

# DAVID HINSON

FAIA

## PROFESSOR

Auburn University School of Architecture,  
Planning and Landscape Architecture

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## BIOGRAPHICAL STATEMENT

David Hinson, FAIA

**Community service and advocacy have underpinned David Hinson's forty-year career as an architect and teacher.** Since his early career in Philadelphia, Hinson has worked to mobilize the talents and energy of his professional peers and students to effect meaningful community change, and he has used leadership roles in almost every significant organization of the profession to champion these values.

Hinson's teaching approach is centered on helping his students achieve their full potential as architects, leaders, and change agents. He focusses on students' success inside and outside the classroom, championing a learning culture that places students' growth and development first.

Hinson pushed the AIA to become more responsive to the needs and interests of young professionals by helping to establish the Young Architects Forum in 1991. As an ACSA Director, Hinson helped broaden the capacity of the organization to serve its members by helping establish the Education, Leadership, and Research & Scholarship committees. As a NAAB Director Hinson played key roles in crafting the collaborative approach leading to the drafting of the *2020 Conditions and Procedures*, and he has helped NCARB refine the structures of IDP (AXP) to better serve emerging professionals and update its *Model Rules of Conduct* to better address practice in the 21<sup>st</sup> Century.

Since co-founding Philadelphia's Community Design Collaborative thirty years ago, Hinson has worked to nurture a commitment to community service in his students and mobilize his professional peers to action in service of the under-served. Hinson has led a twenty-year partnership with Habitat for Humanity, providing his students with high-impact design-build learning experiences and elevating Habitat's understanding of the role of design and building performance in its mission to serve low income families. Hinson co-authored *Designed for Habitat; Collaborations with Habitat for Humanity* (Routledge,) which highlights how architects across the country are effecting similar change.

# LINE

The visual timeline to the right represents professional work and impact from 1997 to present, taking place at Auburn University and/or in Auburn, Alabama.

The text timeline below represents education and early professional work.

## EDUCATION

- 1977-82  
Bachelor of Architecture  
Auburn University  
Auburn, Alabama
- 1982-83  
Master of Architecture  
University of Pennsylvania  
Philadelphia, Pennsylvania

## EARLY NATIONAL LEADERSHIP

- Philadelphia, Pennsylvania
- 1989-92  
Young Architects Forum
  - 1991  
Community Design Collaborative
  - 1991-94  
Kellogg National Leadership Fellow
  - 1993  
Philadelphia Young Architect Award

## PRIOR TEACHING

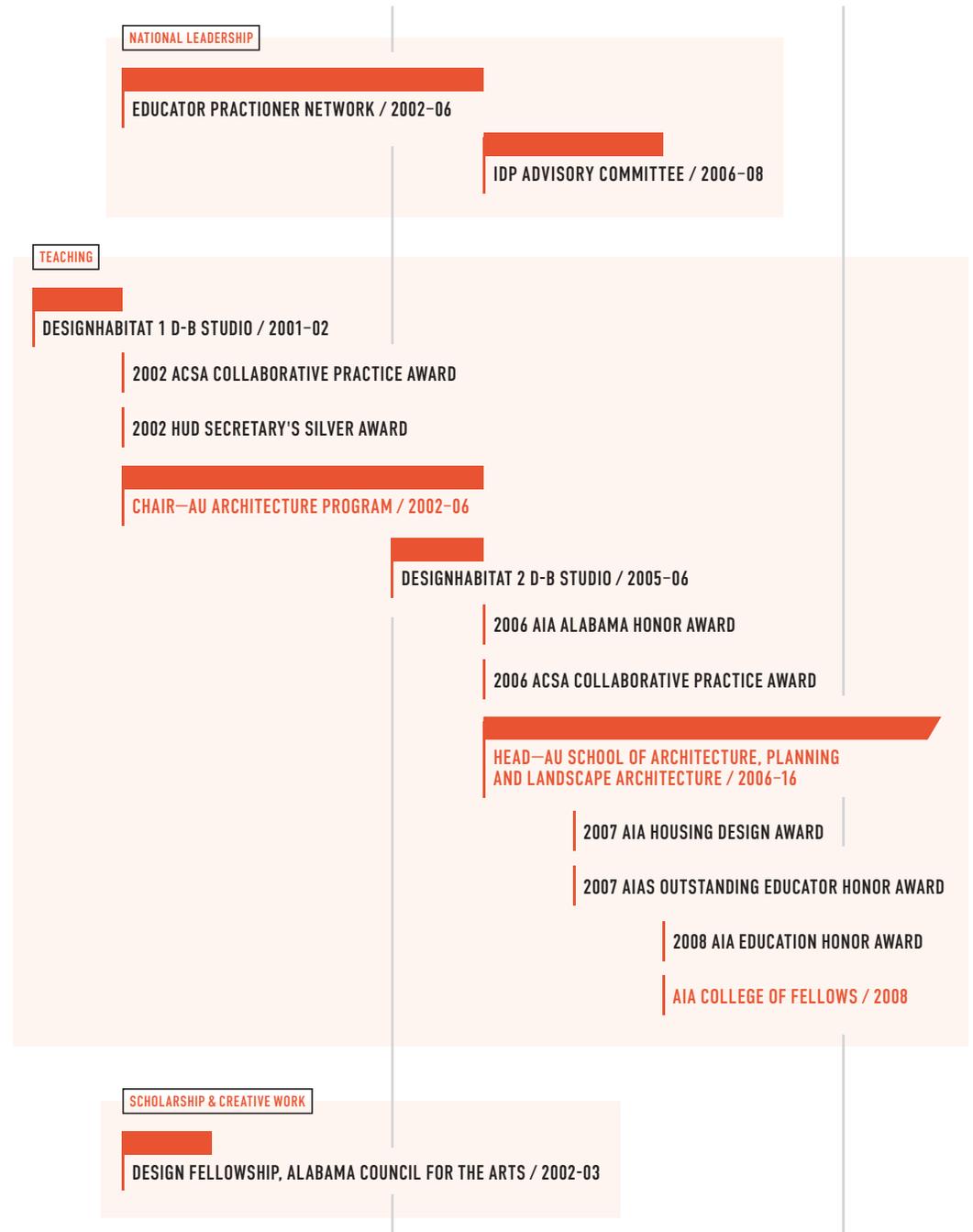
- Philadelphia, Pennsylvania
- 1994-97  
Temple University

