Back to School Facilities Tool Kit

Investigating facility ideas that make the return to school better for ALL students and staff: focused on Brooklyn Laboratory Charter Schools with tools and insights relevant to ALL K-12 facilities.

Version 1: May 26, 2020
EXECUTIVE SUMMARY

Brooklyn Laboratory Charter Schools (LAB) is committed to making any return for the 2020-2021 school year as safe as possible for all students and staff. Given the current public health pandemic, LAB is exploring ways to adapt school facilities and school operations in a way that prioritizes and protects the school community’s health. The initial focus is on LAB’s 77 Sands Street middle and high school location.

Our goal is to develop and widely share what we are calling a “back to school facility tool kit” so that other schools can benefit from LAB’s strategic reopening process, planning, and approach.

To generate the most creative and comprehensive solutions, LAB has undertaken an intensive study or “charrette” with professionals in the field of architecture and urban design. Our partners include Urban Projects Collaborative (UPC), a company that supports capital projects that improve quality of life and a better built environment, and five design firms: Gensler, PBDW, PSF Projects, SITU, and WXY.

The resultant tool kit contains potential modifications to our school facilities that support our commitment to meeting the needs of all learners. The tool kit covers operational adjustments that the LAB team is developing and focuses on general education, students with special needs, and small classes.

Our next step in this process will be to gather input and feedback on the ideas in this tool kit from students, faculty, and families. In parallel, we’ll be studying all ideas for feasibility based on regulatory, budget, and schedule constraints. We also expect to address additional issues like air quality and hygiene protocol, as guided by the relevant authorities.

The most effective ideas will move forward through design, construction, and installation in preparation for occupancy.
WHAT’S IN THE TOOL KIT

Mapping a safeguarded journey from home to the school. The first set of ideas focus on the arrival and entry process as students and staff transition into the building, taking into consideration the egress challenges LAB and many other schools face.

Upgrading classrooms. The second set of ideas focuses on practical and feasible re-mapping of classrooms, breakout rooms, and common spaces to comply with social distancing requirements.
About the Tool Kit
As schools move toward reopening, educators face unprecedented complexities, from new logistical challenges to emergent needs for our most vulnerable students.

At LAB, we view the current humanitarian crisis as requiring upgrades to school health and safety.

No school has the time or resources to tackle all challenges related to these upgrades alone, but as a laboratory school, we believe that advancing design solutions and sharing tools for effective adaptation is part of our mission. LAB encourages all schools to take advantage of this opportunity to upgrade and improve aspects of operations. This research and development initiative around facilities solutions is a first step in that direction.

We took the following steps during our 10-day collaborative process:
1. UPC and LAB staff held initial work sessions to identify challenges.
2. Five design firms partnered with LAB and UPC to brainstorm ideas.
3. The five firms held additional work sessions with LAB teachers, special educators, counselors, and administrators to focus on aspects of the challenges they were best equipped to address.
4. The design firms developed ideas based on the school and community’s needs and best practices to address social-distancing requirements and health safety.

The result is a tool kit of ideas that can be applied by LAB and in other contexts.

**Key Criteria For Ideas:**
- Applicable to ALL students
- Practical and feasible to implement
- Flexible and easy to adapt as needed
- Accessible for use by other institutions
Brooklyn Laboratory Charter Schools (LAB) was co-founded in 2013 by Erin Mote and Eric Tucker with the mission to eliminate the achievement gap by preparing scholars with the academic foundation, digital literacy, and leadership skills necessary to succeed in college and professional life.

LAB is dedicated to serving the highest need students, regardless of their academic level, English language proficiency, or disability. Meeting the needs of these students has continued to be our focus as we re-imagine what the return to school will look like in a post-pandemic setting.

