Roundtable Discussion:
Innovations to Lower the Cost of Construction

Sarah Brune, Neighborhood Housing Services of Chicago

Amy Mayer, Related Midwest

Jason Brown, Habitat for Humanity Chicago
• As the costs of labor, materials, and land rise, home builders are focusing their resources on the high end of the market where profit margins are larger, and they are building fewer “starter homes” and affordable single-family homes.

• Single-family home builders reported a 17% labor cost increase nationally over the past 2 years
The cost of construction materials

The producer price index has risen by 23.7 percent since 2009

Inputs to construction industries PPI

Chart: Jeff Andrews • Source: U.S. Bureau of Labor Statistics • Get the data • Created with Datawrapper
Figure 1. Housing Construction Has Just Kept Pace with Household Growth for an Unprecedented Eight Years

Notes: Household growth data are three-year trailing averages. Placements refers to newly built mobile homes placed for residential use.
Sarah Brune
Manager of Innovation & Public Policy,
Neighborhood Housing Services of Chicago
An architecture competition to create innovative models for building affordable new homes for working families.

Presented by:

Perkins&Will
THE PROBLEM:

Construction costs are on the rise across the country, resulting in fewer starter homes being built for growing and working families.

OUR GOAL:

Create an attractive, iconic, and flexible home design that serves the needs of homebuyers in Chicago today – much like the successful Bungalow and Greystone designs of the past.
This challenge asked architects to submit their ideas for smart designs that achieved the following goals:

• Design a fully code compliant single-family or 2-flat owner occupied house for two sites, one in Bronzeville and another in West Humboldt Park
• Decrease the cost of construction for single-family homes
• Provide flexible and innovative designs that respect and complement historic neighborhood architecture
• Incorporate a wealth-building component, such as live-work space or an income unit
• Increase accessibility and options for aging in place
• Designs must have a purchase price lower than $250,000 (or $350,000 for two units) which is affordable to a family of 3 at 100% Area Median Income, making about $75,000 per year
DISRUPTIVE DESIGN CHALLENGE

Supporters and Organizers

The Chicago Housing Policy Task Force
Neighborhood Housing Services of Chicago
Chicago Neighborhood Initiatives
AIA Chicago
LISC Chicago
Northern Trust
Related Midwest
Polk Bros Foundation
Freddie Mac
CCLF
The Resurrection Project
Community Investment Corporation
Metropolitan Planning Council
Woodstock Institute
“The design was sensible, with a clever floorplan” said juror David Baker.

“The large back yard offers a lot of potential” added Frydland.

“The house is ‘disruptive’ because it reimagines the usual starter-home model,” commented juror Amy Mayer of Related Midwest. “When you’re young you can own the one-bedroom on the first floor, renting out the second unit. As you get older and have kids, you can move upstairs to the two-bedroom; and, as you age, you can live on the accessible first-floor again.” The first-floor office can accommodate a work-from-home or start-up business.
Phase 1 - Finalists
December 2018 – March 2019

Adaptable House
Greg Tamborino, AIA

Green Flex 600
Joel Huffman

The Urban Cabin
Georgi Todorov, AIA & Petya Petrova, IIDA
Finalists spent 6 weeks refining their designs with feedback from the city of Chicago.

They also presented their initial and final designs to residents of West Humboldt Park & Bronzeville.

Jurors considered community feedback on the final designs, as well as their own expertise in construction, design and public health to make their decision.

**Community Feedback**
- Four community meetings to present to the Aldermen and hear community feedback
- Meeting with City of Chicago’s Department of Buildings
- Jury feedback as well as site selection
Design Highlights:

• Home can be built as a 2-flat, changed to single family, and back again based on a family’s needs

• Value engineered to make best use of small space

• Fully accessible unit on the first floor, allows for aging in place and universal design

• Small units decrease cost but include features such as in-unit laundry, ample closet space, and connected kitchen and living space

• 2-unit designed for owner-occupant allows buyers to supplement income
DISRUPTIVE DESIGN CHALLENGE

Construction Challenges:

• Significant sitework costs on single family lots
  • Digging out previous foundations
  • Removal of waste
  • Comps usually include basement

• Appraisal gap in developing neighborhoods
  • Lack of comps
  • Most new purchases need significant rehab
PHASE II THE URBAN CABIN HUMBOLDT PARK
Amy Mayer
Vice President of Construction,
Related Midwest
Taylor Street Library & Apartments
Jason Brown
Construction Manager,
Habitat for Humanity Chicago
THE BOTTOM LINES:

- Small, well-built homes are cheaper to build, more energy efficient, and more accessible than large ones.
- But, subsidies are necessary to bridge the gap between construction costs and market value in order to maintain affordability.

Successful Cost Reduction & Avoidance Strategies:

- Elimination of basement and masonry
- Avoidance of passive-house inspired design elements
- Reduced size of home