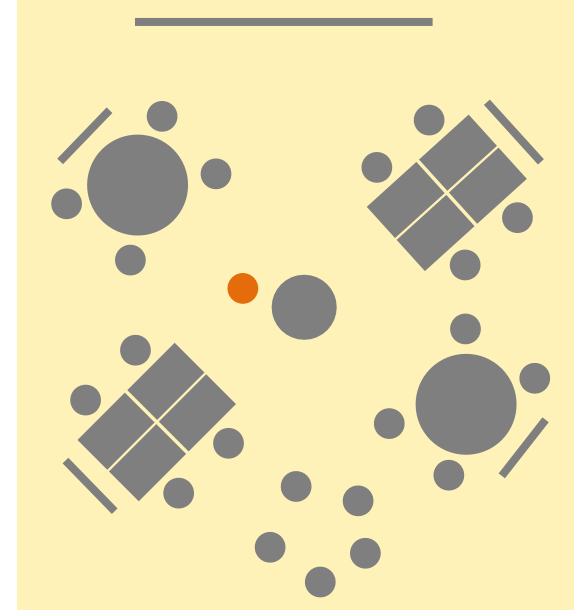
TODAY'S CLASSROOM

FLEXIBLE / AGILE / ACTIVE



20th Century

- Teacher-centered
- Passive learning
- Organized by age/subject
- Rote memorization
- Industrial efficiency



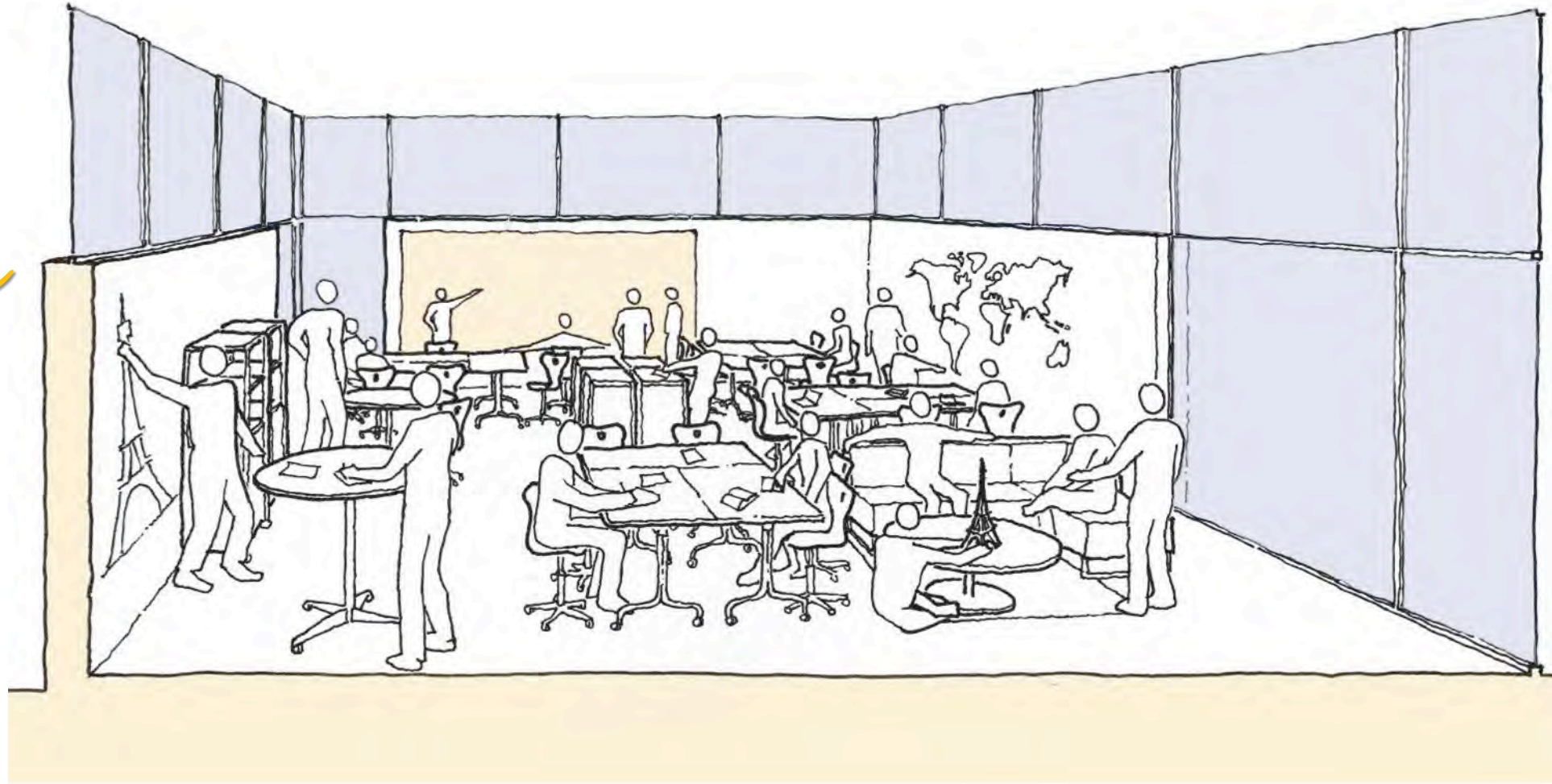
Future Ready

- Student-centered
- Active learning
- Multi-age learning communities
- Project based and experiential
- Students not tied to fixed location