The focus of this planning has been LAB’s middle and high school located at 77 Sands Street, but the ultimate goal is to develop a strategic reopening plan that can be applied to other schools both locally and nationally. The findings from these studies will be shared with special education, technology, and educational organizations with which LAB is connected on a local, state, and national level.

| **UPC** | UPC provides owner representation services for clients engaged in the design and construction of capital projects and facilities oversight. www.upcny.com |
| **PSF Projects** | PSF Projects is an award-winning firm delivering visionary, customized designs for commercial, institutional, residential, and workplace projects. www.psfprojects.com |
| **Gensler** | Gensler is a global design firm partnering with clients to make the places people live, work, learn, and play more inspiring, resilient, and impactful. www.gensler.com |
| **SITU** | SITU is an unconventional architecture practice based in New York City, using design, research and fabrication for creative and social impact. www.situ.nyc |
| **PBDW Architects** | PBDW Architects delivers design with insight and empathy, leveraging the capabilities of architecture to connect people with places and time. www.pbdw.com |
| **WXY** | WXY is an award-winning, studio-based multidisciplinary practice focusing on innovative approaches to public space, structures and cities. www.wxystudio.com |

**Supporter:** AKA STUDIO Architecture + Interior Design akiiru@akastudio.com
Strategies: Home to Classroom
Ideas from WXY
Back to School Facility Toolkit

WXY Studio Approach
Project Focus

1. Entry/Exit & Staging Area
   Develop a school entry/exit experience, including staging of entry, in response to COVID-19.

2. Flexible Options
   Develop a set of flexible options which can respond to new information and guidelines as they are formalized.

3. Student Feedback
   Utilize the options to prompt student feedback and collect information on key issues, such as their journey to school.
<table>
<thead>
<tr>
<th>Queue Type</th>
<th>Information</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature Check</td>
<td>Does this option allow extra time for screening procedures, such as a</td>
<td>Assumes thermal forehead scan temperature check. 10-30 seconds per student.</td>
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<tr>
<td></td>
<td>temperature check?</td>
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<tr>
<td>Entry Speed</td>
<td>How many students can enter the school per minute?</td>
<td>Assumes hand sanitizing upon entry. 5-15 seconds per student. Conservative</td>
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<td>estimate.</td>
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<tr>
<td>One Group</td>
<td>Are arrivals staggered into multiple groups? What times do those groups</td>
<td>Assumes most students arrive at or near their designated arrival time, with</td>
</tr>
<tr>
<td>Entry at 8AM</td>
<td>enter?</td>
<td>some late comers.</td>
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<tr>
<td>One Entrance</td>
<td>How many entrances are available to the school?</td>
<td>One entrance assumes existing Sands St entrance. Two entrances assumes</td>
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<tr>
<td></td>
<td></td>
<td>existing Sands St entrance and Pearl St entrance.</td>
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<table>
<thead>
<tr>
<th>Schedule</th>
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<tbody>
<tr>
<td>8:00</td>
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<tr>
<td>8:15</td>
<td>How long does it take for all students to enter?</td>
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<tr>
<td>8:30</td>
<td>What is the maximum number of students waiting at any one time?</td>
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<tr>
<td>8:45</td>
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<tr>
<td>9:00</td>
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</tbody>
</table>
One entrance, two groups

Options

Queue Type

Temperature Check

Entry Speed
Five students per minute

Two Groups
Entries at 8AM, 8:30AM

One Entrance

Schedule

8:00
20

8:15
27

8:30
20

8:45
27

9:00

This is preliminary information for discussion purposes only.
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Options

A. One entrance, one group

B. One entrance, two groups

C. One entrance, four groups

D. Two entrances, two groups
Entry & Exit Points: Maximum Sidewalk Capacity

TOTAL CAPACITY OF THE SIDEWALK AT 6 FEET APART = APPROX 208 PEOPLE

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Entry & Exit Points: Preferred Queuing Method (Option D)

- Shorter entry periods
- Allows single-file line

This is preliminary information for discussion purposes only.
Temporary Furniture & Design Needs

- **Shelter**
  - Shade
  - Weather
  - Queue control

- **Signage & Messaging**
  - Establish new rules
  - Reduce anxiety
  - Wayfinding

- **Lighting**
  - Daylight
  - Color
  - Safety at night

- **Acoustics**
  - Mitigate bridge noise
  - Allow for conversation
  - Create a sense of calm

Source: SITU
Idea: Set-up temporary waiting pavilions in nearby parks
Idea: Re-imagine entry areas as outdoor classrooms
Next Steps: Student Engagement
Student Feedback

Journey to School

Reshuffling School Arrival

Re-imagining the “Lobby”

“In the Waiting Line”
Student Feedback

Key concerns and challenges related to COVID-19:
What will your journey to school look like?
Where do you need to be careful? What are your transition points from walking or biking to subway or bus?
Where are the entrances or exits that you are nervous about going through?

