

APDESIGN

THE COLLEGE of
ARCHITECTURE, PLANNING & DESIGN // K-STATE



HILTON GARDEN INN & CONVENTION CENTER MANHATTAN, KS

DESIGNEXPO

FRIDAY, FEBRUARY 24, 2023
10:00 AM - 3:00 PM



DESIGNEXPO 2022

Attendance

- 96 firms
- 459 students (357 APDesign)

EMPLOYMENT OF 2021 GRADUATES

97% self reported being employed within six months of graduation

TOP STATES FOR EMPLOYMENT 2021 MO • KS • TX

DesignExpo is an opportunity to bring together students and professionals from firms throughout the country. Employers gain exposure to our students and are able to contact many potential employees leading to summer and academic internships or post-graduation employment. Students gain a better understanding of their respective disciplines and are able to interact with working professionals.

DesignExpo 2023 Kansas State University

Meet emerging professionals seeking internships or full-time positions
Architecture + Graphic Design + Interior Architecture & Industrial Design + Interior Design + Landscape Architecture + Regional & Community Planning

Hilton Garden Inn & Convention Center

Manhattan, Kansas
Friday, February 24, 2023

Registration available in December

Questions?

Contact Dana Voegeli

Career Development Coordinator + DesignExpo Chair
Kansas State University Career Center
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FALL 2022



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"It is our goal to reflect the economic diversity of the society we serve and in doing so, foster greater impact of design and planning throughout all communities."

*-Dean de Noble, FAIA
College of APDesign*

TIM DE NOBLE, FAIA

professor & dean

What does it mean to be a design college in a land-grant institution?

We all know and are deeply committed to the transformative educational model embedded in APDesign, but let's step back and think about our unique contribution to, as well as the responsibilities commensurate with, our land-grant heritage.

Our educational imperatives were well-established in K-State's formation as the first operating Morrill Land-Grant in 1863: *...to the endowment, support, and maintenance of at least one college where the leading object shall be, without excluding other scientific and classical studies and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life.* (Excerpt from Title 7 Section 304 of the U.S. Code)

Embedded in this simple paragraph, coupled with the Smith-Lever Act of 1914 establishing Cooperative Extension Services connected to land-grants, is the charge that has led our development and transformation as a major research institution of higher learning. At K-State, more than any institution I have experienced, we wear the Land-Grant

heritage on our sleeves with pride. While formalized 'extension' is understood as a normative agricultural enterprise of Land-Grant institutions, few realize how other colleges within the university, including ours, contribute to our outreach mission.

At APDesign, we strive to be the model Land-Grant college, fleshing out the ideals of the Morrill and Smith-Lever Acts including:

Access to our educational model.

Enrolling, attending, and completing a degree in higher education has become less affordable for a greater swath of our society as grant and loan programs have not kept pace with rising costs. Our five-year degree structure exacerbates the affordability issue. At APDesign we are motivated to counter this trend through both our Society We Serve Initiative and our 5th Year Fellowship program. It is our goal to reflect the economic diversity of the society we serve and in doing so, foster greater impact of design and planning throughout all communities.

Access to new knowledge.

Faculty-directed design and planning research, often conducted through the context of the design studio is at our core. We continue to build and grow funded research through federal, state and local agencies. In parallel, we continue to expand our role in research and development for private industry, capitalizing on our broad but interconnected and comprehensive

expertise. We strive to be the preferred institutional partner in private industry-contracted research and development. The funds generated by these public research endeavours and through private R&D sponsorship and royalties fund facilities improvements, faculty and staff support, and underwriting grants for our students.

Access to our transformational outreach and engagement.

We deploy an interdisciplinary approach in outward-facing teaching and learning opportunities, working with communities and external stakeholders to model the transformational impact of design and planning leadership. Up and down our year levels, students from our college are afforded opportunities to apply design thinking in addressing issues facing our urban and rural communities, helping stakeholder groups to envision a new future.

Examples of this tripartite approach are found throughout this volume of the APDesign Magazine. As you will see in the following articles the impact of our academic model is far-reaching, beyond preparing students to be impactful graduates, to informing our culture while serving our communities. We are justly proud of the land-grant model we continue to hone at APDesign and of our contributions to K-State's classification as a Carnegie Community Engagement Institution.

A HIDDEN GEM OF DESIGN EDUCATION

A Visit to the Master of Interior Architecture and Industrial Design Program: VISITING KANSAS STATE UNIVERSITY

Reprinted from OFS, *imagine a place*
The Journal

Two hours outside Kansas City, Kansas State University is located in the college town of Manhattan—endearingly nicknamed “The Little Apple.” Much like the city’s name, the idea of a world-class design program in this pastoral landscape feels unexpected, even ironic. But the Master of Interior Architecture and Industrial Design program is the real deal, with impressive facilities, expert faculty, and graduates employed by top design firms around the country, such as Gensler and HOK.

We spoke with Neal Hubbell, the program’s instructor for contract furniture and an associate professor. When we asked about their location, he told us: “I actually like to think of us as one of the best-kept secrets in design education in the United States. Kansas is typically thought of as a flyover state—and that the centers of design are really located on the two coasts. I don’t think most students, nationally, think of the Midwest as really being a design center, but I think we’re proving that very wrong.”

The innovative master’s program offers a unique track to completing the degree: KSU undergraduates can apply to join the program after their freshman year, allowing them to graduate with a master’s degree in just five years. (For post-baccalaureate students, the program requires three years.)

The degree’s lengthy name reflects a holistic approach to design: a Master of Interior Architecture and [Industrial] Design (M.IAID). Rather than honing in on product design, furniture design, or interior architecture, students learn each of these three disciplines in the context of the other two.

Neal explained the thinking behind this approach: “For instance, in product design, it’s important to understand the context in which a product is actually being used. In interior architecture, it’s important to

understand how furniture and products are going to be used in their spaces. All of those different scales lead to a much more comprehensive, in-depth understanding of design.”

Only about 20 to 30 students graduate from the IAID program each year. After five years together, this small class size and the rigorous, collaborative work required by the program creates a tightly knit community for each cohort. While they work alongside aspiring architects and designers in adjacent fields, the students describe



a uniquely close kinship with their IAID classmates.

Zach Simpson, a student from the 2019 graduating class, put it as such: “I think the influence really sparks creativity, and pushes each of us to be a better designer more and more because I see friends and students beside me continuing to build their skills and continuing to grow.”

We spoke to several students from the program about their experience. In each conversation, we heard that same theme echoed over and over—where collaboration and critique helped students develop their design voice.

Jake Mullins, (pictured to the right), another 2019 graduating student, told us: “There’s a little bit of a competition, and you’re also trying to impress everyone a little, but it all helps you work toward the best design possible because you’re working with your friends and help each other improve.”

Jake Mullins found his way into the design world through a high school project to imagine a new approach to prosthetics based on the experience of his father, a single-leg amputee.

The core of the program, as described by department head Nathan Howe, is found in the workshop: “Making has been a part of this program since its inception. The shop is a foundation for everything else. So much has been driven lately into the digital world that we all know we have to deal with. But the critical problem you’re solving with design is to actually bring something into reality.”

This approach to making underpins much of the department’s philosophy. Rather than exploring ideas solely in an abstract context, students interact with actual materials and the constraints of physicality. Whether it’s the way that ambient light scatters on a shape, or the practical comfort of a seat, professors maintain that some things cannot fully be learned on screen.



This workshop sets the stage for some of the program’s most important interactions, where shop specialists and professors help students explore ideas and materials. Spread over

20,000 square feet of metal and wood manufacturing, the space includes an upholstery studio, 3d printers, laser CNC cutters, and much more.

In a hallway outside the shop, a lengthy wall of past student projects serves as a friendly reminder that “pretty much every idea you think of as a student has been tried before, in some form,” according to Neal.

While the IAID department celebrated its 50th anniversary in 2014, the workshop facility is much newer, the product of a major renovation that was completed in 2017. Before the space was completed, the various departments in the College of Architecture, Planning and Design all had their own shops. In the new facility, the different departments, including IAID, share this comprehensive making space.

“That’s been really important because it has allowed for I think our students to learn adjacent to the other disciplines. It’s the kind of one place where all disciplines really come together and students get exposed to each other’s work.” said Howe.

“If you can't actually take a vision and make it a reality, then it's almost meaningless. And our students really understand that, that making is the essential ingredient.”

- Nathan Howe, IAID Department Head

Another of the IAID program’s

defining traits comes in its corporate collaborations, including one with our own product design team. OFS first connected with KSU several years ago, when an alumnus of the IAID program suggested our organizations should develop a professional relationship.

The project began as an effort to enrich the curriculum by providing students with real design briefs and giving them the opportunity to receive real feedback from a client. Students research and develop a concept, then design and prototype a concept using real materials. Some student designs have even been put into production.

This year's briefs range from creative approaches to workplace storage to developing furniture for specialized medical environments. The specificity of working to meet the needs of these different environments requires deep research and understanding of the users they design for, something the department leaders emphasize.

"I think one of the best parts about the collaboration is really getting to understand how the industry thinks, and what companies like OFS really care about, because it's more than just the almighty dollar. It's important to know that there are companies passionate about end users." Howe said.

Working within the constraints of an authentic project brief, students are required to solve problems they otherwise might not consider in an academic setting. Students described the challenges of developing designs with manufacturability as a key

"I look at myself as, a facilitator and a critic. The most important thing I can do is to ask questions so the students learn to ask the questions of themselves."

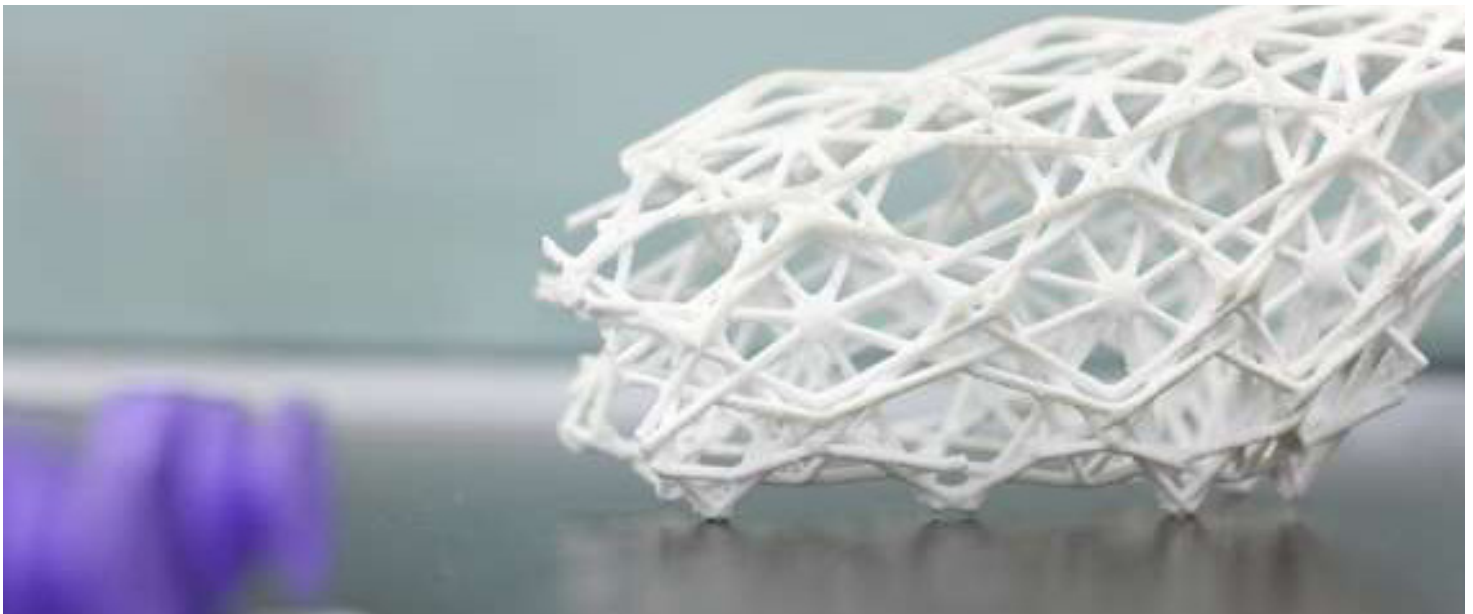
- Neal Hubbell,
Director of Graduate Studies

constraint, and how they encounter unexpected questions like "how will cleaning products affect our materials over time?"

