OPTIMIZE YOUR SPACE AND INVESTMENT

ROADMAP TO THE RESILIENT CAMPUS

A Resource for Campus Leadership and Boards

JLL SMITHGROUP

ROADMAP TO THE RESILIENT CAMPUS

Technology has allowed us to bridge this difficult time, but this experience has also demonstrated the importance of an immersive academic environment to a successful student experience.

As colleges and universities advance plans for modifications to their campuses in light of the novel coronavirus, aka COVID-19, there is a renewed urgency around questions from students, parents, and the public:

"If we have online learning, are physical campuses still valuable? Why would one pay such an enormous premium to *be* on campus?"

Technology has the power to bridge social distance, and online instruction may have benefits related to flexibility and convenience. Yet, as we live, work, learn and play from home, we are all more aware than ever that virtual chats and video calls are not a one-for-one substitute for in-person connection and collaboration. In fact, many have discovered that these modes of interaction borrow from the bonds built in person previously to facilitate quality use of the distance technology.

Undoubtedly, the temporary closing of campuses across the world has accelerated adoption of remote learning and communication technologies. It is our hope that these technologies will increase the flexibility and creativity for the future. **However, empirical and research evidence demonstrate there is an overwhelming correlation between campus life and student success.**

Compiled in this document is a range of strategies and insights to help campus leaders prepare for a safe return to campus with a focus on realizing the value of place despite the challenges of the current times.

VALUE OF THE PHYSICAL CAMPUS

Why the fundamental value proposition of the physical campus persists going forward.

INSTRUCTION

Due to the variety of ways in which people learn, on-campus instruction facilitates the critical internalization of information through complex human environments, social structures, applied contexts, and a subconscious sense of access. Physical proximity intensifies the brain's internalization of information, and analytical collaboration with other students allows for the development of both social and intellectual skills that will serve students for the remainder of their professional lives.

The modern campus also offers specialized experiential learning opportunities such as labs, maker spaces, and simulation rooms that are difficult, if not impossible, to replicate online. On-campus experiences also enable students to develop "T-shaped[1]" abilities to span across disciplines and, as a result, be better positioned for success in the workplace. For these reasons, on-campus instruction has consistently seen much stronger demand compared to its online counterparts.

STUDENT LIFE

In addition to applied learning, on-campus student life intentionally produces chance encounters and casual conversations between students from across disciplines and backgrounds, broadening each learner's academic and career trajectory. Students on campus are more likely to participate in informal peer-to-peer learning and develop a life-long sense of shared identity based on this critical portion of their personal development. Informal interactions allow students to build professional networks and diverse modes of thought. Sharing a connection to a specific place and set of collective experiences connects students to alumni of the past and future, often improving a student's long-term career prospects. **As much as an education, prospective students routinely view their choice of college as an investment in a community as well as an experience.**
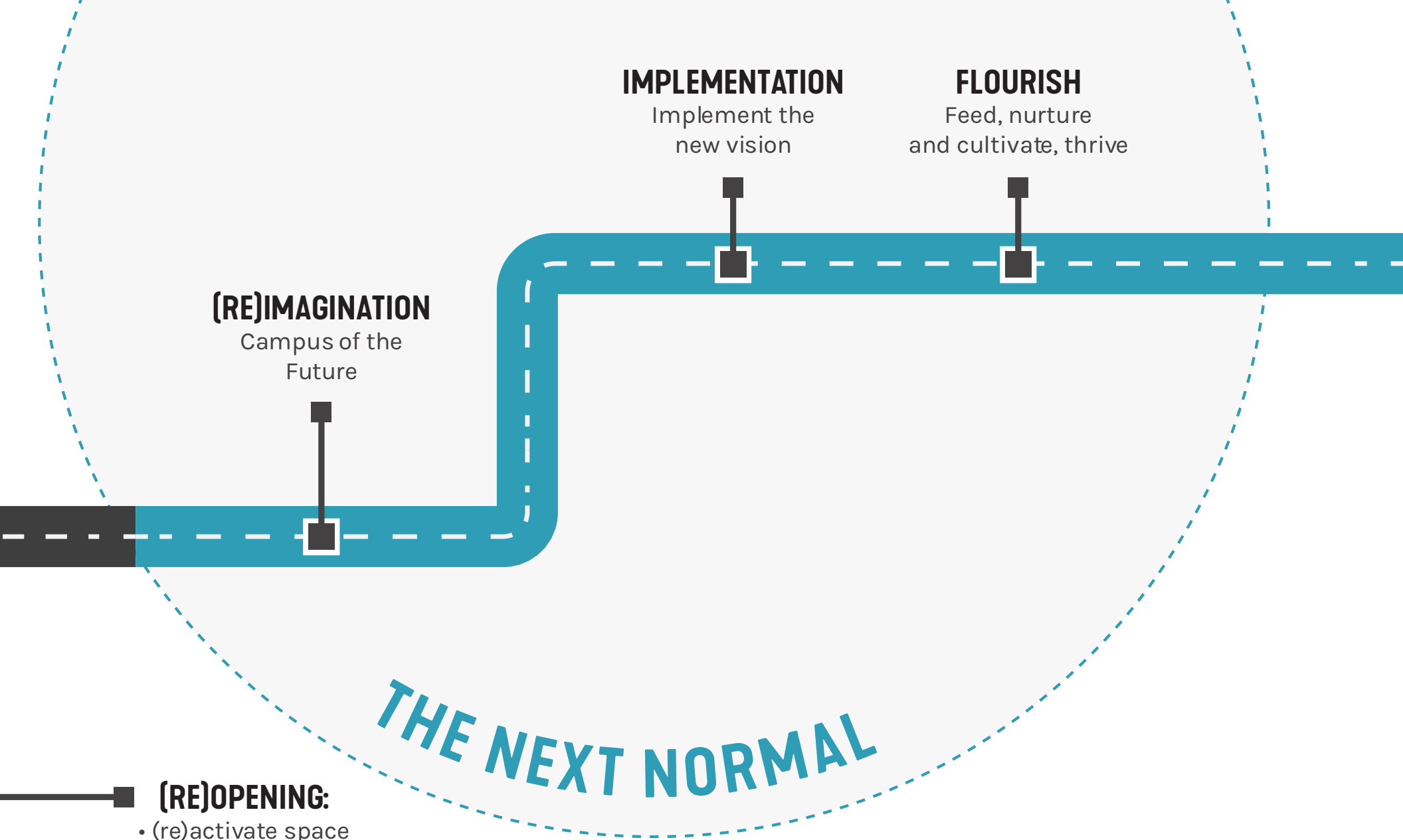
SCHOLARSHIP & RESEARCH

