

## Premise: Re-Thinking Workplace Design in the Post-COVID Era

Ben de Rubertis // May 2020

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## INTRO

Epidemiologists study the course of infectious disease with an eye to understanding and mitigating impacts to human populations. Planners and designers have up to now thought of our roles as upstream from these concerns, but that will need to change if we want our services to deliver value going forward. There are three key aspects to this. First, we must understand how design can be responsive to outbreak and correctly frame the problem. Second, we must consider the fundamental value of workplace resources; how work enhances our capabilities and allows us to develop ourselves more fully as individuals and peers. Third, we must engage our communities, clients, and our leaders and embrace a strategic role that serves the multiple adjacent issues to workplace design. In summary, values are our guideposts: by looking more critically and deeply into why we gather to work together, we can create a new toolkit for a new design era that helps our society to seize the opportunity to develop a healthy and resilient workplace.

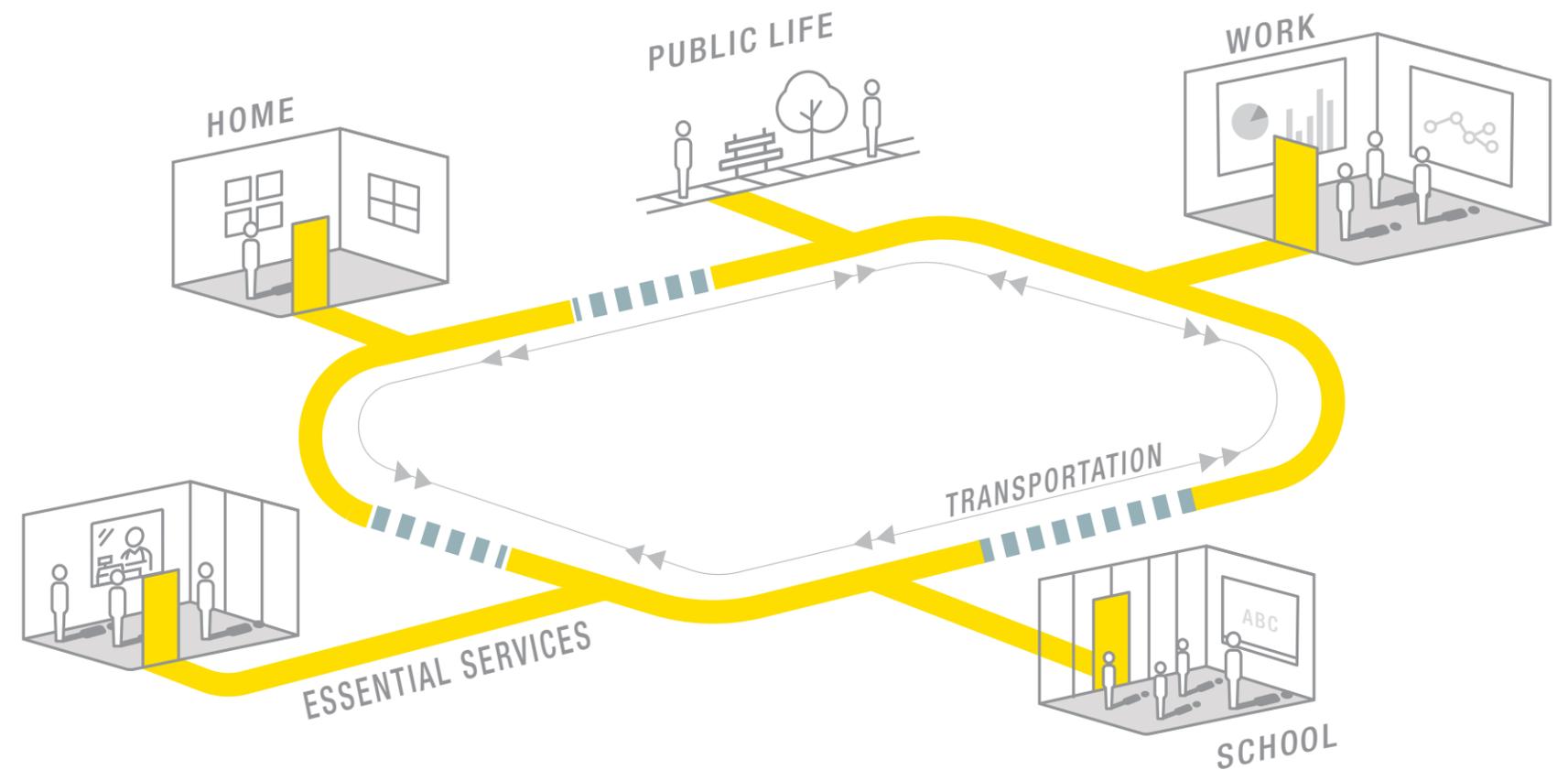


*THIS IS NOT THE END.  
IT IS NOT EVEN THE  
BEGINNING OF THE END.  
BUT IT IS, PERHAPS, THE  
END OF THE BEGINNING.”*

*– WINSTON CHURCHILL*

## FRAMING THE DESIGN PROBLEM

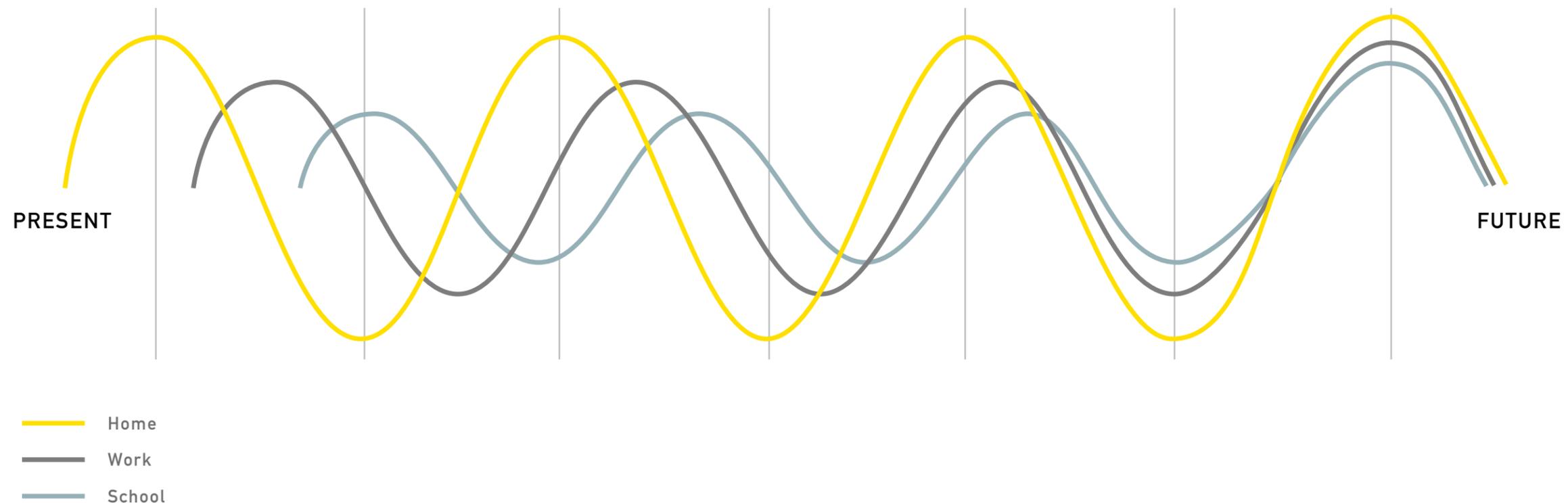
In modern times there are no examples of an external problem that fundamentally alters the approach to design across all disciplines and typologies. The COVID-19 chapter of design requires a re-framing of the question of workplace to include adjacent issues of work life. In his public task force address on 4/21, Governor Andrew Cuomo spoke about the need for policy to link together disparate elements of the