MARKET ANALYSIS

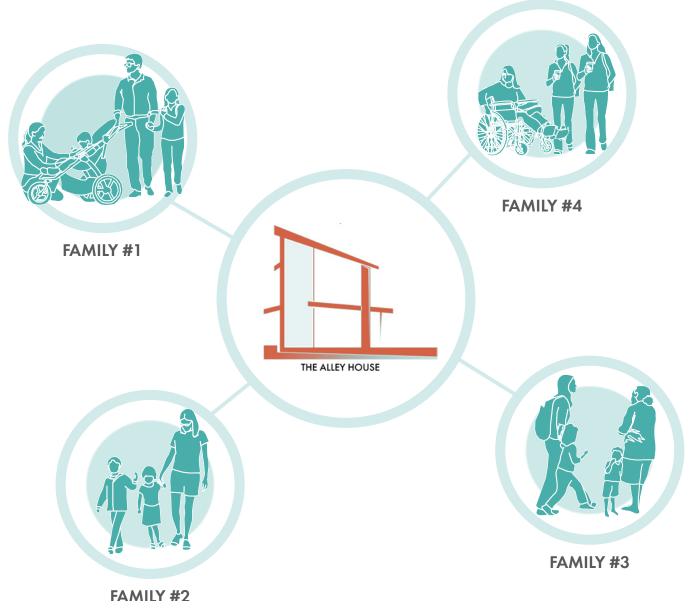
DESIGN APPROACH

The Alley House is a two-family home located in the Englewood Neighborhood of the Near Eastside of Indianapolis. In conjunction with the Englewood CDC, Cardinal Studio has designed a home that directly responds to the needs, wants, and concerns of the community. Its impactful and affordable design and construction practices allow for future adaptation and replicability throughout the neighborhood. The Alley House is part of Englewood CDC's larger plan to redevelop twenty vacant lots in the neighborhood and offers an affordable and attainable housing option in an area facing gentrification. With Englewood CDC, Cardinal Studio has created a safe, adaptable place for families to grow.

CONTEST OVERVIEW

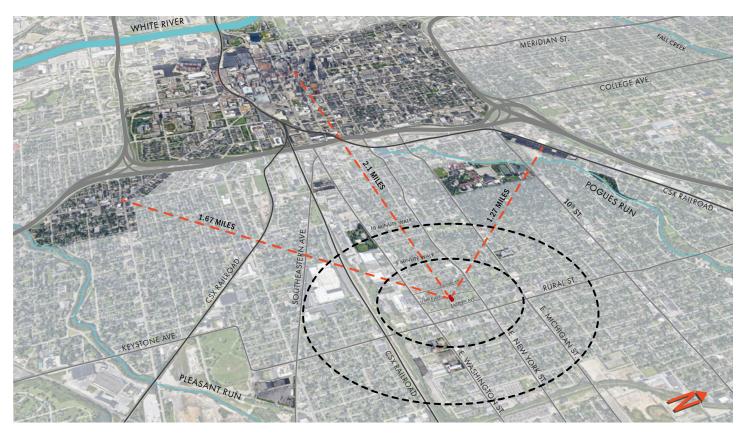


The Alley House achieves the priorities of Architecture, Affordability, and Inclusivity set by the community and Englewood CDC. The need for affordable and attainable housing in the Englewood neighborhood of Indianapolis is illustrated by ever-increasing housing costs and a median household income of just \$25,000. Families comprise the target market for the Alley House. Cardinal Studio's home design is suitable for a variety of family types and effectively responds to their needs while also focusing on affordable and environmentally conscious design approaches.



Target Market

STUDY



PROXIMITY TO DOWNTOWN

Located at 201 North Temple Avenue, the Alley House is located within the Englewood community on the Near Eastside of Indianapolis. The two-family home is 2.1 miles from the Sailors' and Soldiers' Monument in the heart of downtown and 1.67 miles from the Fountain Square Neighborhood, a bustling and revitalized part of the city. The Alley House is also just off East Washington Street, part of Indiana's Historic National Road that runs across the entire state, and just west of Rural Street, which connects directly to Keystone Avenue, an artery to the northwest.

