AYERS SAINT GROSS

2022

COMPARING CAMPUSES

Design Excellence

FACING THE FUTURE

Today's built environment is facing complex challenges including the effects of climate change and systemic inequity. These issues often defy simple definitions, overlapping and merging with one another to amplify impacts.

As designers, we must look at the whole picture to find the basis of these interrelated issues and use our creativity to determine ways to overcome these and other pressing societal needs in the built environment. We believe that good design has the power to change existing systems, challenge assumptions, shift perspectives, and inspire positive action.

Driven by missions of dynamism, continuity, and education, colleges and universities can be leaders in adopting these efforts. The campus ecosystem is always evolving, and thoughtful planning and design positions institutions to champion design for good. The built environment in higher education will continue to evolve and align with big picture priorities and goals for equitable, inclusive, innovative, resilient, and sustainable places through stewardship of the principles of the AIAs Framework for Design Excellence.

Our 2022 Comparing Campuses poster highlights design excellence through the lens of the Framework for Design Excellence developed by the American Institute of Architects. The Framework establishes principles of good design in the 21st century. Its 10 principles highlight topics of resilience, equity, and discovery, among others. The searching questions encourage designers to think about how these themes can be achieved and where they intersect. Utilizing the Framework as a toolkit, designers and their clients are empowered to comprehensively address the challenges of our time.

Our 2022 poster compares six projects at institutions of varying size, geography, and context to explore integrated design solutions. Each highlights implementable strategies and how they align with the AIA Framework for Design Excellence.

ayerssaintgross.com | 410.347.8500 | comparingcampuses@ayerssaintgross.com

The data, illustrations, and narratives presented are a springboard for discussion and ideation. We give our sincere thanks to The American Institute of Architects who has been our main source for this research. We hope you enjoy examining the AIA Framework for Design Excellence as much as we have enjoyed analyzing and interpreting it.

Our thanks to the colleges and universities that provided information. All campus plans and buildings are intended for comparative use only. Recognizing that errors are inevitable, we apologize for any inaccuracies.

Concept—Jim Wheeler | *Copyright 2022 Ayers Saint Gross*
Graphic Design—Charlie Francis, Angi Kwak, Anna Tiburzi; **Content**—Katie Bahr, Amanda Hodgson, Elizabeth McLean

TRANSLATING THE IMPACT

Colleges and universities are guided by missions interlacing education, equity, and impact. Our goal as interdisciplinary planners, architects, designers, and facilitators is to translate this mission into the built environment and celebrate the spirit of place.

We believe that using the Framework as a guide, institutions can more easily analyze decisions about the built environment through a variety of lenses. In this spirit, we are thrilled to center our annual Comparing Campuses poster on the topic of design excellence, as guided by the AIA Framework for Design Excellence. United in the pursuit of great places, we should work to reflect mission, vision, and culture in the built environment.

We believe translating the impact of projects using consistent benchmarks amplifies knowledge-sharing opportunities and creates a shared language for us all to work from. We hope that by showcasing the Framework's applications in six projects of varying types and scales, this poster can spark conversation on how these principles can be applied in the future.

VOLKER CAMPUS MASTER PLAN

University of Missouri-Kansas City | *Kansas City, MO* | *Completed 2021*

Undergraduate **6,944** | Graduate **3,547** | Faculty **1,179** | Staff **1,964** | Total Population **13,634***

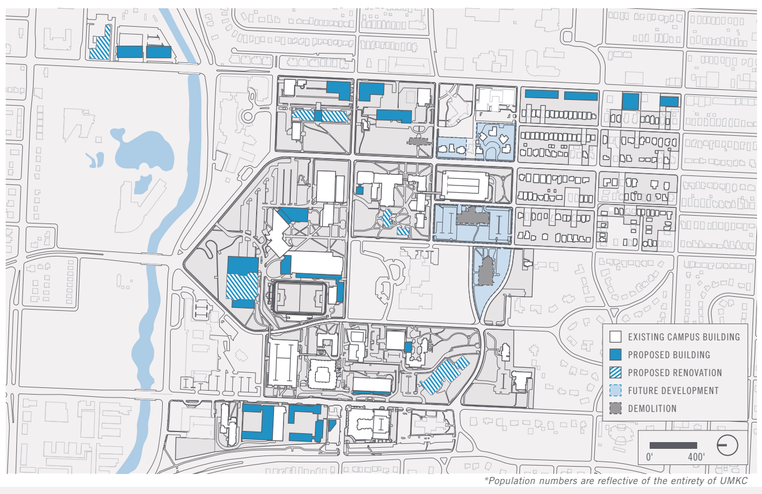
Defining a United Vision for Renovation and Renewal

DESIGN FOR EQUITABLE COMMUNITIES
Inclusive engagement with the campus and larger Kansas City community facilitated recommendations including centralized gathering spaces and considerations for accessibility.