Reshuffling School Arrival: Journey to School

Arrive at school

Get out at York St

CitiBike to subway

Leave home
Student Feedback

Questions:

A. How do you plan to travel to school in the fall? Subway? Bus? Bicycle? Walk?

B. When you arrive at school, which side of the street do you come from? Do you have any public art or design ideas that can help kids know where to gather?

C. How often do you arrive early or late for school? Do you have ideas for where to wait outside (or inside) the school on arrival? Do you think that waiting inside of temporary structures or furniture would work for you? If not, what are your concerns?

Reshuffling School Arrival
Student Feedback

A. What types of temporary structures or furniture should be outside of the school entrance to make it feel more like a “lobby”?

B. In addition to hand sanitizer, what other health precautions do you want to see at your school entrance?

C. Do you have ideas for what types of designs can most successfully help your peers stay 6 feet apart?
Student Feedback

Questions:

A. What types of academic or physical activities would you like to participate in while lining up to enter school?

B. If BLS were able to install a TV monitor outside, what type of school or health-related programming would be useful for you? Would you be interested in working on a weekly student broadcast for this?
Ideas from SITU
Re-imagining Arrival in Urban Schools
May 2020

About
This document was created by SITU, a design, research and fabrication firm based in the Brooklyn Navy Yard.

Assistance was provided by Nadine J. Cohen MD FAAP FACP Internal Medicine and Pediatrics

Contact
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01 The Challenge
Urban schools located in multistory buildings typically face challenges of limited points of entry, shortage of space and overcrowding of classrooms.

In order to accommodate social distancing and daily temperature checks prior to entry, many schools will have to extend deeper into public space during the arrival and dismissal periods.

The long term nature of such measures demand well-designed ideas that respect the surrounding public space and community.
A four-pronged strategy for safe arrival

**Preventive measures**

- **Social distancing**
  - Maintaining 6’ spacing between individuals to prevent the spread of COVID-19 viral particles

- **Temperature checks**
  - Restricting entry for any individuals with fevers in the case that it indicates COVID-19 infection

- **Staggered scheduling**
  - Alternating days or staggering groups to reduce the size of each arrival group and the number of students within the school at any given time

- **Increased points of entry**
  - Utilizing the second egress stair or building an external stair solely for Brooklyn Lab to reduce the size of each arrival group

This is preliminary information for discussion purposes only.
Before COVID-19

1000+ students enter daily through Stair B between 7:30–8:30 am.

Main lobby and elevators available to school staff and those unable to use Stair B.

Cafe patron and bakery tenant entry.
After COVID-19

Middle school entry (200 students daily total with staggered schedule)

High school entry (300 students daily total with staggered schedule)

School staff and accessible entry through main lobby with dedicated elevator cab

Cafe patron and bakery tenant entry

Main entry for all building tenants

Restaurant tenant

Bakery tenant

Restaurant outdoor seating

Main lobby

Loading area

SANDS STREET

STREET
Arrival volume with social distancing

1000 students arriving at once
250 min. total*

200 students arriving 10 min. apart
50 min. total*

300 students arriving 10 min. apart
75 min. total*

* assuming 15 seconds per person for temperature check
Public health considerations

Infrared temperature gun
- Time per test: 10-20 sec.
- Cost: $150 each
- Slow
- Staff intensive
- Inexpensive
- Simple to learn
- Can have multiple scanners

Thermal imaging stations
- Time per test: instantaneous
- Cost: $5,000-$20,000+
- Fast
- Minimal staff
- Expensive
- Complicated tech
- Temperature gun required for backup

Home self-check + online survey
- Time per test: 1-5 min at home
- Cost: TBD
- Fastest
- Inexpensive
- Relies on trust
- Good option for staff and students requiring lobby access