Alexa McCallum, another 2019 graduating student, spoke to the value of working with an actual manufacturer: "I think it helps us as students know how the professional world will be handled in a realistic way. Learning what a client needs and wants and then translating that into a project is a great preparation for whatever we'll do after we graduate. It's a very unique experience that a lot of programs don't have."

The collaboration with OFS has produced some exciting and encouraging results, but the IAID program has already been leaving a powerful legacy, sending graduates to influential roles in firms throughout the country. While a handful of other schools may be able to give KSU a run for its money on one particular feature of the IAID program, its academic excellence, creative opportunity, and supportive community are a uniquely powerful combination.

Based on a foundation of making and the vital relationship between students and mentors, the IAID program continues to challenge assumptions and equip a new generation of designers.



VICTOR L. REGNIER

VISITING PROFESSORSHIP

Faculty Share the Impact of the Victor L. Regnier Chair Distinguished Visiting Professorship Over the Years

PREVIOUS REGNIER DISTINGUISHED VISITING PROFESSORS

- Vincent Snyder (2022-2023)
- Jerry Tate (2021-2022)
- Larry Scarpa (2020-2021)
- Fuensanta Nieto (2018-2019)
- Fran Silvestre (2017-2018)
- Gonçalo Byrne (2016-2017)
- Jay Siebenmorgen (2015-2016)
- Steven Ehrlich (2014-2015)
- Javier Sánchez (2013-2014)
- Beat Kämpfen (2012-2013)
- Wendell Burnette (2011-2012)
- Helen & Hard (2010-2011)
- Alan Dunlop (2009-2010)
- Alfred Jacoby (2008-2009)
- Miguel Angel Roca (2007-2008)
- Mikko Heikkinen (2006-2007)
- Alberto Campo Baeza (2005-2006)
- Hiroshi Hara (2004-2005)

In 2004 we hosted our first Regnier Distinguished Visiting Professor, Hiroshi Hara. Our current chair Vincent Snyder is the nineteenth. For the most part, our visitor has been hosted by one of our faculty creating in essence, a co-taught studio for fifth-year students. As the twentieth anniversary approaches, we invited some of our faculty who have had this opportunity to share their thoughts on the impact of the chair.

Alberto Campo Baeza



In 2006 I had the pleasure to work with Alberto Campo Baeza coteaching a studio that remains a highlight of my teaching career. I had been teaching at that time for 15 years and thought I knew what I was doing. I was wrong.

First, let me tell you about Alberto. He is one of the most generous and kind persons I have met. He is an architect of incredible talent. His buildings make you think that there is serious magic in the water of Spain. They are that good. Yet, he is also an amazing teacher. I feel almost ashamed to confess that I learned just as much that semester about architecture, if not more, than our students. I learned that architecture can be reduced to light, structure, material, planes, simple notions of cave and hut and poetry. I watched as he sat with a student, listening, and talking but always sketching. Words that were floating would become grounded in clearly shaped lines in the sketchbook. I have never seen anyone so skilled at taking often confused and ill-formed ideas and bringing them to a rational reduction. You could see the light going on in the student's face. I still look back on that semester as a turning point. Alberto made me a better teacher and having heard from many of our former students in that studio, I know it made them better architects and that much more passionate about architecture.

- Matthew Knox
Professor + Dept. Head ARCH



Steven Ehrlich and Jerry Tate



In 2015 I hosted Steven Ehrlich and I was the host of our 2021-2022 Regnier Chair, Jerry Tate. Both experiences have been a wonderful way to get to know a couple great architects, but to also reflect on my own teaching. I will not forget the generosity Steven Ehrlich showed to the students, showing them around Los Angeles and opening his studio up to them, but he extended that generosity to me as well – staying in Steven’s guest house, attached to his house in Venice, which he had designed for himself, was outrageous and has made me more convinced than ever that architects should only live in the spaces they’ve designed for themselves.

Jerry has shown an amazing commitment to last year’s studio, visiting with them via Zoom and really taking a personal hand with every student. One of the things I’ve really appreciated working with both Steven and Jerry has been to see their approach with the students, particularly as they have their first foot in practice. It’s given me an opportunity not only watch their methods but to really collaborate with colleagues outside our institution.

- **Genevieve Baudoin**
Associate Professor, ARCH



Beat Kämpfen and Alan Dunlop



I had the honor of hosting two Visiting Regnier Chairs: Alan Dunlop, FRSA from Glasgow, Scotland, during the 2009-2010 academic year; and Beat Kämpfen, Dipl. Architekt ETH SIA, from Zurich, Switzerland, during 2012 – 2013. In advance of their visiting professorships, I collaborated with each Chair to define the topics and sites for the year-long projects.

My students were thrilled to have the good fortune of being exposed not only to the expertise and way of thinking of their respective Regnier Chair but also to travel to Europe and immerse themselves into unfamiliar contexts (Glasgow and Zurich). Studying the sites; learning about different societies, their ways of life and living together; interviewing local experts; being hosted by well-known professionals and their families; visiting their projects and learning about new construction methods (at the time CLT was not a familiar term in the US); and - for one student - getting engaged on top of Fraumünster Church in Zurich; were memorable experiences that expanded our views of the profession and tied each class together at a personal level.

With Alan, students prepared proposals for Hazelwood House, a living environment for dual sensory impaired young adults who had graduated from Hazelwood School, an award-winning school for dual sensory impaired persons aged 3-18. In close proximity to the school, Hazelwood House was seen as a new building type that needed to be ‘invented’ in support of these young adults with vision, hearing and a wide range of functional limitations to live

their lives as dignified and socially rich as possible. A rigorous process of research into the nature of dual sensory impairment was conducted and a range of architectural responses developed. Several students were recognized for the individual research posters they had submitted to the institution-wide K-State Research Forum; one of those posters won the Third Place Award; and another student’s poster was selected as one of ten for presentation at the Capitol Graduate Research Summit in Topeka, KS, all firsts in the department.

“My students were thrilled to have the good fortune of being exposed not only to the expertise and way of thinking of their respective Regnier Chair but also to travel to Europe and immerse themselves into unfamiliar contexts.”

With Beat, whose practice centers on sustainability beyond the technological focus, students developed propositions for multi-generational housing on a site in an urban neighborhood close to Zurich’s city center. Zurich has a long history of non-profit housing cooperatives, self-help organizations that provide its members affordable

“I admired their work with the students in the classroom, as they engaged students with organic back and forth processes...”

residential and commercial space. Based on currently existing models, and given the shift in demographics toward an increase in healthy and active older populations, students were challenged to develop proposals for apartment buildings offering innovative architectural solutions in support of people who want to live together collectively across the generations, related and unrelated, while also creating energy efficient, ecologically sound and socially inclusive settings.

While both architects emphasize different aspects in their respective professional practices, they instilled in the students deep commitments to creating contemporary environments of the highest level in support of the health of the environment and its inhabitants; and to pursuing excellence in all aspects of design. I admired their work with the students in the classroom, as they engaged students with organic back and forth processes involving ‘loose reigns’; group reviews; study models; freehand sketches; and constructive desk crits. Furthermore, I appreciated that in the end - despite serious issues guiding each of the studio projects - both Chairs paid great attention to the aesthetic qualities of the design propositions.

I hope, and believe, that the encounters with these two Regnier Chairs contributed greatly to preparing the students for empathetic, thoughtful and creative responses to future tasks, including the multi-faceted needs of people, while simultaneously considering the changing climatic circumstances which have already begun to impact our lives. The experiences of interacting with, and learning from, award-winning practicing architects is a wonderful mind-expanding experience which my students deeply cherished. It is especially powerful when the visiting architects come from abroad, bringing with them values, understandings and insights that allow students to build upon and expand on the four prior years of professional education. The Victor L. Regnier Visiting Professorship plays a significant role in preparing our students to pursue meaningful and rewarding careers.

**- Susanne Siepl-Coates
Professor Dipl. Ing. Emerita, ARCH**



Lawrence Scarpa



I co-taught with Regnier Chair Larry Scarpa during the 2019-2020

academic year. Our studio focus, naturally, was affordable housing. Larry and Angie (Brooks Scarpa) are among the foremost experts in creating dignified housing for several disadvantaged communities, primarily in California. They believe everyone deserves access to well-designed, environmentally responsible housing. They put this belief into action by getting involved in policy matters, and by doing the hard work of coercing beautiful housing paradigms into a world that doesn't seem to really want them. With students, we visited many of them in the fall of 2019. Larry and Angie are humanists. Citizen Architects. They are good people.

Another focus of the studio was modular construction. Larry brought their acclaimed work from The Nest Toolkit (a prefabricated kit-of-parts system) into the fold. I shared el dorado's experience with pre-manufactured housing and low-cost construction in Kansas City. The results of the studio were inspired, doubly so because COVID grounded us all physically, but not virtually, in the Spring of 2020. The work of one group of students, called 898 DU/Acre (a reference to the density of housing units per acre), was submitted to the 2020 AIA Kansas City Design Excellence award program, a blind peer-reviewed professional jury process. They earned the sole Honor Award in the Unbuilt Architecture category. It was a terrific ending to an otherwise roller coaster ride of an academic year.

**- David Dowell, AIA
Studio Consultant**



Fuensanta Nieto



During the 2018 – 2019 academic year, the students and I had the honor of developing their yearlong thesis design proposals with Fuensanta (Santi) Nieto, a founding partner of Nieto Sobejano Arquitectos (and the third Spaniard to hold the honor of being a Regnier Distinguished Visiting Chair.) Where should I begin in sharing how this experience changed my teaching, or the creative aspects of my practice? Simply put – they are numerous. Santi is inspirational. The work from the firm is about texture, materiality, and light. When she finally decided to work with our students she was all in (it took numerous times to coax her to come to the center of America!) Santi engaged with the studio both in-person in Spain and in Manhattan. In Spain we visited her office as well as several of the firm's designs. The rhetoric and the reality of her work were palpable. For Santi everything is about design, from the quality of light, materiality, and magic of the spaces they design, to even how food is displayed on a plate.