EMPLOYMENT

The highest percentage of workers are in the transportation industry, followed by office/administration work.

HOUSING



DIVERSITY INDEX - 80.6

The diversity index summarizes the racial and ethnic diversity of an area and shows the likelihood that two people chosen at random belong to different races or ethnic groups. The index ranges from 0 (no diversity) to 100 (complete diversity). The Englewood Neighborhood has a diversity index of 80.9; by comparison, Marion County has a diversity index of 68, and Indiana has an index of 44.

TOTAL POPULATION BY RACE

\$25K

\$12K

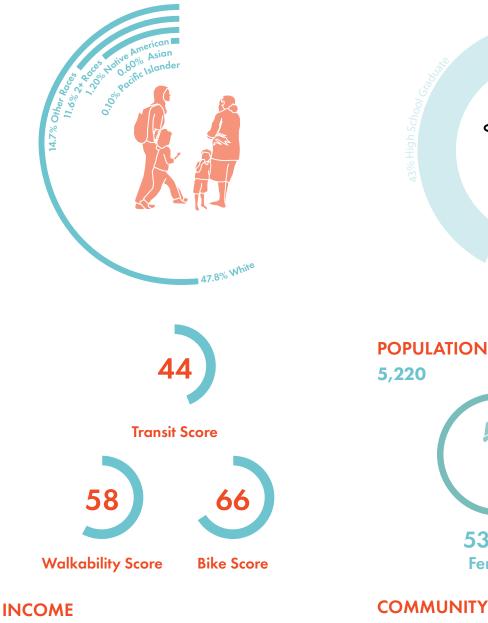
\$11K

Median Net Worth

Per Capita Income

Median Household Income

EDUCATION



53.5% 46.5% Male Female

20% Some College

COMMUNITY ASSETS

U.S. Department of Energy - Solar Decathlon 2023 | Ball State University - Cardinal Studio

Within the Englewood community, there are numerous assets and organizations for residents. In the immediate vicinity of the Alley House are Englewood Christian Church, Englewood Community Development Corporation, Exodus Refugee Immigration, Elevate Indianapolis, Good Samaritan Health Clinic, Good News Youth Center, Good News Family Center, and Wheeler Mission Ministries. These organizations offer diverse types of support to those in need. Schools, grocery stores, a library, and a health center are also within walking distance. The north-south alleyways and the east-west alley that runs south of the Alley House provide walkable community connections to these assets. This abundance of services, resources, and networks creates a strong neighborly community, emblematic of the positive change happening in Englewood.

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NEIGHBORHOOD DENSITY

The majority of Englewood comprises single-family detached housing, followed closely by duplex housing. However, in recent years, Englewood CDC has developed projects that address the community's need for denser housing options, including both new construction and renovation of vacant buildings. In total, 113 units are divided between four medium-density facilities. Englewood CDC's "Scattered Site Rental" program focuses on renting out a total of thirty one-and two family homes throughout the neighborhood. As a two-family home, the Alley House falls into this category and crucially helps to increase neighborhood density. Previously nonexistent "Missing Middle Housing" options are growing throughout the neighborhood, and the Alley House is an integral part of that expansion. The Alley House effectively responds to the neighborhood scale and creates higher density without seeming out of place.

ADDRESSING VACANCY

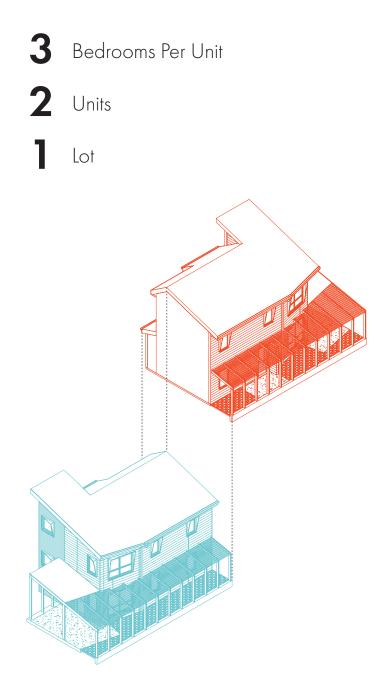
The Englewood community contains many vacant lots and homes. One of Englewood CDC's missions is to reduce that number while providing attainable housing for neighborhood residents. The Alley House is a part of an infill project started by Englewood CDC that aims to infill twenty vacant lots throughout Near Eastside neighborhoods. The Alley House's compact, simple design allows for future replication on vacant lots in the area, especially using its front-to-back model that provides equity in southern exposure. The Alley House sets an important precedent in this infill process by focusing on affordability within environmentally conscience and community-responsive design.