DESIGN FOR INTEGRATION
The plan celebrates UMKC's role as an anchor institution by creating unifying spaces and maintaining a commitment to learning, discovery, equity, inclusion, and impact.

DESIGN FOR CHANGE
The plan establishes an adaptable framework to guide campus development, outlining building renewal opportunities and enhancement of key corridors to provide community spaces.

DESIGN FOR ECOSYSTEMS
The plan recommends opportunities to plant native species reducing the need for potable water for irrigation, contributing to the spirit of place, and supporting a healthy local ecosystem.



**Population numbers are reflective of the entirety of UMKC*

UNDERSTANDING THE PRINCIPLES

The AIA Framework for Design Excellence consists of 10 principles and searching questions meant to provoke thought, inspire, and engage. The following list is a reproduction of the AIA Framework for Design Excellence.

More resources can be found here: *www.aia.org/resources/6077668-framework-for-design-excellence*

DESIGN FOR INTEGRATION

Good design elevates any project, no matter how small, with a thoughtful process that delivers both beauty and function in balance. It is the element that binds all the principles together with a big idea.

- What is the concept or purpose behind this project, and how will the priorities within the nine other principles inform the unique approach to this project?
- How will the project engage the senses and connect people to place?
- What makes the project one that people will fight to preserve?
- What design strategies can provide multiple benefits across the triple bottom line of social, economic, and environmental value?

DESIGN FOR EQUITABLE COMMUNITIES

Design solutions affect more than the client and current occupants. Good design positively impacts future occupants and the larger community.

- What is the project's greater reach? How could this project contribute to creating a diverse, accessible, walkable, just, human-scaled community?
- Who might this project be forgetting? How can the design process and outcome remove barriers and promote inclusion and social equity, particularly with respect to vulnerable communities?
- What opportunities exist in this project to include, engage, and promote human connection?
- How can the design support health and resilience for the community during times of need or during emergencies?

SEMANS-GRISWOLD ENVIRONMENTAL HALL

Washington College | *Chestertown, MD* | *Completed 2019* | *Net Zero*

Undergraduate **1,089** | Graduate **N/A** | Faculty **147** | Staff **245** | Total Population **1,481**

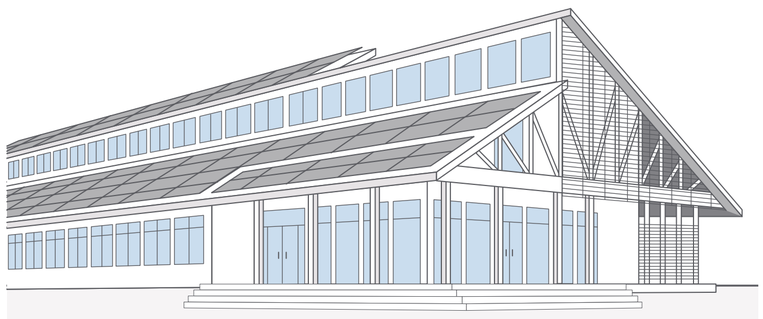
A Living Laboratory on the Waterfront

DESIGN FOR ENERGY
105% of annual energy demands are generated on-site through a rooftop solar array.

DESIGN FOR RESOURCES
Finish selections prioritize materials with high recycled content and locally sourced options.

DESIGN FOR ECOSYSTEMS
The landscape consists of three meadows: a foraging meadow, a pollinator-medicinal meadow, and a habitat meadow. Together, they sequester 386 metric tons of carbon annually.

DESIGN FOR ECONOMY
The wood-framed structural system is less carbon-intensive than a steel or concrete structure. Exposed wood trusses on the interior reduce the demand for interior finishes.



HAYDEN LIBRARY REINVENTION

Arizona State University | *Tempe, AZ* | *Completed 2019* | *LEED Platinum*

Undergraduate **64,716** | Graduate **13,165** | Faculty **4,919** | Staff **7,849** | Total Population **77,484**

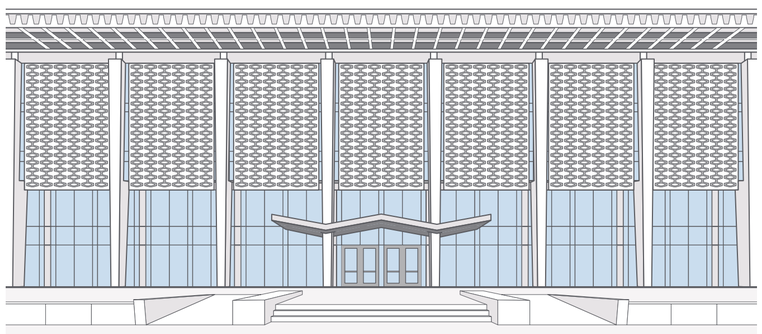
Transforming a Place for Books into a Place for People

DESIGN FOR CHANGE
The reinvention absorbs the library's diverse space needs and supports its continuing evolution.

