

IVORYINNOVATIONS

IMPACT REPORT 2021



OUR MISSION AT IVORY INNOVATIONS IS TO CATALYZE

INNOVATION IN HOUSING AFFORDABILITY



OUR 4 MAIN FOCUS AREAS INCLUDE:

- Convene and learn from the industry's foremost experts
- Source and support the best entrepreneurial solutions
- Inspire and seek ideas from the next generation
- Experiment and put innovation into practice

Since 2018, we have been on a journey to change the housing industry and shine a light on the innovations that have the potential to transform the lives of millions in this country. In the last four years, we have reached the following accomplishments.

IVORY INNOVATIONS ADVISORY BOARD CONVENE AND LEARN FROM THE INDUSTRY'S FOREMOST EXPERTS

We have brought together a 10-person Board of Advisors and Fellows with experience at organizations including the Department of Housing and Urban Development, the Joint Center for Housing Studies at Harvard University, the Urban Institute, the National Association of Homebuilders, and others. Our Advisory Board helps guide our strategic direction and picks the winners of our annual Ivory Prize for Housing Affordability.



THE IVORY PRIZE FOR HOUSING AFFORDABILITY SOURCE AND SUPPORT THE BEST ENTREPRENEURIAL SOLUTIONS

Each year the Ivory Prize awards three \$70,000 grants to the most promising innovations in housing affordability across three categories: Construction & Design, Finance, and Public Policy & Regulatory Reform. Since 2018, Ivory Innovations has evaluated 600+ organizations (across all sizes of for-profit, non-profit, and government entities) to find the best ideas and champions of change.



“Winning the Ivory Prize for Housing Affordability has been an invaluable asset for our efforts to help improve access to homeownership... Since winning in 2018, we have expanded into several additional markets encompassing millions of these essential community members in no small part due to the support of Ivory Innovations [and] the Ivory Innovations network continues to be a resource for us to find unique partnerships, understand other innovative approaches, and address this issue with a group of like-minded entrepreneurs.”

-ALEX LOFTON, CO-FOUNDER OF LANDED

HACK-A-HOUSE INSPIRE AND SEEK IDEAS FROM THE NEXT GENERATION

A first-of-its-kind event, Hack-A-House is a 24-hour competition where students compete to pitch new solutions to housing affordability issues. Our goal is to inspire students interested in housing to go beyond learning about the issues to actually working on solutions.

- 500+ students from 195 teams and \$40K+ in awards over 4 years of competition
- Moving to a virtual hackathon in 2020, due to COVID, allowed us to greatly expand the reach of the competition and work with schools all over the world. We are excited to continue growing our reach for this event and to continue supporting students would like to take their ideas from this competition and turn them into businesses



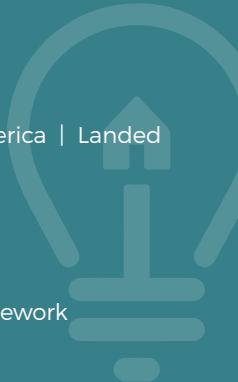
600+ NOMINEES AND 11 WINNERS OVER 3 YEARS
WITH \$660,000 AWARDED

PAST WINNERS INCLUDE:

2019 The Alley Flat Initiative | Factory OS | Home Partners of America | Landed

2020 Entekra | Rhino | Symbium

2021 BamCore | Curtis+Ginsberg's Park Avenue Green Project
Impact Justice's Homecoming Project | KeepHome by Framework



STUDENT ENGAGEMENT

INSPIRE AND SEEK IDEAS FROM THE NEXT GENERATION

Ivory Innovations is committed to educating students about the issue of housing affordability and helping them grow to be change makers in the space. This goal is accomplished in **three different ways**:



Hack-A-House

Bringing students together from across the country to solve housing affordability issues, mentioned in detail on the previous page.

Innovations in Housing Affordability Course

In 2021 we hired Andra Ghent, a renowned finance and real estate professor to teach this course. The course pulls together students from different disciplines including real estate, finance, architecture, urban planning, business, engineering, and policy. One of the main objectives is to help students gain new perspectives by understanding their peers' points of view as well as by learning about what is occurring around this issue across the country. Students also participate in diligence for the Ivory Prize and spend multiple class periods learning about the importance of innovation in the housing market.