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### Design guidelines

<table>
<thead>
<tr>
<th>Shelter</th>
<th>Signage and messaging</th>
<th>Lighting</th>
<th>Acoustics</th>
</tr>
</thead>
</table>
| ![Shelter Icon](image1)  
- Shade  
- Weather  
- Queue control | ![Signage Icon](image2)  
- Establish new rules  
- Reduce anxiety  
- Wayfinding | ![Lighting Icon](image3)  
- Daylight  
- Color  
- Safety at night | ![Acoustics Icon](image4)  
- Mitigate bridge noise  
- Allow for conversation  
- Create a sense of calm |

This is preliminary information for discussion purposes only.
Design components

**Exterior stair**
Vertical circulation to new building entry on 2nd floor

**Screen & partitions**
Privacy, messaging, acoustics

**Wayfinding & distancing signage**
Mobile and fixed signage on structure, ground and additional surfaces

**Structure / Shed**
Shelter, lighting

**Greeting station**
Check-in, temperature check

**Barricades**
Traffic and pedestrian control, artwork, planters
Improved sidewalk shed

Sidewalk sheds are pre-engineered systems with well-known permitting processes that could allow for rapid deployment.

These structures could be easily modified to become more inviting, thoughtfully designed, light-filled exterior lobbies that support new entry sequences without negatively impacting the surrounding neighborhood.
Integrated solar covering

Modular rooftop canopy system designed by SITU for Brooklyn Solar Works
Creative fabric structures

Retractable fabric walkways and covers

Inflatable canopy systems

Tent structures
01 The Challenge
02 Design Opportunities
03 Arrival Strategies
Queuing strategies

Stacked
- Greater capacity for students
- Smaller footprint / more contained - less structure
- Greater impact on Sands St sidewalk & building entry
- Higher density of students within shelter

Linear
- Lower density - better student distancing
- Single line easier to monitor by staff
- Greater impact on less-trafficked Jay St. sidewalk
- Jay St. is very loud due to bridge train traffic
Arrival experience with stacked queue

- **Middle school entry shelter**: 20 student capacity, Wait time: 5-10 min
- **High school entry shelter**: 32 student capacity, Wait time: 8-16 min

Traffic lane partially closed to extend public circulation during arrival

```
PROSPECT STREET
SANDS STREET
```

- **Stair A**: Student with 6’ distance
- **Structure footprint**: Start of line
- **Public circulation**: Public circulation
- **Road barricade**:
Arrival experience with linear queue

Middle school entry shelter
12 student capacity
Wait time: 3-6 min

High school entry shelter
30 student capacity
Wait time: 7-15 min

Jay Street closed
to vehicle traffic
during arrival / departure times
Staffing needs with linear queue

1 Staff at door to check temperature and control entry

1 Staff to manage queue and hand out masks to those that need it

1 Staff at door to control entry

1 Staff overseeing queue and guiding pedestrian traffic

1-3 Staff conducting temperature checks

Student with 6’ distance
Staff with 6’ distance
Arrival experience, zooming in

- **Use of hand sanitizer enforced prior to entering**
- **Temperature check station behind privacy wall**
- **Hand sanitizer stations placed along queue**
- **Planters used as traffic barriers & queue management**
- **Staff queue manager**
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Thank you!
Ideas from PSF
Back To School Toolkit
Brooklyn Lab Charter School

FACTS & CHALLENGES
APPROACH
EXPLORATIONS
METHODOLOGY

About
This work was created by PSF Projects. Our team thrives on viewing challenges as opportunities to create innovative solutions that improve the quality of life.

Contact
Barrett Feldman: barrett@psfprojects.com
www.psfprojects.com

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FACTS & CHALLENGES
**FACTS & CHALLENGES**

**PREMISE:**

IF students are required to follow 6’-0” social distancing practices in a world with COVID,

THEN we think schools will need to increase entrances and stairs in order to reduce resulting wait times.

**HYPOTHETICAL:**

We base our analysis and example case study on a 1000 student school.

A line of 1000 students socially distanced 6’-0” apart is 1 1/2 miles. That is longer than the Brooklyn Bridge!

**PROPOSAL:**

Our design proposal presents a response to the challenge of entry into School Buildings in a world with COVID and social distancing. What follows is a modular approach to solving this new quandary.

This is preliminary information for discussion purposes only.
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1st SCENARIO: MAIN ACCESS STAIR (Stair B)

We analyzed the stair to find the maximum capacity using a 6'-0" volumetric spacing.