Each Regnier Chair has the privilege to influence the subject matter of the studio. Ms. Nieto chose as our location the historical Moorish neighborhood of Albaicín in the city of Granada. At that time, this part of Spain was seeing an increase in migrants fleeing their home countries via whatever boats they could find, and somehow reaching

the southern coast of Spain. Santi wanted us all to work on something that was relevant to Spain and to the world — an issue of a political or social impact. She believed as design professionals we needed to be a part of the solution for social issues, and not hide-our-head-in-the-sand. Santi did not shy away from difficult conversations. I was all in, studying the hard issues of migrants fleeing to a new situation, and what society's role was in welcoming them to a new place. Specifically, what should we or could we do? She demanded of all of us a thorough understanding of what was appropriate while the resultant design proposition must simultaneously be beautiful. Through Santi's guidance and mentorship, she showed us how to ask the difficult questions so we could make compelling intellectual arguments, by assembling them through inquiry, discovery, writing, speaking, diagrams, models, drawings, and images. Many have reflected upon this semester, me included. Each of us has a stronger and a more persuasive ability to tell the story of our design propositions in a clear and concise manner, making our case through iteration, reflection, and representation. Because of our time with Santi, we learned to look for projects where we could make a difference – socially or politically, be even more passionate about our work, and to clearly communicate that passion to others. She emphasized collaboration, as well as having a supportive, encouraging, and challenging environment where everyone thrived and found confidence. Every design was done with purpose and heart, empathy and experience. The bonus for this studio was that we won both the Heintzelman and *Architecture* magazine's Studio Prize. There definitely were great things in the air for all of us. I am a better educator and architect because of this experience.

- **Wendy Ornelas, FAIA**
Professor, Emerita, ARCH



“Because of our time with Santi, we learned to look for projects where we could make a difference – socially or politically, be even more passionate about our work, and to clearly communicate that passion to others.”

Scan the QR Code below to read more about the Victor L. Regnier Distinguished Visiting Professorship and watch lectures given by previous visiting professors.



BUILDING COMMUNITIES

Community Focused Project Earns Graduate Students Award of Merit from the Prairie Gateway Chapter of The American Society of Landscape Architects

Submitted by: Jessica Canfield
Associate Professor, LARCP

The Prairie Gateway Chapter of the American Society of Landscape Architects recognized three graduate students from Kansas State University's College of Architecture, Planning & Design, or APDesign, landscape architecture and regional & community planning department with the Award of Merit for their redevelopment proposal "Intersection: Marysville's Third Place."

The graduate students, Meredith Bryan, Cary, Illinois; Thomas Schneider, Sioux Falls, South Dakota; and Madison Wulfkuhle, Berryton, Kansas, presented their plan to re-envision the Marysville historic Union Pacific Depot building and surrounding site as a regional attraction for visitors and a daily destination for local residents.

The students were part of the Site Research and Design Studio in fall 2019, led by associate professor Blake Belanger. "Meredith, Thomas, and Madison worked

together seamlessly from the first day of the project and were responsive to the aspirations of community members," Belanger said. "Their highly creative site plan appeals to the senses by providing a variety of different experiences for people of all ages."

The team celebrated the historic significance of the rail line and recognized that Marysville has long been a nexus of transportation including waterways, railroad, the Pony Express Trail, and now regional highways. The design establishes a range of distinctive civic spaces including a sequence of small plazas, a sculpture garden and an outdoor theater.

"The real promise of this proposal lies in the economic potential for reinforcing Marysville's place as a regional destination," Belanger said. "With accommodations for festivals, concerts, markets, and other gatherings large and small, the proposal gives local decision-

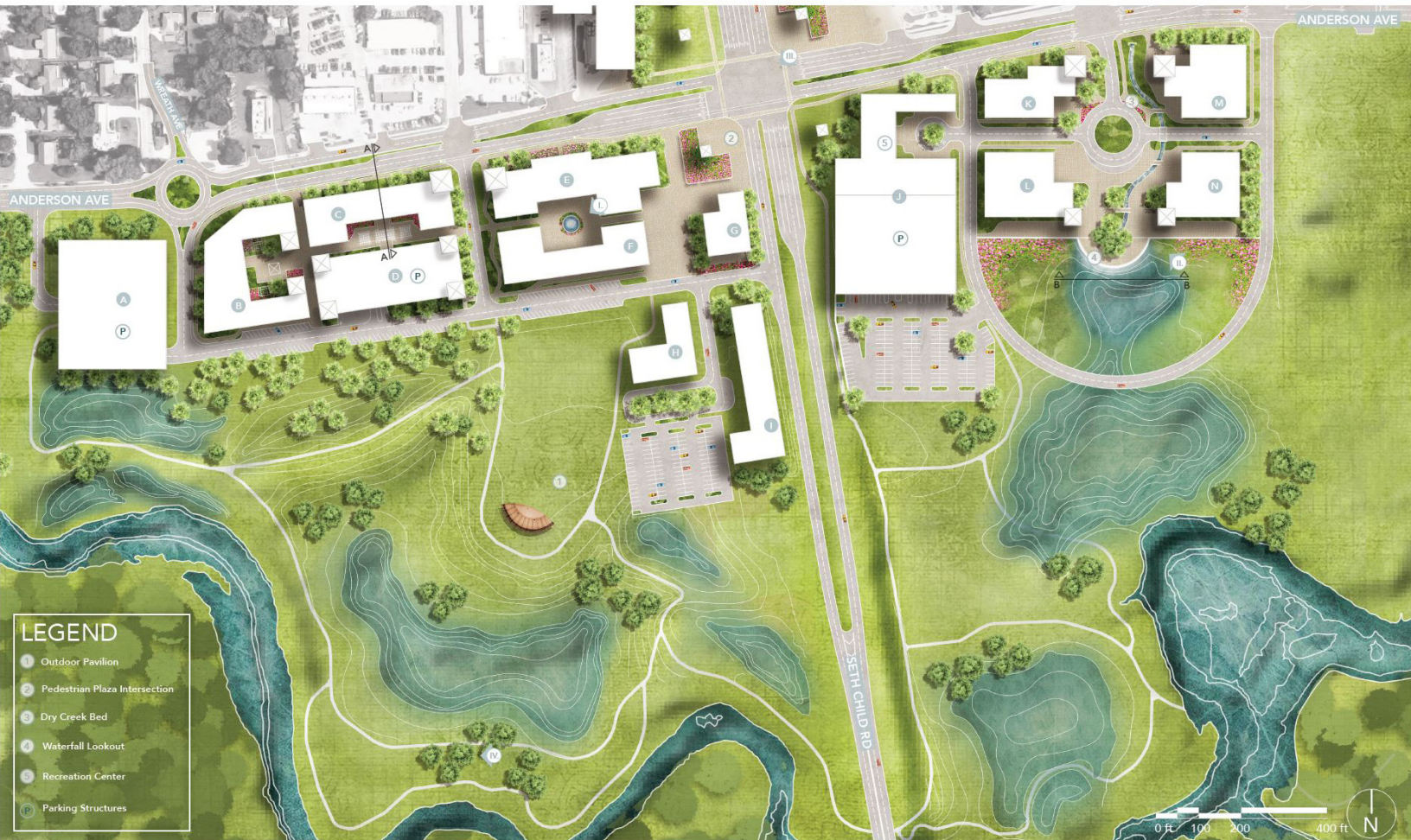
makers a spark to continue the dialogue about the future of the community."

The studio included a collaboration with the department's Urban Design Seminar, led by assistant professor Susmita Rishi. The project was supported with funding from the city of Marysville, an EPA Small Community Technical Assistance Grant through the Kansas Department of Health and the Environment, and technical assistance from K-State's Technical Assistance to Brownfields.

The Prairie Gateway Chapter of the American Society of Landscape Architects represents membership from the states of Kansas and Missouri. Their purpose is to promote the profession of landscape architecture and advancement of the practice through advocacy, education, communication and fellowship.



“The real promise of this proposal lies in the economic potential for reinforcing Marysville’s place as a regional destination...”



NATIONAL HONORS

Graduate Student Projects Receive Special Recognitions

Graduate students from the landscape architecture and regional & community planning department in Kansas State University's College of Architecture, Planning and Design, recently earned honors for their projects from two award programs of the American Society of Landscape Architects, the Prairie Gateway Chapter awards and the Central States awards. The Prairie Gateway Chapter represents Kansas and western Missouri. Central States ASLA represents eight U.S. states: North Dakota, South Dakota, Nebraska, Iowa, Kansas, Missouri, Oklahoma and Arkansas

Earning an Honor Award from the Prairie Gateway Chapter and the Award of Excellence from Central States ASLA for the project "Higher Ground" were graduate students Erich Herbel, Lehigh; August Titus, Montezuma; Ashley Akers, Newton; Paden Chesney and Julia Kappelman, both from Olathe; Grant Pasowicz,

Overland Park; Jessie Carmichael, Plainville; Madelyn Cole, Blue Springs, Missouri; Haley Weinberg, Des Peres, Missouri; Nicholas Ferrara and Kastasya Jackson, both from Kansas City, Missouri; Rainie Madsen, Frederick, Maryland; and Mikala Fitzgerald, Kearney, Nebraska. The project was the focus of a summer 2019 Community Planning and Design studio led by associate professor Howard Hahn. The Excellence Award is reserved for the highest quality projects.

"After extensive site analysis and mapping, the 'Higher Ground' studio presented four design scenarios for how redevelopment around a busy Manhattan interchange quadrant could be envisioned to be more resilient against Wildcat Creek flooding," Hahn said. "Each scenario explored a dominant theme characterized by either urban agriculture, family-oriented development, a health-oriented district, or high-density business/corporate development."

While the studio research project was launched in 2019, it served as the catalyst for the current planning initiative being completed by the city of Manhattan, Flint Hills Regional Council and 2006 APDesign alumna Wendy Van Duyne, senior associate at Stantec.

"The students' thoughtful approach to design and their exceptional presentation skills has proven to inspire the city," said Chad Bunger, assistant director of community planning for the city of Manhattan and a 2008 APDesign graduate. "Their designs and presentations have led the city to search for further planning projects and funding sources to help with redevelopment of the area."

Earning an Honor Award from the Prairie Gateway Chapter and a Merit Award from Central States ASLA for the project "SPARK: A Vision for Martin Luther King Jr. Square Park" were August Titus, Montezuma; Julia Kappelman,



“Working collaboratively, students illustrated how an underutilized park can become a multi-beneficial amenity...”



Olathe; Grant Pasowicz, Overland Park; Haley Weinberg, Des Peres, Missouri; Mikala Fitzgerald, Kearney, Nebraska; and Si Chen, Shanghai, China. The project was developed and presented under the guidance of associate professor Jessica Canfield.

According to Canfield, the project challenged students to explore how strategic investments, improved connections and community empowerment can lead to a more resilient, better connected, healthier and vibrant park space for the eastside Kansas City, Missouri. Working collaboratively, students illustrated how an underutilized park can become a multi-beneficial amenity in an underserved community — providing essential social services while

improving degraded environmental conditions.

The Martin Luther King Jr. Square Park, or MLK Park, is a 42-acre site along the Brush Creek Greenway. Over the years, the park site, which is essentially a vacant lot, has seen a genuine interest from the community to be developed — with ideas ranging from minimal interventions to very extreme changes.

The team of the six graduate students worked collaboratively over one semester to develop a vision plan for the MLK Park site. Students collaborated with 2004 APDesign graduate Tim Duggan of Phronesis and local stakeholders to inform and strengthen the work, taking into consideration the community’s need,

“With a central focus on social justice, the students sought to transform the park into a signature destination to play, gather and connect, for the surrounding neighbors and greater Kansas City community.”



the site’s physical opportunities and constraints, and future impacts of climate change. The aim of the students was to develop visionary, yet feasible, design and programming ideas that the community and city could use as a starting point for conversations on implementation.

and connect, for the surrounding neighbors and greater Kansas City community. Most notably, the site will exemplify MLK’s legacy by uniting communities around a welcoming, safe and inclusive park within a rejuvenated greenway.