TODAY'S CLASSROOM

FLEXIBLE / AGILE / ACTIVE

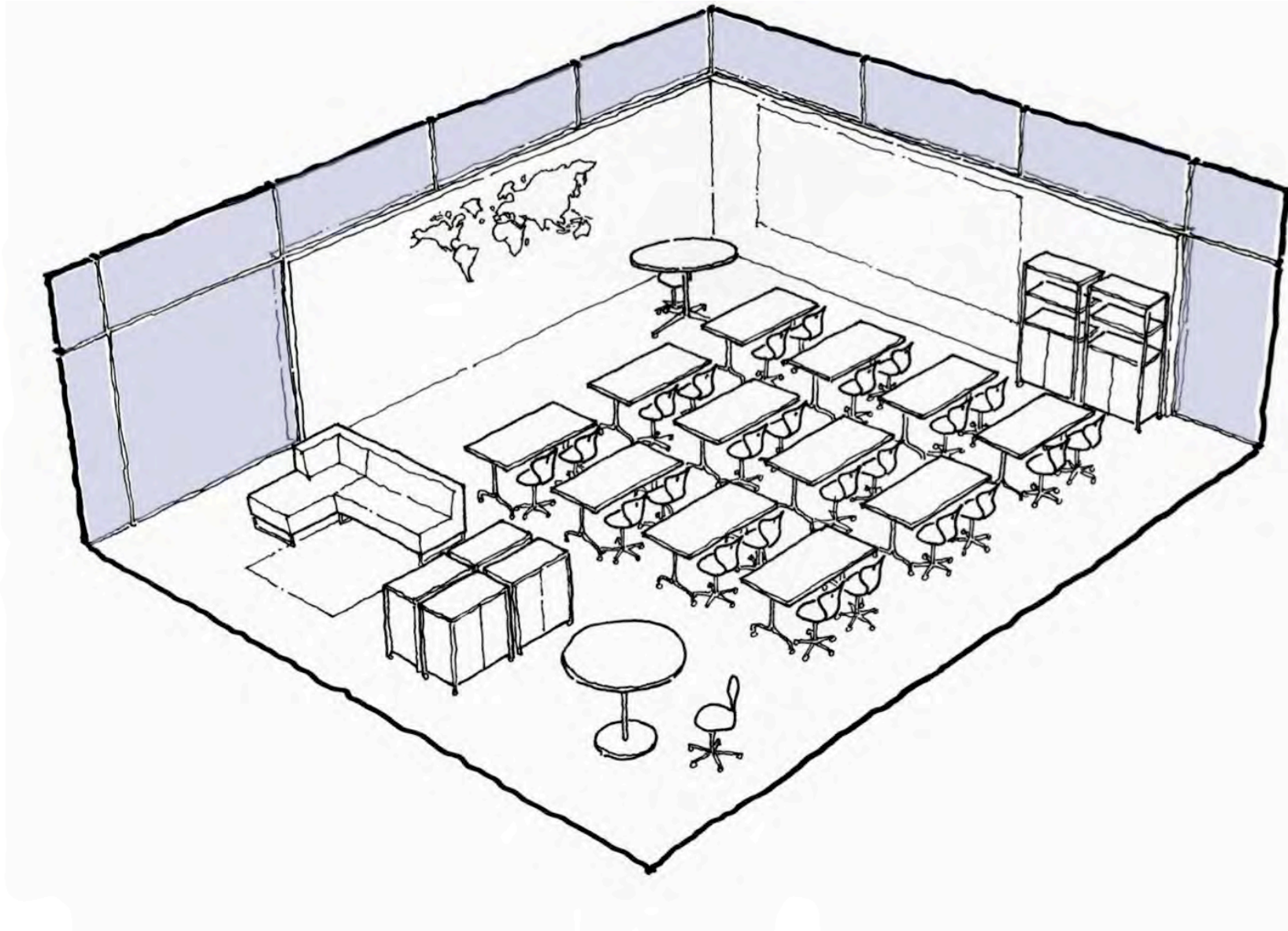
adaptable



TODAY'S CLASSROOM

FLEXIBLE / AGILE / ACTIVE

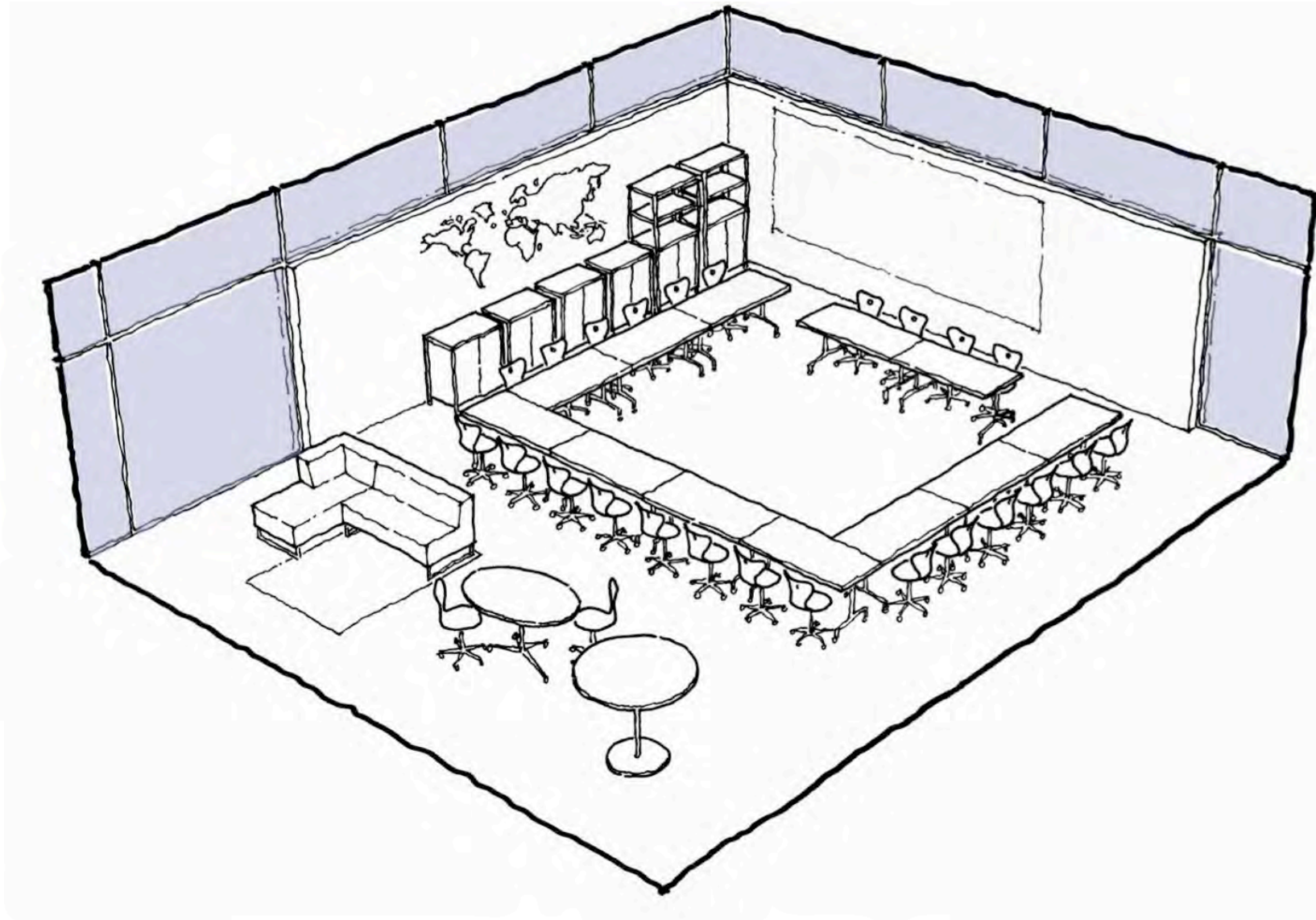
*traditional
lecture*



TODAY'S CLASSROOM

FLEXIBLE / AGILE / ACTIVE

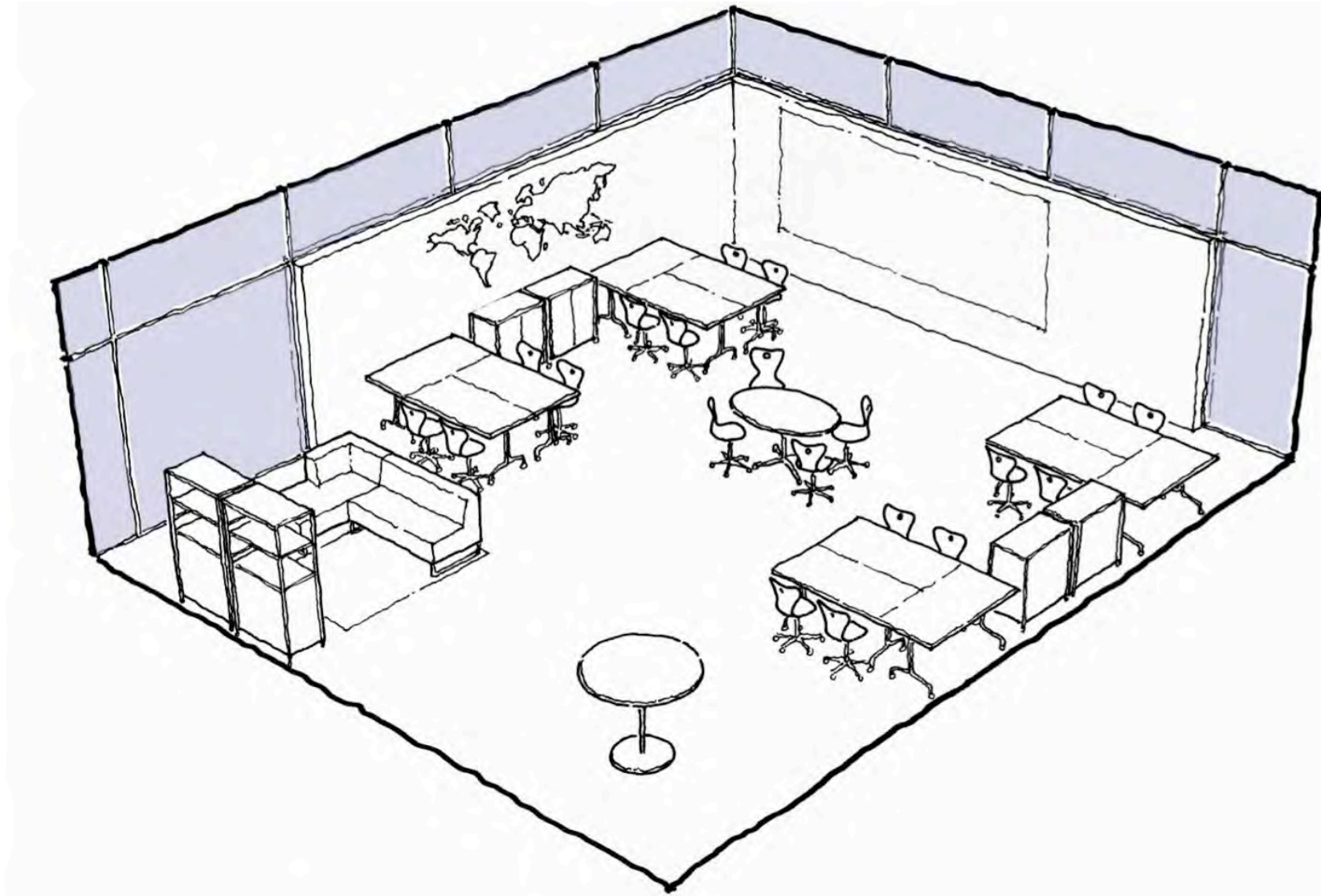
seminar



TODAY'S CLASSROOM

FLEXIBLE / AGILE / ACTIVE

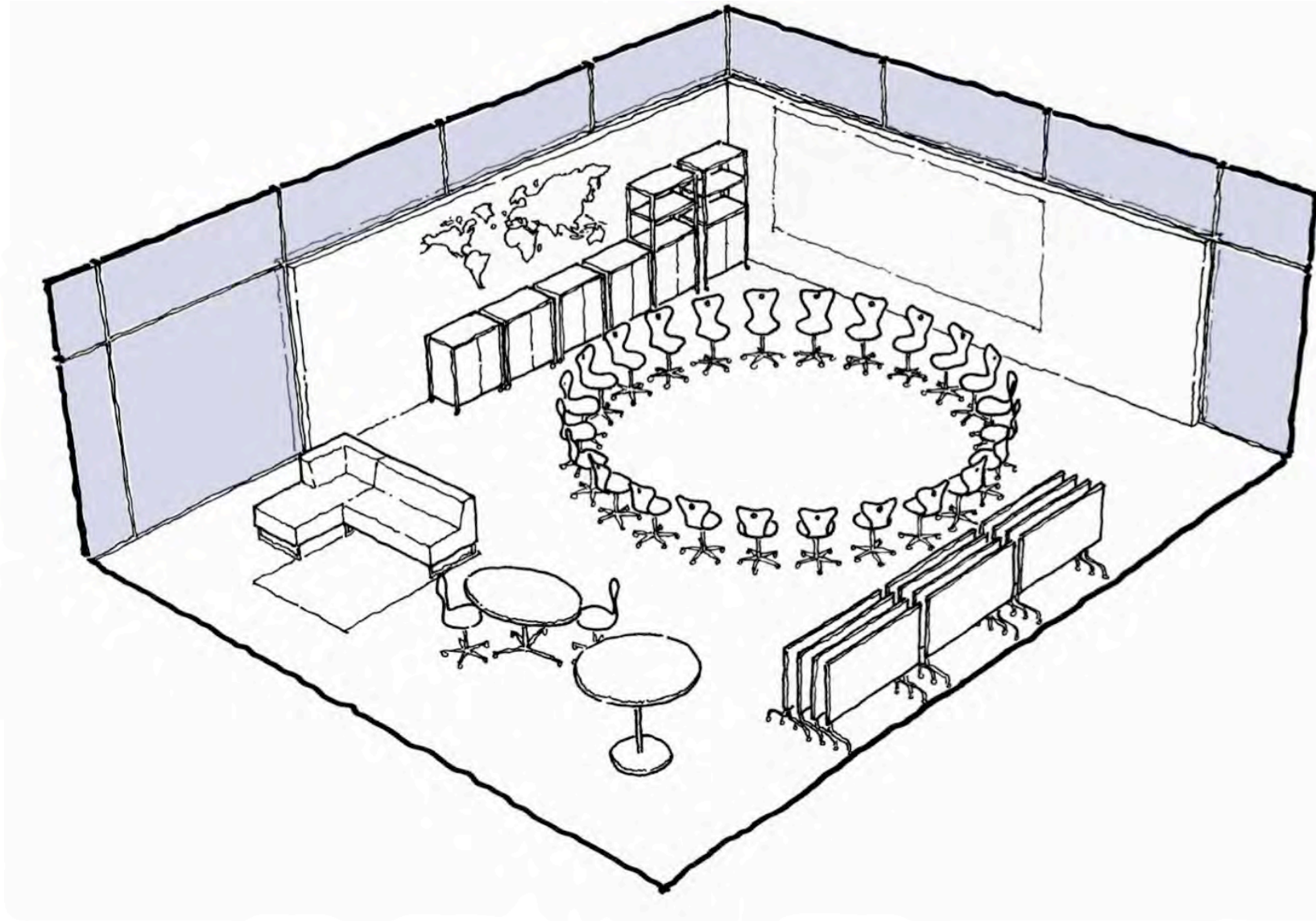
project teams



TODAY'S CLASSROOM

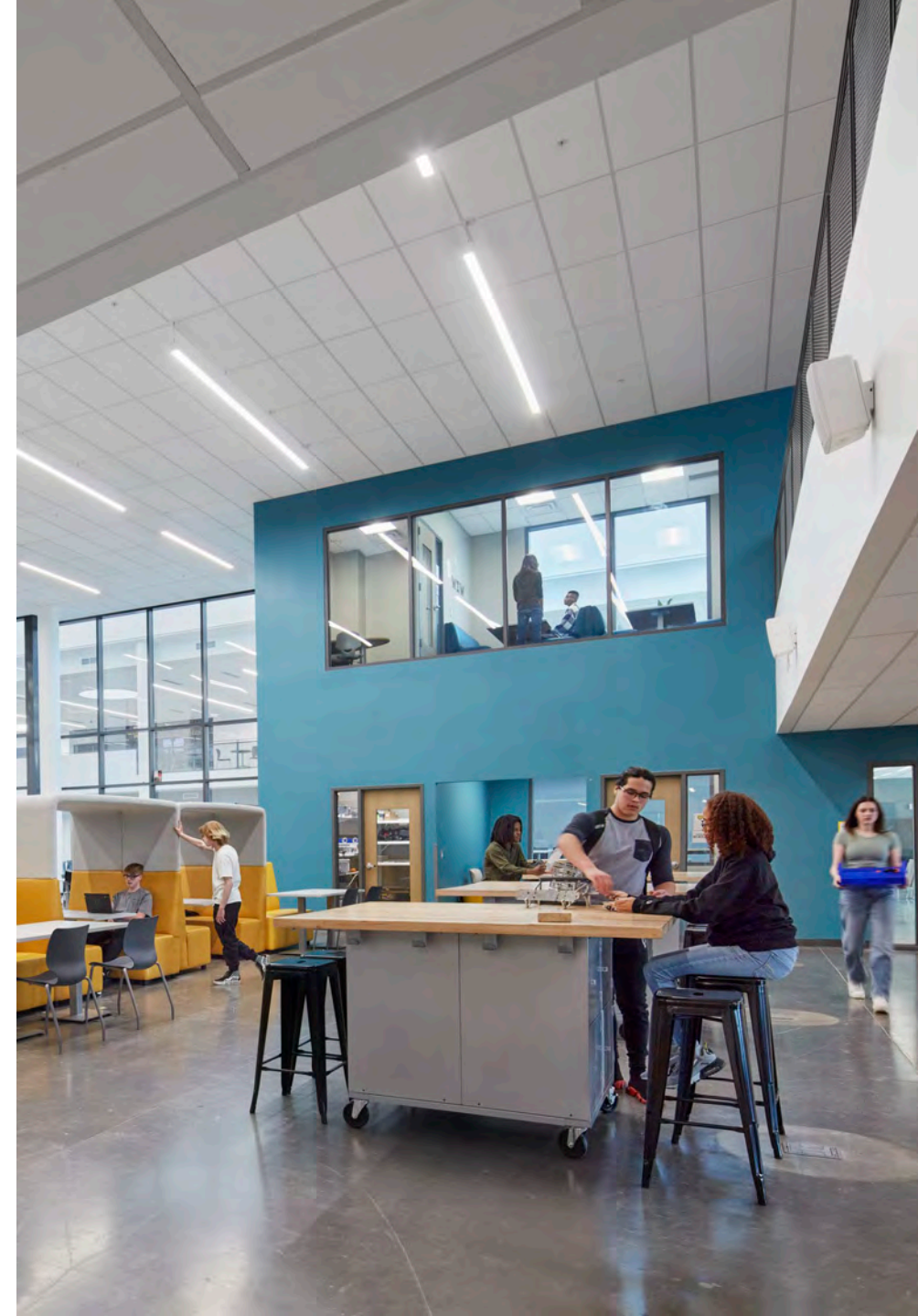
FLEXIBLE / AGILE / ACTIVE

*group
discussions*



Why Do Today's Schools Need More Space?