Capacity = 8 students
1st SCENARIO: MAIN ACCESS STAIR (Stair B)

The sidewalk will be overwhelmed with even 100 students and it will be impossible to provide covered waiting zones.

IF 1000 socially distanced students use this one entrance and stair, THEN it will take 90 minutes to enter.

rate = 1 second per step
APPROACH
2nd SCENARIO: UNUSED EXISTING STAIR (Stair A)

We analyzed the stair to find the maximum capacity using a 6'-0" volumetric spacing.

Capacity = 10 students

This is preliminary information for discussion purposes only.
2nd SCENARIO: ADD UNUSED EXISTING STAIR (Stair A + B)

The sidewalk will still be overwhelmed with students and it would be nearly impossible to provide covered waiting zones. Scheduling student arrivals can further reduce the wait time and length of the line.

IF 1000 socially distanced students use two existing entrances and stairs, THEN it will take 50 minutes to enter.

<table>
<thead>
<tr>
<th>STAIR A + B</th>
<th>TOTAL ENTRANCE TIME per min.</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
<td>80</td>
</tr>
<tr>
<td>70</td>
<td>60</td>
</tr>
</tbody>
</table>

1,000 students

100 students
3rd SCENARIO: TWO NEW TEMPORARY SCAFFOLD STAIRS (Stairs C & D)

Capacity = 6 students

Capacity = 7 students

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3rd SCENARIO: ADD TWO NEW TEMPORARY SCAFFOLD STAIRS (Stair A + B + C + D)

IF 1000 socially distanced students use two existing entrances and stairs, THEN it will take 30 minutes to enter.

The sidewalk will no longer be overwhelmed with a crowd.
AFFORDABLE & EASILY DEPLOYED EXAMPLES: SCAFFOLD

This is preliminary information for discussion purposes only.
NEW FRONT PORCH: FUN & PRODUCTIVE

The scaffold can be transformed into a dynamic framework for engaging between students, staff, teachers, parents, and the community.

The scaffold can provide a place to:
• get cover from rain & snow
• sanitize hands and cell phone
• get grab 'n go breakfast
• exhibit student work
• learn & teach
• engage

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METHODOLOGY
## ANALYSIS: EXISTING STAIRS

### 1st Scenario: Stair B

<table>
<thead>
<tr>
<th># of stair climbers</th>
<th># in stairwell at once</th>
<th>Minutes to enter/climb/exit</th>
<th>Total minutes</th>
<th>Hours</th>
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<tbody>
<tr>
<td>100</td>
<td>8</td>
<td>0.75</td>
<td>9</td>
<td>0.16</td>
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<tr>
<td>1,000</td>
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<td>94</td>
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### 2nd Scenario: Stair A + B

<table>
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<th># of stair climbers</th>
<th># in stairwell at once</th>
<th>Minutes to enter/climb/exit</th>
<th>Total minutes</th>
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<tr>
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<td>50</td>
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This is preliminary information for discussion purposes only.
### ANALYSIS: EXISTING STAIRS + NEW STAIRS

#### 3rd Scenario: Stair B + A + C + D

<table>
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<tr>
<th># of stair climbers</th>
<th># in stairwell at once</th>
<th>Minutes to enter/climb/exit</th>
<th>Total minutes</th>
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## SCHEDULE: NEIGHBORS

### Example Tenant Schedule: 77 Sands Street

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<thead>
<tr>
<th>Time</th>
<th>Prolific Interactive</th>
<th>Galvis &amp; Co.</th>
<th>Husk Bakeshop</th>
<th>Zippy Spot</th>
<th>Brooklyn Small Biz Dev</th>
<th>Creative Business Inc.</th>
<th>Wipro Digital</th>
<th>Designit NYC</th>
<th>Fort Greene Plumbing</th>
<th>WeWork (Likely)</th>
<th>WeWork</th>
<th>Randolph Beer</th>
<th>Brooklyn LAB Teachers/Staff</th>
<th>Brooklyn LAB Middle School</th>
<th>Brooklyn LAB High School</th>
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<tbody>
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</table>

School ingress and egress does not conflict with the business hours for most tenants.
### Alternate Attendance