This project was undertaken as part of the Landscape Architecture Foundation’s Green New Deal Superstudio initiative. With a central focus on social justice, the students sought to transform the park into a signature destination to play, gather



WELCOME HOME

Architecture Students Use Research to Design Affordable, Sustainable Housing

Michael Gibson
Associate Professor, ARCH



INTRODUCTION: AFFORDABILITY AND SUSTAINABILITY CRISIS IN HOUSING

Before the COVID pandemic and economic recession, nearly half of Americans earning under \$50k a year were overburdened by high housing costs. A shortage of affordable homes is a widespread national crisis: in 2020, for every home built for under \$150k, more than 56 homes are built for over \$300k [2020 Characteristics of New Housing, U.S. Census]. Meanwhile, the environmental impact of housing is staggering. Homes in the U.S. consume an incredible 1/5

of national energy use – more than commercial, institutional, or industrial buildings, and a figure that has only worsened during COVID [U.S. EIA]. Few Americans realize that the CO2 emitted from their home's utility use is, on average, twice as much as that emitted from their cars [U.S. EIA, EPA].

The cost of utilities increasingly burdens today's household budgets, beyond just mortgage and rent. Households in Kansas spend on average \$110.69/month on electricity and \$112.37/month on natural gas, which combined

amount to an average of \$2,677 in annual energy costs. In homes that lack insulation and efficient systems, households may see annual energy costs exceeding over \$4,000 per year, and the deep freezes and heat waves of 2021 proved that high energy costs disproportionately affect households whose budgets are already strapped.

Today, housing is an environmental, economic, and societal crisis; more than ever, our communities need carefully designed, healthy, affordable, and resilient housing.

The Net Positive Studio takes its name from a foundational principles of sustainability: lessening environmental impact is not enough to be sustainable. Sustainable actions must also have a positive social and economic impact as well. In the context of housing, a house doesn't just need to save energy or sell for less: it needs to give something back. Housing needs to support comfort, safety, financial security, domestic life, social relationships, and overall well-being for homeowners. The Net Positive Studio seeks to develop housing prototypes that are affordable, safe, high-quality, environmentally sensitive, and functional while demonstrating broad tenants of sustainability: energy and environmental conservation, economic tenability, and positive social and community impact. In advancing a dialogue and solutions for affordable housing in the 21st century, the studio intends to counter multiple dimensions of the local, state, and national affordable housing crisis.

A CLOSER LOOK AT THE HOUSING CRISIS

In cities and towns across the U.S., the availability of right-sized and affordable housing bolstered communities by promoting stability and investment, both economic and social, in the places Americans lived. A large swath of working- and middle-class households could afford housing. In 1976, the average U.S. new home was just 1,590 ft² with an average cost of \$48,000; about 3.8



Fig 1: The St. John prototype designed and built by the AY2019-20 and AY2020-21 studios, in partnership with Stafford County Economic Development Corporation. Ten more homes of this design will be built in Stafford County in the coming years by local contractors.

“our society needs ideas that can help restore and reorganize the larger housing system...”

times the median U.S. income and easy for working families to finance. By 2020, the average U.S. new home ballooned to 2,333 ft² with an average cost of \$391,900, far exceeding what working and middle income household can afford. [U.S. Census]

These statistics illustrate the broken system of housing in the U.S., which has evolved to preference larger, expensive, and energy-intensive housing. Meanwhile, older housing is not always a ‘bargain’ for new homeowners, with deferred maintenance commonly making mortgages impossible. If you are young, retired, a single parent, a one-job household, or simply have a modest income: affordable housing options are limited, scarce, or even nonexistent in many places. The affordable housing crisis has come to involve not only poor households, as it has in the late 20th century; now the crisis impacts the quality life of middle class, young, and retired households with equal vengeance. Though it is argued that renting and high density housing is a solution to the housing problem, only 1 in 5 Americans live in attached housing and only about 1 in 10 would prefer to live in multifamily apartments or condos [2011 Community Preference Survey, National Association of Realtors]. With the average renter tenancy standing at only 2.1 years [U.S. Census], average rents climbing every year, and the threat of eviction looming for many renters, homeownership can offer more stability in many communities. Moreover, moving is costly in terms monetary costs (typically between \$1000 to \$5000 per move, according to ResidentRated) and its impact on families, who can be severed from critical social networks and school communities.

The housing crisis is also crippling the booming, wealthy cities as much as it is crippling struggling small towns. It is a crisis that effects the vitality of local businesses and institutions, as many communities (such as Manhattan) find they don’t have housing that is affordable for their critical workforce:

teachers, public safety personnel, healthcare workers, and the skilled labor required by all types of industry and commerce. It isn’t enough just to propose new housing concepts or ideas; our society needs ideas that can help restore and reorganize the larger housing system to look towards a more resilient, more design- and environmentally-conscious, and more equitable affordable housing machine for the 21st century.

HOW TO MAKE A HOUSE AFFORDABLE: PROCESS AND PARTNERS

In line with the studio’s service learning



Fig 2 (top): The studio presented their design proposals to St. John community members in fall 2019, hearing feedback that would eventually make it into the studio’s final prototype design. Fig 3 (bottom): The 2018-19 studio surveyed the condition of listed and land bank homes in Northeast Kansas City as part of their neighborhood research.

St. John Affordability Analysis for \$37,660 Household Income [7]

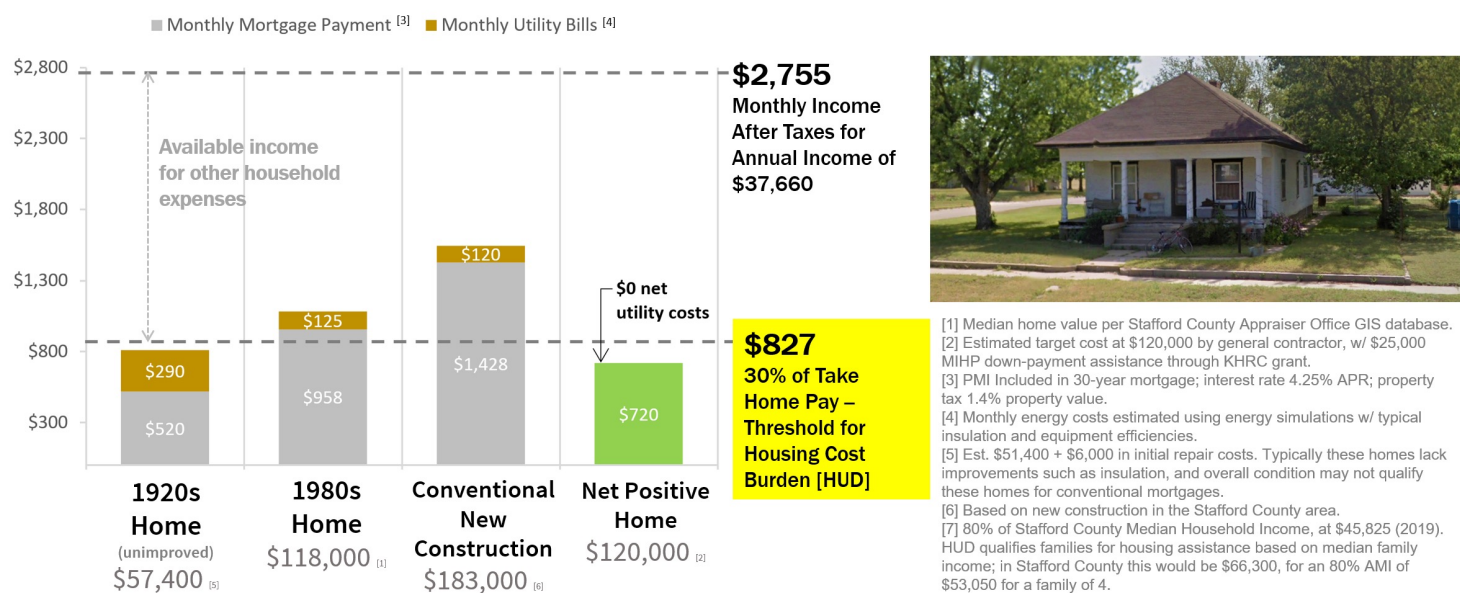


Fig 4: The affordability analysis for the St. John project, completed by the studio using typical criteria for affordability and comparing the costs for various housing options in the community. Many older homes in the community, represented by the 1920s house, are not mortgageable due to their condition.

mission, past and current studio partners are non-profit organizations. Reflecting the renewed interest in affordable housing at the grassroots level, the studio's partners often have missions that extend beyond housing to economic development and community services. The studio's work goes beyond just designing prototype homes for these partners. Students begin a research process each semester that assembles past housing studies for their partner neighborhoods, adding new data layers from property databases, current and past MLS listings, U.S. Census data and maps. The studio also visits neighborhoods and works with partners to identify project stakeholders that can represent potential homeowners, including professionals from the local real estate community.

Lessons gleaned from neighborhood research are numerous, and tend to recur in urban areas as well as smaller towns. Inexpensive 'bargain' and 'fixer-upper' homes are often 'risked out' of traditional mortgages due to issues with quality, condition, and deferred maintenance; they can't be purchased by traditional homebuyers (especially first-time homebuyers) and can only be bought with cash, making these homes

likely investment properties. Some communities have seen little new infill housing in decades, and are instead seeing a steady loss of housing units to neglect and demolition. New homes, if they have been built, are increasingly large, expensive, and offer little benefit to energy efficiency or sustainability. Housing scarcity drives away homebuyers from neighborhoods and communities nearby their workplaces, forcing them to live elsewhere and commute.

During the research process, students also learn about the home financing system and how real estate transactions work. A key part in each project is identifying affordability targets for a location, using the area's median household income, the equivalent monthly take home pay, and the available income for housing (typically 30% of net income, according to HUD). Households with housing costs exceeding 30% of net income are considered "cost burdened" under prevailing affordability guidelines. Energy costs, sometimes overlooked in the affordability discussion, can exacerbate housing cost burdens in our region, and the studio has used energy modeling tools estimate the increase in energy costs likely in homes

that lack modern weatherization.

As shown in the affordability analysis for the studio's St. John project, energy costs can play a significant role in squeezing household income. The studio's design goals are thus two-fold: design a home that can be purchased or rented affordably, while also achieving 'net zero' performance. By definition, net zero homes generate electricity on site that offsets the energy (by kWh or by cost) consumed by the house on a yearly basis. Using a range of analytical tools, the students produce cost estimates and comprehensive energy analyses for their designs during the design process. What has been learned and confirmed by the studio is that a right-sized house can use a small footprint to shift a modest amount of investment into better insulation, generous glazing, and a small PV system that realizes net zero performance and can be potentially mortgaged with the house.

