

School Building Improvement and Occupancy Plan

12 November 2020

Community updates

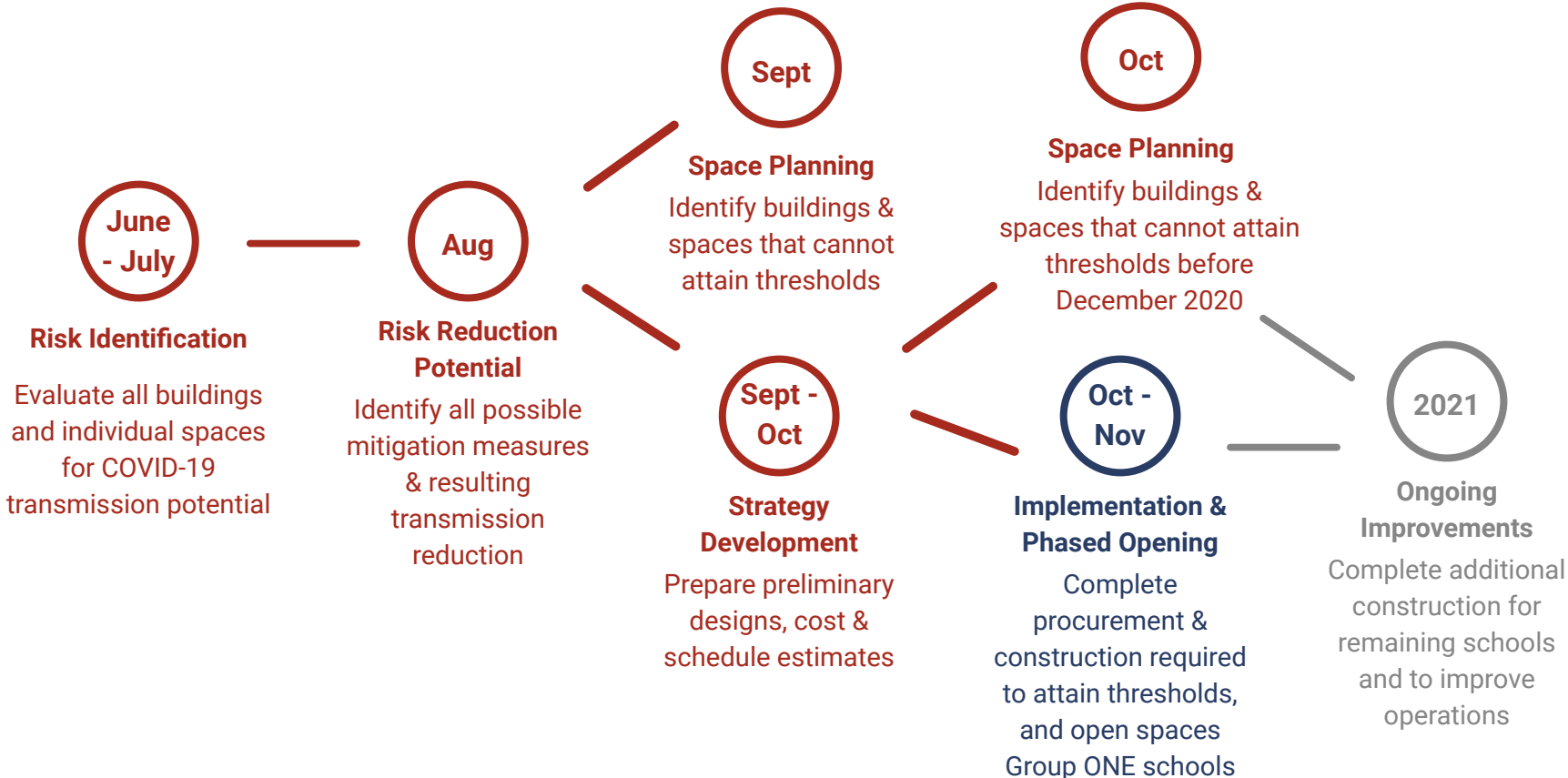
- School Town Halls
 - July 29th
 - August 5th
 - September 21st
 - October 29th
- School Committee meetings
- Technical report posted:
 - www.somerville.k12.ma.us/back-school-2020

**Internal
Factors**

Building &
Ventilation
Achieve "Low
Risk" Score



Building Assessments - Risk Management



Understanding Primary Airborne Audit Risk Assessment - Scoring System

1.00	1.99	2.00	2.99	3.00	4.00
Low Risk		Moderate Risk			High Risk
Air handling consistent with ASHRAE guidelines for aerosol spread prevention		Some air handling, but not to reliable levels for aerosol spread prevention			Little to no air handling, allowing aerosol concentration
1.00 to 1.99 = Assessment score for opening a building / space for student use					

Building Assessments - Deemed Unsafe During Pandemic

	Existing		Potential		
Building	Score	Risk	Score	Risk	Building system summary
Brown	3.67	High Risk	2.01	Moderate Risk	No ventilation or central HVAC system. Only ventilation is via operable windows. Existing in space cooling units do not include any filtration.
Edgerly (CTE, NWFC)	3.08	High Risk	2.14	Moderate Risk	No ventilation or central HVAC system. Only ventilation is via operable windows.
Existing High School (1895, 1929)	3.42	High Risk	N/A	High Risk	No ventilation or central HVAC system. Only ventilation is via operable windows.