workplace. Healthcare, transportation, education, and workplace cannot not be solved independently. The workplace is inaccessible without consideration of public transit, and the workplace would not be effective or equitable without schools open for children to attend while their parents work.



# 05



To solve for only one modality would be a waste of resources, because it would fail to address the risks entered in adjacent modalities and between modalities. For instance, we need to understand not just how to apply social distancing criteria at work, but also how to arrive by bike, store the bike, shower, and dress to manage the risks entered in both tasks. Sustainability of approach is another risk: it would be ineffective to design facilities to criteria that are still in flux. For architects and planners considering the questions around designing sustainably in this era, this observation serves as a fundamental problem definition. At this moment, behavior is the most effective, inexpensive, and quickest path to change, so we acknowledge that part of our task is to design a new set of behaviors, new habits that will transpose across life's modalities. Workplace designers can and should be harvesting approaches in school design and in best practices of health care. The good news is that these modalities can share many common patterns and those patterns can help us to reinforce healthy and sustainable behaviors during periods of outbreak. Design practices which overlap in one or more of these areas can pool resources and take a cross-disciplinary approach that helps clients and communities to move more quickly and with greater confidence. All these risk modalities concern the body moving through space – by assessing the relative levels of risk using the public health resources, we can design places to safely and equitably accommodate new behaviors.