Ivory Innovations Student Associate Program

Over the last four years, Ivory Innovations has had 23 different Student Associates, 7 of whom have interned for two consecutive years. Student Associates are responsible for sourcing and diligencing companies for the Ivory Prize. As we move throughout the process they work with the Top 25 and Top 10 companies more closely and have the opportunity to intern for one of the Top 25 companies during the summer. The internships can be paid for by Ivory Innovations and have provided a meaningful hands-on experience for our students. The Ivory Innovations team has also helped to place students in full-time roles such as with past Ivory Prize winners, Landed and Symbium, as well as with one of our partners, Schmidt Futures.



BRINGING INNOVATION TO LIFE EXPERIMENT AND PUT INNOVATION INTO ACTION

One of the most important aspects of our work is the opportunity to see and understand the innovations that drive housing affordability across the country and to help support and scale those innovations. Our efforts have focused on working with Ivory Prize Top 10 finalists and winners to enter the Utah market.

- Home Partners of America has expanded their offerings in Utah and working with them to launch their new Choice Lease program which offers the opportunity for people in the 80-120% AMI range to have the opportunity to grow equity in their home.
- ROC USA helps residents who live in communities with manufactured housing to collectively purchase the land that they live on. They have four communities within Utah and the Ivory Innovations team works to help struggling manufactured housing communities partner with ROC USA in order to help the state preserve this existing source of affordable housing.
- Rhino provides an alternative to rental deposits in the form of insurance that costs the tenant around \$5/month. The Ivory Innovations team has been working with them to introduce this product to property management groups in Utah as well as working with them to pass the Choice Lease legislation.
- Esusu facilitates the reporting of on time rental payments to credit bureaus. This allows renters to build their credit in a way that is similar to how on time mortgage payments are reported. Ivory Innovations has connected Esusu with large property management companies in the state as well as worked with them on a consulting project targeted at deploying their service on University campuses for students.



ESUSU | 2020 IVORY PRIZE TOP 10 FINALIST

In August 2021, Fannie Mae began including rent payment history as part of the mortgage approval process and in November 2021, Freddie Mac launched a program incentivizing landlords to report on-time rental payments to credit bureaus through Esusu's platform. Including on-time rent payments is meant to help people with a limited credit history qualify for homeownership and Esusu can report up to 24 months of past on-time rent payments, which can have an immediate positive impact on renter's credit scores. Fannie Mae researchers have found that ~20% of Americans have little to no established credit history and that 17% of applicants over the last 3 years would have qualified for mortgages had their rent histories been considered. The Ivory Innovations team is pleased to support Esusu's efforts and placed a summer intern with the company in 2021.

INDIEDWELL | 2019 IVORY PRIZE TOP 25 FINALIST

indieDwell provides modular solutions for affordable housing developers. Registered as a B Corporation, their steel-framed modular units have been used by multifamily housing providers, emergency shelters, and in subdivisions. The Ivory Innovations team was pleased to recommend the company to our funding partners, helping indieDwell secure a \$5.75M Series A funding round in September 2021.

2021 IMPACT

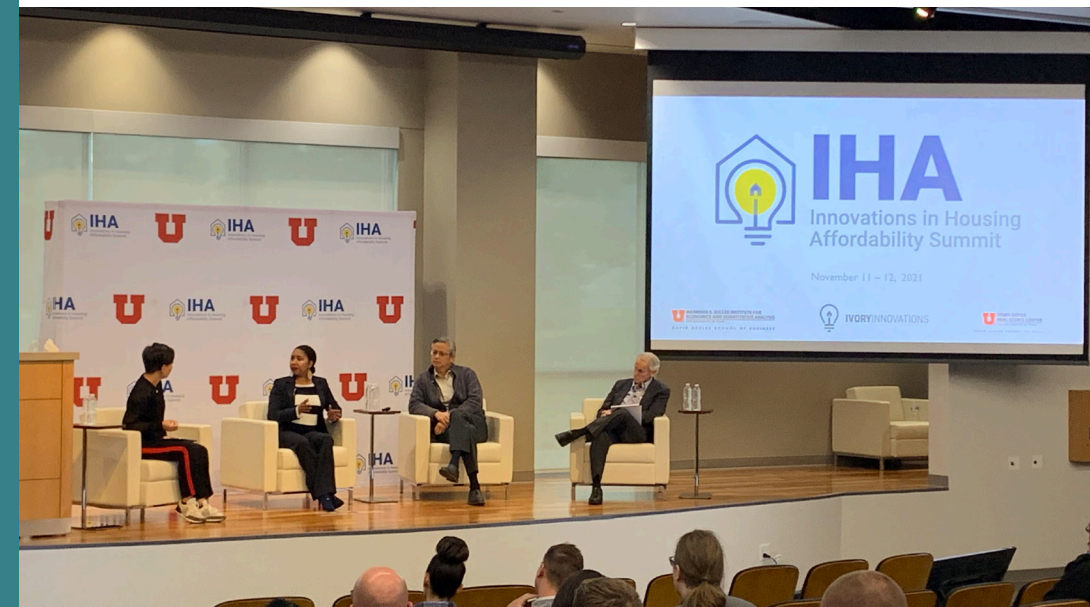
In 2021, we added new events and new team members to support our work while continuing to grow our existing programs. **As we enter our fifth year, we are excited to roll out new initiatives and projects that enhance the implementation of the most innovative ideas in housing. We will continue to research new companies and work with our students and partners to increase our overall impact in supporting the innovations that drive housing affordability.**

