

DISRUPTIVE DESIGN CHALLENGE

Making Homeownership Affordable in Chicago

COMPETITION SUMMARY

Disruptive Design is a three-part design competition that seeks to address the challenges associated with designing and building affordable, owner-occupied housing. The competition was initiated by the Chicago Housing Policy Task Force — a diverse group of organizations invested in creating affordable housing in Chicago — and carried out by a team of individuals representing those organizations.

Organizations represented include: Neighborhood Housing Services of Chicago, LISC Chicago, AIA Chicago, Northern Trust and Chicago Neighborhood Initiatives.

Architects, designers, students, and those invested in urban development are invited to submit their speculative ideas for an owner-occupied single-family home incorporating a flexible architectural solution that encourages wealth-building through homeownership and entrepreneurship. The competition will conclude with an occupant/buyer-ready prototype of the winning design. Submitters will be asked to design for two distinct Chicago neighborhoods: Bronzeville and West Humboldt Park.

THE CHALLENGE:

Cities across the country are observing a rapid decline in affordable homeownership options for first-time buyers and working families - defined here as buyers earning around 100% AMI. This represents a household of three earning about \$75,000 in Chicago, or \$61,000 nationally. In Chicago, the desire for affordable and accessible housing, with opportunities for flexibility and aging in place, is present in both gentrifying and underserved Chicago neighborhoods. In gentrifying areas, land values rise with desirability; in underserved areas, depreciated property and land values produce an appraisal gap that prohibits new development.

Further, the construction of new affordable, owner-occupied housing is expensive and only becoming costlier. As the cost of construction and labor increases and incomes do not grow at pace, the **affordability gap** between what young professionals, small families, or first-time homebuyers can afford and the cost of construction becomes apparent to both developers and buyers—it is no longer advantageous to build starter homes. Subsidies, while helpful, cannot be the only long-term solution to this issue.

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Finally, recognizing that developing new housing in communities experiencing poverty can create economic stratification and gentrification, **affordable housing solutions of the future must address how to build wealth and create healthy mixed-income communities.**

THE DISRUPTION:

Architects must innovate for affordability, utilizing new construction materials and methods, and providing single-family homes with opportunities for live-work situations, growing families, aging in place, accessibility for people with disabilities, and a new focus on the “gig” economy.

This competition seeks solutions to the affordable housing gap that would allow for the development of sustainable, affordable, replicable, dynamic and multi-faceted housing solutions that build wealth and opportunities for homeowners across Chicago. Submissions will yield a new housing typology infused with equity and possibility.

Home designs submitted in this competition may not exceed a \$250,000 sales price.

The competition is divided into three phases, each of which asks submitters to consider ideas, design, and feasibility for actualization.

CHALLENGE PHASES:

PHASE I: Ideas

In this phase, submitters will register their team and be asked to:

1. Submit a written narrative that describes their design and program, up to 250 words.
2. Respond to a series of targeted questions that will assist a jury in understanding how each submission addresses the hard cap on construction and sales costs, affordability gap, economic and environmental sustainability, zoning, and wealth-building components of their idea.
3. Submit one drawing of their proposed design

Questions can be found in the submission details included in this document. A jury will review all submissions. Five submissions from Phase I will continue on to Phase II. Phase I will open on December 1st, and conclude on January 31st.

PHASE II: Design

The five participants selected to move forward from Phase I will be given a \$10,000 stipend to continue work on their proposal. Phase II participants will produce site plans, sections, elevations, high-resolution renderings, and another narrative that aggregates the information provided in Phase I. Phase II participants will be notified in February 2019.

PHASE III: Realization

A jury of architects, city officials, academics, and developers will judge Phase II submissions. Residents of both Bronzeville and Humboldt Park will also be invited to submit their feedback on the final five designs. Phase III moves outside of the juried competition and invites the jury-selected winner to work alongside the developer, Related Midwest, to build their vision into reality. The final winner of the competition will receive an additional prize of \$20,000.

SUBMISSION DETAILS AND REQUIREMENTS

SITE

There will be multiple sites located in 2 competition neighborhoods: West Humboldt Park and Bronzeville. The sites are representative of typical Chicago lots – 25' wide x 125' long with minimum zoning of RT4. Competition entries should address the context of both of these neighborhoods.

Specific addresses for neighborhood sites will be announced at the beginning of Phase II. Some context on the neighborhoods can be found here:

Humboldt Park: http://www.lisc.org/media/filer_public/30/60/3060df4e-bb16-4662-9661-a75815e94fee/humboldt_park_qlp_2005.pdf

Bronzeville: http://www.lisc.org/media/filer_public/64/bd/64bdf93b-c358-4e62-8152-5346be1e3459/quad_communities_qlp_2005.pdf

The City of Chicago Zoning Code should be followed for required front and rear setbacks. Since a goal of this competition is to develop an affordable housing prototype, all entries should fit on a standard 25' Chicago lot regardless of the actual lot width. Therefore, the typical side yard setback would dictate a maximum 19' wide building. A zoning variance for live-work units may be considered. Refer to City of Chicago Zoning Code for current allowable uses in residential zones.

PROGRAM

Each of the proposed design solutions should address following criteria. Please note that although the competition entries should address the criteria below, these actual design submissions are only required in Phase 2.

