AIA Dallas

May 30, 2023

Marcel Quimby, FAIA
Chair, Honor Awards Committee
Texas Society of Architects
500 Chicon Street
Austin, TX 78702-2754

RE: University of Texas at Arlington College of Architecture, Planning, and Public Affairs Design Build Program for the TxA Citation of Honor Award

Dear Ms. Quimby and Honors Committee:

It is with great pleasure that AIA Dallas nominates the University of Texas at Arlington (UTA) College of Architecture, Planning, and Public Affairs Design Build Program for the Texas Society of Architects Citation of Honor Award. The UTA Design Build Program started in 2002 and has impacted hundreds of students, community members, and professional and industry partners for over two decades. The program gives students full-scale design and construction opportunities while working with strategic community partners in the North Texas Region.

The program has now grown into one of the central tenets of the strategic plan for the college and a catalyst for developing future design leaders. Through a well-crafted process, projects apply innovative research, develop a critical advocacy platform, deepen design education, and foster engagement to support community-driven ideas.

Projects range from installations, gardens, single-family residences, and civic works for local municipalities. These projects create a diverse array of typologies, material and technology benchmarks, and community interaction. The program has always benefited from strategic partnerships - from nonprofit project partners like the Housing Channel and bcWORKSHOP or industry and professional partnerships like AIA Dallas and Dallas Area Rapid Transit.

The program historically has always focused on how the intersection of education, design, and our community can produce a stronger and more equitable built environment. From the La Bajada Urban Farm to the pioneering micro-housing project in Arlington with the Housing Channel of Tarrant County, the program has consistently found opportunities to advocate for thoughtful and sustainable design solutions that support the people who would most benefit.

The UTA Design Build Program has grown and received recognition among the community, region, state, and other academic institutions. This includes seven national, state, and local design awards reinforcing our mission of working with our local communities while seeking broad-based impact through education and advocacy.

With great support, we nominate this exceptional Design Build Program at the University of Texas College of Architecture, Planning, and Public Affairs for the Texas Society of Architects Citation Award.

Sincerely,

Kate Aoki, AIA
2023 President, AIA Dallas

University of Texas at Arlington / DESIGN BUILD PROGRAM

The UTA Design Build Program is a multi-disciplinary academic initiative working with strategic community partners in the North Texas Region. Based in the College of Architecture Planning and Public Affairs (CAPPA) at the University of Texas at Arlington, the program has impacted hundreds of students, community members, and professional partners for over two decades. Starting in 2002 with the modest intentions of providing students with more full scale design and construction opportunities, the UTA Design Build Program has grown into one of the central tenets of the strategic plan for the college and a catalyst for developing design leaders of the future. Through a well crafted process, projects apply innovative research, develop a critical advocacy platform, deepen design education, and foster engagement to support community-driven ideas.

Projects range from temporary installations to garden pavilions, and single family residences to civic works for local municipalities. When taken as a whole, these projects create a diverse array of typologies, material and technology benchmarks, and community interactions. The program has always benefited from strategic partnerships including non-profit project partners such as the Housing Channel and bcWORKSHOP and industry and professional partners like AIA Dallas and Dallas Area Rapid Transit.

In 2016, CAPPA's School of Architecture re-energized its Design Build Program as a result of several synergistic and complementary actions. The financial support of a generous donor, administrative support that led to design build becoming a component of the university's strategic plan, and most importantly an increased interest from students propelled the program forward. These elements aligned with a broader national trend in architectural education that centralized design pedagogy to value community engaged design build curriculum. In 2019, the UTA Design Build Program acquired resources to hire additional faculty and expand into the new 13,000 sq. ft. Community Design Build Lab where students work on full-scale projects supported by a state-of-the-art fabrication facility. As a result, the program is now supported by multiple studios and professors with twelve projects completed in partnership with a wide range of community organizations over the past seven years.

BIOGRAPHY

Throughout its history the program has always focused on ways education, design, and community engagement can produce a stronger and more equitable built environment. From the La Bajada Urban Youth Farm in Dallas, to the pioneering micro housing project in Arlington, the program has consistently found opportunities to advocate for more thoughtful, and sustainable design solutions to create real-world tangible impact with communities. As the UTA Design Build Program has grown, not only has the type and range of projects increased, but the profile of the program has risen to receive recognition among the community, region, state, and other academic institutions. This includes seven design awards at the national, state, and local levels that reinforces our mission of working with our local communities while seeking broad based impact through education and advocacy.