The research conducted by faculty and other professionals forms an intellectual engine on campuses. Empirically, the collaboration and connection of researchers is critical to borrowing ideas and methods to advance their missions. Furthermore, connectivity with students and other emerging professionals simultaneously advances research quality as well as forms professional relationships. **The value of research on campus is reinforced by over a billion dollars annually of private sector investment in campus-adjacent research facilities across the country.**
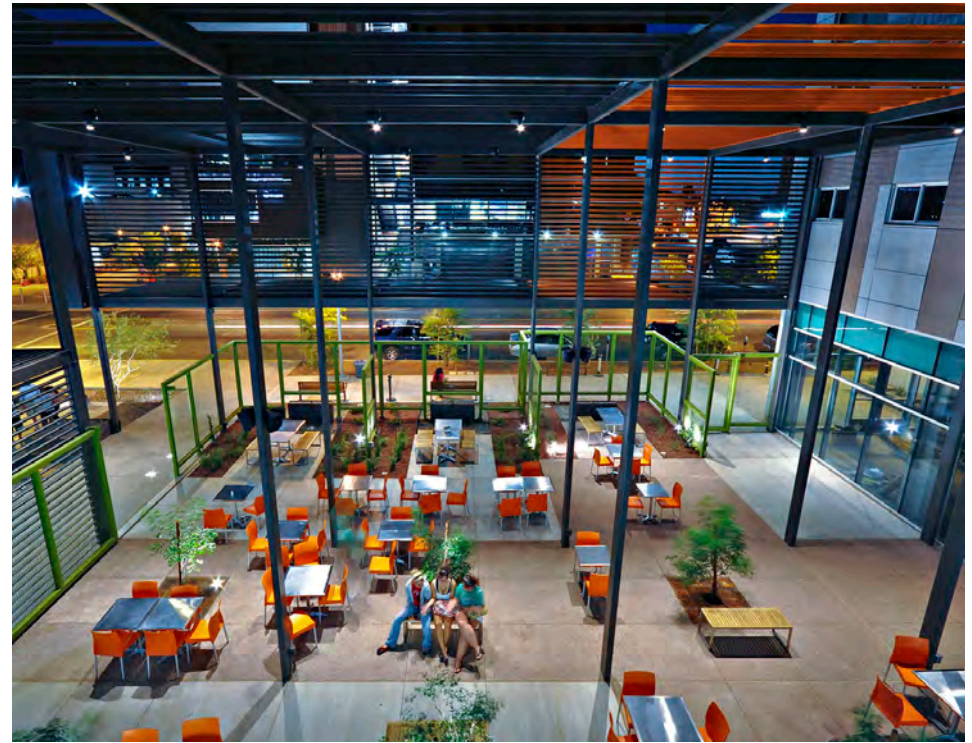
Ultimately, the physical campus provides a unique value through intellectual immersion, cross pollination of ideas, and alignment of social and academic modes. Though higher education will continue to evolve, demand for quality campus environments remains an institutional differentiator because of enhanced outcomes.

ROADMAP TO A RESILIENT CAMPUS

SHOCK
Denial and disbelief

REALIZATION
Confront the impacts and dynamics

RESPONSE
Shelter in place and physical distancing drives campus closures

FUTURE-FIT RESILIENCY PLANNING
Parallel path to more resilient and adaptive future state

FINISHING OUT THE SPRING SEMESTER:
• Scale remote learning program
• Communication / governance
• Retooling experiential curriculum
• Remote commencements

FINANCIAL & FUNCTIONAL CHALLENGES
Projected revenue shortfalls & potential loss of market share

IMPLEMENTATION
Implement the
new vision

FLOURISH
Feed, nurture
and cultivate, thrive

(RE)IMAGINATION
Campus of the
Future

THE NEXT NORMAL

(RE)OPENING:
- (re)activate space
- (re)spect health and wellness
- (re)vitalize property and workplace
- (re)instate full public services

WE'RE ALL HERE, IN THIS TOGETHER

RETOOLING FOR A SAFE AND THRIVING CAMPUS COMMUNITY

Colleges and universities across the nation are grappling with tough decisions that will impact the health and wellness of students returning to campus during the COVID-19 pandemic. Reducing density to maintain social distance prioritizes student and community health but is contrary to our experience of campus as a dense, socially engaging setting. The challenge for university leaders is to enact measures that, for a time, will limit the potential spread of the virus while **preserving core on-campus experiences in ways that have residual value into the future.**

Retooling millions of square feet of real estate is not easy. We are working with our institutional clients and partners across the country to develop strategies that will accelerate campus reopening AND provide enhanced resilience.

REWORKING THE ROLE OF OPERATIONS & MAINTENANCE

Traditionally, custodial and facilities staff sought to work seamlessly in the background on campus. This is now flipped: increased visibility increases perceived safety, availability, and accountability. Campuses are outfitting these staff with **more noticeable uniforms** and attire, as well as providing **customer service training** in advance of their new role. Long term, this heightened campus visibility may accentuate cleanliness as a noticeable benefit of life on campus.

