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Portland Public Schools

Ida B. Wells High School Modernization

Design Advisory Group Meeting #5
October 23, 2024

PPS

DESIGN TEAM HERE TODAY

Donna Bezio

PPS

Rolando Aquilizan

PPS

Stefee Knudsen

Bora

Amelie Reynaud

Bora

Becca Cavell

Corey Squire

Bora

Abigail Strong

Bora

Ryan Fukuda

After Bruce

AGENDA

Introduction 00:03

Community Agreements 00:02

Where Are We Now? 00:10

Engagement and Outreach Updates 00:05

What We Heard at DAG Mtg #4 00:10

Sustainability Primer: Indoor Air Quality: 00:10

—Break 00:5—

Feedback Activity & Report Out 00:50

Closing/Next Steps 00:10

meeting notes from DAG #4 are posted on the PPS Bond website!

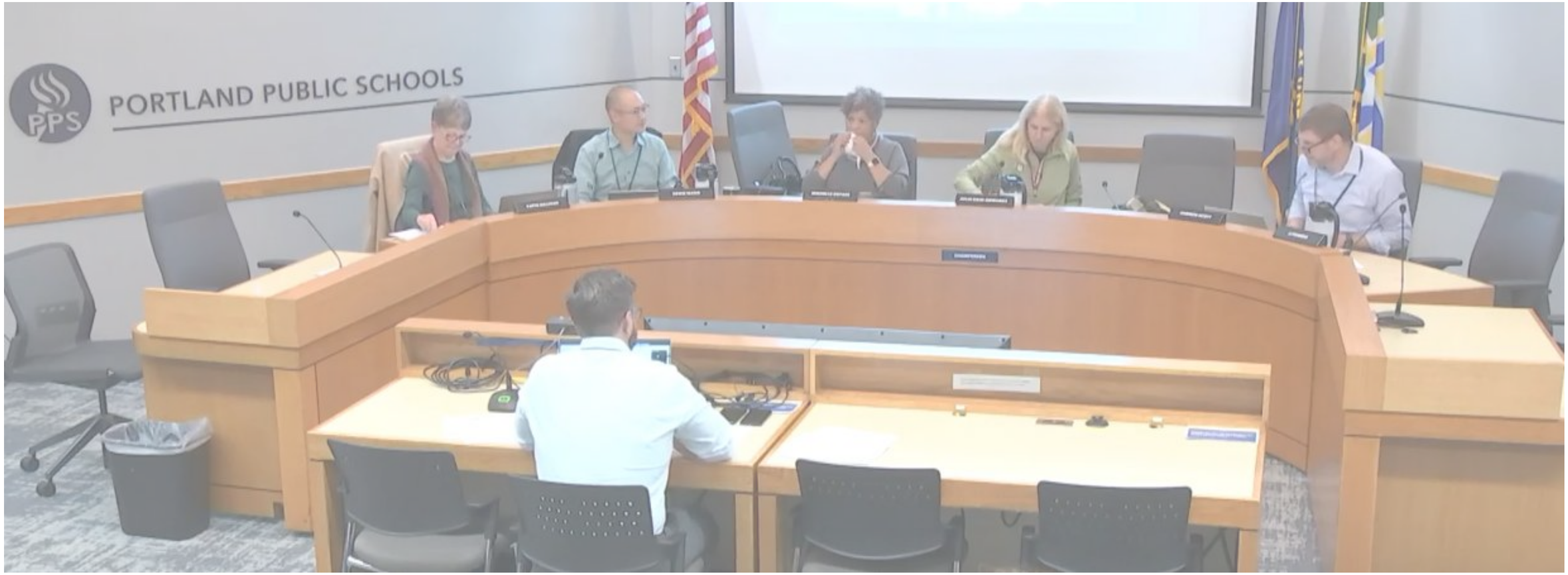
BUT FIRST...

Bond Update

Past meetings on YouTube:

Oct. 8th Board of Education Meeting

Oct. 21st School Facilities Improvement Oversight Committee



Community Agreements

COMMUNITY AGREEMENTS

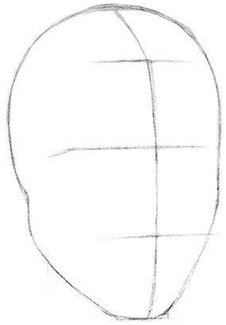
1. **We embrace student-first thinking.**
2. **We approach conversations with curiosity and question our assumptions, understanding that multiple solutions or approaches can exist at the same time and all be true.**
3. **We assume positive intent and respect one another through our words and actions.**
4. **We understand that we all can’t get what we want.**
5. **We encourage a variety of voices in our process, and make space for different communication styles and preferences.**

Where Are We Now?

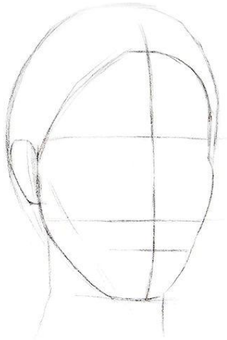
PROJECT TIMELINE

We are are here!