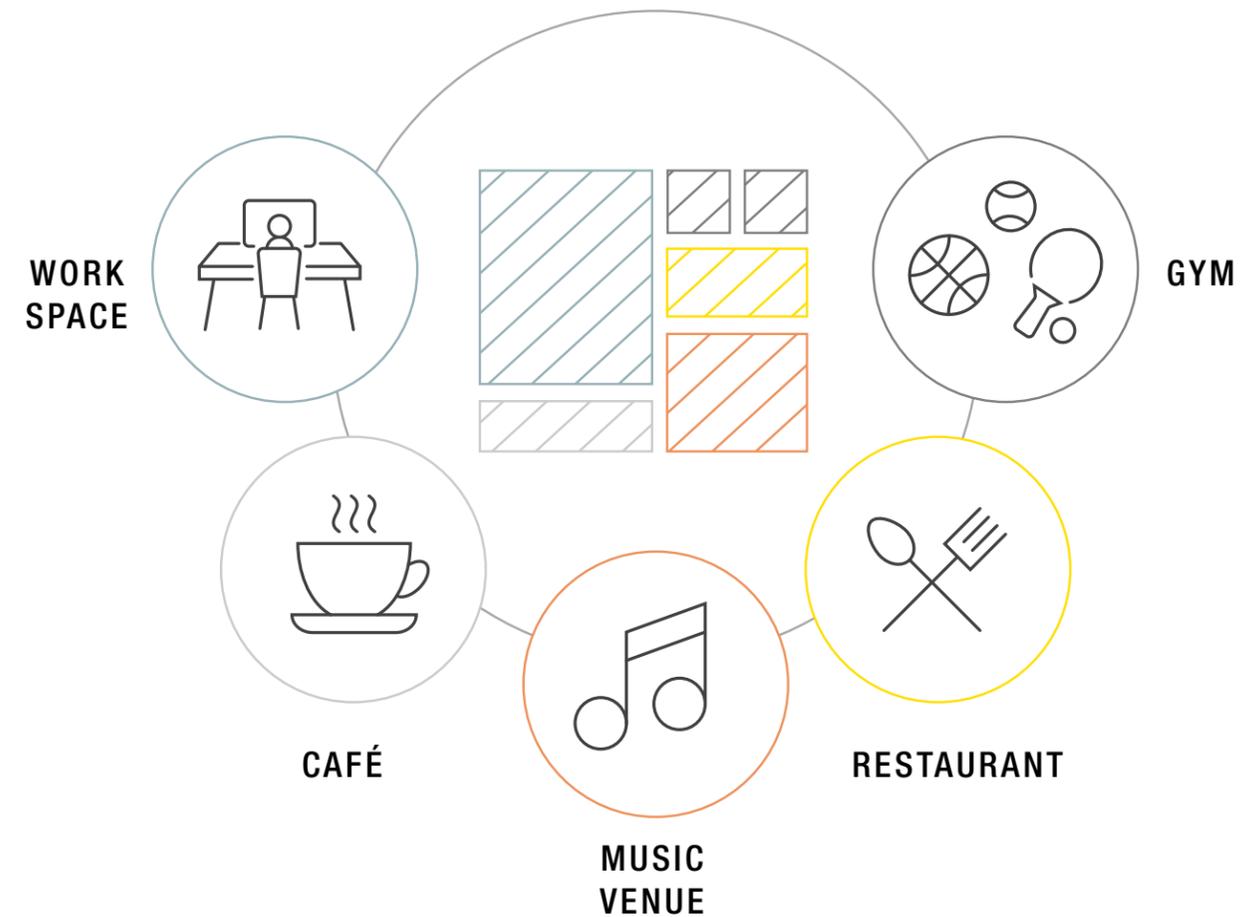


# 06 —

## CONSIDER THE WORKPLACE AS A RESOURCE

Work, the noun, conventionally came to mean the office. Once you got to the office, all aspects of work life pinwheeled from it, with the early days of design including food service, the comfort and privacy of the office cubicle, and the activities room, then gradually ushering in the library, child-care, and dry-cleaning service. This has only expanded in the last 20 years, driven by the belief that the work culture rivals the work itself in attracting talent in key positions, so much so that many aspects of community life are now being provided at work: cafés, bars, restaurants, mini-museums, and even music venues. For the past few years, designers have been exploring how to integrate into the workplace the hum and drive of urban environments: so much so that buzz-thrive-excite amenities of today's workplace are now more directly tied to their urban antecedents than to the cafeteria-lounge-kitchen offerings of yesteryear.