1.0 1.5 2.0 2.5 3.0 3.5 4.0



1 = Low Risk/ASHRAE guidelines

4 = High Risk

Space & Implementation Planning

- Aligning building mitigation with academic need

Unavailable Buildings

- Old SHS, Edgerly CTE & NWFC classrooms, Brown School
- Students will be placed in alternative spaces based on SPS in-person phasing schedule
- Renovations to Edgerly and Brown will be evaluated along with municipal buildings starting in early 2021

Eligible Buildings

- Evaluated mitigation logistics and best use of each building
- IAM estimated difficulty/schedule for each building
- Work must be completed on a per-building basis
- Buildings will open in phases as mitigation work brings buildings to Low Risk range
- SPS determined how priority students could occupy each building

Students may not be returning to their original school this year. Students will be brought back into available spaces as buildings are ready, based on the SPS phased hybrid in-person plan.

Building Assessments-Group ONE Schools

	Existing		Potential		
Building	Score	Risk	Score	Risk	Building system summary
Argenziano	2.09	Moderate Risk	1.2	Low Risk	Has good central air system to work with to increase filtration and/or ventilation but does not currently have any humidification.
Capuano	2.57	Moderate Risk	1.29	Low Risk	Has good central air system to work with to increase filtration and/or ventilation but does not currently have any humidification.
West Somerville	2.53	Moderate Risk	1.52	Low Risk	Includes both central system and single zone systems that can be modified to increase filtration and/or ventilation but there is no existing humidification.



1 = Low Risk/ASHRAE guidelines

4 = High Risk

Building Assessments-Group TWO Schools

	Existing		Potential		
Building	Score	Risk	Score	Risk	Building system summary
East Somerville	2.32	Moderate Risk	1.75	Low Risk	Has good central air system to work with to increase filtration and/or ventilation but does not currently have any humidification.
High School Mods	2.02	Moderate Risk	1.49	Low Risk	Each room served by ventilation units that include filtration and that can be improved.



1 = Low Risk/ASHRAE guidelines

4 = High Risk

Building Assessments - Group THREE Schools

	Existing		Potential		
Building	Score	Risk	Score	Risk	Building system summary
Healey	2.32	Moderate Risk	1.56	Low Risk	Has good single zone systems in place that can be modified to increase filtration and/or ventilation but there is no existing humidification.
Kennedy School	2.69	Moderate Risk	1.36	Low Risk	Most spaces are served by systems that include filtration and ventilation, which can be improved. Corridors have minimal airflow. No humidification.
Winter Hill	2.46	Moderate Risk	1.45	Low Risk	Most spaces are served by systems that include filtration and ventilation, which can be improved but there is no humidification. Airflow pattern in classrooms can be improved as well.



Building Assessments - New High School

	Existing		Potential		
Building	Score	Risk	Score	Risk	Building system summary
New High School (2020)	N/A	N/A	1.2	Low Risk	New centralized system