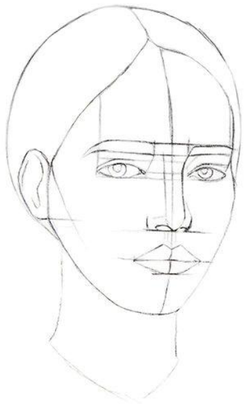
2019 Comprehensive Master Plan



2023-24 Comprehensive Planning



Schematic Design



Design Development

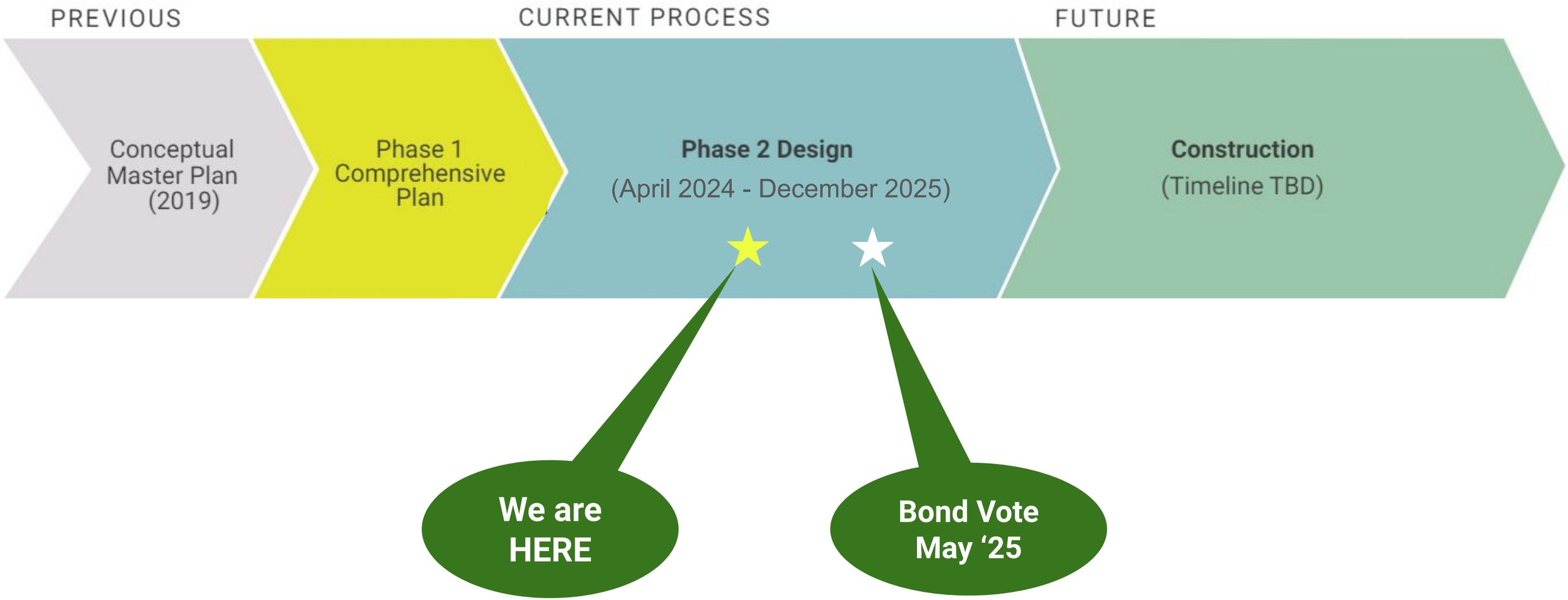
Permit Documents

Ready for Construction!

TYPICALLY 18-24 MONTHS

TYPICALLY 24-36 MONTHS

PROJECT TIMELINE



BUILDING PROGRAM & SIZE

TARGET GSF ≈ 316,000 sf

PREVIOUS GSF ≈ 340,000 sf

CURRENT GSF ≈ 324,000 sf

AREA REFINEMENT:

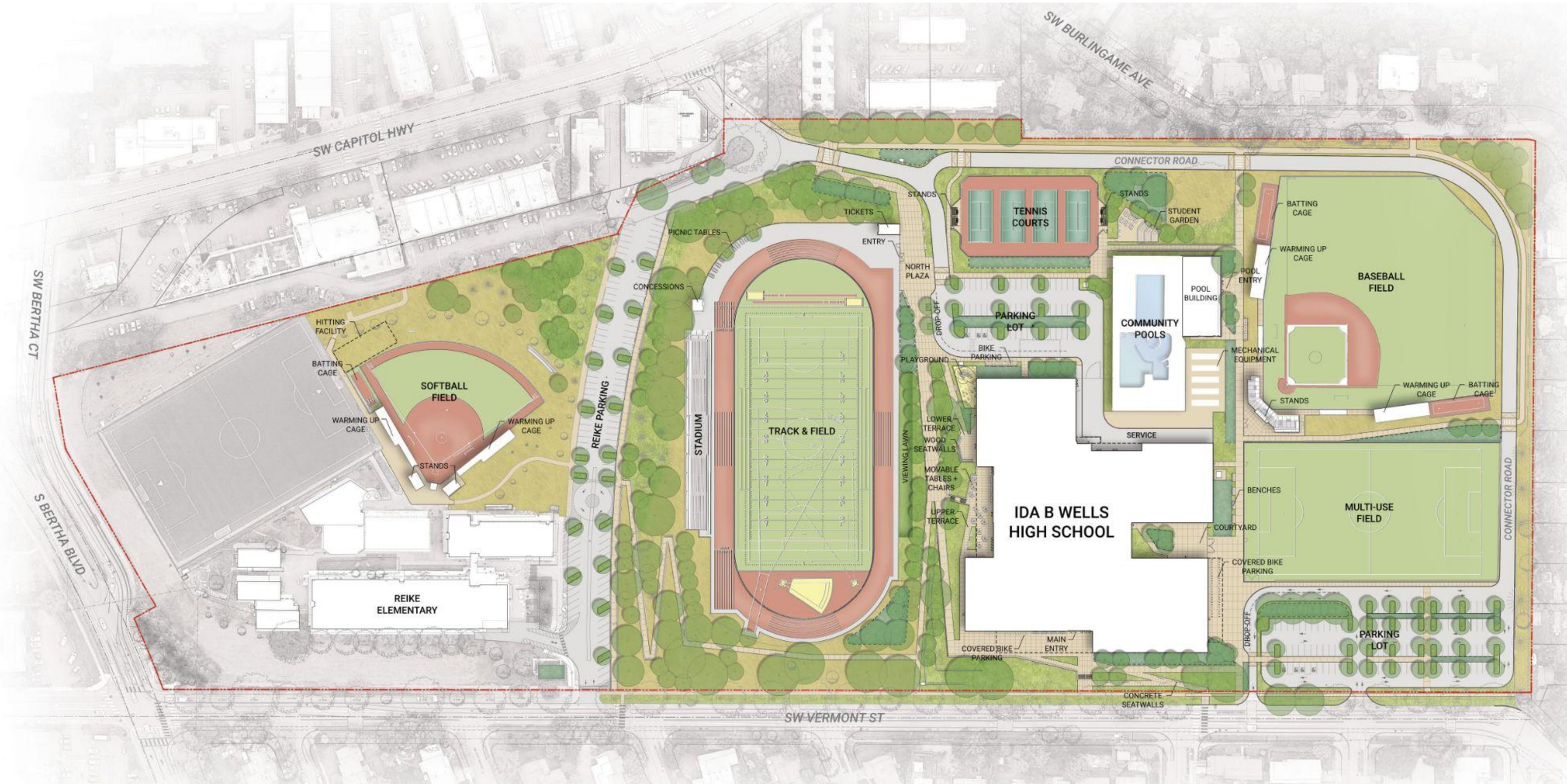
SMALL ADJUSTMENTS AND REFINEMENTS

PROGRAM REFINEMENT:

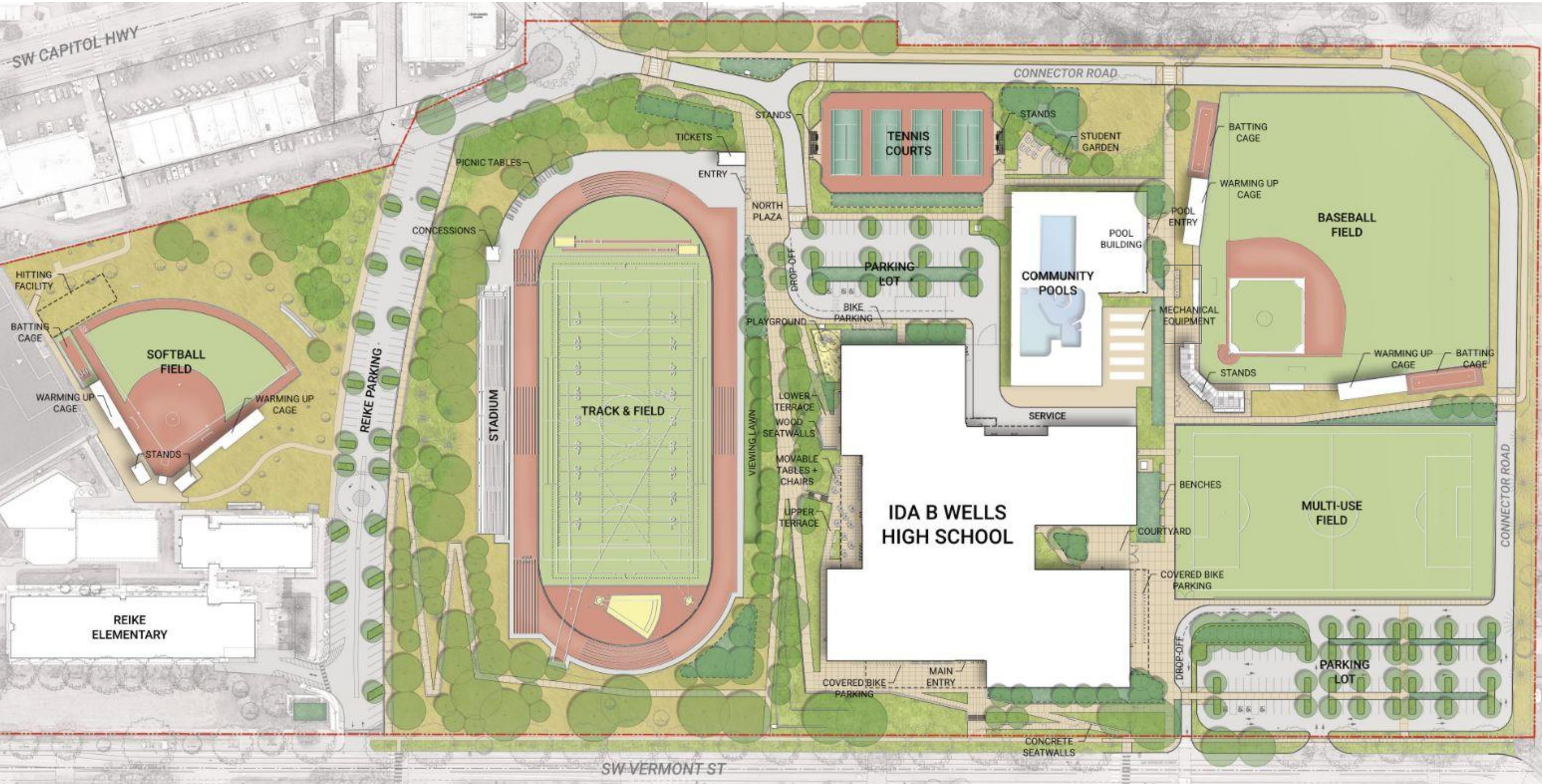
METAL SHOP REMOVED

INDEPENDENT HEALTH CLINIC REMOVED

SITE PLAN


SW CAPITOL HWY
SW BURLINGAME AVE
SW BERTHA CT
S BERTHA BLVD
SW VERMONT ST
CONNECTOR ROAD
CONNECTOR ROAD
TENNIS COURTS
STANDS
STANDS
STUDENT GARDEN
BATTING CAGE
WARMING UP CAGE
BASEBALL FIELD
POOL ENTRY
POOL BUILDING
COMMUNITY POOLS
MECHANICAL EQUIPMENT
WARMING UP CAGE
BATTING CAGE
STANDS
TICKETS
ENTRY
PICNIC TABLES
NORTH PLAZA
CONCESSIONS
DROP-OFF
PARKING LOT
BIKE PARKING
PLAYGROUND
HITTING FACILITY
BATTING CAGE
SOFTBALL FIELD
WARMING UP CAGE
WARMING UP CAGE
STANDS
REIKE PARKING
STADIUM
TRACK & FIELD
VIEWING LAWN
LOWER TERRACE
WOOD SEATWALLS
MOVABLE TABLES + CHAIRS
UPPER TERRACE
SERVICE
IDA B WELLS HIGH SCHOOL
BENCHES
MULTI-USE FIELD
COURTYARD
COVERED BIKE PARKING
REIKE ELEMENTARY
COVERED BIKE PARKING
MAIN ENTRY
DROP-OFF
PARKING LOT
CONCRETE SEATWALLS

SITE PLAN


SW CAPITOL HWY
CONNECTOR ROAD
STANDS
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DROP-OFF
PARKING LOT
COVERED BIKE PARKING
MAIN ENTRY
CONCRETE SEATWALLS
SW VERMONT ST

Engagement and Outreach Updates

DESIGN CLUB

5.9

“ That looks very comfortable and fun maybe just in the back rest area put some pillows or something smooth.”

“ That lime green seating thing looks strange and uncomfortable.”

5.10

“ It looks really chill I love it”

“ The celing is strange but I like the seating and the natural light”

6.1

“ I like the wood and the different colors and the font of the letters, I don’t know how I feel about the floor because it reminds me of the floor our building has now.”

“ Having the floor is the same pattern as the walls kind of throws you off”

COMMUNITY LISTENING SESSIONS

- Affinity Group leaders and student leaders of color
- Gender Sexuality Alliance (GSA) club
- Muslim Student Association & Arab students
- Special Education teachers, staff, parents and caregivers
- Indigenous Alliance
- Parents of Color
- All After Bruce-led audiences

Email rhonda@afterbruce.com to sign up

What We Heard at DAG Meeting #4

LAST TIME: FEEDBACK EXERCISE, SCHOOL COMMONS

Key takeaways for creating welcoming and comfortable spaces:

- Incorporate Warm and Natural Elements
- Emphasize Natural Light
- Use Varied Seating Options
- Prioritize Human Scale and Proportions
- Ensure Accessibility
- Integrate Art and Color Thoughtfully
- Provide Inclusive Signage and Communication
- Create Flexible Spaces
- Balance Aesthetics with Functionality

FEEDBACK EXERCISE - SCHOOL COMMONS

Warmth and Natural Materials

The warmth of the **exposed wood** structure was generally loved. **Artwork**, especially student art, makes the space feel brighter and more personal.

FEEDBACK EXERCISE - SCHOOL COMMONS

Connection to the Outdoors

The **covered outdoor seating** area is seen as a major plus. The visual **connection** between the patio, the commons, and the courtyard is loved.

FEEDBACK EXERCISE - SCHOOL COMMONS

Daylight

The access to daylighting was both praised and criticized. Some people felt the **darker spaces** (upstairs) were more comfortable by being **cozy** and creating variety, others thought the materials should be **lighter to brighten** the space. Several people thought more **skylights** in the space would improve the daylight access.

FEEDBACK EXERCISE - SCHOOL COMMONS

Seating Variety and Flexibility

More diversity in the types of seating and atmosphere of seating is desired. **Movable, flexible** furniture is very important, but there is also a desire for more **built-in furniture to create zones** within the larger space. The slightly darker/smaller upstairs space felt cozy and quiet providing some seating variety.

FEEDBACK EXERCISE - SCHOOL COMMONS

Safety

Safety was brought up in light of two design features - the **large glass** windows into classrooms, and the railing at the double height space. **High tables** and chairs were generally seen as a safety concern.

FEEDBACK EXERCISE - SCHOOL COMMONS

Accessibility

The comments on accessibility emphasize the need for wheelchair access and **clear pathways** to ensure equitable navigation throughout the space. The density is also a concern with keeping wide circulation space available for accessibility. The **elevator should be easily visible** as a main connector between the two levels.