DESIGN FOR ECONOMY
New materials are limited and selected to complement existing materials, such as granite slabs, stained glass, and terrazzo stair treads.

DESIGN FOR ENERGY
The library achieves low-energy by retrofitting to a high performance envelope, converting to chilled beams and LED lighting, and utilizing a rooftop solar array to partially offset energy costs.

DESIGN FOR DISCOVERY
The university and design team share best practices about Hayden Library's reinvention through speaking engagements, white papers, and numerous awards, including the AIA COTE Top Ten Award.



DESIGN FOR ECOSYSTEMS

Good design mutually benefits human and nonhuman inhabitants.

- How can the design support the ecological health of its place over time?
- How can the design help users become more aware and connected with the project's place and regional ecosystem?
- How can the design build resilience while reducing maintenance?
- How is the project supporting regional habitat restoration?

DESIGN FOR WATER

Good design conserves and improves the quality of water as a precious resource.

- How does the project use water wisely, addressing efficiency and consumption while matching water quality to appropriate use?
- How can the project's water systems maintain function during emergencies or disruptions?
- How does the project handle rainfall and stormwater responsibly?
- How does the project contribute to a healthy regional watershed?

DESIGN FOR RESOURCES

Good design depends on informed material selection, balancing priorities to achieve durable, safe, and healthy projects with an equitable, sustainable supply chain to minimize possible negative impacts to the planet.

- What factors (priorities) will be considered in making material selection decisions?
- How are materials and products selected and designed to reduce embodied carbon and environmental impacts while enhancing building performance?
- How can material selection reduce hazards and support equitable labor practices in the supply chain?
- How does the project promote zero waste throughout its life cycle?
- How does the project celebrate local materials and craft?
- How long will the project last and how does that affect materials?

DESIGN FOR ENERGY

Good design reduces energy use and eliminates dependence on fossil fuels while improving building performance, function, comfort, and enjoyment.

- How can passive design strategies contribute to the project's performance and form?
- How can the project exceed building code efficiency standards to approach net zero energy and net zero carbon?
- Can the project be powered by clean, renewable energy sources?
- How can the project provide for continuous performance improvements over its lifetime?

CAMPUS MASTER PLAN

Ringling College of Art and Design | *Sarasota, FL* | *Ongoing*

Undergraduate **1,670** | Graduate **N/A** | Faculty **190** | Staff **281** | Total Population **3,811**

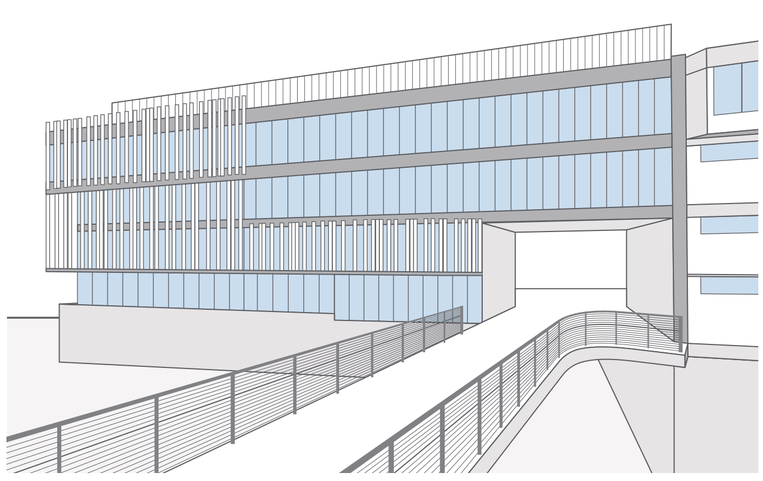
Infusing the Physical Environment with Ringling's Creative Spirit

DESIGN FOR WATER
Exterior landscaping is irrigated primarily with Sarasota's municipal greywater system to reduce the demand for potable water.

DESIGN FOR INTEGRATION
Landscape enhancements define a sense of place, expand the ecological habitat, clarify wayfinding, create space for gathering, and define a campus identity through consistent materials and details.

DESIGN FOR DISCOVERY
This master plan is the result of an ongoing 12-year relationship and has continued to support enduring engagement through implementation.