Detailed scheduling of custodial/facilities staff between use of spaces on campus may be essential initially, and to some extent ongoing. A number of integrated workplace management systems (shortened to IWMS, such as Archibus, Tririga, and FM:Systems) already used on campus can be relatively easily adapted to manage cleaning processes in a manner integrated with room scheduling software.
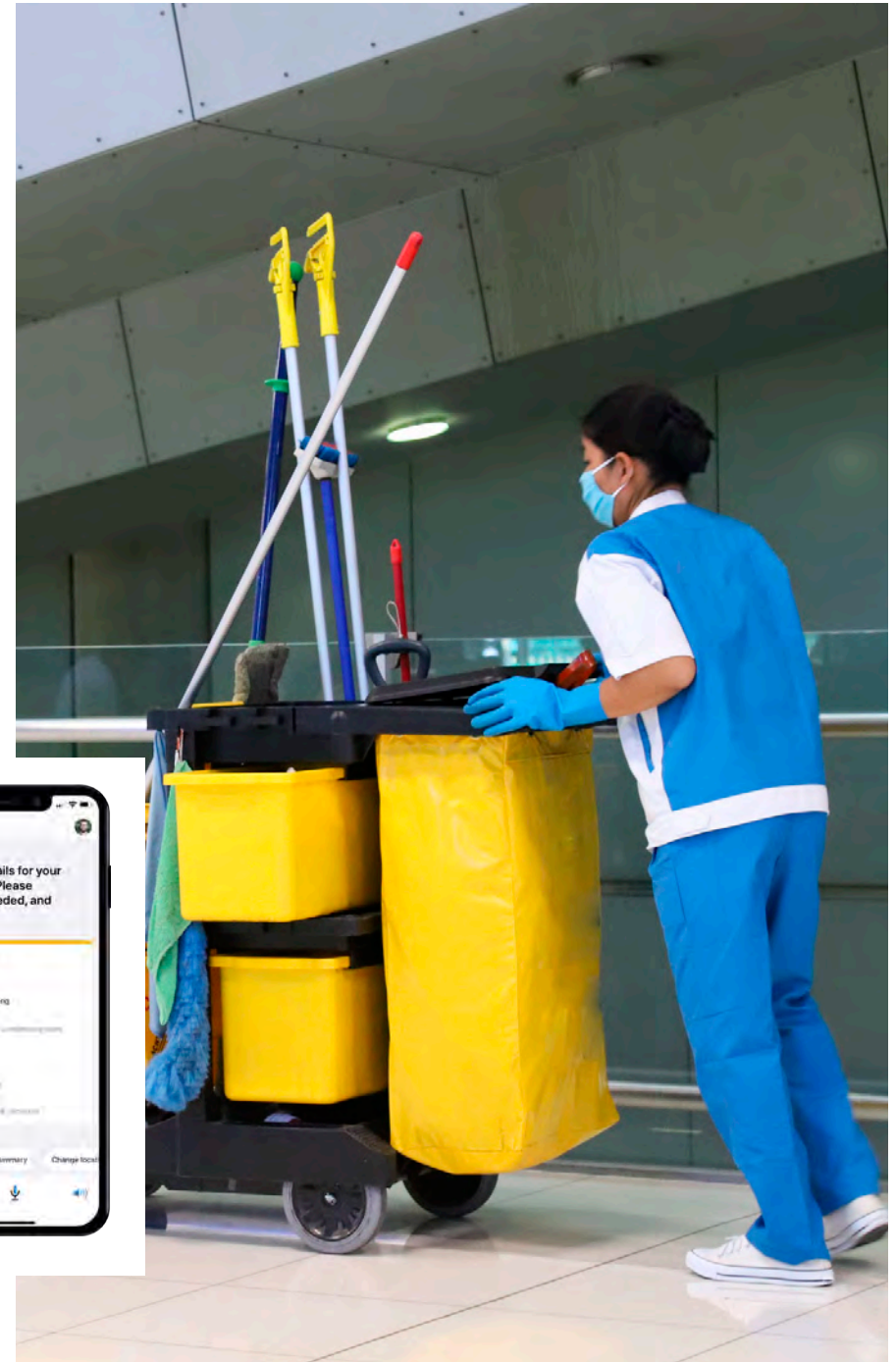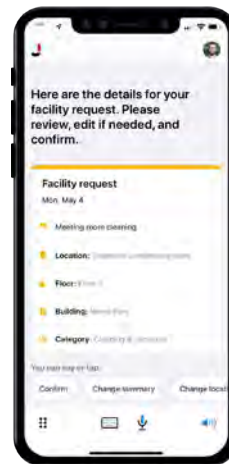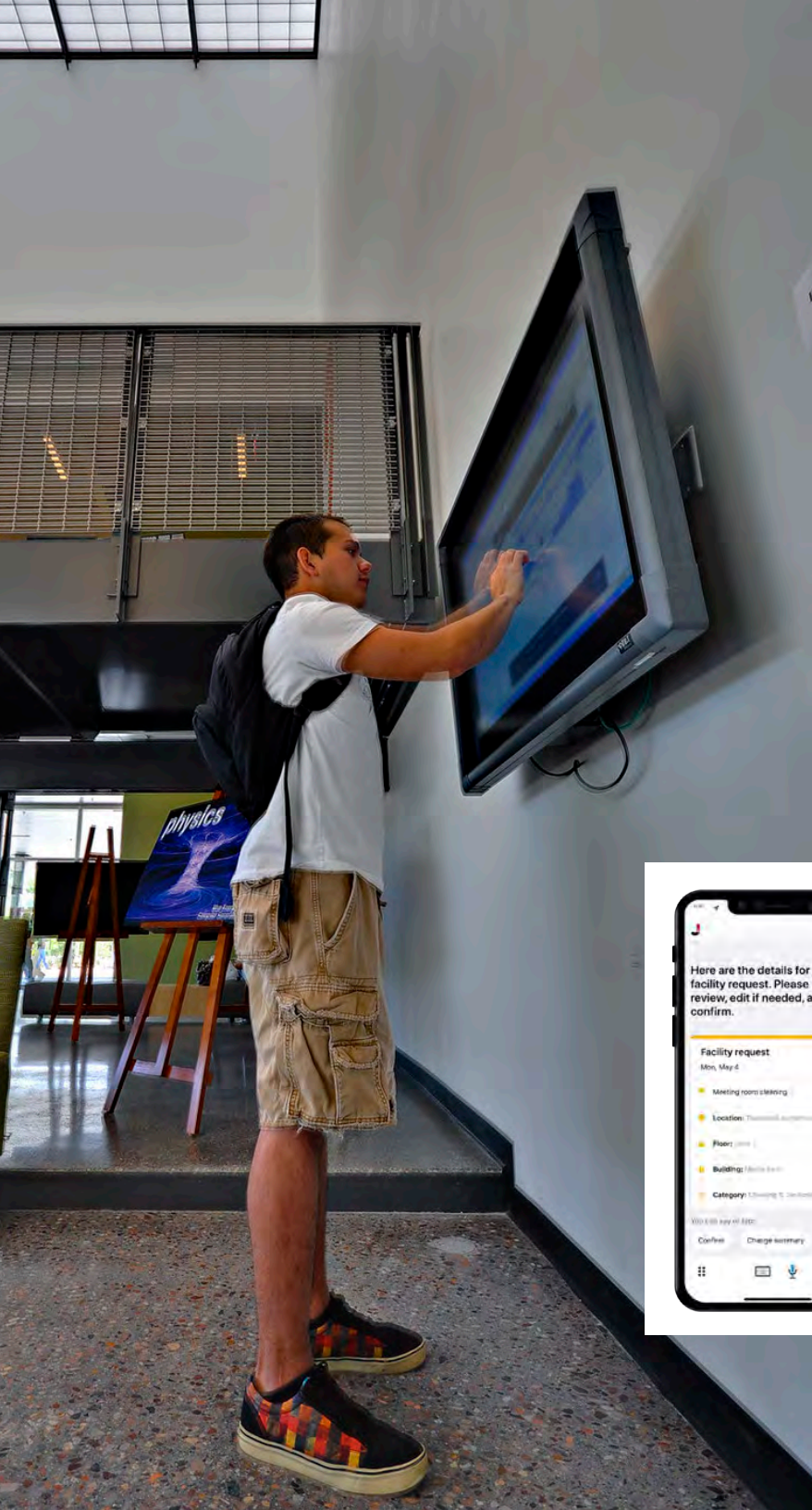
SCHEDULING

In the near term, planning efforts should also consider whether it might be extending the duration of class change periods. This could be helpful to decongest circulation pathways such hallways and pinch points such as bathrooms and stairwells. It can also assist with scheduling periodic cleaning of the classrooms throughout the day, if such resources are available. Typically, M-W-F classes have a 10-minute class change and M-W and T-R classes have a 15-minute change, so it is worthwhile to consider what proportion of coursework falls into each category. Extending the class change to 20-25 minutes instead of the typical 10-15 could be beneficial, yet effectively lengthen the instructional day and potentially encourage students to congregate between classes without sufficient space in which to do it. Modelling different scheduling scenarios can help determine how to optimize the approach, as well as identifying outdoor and other locations appropriate to be between classes.