# TIME

2000

2005

2010



# LINE

# TIME

2010

2015

2020

NATIONAL LEADERSHIP

ACSA BOARD OF DIRECTORS / 2012-15

NCARB ETHICS TASK FORCE / 2015-17

NAAB BOARD OF DIRECTORS / 2016-19

SCHOLARSHIP & CREATIVE WORK

AIA MONTGOMERY MERIT AWARD / 2008 Hinson+Dagg Architects—Large Residence

AIA MONTGOMERY MERIT AWARD / 2009 Hinson+Dagg Architects—Lusche Residence

AIA ALABAMA MERIT AWARD / 2011 Hinson+Dagg Architects—Hinson Residence

*DESIGNED FOR HABITAT: COLLABORATIONS WITH HABITAT FOR HUMANITY (2012)*

AIA MONTGOMERY MERIT AWARD / 2016 Hinson+Dagg Architects—Browning Residence

AIA ALABAMA MERIT AWARD / 2016 Hinson+Dagg Architects—Browning Residence

AIA ALABAMA MERIT AWARD / 2018 Hinson+Dagg Architects—Dugas Residence

AIA MONTGOMERY MERIT AWARD / 2019 Hinson+Dagg Architects—Dugas Residence

*DESIGNED FOR HABITAT 2 (IN PROGRESS)*

TEACHING

HEAD—AU SCHOOL OF ARCHITECTURE, PLANNING AND LANDSCAPE ARCHITECTURE / 2006-16

AU EXCELLENCE IN FACULTY OUTREACH AWARD / 2010

AIA/ACSA HOUSING EDUCATION AWARD / 2010

2015 AU SPIRIT OF SUSTAINABILITY AWARD

HABITAT 20K PASSIVEHOUSE D-B STUDIO / 2018

1<sup>ST</sup> CERTIFIED PHIUS BUILDING IN ALABAMA / 2019

HABITAT 20K ZERH D-B STUDIO / 2019

PHIUS BEST AFFORDABLE HOME AWARD / 2020

# NATIONAL SERVICE AND LEADERSHIP

David Hinson, FAIA



Selected to represent AIA Pennsylvania on the Young Architects Task Force in 1989, Hinson and the other young leaders on the task force pushed the AIA to strengthen its efforts to address the needs and interests of young architects and emerging professionals. This resulted in the creation of the **Young Architects Forum** and subsequently the National Associates Committee. Hinson became a founding advisory council member for the Young Architects Forum and influenced its focus and programming.



Concurrent with his national YAF appointment, Hinson founded and led one of the most active YAF chapters in the country in Philadelphia. The Philadelphia YAF was a dynamic change agent in the early 90s Philadelphia design community, inspiring a generation of future leaders who've had a lasting impact in the city. Hinson's leadership and service with the YAF earned him a **Kellogg National Leadership Fellowship** (one of only 4 architects selected as Leadership Fellows by the Kellogg Foundation over the 20-year span of this program) and the **1993 AIA Philadelphia Young Architects Award**.



Among the most profound legacies of Hinson's leadership in the Philadelphia design community was his involvement as a co-founder of the Community Design Collaborative. Established in 1991 to harness the talent and energy of the Philadelphia-area design community, the **Community Design Collaborative** organizes teams of designers and engineers to provide pro bono design services to community groups and non-profit organizations. Hinson served on the board of the CDC from its founding in 1994 until leaving Philadelphia to teach at Auburn in 1997.



From 2002 to 2006 Hinson served on the national advisory council for the **Educator Practitioner Network** (EPN). Hinson helped lead the EPN to a dramatically expanded role as the hub of the AIA's efforts to establish stronger partnerships with architectural educators. Hinson served as EPN liaison to the Case Study Work Group and (as EPN Chair) oversaw the adoption of the Case Study Initiative as an EPN-led program. Hinson organized and chaired an EPN-sponsored panel on international models of educator/practitioner collaboration at the 2005 ACSA International Conference in Mexico City. In 2006 Hinson chaired the AIA Education Honor Awards jury and presided over the awards presentation session at the 2006 AIA National Convention in Los Angeles.



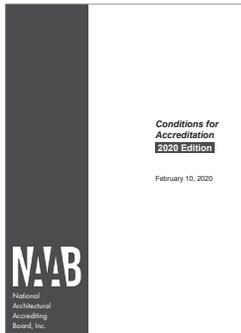
Hinson has been a passionate advocate for interns and an active voice in the national dialogue on the evolution of the **Intern Development Program** (now the AXP). In addition to serving as an IDP/AXP mentor and Educator Coordinator for Auburn, Hinson has been an active participant in numerous IDP/AXP Coordinators conferences. He was an invited presenter to the 2002 Internship Summit and served as the Educator Coordinator representative on the national IDP Coordinating Committee. Via these roles, Hinson served to advance comprehensive updates and changes to the AXP program designed to improve the learning experience of emerging professionals as they navigate this challenging phase of their professional careers.

