



CAMPUS FORWARD

Transformative Places for Learning,
Research and Engagement

SMITHGROUP



Design a Better Future

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Transformative Places for Learning, Research, & Engagement

The Twenty-First Century initiated a period of profound change in higher education; traditional models of funding, governance, delivery, accountability, and campus life are all being challenged. CampusForward is an exploration of the physical planning responses to an evolving enterprise. Our team of architects, engineers and planners is tracking the trajectory of higher education over the next twenty years to envision new facility platforms across all scales—campuses, buildings, individual spaces—for teaching, learning, and knowledge creation.

It is important to SmithGroup to understand our client's history and unique context. With this foundational knowledge, CampusForward considers how the current drivers of change in higher education have the potential to shape the future of physical space at our client's institution. As a design practice, we want to consistently remain focused on what is ahead, challenging the current models and collaborating with our clients to forecast how their campus and their students' experiences will evolve over time.

In June 2017, SmithGroup convened a discussion around the CampusForward construct with 21 administrators, facilities directors, architects, and planners. This document serves as a summary of that conversation and a springboard for continued exploration.

OUR PROCESS

1 IDENTIFYING THE INSTITUTION TYPES

Integral to our approach, we looked at the types of constituent universities that comprise the higher education ecosystem through literary review, engaging our research advisor, James Hyatt, and our professional experience in planning and designing for over 400 higher education institutions. Categorizing the institutions allowed us to look more specifically at the varying levels of impact each driver of change has on each institution type.

2 UNDERSTANDING THE DRIVERS OF CHANGE

Working again with our research advisor, SmithGroup sought an understanding of the drivers of change impacting higher education today and into the future. Through literature review and interviews with a number of leaders within the established institutions of higher education, SmithGroup identified the disruptors reshaping higher education. The findings are now synthesized into a framework, which provides analytical categories for describing and responding to change.

3 TESTING THE WATERS

SmithGroup convened a group of attendees at the SCUP Annual Conference in Washington, DC to share the initial findings of these first two steps and to discuss these questions:

1. Does the proposed framework reflect the experience of the group?
2. Are the analytical categories (drivers of change) appropriately descriptive, powerful and flexible?
3. Where are these drivers converging causing a need for a significant change to the physical environment of your campus?
4. What role do facilities play in adapting to change?

4 EXPLORING THE FRINGES

There are a number of pioneering responses to the changing landscape of higher education. SmithGroup will include these more radical perspectives through an additional series of interviews with innovators such as Ben Nelson of Minvera, Christine Ortiz (formerly of MIT), and College for America. These interview findings will allow us to explore disruptive approaches to teaching and learning and the resulting innovations in physical space.

5 TAKING THE LEAP

Finally, SmithGroup will organize regional design forums to analyze the impacts of the changing contexts that are unique to each institution type. These sessions—to be conducted throughout 2018—will explore the evolution of physical space across a range of scales from campus to building to room.

RESEARCH EFFORTS

Research plays a leading role informing our "thinking at scales" when approaching any of our clients' needs. Research initiatives such as CampusForward allows us to find the connectivity of issues impacting institutions across all scales—campus, building, and room—including the surrounding community. We leverage multiple methodologies to gain these insights from different stakeholders including interviews, advisory boards, surveys, and more.

The research efforts conducted prior to the meeting in July uncovered a few surprises, which we tested on the Advisory Board and confirmed through additional research afterwards. To date, CampusForward efforts have relied heavily on interviews conducted with academics, administration, and faculty with various

leadership roles throughout the institution types of broad access, regional comprehensive, high research, and liberal arts plus the CampusForward Advisory Board.

"I think engaging a broader range of design-thinkers in terms of the solution to [the private versus open office] problem may be a way to make that inroad."

ADVISORY BOARD MEMBER

BENEFITS OF A RESEARCH ADVISOR



To broaden our perspective regarding the future state of higher education, we engaged a research advisor to help define a structure for our initiative. James Hyatt, with his comprehensive understanding and who thinks of higher education at a high level, serves in this role.

James Hyatt, Vice Chancellor for Budget and Finance and CFO Emeritus of University of California Berkeley and Associate Director of Center for Studies in Higher Education, has extensive experience as a senior level executive at a number of the nation's major research universities, including UC Berkeley; the University of Maryland, College Park; University of Arizona; and Virginia Tech. Additionally, Jim has been a principal investigator on externally funded research projects in the areas of higher education financial management, financial reporting, pension reform, and campus safety and security. James' breadth of expertise in higher education proved a vital asset in shaping our investigation and further defining the drivers of change.