Figures

Top: Design conversation on site at the micro houses project

Figures
Top: Students welding at the Community Design Build Lab
Middle Top: Students facilitating a community survey in Dallas
Middle Bottom: UTA curated design build exhibition
Bottom: UTA facilitated design build conversation at TxA event

STATEMENT OF CONTRIBUTIONS

Within the regional and academic community the UTA Design Build Program is the only of its kind that provides research, design, build, and engagement opportunities in a synthesized process. The program is built upon several foundational principles that guide the work.

Education

Through strategic collaborations with non-profit partnerships, education is central to the mission of the Design Build Program. The curriculum focuses on team building, best practices, industry workshops, along with contractor and construction process engagement. On-site reviews with students, specialists, clients, and community broaden the educational network to encompass as many in this critical aspect of the program. Affordable single family homes such as Casa Cortile or Skylark have consistently made great use of this model, by bringing together many of these educational aspects to ensure high quality outcomes for homes in Arlington, Fort Worth, and Dallas.

Engagement

Community engagement is an essential element to design build. Design when used in service of community improvement is transformational. To do this well, discourse and workshop planning is critical. The most recent project in collaboration with Joppy Mamma's Farm is a great example of a project that has evolved from years of relationship building between neighborhood leaders and UTA faculty and students across landscape architecture, architecture, and historic presentation disciplines. Specifically this project generated a master plan for the urban garden, a built office space, and a constructed outdoor classroom pavilion. The farm itself is a transformational project for a non-profit regenerative organization in the community.

Research

As an academic program, research and innovation are fundamental to how the Design Build Program works. Cultivating new knowledge, largely through applied research outcomes is a central factor to the projects selected and the solutions that are implemented. One of the clearest examples of this is the building performance research for passive house technology in the Wynn Terrace Micro Housing project. This research creates valuable data collection on construction technology through sensors and monitoring systems in real time.

STATEMENT OF CONTRIBUTIONS

Similarly, The Next Generation Bus Shelter for DART creates a bridge to advocate for equitable technology solutions to all communities through the engagement and design process held with DART riders.

Advocacy

Within the AEC industry, the UTA Design Build Program has been able to advocate for sustainable, equitable and innovative design solutions presented through collaborative project opportunities. Recent work with CADRE of HKS on micro housing for the aging population has led to a number of publications on the use of technologically equipped housing modules capable of responding to a growing population of users in urban communities. Or the award winning work in the Polytechnic Heights neighborhood in Ft. Worth which foregrounds important work on design justice and led to a master plan for a community that has desired comprehensive direction for many years. More broadly, the UTA Design Build Program actively publishes, exhibits, and holds lectures for the purpose of deepening the impact of these key issues.

Design Excellence

The program places an emphasis on design excellence by implementing well defined strategies that can be constructed and detailed on time and on budget. The culmination of these points coming together in a large full scale project is often challenging for students who are often working at this scale for the first time. However, the student's ingenuity and determination always rises to the occasion. The first micro home prototypes done in 2016 were great examples of this for how two teams of students built very small experimental projects that tested new construction techniques, and included building all cabinetry and millwork for both projects. These projects received statewide attention and ultimately were presented at TxA in 2017.

> "The collaborative nature of these studios made the biggest impact on me. As I enter the workforce, I am keenly aware that we are in a profession that thrives from collaborating with a diverse group of individuals - from students, to the community, to the client; the list is endless." (CAPPA Design Build Alumni)

Figures

Top: Homeowner of design build duplex project sitting on her porch

EXHIBIT / IMPACT THROUGH EDUCATION

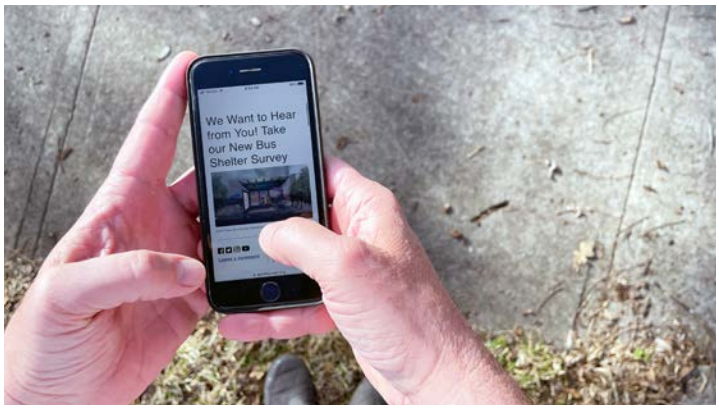
34 Studios
350+ Students
100% Graduation Rate
86% Alumni in Architecture