# NATIONAL SERVICE AND LEADERSHIP

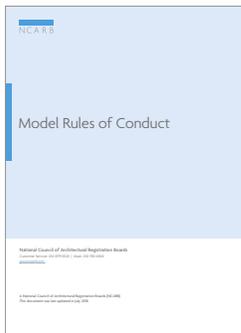
David Hinson, FAIA



Hinson served on the **ACSA Board of Directors** from 2012 to 2015, chairing the ACSA Awards Committee in 2014 and serving on the Executive Committee in 2015. As an ACSA Director, Hinson worked with his colleagues to broaden the structure of the ACSA board and to create three new standing committees - focused on teaching, scholarship and research, and leadership – to help the association advance and serve the interests of its membership in these critical areas.



Hinson was nominated to the **NAAB Board of Directors** by the ACSA and served on the Board from 2016 to 2019. He served as the first Chair of the NAAB's International Committee and led the effort to clarify NAAB's mission in the international arena and update its international certification services. Hinson also played a critical role in the planning and process design behind the 2019 national accreditation summit and served on the final writing team for the 2020 NAAB Conditions and Procedures.

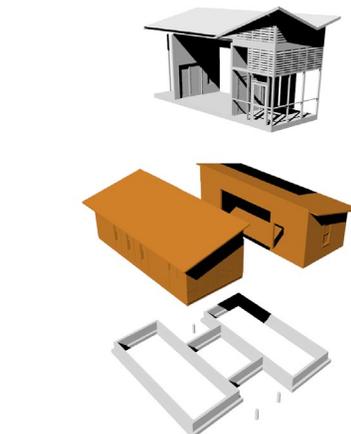


In 2015, Hinson was tapped to serve on an NCARB Task Force assigned to undertake a comprehensive update to NCARB'S model **Rules of Conduct**. Over a three-year process Hinson his colleagues worked to bring the Rules of Conduct into alignment with 21<sup>st</sup> Century practice, including the addition of new provisions addressing workplace harassment and fair employment practices. The new Rules of Conduct were adopted by NCARB in 2018.

# TEACHING

David Hinson, FAIA

As a Kellogg National Leadership Fellow (1991-94), Hinson studied the role that professional schools play in the development of professional values related to community service in the disciplines of law and medicine. From the beginning of his teaching career, Hinson has worked to apply the lessons and insights gained from that fellowship to his role as an architectural educator. Inspired by his mentor and Auburn colleague Samuel Mockbee, Hinson founded the **DESIGNHabitat program**, a twenty-year partnership between Auburn University and Habitat for Humanity affiliates across the state. Via a series of design-build studios and HFH partnerships, Hinson and his faculty and student collaborators have elevated the role of design and the understanding of sustainable design across the Alabama Habitat community.



## TEACHING

David Hinson, FAIA

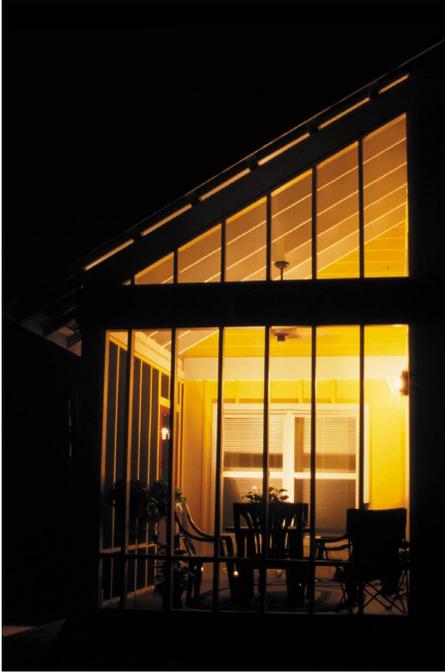
These design-build studios produced the first Energy Star certified HFH homes in the state 20 years ago, and the first Passive House certified home in Alabama in 2020. These studios have earned accolades for both teaching impact and design outcomes, including:

- 2002 ACSA Collaborative Practice Award
- 2002 HUD Secretary's Silver Award
- 2006 AIA Alabama Honor Award
- 2006 ACSA Collaborative Practice Award
- 2007 AIA Housing Design Award
- 2008 AIA Education Honor Award
- 2010 Auburn University Excellence in Faculty Outreach Award
- 2010 AIA/ACSA Housing Education Award
- 2015 Auburn University Spirit of Sustainability Award
- 2020 PHIUS Best Affordable Housing Design Award