FEEDBACK EXERCISE - SCHOOL COMMONS

Functional Flexibility

This space should support the **everyday needs** of the school in addition to **special events**. Furniture and layout needs to accommodate both. The space should have plenty of **outlets** for charging personal devices **audio-visual** accommodations for events.

LAST TIME: FEEDBACK EXERCISE, SCHOOL COMMONS

How do these images align/ not align with the key takeaways?

Aligning:
- Warmth and Natural Materials
- Connection to the Outdoors
- Daylight

Not Aligning:
- Flexible and Varied Seating
- Daylight

Concerns:
- Safety
- Accessibility
- Functional Flexibility

Sustainability Primer: Indoor Air Quality

Designing Healthy Indoor Air


How Do We Measure
Indoor Air Quality?

Background:

Standards and best practices around Indoor Air Quality (IAQ) have been recently changing based on the COVID-19 pandemic and new research around indoor air and learning outcomes.

PPS is committed to current design that will deliver high quality indoor air for school modernization projects.

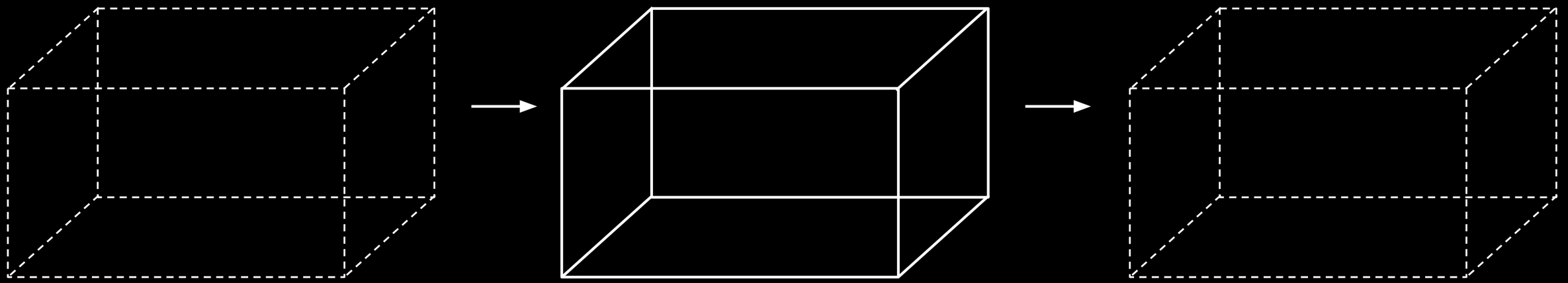
These best practices are already incorporated into the design and cost estimates.

PPS and design teams received a letter from parents and community members regarding IAQ for new schools.

Goal:

Provide healthy air in qualities that enhance academic performance and minimize pathogen transmission.

Air Change Per Hour (ACH)

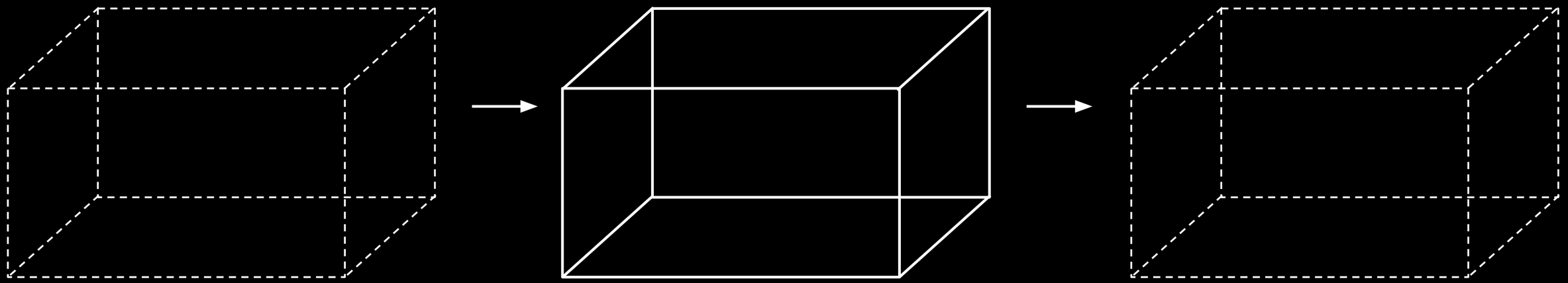


The room volume of air that’s replaced each hour

Air Change Per Hour (ACH)