Vacancy and Proximity Map

ATTAINABLE HOUSING

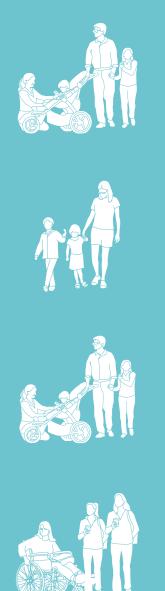
Jobs in Indianapolis are projected to increase by 38% over the next 10 years, growth that will bring more families in search of attainable housing. A significant contributor to attainable housing is the implementation of various housing types and scales. Set in a mostly single-family home area of the Near Eastside, the Alley House is a part of efforts by the Englewood CDC and the community to boost density.



Adaptability Diagram

RENT-TO-OWN

Englewood CDC is leading a strong effort to combat gentrification in the Near Eastside and has created a rent-to-own program to reduce the high rate of renteroccupied housing in the area. The Alley House will be a part of that program, allowing families on limited incomes to chart a path toward home ownership in an up-andcoming district of Indianapolis. This extremely important step will create attainable housing within the area and provide families, many of whom otherwise lack the means, with the opportunity to own their own home.



A family with young children is looking to relocate within the neighborhood. They are looking for an affordable, reliable, long-term housing option for their family.

The family finds the Alley House, an affordable, resilient housing option. They begin Englewood CDC's Rent-to-Own Program and start paying rent, as normal.

The family continues paying rent and living in the Alley House for 15 years. At this point, they have reached the end of their contract and now own the home.

The family continues to grow and goes through various stages. They stay, and confidently age, in the home because of its resiliency and adaptability.

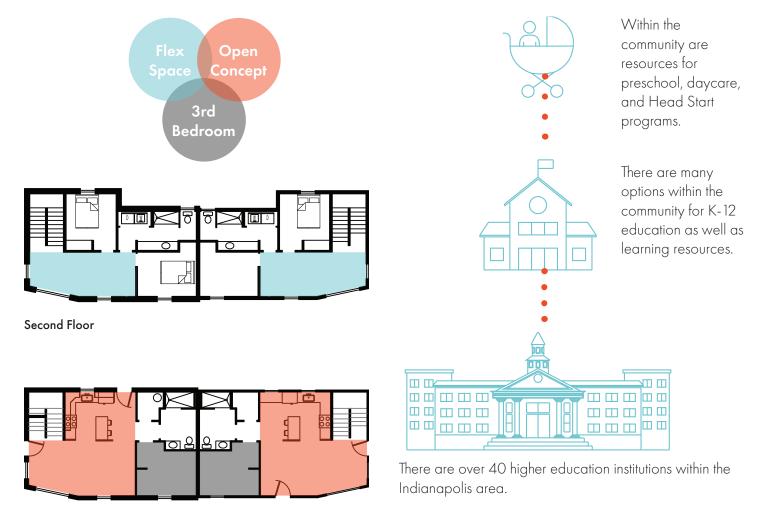
Rent-to-Own Diagram

ADAPTABILITY

The Alley House is an adaptable, versatile two-family home that can respond to its occupants' life cycle changes. Buying a home is the largest purchase many Americans ever make, and the team at Cardinal Studio feels that it is vital to produce a home that can serve a family throughout its lifetime. 90% of adults, 50 years and older, prefer the idea of aging-in-place. The Alley House effectively responds to this by having all the main living spaces, including one bedroom, on the lower level. With a large influx of people now working from home, it is important to consider that occupants may need a space in which they can work effectively and efficiently. Both units of the Alley House utilize an open floor plan, a second-floor flex space, a third bedroom, and modular interior furnishings to allow the flexibility needed to adapt to the changing needs of their occupants.