**TEACHING**

David Hinson, FAIA



DESIGNhabitat 1



**TEACHING**

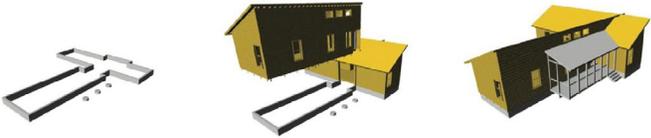
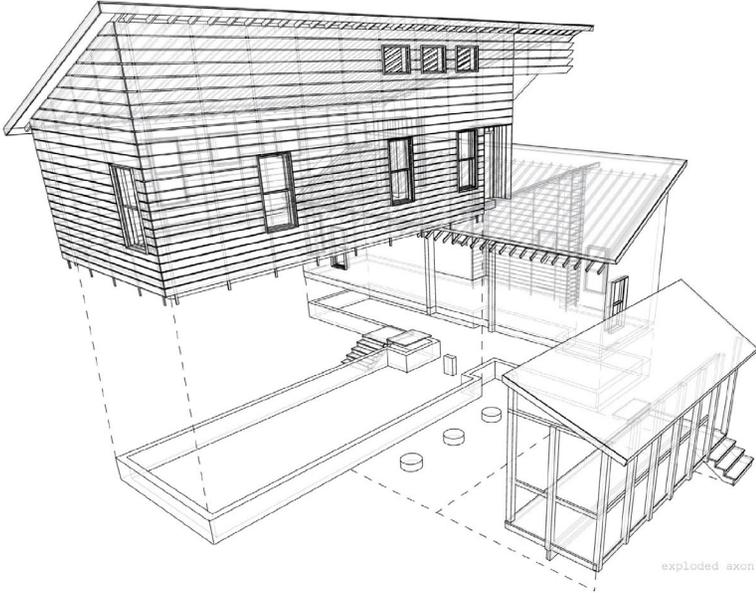
David Hinson, FAIA



DESIGNhabitat 2

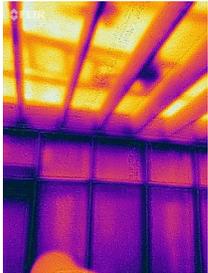
# TEACHING

David Hinson, FAIA



# TEACHING

David Hinson, FAIA



# TEACHING

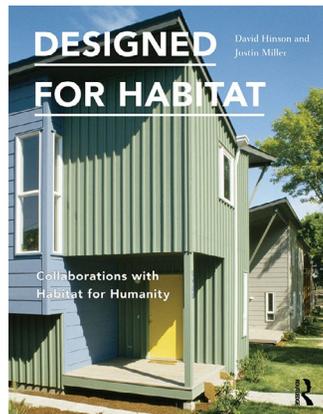
David Hinson, FAIA



# SCHOLARSHIP

David Hinson, FAIA

Hinson has leveraged his experience with community-focused design-build teaching to build a program of scholarship focused on measuring the impact of this teaching approach on students and the impact of this type of engagement on non-profit housing advocates. Hinson has published numerous peer-reviewed papers and journal articles on these topics over the last twenty years. In 2012, Hinson and his faculty colleague Justin Miller co-authored *Designed for Habitat: Collaborations with Habitat for Humanity* (Routledge) which profiled 13 case studies of collaborations between architects and architecture schools and Habitat affiliates across the country and analyzed the lessons these examples offered for both architects and housing advocates seeking similarly effective engagement. Hinson and Miller are currently under contract with Routledge for a follow up to *Designed for Habitat*, to be published in 2022.



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Charlottesville, Virginia  
University of Virginia with Habitat for Humanity Greater Charlottesville (VA)

**Chapter 6**  
**ecoMOD4**

Charlottesville, Virginia  
University of Virginia and Habitat for Humanity Greater Charlottesville (VA)

**Key Partnerships**  
Jill Quirk, University of Virginia School of Architecture (UNSA)  
Patrick McCall, University of Virginia School of Engineering and Applied Science  
Jim Steinberg, Executive Director, Habitat for Humanity Greater Charlottesville (HFHC)  
Aurby Stone, Director of Construction Services, Habitat for Humanity Greater Charlottesville

**Program Summary**  
2 bedrooms, 1.5 bath, single-family detached home  
1100 square feet

**Catalysts for Collaboration**  
ecoMOD4 is an award-winning initiative within the School of Architecture at the University of Virginia devoted to exploring how advanced construction techniques and technologies can be used to produce affordable homes that consume fewer resources to build and operate. One of the primary advanced construction techniques at the center of the ecoMOD4 program is modular prefabrication.

Led by Prof. John Quirk, the ecoMOD4 program engages architecture and engineering students in what Quirk describes as a “design/build/learn” cycle of design-based research that allows the students to gain hands-on experience of design and construction, along with the experience of collaborating with non-profit housing organizations. To date, the program has produced five homes, including two homes for Habitat affiliates. Each ecoMOD4 home is constructed by Quirk’s students in a former airport hangar in large modules or pods, and trucked to the construction site for on-site assembly.

The first collaboration between UNSA and Habitat (ecoMOD1) was a pre-fabricated home completed in 2006 for a family displaced by Hurricane Katrina. The home was designed and fabricated in Charlottesville by Quirk and his students, and erected in Gulfport, Mississippi. Charlottesville HFHC was the sponsoring affiliate.

**Chapter 8**  
**Roxbury Estates**

Seattle, Washington  
Olson Kundberg Kundig Allen Architects and Habitat for Humanity Seattle/South King County

**Key Partnerships**  
Rick Lundberg, FAIA, architect and former principal at Olson Kundberg Kundig Allen Architects (OSKA)  
Douglas Burt, Executive Director (2002-06), Habitat for Humanity Seattle/South King County (HFSCW)  
Mark Koehn, Executive Director (2006-present), Habitat for Humanity Seattle/South King County (HFSCW)

**Program Summary**  
Two 2 bedrooms, 1.5 bath, detached single-family units  
800 square feet

Four 3 bedrooms, 1.5 bath, detached single-family units  
1075 square feet

Two 4 bedrooms, 2.5 bath, detached single-family units  
1450 square feet

Two 5 bedrooms, 2.5 bath, detached single-family units  
1620 square feet

**Catalysts for Collaboration**  
In 2001 the local Episcopal Diocese donated a parcel of land in an urban residential neighborhood in southeast Seattle to Habitat for Humanity Seattle/South King County (HFSCW). The small parcel (less than an acre) was bounded by a steep arterial street to the south (S.W. Harbor Street) and residential streets to the east and west. HFSCW soon realized that developing the site would be challenging: the surrounding neighbors had concerns about the number of units that might be built there, and the affiliate had to accommodate the request of the Diocese to reserve a housing unit for transitional housing.