INSTITUTION TYPES

Knowing the importance of understanding and appreciating the full spectrum of higher education and the variable impact of change according to institutional characteristics, our framework needed to first group institutions into specific types. Distinguishing institutional characteristics include affordability, competitiveness, funding sources, governance, and student experience. Based on our initial literature review and interview discussions, three institution types clearly stood out—broad access, comprehensive, and research.



BROAD ACCESS

Most simply, broad access institutions enroll the majority of US students and at the lowest cost. These colleges and universities have essentially open admissions, serve mostly non-traditional students within the community, and are affordable. Community colleges are the most recognized type of broad access institution.



REGIONAL COMPREHENSIVE

Regional comprehensive universities, funded primarily through the state, offer a range of degree programs focused primarily on undergraduate education with some master programs. Admission is moderately selective, and student population is quite diverse.

"Is there a vision of the future where traditional students entering college for the first time might be actually integrated with returning students focused on career development? If we were planning spaces for 17, 18, 22-year-olds and for 55 and 65-year-olds, would we do things differently?"

ADVISORY BOARD MEMBER



RESEARCH

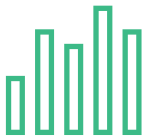
Universities in the US where faculty and graduate students engage in extensive research activities committing substantial expenditures per year funding doctoral research are defined as research institutions. All have graduate programs and state-of-the-art research facilities offering a wide range of majors. Research depends on government and, increasingly, private research and development corporation funding.

PRIVATE LIBERAL ARTS

Independently operating mostly as educational and research nonprofit organizations, smaller private and liberal arts institutions are privately funded and rely heavily on incoming tuition. While some private colleges have a wide range of admission selectivity, they emphasize undergraduate study from sciences to humanities and most often offer a low faculty-to-student ratio. Smaller liberal arts, faith-based, and specialized colleges dominate this institution type.

DRIVERS OF CHANGE

Our initial research efforts identified six, networked drivers of change impacting the evolving enterprise of higher education. Resiliency & Sustainability, the seventh, was added after the Advisory Board meeting at SCUP. The impacts and rate of change vary per institution type and evolve over time; hence the push-pull effect of the networked drivers of change. These disruptors form the basis of the CampusForward framework and have a direct effect on how the physical environment on campus is shaped—today and into the future.



DEMOGRAPHICS & CULTURE

Stagnant enrollment may be the most significant driver of change in higher education. The rapid enrollment growth experiences in the second half of the 20th-century will not be repeated in the 21st. While enrollments have declined, the student population is increasingly diverse in ethnicity, religions, age, and life experience. More than half of all college students are enrolled in community colleges, and all institutions must address a broad range of expectations and needs. Our cultural relationship with higher education is changing. The cost of education, and particularly the resulting debt burden, require graduates to measure the value of a degree in terms of income, not learning.



TECHNOLOGY

The widespread availability of high-quality online content has not yet revolutionized higher education. As frameworks for remote engagement and assessment emerge, however, online learning has the potential to be effective at a global scale, significantly reducing the cost of delivering higher education. Several pioneers, including for-profits, are pursuing visions of technology-enhanced learning in an attempt to upend the academy. Students, too, are driving innovation—demanding continuous access to global social and learning communities and seamless transitions across multiple platforms.



FUNDING

Public sector support for higher education has been dramatically reduced over the past two decades. One of the most tangible results has been the shifting of costs to students and their families in the form of tuition increases. As a result, affordability has become a political issue, with legislators demanding massive reductions to the cost of undergraduate education. Something has to give: states test the limits of support, schools test the limits of tuition, and a large segment of the population is alienated from higher education as it seeks more direct, affordable paths to employment.

"We don't know what's coming. The idea of discussing an open, flexible space is really about preparing for the continuum... the more we make that kind of space so it adjusts to what's coming, the more successful it will be."

ADVISORY BOARD MEMBER





PRIVATE PARTNERSHIPS

Reductions in capital funding have led to expanding private investment in higher education such as the public-private-partnership (P3) development model. Currently emerging on campuses across the United States are private sector industry and community partnerships both in the form of sponsorship of and direct participation in research and scholarship. The growing realization that technical skills and knowledge have limited durability also emphasizes the need for lifelong soft skill assets—such as communication and synthetic thinking. This reskilling occurs in a variety of forms, including continuing education in the health professions and executive education, but has the potential to change the model of lifelong learning.