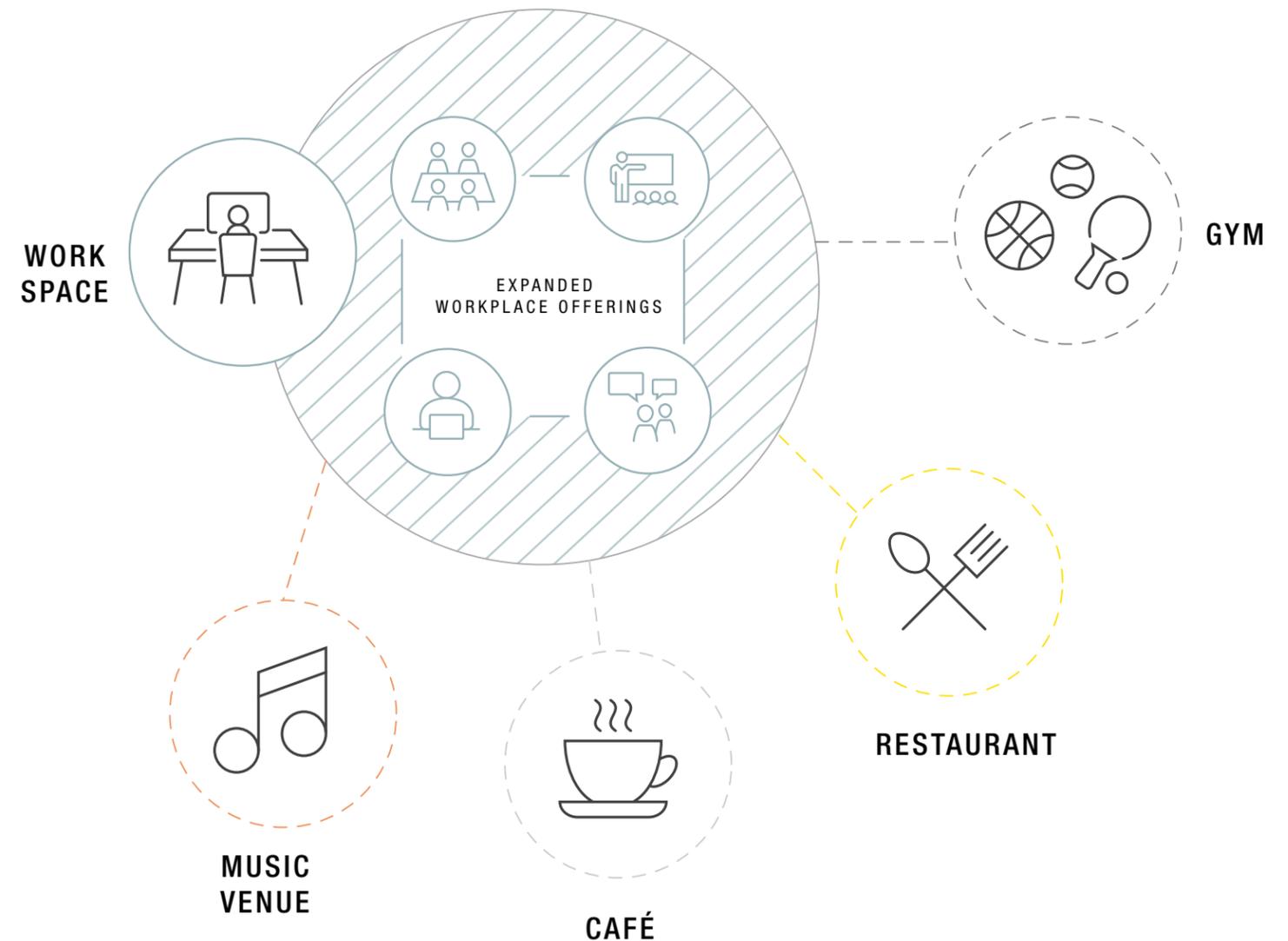
## SELF-CONTAINED WORKPLACE



# 07 —

The outbreak of COVID-19 is already inculcating a different view of the workplace as a culture-giver. Rather than the humanizing of the work environment, we may see an acceleration of the inverse: making civic life more work-ready. When the workplace is seen as a resource deployed to achieve organizational needs, it would come under the same expectation as any other resource. We naturally grumble at the inefficiency of the web-based meeting, but it should logically be measured against other impacts: air and water pollution, time loss in the form of daily commuter travel, and health care costs to treat stress-related illness. If a sizable fraction of the workplace remained in local communities, we might see more resources be developed there to relieve the burden on the home. Transportation systems in turn could be evaluated in the form of capacity modeling rather than imposing time penalties on all users due to a choked system. This would benefit people, places, and the environment. These kinds of changes recognize a core flexibility that phones and computers have introduced but not fully harnessed. When the outbreak began, we still thought of work in the singular sense of the workplace, but since that time, we have seen governments and businesses begin the process of dividing work into essential and non-essential categories. We might choose to see this as a simple rebalancing of expectations around workplace presence. Yesterday workplaces were a pastiche of work and community life. Tomorrow, workplaces could be centers of excellence for work resources, outsourcing community features as complimentary centers of excellence that offer more connectivity and resources.

## EXPERTISE-DRIVEN MODEL



### NEW YORK TIMES:

IS IT SAFER TO VISIT A COFFEE SHOP OR A GYM?

Learn how data can help us measure risk. >

## MATERIALS AND MORALITY

There are a number of materials which are naturally resistant to viruses. These include several premium natural materials: copper, bronze, and several of their alloys. A few synthetic products were specifically developed for use in areas which need to tolerate high levels of cleaning or use of disinfectant, including glass, phenolic resin panels, chemically-resistant surfaces, and abrasion-resistant coatings. Many other products are in development, and many more are likely to follow as research and development catches up with the spike in demand. The strain on health resources around COVID-19, and on resources generally, has not yet been fully assessed, but it is likely that the effects will impact supply chains, meaning the availability, price, and lead times for critical materials sourcing. This is no time to aggressively specify microbial-resistant products for applications which do not

require them. The reasoning for this is twofold: primarily, this is the time to ensure the supply chain is robust for critical functions like hospitals, clinics, and hazardous lab research and testing environments – we should be sparing in the specification of materials and systems that stand to benefit the whole society when used to help provide critical services; secondarily, many of these materials such as glass and metals have a high embodied energy, so their overuse is not sustainable if we are considering potential impacts on climate change and scarcity. Designers and planners are in a unique position of stewardship – by arming ourselves with good information about the use of materials, we can help inform the client community about how to use these materials responsibly.