Faced with a complex site, and an ambitious building program, HFSCW engaged Portland-based Callison Architecture to help develop a conceptual site plan for their building program. The conceptual site plan developed by Callison recognized the housing site as a single building, which provided small floor plans and a large common yard and parking area on the interior of the program. The only pre-build south by Callison led HFSCW to propose the construction of 12 housing units on the one-acre site. Call of Portland.

While the conceptual site plan successfully resolved Habitat’s building program, families in the surrounding neighborhood – largely comprised of single-

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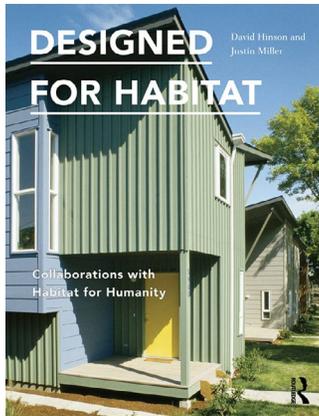
**GROUP TWO**  
**Collaborations with Architects**  
David Hinson and Justin Miller

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Philadelphia, Pennsylvania  
Sally Harrison with North Philadelphia Habitat for Humanity (PH)
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— **ROXBURY ESTATES**  
Seattle, Washington  
Olson Kundig Sundberg Architects with Habitat for Humanity Seattle/South King County (SKC)
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Wallace Roberts & Todd with Habitat for Humanity Philadelphia (PH)
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Kahn Robide Architects with Habitat for Humanity Pioneer Valley (MV)
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Portland, Oregon  
Scott Haring and David Probst with Habitat for Humanity Portland/Metro East (OR)
- **Chapter 13**  
— **KINSELL COMMONS / TASSAFARONGA**  
Oakland, California  
David Hinson and Partners with Habitat for Humanity East Bay (CA)



# SCHOLARSHIP

David Hinson, FAIA



## Chapter 10 Stanley Street

Amherst, Massachusetts  
Kulu-Ridda Architects, Amherst College, and Habitat for Humanity® Pioneer Valley (HFHV)

**Key Partnerships**  
 Chuck Roberts, AIA, Principal, Kulu-Ridda Architects (KRA)  
 Tom Gering, President, Amherst College  
 James Bruneau, Director of Facilities, Amherst College  
 Tom O'Leary, Assistant Director of Facilities/Director of Design and Construction, Amherst College  
 M.J. Adams, Executive Director, Habitat for Humanity Pioneer Valley (HFHV)  
 Michael Street, Building Construction Supervisor, Habitat for Humanity Pioneer Valley (HFHV)  
 Charles Allen, Habitat for Humanity Pioneer Valley (HFHV)

**Program Summary**  
 House 1  
 3bedroom, 1.5 bath detached unit  
 1275 square feet  
 House 2-4  
 3bedroom, 1.5 bath detached units  
 1150 square feet

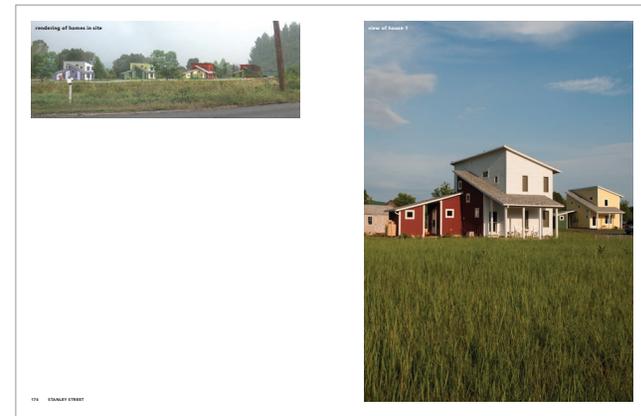
**Project Timeline**

**Catalyst for Collaboration**  
 The Stanley Street Habitat homes are the result of a unique collaboration between Amherst College, Habitat for Humanity Pioneer Valley (HFHV), and Kulu-Ridda Architects (KRA). In 2005, Amherst College donated the land to build four houses. KRA designed the prototype houses, which incorporate super-insulated envelopes, passive solar design, daylighting, and green roofs to help in an effort to provide an economical alternative for affordable housing.

Located in the Connecticut River Valley of Western Massachusetts the HFHV affiliate is situated within the "five college" region of the state (Amherst, Hampshire, Mount Holyoke, Smith College, and the University of Massachusetts Amherst). Amherst College, just across the Connecticut River from Northampton, provides a good deal of student volunteer support for HFHV's building activities. While the affiliate had been quite active in Northampton, lack of available affordable sites in nearby Amherst had prevented the affiliate from doing work there.