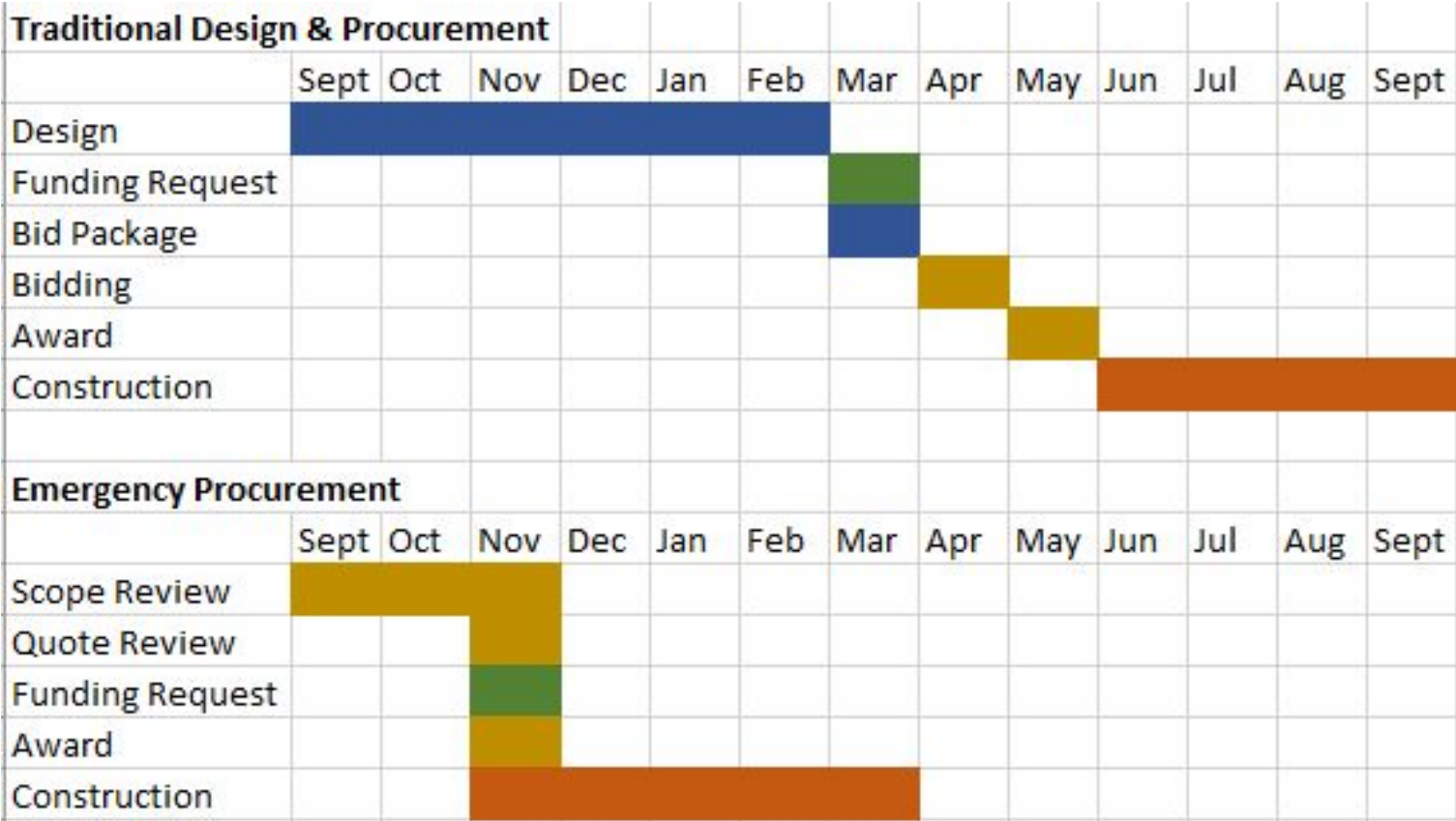


School Grouping	In-Person Phase Sequence	In-Person Education Target Start Date
Argenziano, Capuano, West Somerville	<p>Phases 2A & 2B: All SPED High Needs, ELL Levels 1 & 2 (K-8)</p> <p>Phase 3A: Pre-K & K</p>	Early December 2020
New Somerville High School	<p>Phases 2A & 2B Cont.: ELL Levels 1 & 2 (9-12) Next Wave/Full Circle, CTE Seniors</p>	Early January 2021
High School Mods, East Somerville	<p>Phases 3B: Grades 1 & 2 Grades 3-12 TBD</p>	Late January 2021
Healey, Kennedy, Winter Hill	Phases 4+	TBD - March/April 2021

Building Improvement Details

- Centralized air handling systems (based on physical constraints)
 - Increase outside air percentage
 - Increase filtration from MERV-8 to MERV-11, 13, or 14
 - Add in-line UV disinfection units
 - Add in-line humidification units
 - Update electrical and plumbing systems as needed
 - Rebalance and recommission the systems
- Separate areas
 - Portable HEPA filters
 - Portable humidifiers
- Nurse's stations / Wellness rooms
 - Isolate air handling from centralized systems
 - Provide new exhaust vents to roof
- Monitoring
 - Carbon dioxide (CO₂) meters

Compressed Timeline



Current status & funding request

- Group 1 & Group 2
 - Quotes reviewed, ready to award immediately
 - Need to proceed immediately to achieve occupancy dates
- Group 3
 - Quotes received, anticipate award next week
- Budget = \$7.5M (Quotes + 20% contingency)
 - \$3M CARES Act (must be expended by 31 Dec 2020, no City Council action)
 - \$3M COVID-19 Stabilization fund (Agenda Item 39, ID # 23755)
 - \$1.5M Facility Construction & Renovation Stabilization Fund (Agenda Item 40, ID # 23756)

Questions?