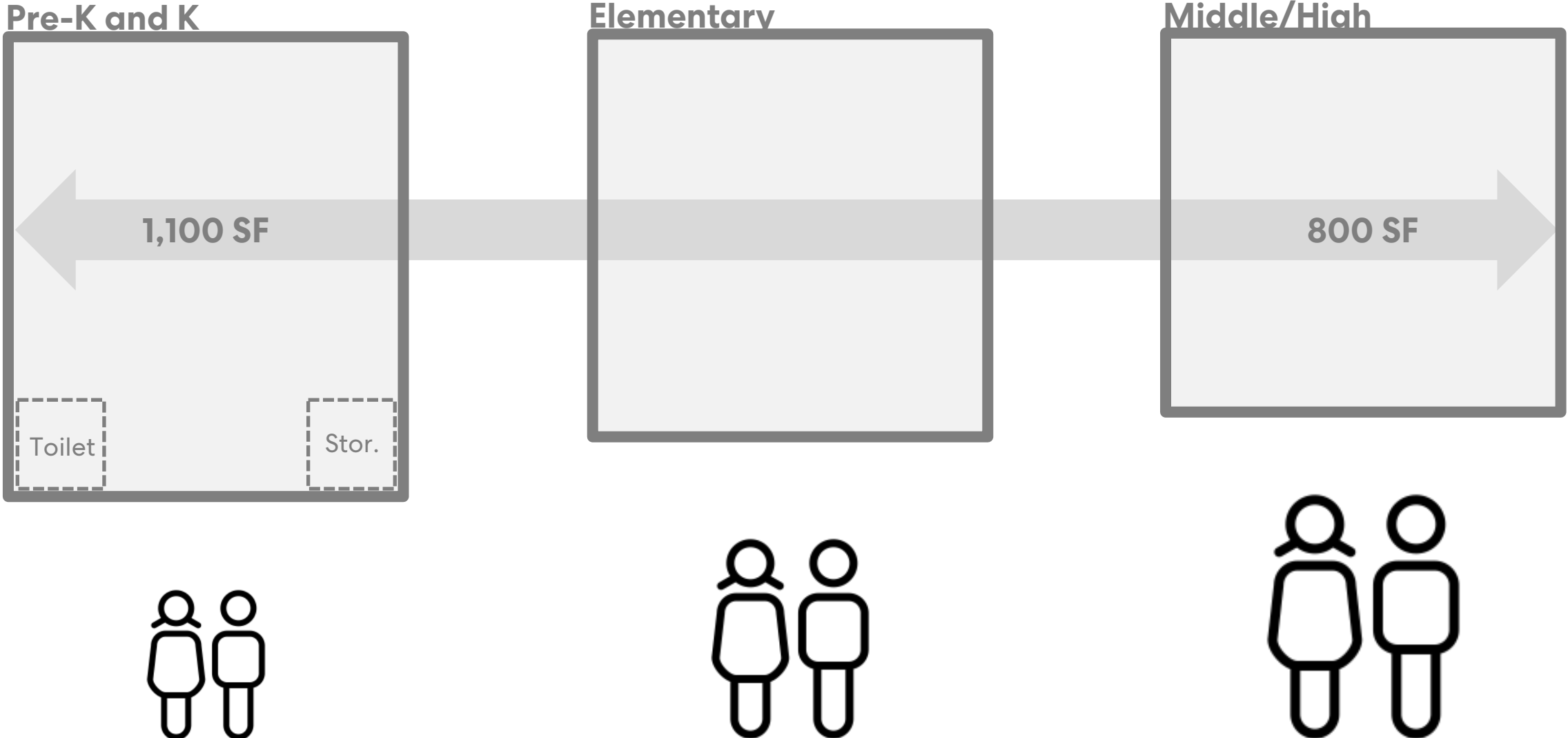
- More robust technology
- Additional pre-kindergarten and full-day kindergarten
- **PE/Athletics provided for all students (Title IX)**
- **Project based learning encouraging collaboration**
- Flexible space
- Flexible furniture
- **Increased space for special education students**
- Americans With Disabilities Act (ADA)
- **Increase in programs / classes offered**
- **Additional support staff**
- Change in concept of food service / cafeterias
- Space for adult and community use