In the fall of 2005, Amherst College student and HFHV volunteer, James Puchner, approached M.J. Adams, Executive Director of HFHV, and offered to help find sites in Amherst. Adams and Puchner began to look at unused land

STANLEY STREET 107



## Chapter 12 Webster Street

Portland, Oregon  
Scott Ramsey and David Peadar and Habitat for Humanity® Portland/Metro East (HME)

**Key Partnerships**  
 Scott Ramsey, Green architect, TTK Architects  
 David Peadar, Green architect, GSD Architects  
 Clifton College, Director of Housing/Development, Habitat for Humanity Portland/Metro East (HME)  
 Steve Mawardi, Executive Director, Habitat for Humanity Portland/Metro East (HME)  
 Dick Hamilton, Webb Construction Co.  
 Howard Thurston, electrical engineer, New Paradigm Engineering

**Program Summary**  
 One 3 bedroom, 1.5 bath detached unit  
 950 square feet  
 One 4 bedroom, 2 bath detached unit  
 1200 square feet

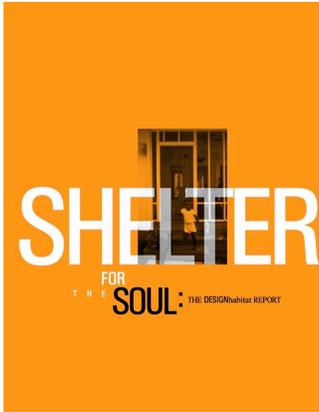
**Project Timeline**

**Catalyst for Collaboration**  
 Each year the Cascade Green Building Council is regional chapter of the US Green Building Council (USGBC) sponsors a regional chapter of the "National Talent Design Competition," a national program sponsored by the USGBC to promote "creative thinking by students and young professionals" regarding projects and ideas for sustainable building in their communities.

In 2006, the Cascade Green Building Council approached the Habitat for Humanity Portland/Metro East (HFHV) with a request to use one of the affiliate's undeveloped sites and the affiliate's typical Habitat home standards (three units) as the subject of the competition. According to Steve Mawardi, Executive Director of HFHV, while there was no commitment by the affiliate to build the winning entry, it provided an opportunity to learn from the competition entries and to gain positive exposure for HFHV's efforts in the East Bay area. In January of 2007 the Cascade Green Building Council opened the competition to the public. The competition brief called for design proposals for simple, decent, affordable duplex homes (two bedrooms and four bedrooms) that would meet USGBC LEED House Silver certification requirements.

WEBSTER STREET 101





**design habitat | PROJECT REPORT**  
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**P R O J E C T OVERVIEW**

**Post-Disaster Pre-Disaster Recovery**

The recovery phase of the DESIGNhabitat project was situated on a site both familiar to the students and unfamiliar to the community. The students, who had been in Alabama for a short time, were invited to participate in a visit to the headquarters of HFI International in Anniston, AL. There, the students met with Habitat Assessment and Affiliates volunteers, visited HFI's homes under construction and witnessed the ongoing work of residential post-disaster housing in the community. The site was helpful in establishing an understanding

of how the various affiliates across the state approach design and construction projects. They provided an opportunity to meet the leaders of HFI areas and learn how they have been able to sustain and improve housing in Alabama homes. The four affiliates who also served as a benchmark by which to measure and evaluate the design goals of the project.

Concurrent with the affiliate site visits, the students organized into four research teams. The first of these teams looked into the general construction technology used by Habitat and searched for prototyping material or construction process alternative to consider in the prototype design. The **SECOND** team studied HFI's "Green Teams" initiative and how the goals of this program could be expanded. The **third** team studied the stock of pre-air conditioning (largely pre-war) working-class housing found in most Alabama communities to better understand the design features of these homes. And in an effort to learn from others who have pursued similar collaborations with HFI, the **fourth** team developed a variety of case studies of prior partnerships between HFI affiliates and design professionals and/or design schools.

The students presented their research to the advisory group from Habitat along with a summary of design concepts and strategies that would serve as the design brief for the next stage of the project. The details of their research and how they were incorporated into the program are explained in the following sections of the report.

**P R O J E C T DESIGN STRATEGIES**

**RESPONSE TO THE CULTURE AND CONTEXT OF ALABAMA**

Perhaps more than any other single building type, it is the houses of a community that contribute the most to the feeling and to the overall character, identity, and spirit. The aggregate effect of these houses, which are often so wide and flat and so dispersed, is a certain design language that is unique to each community. A neighborhood's sense of identity that is not only seen but also felt and lived in is often a result of the cumulative effect of these houses. It is this sense of place that is the focus of this report. In the next 200 pages, the architectural details that are used and well known to the residents of Alabama are examined and analyzed in the Alabama climate, social systems and practices and the particular patterns of construction currently available in that state.

The overall effect of these details is the widespread adoption of a certain style of construction and the incorporation of the home building industry into the local economy. This is not to say that the style is not also a result of the climate and the building codes, which have been established over time. However, the style is not only a result of the climate and the building codes, but it is also a result of the social and cultural traditions of Alabama. The style of the houses in Alabama is not only a result of the climate and the building codes, but it is also a result of the social and cultural traditions of Alabama. The style of the houses in Alabama is not only a result of the climate and the building codes, but it is also a result of the social and cultural traditions of Alabama.

**Key Strategies:**

- Utilize spaces to expand living space and enhance social interaction.
- Position the home to support the pattern of the surrounding neighborhood.
- Use building details and materials to strengthen connections with the community.

**RESPONSE TO THE CLIMATE OF ALABAMA**

The DESIGNhabitat house responds to the challenge of using environmental resources and reducing operating and maintenance costs by the incorporation of a number of building features, design strategies and advanced construction systems and technologies. This integrated approach offers a cost-effective response to the climate of the southeastern United States, a model of sustainable and distributed building practices that are compatible with Habitat's volunteer-based building program.

The DESIGNhabitat house has earned an ENERGY STAR certification from the Environmental Protection Agency (the first Habitat house in Alabama to earn the designation) indicating that the design and construction strategies will result in 20 to 30 percent lower costs for heating, cooling and water heating. More information about the design that program can be found on the project Web site: [www.designhabitat.org](http://www.designhabitat.org).