Technologies can be easily leveraged to facilitate student and faculty independence on campus while mitigating transmission risk. **Mobile room booking applications** can allow clean rooms to be identified and booked on the fly, used to crowd-source information regarding needed work orders, and **send push notifications** when desired spaces become ready after cleaning. These technologies can be useful long after re-opening to give the campus community greater control of their spaces and increase space utilization overall.
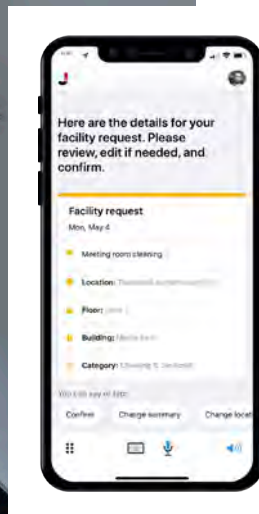
INSTRUCTIONAL

Instructional space that is well designed and furnished for flexibility can accommodate social distancing more readily and efficiently than spaces with fixed stations. Flexible spaces are also well positioned to accommodate programmatic and pedagogical changes, such as trends toward active learning environments which have been shown to achieve better outcomes. Software modules exist that **can easily run spatial algorithms** to quickly calculate maximum spatial occupancy of all campus spaces under 'social distancing' scenarios. These modules run on existing campus IWMS software, and can provide reference point should the campus need to return to social distancing later, as well as create more versatility for occupancy planning in the future. Strategic repositioning of existing assets for future flexibility can also be achieved through thoughtful and comprehensive analysis of the existing space portfolio.

Additional consideration should be given to circulation into and out of classrooms, as well as horizontal and vertical circulation within buildings. Classrooms on upper floors can remain closed to reduce use of stairwells and elevators, if scenario modelling indicates that they are not needed. Elevator use should be limited and prioritized for ADA access.

LARGE FORMAT

Courses with an enrollment of 80 or more may be successfully migrated to online platforms and a significant portion of this coursework may not return to the classroom. Didactic content can be effectively communicated online, but students may not have the opportunity for team-based and informal, peer-to-peer learning and engagement.

- Promote faculty development to enhance online delivery, learning outcomes, and student satisfaction.

- Add **greater emphasis on small group and breakout formats**, such as with graduate fellows, to enhance in-person learning. Note that these sessions can be more easily scheduled during times in which campus spaces are less heavily used.

- Provide opportunities for students to safely engage in informal, peer-to-peer learning—socially distant or virtual discussion groups.

- Explore partnerships with online curriculum developers who work primarily in the corporate training space but have tools and platforms that are readily adapted to the needs of higher learning.

CENTER AND OUTER SEATS TO BE FILLED BEFORE AISLE SEATS

STUDENT SEAT + 6'-0"
PHYSICAL DISTANCE BUBBLE

INSTRUCTOR SEAT + 6'-0"
PHYSICAL DISTANCE BUBBLE

6'-0" CIRCULATION PATH

CIRCULATION DIRECTION

SEATED PERSON

STANDING PERSON
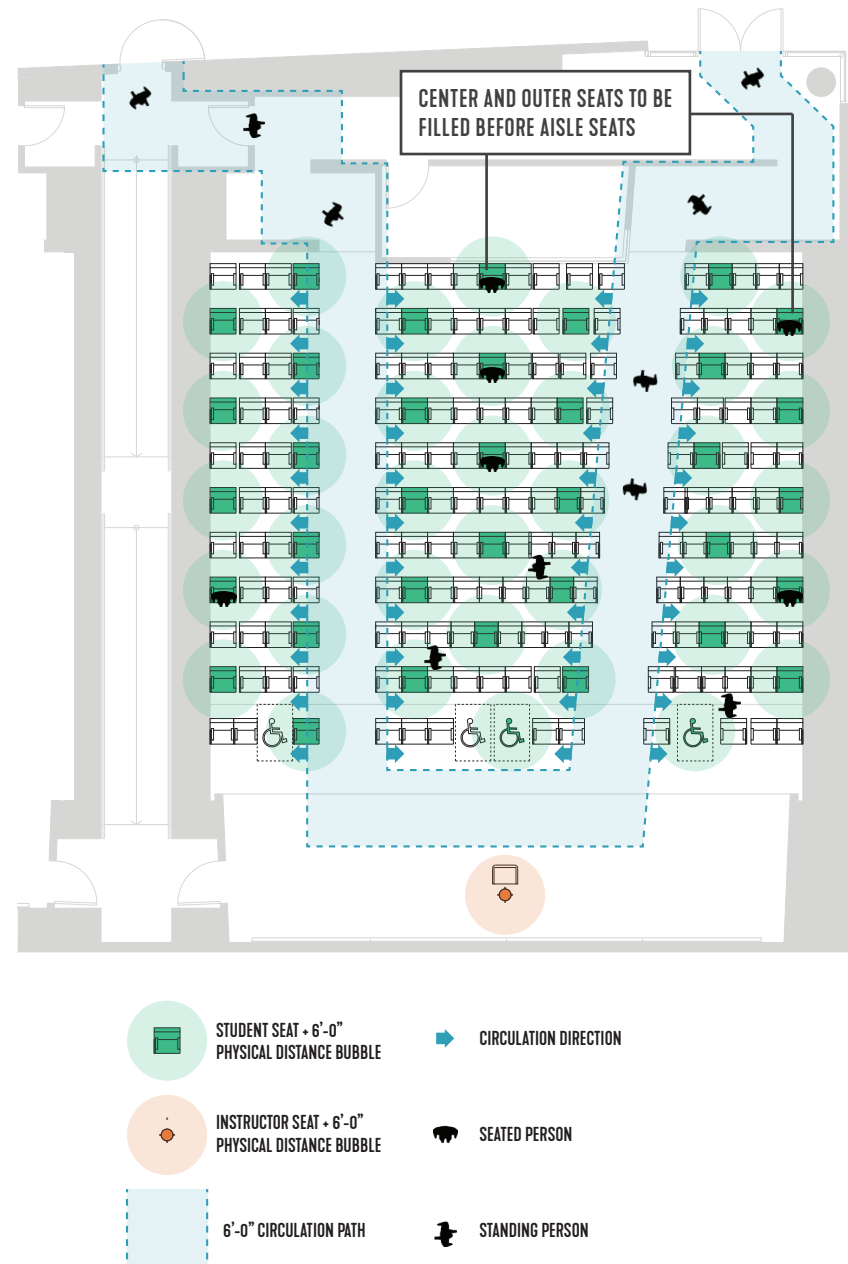
MEDIUM FORMAT

Courses within the 40-80 class size can effectively be remapped into larger classrooms to provide appropriate social distancing; because these courses are scheduled, social distancing and **decontamination is more easily operationalized.**

- Establish classroom capacity for entire inventory before running multiple scheduling scenarios with registrar to find best fit.