The rigorous and thoughtful design process of the students, overall, has shown that these small houses can truly feel 'big,' including gracious kitchens, dining areas with 6-person seating, appropriate storage, and connections to the outdoors -- functional amenities

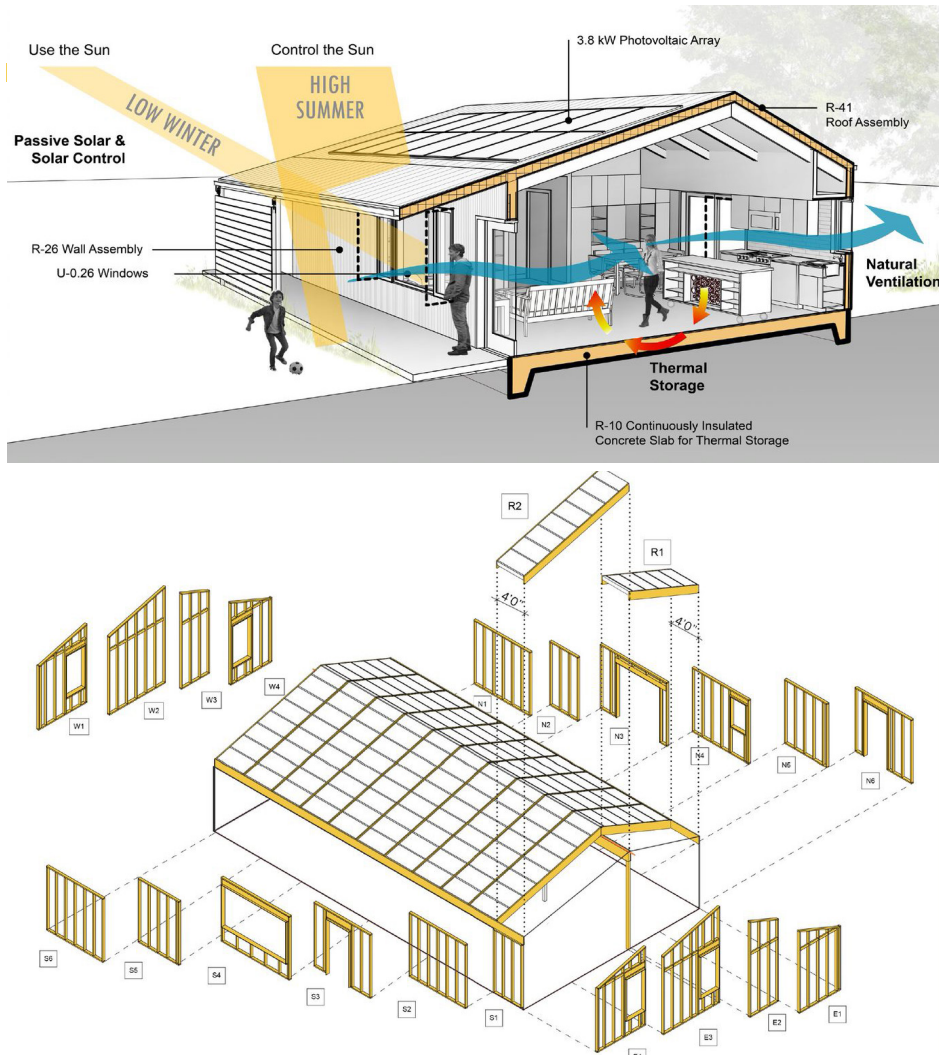


Fig 5 (top): The studio's homes make use of passive design strategies that are appropriate for our climate yet work with conventional construction and the project budget. As a result of passive design, the home (St. John shown) will not require any heating and cooling for 56% of the year. Fig 6 (bottom): The studio plans the prefab panelization of the house using computer modeling; the model is then used to develop fabrication drawings for use in the shop.

that are associated with larger and more expensive homes. Beyond the visible and tactile features of the house, the studio also works with consulting tradespeople to plan out the plumbing, electrical, and mechanical systems of the house – which also play a key role in realizing the home's performance.

BUILDING NET POSITIVE: PREFAB AND PERFORMANCE

Realizing high-performance, net-zero homes has required the studio to go beyond just designing the house on paper. The studios use state-of-the-art computer modeling for energy modeling and cost estimating, but these models also provide the ability to optimize and plan how the house is actually

built using prefab construction. Since the first studio in 2018, the studio has been improving its approach to prefab, which allows the exterior walls and roof to be assembled in APDesign's off-campus shop. Prefab benefits the studio's work by providing better shop-based assembly methods to integrate high performance insulation, eliminate waste that would normally occur onsite, carefully manage construction quality and costs, and shorten the onsite construction timeline. By the time panels are being assembled on site, the house has been 'built' many times over as a computer model. The increased level of construction planning and management enabled the studio's spring 2021 build in Ogden to be delivered on time and

under budget, despite the remarkable construction material shortages and escalations occurring during that time.

The current prefab methods used by the studio take advantage of a structural insulated panel (SIP) that has wood framing formed into pre-cut 'blanks.' With more than twice the thermal resistance of typical fiberglass insulation, the studio's prefab process cuts down the SIPs and uses conventional framing techniques to build its wall and roof panels. Students follow a special set of fabrication drawings that they develop for each project, where every unique panel has its own set of assembly instructions. Two to three panels can be built in an afternoon using this process, and the studio can complete the panelization of an entire house in under two weeks in the shop. At the end of the process, the panels are loaded onto a trailer and moved to the site, where assembly takes place. During prefab, contractors pour a fully-insulated, frost-protected shallow foundation on site: a foundation that uses a fraction of concrete that a conventional deep foundation uses, while reducing heating and cooling energy by about 20% by providing thermal mass. While a telehandler helps to make onsite assembly faster, many of the panels are light enough that they can be placed by hand. After one to two weeks, the house is ready for the installation of systems, doors and windows, and finishes.

Beyond working with clients on the design of the homes, the students must develop real drawing sets to guide the construction process, and interact with other building professionals and tradespersons along the way. The students' immersive experience learning and deploying advanced construction methods earn them valuable skills managing the practical, financial, and technical aspects of the project in a collaborative setting where they can apply their design training to a broader context.

PROJECT SHOWCASE

Thus far the studio has worked with



Fig 8 (top): The studio's first project, created with the Mattie Rhodes Center by the 2018-19 studio and built by the non-profit Emerging Builders. The studio designed the home, built the wall and roof panels, pre-installed windows, and prefabricated the central core of built-in cabinets and closets. The home's HVAC system runs in a simple straight line above the central core.

Fig 9 (middle): The 2019-20 studio designed this prototype home for Stafford County Economic Development Corporation. Prefab was started by the 2019-20 studio; after pausing due to COVID, a small summer crew from the studio joined with Americorp Vista interns to erect the house and the 2020-21 studio continued to work on the project through its completion. (Exterior view shown in Fig 1)

Fig 10:(bottom) The studio partnered with Manhattan Area Habitat for Humanity as part of the Workforce Solar Housing Partnership, joining technical education partners to build a home in Ogden, KS. The studio's quickest prefab-to-build process yet, this partnership plans to continue working each year to build a new affordable prototype house in the greater Manhattan area.

three non-profit partners to realize its first three builds, all of which were designed and also prefabricated by the studio at APDesign's off-campus shop facility, APDWest.

In 2018-19, the first iteration of the studio was affiliated with the Kansas City Design Center and partnered with the Mattie Rhodes Center in Northeast Kansas City, Missouri to build a new infill home near the organization's Northeast Center. A non-profit offering a range of youth and family services in the Historic Northeast neighborhoods, Mattie Rhodes received its first HUD grant to break a long drought of new housing in the Indian Mound neighborhood. The studio researched the housing conditions in the neighborhood, looking beyond the data to visit several listed 'bargain' homes and land bank properties to conclude the high costs and high risks of remediating the most challenged housing. Working with stakeholders to vet several early designs, the students designed a 3-bedroom, 1.5-bath prototype home that could work on the narrow lots typical of Northeast Kansas City, integrating a well-appointed program into a package of only 1033 ft², while also designing the home to achieve net zero with a modest 3.4 kW photovoltaic array. In 2019, the studio completed prefab wall and roof panels for the house and the non-profit organization Emerging Builders completed the house in 2021, providing immersive training to support underrepresented groups in entering the construction field. The studio's effort to design to a small footprint with big performance, along with the unique educational partnership behind the home, made it possible to offer the home for only \$125,000 to qualified homebuyers: a price point that would allow renters in the neighborhood (where rents average \$800) to transition into home ownership. Emerging Builders and Mattie Rhodes are moving forward with multiple new builds as of 2021, and the studio is developing a second prototype design for use in these future builds.

The studio advanced in 2019-20

as one of nine teams competing internationally in the U.S. Department of Energy's Solar Decathlon 2020 Build Challenge, a program that challenges collegiate teams to design and build innovative homes that demonstrate the use of renewable energy. The studio partnered with Stafford County Economic Development Corporation (Stafford Eco Devo) to design and build a house in the small town of St. John, Kansas. Students worked through the fall semester to research housing conditions in the town, identifying low quality of many existing homes and a slow depletion of the housing stock. The studio developed several initial design options before finalizing a 3-bedroom, 2-bath design with under 1200 ft². Prefab began in the spring using structural insulated panels of foam and wood framing, a new product for that year's build that introduced several benefits to the studio's evolving prefabrication techniques. The COVID pandemic halted prefabrication in March of 2020, but a small group of students worked with their faculty lead to complete prefabrication in the summer and erect the house over a week in August. The next year's studio worked short stints through fall of 2020 and into the spring of 2021 to complete the house with assistance from local contractors and Stafford Eco Devo, with the photovoltaic array installed with the help of Flint Hills Renewable Energy and Efficiency Cooperative. Stafford Eco Devo is renting the home to Americorp Vista interns, so the home will remain available for education. In part due to the success of the first build, Stafford Eco Devo has secured financing to build at least 10 more homes based on the studio's design.

Following the successful projects in Kansas City and St. John, the studio joined a group of non-profit and educational partners to address the workforce housing problem in the greater Manhattan area. Dubbed the Workforce Solar Housing Partnership, the group was formed by Flint Hills Job Corp, Manhattan Area Technical College (MATC), Flint Hills Renewable Energy and Efficiency Cooperative, Manhattan Area Habitat



Fig 11: Volunteers from Manhattan-based Flint Hills Renewable Energy and Efficiency Cooperative installed the photovoltaic array in St. John. Solar installations like this one are more affordable every year, with prices falling below \$10k for a system of this size; in the meantime, the efficiency and output of PVs is rising. In sum, net zero is more affordable than ever for small homes like those designed and built by the Net Positive Studio.

Fig 12: Living in a 'net positive' house isn't just about saving energy. Showcasing the capabilities of APDesign students, these homes are designed to 'give back' at many levels through their sustainability.

Fig 13: The Net Positive Studio is pleased to be part of a growing network of partners that believe in the impact and future of affordable and sustainable housing. Emerging Builders, a non-profit general contractor and construction training program for underrepresented groups in the construction trades, built the studio's first project and is currently working with the studio on a new design to be constructed in 2022.



for Humanity, and former leaders from the Community Solutions to Affordable Housing, an earlier project funded by KSU's Center for Engagement. While the group was planning future projects, a new build in Ogden, KS became feasible through Manhattan Area Habitat for Humanity. The studio completed a research and design phase in the fall, then quickly moved to finalize a design, develop permit drawings, and plan for prefabrication. In the studio's quickest build yet, the students prefabricated wall and roof panels in just over two weeks, delivering the components to the site where a freshly-poured foundation was waiting. In just three days, KSU and MATC students erected the walls and roof of the house, with help from enlisted service members from Ft. Riley's Home Builders Institute (HBI) job training program. Over the next week, the team completed insulation and taping of the weather-resistant exterior insulation, while framing interior walls. MATC and HBI students continued work through the summer, with the house nearing completion this fall, when it will be sold to a qualified homebuyer.