**Key Strategies:**

- Use proper solar orientation to minimize summertime solar gain.
- Use insulation with appropriate R value and minimize air infiltration through the "envelope" of the house.
- Take advantage of comfort ventilation strategies.
- Don't combine air conditioning equipment.
- Don't install airlocks in the attic.
- Control duct leakage.

**CONTROLLING SOLAR GAIN**

The key to controlling unwanted solar gain involves orienting the house so that the exterior walls — especially the windows — are in shade for as much of the summer day as possible. The DESIGNhabitat house has been developed with several simple features to make this goal achievable:

1. **Window profiles orient the house with the long axis of the glass oriented east to west.** This allows the deep eaves shading of the DESIGNhabitat house to shade the long wall of the house throughout the longest part of each summer day.
2. **The porch overhangs shade the porch on the south in summer equinoxes whenever possible.** This will allow the porch to shade the front entrance to the house to make the space comfortable to enjoy at sunset.
3. **Dark roofs absorb heat!** The DESIGNhabitat house uses a color of roof in order to absorb as much heat as possible to reflect a significant percentage of the sun's radiant energy back into the atmosphere, reducing energy use, lowering temperatures and reducing the carbon footprint. The house is also designed to take advantage of passive ventilation strategies. Regular air conditioning equipment is not used in the DESIGNhabitat house.

**SITE DESIGN STRATEGIES**

The site design strategies of House 1A represent a balance between integrating the home into the existing fabric of the neighborhood and optimizing the energy conservation potential of the design.

When House 1A is built within an existing neighborhood of houses, the home construction and design details should be done in the performance pattern of existing homes in the area. In many communities the existing homes are built with a certain design language that is unique to each community. A neighborhood's sense of identity that is not only seen but also felt and lived in is often a result of the cumulative effect of these houses. It is this sense of place that is the focus of this report. In the next 200 pages, the architectural details that are used and well known to the residents of Alabama are examined and analyzed in the Alabama climate, social systems and practices and the particular patterns of construction currently available in that state.

The overall effect of these details is the widespread adoption of a certain style of construction and the incorporation of the home building industry into the local economy. This is not to say that the style is not also a result of the climate and the building codes, which have been established over time. However, the style is not only a result of the climate and the building codes, but it is also a result of the social and cultural traditions of Alabama. The style of the houses in Alabama is not only a result of the climate and the building codes, but it is also a result of the social and cultural traditions of Alabama.

**Key Strategies:**

- Utilize spaces to expand living space and enhance social interaction.
- Position the home to support the pattern of the surrounding neighborhood.
- Use building details and materials to strengthen connections with the community.

**CONSTRUCTION SEQUENCE PHOTOS**

WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5
<ul style="list-style-type: none"> <li>Foundation</li> <li>Post-Disaster Recovery</li> <li>Post-Disaster Housing</li> </ul>	<ul style="list-style-type: none"> <li>House 1A Housing</li> <li>House 1A Housing</li> <li>House 1A Housing</li> </ul>	<ul style="list-style-type: none"> <li>Post-Disaster Recovery</li> <li>Post-Disaster Housing</li> <li>Post-Disaster Housing</li> </ul>	<ul style="list-style-type: none"> <li>House 1A Housing</li> <li>House 1A Housing</li> <li>House 1A Housing</li> </ul>	<ul style="list-style-type: none"> <li>House 1A Housing</li> <li>House 1A Housing</li> <li>House 1A Housing</li> </ul>
WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10
<ul style="list-style-type: none"> <li>House 1A Housing</li> <li>House 1A Housing</li> <li>House 1A Housing</li> </ul>	<ul style="list-style-type: none"> <li>House 1A Housing</li> <li>House 1A Housing</li> <li>House 1A Housing</li> </ul>	<ul style="list-style-type: none"> <li>House 1A Housing</li> <li>House 1A Housing</li> <li>House 1A Housing</li> </ul>	<ul style="list-style-type: none"> <li>House 1A Housing</li> <li>House 1A Housing</li> <li>House 1A Housing</li> </ul>	<ul style="list-style-type: none"> <li>House 1A Housing</li> <li>House 1A Housing</li> <li>House 1A Housing</li> </ul>

2020 National Architecture Research Conference (NARC)

### Can Increasing Energy Performance Be a Key to Unlocking Rural Home Affordability?

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**Keywords:** Energy efficiency, home affordability, rural home ownership

Though home energy use should be considered in every residential project, it is particularly critical for low-income individuals and families. While higher budget projects can rely on a rip-off investment for energy saving features, “affordable” housing projects built by not-for-profit organizations frequently rely on reductions in construction costs to meet purchasing price for low-income buyers. However, this can result in higher maintenance and operation costs over the useful life of the home. Good energy home performance is the mortgage carry of an individual homeowner presents opportunities to create a housing stock of homes that consider the total cost of homeownership? This paper describes a research initiative designed to support the balance point between up-front investments in improved energy performance and home affordability to support of low-income homeowners.

In a design build studio format, the authors and their students have tested and constructed multiple versions of the same rural home. The design-build program has demonstrated the impact of a mixed-income climate on both in the Pacific Northwest (U.S.) (PNW) climate and the other in the Department of Energy’s Six Energy Ready Home (SERH) climate. By understanding their respective energy performance and cost, the authors are able to evaluate the total cost of construction associated with achieving these two performance standards while simultaneously comparing the monthly energy savings afforded by each approach.

Each home underwent a rigorous process of modeling, testing, and monitoring. Computational energy modeling during the design phase were used to test various energy scenarios. As key points in construction, lower budget and thermal modeling were utilized to assess the efficacy of alternative approaches, construction detailing and to verify systems and evaluate air-tightness. Long term

Can Increasing Energy Performance Be a Key to Unlocking Rural Home Affordability?