- Stagger course start and stop times to minimize surge in corridors and at building entries.

- Utilize text-based messaging or mobile campus app to alert crews.

- Develop **hybrid courses** with a significant online component, even for medium and small courses; focus in-person time on dialogue and engagement.

- For appropriate courses in advantageous climates, maximize use of outdoor spaces. Note that slides printed on paper can benefit certain types of learners.

PREVIOUS TYPICAL SEATING

CURRENT RECOMMENDED SEATING
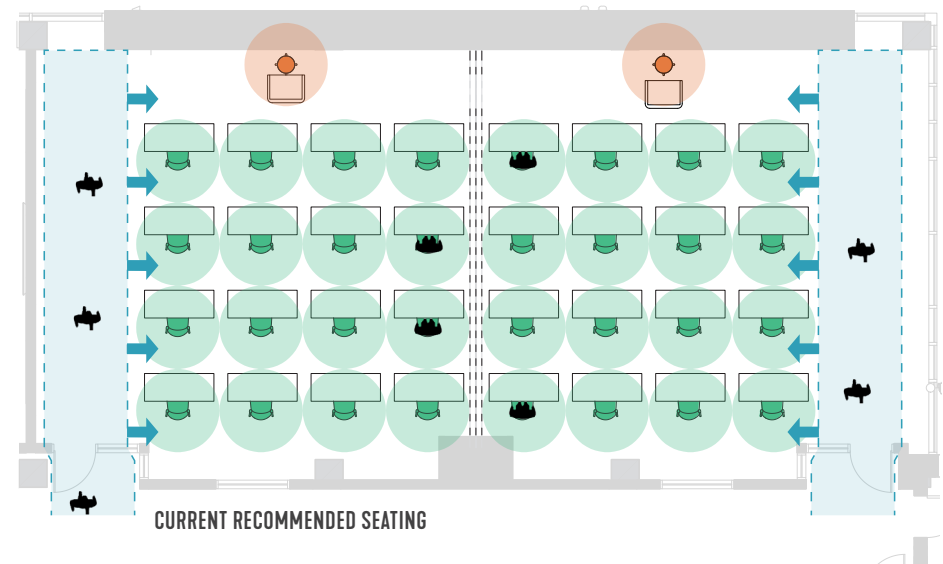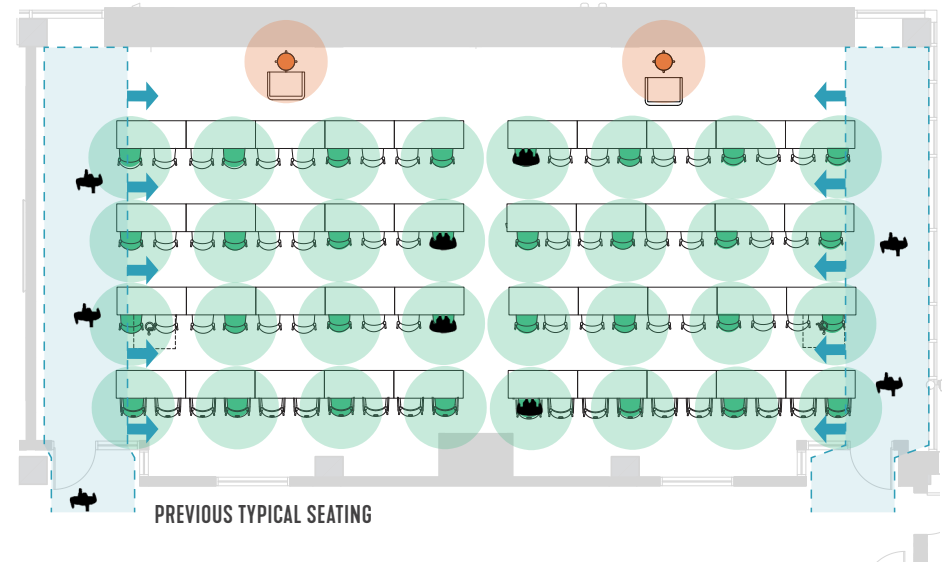
EXPERIENTIAL LEARNING

Class labs, simulation learning, and clinical learning present distinct challenges. These courses often employ group learning and require access to special equipment and facilities.

- Instructional labor costs limit the number of sections that can be taught; institutions are realizing they cannot afford to achieve social distancing in class labs by offering multiple sections.

- In the hybrid model, many faculty are re-thinking their curricula—focusing on desired learning outcomes—and implementing new pathways to achieve them.

- Review potential to operate class labs like "drop-in" language labs; students **schedule a time slot** for completing the lab-based session in facilities operating at 30%-50% of capacity. Again, software can be used to make this relatively easy to organize.

- Leverage student labor where appropriate to offer increased hours of operation for experiential learning settings.

20%
REDUCTION OF CAPACITY

COVID-19 Response Survey, ACUHO-i

CAMPUS AUXILIARIES

Auxiliary enterprises—residential, dining, parking, continuing education—play a major role in contributing to the on-campus experience. As a source of revenue that is directly impacted by whether or not students are physically on-campus, they have been hard hit by COVID-19. Looking ahead to the Fall 2020 semester, scenario planning analyzes a range of parallel scenarios that will enable auxiliary operations to re-engage with students and re-activate the associated revenue stream.

RESIDENTIAL

To address the residential experience, campuses are looking a variety of scenarios. The majority are looking to **decrease their normal capacity** through several strategies, including:

- Limit all existing rooms to single occupancy use, though it will yield a significant reduction in revenue.

- Offer double occupancy rooms with coordinated and pre-determined assignment.

- Establish **off-site accommodations** through master-lease arrangements with local hotel operators. Flexibility in this model allows for phased re-densification of residence halls, if needed.

- Align residential assignments with academic cohorts who will remain together throughout AY 2020-21 so as to mitigate statistical instances of potential transmission.