Classroom Size

Best Practice

Influencing Factors: age, adjoining spaces (i.e. breakout commons), programming, equipment/manipulatives requirements, storage, special needs, etc. **Note:** there is no national size standard.



Burbank Early Childhood School

Educational Adequacy Assessment



Burbank Early Childhood School

Summary

Grades: Pre-school / Pre-kindergarten

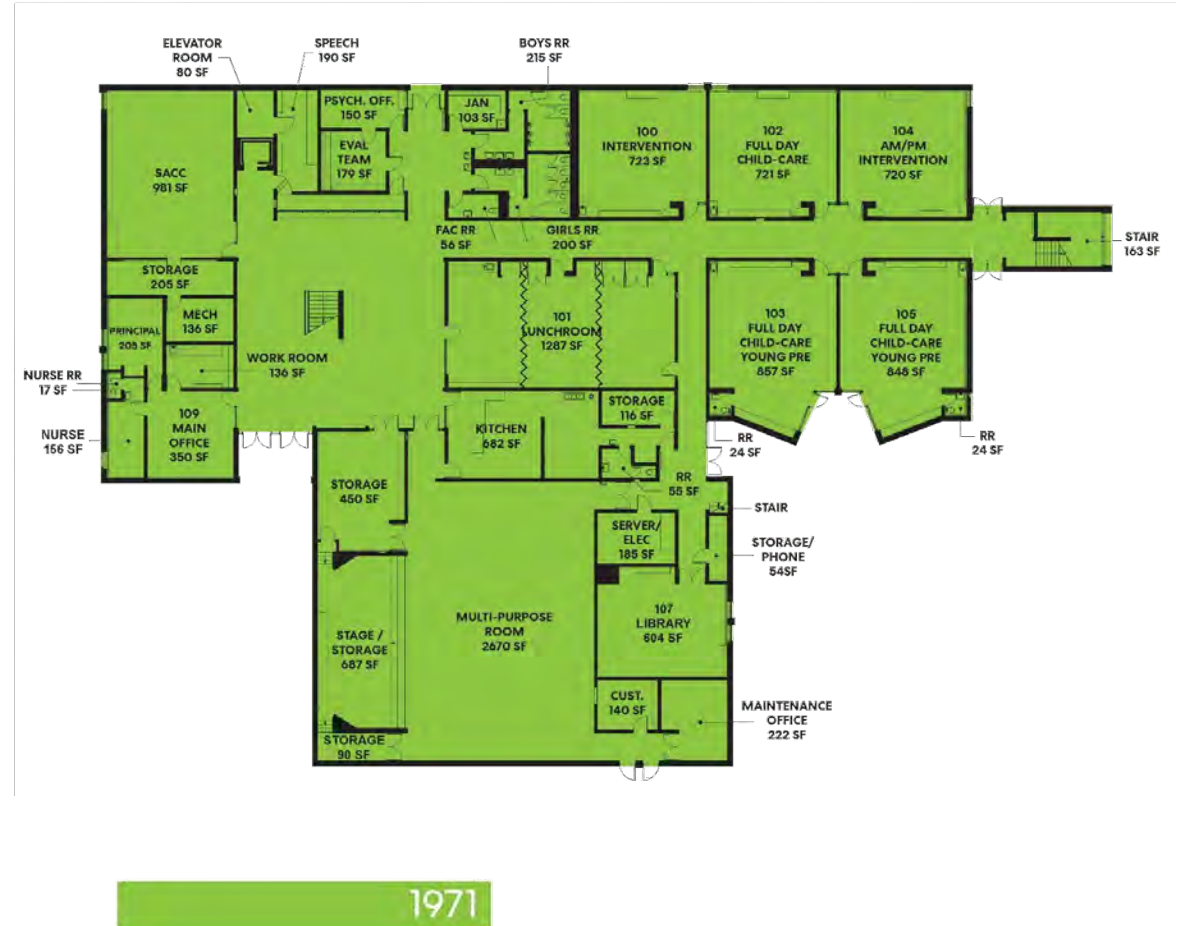
Height: Two stories

Site size: 5.2 acres

Building size: 37,453 square feet (SF)

Number of students: 259

SF/student: 145 square feet



Burbank Early Childhood School

Site

- Generous outdoor play space
- Benefit from adjacent playfields
- Parking quantity sufficient
- Parents park and walk students to front door
- Newer concrete and paving
- Need toilet accessible from outdoors



Burbank Early Childhood School

View from Southeast



Burbank Early Childhood School

View from Southwest





Burbank enjoys wonderful green and play space and can utilize an adjacent park



Burbank Early Childhood School

Challenges

BUILDING:

- Lack of best practices **secure entry** vestibule
- **Classrooms undersized**
- Mechanical units hamper **acoustics** in classrooms
- Limited / no **daylight** in classrooms
- Lack of toilets and storage in classrooms
- General lack of storage (some student storage in corridors)
- No student or adult collaborative space
- Use of building by other district functions takes up program space for early childhood
- No dedicated art room
- Toilet accessibility issues
- Scale / acoustics of multipurpose room (too tall for youngest learners) / use of stage
- Lack of dedicated / organized display areas
- Library location difficult to find



Daylighting has been linked to “**better performance of students** – as much as 20% improvement in math and 26% in reading on standardized tests”

(Heschong Mahone Group, 1999)

First Floor

[illegible]

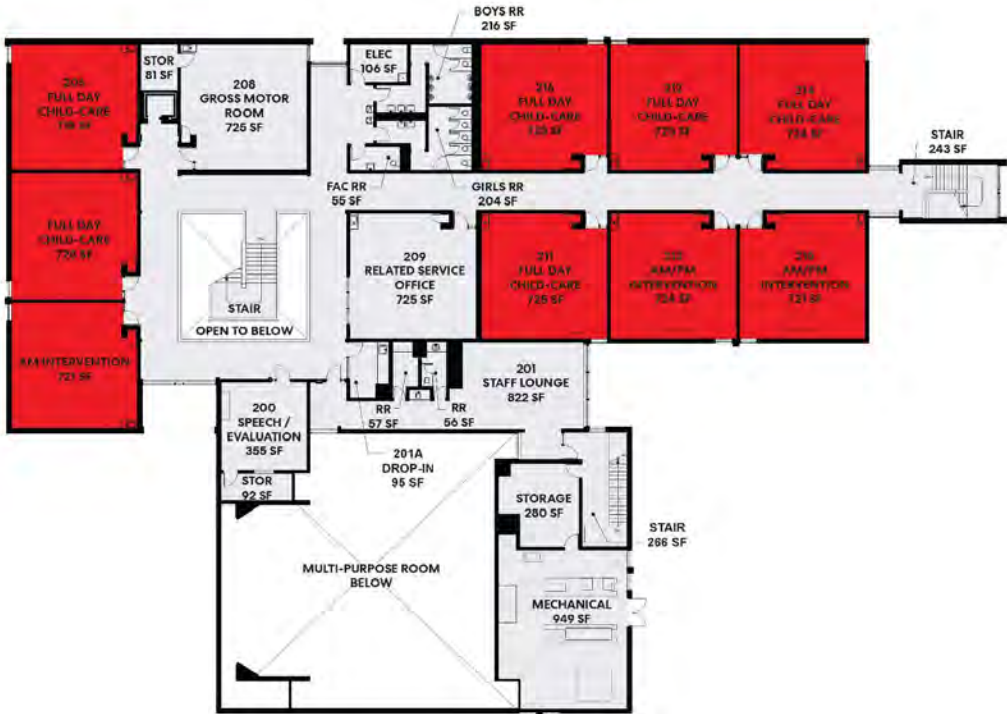
Burbank Early Childhood School

Core Classroom Size Diagram

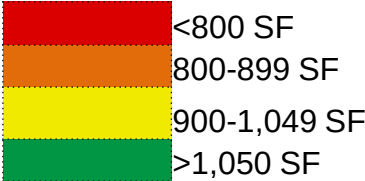
First Floor



Second Floor



Pre-K Classrooms



Burbank classrooms are small

Existing average classroom size = 723 SF

Benchmark recommendation = 1,050 SF

Daylighting Best Practice



Daylighting has been linked to “**better performance of students** – as much as 20% improvement in math and 26% in reading on standardized tests”

(Heschong Mahone Group, 1999)



Burbank Early Childhood School

Daylight Diagram

First Floor



Second Floor



Burbank's classrooms suffer from limited daylight (one window per room)



Classroom size creates cramped conditions
Limited daylight via one window per room



What would ideally be classroom storage spill over into corridors

Acoustics

Best Practice



ACOUSTICS

Noise influences children's information processing strategies and feelings of personal control

(Cohen & Weinstein, 1981)





Fan noise from unit ventilators (mechanical unit) is detrimental to classroom acoustics

Acoustics

Best Practice

In many classrooms . . .
with normal hearing
understand only 75 of
the words from a list.
reading a textbook every
fourth word, and
being expected understand
the material be tested on .
Sounds ridiculous? Well is
exactly the facing
students every in schools .
.

