

# Prototype for the Future: Affordable Neighborhood Housing Solutions

## Inaugural ICC/AIAS/NCARB Building Safety Student Design Competition

### Introduction

As cities across the United States work to support affordable housing solutions, architects and designers play a pivotal role in creating safe and healthy environments. To challenge designers and communities to support family-focused housing options, this student design competition asks participants to envision how a single-family townhouse unit solution can serve as a prototype to create affordable housing options within neighborhoods.

This inaugural competition is focused on the metro area of Long Beach, California where there is a large demand for affordable housing. This coastal city located in southern California is part of the Los Angeles metro area and home to one of the country's busiest seaports. With a population estimate of over 450,000 with 15.1% living in poverty, the city has a need to serve thousands of families<sup>1</sup>.

The City of Signal Hill is surrounded by Long Beach and represents an area where underdeveloped parcels can be used to infill housing and create neighborhoods with nearby elementary schools.

<sup>1</sup> U.S. Census Bureau quickfacts: Long Beach City, California; United States. Accessed January 31, 2024. <https://www.census.gov/quickfacts/fact/table/longbeachcitycalifornia,US/PST045222>

### Sponsors

Sponsored by the International Code Council (ICC), National Council of Architectural Registration Boards (NCARB), and the American Institute of Architecture Students (AIAS)

#### 01 ICC

ICC is the leading global source of model codes and standards and building safety solutions that include product evaluation, accreditation, technology, training, and certification. The Code Council's codes, standards, and solutions are used to ensure safe, affordable, and sustainable communities and buildings worldwide. This competition hopes to inspire creative solutions that demonstrate application of the ICC's International Residential Code® (IRC®).

#### 02 NCARB

NCARB develops and administers national programs for candidates pursuing architectural licensure and helps architects expand their professional reach through the NCARB Certificate. This competition hopes to support architectural students' ongoing learning of design that protects and promotes the health, safety, and well-being of all. Participation in this competition also provides students an opportunity to earn experience towards completion of the Architectural Experience Program® (AXP®).

#### 03 AIAS

AIAS is a student-run organization dedicated to advancing leadership, design, and service among architecture students. This competition hopes to provide AIAS members with an additional opportunity to express their design ideals while applying real-world codes and standards. This competition will enhance participants' preparation for entering the profession while providing design concepts that serve others.