One survey, sponsored by ACUHO-i[2], indicates an average reduction of 20% capacity as a result of these strategies. Because of reduced ratios between residents and student residential assistants/advisors, many campuses are **temporarily restructuring their RA discounts** on housing and dining fees, which can provide for some savings. At certain campuses, this savings may continue into the future.
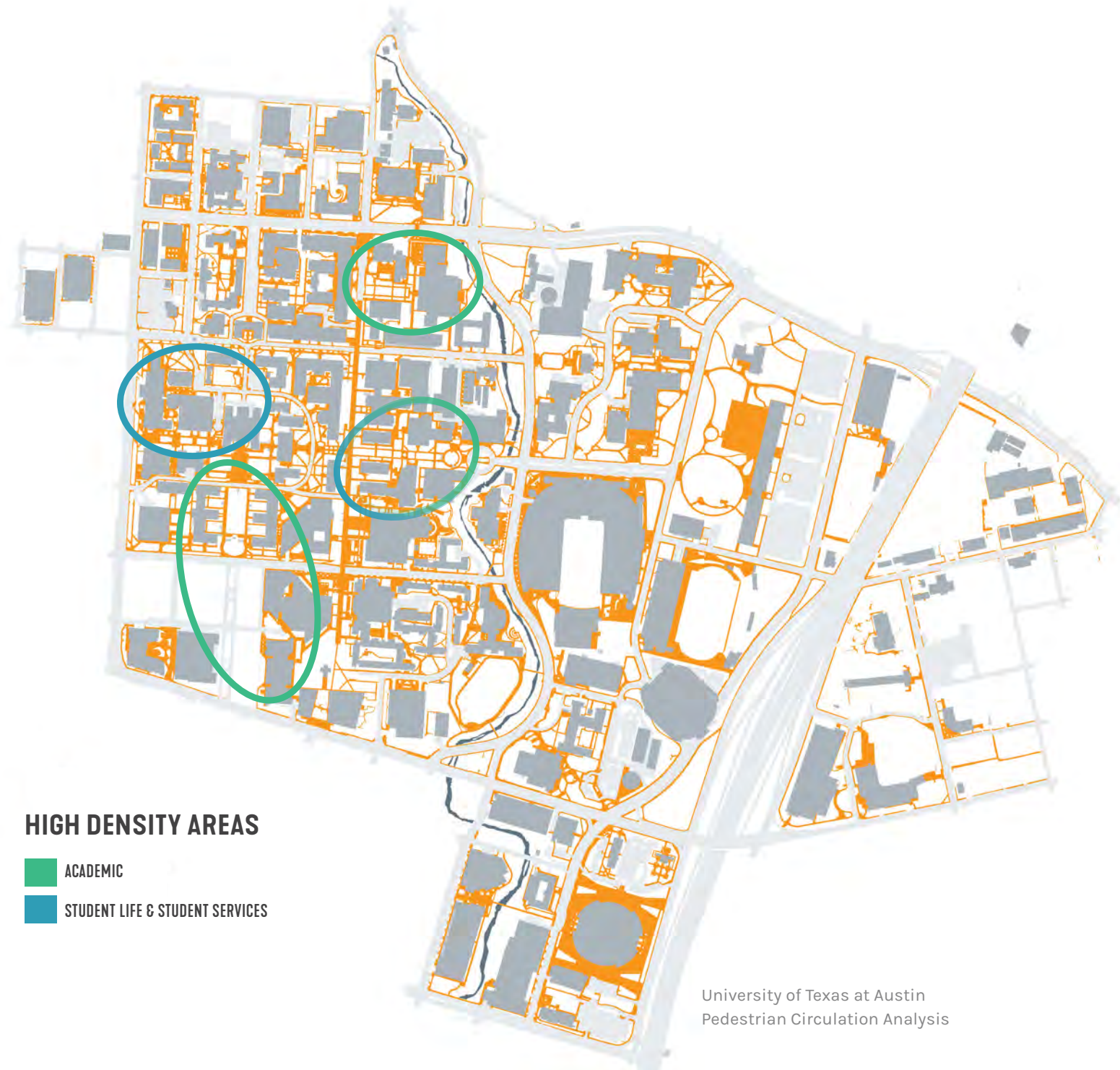
HIGH DENSITY AREAS

■ ACADEMIC

■ STUDENT LIFE & STUDENT SERVICES

University of Texas at Austin
Pedestrian Circulation Analysis

COMMON AREAS

Most campuses are looking at restrictions on use of shared spaces. These may be difficult to enforce without a consistent culture and supervision. In geographic regions with year-round warm or temperate climates, there is an opportunity to **activate outdoor spaces** surrounding residence halls and shift social gathering events to these locations.

In all cases, there is a need to allocate space within existing residence halls for quarantine of any students which fall ill with the virus during the semester. This may be portions of each residence hall, or specific halls that are designated for short-term isolation.

Additionally, it is worth noting that new residential facilities that are in the early planning stages are considering a higher rate of single rooms to address the anticipated future demand. This is a possible indication of future trends in planning for residential life facilities. Greater emphasis on outdoor spaces and activities in warmer climates as well as small group events and recreation is being used to encourage safer socialization.

DINING

There are a number of dining operation modifications that are occurring to reduce the potential impact of infection, some of which will likely see demand well into the future:

- Reduce or eliminate of self-serve options such as salad bars, and dessert stations.

- Offer more **focused menu options** such as higher quality, fewer choices and/or more rotation.

- Shift to disposable serving containers and utensils with more options designed to eat 'on the go'.

- Prepare and package meals directly by staff.

- **Decrease demand for dining room seating** by encouraging students to dine in their rooms by making most food available 'to go' with some meals designed to be finished with hot plates or dorm kitchens.

- Create campus **meal delivery operations** should there be need for a significant quarantine. Note that large-portion deliveries can be created to encourage continued socialization.

- Control flow of lines to enable social distancing for students coming through the dining facilities.

While many of these measures are compromises to the social experience of being part of a campus, they are aimed at increased safety for students and staff. It is the careful communication of these strategies to families that will give them confidence to send their students to campus.
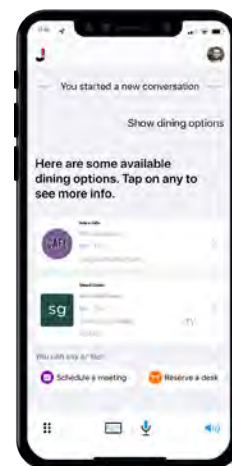
SCHOLARSHIP & RESEARCH

Research participation is a major component of both the student and faculty experience; while most research is team-based, the physical settings for experimentation are relatively low density. Where class labs typically have one occupant for every 50 square feet, research labs may have as much as 200 square feet or more.

- Recognize the inherent benefits of the research lab model—low occupant density, and **high-ventilation and air change rates with single-pass air**. Social distancing should be possible in most contemporary lab facilities using 6-foot benches.

- Research is notoriously unscheduled; consider treating research as a scheduled activity with regular hours and **syncopated schedules**, or "shifts".

- Observe personal protective equipment recommendations for laboratory bio-safety level and additional guidelines per the CDC.

- Expand current decontamination polices to include **regular cleaning** of shared equipment and surfaces.

BUILDING SYSTEMS

Campuses represent a broad range of building systems, and HVAC designs, but there are general strategies that can be applied at the campus scale.

- Disable demand controlled ventilation to keep outside air at design airflows, which does not reduce ventilation airflow based on occupancy.