Outdoor Air In

Stale Air Out

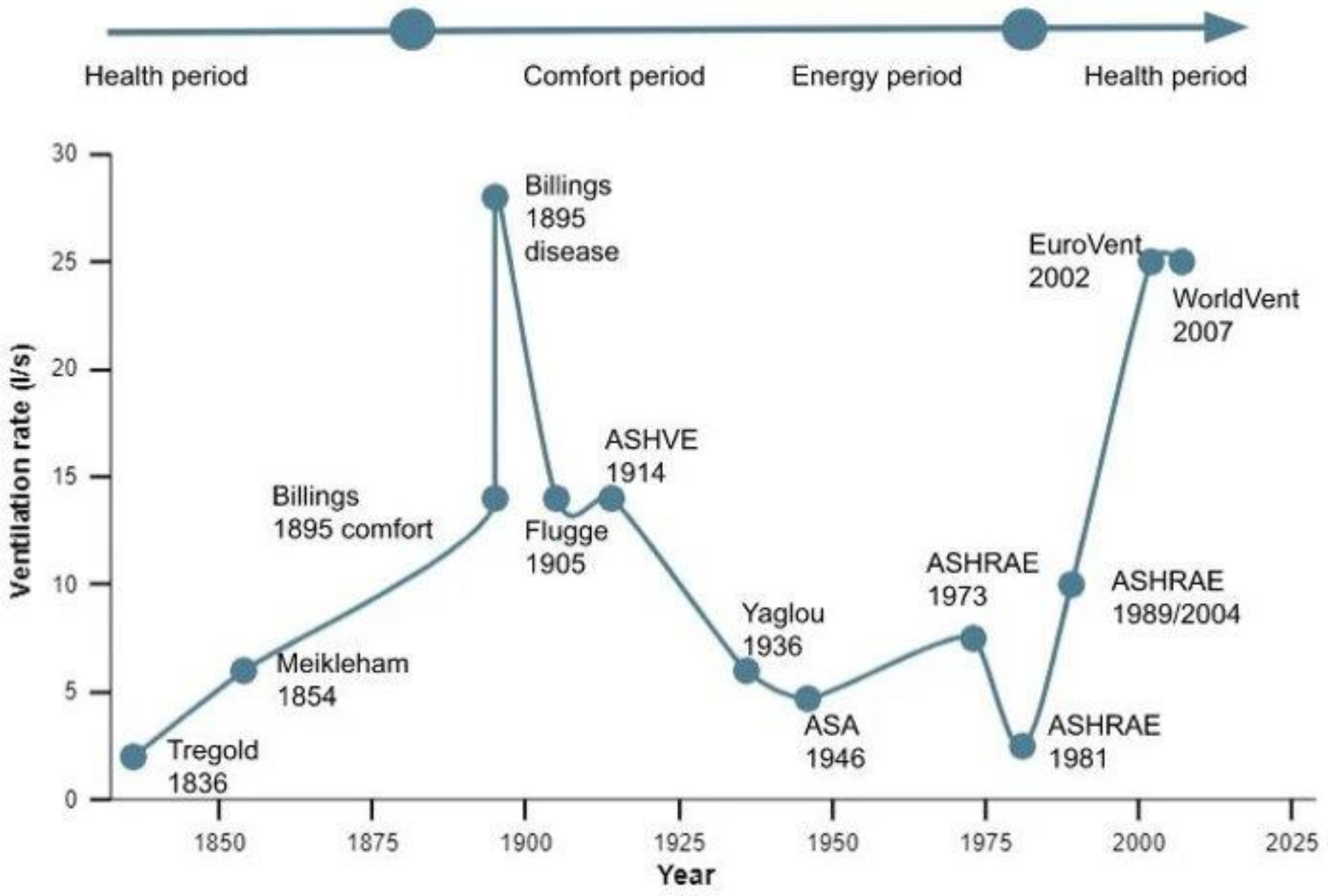


The room volume of air that’s replaced each hour

But ACH is only part of the equation

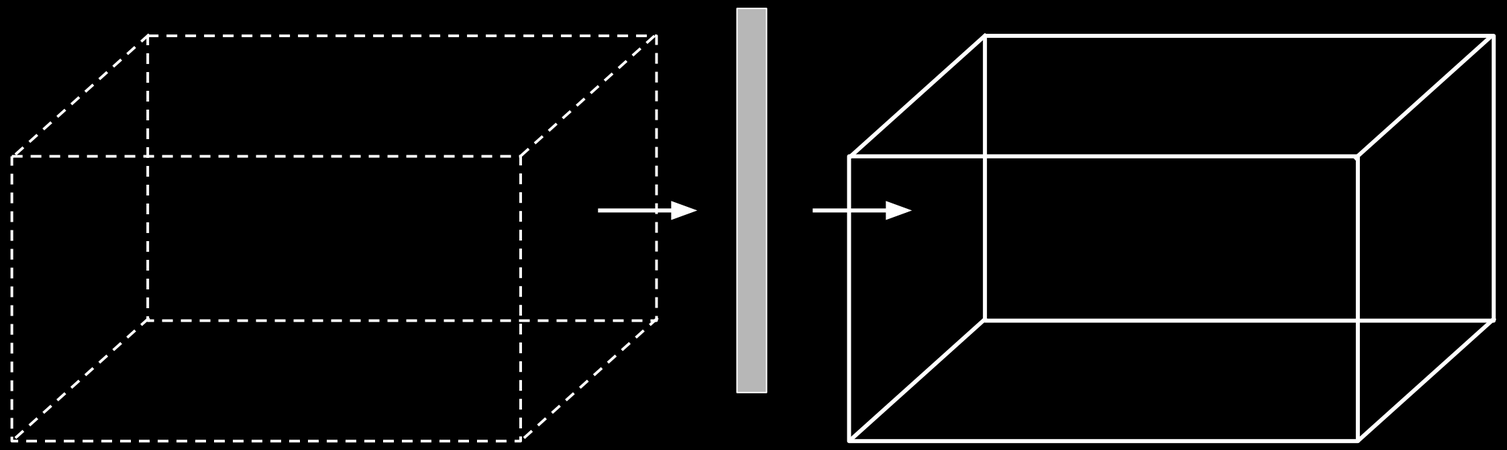
More does not mean better

We need to focus on quality, not quantity


Health period
Comfort period
Energy period
Health period
Ventilation rate (l/s)
30
25
20
15
10
5
0
Billings
1895
disease
EuroVent
2002
WorldVent
2007
ASHVE
1914
Billings
1895 comfort
Flugge
1905
ASHRAE
1973
ASHRAE
1989/2004
Yaglou
1936
Meikleham
1854
ASA
1946
ASHRAE
1981
Tregold
1836
1850
1875
1900
1925
1950
1975
2000
2025
Year