ECONOMIC IMPACT OF NET POSITIVE HOMES

The Net Positive Studio set out to demonstrate that sustainability in



housing was about more than just about environmental good, but about demonstrating how sustainable houses can give back. The economic impact of this 'giving back' is notable for both individual households, as well as for the communities in which they are built.

At the household level, these net zero homes have the potential to return an average of \$2,677 of utility expenses back into homeowners' budgets (based on average Kansas home utility spending); for households in older homes with higher bills, this annual savings can exceed \$4,000 or more. When the affordability of lower mortgage payments is factored in, reduced housing and utility costs of \$800 per month add up to \$288,000 over the duration of a 30-year mortgage. An affordable net zero home may allow a household to avoid taking second or third jobs to make ends meet, pay for childcare and other dependent expenses, or simply maintain a savings for emergencies and special purchases. Becoming 'unburdened' by housing gives households a chance to do more than survive in today's economy, but to increase and sustain a quality of life that the American Dream promised. Moreover, amenities such as daylight, natural ventilation, and access to the outdoors has been proven to improve health, cognitive performance, and emotional resilience in a variety of building types; living with these amenities at home allows the home to nurture the wellness and vitality of its occupants, and not just help them save money. Altogether, a sustainable and livable home may become a major factor for a family to stay and invest in their home, neighborhood, or community for a lifetime.

At the community level, the impact of new housing is also substantial. While the boost of large scale housing development is undebated in rapidly growing communities, in many places there aren't developers or home builders willing to build the new affordable housing that is needed. If these cities, towns, and neighborhoods can break through the deadlock of affordable

housing, and the Net Positive Studio strives to work with partners who are trying to break this deadlock – each house built matters. According to a 2015 study by the NAHB, a single new home creates recurring impacts of \$41k in local personal income, \$10k in tax revenue, and supports 0.7 local jobs; while this impact seems modest, the same study concluded it takes about \$1m in remodeling investment in a community to match this recurring impact. These statistics show the underlying value of the Net Positive Studio's work in helping communities succeed at realizing affordable housing with rigorous design, state-of-the-art construction techniques, and sustainable results.

Moreover, the studio's projects demonstrate a typology and approach to housing that can be duplicated and expanded by others. These homes are not overly-technological, trendy one-offs, but homes that are intended to convince others of the potential and marketability of homes that embody sustainability across the "triple bottom line," benefitting the environment, communities, and economic systems at the scale of the household upwards. The studio can't build all of the houses our communities need to meet the affordable housing demand, but the projects demonstrate that sustainability, affordability, quality, and good design are possible in the same budget; beyond the studio's partnerships, its projects challenge other housing non-profits and advocates, builders, and homeowners to seek the same holistic goals. While today's problem is building one sustainable home at a time, tomorrow's problem is rebuilding a better and more sustainable system to deliver the millions of new housing units our society needs.

ACKNOWLEDGEMENTS

The Net Positive Studio would like to thank its client-partners and their leadership for supporting the studio's work and the unique student opportunities that come with engaged work – the Mattie Rhodes Center, Stafford Economic Development Corporation, and Manhattan Area Habitat for Humanity; and the educational organizations who contributed their teachers' and students: Technical College, Flint Hills Job Corp, and Fort Riley HBI. Thank you to Flint Hills Renewable Energy and Efficiency Cooperative and the Workforce Solar Housing Partnership for making a local impact possible for students. Thank you also to manufacturers who have donated their products in support of the projects: Interstate Windows (windows and sliding doors), Prosoco (panel sealing and flashing), and Beko U.S. (appliances on the St. John build).

The studio also recognizes the help of numerous APDesign faculty who have contributed to the studio as critics, and the APD shop leadership and staff, without which the students couldn't have gotten off the ground.

Lastly, the studio recognizes the past three years of students for their hard work, creativity, dedication, and perseverance: (2018-19 Studio) Yueming Cao, Safa Salih, Amber Morris, Matthew Dickman, Jessica Wyatt, Joe Kutter, Mi Chele Lee, Kazem Namazi, Danielle Dillaha, Christian Carter, Stephen Bregande, Will Olds, Kody Gabel, Johnathan Disberger, Catherine Matthews; (2019-20 Studio) Som Mukherjee, Jordan Bezdek, Sergio Bichara, Jameson Jones, Jeremiah Vick, Rebekka Poole, Yu He, Cat Gutman, Grant Urban, Prajakta Thipsay, Evan Ollenburger, Gaurav Neupane, Braeden Busenitz, Brandon Cole, Bryan Bruckner; (2020-21 Studio) Atia Rahman, Travis Surmeier, Aimee Farrell, Kyler Milligan, Zachary Jensen, Abigail Steinert, Conrad Hively, Justin Cresswell, Autumn Kayl, Salim Akli, Harley Schuster, Alex Weber.

SLOAN® PARTNERS WITH KANSAS STATE UNIVERSITY

Department of Interior Architecture and Industrial Design Partnership Provides Students with Studio, Research, and Design Experience Across Two Courses

Sloan, the world's leading manufacturer of commercial plumbing systems, has partnered with Kansas State University to sponsor two courses in the Department of Interior Architecture and Industrial Design (IAID).

Created to equip students with a background in product research, design, and development, the courses—an undergraduate class for third-year students and a masters-level class for fifth-year students—provide opportunities to learn and innovate the future of interior restroom design as students enter into the workforce.

“Having established this relationship in 2019 we have found this partnership to be mutually beneficial in combining our 100 years of expertise in the plumbing industry with K-State’s amazing creativity in design,” said Jim Allen, President CEO at Sloan. “One of my favorite times of year is when we visit K-State and get to interact with the students. I always leave energized and inspired by the students work and the potential of innovation in the plumbing industry.”

“At Sloan, we’re always looking to advance the future of the commercial restroom, and that innovation starts with the next generation of architects

and designers,” said Gary Peterson, Sloan vice president of engineering and innovation. “We are proud to partner with Kansas State to provide its students with an outlet for creativity in design. In fact, one of our current interns is a graduate of the program.”

The undergraduate course sponsored by Sloan is INDD Industrial Design Studio III taught by Assistant Professor Dr. Mekin Elcioglu, a one-semester class focused on product semantics, design research, problem solving methodologies, conceptualization of ideas, and aesthetic sensibility based in design thinking and human-centered design. Students conduct an in-depth investigation and research an existing restroom product of their own choosing and use their research and analysis within a spectrum of affordable to desirable high-end design solutions to create their own design proposal. Students then design the product in an effort to improve what is currently on the market by solving consumer problems and addressing their needs. The two-semester masters-level course (Product Design Research and Product Market Design), also taught by Dr. Elcioglu, focuses on market research trend analysis and ideation during the fall semester before moving on to design development in the spring term. In addition to their coursework, students

then take a field trip to Chicago to gain a sense of how architecture and design firms operate, while also visiting Sloan headquarters in nearby Franklin Park, Ill.

“We are proud of our relationship with Sloan. This partnership has afforded our students a real-world application of their education,” said IAID Department Head Nathan Howe. “The team that Sloan has put together to work with our students has made this experience challenging, educational and nurturing as they develop into professionals. Our students have thrived in this environment. I am excited to see how Sloan and K-State can build upon the foundation we have already established.”

“Benefiting from both academia’s and industry’s experiences, the research and resources could give the young designers, engineers and everyone who is involved in this collaboration, an upper hand in the development of new concepts and solutions; generating added-value in tackling the issues brought up by global challenges,” added Dr. Elcioglu. “We, the educators, and our industry partners are becoming more adaptable to the swiftly changing local and global needs and paradigms through these partnerships that demand healthier, safer and innovative applications. Adopting new ways of design thinking and integrating



multiple disciplines through holistic and empowering design processes will be a crucial part of design education and hopefully set higher standards that will also benefit the industry.”

Due to the current COVID-19 pandemic, the 2021 spring semester course for fifth-year students was held online. While students were unable to partake in hands-on prototyping, many of their product concepts are directly applicable to the post-COVID-19 commercial restroom environment.

ABOUT SLOAN

Sloan is the world’s leading manufacturer of commercial plumbing systems and has been in operation since 1906. Headquartered in Franklin Park, Illinois, USA, the company is at the forefront of the green building movement and provides smart, sustainable, and hygienic restroom solutions by

manufacturing water-efficient products such as flushometers, electronic faucets, sink systems, soap dispensers, and vitreous china fixtures to promote wellness in commercial, industrial, and institutional markets worldwide. For more information on Sloan and its innovative lineup of products, visit www.sloan.com and follow Sloan on Facebook, Twitter, Instagram, LinkedIn, and YouTube for additional updates.

ABOUT IAID

IAID is in the Architecture, Planning and Design college at Kansas State University located in Manhattan, KS. The department was founded in 1962 as one of the first accredited interior architecture degrees in the nation. It has a 5-year master’s in Interior Architecture and just started a 5-year master’s in Industrial Design. With the industrial partners that IAID has forged in the last 5 years, student designs

have resulted in two products on the marketplace nationwide and seven more in development. Follow IAID on Facebook, Twitter and Instagram.

“We are proud of our relationship with Sloan. This partnership has afforded our students a real-world application of their education”

OZ

A HISTORY

A Look into the History of the Oz Journal

Chris Fein
Assistant Professor, ARCH

Oz, the Journal of the College of Architecture, Planning and Design at Kansas State University, the second oldest student-edited journal in the United States, is dedicated to the exploration of ideas in design through the publication of diverse responses to theoretical issues.

Each year two to three fifth-year graduate students are selected as editors based on idea proposals for a journal theme. The editors seek out essays and projects from leading practitioners, scholars, and artists worldwide. The dialog enriches the editors' and staffs' education. The journal serves as a printed, physical publication—increasingly rare in recent times—allowing for expanded participation and debate for students, faculty, alumni, and others. Also, importantly, Oz serves as an established and respected vehicle with which to grant Kansas State's architecture program a wider, global reach. Oz is largely underwritten through gifts from our many friends: firms, individuals, foundations, and professional organizations. Without such generous support this journal, like most other student-run architectural publications, would no longer exist.

As we approach the 50th anniversary of Oz, we felt it was time to revisit the history of the journal. Started in 1978 by faculty member David Howard Bell, and editor Charles Linn, the intent of the journal was to expose students to a greater range of critical architectural thought and discourse. Professor Bell had been the editor of the now defunct, *Modulus*, which had been the student journal at the University of Virginia, School of Architecture. Bell taught design studios and seminars on critical architectural theory, and the idea of launching the Oz journal represented a clear extension of his teaching and scholarly work.

Within the first three years of the journal—the formative years—a framework for what it would become was established, but it did not initially get off the ground smoothly. Linn, the first editor, graduated, and student Ray Streeter was selected as editor with Michael Grandy and Joy Swallow as assistant editors. At this time the journal still had neither name nor logo.

Truth be told, there was quite a struggle to come up with a name. The dean at the time (Bernd Foerster), taught a second-year lecture course that everyone had to take. One of his

big themes was that architecture had to have “a sense of place.” The editors and staff at the time had all come to believe this was true, and were looking for a name that spoke of place. When it was thrown out (as a joke really) that they call it Oz, the editorial team laughed and then looked at each other and realized it was exactly what they were looking for. Oz, a fictional place that everyone knows about. It is both all about Kansas, but not about Kansas at the same time. It stuck.