<table>
<thead>
<tr>
<th>School Schedule @ 50% Capacity Week 1</th>
<th>M</th>
<th>T</th>
<th>W</th>
<th>TH</th>
<th>F</th>
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</thead>
<tbody>
<tr>
<td>Middle School</td>
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<tr>
<td>High School</td>
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<table>
<thead>
<tr>
<th>School Schedule @ 50% Capacity Week 2</th>
<th>M</th>
<th>T</th>
<th>W</th>
<th>TH</th>
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<tbody>
<tr>
<td>Middle School</td>
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<td>High School</td>
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</tbody>
</table>

### Stagger Arrival Times

#### Student Arrival Schedule @ 100% Capacity, assuming 1000 students

<table>
<thead>
<tr>
<th>Arrival Time</th>
<th>Stair A</th>
<th>Stair B</th>
<th>Stair C</th>
<th>Stair D</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:45</td>
<td>83</td>
<td>83</td>
<td>83</td>
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<td>8:00</td>
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<td>83</td>
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<td>8:15</td>
<td>83</td>
<td>83</td>
<td>83</td>
<td>84</td>
</tr>
</tbody>
</table>

**Total Per Stair**: 249 | 249 | 249 | 252

**Total Per Day**: 999

#### Student Arrival Schedule @ 50% Capacity, assuming 500 students

<table>
<thead>
<tr>
<th>Arrival Time</th>
<th>Stair A</th>
<th>Stair B</th>
<th>Stair C</th>
<th>Stair D</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:45</td>
<td>41</td>
<td>41</td>
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<td>42</td>
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<tr>
<td>8:00</td>
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<td>42</td>
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<tr>
<td>8:15</td>
<td>41</td>
<td>41</td>
<td>42</td>
<td>42</td>
</tr>
</tbody>
</table>

**Total Per Stair**: 123 | 123 | 126 | 126

**Total Per Day**: 498

*NOTE: For simplicity, example chart assumes all stairs on site have the same capacity.*
Strategies: Classrooms & Learning Spaces
Ideas from PBDW
Back-to-School Facilities Toolkit

Classrooms & Learning Spaces

This is preliminary information for discussion purposes only.
EXECUTIVE SUMMARY

DESIGN STRATEGIES
- Socially Distanced Configurations
- Physical Barrier Configurations

DESIGN GOALS
- Work Within the Limits of Existing Facilities
- Be Reversible
- Facilitate Communication
- Provide Flexibility
- Accommodate All Learners

This is preliminary information for discussion purposes only.
CLASSROOM STRATEGIES

SOCIALLY DISTANCED
- Maximizes distance between occupants
- Clear path of circulation for teachers and paras
- Limited physical modifications to furniture
- Easy to implement
- Limited cost impact
- Layouts marked on floor with various color tape
- Most limiting in number of students per classroom

PHYSICAL DIVIDERS
- Less distance between occupants
- For closer access to students, teacher will use PPE
- Temporary physical modifications to furniture dependent upon system used
- Easy to implement
- Cost impact
- Layouts marked on floor with various color tape
- Accomodates more students per classroom
DISTANCE DIAGRAMS

SECOND FLOOR PLAN

FIFTH FLOOR PLAN

This is preliminary information for discussion purposes only.
SOCIALLY DISTANCED

FACING SAME DIRECTION
12 STUDENTS
2 TEACHERS
2 PARAPROFESSIONALS
SOCIALLY DISTANCED

SMALL GROUPS
12 STUDENTS
2 TEACHERS
4 PARAPROFESSIONALS

This is preliminary information for discussion purposes only.
PHYSICAL DIVIDERS

FACING SAME DIRECTION
18 STUDENTS
2 TEACHERS
4 PARAPROFESSIONALS

This is preliminary information for discussion purposes only.
PHYSICAL DIVIDERS

SMALL GROUPS
16 STUDENTS
2 TEACHERS
6 PARAPROFESSIONALS

This is preliminary information for discussion purposes only.
PHYSICAL DIVIDERS

SPECIAL NEEDS
12 STUDENTS
2 TEACHERS
6 PARAPROFESSIONALS

AIDES USE PLEXIGLASS BARRIERS
WITH TRANSACTION WINDOW TO
INTERACT WITH STUDENTS
OTHER STRATEGIES

EDUCATIONAL SPACES
• Avoid use of shared supplies
• Provide hand sanitizer and cleaning wipes adjacent to shared equipment and copiers