Filtration of Incoming Air

Outdoor Air In



MERV 14 Filter

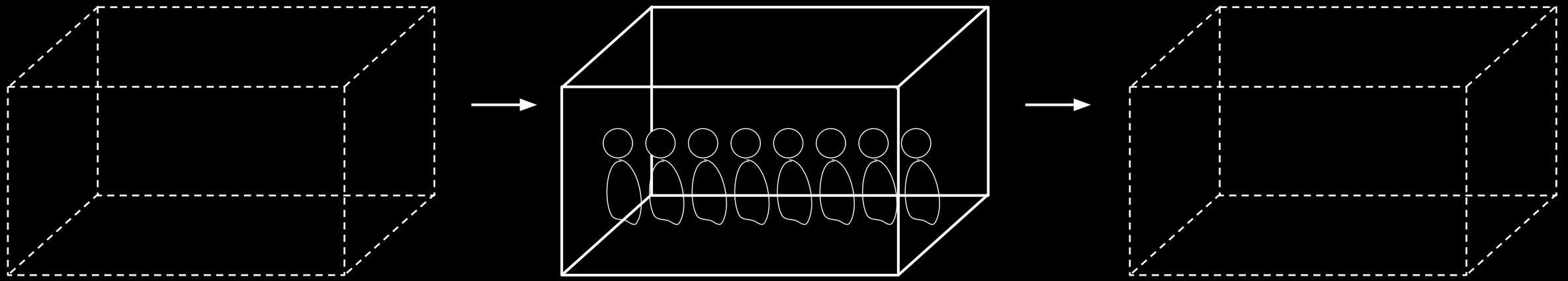
Removes smoke, pollen, and car exhaust

Indoor Generated Pollutants

Filtered
Outdoor Air In

Generation of CO_2,
Odors, Pathogens

CO_2, Odors,
Pathogens Out

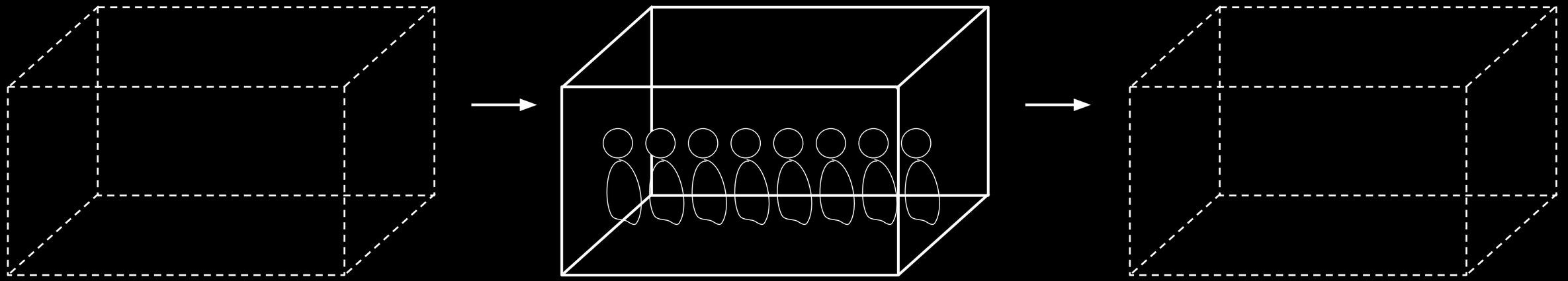


Indoor Generated Pollutants

Filtered
Outdoor Air In

Generation of **CO_2**,
Odors, Pathogens

CO_2, Odors,
Pathogens Out



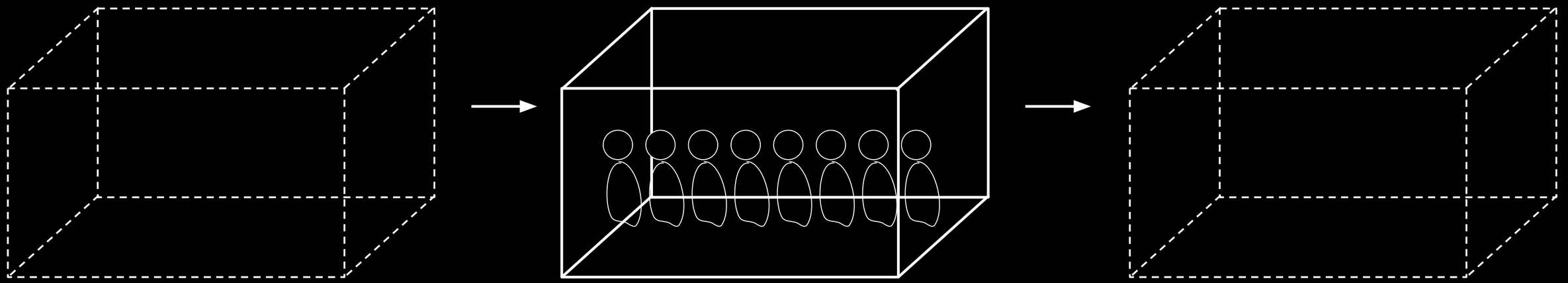
CO_2 Is a Holistic Air Quality Metric

CO_2 Is a Holistic Air Quality Metric

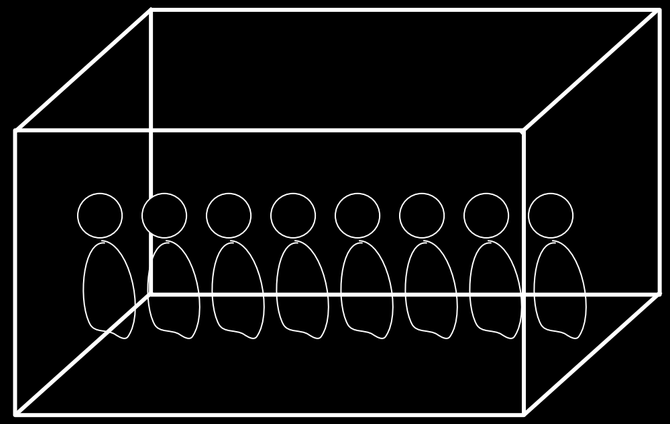
Low CO_2 Air In

Generation of CO_2

High CO_2 Air Out



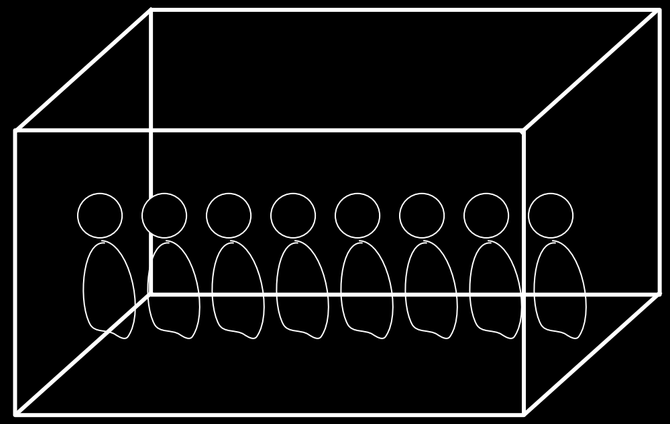
CO_2 Is a Holistic Air Quality Metric



CO_2 should remain ~800 ppm

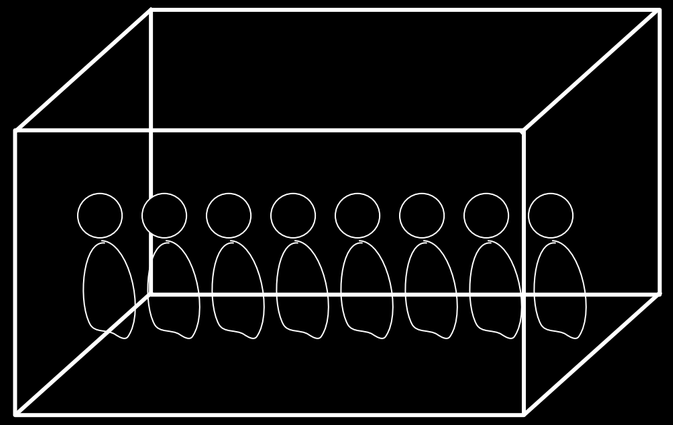
We are designing for this value

CO_2 Is a Holistic Air Quality Metric



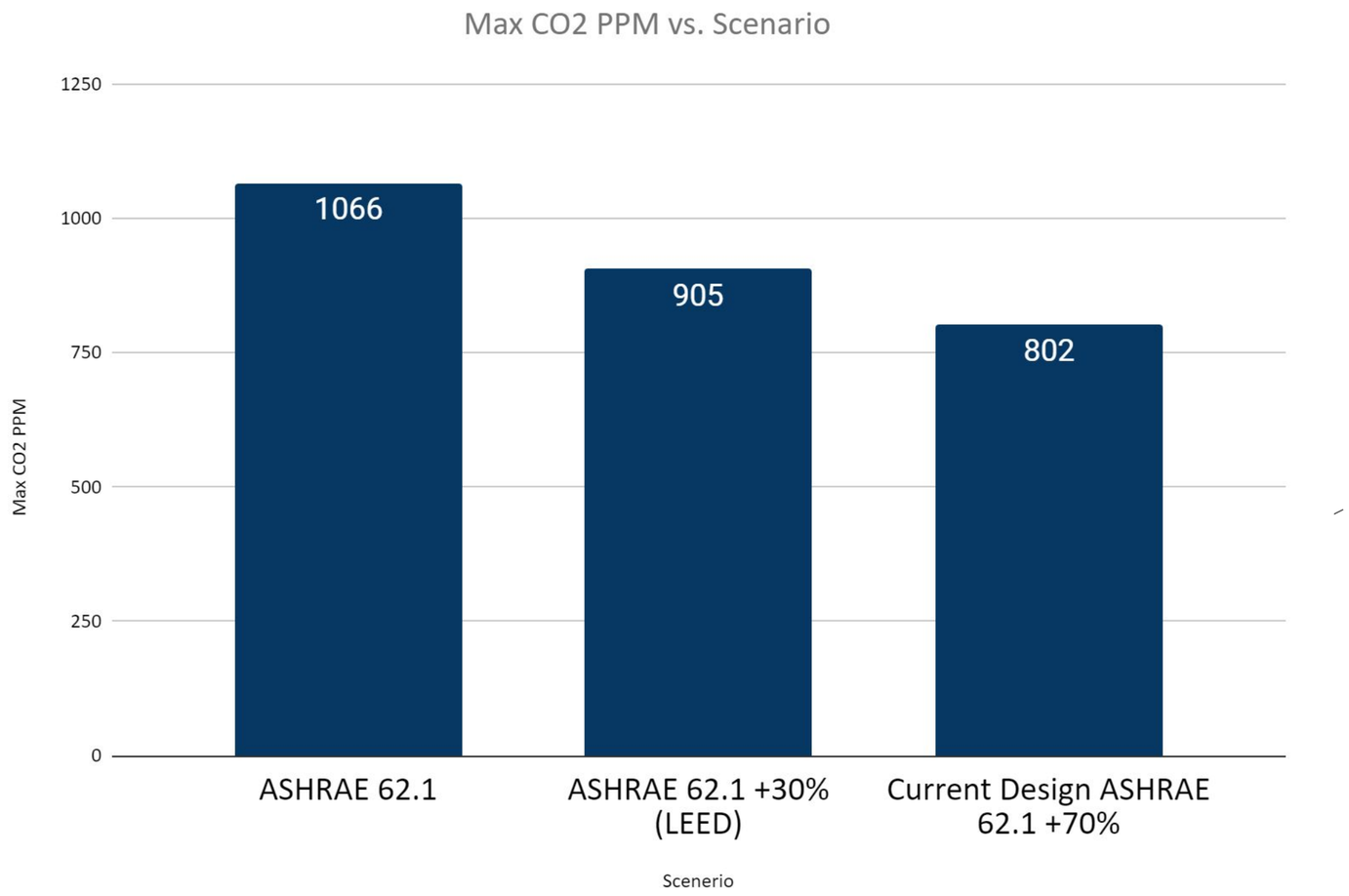
CO_2 that is too high (>1000 ppm) will reduce academic performance and increase risk of pathogen transfer