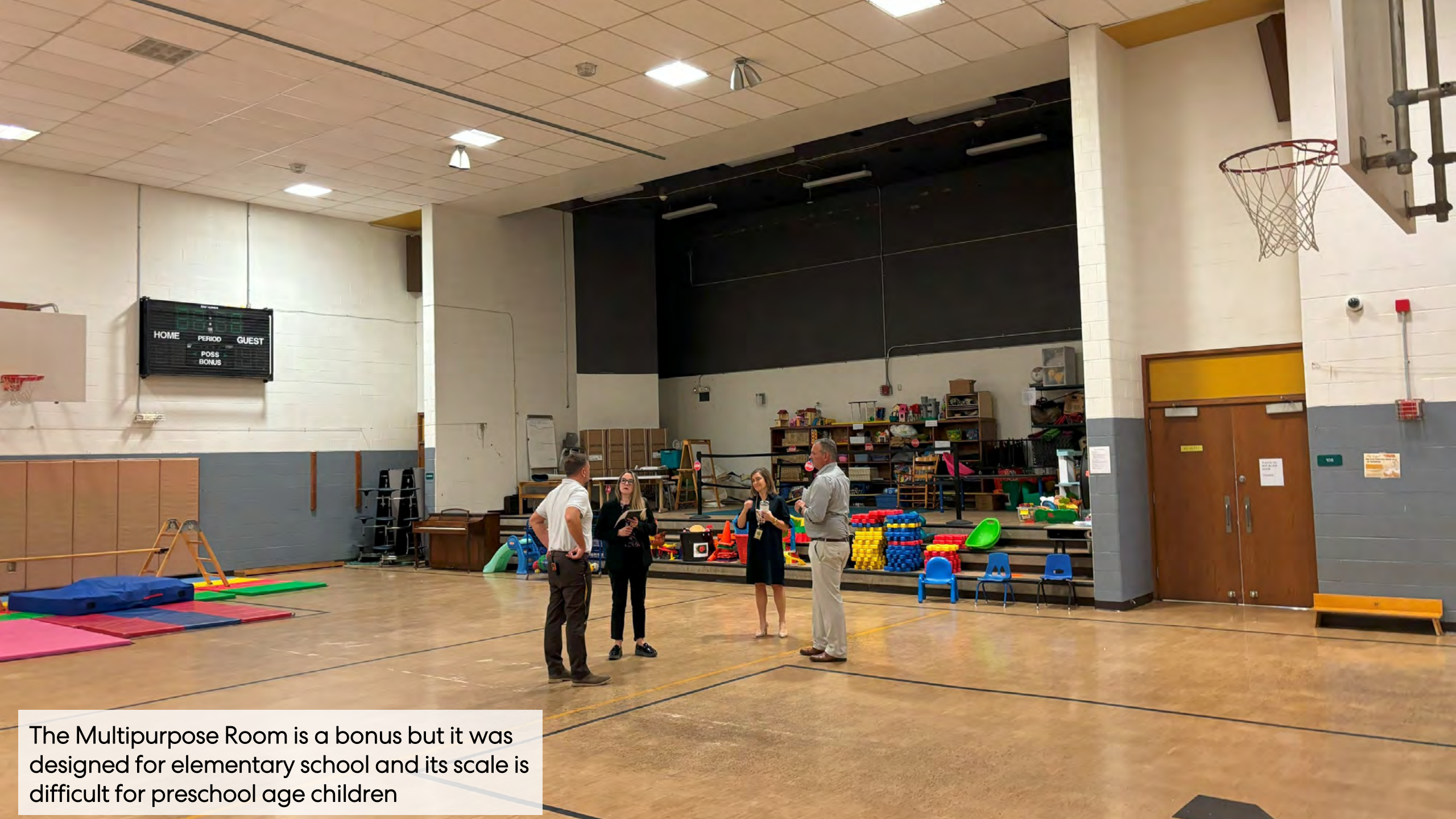


Acoustics

Best Practice

In many classrooms . . . **listeners** with normal hearing **can** understand only 75 **percent** of the words **read** from a list. **Imagine** reading a textbook **with** every fourth word **missing**, and being expected **to** understand the material **and** be tested on **it**. Sounds ridiculous? Well **that** is exactly the **situation** facing students every **day** in schools . .





The Multipurpose Room is a bonus but it was designed for elementary school and its scale is difficult for preschool age children



The cafeteria size is adequate but lacks daylight and while used for faculty meetings is not accommodating

Burbank Early Childhood School

Questionnaire Summary

Not Satisfactory	Somewhat Satisfactory	Neutral	Satisfactory	Very Satisfactory	N/A
1	2	3	4	5	0

Completed October 29, 2024

1.1 - Guiding Principles: Does this UA School facility support championing uniquely accomplished learners:	3.0
1.2 - Guiding Principles: Is this UA School facility support being fiscally responsible and community responsive:	1.8
1.3 - Guiding Principles: Does this UA School facility support fostering and engaging relationships:	2
1.4 - Guiding Principles: Does this UA School facility support bolstering collaboration and creativity:	1.7
1.5 - Guiding Principles: Does this UA School facility support and recognize the need to create a safe place to learn and work:	1.7
2 - Exterior	3.8
3 - General Building	2.0
4 - Academic and Other Spaces	1.5
5 - Future Ready Student Development	1.6
6 - Library/Media Center	2.0
7 - Security	1.2
8 - Adjacencies	1.0
9 - Technology	4.0
10 - Storage	1.0
11 - Furniture, Fixtures & Equipment	1.7
12 - Environmental Quality	1.7
13 - Controllability of Systems	2.0

Physical Adequacy Assessment



2024 Facility Assessment



- Existing physical conditions assessment
- **Review and update 2015 Assessment for Hastings, Jones and Burbank**
- Architectural/engineering/costing team
- Based on observations and district input
- **Update costs** to repair, refurbish, or replace building components and systems to 2024 dollars

Physical Assessment

What do we look at?

HVAC
Systems

Plumbing and
Fixtures

Electrical
Systems

Lighting

Accessibility,
Life Safety

Roofing

Doors and
Windows

Finishes and
Furnishings

Structure

Site and
Athletics

Drainage



2024 Updated Physical Assessment

Our Process

In-depth review of all 3 buildings comparing them to the facility assessment 2015 report and capturing worked completed since then.

Architectural / Engineering / Costing Team

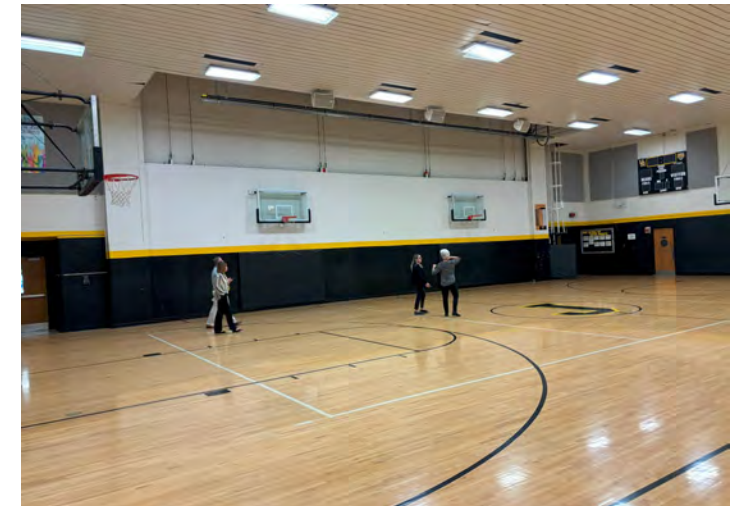
Moody Nolan / Heapy / Turner

Assess the condition of major systems and components

Based on observations

Based on District input

Based on collective expertise



2024 Updated Physical Assessment

Our Charge

Identify the cost to maintain and repair Jones, Hastings and Burbank for the next 15 years to ensure operation well into the future

- Determine the cost to “maintain the status quo through 2040”
- Assumes no building additions
- Assumes no new learning environments
- New systems will last 20-25 years on average