- **Improve filtration to MERV 13**, or the highest MERV rating that can be accommodated in the filter rack, and seal edges of the filter rack to prevent bypass.

- **Operate HVAC 24/7** to dilute and filter pathogens during unoccupied hours. This also keeps building RH down, which can otherwise increase above 60% overnight and over weekends when it is humid outdoors.

- Employ portable room HEPA filters, however, they may be too loud to deploy in learning environments when occupied.

- Consider UVGI in high risk areas or for systems serving high risk spaces.

HEPA FILTRATION

OPTIONAL INLET COLLAR FOR DUCTED APPLICATIONS

PRE-FILTER ACCESS DOOR FOR DUCTED UNITS

MERV 4 WASHABLE PRE-FILTER STD. FOR NON-DUCTED APPLICATIONS.

ECM

DISCONNECT SWITCH

INTEGRAL HANGER BRACKETS (4)

DIGITAL SPEED/ AIRFLOW CONTROLLER

STAINLESS STEEL WELDED PLENUM

FILTER (HEPA/ULPA)

ALUMINUM PERFORATED FACE WITH QUARTER TURN FASTENERS
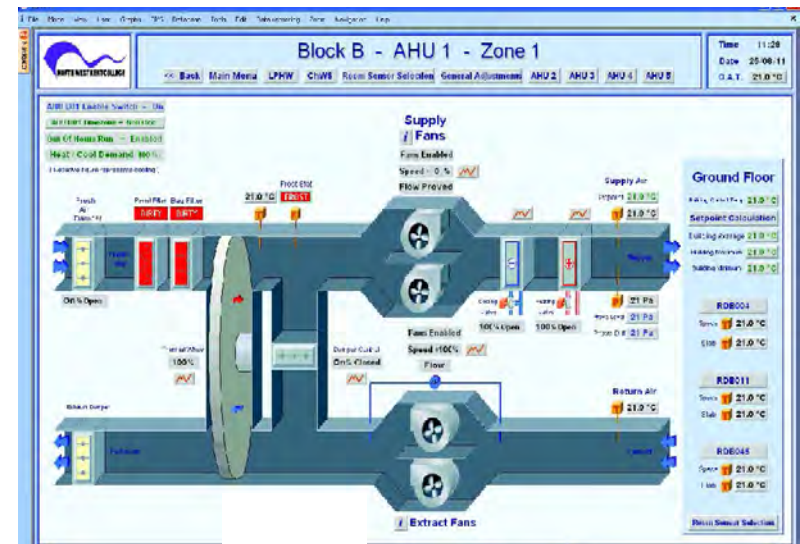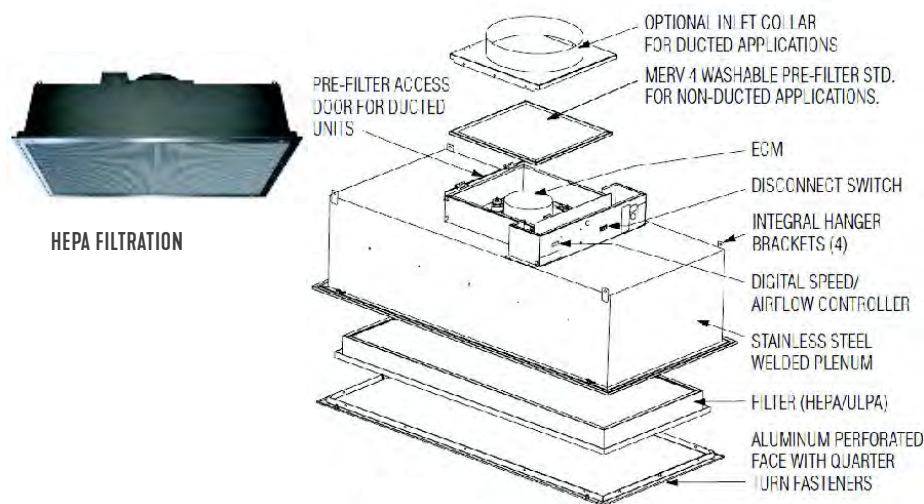
AIRBORNE PATHOGENS - THREAT RESPONSE MODE

WEIGHING THE BENEFITS

Many solutions currently being discussed involve greater expense, such as stipends for faculty to redesign their coursework for online learning, greater cleaning of classrooms and facilities, longer hours in dining facilities, as well as reduced revenue. Remaining, however, is the opportunity for **long-term, positive changes to optimize the use of space,** focus on a more effective educational experience, and maximize the value proposition for each institution. In many instances, the events of early 2020 have identified areas in which campuses can not only adapt to shifts in demand, but instead lead the way for the future. The forced acceleration of investment in the campus of the future provides a silver lining in that the post-COVID campus may be one of the **best places** to be should any future pandemic arrive. Furthermore, campuses can—and should—have comprehensive discussions around modernization and fiscal efficiencies that preserve the institution's values—and value proposition—for years to come.

...the events of early 2020 have identified areas in which campuses cannot only adapt to shifts in demand, but instead *lead the way for the future.*

Legend — Effectiveness: Negligent (light green), Somewhat Effective (green), Effective (blue)
Legend — Level: Low (light yellow), Moderate (gold), High (orange)

Response Strategy	Sunk Cost vs. Long-Term Value		Cost	Level of Risk Mitigation	Impact to Campus Life
	Improves Future Responsiveness & Resilience	Enhances Institution's Long Term Offering			
Disable demand-controlled ventilation	Negligent	Negligent	$	Moderate	Low
Operate HVAC 24/7 to dilute and filter pathogens	Somewhat Effective	Negligent	$$-$$$	Moderate	Low
Employ portable HEPA filters in specific spaces	Somewhat Effective	Negligent	$$-$$$	Moderate	Moderate
Limit housing to single occupancy	Somewhat Effective	Negligent	$$$-$$$$	High	Moderate
Dedensify faculty office	Somewhat Effective	Negligent	$	High	Low
Dedensify campus recreational facilities	Somewhat Effective	Negligent	$$	High	High
Adopted scheduled hours for research	Somewhat Effective	Negligent	$	Moderate	Moderate
Improve HVAC: MERV 13 filtration where possible	Somewhat Effective	Negligent	$$$-$$$$	Moderate	Low
Lengthen/stagger class change periods	Effective	Negligent	$	Moderate	Low
Form residential agreements with nearby hotels	Effective	Negligent	$$-$$$	High	High
Control ingress/egress into all facilities	Effective	Negligent	$$	High	High
Increase frequency of room cleaning	Effective	Negligent	$$$	High	High
Eliminate self-serve & stagger dining times	Effective	Negligent	$	Moderate	Low
Adopt work from home policy, where possible	Effective	Negligent	$	High	Low
Restructure RA discounts	Effective	Negligent	-$	Low	Moderate
Facilitate stricter application of residential college/cohort	Somewhat Effective	Somewhat Effective	$	Moderate	Moderate
Emphasize on small group/breakout instruction	Somewhat Effective	Somewhat Effective	$$	Moderate	Moderate
"Hybridize" courses: virtual and physical engagement	Effective	Effective	$$-$$$	High	High
Increase emphasis on recreation for socialization	Effective	Effective	$$	Moderate	Low
Provide "focused" menu options	Effective	Effective	$	Low	Low
Offer to-go items designed for res hall kitchens	Effective	Effective	$	Moderate	Moderate
Food delivery & options sized for socialization	Effective	Effective	$$-$$$	Moderate	Moderate
Mobile crowd-source work order placement	Effective	Effective	$	High	Low
Mobile room-booking technologies	Effective	Effective	$	High	High
Increase visibility of facilities staff	Effective	Effective	$	Moderate	Low