CO_2 Is a Holistic Air Quality Metric

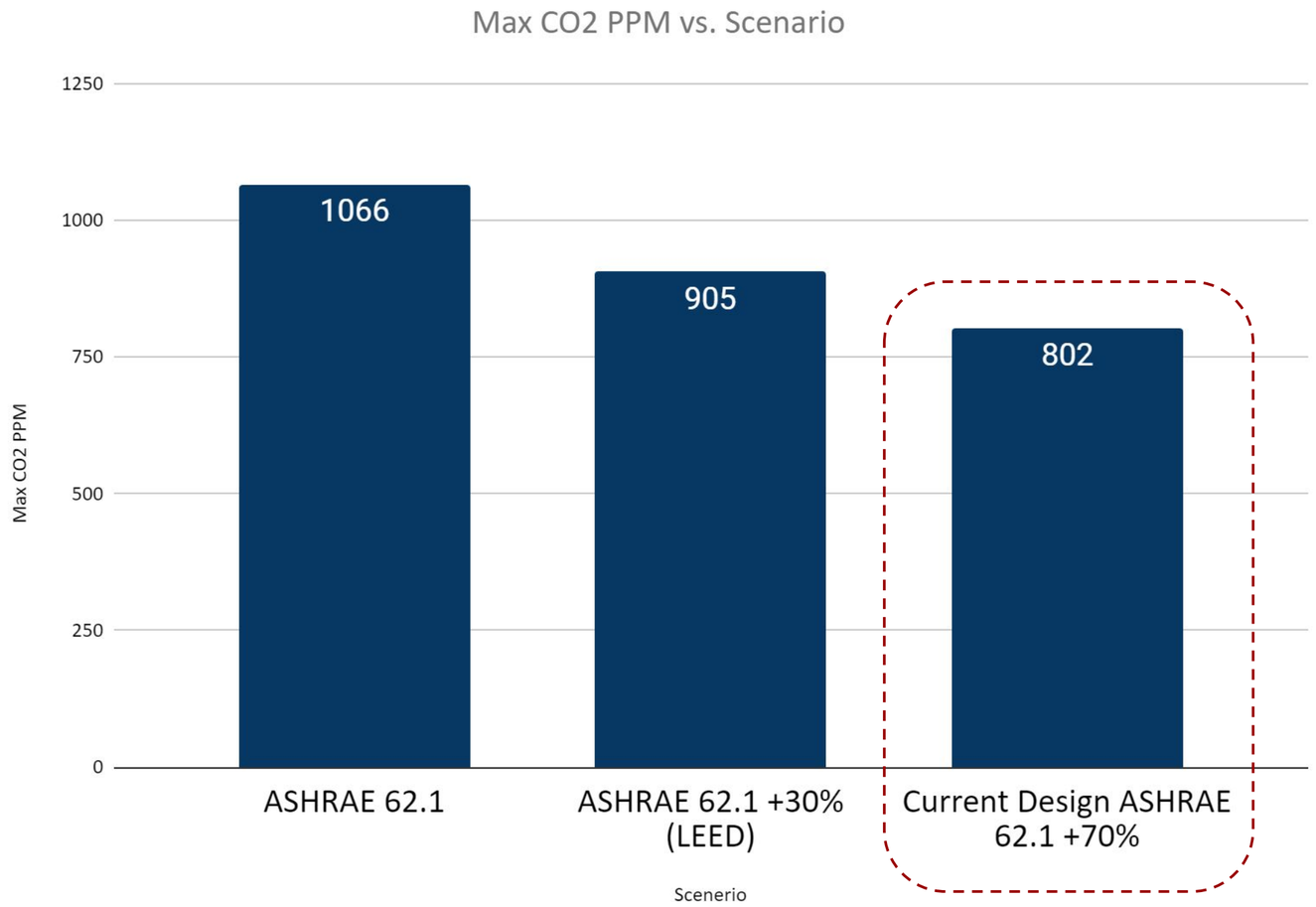


CO_2 that is too low (<700) is unnecessary since is will increase energy use without offering additional health benefits.