Extremely High Risk



**HOTEL PILLOW**  
**3 DAYS**

*We will begin to see a key aspect of materials along the scale of transmission risk and cleanability, with negligible transmission risk at the low end, and extremely high risk items reserved for materials requiring judicious use, special cleaning protocols, or perhaps even a new or evolving set of behaviors.*



**COPPER**  
**5 MINUTES**

Negligible Risk

## CONTINUE TO CHAMPION DESIGN VALUES

What we learn about the changing workplace will have a ripple effect on our thinking about cities. By continuing to engage with civic leaders, elected leaders, developers, major service providers, and small businesses, the design professional community can help navigate impacts to municipalities. Helping to lead this effort is important to the regrowth of the businesses and cultural institutions that have always existed in symbiosis with healthy cities. This is not the first instance where cities have faced massive change. The industrial revolution created environmental impacts to cities that took decades to reverse. The resiliency that cities require is economic in nature, and designers can expect to be absorbing policy changes that will take years to implement. *What will the modern workplace be? How much will be virtual? What will “arriving at work” look like in a few years? What strategies will allow more of our institutions to survive and thrive during periods of outbreak?*



The answers may surprise us. Our return to cities and the appeal of urban life was built on convictions that proximity to others is a value unto itself. We have been riding, with some fits and starts, in a 30-year building boom, so the answer to these questions is unlikely to reside in new buildings: sharpening our approach to adapt existing resources to tomorrow's needs will be critical. We believe that good things happen when we gather, and it has fueled investment in the public realm, in institutions, and in connectivity that has remade our understanding of town and city. This investment and, more importantly, the values that undergird it, need not be abandoned. But we may see wholesale changes in real estate that we have not seen up to now. It is imperative that architects and planners be able to implement sound principles of adaptive reuse, sustainability, urban placemaking, and demographic shift that accompanies workplace change.

## **NEW YORK TIMES:**

### **THE CORONAVIRUS IS SHOWING US WHICH ENTREPRENEURS MATTER**

The owners of hair salons, bike shops and delis are stepping up to help their communities, all while wondering if they'll make it. 

## **COLLECTIVE IMPACT**



**ASSIST COMMUNITIES WITH READINESS:  
CONSIDER SPONSORING AN INSTITUTION  
THAT NEEDS SUPPORT.**



**DEVELOP DESIGN SOLUTIONS WHICH COMBINE  
TECHNOLOGICAL EFFICIENCIES TO REDUCE  
STRAIN ON HUMAN SYSTEMS AND ECOSYSTEMS.**



**CHAMPION THE NEED FOR AFFORDABLE  
HOUSING IN ALL COMMUNITIES.**



## SUMMARY // A NEW DESIGN ERA

There has never been a better time for architects and planners to be seated at the table than today. The 20th century provided myriad examples of our ability to navigate rapid and unexpected change. The present moment has issued in a societal shift requiring us to work remotely for an extended period, and the findings will be studied and debated for years to come. The sudden, rapid change has afforded us the ability to see challenges and opportunities in a wholesale reduction of car travel, air travel, and consumption. What can we learn from this? We stand to uncover a set of design principles that defines a new era of thinking about workplace. How can we do this?

*We can start by engaging our client community to better understand impacts of the changes to work modalities and how organizational design and behavioral design influence physical design.* As a profession we must overcome the temptation to define our work around form and materials and consider how strategic planning influences tangible design decisions. Finally, design agencies should strongly consider open-sourcing strategic work unless we are precluded from doing so. This pandemic affects us all. It exposes the degree to which our outcomes are tied to the outcomes for all industries, for all of life's modalities. For small companies, outposts, and institutions, our work could represent an affordable point of entry for thinking through dilemmas we face together.



*IN THIS ATMOSPHERE, ECONOMIC RESILIENCE WILL BE MORE VALUED THAN MAXIMIZED EFFICIENCY. WE'LL SPEND MORE TIME MINIMIZING DOWNSIDE RISKS THAN MAXIMIZING UPSIDE GAINS. THE LOCAL AND THE ROOTED WILL BE VALUED MORE THAN THE DISTANTLY NETWORKED. WE'LL VALUE COMMUNITY OVER INDIVIDUALISM, EMBEDDEDNESS OVER AUTONOMY.*