DOOR SOLUTIONS
• Add hand sanitizer stations next to doors
• Use smart building technologies for door lock controls
• Install foot controls for doors

RESTROOMS
• Install sensor-operated hands-free technology at faucets & flushometers in restrooms
• Tape off alternate lavatory & urinal to facilitate social distancing
• Increase frequency of cleaning and disinfecting surfaces
• Modify drinking fountains into bottle fillers

AIR QUALITY
• Increase ventilation by opening windows
• Sanitize ducts
• Replace existing HVAC air filters with MERV 13 filters
• Change HVAC filters frequently
• Maintain humidity between 40-60%

SIGNAGE
• Colored tape on floors to demarcate various furniture layouts
• Demarcate circulation patterns
STRATEGIES IN PRACTICE

DENMARK

SOUTH KOREA

THAILAND

TAIPEI

HONG KONG

DENMARK

This is preliminary information for discussion purposes only.
EQUIPMENT EXAMPLES

This is preliminary information for discussion purposes only.
This is preliminary information for discussion purposes only.
Ideas from Gensler
HIGH SCHOOL SUMMARY

CLASSROOMS
WHAT IS A SETUP FOR EACH ROOM SIZE AND TYPE THAT FOLLOWS
SOCIAL DISTANCING AND SUPPORTS INSTRUCTION FOR GENERAL
EDUCATION AND SPECIAL NEEDS STUDENTS?

CIRCULATION
HOW CAN WE REDUCE THE NUMBER OF STUDENT CONTACTS
WITHIN THE HALLWAYS AND STAIRWELLS?

HYGIENE
HOW CAN DESIGN PROVIDE FOR AND PROMOTE STUDENT
HYGIENE?
This material is intended solely to provide ideas or options for further consideration and decision. Client should make decisions related to your business continuity or preparedness plans in collaboration with experts in public health and safety. See current CDC guidelines at www.cdc.gov/coronavirus/2019-ncov/community/

This is preliminary information for discussion purposes only.
COHORTS ATTEND CLASSES ON A SINGLE FLOOR.

ELECTIVE CLASSES PUSH INTO FLOORS AS POSSIBLE. ASSIGN FLEX ROOMS AT EACH FLOOR.

CIRCULATE FLOORS IN ONE DIRECTION ONLY

VERTICAL TRAVEL IN ONE DIRECTION ONLY

This is preliminary information for discussion purposes only.
This material is intended solely to provide ideas or options for further consideration and ideation. Client should make decisions related to your business continuity or preparation plans in collaboration with experts in public health and safety. See current CDC guidelines: https://www.cdc.gov/coronavirus/2019-ncov/community/
Next Steps
FROM IDEAS TO IMPLEMENTATION

The ideas outlined in this document are the steps to reopening. The actions summarized below describe the implementation process for the ideas.

Month One

- **Wide distribution of ideas**: solicit feedback from all stakeholders, including teachers, students, families, and community members.
- **Generate Additional Ideas**: address needs like new or modified furnishings, mechanical system modifications (increased air flow), and plumbing additions/modifications (for handwashing).
- **Study Feasibility**: evaluate ideas based on regulatory, budget, and schedule constraints.

Month Two

- **Confirmation of ideas**: to be implemented.
- **Project implementation plan**: developed including scope, budget, and schedule alignment.
- **Team engagement**: design and construction teams brought on board.
- **Mock-ups**: of selected ideas.

Month Three

- **Construction and installation**: interior and exterior ideas implemented.
HOW TO ENGAGE

Our success and safety is tied to yours. We are sharing our process and plan widely so that we can get input from as many people as possible, and so that our process can help inform yours. Here are various ways to engage with us and help give families and students the option to return to school safely this fall.

- Provide feedback through our survey.
- Register for a focus group conversation.
- Attend a webinar with the American Federation of Teachers, teachers and educators from Brooklyn LAB, and members of the design team.
- Share the V1 Back to School Toolkit with leaders in your school community, reviewing the relevance of questions and ideas developed in relation to the Brooklyn LAB facility to your own context.
- Reach out to offer input or propose ways that we might work together to move this agenda forward in communities around the country.