- A. Heating System
- B. Roofing
- C. Ventilation/Air Conditioning
- D. Electrical Systems
- E. Plumbing and Fixtures
- F. Windows
- G. Structure: Foundation
- H. Structure: Walls and Chimneys
- I. Structure: Floors and Roofs
- J. General Finishes
- K. Interior Lighting
- L. Security Systems
- M. Emergency/Egress Lighting
- N. Fire Alarm
- O. Handicapped Access
- P. Site Conditions
- Q. Sewage System
- R. Water Supply
- S. Exterior Doors
- T. Hazardous Material
- U. Life Safety
- V. Loose Furnishings
- W. Technology
- X. Non-Construction Costs
- AA. Site and Athletics

The 3 "Buckets" For Facilities Needs (2024)

As Identified In The Physical Assessments

ZERO TO FIVE YEARS



**UPPER ARLINGTON
HIGH SCHOOL**

FIVE TO 10 YEARS



**ALL FIVE ELEMENTARY
SCHOOLS PLUS BURBANK
EARLY CHILDHOOD SCHOOL**

10 TO 15 YEARS



**HASTINGS AND JONES
MIDDLE SCHOOLS**

The 3 "Buckets" For Facilities Needs (2024)

As Identified In The Physical Assessments

ZERO TO FIVE YEARS



**HASTINGS AND JONES
MIDDLE SCHOOLS
BURBANK EARLY
CHILDHOOD SCHOOL**

FIVE TO 10 YEARS

10 TO 15 YEARS

Construction Activity in Columbus Market

- Construction Market and Competing Projects

- Subcontractor / Labor / Material availability
- Intel – \$20B, Honda EV Plant – \$4.6B
- Google \$1.7B Airport – \$1.6B
- Ohio Expo - \$1.3B OhioHealth – \$2B,
- OSU - \$1B County Courthouse- \$0.5B
- Scioto Peninsula- \$0.3B Microsoft - \$4.4B

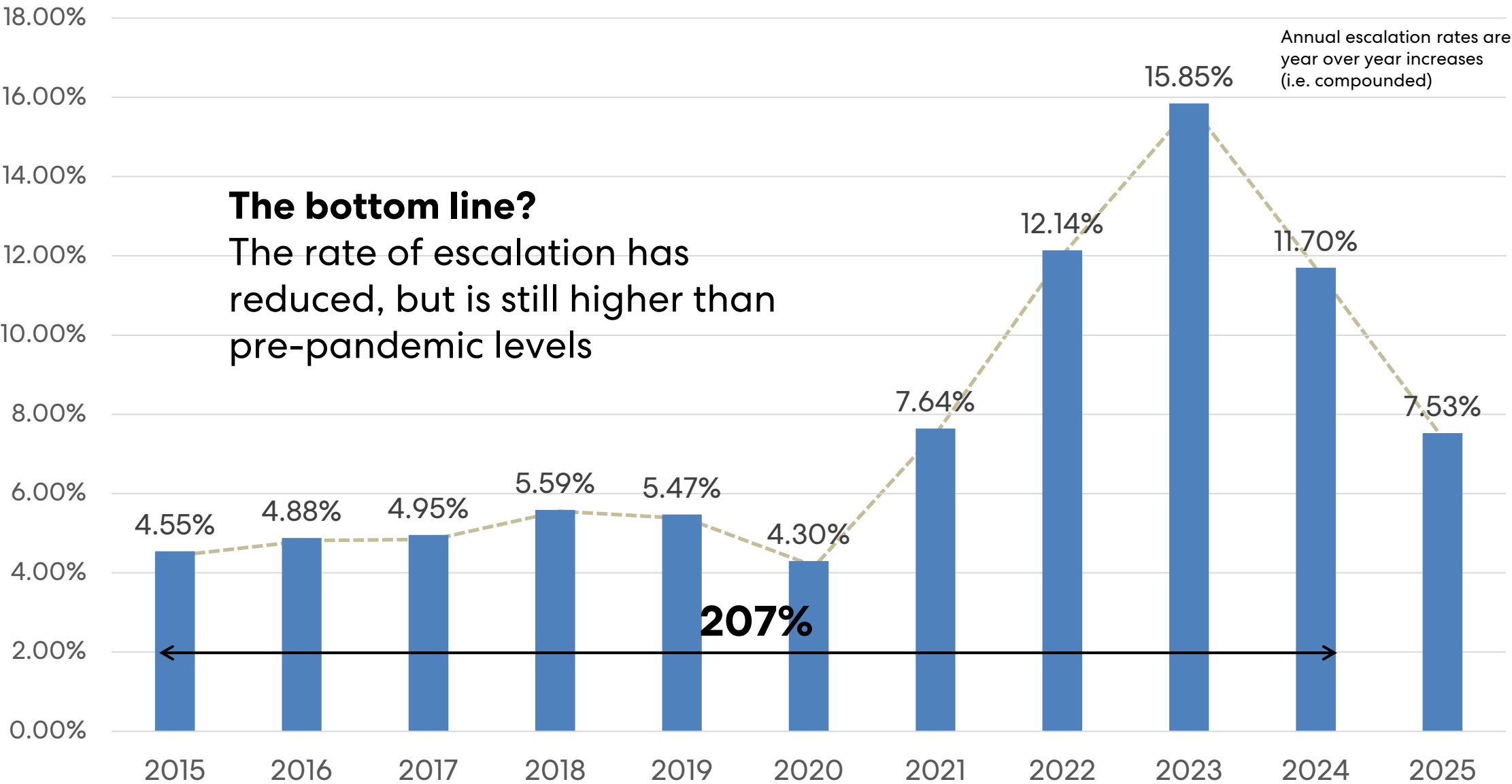
- School Construction Market

- Dublin – \$145M
- Grandview - \$69.5M
- Hilliard - \$142M
- New Albany – \$135M
- Worthington - \$234M