DESIGN FOR CHANGE
The plan has led to the implementation of significant below-grade stormwater vaults to build resiliency in the face of weather events.



SUSTAINABILITY PLAN

University of California, Los Angeles | *Los Angeles, CA* | *Completed 2022*

Undergraduate **31,600** | Graduate **14,300** | Faculty **7,790** | Staff **30,155** | Total Population **83,845**

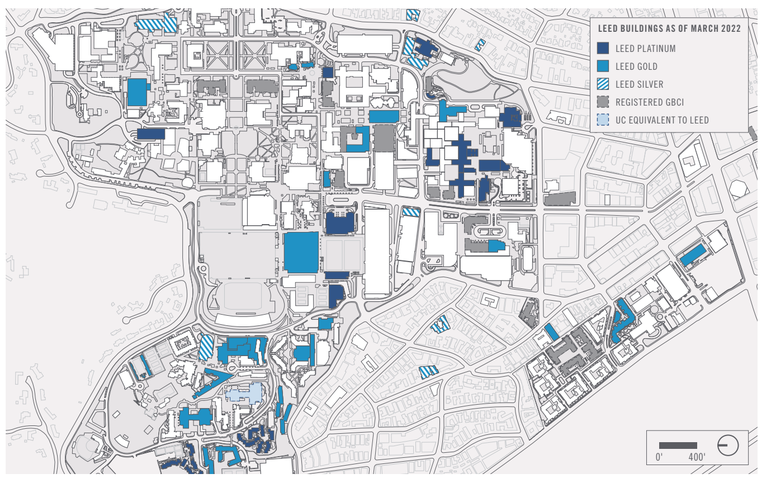
Planning Integration and Evolution to Advance UCLA's Sustainability Leadership

DESIGN FOR WELL-BEING
The plan initiates community-university-medical center partnerships to raise awareness that human and planetary health is inextricably connected.

DESIGN FOR ENERGY
To achieve UC climate neutrality goals, the plan identifies strategies to reduce emissions and pathways to decarbonization.

DESIGN FOR EQUITABLE COMMUNITIES
Engagement with more than 1,000 stakeholders within the UCLA community revealed a need to elevate equity, diversity, inclusion, and justice as intersectional to all other sustainability initiatives.

DESIGN FOR WATER
In response to California's persistent drought, the plan strives to conserve potable water and expand water recycling in partnership with LA County.



DESIGN FOR WELL-BEING

Good design supports health and well-being for all people, considering physical, mental, and emotional effects on building occupants and the surrounding community.

- How can the design encourage a healthy lifestyle?
- How can the project provide for greater occupant comfort?
- How can the project be welcoming and inclusive for all?
- How can the project connect people with place and nature?
- How can material selection reduce hazards to occupants?

DESIGN FOR CHANGE

Adaptability, resilience, and reuse are essential to good design, which seeks to enhance usability, functionality, and value over time.

- How does the project address future risks and vulnerabilities from social, economic, and environmental change?
- How is the project designed for adaptation to anticipate future uses or changing markets? How does the project address passive survivability and/or livability?

DESIGN FOR ECONOMY

Good design adds value for owners, occupants, community, and planet, regardless of project size and budget.

- How do we provide abundance while living within our means?
- How will the design choices balance first cost with long-term value?
- How can the performance of this project be improved in ways that are cost and design neutral?

DESIGN FOR DISCOVERY

Every project presents a unique opportunity to apply lessons learned from previous projects and gather information to refine the design process.

- How can the design process foster a long-term relationship between designers, users, and operators to ensure design intentions are realized and the building project performance can improve over time?
- How are performance data and experiential stories shared, even if the findings fall short of the vision?
- What strategies promote a sense of discovery and delight?

BRYAN HALL

Washington University in St. Louis | *St. Louis, MO* | *Completed 2018* | *LEED Gold*

Undergraduate **8,058** | Graduate **8,989** | Faculty **6,020** | Staff **13,792** | Total Population **36,796**

An Engaging Hub of Research and Education

DESIGN FOR EQUITABLE COMMUNITIES
The newly replaced pedestrian bridge establishes a universally accessible, multimodal campus gateway to support more than 500,000 annual users.

DESIGN FOR RESOURCES
The renovation of Bryan Hall preserved 80% of the original structural elements and opaque building envelope.

DESIGN FOR ECOSYSTEMS
Walkways are lined with native vegetation to provide a habitat for birds and pollinators and to reduce water usage for irrigation.

DESIGN FOR WELL-BEING
Occupant comfort is enhanced with ample access to equitable daylight and views to the exterior in common areas and workspaces such as write-up offices, conference rooms, and breakout areas.