Figures

Top: Students on site building at the Beall Street Duplex project
Bottom Left: Students in studio designing as a team
Bottom Right: Students on site presenting at Joppy Momma's Farm

Design build students engage the design, making and management of projects to facilitate a stronger connection between architecture, context, construction, and material experimentation. For many students this is the first time they are confronted with real world design challenges, clients, team collaboration, budget, gravity, and weather in their architectural studies. Studios have been shown to positively impact the overall quality of architectural education through hands-on experiential learning that improves a students' overall understanding of the practice of architecture. As one design build alumni shared, "design build is one of the best program types to get students out of their comfort zone and able to really understand architecture... it made a profound impact on my career."

EXHIBIT / IMPACT THROUGH ENGAGEMENT



Community engagement is foundational for all of UTA's design build projects. Regardless of the approach used, participatory processes work to expand neighborhood capacity, reflect community identity and priorities, advance public interests and example community decision-making. By incrementally addressing the barriers inhibiting community-led development, design build interventions contribute to more just and equitable neighborhoods. To engage this work UTA regularly partners with neighborhood organizations to advance a community's agenda and with industry partners and municipalities to explore urban issues.

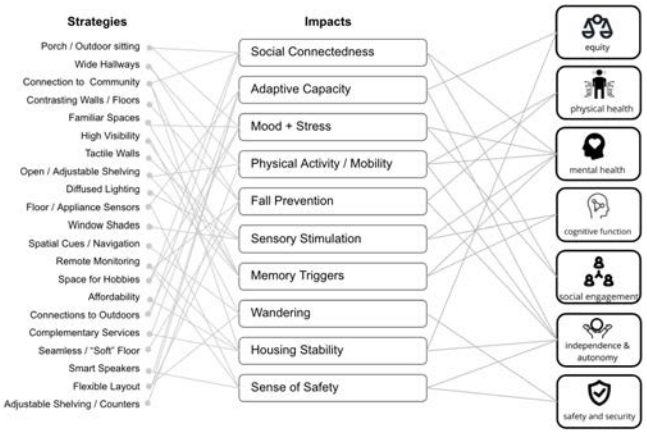
Figures

Top Left: Community visioning session - Melissa Pierce Project
Top Right: Public feedback survey - DART bus shelter prototype
Middle Left: Community research + gallery walk - Beall Street Duplex
Middle Right: Community conversations - Carroll Street Duplex
Bottom Left: Neighborhood + site tour - Joppy Momma's Farm
Bottom Right: Community + funder presentations - Joppy Momma's Farm

EXHIBIT / IMPACT THROUGH RESEARCH

In addition to teaching and community engagement, design build projects engage professional partnerships to conduct multi-disciplinary research that seeks to advance design, construction, and development fields. Students leverage research opportunities to test materials, building assemblies and applications, integrated technology solutions, and social, health, and environmental performance measures to enhance the long-term sustainability and viability of projects.

Wynn Terrace (above) is an example of a multi-year research initiative that designs and tests different performance standards in micro home construction. Student mock-ups were constructed to study conventional stick, SIP, and ICF construction. These systems will be used to construct four houses meeting a range of certification levels, including a “baseline” IECC, EnergyStar, Zero Energy Ready, and Passive House. Research includes issues of construction cost, housing typology, and post-occupancy monitoring which is being explored with faculty from the College of Engineering. This project has been presented at several international conferences and construction will begin in summer 2023.



Influencing Building Standards Proposing Policy Changes Partnering with Think Tanks

Figures

Above: Wynn Terrace: built mock-ups of 4 comparative wall assemblies for performance testing: baseline, energy star, doe zerh, passive house
Below: Agile dwelling units for elderly: outcomes based design framework

EXHIBIT / IMPACT THROUGH ADVOCACY

Design build projects seek to optimize positive influence on students, project partners, the community, and the broader architectural design and development profession. As such, the UTA Design Build Program collectively evaluates the research agenda and potential impact of each project before entering into a partnership agreement. Projects are thoroughly documented by faculty and students and are leveraged through public exhibitions, lectures, presentations, articles, and awards. The work is used to example solutions to critical questions facing the built environment. Advocacy around issues of equity, sustainability, and health and well-being (just to name a few) expand the impact of this work beyond the classroom or local neighborhood to state and national relevancy.