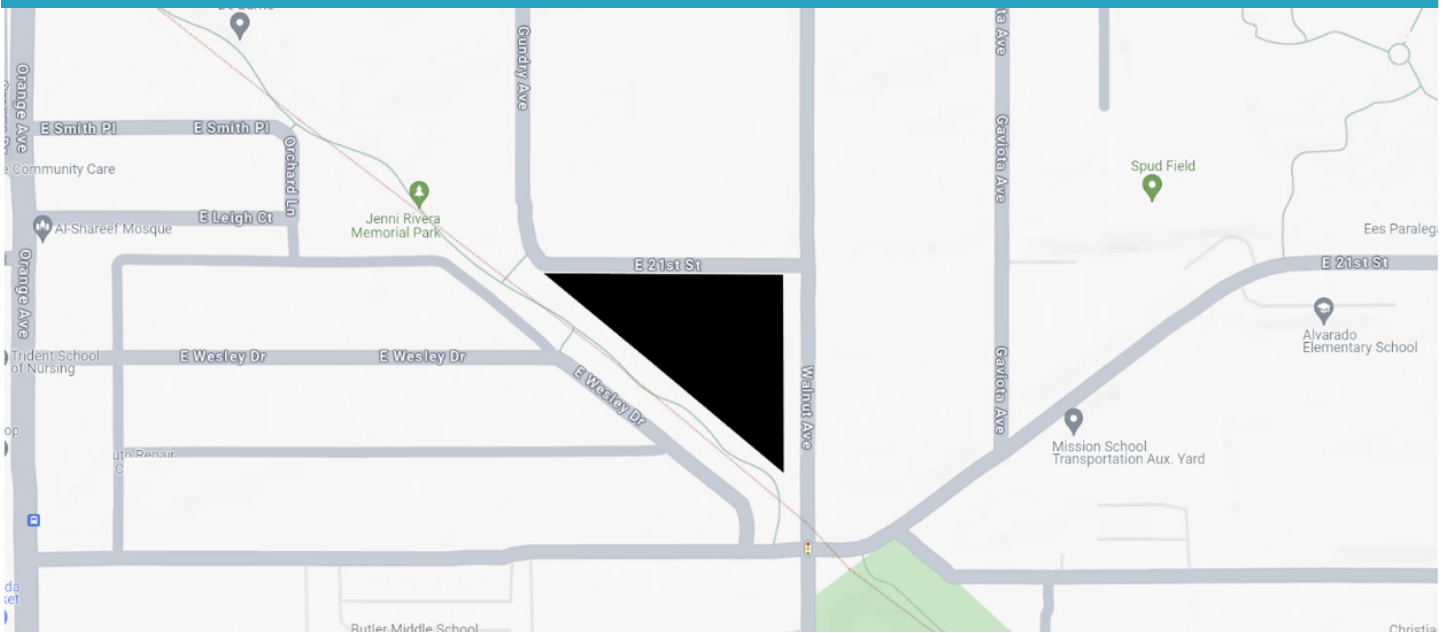
### Eligibility >>



The competition is open to all active members of the AIAS. Submissions will be accepted by individuals or design teams (two members maximum). Individuals or design teams interested in the design competition shall register with the AIAS by applying through Slideroom at the following link: <https://aias.slideroom.com/#/permalink/program/77878> or by contacting [mailbox@aias.org](mailto:mailbox@aias.org) with any questions or concerns.

## The Competition Site >>

An underdeveloped triangular parcel of land sits adjacent to the Jenni Rivera Memorial Park and an extensive pedestrian path along the border of Long Beach. The site has public right-of-way access on the east, Walnut Avenue, and the north, East 21st Street.



## Design Program >>

The goals of the solution are to:

1

Identify site placement and massing for 12 - 18 single-family townhouse units in clusters of three to five attached homes per cluster. Provide on-site parking space of no less than one per home.

- Massing designs should be a combination of one-story and two-story solutions that are harmonious with the scale of the surrounding area.
- Massing should reflect home sizes that support both two-bedroom and three-bedroom solutions.
- Buildings should be located on the site in compliance with distance separation requirements of the International Residential Code (IRC). A free online version of the IRC can be found at <https://codes.iccsafe.org/content/IRC2021P2>

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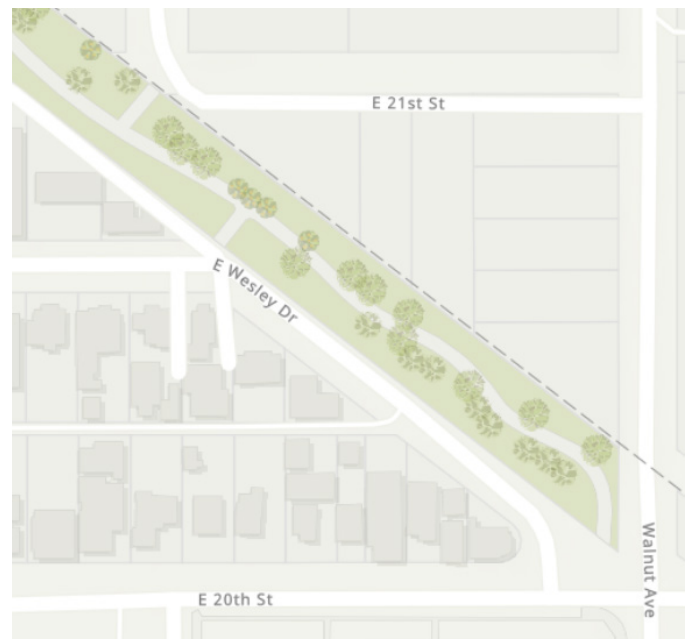
Create a prototypical one-story plan within one building cluster that meets the requirements for wheelchair accessibility and International Residential Code requirements.

- This prototype should be a two-bedroom home with a fully accessible primary bath and a second bath for guests.

3

Create a prototypical two-story plan within one building cluster that meets the requirements of the International Residential Code requirements.

- This prototype should be a three-bedroom home with a minimum of a primary bath and a second bath for guests.



The total property consists of eight parcels to be combined into one proposed solution. The eastern site boundary is a total of 307 ft in length running north to south and maintains a 15 ft setback from the edge of right of way. The northern site boundary is 391 ft in length running east to west with no setback from the right of way.

The site can be [viewed on Google Maps](#).

## Prizes

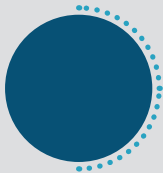


Prizes and certificates of achievement will be awarded at the regional (Northeast Quad, South Quad, Midwest Quad, West Quad, and International) level. The winning submission from each region will advance to the final level where a grand-prize award will be given.