CO_2 is a Holistic Air Quality Metric

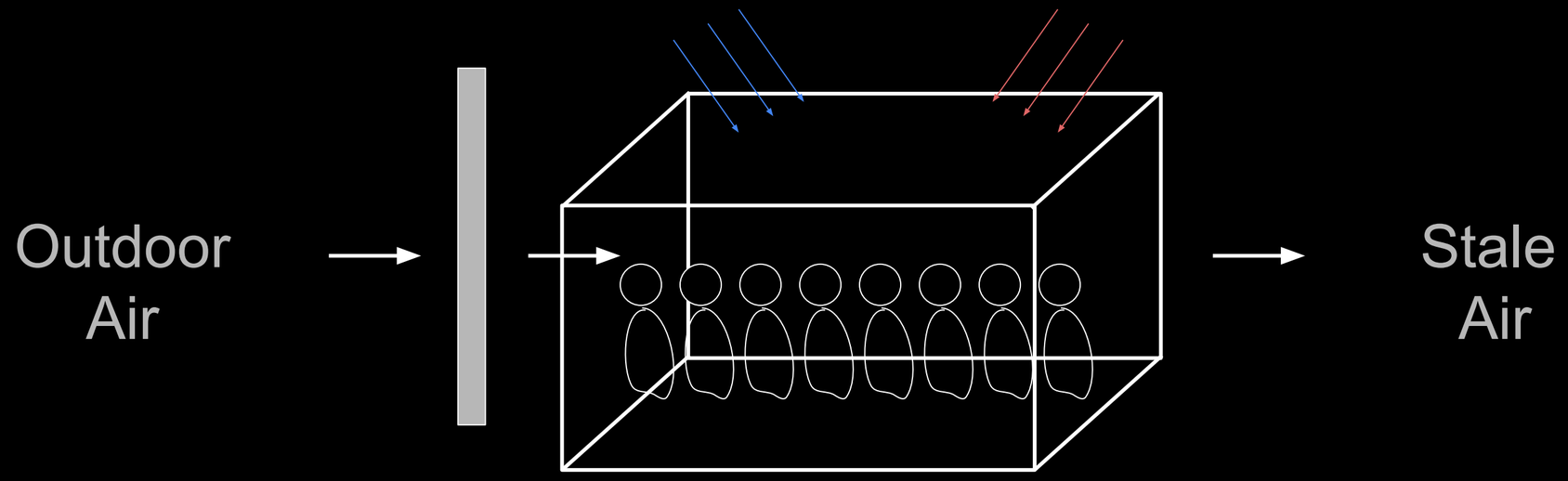


CO_2 is a Holistic Air Quality Metric



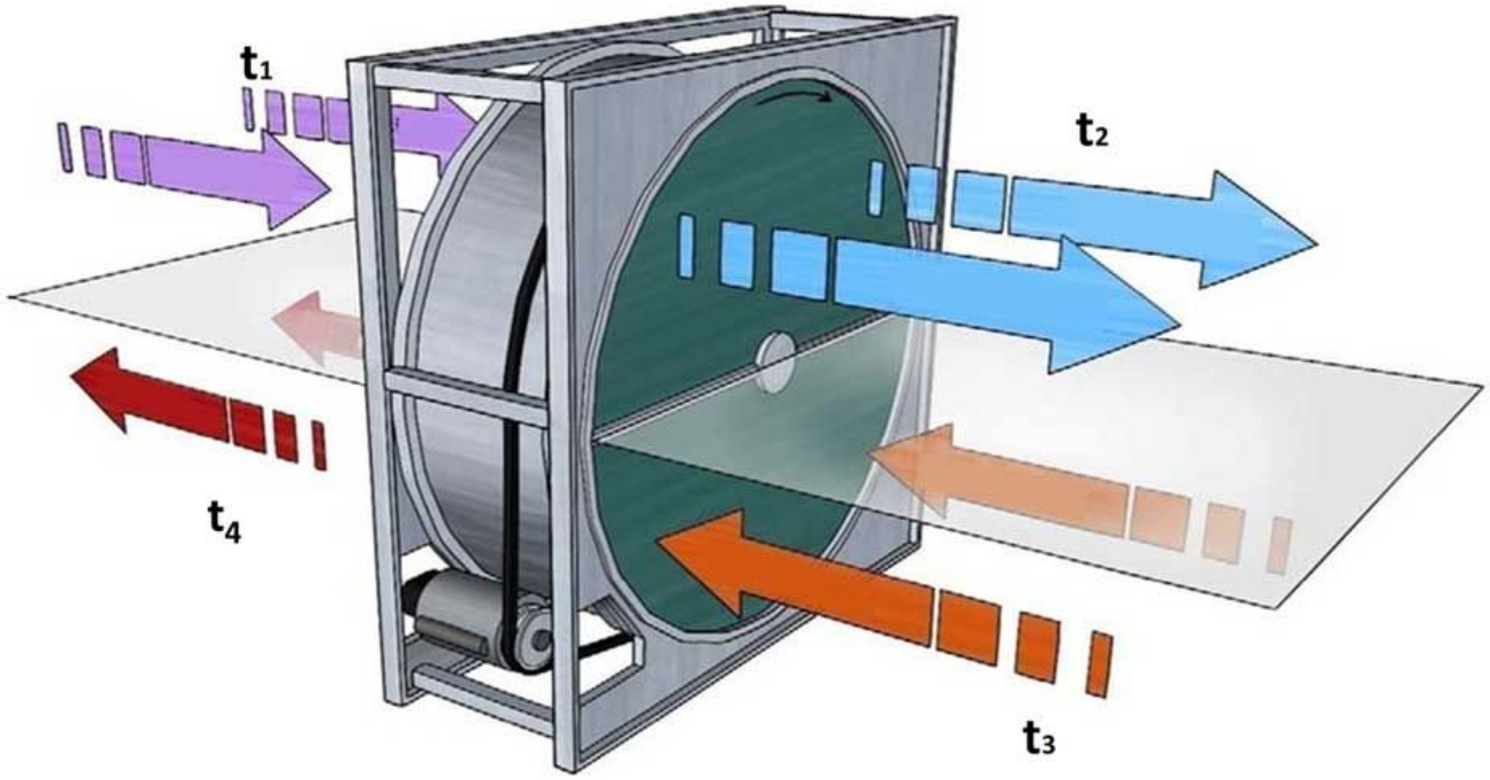
We're designing for a CO_2 concentration of ~800 ppm

Here’s the formula

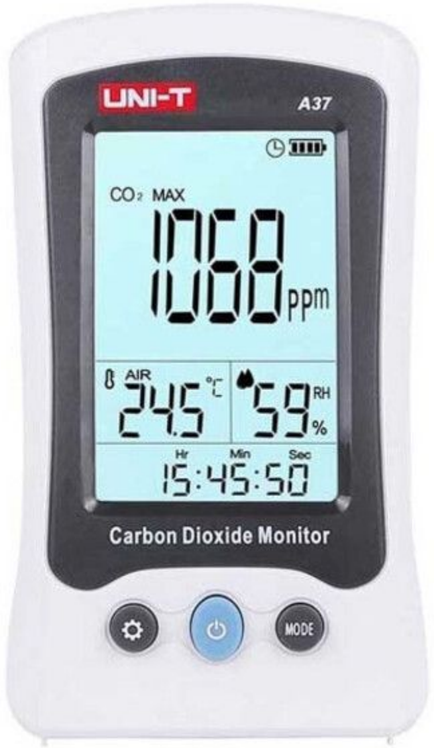


Heating and cooling systems are decoupled from ventilation.

Energy Recovery Ventilator



A CO_2 Meter in classrooms will confirm indoor air quality



This design will eliminate the need for portable air scrubbers, even during a future pandemic

A note on ACH_e:

More filtration cannot provide more oxygen

Operable windows in classrooms can decrease CO_2 and airborne pathogens further as needed

In Conclusion

$$T_{out} - T_{in}$$

Break!

Feedback?

Feedback Activity:
A Day in the Life

FEEDBACK ACTIVITY - A DAY IN THE LIFE

- **Divide into groups of 5 or 6 people.**
- **Individually read the 1st scenario on the handout.**
- **As a group, discuss and answer the question for that scenario.**
- **Choose 1 person from your group to report out to the larger group on this scenario at the end.**
- **Repeat for scenarios 2-4.**

Feedback?

Report out

1 person from your group report out about each scenario

Feedback?

Next Steps

NEXT STEPS

Schematic Design Documents Cost Estimate Completed mid-November

Listening Session Recruitment Ongoing

DAG Meeting #6 December 4th

Community Design Workshop December 8th

Feedback?