Another significant question remained: what would be the visual representation of the journal? Professor Bell designed the Oz logo. In this conception, the “O” letter is shaped as a circle yet the inside portion, the counter, is shaped like the plan of the Campidoglio in Rome. Michelangelo's plan placed the statue of Marcus Aurelius near the center of the circle, symbolizing that space as being the center of the Roman world, though the oval has no center. The Oz logo has Manhattan as the center of the journal while not being the center of the architectural world.

The first Oz journal was printed in spring of 1978. At 8.5 x 11 inches this volume was printed on campus. The



iconic cover of *Oz* 1 was actually a failed competition entry to design the cover of the State of the State address by the Kansas governor. It features characters Dorothy, the Tin Man, and the Scarecrow from the Wizard of Oz driving a bright yellow Kansas State University work truck lovingly referred to as “Jahnke’s Truck.” (Referring to then-Associate Dean Bill Jahnke)

Thomas Lance Braht and Michael Grandy edited volume 2. This issue was printed in the European A4 paper size (an influence of the Italian study program on the editors) and included work from a week-long studio with noted architect Peter Eisenman, the overview authored by student Helen J. Maib, that launched a tradition of engaging important external architects, thinkers, and others contributing to global architectural discourse.

Volume 3, edited by Dixie Roberts Junk and Robert P. Junk, with assistant editors Kelly Kerns and Ken Zuber, is the first to establish *Oz* in its current format. Much credit is due to the Junks for their work on this volume. Under their tenure as editors the 10.5 x 10.5 inches square format and its text styles, fonts, and overall layout was established. It was also the first journal to have a specified “Theme Statement” to which contributors would respond. In the forty-one years since this volume’s printing, this framework has only been slightly adjusted on a case-by-case basis for reasons of theme.

The Faculty Advisor role transitioned from Bell, to Professor Frank Locker for the critical volume 3. The prominent architectural historian Richard Longstreth then led volumes 4 and 5 at the faculty level. Professor William Miller took the reins for volumes 6 through 9, with Professor Ray Streeter sharing the responsibility for volumes 8 and 9. It is with Streeter’s steady hand, that students were able to complete the journal from volume 8 in 1986 all

including two Douglas Haskell Awards for Student Journalism from AIA New York, and numerous awards for graphic design and printing. We have had the privilege of publishing works by nine Pritzker Prize winning architects: Toyo Ito, Shigeru Ban, Thom Mayne, Norman Foster, Tadao Ando, Renzo Piano, Zaha Hadid, Robert Venturi, and Arato Isozaki, in addition to hundreds of other major architects and scholars, including Todd

Williams and Billie Tsien, Steven Holl, Marlon Blackwell, Thomas Schumacher, MVRVD, and Barrozi Viega, to name just a few. Additionally, we have published numerous significant artist

such as: Julius Schulman, Richard Serra, and Alice Aycock. Although not all, many of these contributors were early in their careers when they were asked to contribute to the journal. This is further evidence that the idea of our students tapping into the larger zeitgeist of architectural discourse has been a lasting legacy of the journal.

Let us end by saying, of all the student-led architectural journals only one has existed longer than *Oz*, and that is *Perspecta*, Yale’s architectural journal, currently working on volume 54. At our consistent rate, we may even surpass *Perspecta* in volumes, as they do not always publish annually, and we have thus far never failed at this task. With luck, and quite a bit of work from our student editors and staff, the journal will continue as a pillar of both outward reach as well as our inward learning far into the future.

the way through volume 43 in 2021, though Professor Matt Knox briefly interrupted Ray’s tenure as faculty advisor for volumes 19-21. Then for volumes 23-33 Ray worked with either Professor Knox, or Professor R. Todd Gabbard sharing the role as faculty advisors intermittently. The truth of the matter is that through Professor Streeter’s patience and long-term commitment the journal has become what it is today. Picking up the reigns in 2022, Professors Christopher Fein (editor for volume 21) and Michael Grogan have assumed the role of Faculty Advisors.

Since its inception in 1979, *Oz* has received accolades and recognitions,



WHO ARE APDESIGN STUDENTS?

APDesign Students Continue to Represent and Build a Diverse Demographic in the Design World



50%

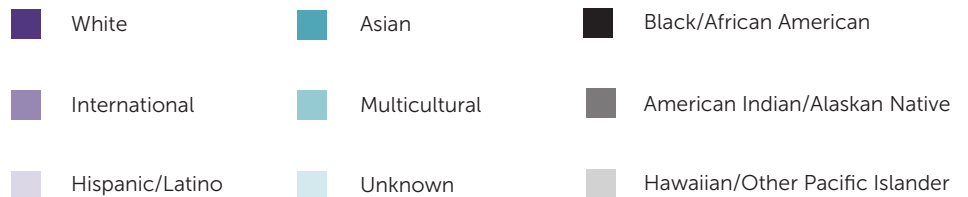
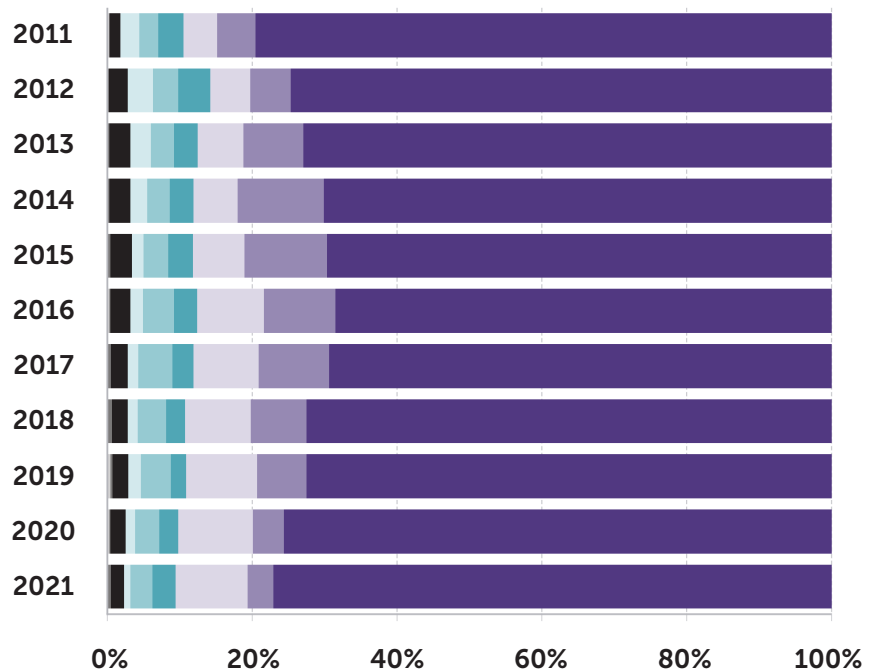


49%

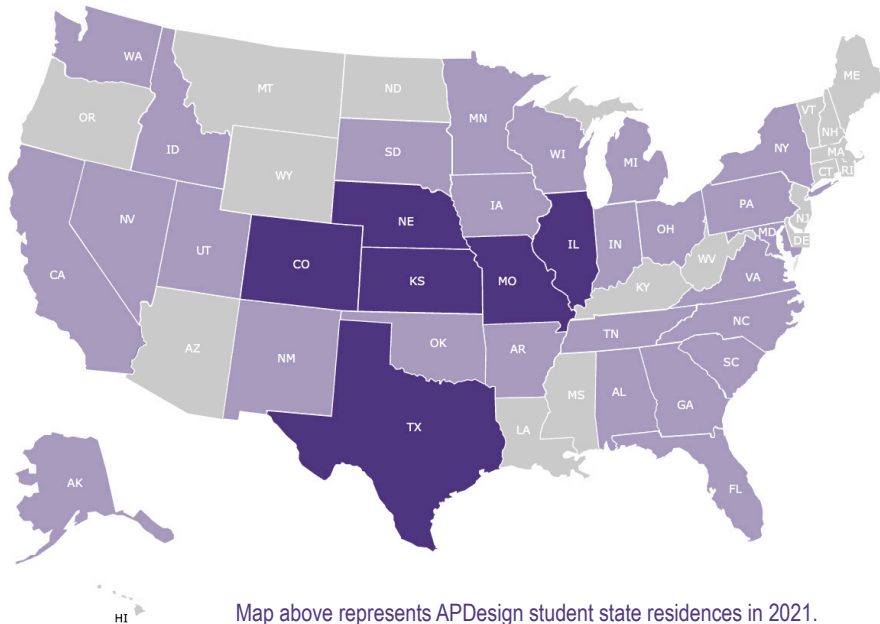
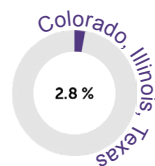
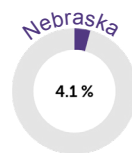
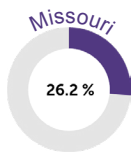
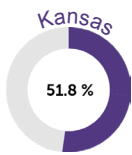
Women have made up over half of the students in APDesign over the last ten years contributing to the vastly growing representation of women in the design field.

RACE AND ETHNICITY

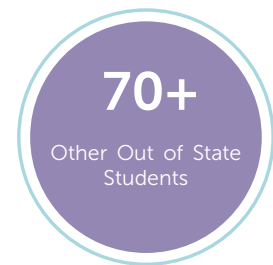
Over the course of ten years, APDesign students have represented a growing variety of race and ethnicities.



TOP U.S. STATE STUDENT RESIDENCIES



Map above represents APDesign student state residences in 2021.



INTERNATIONAL *students*



From 2011-2021, APDesign has enrolled up to 80 international students each year representing over 49 countries. Specifically, in 2021, the program hosted over 30 international students from 13 different countries.

19%
FIRST GENERATION

PLANNING PATHWAYS

Department of Landscape Architecture and Regional & Community Planning Adds New Bachelors Degree

The department of Landscape Architecture and Regional & Community Planning (LARCP) within Kansas State University's College of Architecture, Planning, & Design (APDesign), has introduced many new and exciting changes to start the Fall 2022 semester. Huston Gibson, the new head of the department, has worked collectively to propose and now offer, a Bachelor of Science in Real Estate and Community Development (BS RE+CD).

Currently, there is a Master of Regional and Community Planning program established within APDesign. While this program focuses heavily on a curriculum for aspiring professional planners, the new BS RE+CD

program will have a broader focus on community development professional opportunities with greater emphasis on real estate within the built environment.

Unique to other community development degrees across campuses and in the United States, the BS RE+CD curriculum bridges community development and business with the inclusion of real estate learning, capitalizing on Kansas State University's strengths.

The Bureau of Labor Statistics states the job growth rate for Community and Social Services Specialists and Managers is much faster than any other job average growth rate nationally. Community development professionals make up a critical niche within this category providing imperative place-based community expertise of the built environment. In addition, real estate development occupations are projected to grow 5% between 2019 and 2029, also faster than the average for all occupations nationally.

These disciplines prepare students for future workforce areas such as downtown development programs, business improvement districts, environmental groups, in public, private, and non-governmental organizational sectors, and ultimately focus on people and place. Through a total of 120 credit hours, students will consider built capital, learn how

to map assets, and work to help re-imagine main streets and downtown districts.

As a joint endeavor between APDesign and the College of Business, this program reflects and builds upon the existing resources and faculty expertise between both colleges, key alumni, and professionals, providing the opportunity to form connections. Similar to other degree paths within APDesign, the BS RE+CD curriculum gives students the opportunity to participate in an education abroad experience and/or complete a professional internship, with opportunities being coordinated in part with the Kansas Department of Commerce's Community Development



Main Street Photos - Independence, KS
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“the BS RE+CD curriculum bridges community development and business with the inclusion of real estate learning...”