- An overall **site plan** that shall include the following:
 - A single-family or 2 flat (2 unit) residential unit
 - Trash/recycling receptacles
 - A hardscaped area that can accommodate parking for 1 or 2 cars off the alley
 - Lighting, fencing and general site security should be considered

- A complete **floor plan** design for the residential unit(s) – 1,200 min sf:
 - Kitchen
 - Living and Dining spaces
 - Bedroom(s)
 - Bathroom: tub/shower, toilet and sink
 - Storage space
 - Secure door and window(s)
 - Full MEP design considerations (allow and show spaces for all proposed mechanical, electrical and plumbing equipment).
 - Wealth-building component (such as an income unit or live-work space)
 - Expandable space is desired (such as a basement/attic or other)

- Building **elevations** that respond to the context of the neighborhoods selected. Context criteria includes (but is not limited to) massing, setbacks, materials, colors and finishes.
 - One front building elevation for the Humboldt Park site
 - One front building elevation for the Bronzeville site
 - The building design should address corner lots as required.

Refer to City of Chicago Building Code for specific room requirements.

Accessibility needs and universal design principals. For the purpose of this competition, meet the minimum following accessibility requirements:

- All housing units to be visitable:
 - Visitable units shall be designed and constructed in accordance with Sections [18-11-1107.5.4.3.1](#) through [18-11-1107.5.4.3.8](#) of the [Chicago Building Code](#).
- Fully accessible housing units are encouraged

Maximum cost of materials, labor, site work, and mechanical system for single family houses not to exceed \$200,000. Total development cost will be \$250,000.

Maximum cost of materials, labor, site work, and mechanical for 2 Flat submissions not to exceed \$300,000. Total development cost will be \$350,000.

Reasonable structural and mechanical systems for the given climate and location and the above budgets. Competition entries are encouraged to address and design to Passive House, 2030 Commitment standards or Net Zero design.

Assumptions:

- Per City of Chicago code, a foundation system to 42" below grade will be required.
- Water, sewer, gas and electrical hookups will be provided to the location of your building
- Zoning variance and/or exceptions may be required. Contestants to conform to existing use or special use zoning requirements.

CONSTRUCTION REQUIREMENTS

Assume that the housing needs to comply with City of Chicago code IVA construction (combustible frame construction in which the structural elements, including enclosing walls, are entirely or in part of wood or other materials not more combustible than wood). See more description under division 6, type IV [here](#).

Meet the following minimum energy requirements:

- Minimum wall assembly = R21
- Minimum roof assembly = R48
- Maximum window assembly = U.30

SUBMISSION REQUIREMENTS

- Phase 1: **ENDS JANUARY 31, 2019**
 - Online registration form
 - 250 words (max) response to each of these questions:
 - How does the proposed design contribute to reducing the prevailing cost of construction while still ensuring a durable, sustainable, and livable space for working families?
 - What practical changes to the existing Chicago zoning and building code may be needed to support your proposed design (i.e., what do you believe to be real, but readily addressed barriers to affordable owner-occupied housing)? Where in the U.S. have these changes been implemented and tested?
 - With changes in the economy increasing the desire or need of households to supplement their family income with independent or contract businesses, how could a potential design incorporate flexible space and wealth-building potential in the home or onsite (i.e., in the basement or a garage as studio/workshop)?
 - How does the proposed design support full accessibility and aging in place?
 - One graphic presentation sheet of the proposed design. 11"x17" landscape oriented at 300 dpi in PDF format and saved as a single PDF file less than 10MB in size. To ensure legibility in jurying and publication, all fonts must be 12 point or larger. **Multiple sheets will be disqualified.**
 - If the design is submitted by a team of people, ALL team members must be identified on the application

- Phase 2

Two presentation boards. 24" x 36" landscape oriented at 300 dpi in PDF format and saved as a single PDF file less than 25MB in size. To ensure legibility in jurying and

publication, all fonts must be 12 point or larger. The presentation board must contain the following:

- Site Plan 1/16" = 1'-0" (include context of neighboring buildings)
- All Proposed Floor Plans 1/4" = 1'-0"
- (2) Building Sections 1/4" = 1'-0"
- (2) Building Elevations 1/4" = 1'-0"
- High resolution rendering
- Cost of Materials List
- Names of contestant individuals or organizations **MUST NOT** be visible on the presentation board

FEES

There are no fees associated with entering the competition.

ELIGIBILITY

This Design Competition is open to all with the following exclusions:

- Entries shall not have been previously published in any competition publication, whether printed, online or otherwise
- Entries shall not have been selected as finalists, winner, honorable mention, etc. in any other competition
- It is strongly recommended that each team include a licensed architect in Phase 1. Those selected to continue on to Phase 2 will be required to include a licensed architect. The winning project must include or engage an architect licensed in the state of Illinois
- Current employees of Disruptive Design funders, jurors, sponsors, or task force organizations are **not** eligible to enter. Teams submitting to Phase 1 will be required to sign a disclosure of non-affiliation prior to jurying

JUDGING CRITERIA

The jury will review the submission and select the finalists based on these criteria:

- Compliance with all submission requirements
- Adherence to the design parameters
- Believable constructability within identified budget parameters
- Suitability of design for intended use
- Aesthetic merit
- Responsiveness to neighborhood and site context for all selected lots
- Plans for accessibility and aging in place