Figures

Above: Community Design Build Lab open house
Top Right: AdEx Exhibition + gallery talk - Sneaky Density
Bottom Right: Various design build publications

EXHIBIT / IMPACT THROUGH DESIGN EXCELLENCE

24 Projects
26 Communities
18 Community Partners
34 Industry Partners

Community engaged design and building activities have been a part of UTA's architectural curriculum for over two decades. During that time, design build studios have worked in collaboration with 18 community partners across North Texas. Projects apply innovative research, creative problem solving, design education, and making to support community driven ideas.

Figures

Above: Images representing a range of UTA design build projects

EXHIBIT / IMPACT THROUGH DESIGN EXCELLENCE

Micro Houses

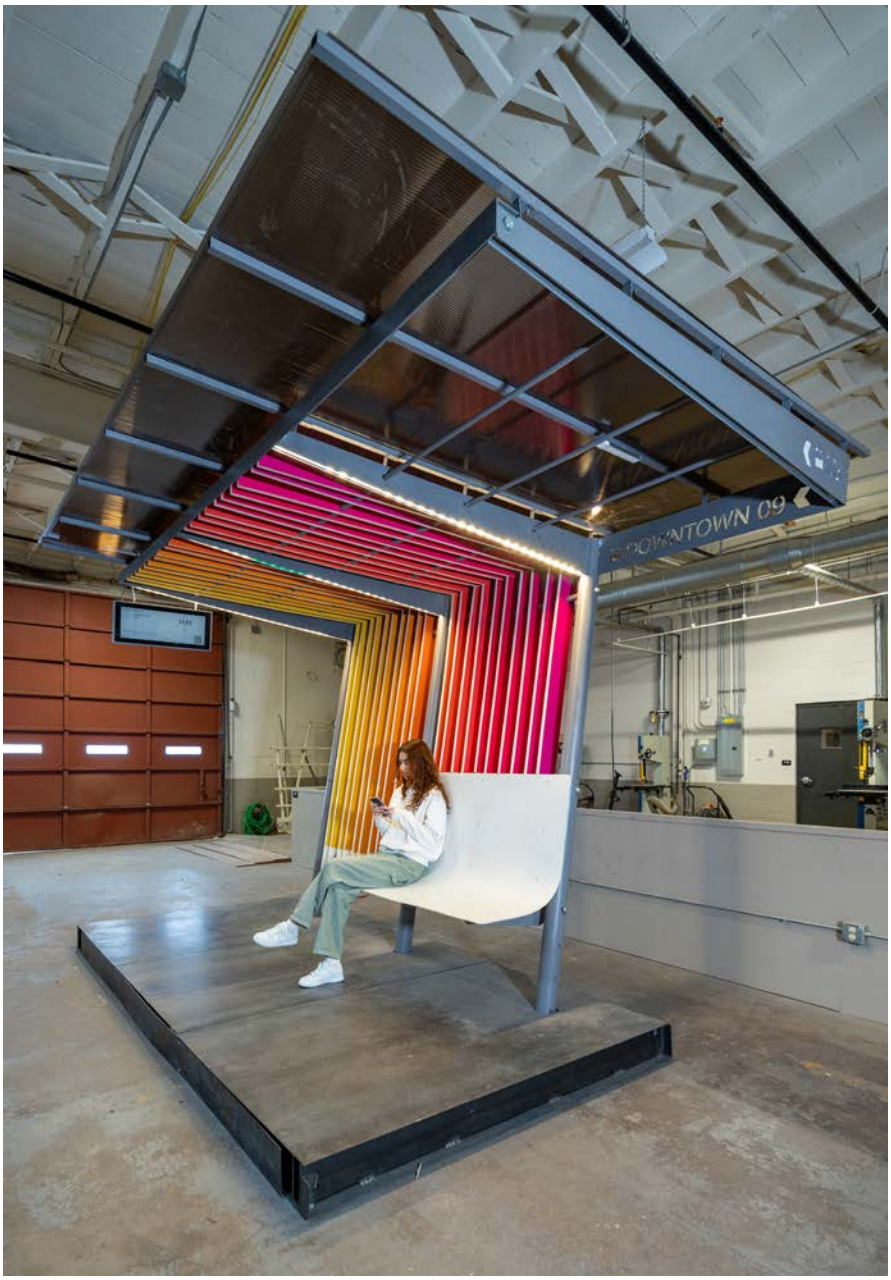
Partners: Housing Channel, UTA

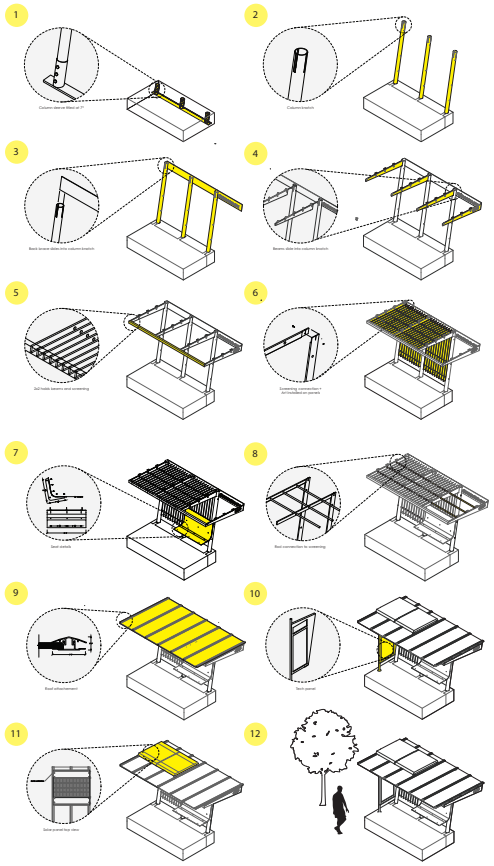
Micro Houses: Micro Houses are designed to minimize the built footprint on the landscape, utilize recycled or re-purposed materials, and to embody sustainability principles. The project encompasses the functionality of a standard size house into an elegantly structured 350 or 400sqft footprint. One of the concepts behind the design was to create a new generation of Catalog Homes. As a series of prefabricated spatial modules, the designs maximizes the interior space by combining the electrical and plumbing needs into a centralized zone. Plans consists of living and bedroom modules, bisected by the service core. Large windows and sliding doors bring the outside in to provide ample light, making the homes feel larger than their small footprints.

Figures

Above: Two completed micro houses
Top Right: Interior one
Bottom Right: Interior two