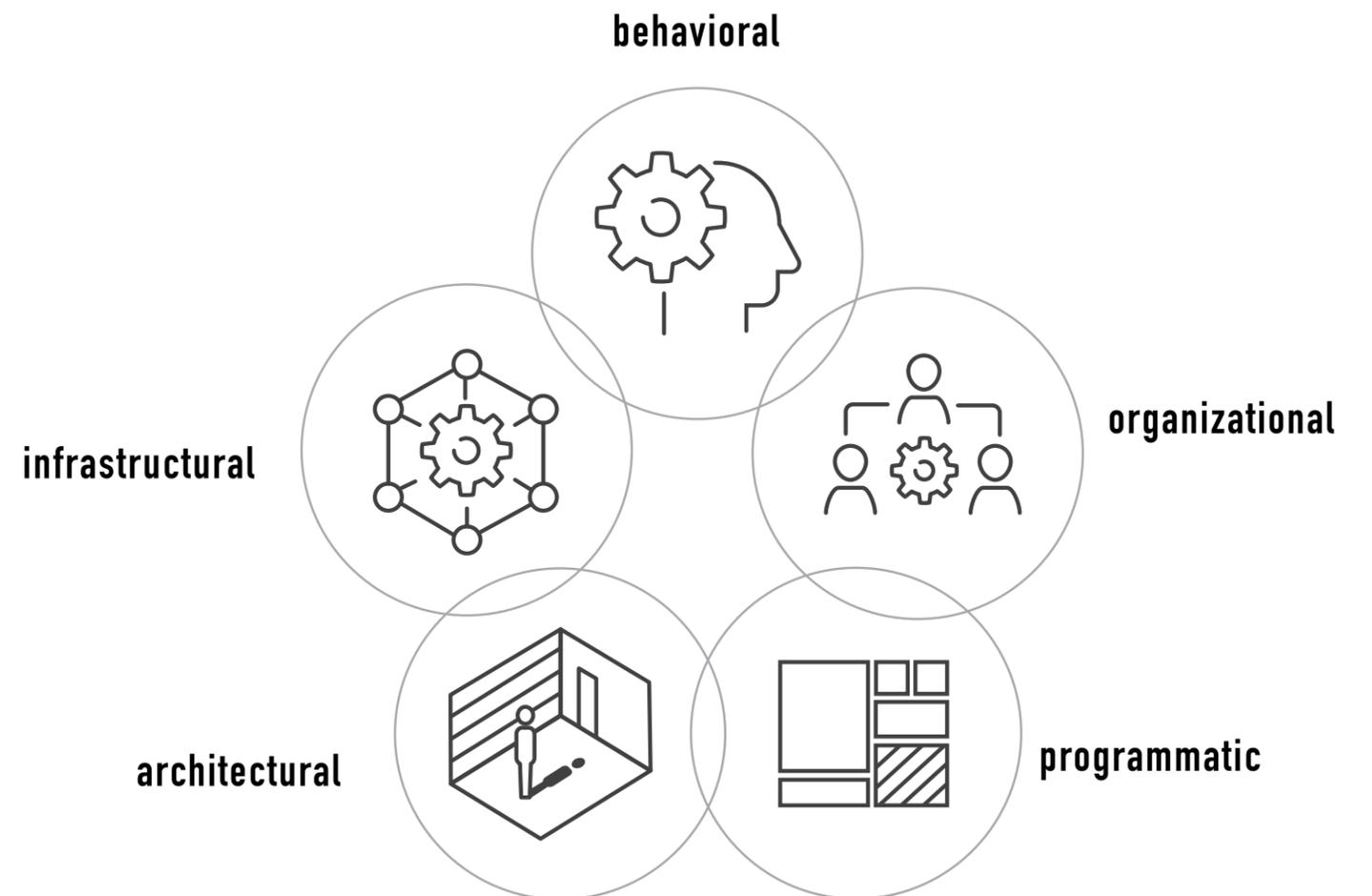
*- DAVID BROOKS*

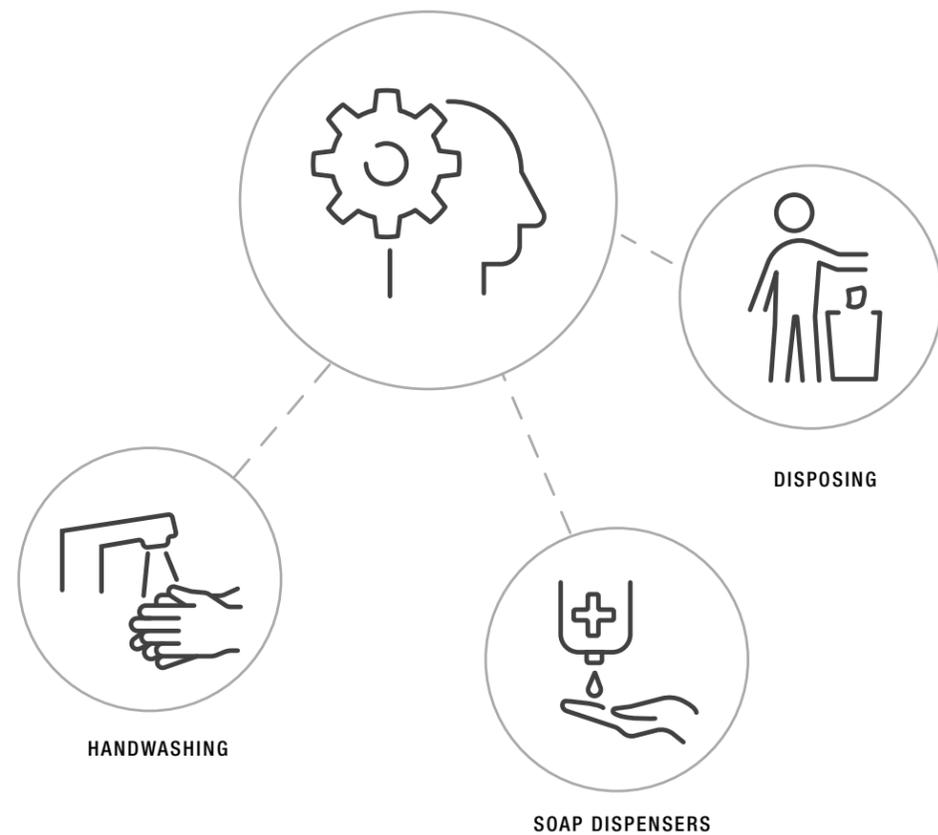
## RISK MITIGATION

### CASE STUDY // WORKPLACE FLEX

For a biotech client with limited ability to schedule downtime, and processing throughput needs that accelerate during outbreak, the approach to staying on the job safely is paramount. The planning and design efforts were in a relatively early period of development and so the design team used the opportunity to study the work group needs and how to address them with a combination of approaches, including:

- converting amenity space to temporary desking
- developing arrival and departure protocols
- laboratory blood and tissue handling
- remote desking and meetings with partial teams of on-site workers
- mental health, workplace morale, and essential culture





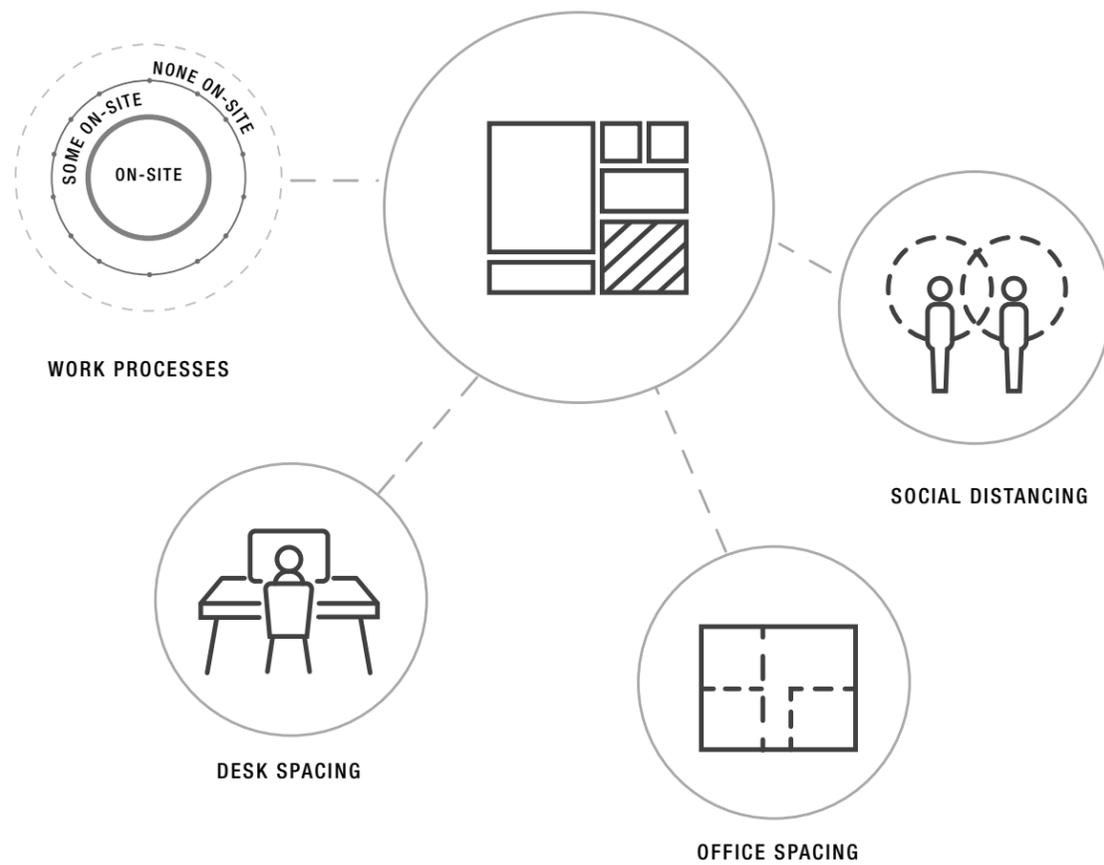
## BEHAVIORAL

- Conduct body inventory – a daily, honest self-reporting of symptoms and vulnerabilities
- Accept guidelines – recognize freedoms are elastic during periods of heightened risk
- Work within the new workplace norms
- Address ergonomics at remote work locations