Historical and Projected Construction Cost Escalation

Columbus, Ohio Market



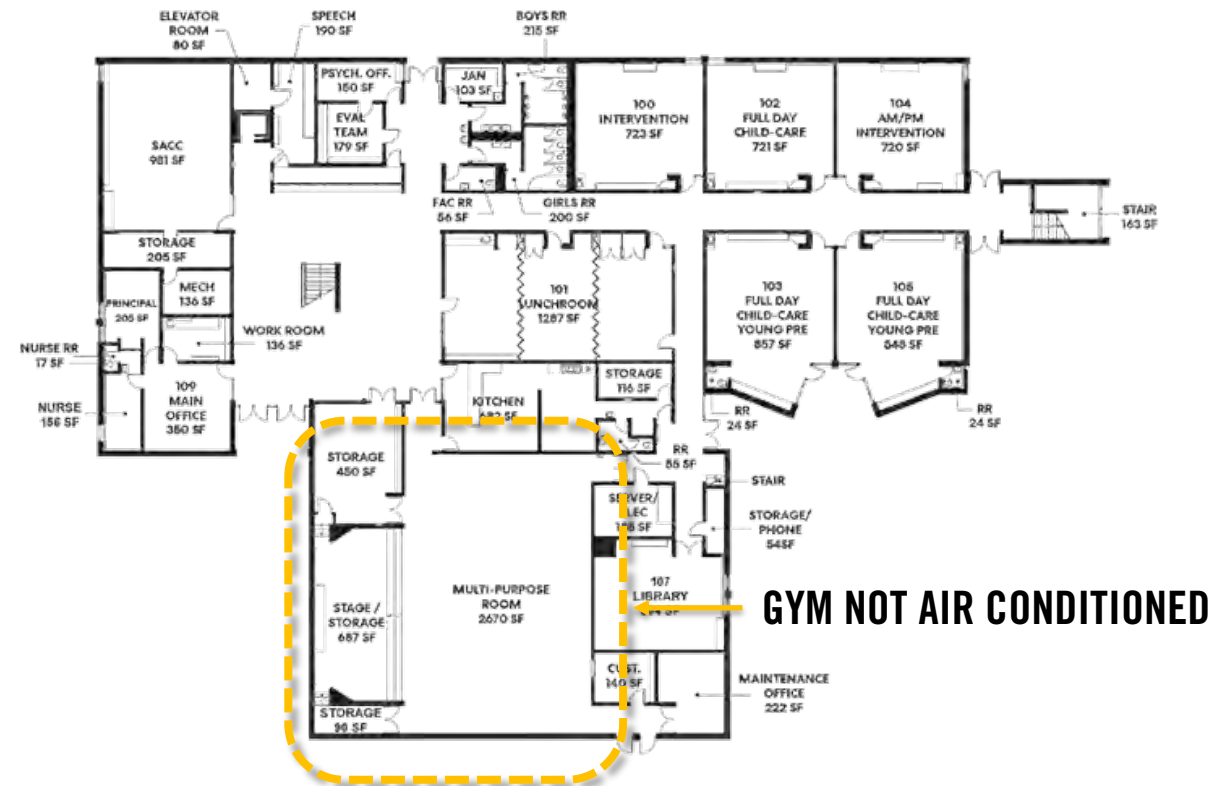
Burbank Early Childhood School

Physical Adequacy Assessment

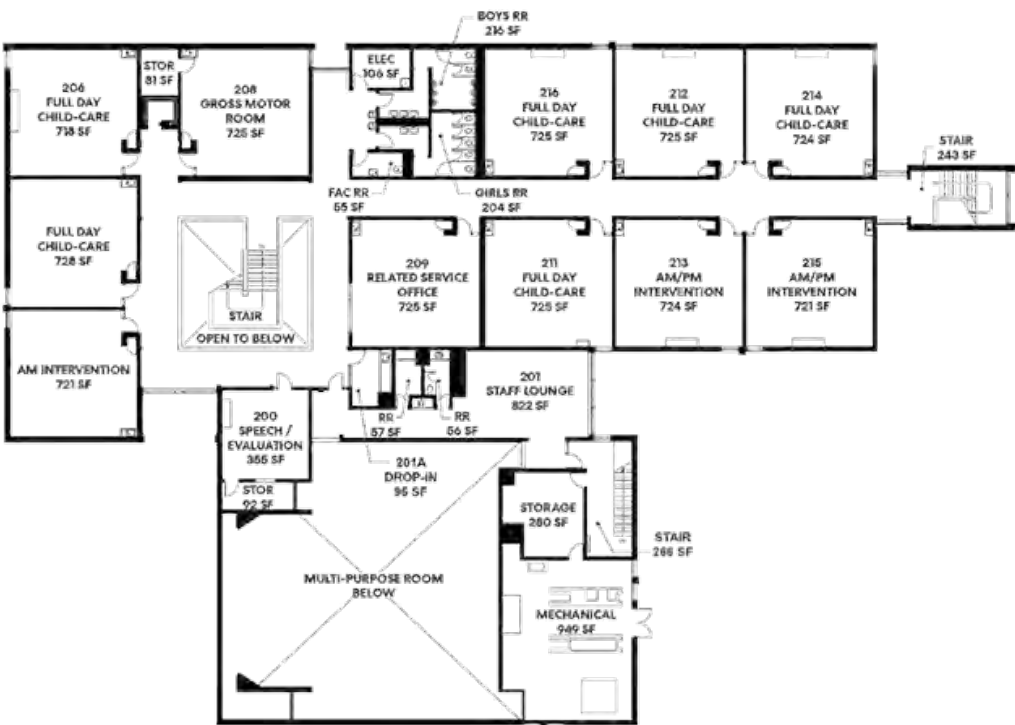


Burbank Early Childhood School

Floor Plans



Existing First Floor Plan



Existing Second Floor Plan

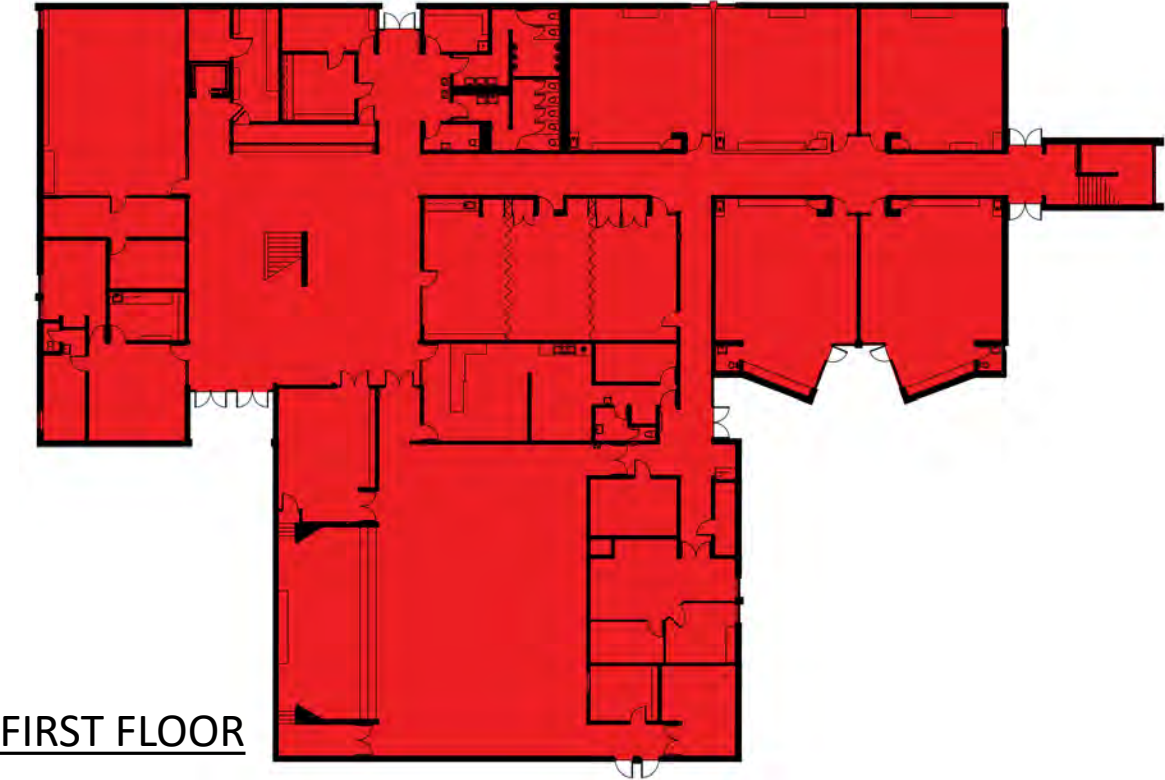


Burbank Early Childhood School
Mechanical System Condition

LEGEND – MECHANICAL SYSTEMS

Unit Condition

Poor	Fair	Good
1971		2012



Boiler and chiller replaced in 2012, balance of mechanical system is original and in need of replacement

Burbank Early Childhood School

Site



**SITE CONCRETE AND ASPHALT
REPLACED IN 2022**

**ROOF REPLACED
IN 2022**

Burbank Early Childhood School

Key Physical Assessment Issues

LACK OF PROPER STORAGE



GYM NOT AIR CONDITIONED



FINISHES AND CASEWORK



Burbank Early Childhood School

Key Physical Assessment Issues

ORIGINAL WINDOWS



RECENT MECHANICAL UPDATES



Burbank Early Childhood School

Key Physical Assessment Issues

Partial Summary of Identified Issues

- **Building electrical system is original to the building**
- Gymnasium not air conditioned
- **Original windows throughout**
- Building exhaust and kitchen exhaust
- Flooring and ceiling materials are beyond their life
- Built-in cabinets are original and in need of replacement
- Inefficient interior and exterior lighting
- ADA accessibility challenges
- **Stairwell enclosures & guardrails to meet current code**
- Building does not have a fire suppression sprinkler system
- Mix of older and newer furniture
- Energy inefficient and noisy unit ventilators in each classroom
- Internal cafeteria with no natural light/exterior views
- Site work required for potential new water service for fire suppression system



Burbank Early Childhood Center	11/19/2024	
Complete Building	37,997 sq. ft.	

	Item	\$	10	15	Cost	Unit	Quantity		Sum
a.	HVAC System Replacement	☐	☒	☐	\$80.00	sq. ft.	37,997	sq. ft.	\$2,279,820.00
b.	HVAC System Replacement Demo	☐	☒	☐	\$0.75	sq. ft.	37,997	sq. ft.	\$28,497.75
c.	Convert to Ducted System	☐	☒	☐	\$20.00	sq. ft.	37,997	sq. ft.	\$759,940.00
d.	Deduct for Boilers/Pumps	☐	☐	☒	\$2.50	sq. ft.	37,997	sq. ft.	\$84,992.50
e.	Controls (Only)	☐	☐	☐		sq. ft.		sq. ft.	\$0.00
f.	High Bay/Industrial: Heating & Ventilation	☐	☐	☐		sq. ft.		sq. ft.	\$0.00
g.	High Bay/Industrial: Heat & Vent Demo	☐	☐	☐		sq. ft.		sq. ft.	\$0.00
h.	High Bay/Industrial: RTU w/o AC	☐	☐	☐		sq. ft.		sq. ft.	\$0.00
i.	High Bay/Industrial: RTU w/ AC	☐	☐	☐		sq. ft.		sq. ft.	\$0.00
j.	Other:	☐	☐	☐					\$0.00

Sum:	\$3,163,250.25
------	----------------

A photograph of a well-lit, cluttered classroom or playroom. The room features a large blue rug, a wooden table with chairs, a bookshelf, and various toys and decorations. A large potted plant is in the foreground, and a television is mounted on the wall.