RESEARCH AND THE INNOVATION IN HOUSING AFFORDABILITY SUMMIT

CONVENE AND LEARN FROM THE INDUSTRY'S FOREMOST EXPERTS

The Innovations in Housing Affordability Summit was designed to be a premier event targeted at bringing together academics, nonprofits, policymakers, and entrepreneurs to focus on innovation and collaboration in America's housing affordability challenges. Due to COVID, the event was capped at 130 attendees. We appreciated the opportunity to bring a high quality group of individuals together allowing for meaningful conversations and connections that we hope will have a lasting impact. Event highlights include:

- Hearing from Alanna McCargo, President, Ginnie Mae and Jenny Schuetz, Senior Fellow at Brookings, who served as our event keynote speakers
- Bringing the 2021 Ivory Prize Top 10 companies together to share their insights with the audience
- Learning from five of our Advisory Board members as they spoke and shared research
- Putting research into action, as Jenny Schuetz's Utah-specific research has become a critical element in Salt Lake County's current housing policy update





IVORYPRIZE

FOR HOUSING AFFORDABILITY

SOURCE AND SUPPORT THE BEST ENTREPRENEURIAL SOLUTIONS

The Ivory Prize is an annual award recognizing ambitious, feasible, and scalable solutions to housing affordability. In 2021 we selected 4 winning organizations based on the potential of their solutions to further innovation in housing affordability:

Impact Justice + The Homecoming Project

2021 Public Policy & Regulatory Reform Winner

Thousands of Americans are not only priced out of affordable housing but are often intentionally left out of many housing options. The Homecoming Project is a program that ensures successful reentry back into communities by providing safe and stable housing and a welcoming host. Formerly incarcerated people are able to integrate more easily into the community by quick placement into stable housing right out of prison.

Keep by Framework

2021 Finance Winner

Framework Homeownership's Keep by Framework app helps home buyers understand the process to purchase a home and how best to maintain and stay in that home for the long term. With an emphasis on first-time, first-generation potential homeowners, Keep guides users through the entire process of purchasing a home, with a keen focus on how to assist homebuyers confronting structural and persistent racial barriers, to democratize the homebuying process.

Curtis + Ginsberg Architects

2021 Construction & Design Co-Winner

Often sustainability and affordability are competitive goals for housing development. However, C+GA is pioneering new approaches to break through the budgetary barriers that previously made building energy-efficient and affordable multifamily housing difficult. C+GA has designed the largest completed Passive House affordable housing building in the United States. Their primary strategy in designing energy-efficient Passive House standards is to reduce the operational cost of buildings, and in turn, maintain affordability long after a building is completed while providing healthier buildings for residents.

BamCore

2021 Construction & Design Co-Winner

Bamcore's innovative bamboo-based framing solution has the potential to address the crippling rise in material costs that we have seen since 2020, provide a more climate positive supply chain, reduce the need for skilled labor and speed up the build time by more than 50%, while producing a much more energy-efficient home.

HACK-A-HOUSE

INSPIRE AND SEEK IDEAS FROM THE NEXT GENERATION

Hack-A-House is a 24-hour “hackathon” style competition that inspires students to think about solutions for the affordable housing crisis.