PEDAGOGY & SCHOLARSHIP

Despite increasing competition for and investment in research faculty, tenure is under scrutiny and the use of instructors and adjuncts across the spectrum of higher education is expanding. Simultaneously, faculty are experiencing rapid change in curriculum and pedagogy. The experiential learning revolution has propagated "flipped" classrooms and "new materialism," which fundamentally links learning to making and doing and potentially raises the need for maker space to support all forms of inquiry. Curricula are being reorganized to promote systems before disciplines, requiring more cooperation between faculty and departments to design and assess integrated learning experiences.





STUDENT EXPERIENCE

Students enter college with a broad range of experience and preparedness. The mission of campus is to make place-based learning an added value for all learners across the demographic spectrum. Institutions assert that learning on campus results in a higher degree of engagement resulting in higher rates of persistence. From this perspective, place matters. Yet, after two decades of competing for the student consumer, campuses are crowded with options for dining, recreation, and residence. The vitality students bring to campus and the adjacent communities is not yet a qualified benefit worth competing for. Just as program and degree options are evolving and offering greater flexibility, many higher education institutions are redefining student life.



RESILIENCY & SUSTAINABILITY

The need to improve an institution's resiliency is growing and is garnering greater attention. Resiliency, the ability to endure and quickly recover from acute shocks and chronic stresses such as climate changes, crumbling infrastructure, and socioeconomic threats, is paramount to higher education's continuance. Activities being explored and implemented include moving towards climate neutrality, developing a sustainability governance structure, partnering with the local community to identify synergistic initiatives and sustainability strategies, and empowering students to be exploratory, to innovative, and to drive sustainability initiatives on campus.



"Every time we do a campus space study we find that 40% or more of our campuses are dedicated to faculty offices and administration, yet faculty occupy the office only 15% of the time. Space utilization is a real challenge, but large, private offices are entrenched in our culture."

ADVISORY BOARD MEMBER



TOP 5 TAKEAWAYS

CampusForward's evolution is, in part, a result of the open and informed dialogue among the Advisory Board participants. The Top 5 Takeaways from the meeting are:

- 1 Place Matters:** Institutions remain committed to learning in place, particularly for undergraduates. Face-to-face learning and student engagement enhance retention and attainment. The campus—as a whole—plays an important role in the formation of individual identity and community.
- 2 Office Utilization is Increasingly Controversial:** Office space is a substantial portion of every campus' space inventory. University leadership and facilities managers are asking if existing office space is appropriately sized and effectively utilized. These voices acknowledge faculty's need for space to concentrate, write, and meet with students and colleagues but are looking to private sector models which promote openness and collaboration while improving real estate utilization.
- 3 Funding has Forever Changed:** While the general economy has recovered, the revenue structure of higher education appears to have changed permanently; public sector funding for operations is historically low and capital funding is similarly scarce. These changes are ushering in a new era in university and industry partnership that will quickly move beyond current public-private-partnership models.
- 4 Disruptions Impact Institution Types Differently:** Institutional responses to change are not uniform, but do seem to vary by type. Broad Access institutions, for example, are at the leading edge of demographic and cultural change, while Regional Comprehensives struggle to maintain enrollment and program offerings. Large Research Institutes feel less demographic pressure, but have significant operational funding risk associated with research. The dimensions of change need to be examined for each institution type.
- 5 Purpose-built Facilities Often Don't Age Well:** Facilities built to satisfy a specific need or technology today may prove to be useless tomorrow as higher education continues through this unprecedented rate of change. The next generation of academic facilities—regardless of typology—will place a premium on flexibility, re-use, and, potentially, recycling to meet needs of our increasingly dynamic campuses.







CAMPUSFORWARD IS NOW PROGRESSING TO OUR NEXT STEP IN THE PROCESS— TAKING THE LEAP.

Through the lens of this framework, we are hosting four design forums connecting the impacts of the drivers of change to the physical space solutions that can set up an institution to thrive in this dynamic environment. Each will be grouped by type to explore the specific rate and strength of changes unique to their institutional characteristics.

Using our proprietary CampusForward Drivers of Change map, we will assess the rate and strength of change on campus. These outcomes narrow in on the drivers with the greatest impact on an institution or group and serve as focal points for the charrette exercises. Exploring ideal future-states across all scales—campus, building, and room—opportunities for innovation based on the specific drivers of change will emerge leading to new models of campus solutions.