Delta %: 2.43%

Burbank Early Childhood School

General Requirements and Contingencies

Owner / Design / Estimating Contingency
Construction Contingency
Phasing & Swing Space Costs
General Requirements

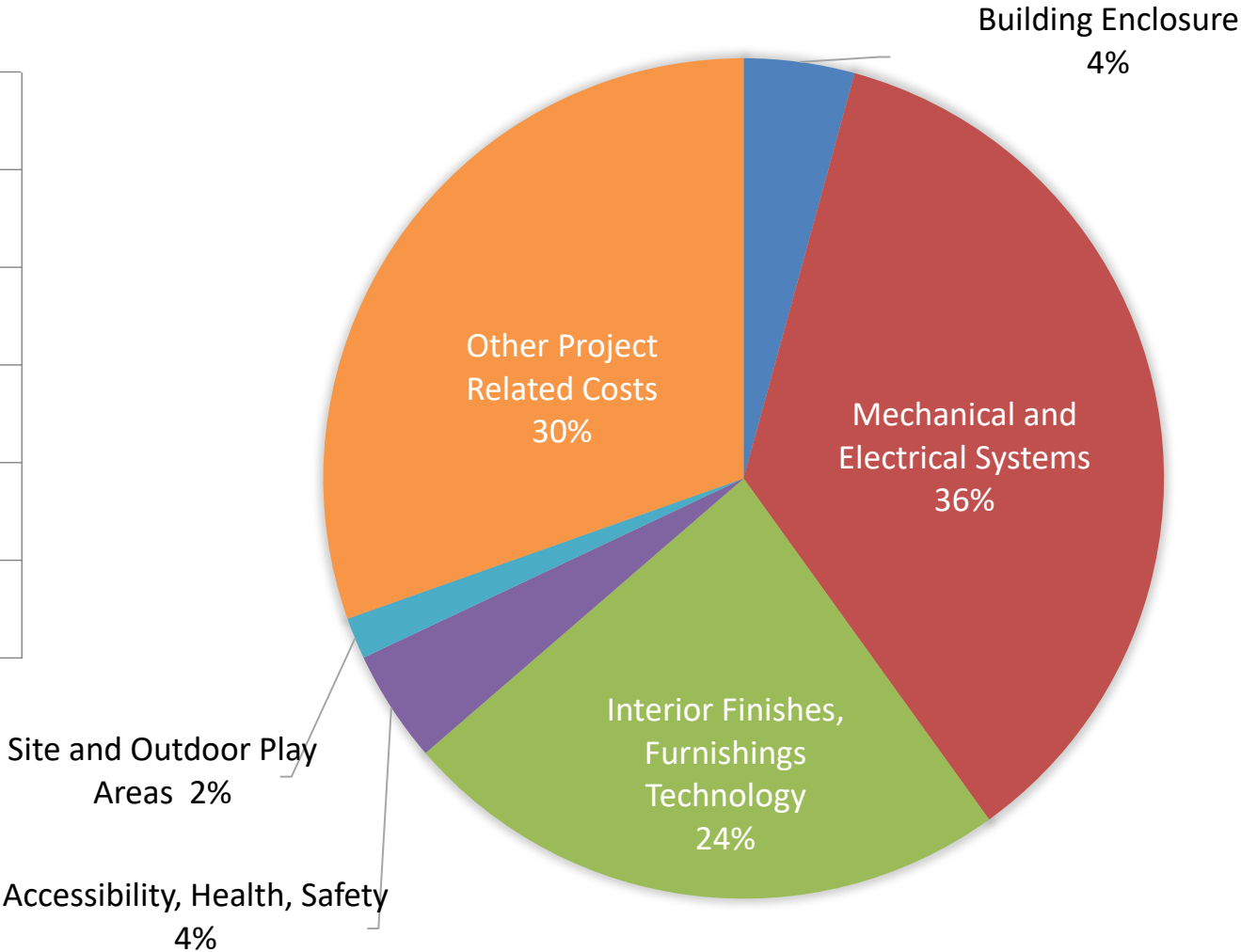


Burbank Early Childhood School

Summary: Distribution of Required Investment

DISTRIBUTION OF WORK REQUIRED (%)

Building Enclosure
Mechanical and Electrical Systems
Interior Finishes, Furnishings, Technology
Accessibility, Health, Safety
Site and Outdoor Play Areas
Other Project Related Costs

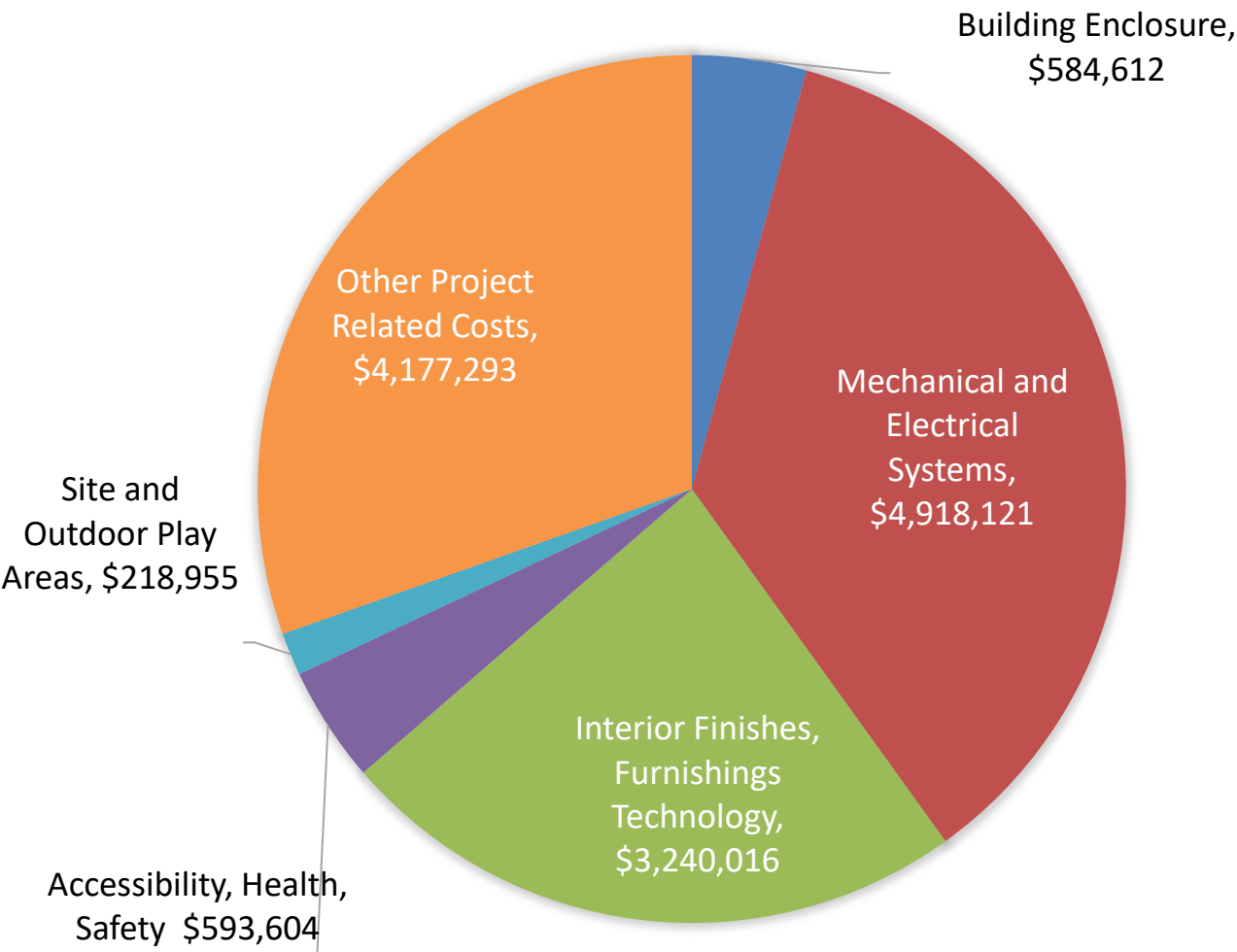


Burbank Early Childhood School

Summary: Distribution of Required Investment

DISTRIBUTION OF WORK REQUIRED (\$)

Building Enclosure
Mechanical and Electrical Systems
Interior Finishes, Furnishings, Technology
Accessibility, Health, Safety
Site and Outdoor Play Areas
Other Project Related Costs



Burbank Early Childhood School
Summary: Distribution of Required Investment

Work Required	TIMING OF REQUIRED INVESTMENT		
	0 - 5 YRS	5 -10 YRS	10 - 15 YRS
Building Enclosure	✓		
Mechanical and Electrical Systems	✓	✓	✓
Interior Finishes, Furnishings, Technology	✓		
Accessibility, Health, Safety	✓		
Site and Outdoor Athletics/Recreation	✓		
Other Project Related Costs (permits, fees, etc.)	✓	✓	

2024 Physical Adequacy

Cost Summary by School

	Burbank Early Childhood Center	Hastings Middle School	Jones Middle Schools	Total All Schools
Building Enclosure	\$584,612	\$4,262,881	\$1,843,125	\$6,690,618
Mechanical and Electrical Systems	\$4,918,121	\$17,569,678	\$15,512,637	\$38,000,436
Interior Finishes, Furnishings, Technology	\$3,240,016	\$10,925,618	\$8,050,905	\$22,216,539
Accessibility, Health, Safety	\$593,604	\$1,955,073	\$1,925,932	\$4,474,609
Site and Outdoor Play Areas	\$218,955	\$508,850	\$997,544	\$1,725,349
Other Project Related Costs	\$4,177,293	\$14,371,830	\$12,036,425	\$30,585,548
	\$13,732,600	\$49,593,512	\$40,366,568	\$103,693,099

30 minutes

Small group work

Questions to consider (select your school) :

- Did anything surprise you?
- What building-specific items would you add to the established parameters?
- What would you prioritize as top programmatic needs?
- Are there any other thoughts you would like to add?

<https://tinyurl.com/UA-BTM1>



15 minutes

Small group reports / next steps





Thank you