Winning proposals and honorable mentions will be awarded at the regional level. A grand prize winner will be awarded at the international level.



### Prizes for the winning submission at each region include:



- A \$500 cash prize to the winning team.
- A scholarship to each team member to attend the International Code Council's Annual Conference and Expo in Long Beach, CA from October 19 - 23, 2024. The scholarship will include reasonable roundtrip airfare, full conference registration, and hotel accommodations for the event.

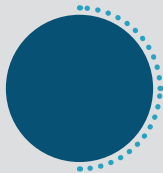
Each team member will receive a free NCARB Record application or yearly renewal of their existing NCARB Record and complimentary student membership from the ICC.

### Prizes for an honorable mention at each region include:



- Each team member will receive a free NCARB Record application or yearly renewal of their existing NCARB Record
- A complimentary student membership from the ICC.

### Prizes for the final winning proposal:



- The final winning proposal at the international level will be revealed at the International Code Council's Annual Meeting and the winning team will be awarded an additional prize of \$1,000.

## Competition Schedule

**March 26, 2024**

Opening Date for Registration

**April 26, 2024**

Closing Date for Questions & Answers

*\*To guarantee equal opportunities to all competition participants, no new questions will be answered after this deadline! All teams that register will receive written notification of all questions received and answered.*

**June 1, 2024**

Closing Date for Submissions

**July 18 - 20, 2024**

Regional Awards Announced at AIAS Grassroots

**October 20 - 22, 2024**

ICC Annual Meeting and Final Winner Announced

# Submission Requirements >>

Participants are required to submit only Arch D (24" x 36") portrait-orientated presentation boards (must not exceed 50MB each) with sketches, renderings, plans, sections, elevations, diagrams, and/or other representations to explain their proposal. Boards must be submitted in PDF file format. Each submission can use up to two presentation boards to convey their design solution.

Design teams can also, but are not required, to submit up to a three-minute video explaining their design solution and how it achieves the design program.

## Recommended Submission Content:

- A site depiction that highlights how the comprehensive design connects with the surrounding urban fabric.
- Plans and detailed annotations of two suggested home layouts (one exterior unit and one interior unit).
- Various inside and outside viewpoints reflecting the character of the housing's interior and exterior spaces, including functionality, access, and flexibility to diverse living preferences.
- Explanation of the scheme's building methods, material palette, and ecological adaptability such as energy efficiency or sustainable practices.
- Renderings or elevations that emphasize the comprehensive design and the solution's potential influence on local communities and diverse families that could call this place home.
- Illustration of the project's viability concerning local environment, prevailing weather patterns, material lifespan, conscientious material selection, and enduring sustainability.

## Submission Rules:

- All information provided in writing must be in English.
- All submissions must be uploaded to: <https://aias.slideroom.com/#/permalink/program/77878>
- Access information and instructions on how to upload the presentation board will be issued to participants via email immediately after successful registration.
- Presentation boards must not indicate any information related to individual's/team's identity.
- Participants who do not comply with the requirements will be disqualified.

## Intellectual Property Rights and Other Rights:

Contestants should have independent, complete, clear, and undisputed copyright of their works when they submit them to the competition. The works submitted by contestants must not be authorized for commercial use by any organization or individual (whether paid or unpaid) and must be original to the contestants and must not be plagiarized or stolen from others. Contestants should also ensure that their submitted works do not breach any third-party rights, including intellectual property rights, portrait rights, reputation rights, privacy rights, etc.

The organizer has the legal right to use all the entries provided in this competition. Once the participants participate in the competition, they are deemed to have agreed and authorized the organizer and its affiliated companies to use their submitted works for events and brand promotion free of charge, including but not limited to the use of the works for marketing events such as cross-media platforms without any need to notify the participants or obtain the consent of the participants when using the entries.

## Jury:

The competition sponsors are committed to selecting qualified industry professionals from building code and state fire marshal departments as well as architects that represent the diversity of the profession to comprise its jury panels. Jury panels may also consist of other professional backgrounds that are relevant to the competition topic, to guarantee the most objective competition results.

The Prototype for the Future is an ideas competition, which encourages participants to challenge the boundaries of architecture and design while ensuring safe built environments as guided by national standards. The jury may choose to reward projects that show a high degree of creativity, even if they breach competition guidelines, if this is justified.

All competition-related communications should be carried out solely with AIAS staff. For any questions, please contact us at [mailbox@aias.org](mailto:mailbox@aias.org).