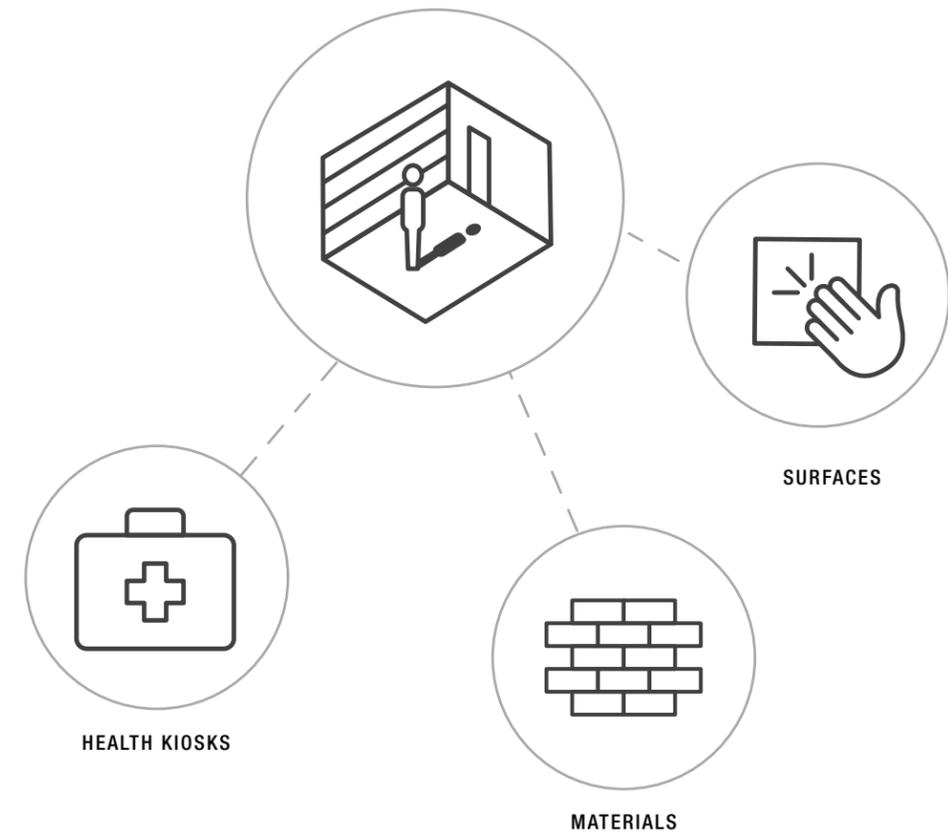
## ORGANIZATIONAL

- Develop policies that are responsive to evolving criteria from CDC, state and local government
- Establish essential and non-essential processes at work
- Promote equitable work patterns for on- and off-site (WFH) workers
- Implement safety provisions and provide guidance



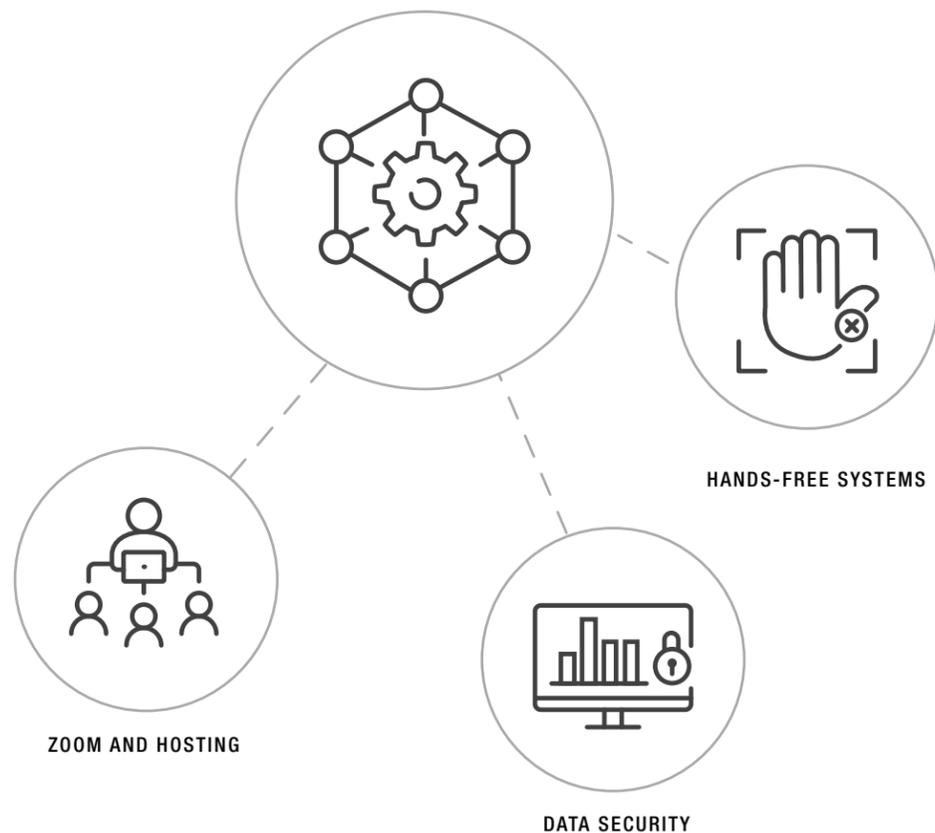
*PROGRAMMATIC*

- Adopt appropriate metrics for occupancy under social distancing guidelines
- Incorporate resources and hygiene criteria that allow workplace resources to be used safely



*ARCHITECTURAL*

- Help government and leadership to focus resources in areas of greatest need
- Develop site-specific master planning for return to work
- Assemble best practices and consider open-sourcing your thinking when possible
- Specify materials and systems judiciously to limit spread of virus in high-touch areas



## INFRASTRUCTURAL

- Adjust mechanical service to allow for safe occupancy in all areas
- Disseminate virtual work resources and provide troubleshooting
- Secure data and data processes

## CLOSING

Design has always comprised elements of risk mitigation. Health, safety, and well-being may come to include best practices on how to limit transmission, but it is important to recognize we are at the early stages of the learning curve. Many approaches and techniques will endure, and some will fall by the wayside. Our constant companions through all of the analysis, all the trial and error, are our values. It is important to understand how to gather safely, but it is vital to understand why we value community and how to manifest it equitably, safely, and beautifully. The next installment in this series on workplace design is a case study for the scientific workplace in the post-Covid era: a biotech client with limited ability to schedule downtime, processing throughput needs that accelerate during outbreak, and paramount approach to safely stay on the job.

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