CAMPUS OF THE FUTURE

A resilient campus can leverage planning and technology to quickly adapt operations with as little disruption as possible. While the behind-the-scenes planning and actions to rapidly transform a campus into a safe space during times of uncertainty are immense, the end-user experience should be seamless. The following illustrates a student's typical day on your future resilient campus.

A STUDENT'S DAY-IN-THE-LIFE ON A RESILIENT CAMPUS

8:25 AM
Head to the residence hall lobby to pick up grab-and-go breakfast that was delivered by campus food service since the dining halls are no longer open for breakfast.

8:00 AM
Use my assigned bathroom pod to shower and get ready for class. Wow, this bathroom has been really deep cleaned overnight.

7:45 AM
PUSH NOTIFICATION
Receive results from yesterday's on-campus monthly CV Test. Time to get up and start the day.

9:02 AM
Arrive at ECON255 in person today. Classroom is cleaned, furniture removed so the seats are 6 feet apart. I follow the arrows to my seat overhearing my commuter friends talking about the lack of traffic and loads of empty parking on campus.

10:15 AM
Class finishes, we are let out in staggered times…have to head back to the residence hall because social spaces are limited and don't allow hangouts between classes. I'm following the arrows on my way back to the dorm.

11:30 AM
Arrive at PHIL201 online. Remind my roommate to use headphones for their class.

4:30 PM
Work session took forever. This Econ professor assigns way too much work! I send a notification on the app to UFacilities that we are done with the room, and they can do their cleaning.

2:45 PM
PUSH NOTIFICATION
Work room in the Student Union is ready. I meet up with my ECON255 work group, most of whom commute, to work on the problem sets using a room with 2 whiteboards. We take a photo of our work, which autoconverts to text, and upload to the class website.

1:04 PM
Eat lunch at my designated time with my eating group in a socially distant outdoor dining area. Sit next to my ECON255 group-mate, 6 feet apart. Chicken tenders are healthy, right?

5:00 PM
Time for Spanish Club virtual meeting. Zoom with fellow members practicing our Spanish while day-dreaming about our upcoming spring break trip to Mexico City!

6:00 PM
PUSH NOTIFICATION
My residence hall has been sterilized. I can now go home.

7:17 PM
Dinner has arrived! The famous "Campus Protein Bowl." Who knew on-campus delivery would be one of the perks of the semester?

8:49 PM
Parents are trying to Facetime me…I better face the phone away from the mess in my room.

12:45–1:00 AM
PUSH NOTIFICATION
Homework is finished and uploaded to the PHIL201 professor's portal.

Time to go to bed. I'm up early for a group run the hills outside of town. I had no idea how pretty it is up there.

11:30 PM
Ok. I must start my homework . . . finally

10:55 PM
PUSH NOTIFICATION
Your Pizza Is waiting in the lobby.

10:30 PM
Time for a late-night snack: "Alexa: Order a medium pizza with olives delivered to my dorm."

9:15 PM
I should do homework but time for a FIFA match on the XBox.

EMERGENT IDEAS

Our goal in outlining these range of considerations is to support you as you develop your roadmap to return to campus.

What is the right model for your campus? How do you make the final decision? How do you set priorities?

We know that students are also making decisions and are developing alternative plans while they wait for their preferred schools to make final decisions. McKinsey[3] reports that 21% of students and their families are considering changing the first choice school.

From our conversations with campuses across the country, we are finding a series of themes emerging regarding their decision-making processes:

- New **cross-campus partnerships** have been formed to quickly build consensus with diverse perspectives.

- **External partnerships**, with other institutions and industry partners, to support technology and/or housing needs.

- **Data gathering** from students and faculty. A range of approaches exists. Some have surveyed students extensively. Others have taken a more personal approach and are contacting students individually.

Each institution—from Open Access to R1 schools—will arrive at their unique solution that is consistent with their mission and the culture of their campus. Once these decisions have been made, their communications plan will be critically important: to help students make their final decisions about returning and then, once the semester begins, to express the importance of all measures being taken. The high-level strategies on the next page outline the level of mitigation, relative cost, and impact on campus life. Each will have a distinct impact, but a clear communications plan will help reinforce new, healthy behaviors.

Moving beyond the COVID-19 crisis, the pandemic impacts will undoubtedly create long-term financial distress for many universities. To survive and thrive will require these institutions to re-imagine and re-engineer how to provide the services necessary to meet their mission in a way that is financially sustainable. This will necessitate innovating to do more with less and establishing resilient structures that enable the delivering education in varied models while maintaining a focus on the student experience.

To successfully navigate towards the "next normal" will require holistically evaluating the interrelationships between people, education and research delivery processes, the physical environment, the use of technology, and financial realities. This process should begin by examining lessons learned from this interim period as society reopens with the virus's threat still present. From this vantage, institutions can determine which strategies deployed during the initial immediate need are no longer needed and which have resulted in durable innovations that should be adopted for the long term.

To navigate an institution's unique combination of issues and opportunities and work towards new innovative, integrated strategies that are agile, cost-effective, and resilient is best empowered by co-developing solutions utilizing multi-disciplinary teams that include experts from education and research, architecture and engineering, real estate and facilities, information technology; human resources and finance. It is for this reason that JLL and SmithGroup have partnered to develop this roadmap and to be available to further formulate integrated solutions for our clients.

CITATIONS

[1] SmithGroup. *Designing for the T-Shaped Student.* "Retrieved from https://www.smithgroup.com/perspectives/2018/designing-for-the-t-shaped-student"

[2] ACUHO-I. (2020). *COVID-19 Response Survey Results: An ACUHO-I Data Report on the Operational Response of Campus Housing Departments in the U.S. and Other Countries.* "Retrieved from https://www.acuho-i.org/Portals/0/Research/Strawpolls/FINAL_COVIDReport.pdf"

[3] McKinsey & Company. *COVID-19 and US higher education enrollment: Preparing leaders for fall.* (2020). "Retrieve from https://www.mckinsey.com/industries/social-sector/our-insights/covid-19-and-us-higher-education-enrollment-preparing-leaders-for-fall"

Design a
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