Ultimately, using the CampusForward framework and the outcomes of these forums to inform our project approaches, we are able to guide our clients to physical strategies and solutions that anticipate and respond to the dynamics of higher education.

PARTICIPANTS

On behalf of SmithGroup, we would like to thank the dedicated professionals for their participation and insights in this lively discussion exploring the physical planning and design of learning environments across all scales—campuses, buildings, individual spaces—for teaching, learning, and knowledge creation.



JAMES A. HYATT

Vice Chancellor for Budget and Finance and CFO
Emeritus / Associate Director; University of California,
Berkeley / Center for Studies in Higher Education



MAURA DONNELLY, LEED AP

Senior Architect & Planner, Historic Preservation Officer;
University of Wisconsin System Administration



ADAM THEIS, AICP

Assistant Vice President, Capital Planning and
Facilities; Indiana University-Bloomington



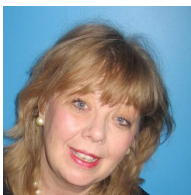
LORENA PERMY

Associate University Planner;
Georgetown University



DOZIE IBEH, AIA, LEED AP

Associate Vice President, Project Delivery Group;
Temple University



SALLY GRANS-KORSH, FAIA, LEED AP

Director, Facilities Management & Environmental
Policy; National Association of College and University
Business Officers



WALT MEISSNER

Associate Vice President, Operations;
Boston University



KATHY JONES

Associate Vice President for Facilities Engineering
and Planning; Rice University



HOWARD WERTHEIMER, FAIA, LEED AP

Associate Vice President, Capital Planning & Space
Management; Georgia Institute of Technology -
Main Campus



JIM JAMES, MPA, AIA, AUA

Vice Chancellor for Real Estate and Facilities;
The Board of Regents of the University System of
Georgia



MARGARET CARNEY, AIA

Associate Vice President for Facilities Planning &
Management; Catholic University



PATRICK DALY, AIA, NCARB

Associate Director and Senior Architect;
Arizona State University



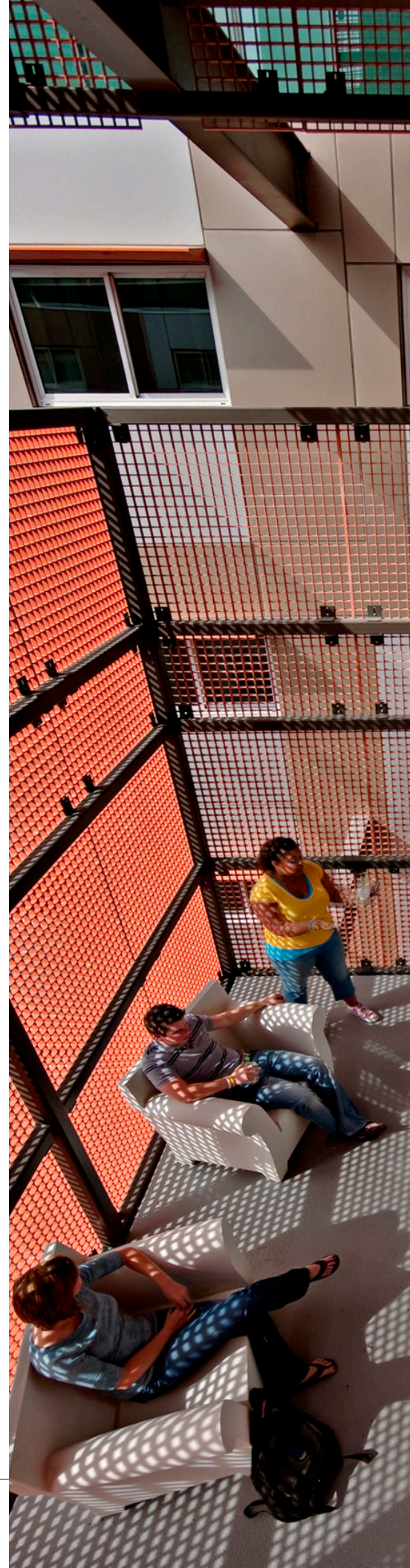
JENNIFER DAM-SHEWCHUK

Director, Campus Planning and Space
Management; University of Nebraska-Lincoln



R. UMASHANKAR

Principal Planner;
University of California-Riverside



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