Main Street Photos - Marysville, KS
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Division. This partnership speaks to the long-standing high-performance of the LARCP programs as the current director is an alumna of APDesign with a Master of Science in Community Development.

This program not only responds to the new university budget model but is grounded in APDesign mission and foundational strengths and supports existing degrees and pathways. For almost two decades, LARCP has offered an award-winning Master of Science in Community Development, and more recently a graduate certificate in community development; both programs offered online as part of the Great Plains Interactive Distance Education Alliance (GPIDEA). Until now, the department and college has not offered any undergraduate degrees. This program will allow K-State students to expand their interests in community development and real estate with a potential path for graduate study.

The specific combination of Community Development and Real Estate Development, sets graduates from the BS RE+CD program apart from general or stand-alone community development or real

estate development programs sending community focused and financially minded graduates into the job market prepared to help build stronger, healthier communities.

Internal market analysis indicates that today's students have a greater willingness to act with increasing enrollments in community development majors. Gibson states the new RE+CD program, "is for today's students motivated and aware of community development challenges, interested in helping others and making quality places to live." Overall, the program will collectively provide a holistic view of communities, again, emphasizing a focus on people *and* place!

NEW LARCP DEPARTMENT HEAD

HUSTON GIBSON



Huston Gibson, professor of Landscape Architecture and Regional & Community Planning, has been named head of the landscape architecture and regional & community planning department in the Kansas State University College of Architecture, Planning & Design.

"I am looking forward to working with faculty, staff and students at APDesign on the important challenges of community and environmental health, prosperity and equity — areas where Landscape Architecture and Regional & Community Planning can play an innovative leadership role in society," Gibson said.

Gibson has been a K-State faculty member in the College of Architecture, Planning & Design in the landscape architecture and regional & community planning department since 2010. He has worked with all programs in the department, including serving as the director of the community development program since 2015.

"Professor Gibson, a proven collaborator, has demonstrated his capacity to lead, leveraging the strengths and trajectory of the department through his leadership in the growth of GPIDEA offerings in community development and his contributions to the introduction of new curriculum and programs within the college," said Tim de Noble, College Dean. "I look forward to his dynamic presence as an engaged departmental administrator."

WAYFINDING AT WEIGEL LIBRARY

Alisha Rall and Ellen Urton

In the book **Wayfinding: People, Signs, and Architecture**, we learn that wayfinding is “problem solving under uncertainty.” Similar to the architectural concept, libraries are also concerned with wayfinding in both the spatial and intellectual sense. When you walk into Weigel Library, we know that our patrons need to have a sense of where they are going and to be confident they are going to find what they are looking for.

We are all unbelievably excited to be back in our spaces among our colleagues. However, we realized that for many new and returning students, Weigel Library may be unfamiliar.

To counterbalance this, Ellen Urton, previous Academic Services Librarian and Alisha Rall, Weigel Library Specialist have worked to create wayfinding strategies to help students locate the most relevant resources for their studies.

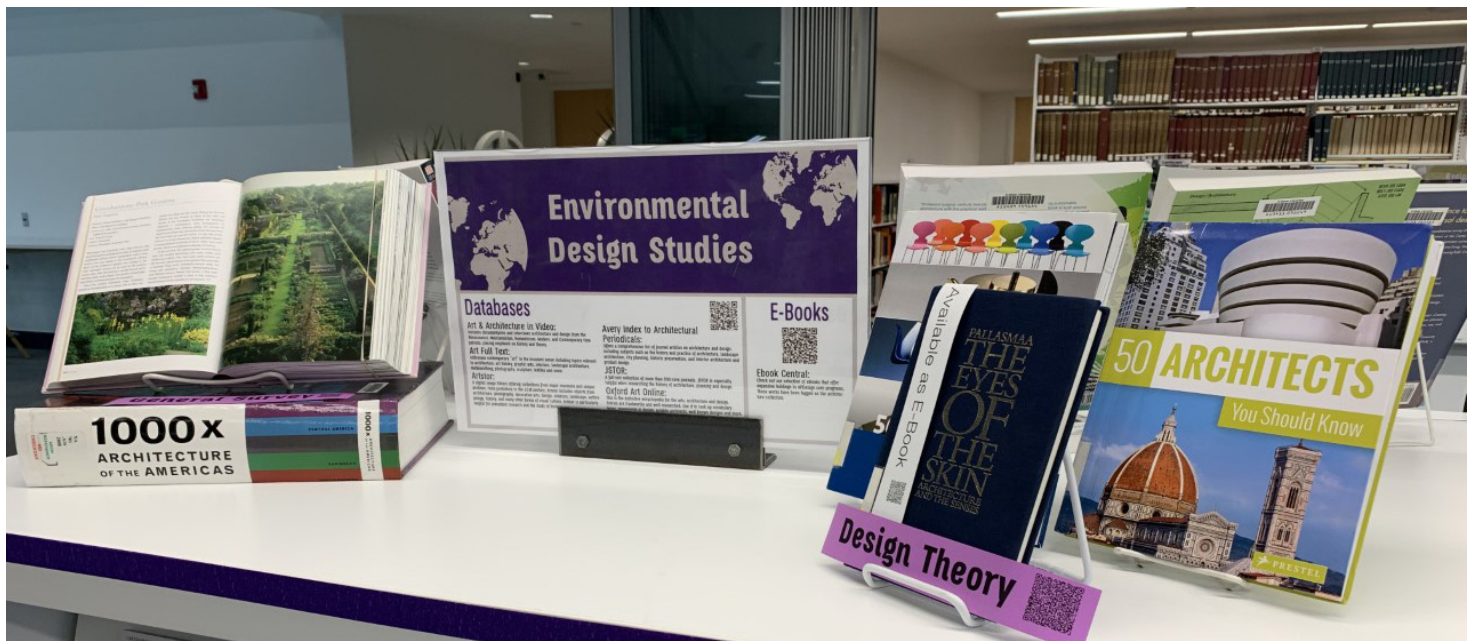
Resource Displays by Program

For each APDesign program, we gathered resources tailored to their curriculum. We chose books, databases, and topics we consider great starting places for browsing Weigel by each field of study. In addition to the books placed on display, each topic has a QR code linking to our online library catalog to feature

more books on that subject. To ensure that students have the opportunity to explore both the physical and online environments, we incorporated select research databases and eBooks that would be useful in their program.

Guided Browsing

One of the things we hear from professors all the time, is that they wished students understood how much inspiration can come from browsing the library shelves. To help students feel more comfortable exploring the stacks, we created a series of guided browsing handouts that feature a collection of useful topics, with their locations drawn out on a map of the





“To help students get a jump start on the semester, we held an interactive informational event called Weigel Library: Explore the World of Design.”

library. Using color coded tape, we highlighted the shelves that correspond to the topic.

Week of Welcome

During the first few weeks of the fall semester, we offered a series of orientation events in Weigel Library. In addition to classroom instruction, we hosted over 300 students in group tours from ENVD, design research, interior design, post-baccalaureates, architecture studios, and many more individual visitors.

To help students get a jump start on the semester, we held an interactive informational event called Weigel Library: Explore the World of Design. We developed four learning stations explained the key features of Weigel Library’s collections, services, technology and reference offerings. The students that attended were rewarded with treats and prizes.

To encourage students to take a break and remember to have some fun, Weigel Library hosted a week long all-campus Lego Competition. We enjoyed the products of their creativity as well as these early semester opportunities to connect everyone to our library resources and services.

Research: Problem Solving Under Uncertainty

As much as navigating the physical world can be a challenge, we face similar barriers in our research. The research process can be fraught with uncertainty, misdirection, and times when we feel lost. Weigel Library is a beloved physical space, but it is also a collection of tools to support your research by getting you started down the right path. As we find our way back to life on campus, remember that Weigel Library is here for you. Alisha and Ellen are available as your guides through Weigel’s world of design.



EKDAHL LECTURE SERIES

FALL 2022

Ernest C. Wong *PLA, FASLA, APA*
September 26



As the founding Principal and President of site, Ernest C. Wong has been instrumental in the evolution of site design group, Ltd. as a multi-cultural cutting edge designSentity and fostering the landscape architecture profession in the City of Chicago. In managing the firm for over 31 years, site has established a reputation for creative design solutions, and developing thoughtful, community-oriented urban spaces.

Kay Sargent *FASID, FIIDA, CID, LEED AP, MCR.w, WELL AP*
October 5



Kay is a director of HOK's global WorkPlace practice. With a passion for using design to transform how and where people work, she spends her days (and many nights) working with clients on workplace strategy and design.

In 2021, the International Interior Design Association (IIDA) announced the induction of Kay into its prestigious College of Fellows. Admission to the College of Fellows is the highest honor given by the IIDA and recognizes those whose design work has significantly influenced the profession.

Alan Organschi *PRINCIPAL | GRAY ORGANSCHI ARCH.*
October 24



A trained cabinet-maker and builder as well as teacher, Alan had developed a practice and a pedagogy that seeks to link broad based conceptions of architectural space, form, and program to the physical means and methods of producing them. He is the founding principal of the construction company JIG Design Build, an offshoot of his work at Gray Organschi Architecture. Alan has lectured on architecture, technology, and the ecological impacts of building at universities and public and professional forums in the US, Canada, and Europe.

(Y)OUR FUTURE



Help Recruit Students to APDesign

Karina Taufi is the personal contact for students interested in pursuing one of our design or planning degrees. Please feel free to share her contact information. Also if you are preparing to give a presentation about your profession, please let us know. We are happy to provide information about APDesign.

Karina Taufi
Director of Student Recruitment

785-532-1994

myapd@k-state.edu

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Planning & Design

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Andres Alfaro '12

Burns and McDonnell, Kansas City KS

Olivia Ashbrook '19

FORWARD Design | Architecture, Kansas City MO

Mark Bacon '06

BVH Architecture, Lincoln NE

Felicia Balestrere '13

Lisa Schmitz Interior Design, Kansas City MO

Brandon Drake

Dake Wells Architecture, Springfield MO

Joe Daly '98

Norris Design, Cedar Park TX

Cale Doornbos '01

Lamar Johnson Collaborative, Kansas City MO

Bill Dunn, Jr. *

JE Dunn Construction Group, Mission Woods KS

Jeff Ellison '90

Ellison-Auxier Architects, Inc., Saint Joseph MO

John Frank '02

BRR Architecture, Bentonville AR

Michael Friebele '09

Perkins Eastman, Dallas TX

Kent Glasscock

K-State Institute for Commercialization, Manhattan, KS

Meredith Hampton '14

GLMV Architecture, Wichita KS

Adam Herbig

Katalyst Group Inc., Kansas City MO

David Hildebrandt '08

Director of Store Design, Pizza Hut, Arlington TX

Joe Keal

Lamar Johnson Collaborative, Kansas City MO

Amie Keener '01

Gensler, Garland TX

Peter Kruse

Kruse Development Services Group, Carlsbad, CA

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Kent Mendenhall '95

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Brian Mirakian

Populous, Fairway KS

Lynn Newkirk

Newkirk Novak Construction Partners,
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Kirk Thompson

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JE Dunn Construction, Overland Park KS

Natalie Gordon

Anderson Knight Architects, Manhattan KS

* Retired