

DAGspace

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The Surge Facility of the Future

by Kevin Block

Kevin Block is a historian of the built environment who returned to the Philadelphia area, where he grew up, after completing his doctoral training at UC Berkeley. He looks forward to attending his first DAG meeting sometime in the near future!



The Liacouras Center at Temple University, converted to a surge medical facility
Betsy Manning, Temple University

In mid-April, local city officials and Temple University administrators converted the Liacouras Center, the 340,000 square foot home of the Temple Owl basketball programs, into a 200-bed Covid-19 “surge facility.” The Centers for Disease Control and Prevention and the U.S. Department of Health and Human Services delivered the medical supplies.

Members of Pennsylvania Task Force 1, a FEMA group of first responders that, since 9/11, has only deployed in the aftermath of hurricanes and floods, completed the \$5 million conversion. In just over three weeks of operation, this impressive example of pop-up architecture only received 14 patients. It was broken down after the first week in May, although the public health crisis continues.¹ Nobody knows if this space will be needed again in the future.

The use of stadiums and arenas like the Liacouras Center as Covid-19 surge facilities has been a global phenomenon, as depicted in a recently published photo-essay in the *New York Times*.² In Brazil, Japan, and France, from the Rose Bowl in Pasadena to CenturyLink Field in Seattle, sports facilities have become testing centers and temporary hospital wards, just like on North Broad Street. Icahn Stadium on Randall Island in New York City is even serving as an overflow morgue. Rory Smith notes in his introduction to this NYT article, “It is in these stadiums, these soccer fields and ballparks and basketball courts, that we see the old world--the one in which sports could exist, in which we could be together--juxtaposed, most starkly, against the new. The buildings and the architecture are the same; what they are for, what they mean, could not be more different.” The celebratory has become the precautionary. The cathedrals of sport have transformed into our places of refuge.

Now that the pandemic has (perhaps momentarily) subsided and the first responders have gone through the expensive exercise in preparedness, what lessons can the design community draw from the temporary conversion of these athletic facilities into healthcare facilities? How can members of Philadelphia’s design community help emergency responders and healthcare workers plan for the use of stadiums and arenas as surge facilities in the future? Below are some preliminary thoughts, to get the conversation started.

1. Define “Surge Facility”

First, let’s try to define what constitutes a “surge facility.” Like the phrase “flatten the curve,” the term is a new addition to the popular lexicon. No definition appears on the website for Philadelphia’s Office of Emergency Management (OEM). Neither does “surge facility” seem to have been a widely used term in architectural discourse prior to Covid-19. According to the U.S. Department of Health and Human Services, a “medical surge” is the mustering of resources “to provide adequate medical evaluation and care during events that exceed the limits of the normal medical infrastructure of an affected community. It encompasses the ability of HCOs [healthcare organizations] to survive a hazard impact and maintain or rapidly recover operations that were compromised (a concept known as medical system resiliency).”³ In other words, a “medical surge” is not the emergency itself but the response to the emergency. This is a somewhat vague, functional definition that tells us little about what makes one building type better or worse than another for conversion into a surge facility. Perhaps there is a more precise definition somewhere out there on the internet, but I haven’t been able to find it. I’ve also encountered the phrase “alternate care site.” Clarifying how we talk about these spaces will help us improve their design.

Why was the Liacouras Center used as a surge facility and not, for example, the Philadelphia Convention Center? In New York, first responders and healthcare workers converted the Javits Center into a surge facility, not Madison Square Garden or the Barclays Center (where the Brooklyn Nets basketball team plays). What makes one facility better than another? We want to make sure that the best facilities are available for emergency use, and not just those whose owners are most willing to work with the city. Maybe one kind of facility will perform better in the aftermath of a hurricane but not as well during a pandemic or following a terrorist attack. In the case of Covid-19 in Philadelphia, the city was able to broker a deal with Temple but not with the owner of the old Hahnemann Hospital. Before we celebrate one owner and vilify the other, let's try to make a normative assessment of which facilities *should* be made available to the public based on the kind and severity of the emergency.

The discipline of architecture includes a rich history of temporary and pop-up architecture, including the pavilions of world fairs and international exhibitions. We shouldn't let the hydrological metaphors that structure our thinking around surge facilities dam, as it were, our capacity to reimagine a safer, more comforting, and cheaper emergency facility in the future.

2. Engage Philadelphia's OEM; learn from our experience

I'm not going to pretend to know how to design and operate a surge facility. Luckily, Adam K. Thiel (Director), Dominick Mireles (Deputy Director of Operations), and the staff of Philadelphia's Office of Emergency Management are responsible for this task. Let's encourage the OEM to make publicly available an assessment of the conversion of the Liacouras Center into a surge facility so that groups like DAG can review the facility's design and conversion protocol and submit suggestions for improvement. Perhaps a representative of the OEM would be willing to attend a DAG meeting and tell our group about the experience of converting the Liacouras Center. A representative of the Vitetta Group, which designed the building, might participate.

3. Prepare our sports arenas to serve in future surges

Since we can safely assume that sports stadiums and arenas will be used as surge facilities during future emergencies, they should be designed or renovated with this temporary use in mind. There are two premises to this proposal. First, stadiums and arenas are effectively public buildings, no matter how they are financed. Second, stadiums and arenas, because of their size and clear-span design, are multi-purpose facilities, whether they've got artificial turf in them or not. From these two premises we should insist that surge facility use be included in any new stadium packages negotiated by the city and the owners of the professional sports franchises, especially if taxpayers will be footing any portion of the construction or renovation bill. Perhaps this would entail providing a certain amount of flexible space that is readily convertible or a particular kind of emergency infrastructure. This would all be up for discussion. Let's start that discussion now.

¹ Morgan Zalot, "Watch: Temple's Liacouras Center Is Transformed into a Medical Facility," *Temple Now*, March 30, 2020, <https://news.temple.edu/news/2020-03-30/watch-temple-s-liacouras-center-transformed-medical-facility>; Max Marin and Nina Feldman, "Philly Spends \$5 Million on Coronavirus Surge Hospital That Admitted 14 Patients," *Billy Penn* (blog), May 4, 2020, <https://billypenn.com/2020/05/04/philly-spends-5-million-on-coronavirus-surge-hospital-that-admitted-14-patients/>.

² "The World's Stadiums Become a Lifeline," *The New York Times*, May 1, 2020, sec. Sports, <https://www.nytimes.com/interactive/2020/05/01/sports/coronavirus-world-stadiums-arenas.html>.

³ "What Is Medical Surge," Public Health Emergency, February 14, 2012, <https://www.phe.gov/Preparedness/planning/mscc/handbook/chapter1/Pages/whatismedicalsurge.aspx>.