Figure 2: Comparison of Key Assemblies.

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Figure 4: Illustrates how these three categories of energy use add up for each home, and Figure 5 shows how the Category One energy use for the 100 rural homes in the study area is broken up by a few unexpected variables. House 68 was associated with the energy use, such as the Rural Home either associated with the COVID-19 pandemic, and a faulty humidifier at one of the homes.

It is important to note that these results reflect energy data from only three quarters of a year. It is expected that the added insulation in House 68 will translate to performance advantage during the three coldest months of the year (December-March). However, the data collected so far suggests that the cost-saving measures associated with House 68 are not translating to significant penalties to the performance of the building.

Returning to the question of how the cost-reduction strategies impact operating costs, and how this relates to affordability, the data collected thus far is beginning to provide some emerging answers.

The costs for heat and cool both homes (Category One energy and under \$1.1 per month (2023) year), compared to just over \$2.0 per month (2020) year for an average home in Alabama.”

Establishing such an ambitious goal for operating cost savings is critical to our goal of reducing “affordability” as a measure of the cost to operate. Energy cost savings of \$46/month on other over \$2000+ up-front investments in performance.”

Category Three: This includes all the unconnected appliances and fixtures. These “plug loads” are entirely occupant-driven. While there can have a significant impact on the total percentage of annual energy consumed, plug loads in a high-efficiency house, they have little relation to the way the home was constructed.

Figure 5: Category 1 energy Use Actual and Predicted

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LIFELONG LEARNING

### Academy, Practice, and the Search for Harmony

BY JOHN W. HANSEN AND RENE CHENG

The Education Practitioner Network (EPN), a broad coalition of individuals united by their commitment to improving all aspects of an architect's training, was formed in 1992 in response to a rift between the academy and the profession about when to draw the line between theoretical and practical study. On the one hand, observers argued that the field only was to provide a comprehensive education in the principles that govern the work of architecture, rather than vocational training. On the other, practitioners believed that firms could use “rhetoric” to describe an “academic” entry-level professional education and then a more practical, hands-on, job-specific education. The EPN was created to find harmony and reduce the discussion on the concept of partnership and has been to offer in a way that resonated the concept “strong” and “weak” disciplines. In fact, the EPN has been the most of the members. (The EPN was established in 1992, and it has since then given the most practicing architects also teach. As “no one” architect’s hand to sustain which, ultimately, is an issue.)

In the opening years, the EPN has launched a variety of efforts on multiple fronts. The EPN is the primary driver of the AIA Education Ready Home design program, the only such program designed to integrate models of excellence in architecture

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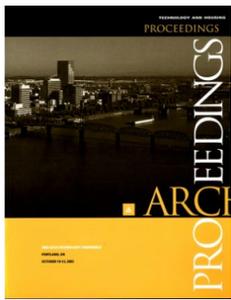
Design Research: Learning from Doing in the Design/Build Studio



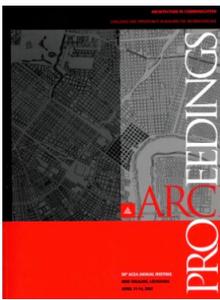
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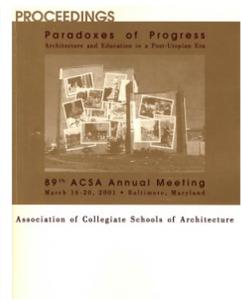
Experiencing the Rural Studio: An Assessment of Student Learning Outcomes



Community Centered Design/Build Studios: connecting the past and the future of architectural education



Examining the Rural Studio: Community-Centered Design/Build Studios and the Undercurrents of Architectural Education



Preparing for Leadership: The Case for Leadership Education in Architecture Schools

## CREATIVE PRACTICE

David Hinson, FAIA

David Hinson began his professional career in Philadelphia in 1982, working for Venturi, Rauch, and Scott Brown while completing his graduate degree at the University of Pennsylvania. He became a registered architect (Pennsylvania) in 1985. Over a 15-year period Hinson worked for several distinguished firms in Philadelphia and rising to be an Associate with Ballinger before returning to Alabama to teach at Auburn in 1997.

Hinson has maintained an active practice, focused on custom single-family homes, throughout his tenure on the Auburn faculty with projects in Auburn, Montgomery, and Lake Martin. In 2006 Hinson partnered with Christian Dagg, an Auburn faculty colleague, to form Hinson+Dagg Architects (H+DA.)

H+DA's design ethos combines a focus on place and culture with an emphasis on energy performance and sustainability. While the scope of the practice is modest, H+DA has earned six local- and state-level design awards from AIA Montgomery and AIA Alabama since 2008.



Dugas Residence



Browning Residence

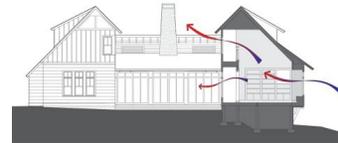
# CREATIVE PRACTICE

David Hinson, FAIA

- **AIA Montgomery Merit Award 2019**  
Dugas Residence
- **AIA Alabama Merit Award 2018**  
Dugas Residence
- **Best in American Living Award 2017**  
Browning Residence
- **AIA Montgomery Merit Award 2016**  
Browning Residence
- **AIA Alabama Merit Award 2011**  
Hinson Residence
- **AIA Montgomery Merit Award 2009**  
Lusche Residence
- **AIA Montgomery Merit Award 2008**  
Large Residence



Hinson Residence



Lusche Residence