- In 2021 we evaluated 37 submitted solutions from 157 registered students representing 30 colleges and universities
- We piloted a 2-day entrepreneurship bootcamp for winning teams and select others who were recognized for their excellence. As most Hack-A-House students do not come from business backgrounds, our programming included speakers and workshops pertaining to housing and business creation. 13 of the 16 students found the experience valuable or very valuable and the Ivory Innovations team will build on the success of this pilot bootcamp to support future student teams interested in pursuing their housing solutions

KIT SWITCH | HACK-A-HOUSE 2020 WINNER

Co-founded by five female engineers from Stanford, Kit Switch was a 2020 Hack-A-House winner in the Construction & Design category for their kit-of-parts solution to support adaptive reuse and conversions for commercial office spaces to housing. Since winning Hack-A-House, Kit Switch has won an additional \$80,000 in grant competitions, has begun prototyping kitchen and bathroom modules with manufacturing partners and potential clients in California, and is raising a seed round to scale their operations. Ivory Innovations has supported the team by connecting them with experts, office space in San Francisco at Autodesk’s Technology Centers, and supporting their fundraising efforts.



STUDENT ENGAGEMENT

INSPIRE AND SEEK IDEAS FROM THE NEXT GENERATION

Ivory Innovations seeks to engage with students in a consistent way. We care about educating them about the overall issue of housing affordability as well as helping them find ways to make this cause a part of their future.

- **Innovations in Housing Affordability Course:** In 2021 we had our largest class size with 22 students. Andra Ghent was brought on as the professor and she was able to go in depth on the current state of housing finance, policy, and construction. Abby Ivory taught about what is happening in the realm of innovation and worked with the students to source nominees for the 2021-22 Ivory Prize
- **Student Associates:** We worked with eight students in the 2020-2021 academic year. Four students were hired as summer interns or for full-time roles at Ivory Prize companies: Two students pursued full-time roles at GO Logic and Landed and two students interned at Framework and Salt Lake County. We are working with nine students in the 2021-2022 academic year and are excited to help place some of them in full time roles or internships with Ivory Prize organizations

BRINGING INNOVATION TO LIFE
EXPERIMENT AND PUT INNOVATION INTO ACTION

In the past year we have focused more than ever on bringing innovation to life, especially through developing affordable housing units in the Salt Lake City area.

- Landed, a 2019 Ivory Prize winner, officially launched in the Utah market in February 2021. We have worked with them to build partnerships with Weber County, Salt Lake County, Utah County, and The University of Utah. They had their first Utah customer in July and are excited as they grow into our market
- We established the Ivory Innovations Operating Foundation, a 501c3 nonprofit, to house our innovations work and affordable housing development projects. Current affordable housing projects include Ivory University House, a 536-unit student housing project that will provide tens of thousands of dollars in financial aid to University of Utah students through an innovative endowment model, and a below-market-rate project in Lehi, UT at the Ivory Homes community at Holbrook Farms
- We are supporting former Ivory Prize finalists and winners through consulting work, including a market expansion evaluation for Impact Justice's Homecoming Project (housing individuals recently released from the incarceration system) and a strategic evaluation of bringing the Building Talent Foundation (solving the labor shortage in residential construction) to the Utah market

OURTEAM

In 2021, we added two new members to our small but mighty team. In addition to our Advisory Board members and collaborators at Ivory Homes, our core Ivory Innovations team includes:



Abby Ivory

Managing Director

Ivory Innovations was born while Abby was working on the Impact Investing team for the Sorenson Impact Center. Prior to her experience in impact investing, she worked as an intern focused on researching Green Bonds with Equilibrium Capital in Portland, Oregon. Her work has been published in the Stanford Social Innovation Review. Abby graduated with a Masters in Business Administration from the University of Utah in 2016 with an emphasis in Sustainability



Jenna Louie

Director of Strategy
and Operations

Jenna began researching urban issues during her undergraduate degree at Harvard University. After graduating, she worked as a diversity and inclusion consultant with Fortune 500 firms and on Hilton's corporate strategy team. She made a career pivot to focus on urban and housing issues during her MBA at Stanford's Graduate School of Business and began working with Ivory Innovations during the second year of her degree. She joined full-time in July 2021 and is passionate about finding, supporting, and scaling innovative ideas in housing affordability



Dylan Empey

Program Manager

Dylan graduated from the University of Utah and as a Salt Lake City native, he is passionate about confronting the housing crises that we are facing locally and nationally. He runs our Student Associate program where students source and perform due diligence on potential Ivory Prize nominees





Ivory Innovations team
and 2021-2022 Student Associates



IVORYINNOVATIONS



IVORY-INNOVATIONS.ORG