EXHIBIT / IMPACT THROUGH DESIGN EXCELLENCE





Next Generation DART Bus Shelter

Partners: AIA Dallas, Dallas Area Rapid Transit

The Next Generation DART Bus Shelter re-imagines the design of existing infrastructure to optimize public benefit. This studio was conducted in partnership with AIA Dallas and Dallas Area Rapid Transit. By coupling public engagement with design and making, the new shelter enhances rider experience, responds to environmental conditions, and relates to different neighborhood contexts through its kit of parts approach and tailored use of art and technology. The prototype is currently being used to solicit public input that will inform DART's new bus shelter model.

Figures

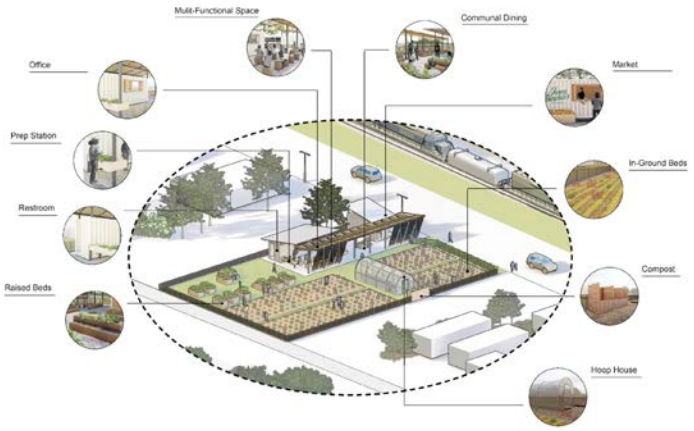
Left: Completed bus shelter prototype
Top Right: Rendering
Bottom Right: Kit of parts diagram + assembly instructions

EXHIBIT / IMPACT THROUGH DESIGN EXCELLENCE

Joppy Momma's Outdoor Classroom

Partner: Joppy Momma's Farm

Joppy Momma's Farm Outdoor Classroom serves as the primary outdoor gathering space and "front porch" for the Joppa Freedman's community in Dallas, Texas. The pavilion's design was inspired by the historic shotgun houses of the area which is reflected in its form and use of reclaimed wood siding as sun shading louvers. Integrated rainwater collection system and solar panels reinforce Joppy Momma's Farm mission to empower, educate and create greater opportunities for health, wellness and self-sufficiency through sustainable, regenerative agriculture. The structure was prefabricated at UTA's Community Design Build Lab and erected on site in one week's time.



Figures

Above: Outdoor classroom in progress
Top Right: Re-purposed wood overhead screen detail
Bottom Right: Master plan site diagram