CRADLE-TO-COLLEGE

The Englewood Neighborhood is building a "cradle-tocollege" walkable community, striving to increase and maintain the number of local children graduating from each stage of education, all the way to college. Within walking distance of the Alley House are DayStar Preschool Program, Thomas D. Greg Neighborhood Elementary School, Paramount Middle School and Purdue Polytechnic High School on the adaptive-reuse P.R. Mallory campus, and the historic "Carnegie" East Washington Branch Public Library. The neighborhood hosts diverse advancement options for non-traditional students, including those who dropped out, are ex-offenders, or are unemployed or underemployed; this includes Uplift Produce, an aquaponic growing facility. There are 40 higher education institutions within the Indianapolis area.



First Floor

Adaptability Diagram

Cradle-to-College Diagram

IMPROVING INDUSTRY

The Alley House uses a variety of innovative systems and technologies, including a shallow frost protected slab (Legalett system), advanced framing techniques, prefabricated components, and Sustainable SITES and PHIUS design certification principles. Within the region, there is a lack of emphasis on and implementation of environmentally and community conscience design. The Alley House sets a strong precedent for future implementation, and Cardinal Studio hopes the use of these systems within the project will catalyze change.

ENSURING QUALITY AND EFFICIENCY

Quality construction is one of the top priorities on the Alley House project. Through the implementation of Legalett's foundation system, truss joist I-joists, and prefabricated roof trusses, the Alley House reduces overall construction time and produces a quality home in which occupants can live and thrive. Using prefabricated components also reduces product waste and ensures accuracy and quality within products.



Alley House Exterior View Looking East

AFFORDABLE CONSTRUCTION

Because the median household income in Englewood is \$25,000, affordability was an extremely important criterion in Cardinal Studio's decision-making process. Common construction methods and materials kept initial building costs down. According to the U.S. Department of Energy, advanced framing can cut costs by \$500 and labor costs by 3% per 1,200 square feet. In addition, native plants and local materials are less expensive and require less shipping for sale or replacement.

FUTURE COST SAVINGS

The Alley House contains many components that, while more costly upfront, were chosen for lifecycle savings potential. These include extra insulation, especially continuous insulation to reduce thermal bridging, triplepane windows, and photovoltaic panels. Passive ventilation strategies have also been incorporated into the design, resulting in less stress on active systems and cost savings.

OVERALL CONSTRUCTION COSTS

These numbers reflect as-built costs for the West unit with no donations or discounts.

Advanced Framing Construction	Site:	\$32,388.00
	Plumbing:	\$38,394.00
	Mechanical:	\$39,844.00
Passive Ventilation System Design	Electrical:	\$52,500.00
	Interior Components:	\$56,795.00
Local Materials		
Photovoltaic Panel System		
Native Landscaping and Water Collection and Retention		
Super-Insulated Construction	General Construction: Construction Cost Breakdown	\$427,241.31

OVERALL AFFORDABILITY

NEW CONSTRUCTION COST

		Construction	Construction
Price/sq.ft. Total sq.ft. of Duplex Construction Cost Construction Cost w/ Soft Costs	\$274.30 2,700 \$649,662.39 \$740,615.03	\$274.30 per sq. ft.	\$107.27 per sq. ft.

Alley House

PROPERTY TAX

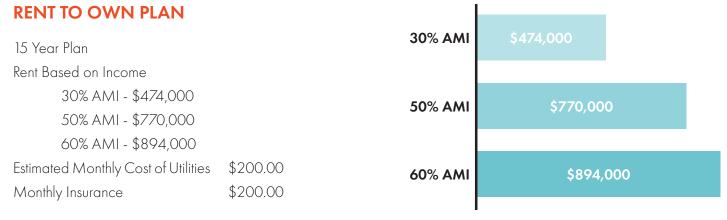
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Tax Rate	1.04%		
Annual Property Tax	\$2,047.06		
Monthly Property Tax	\$170.59	\$1,268.31	
FINANCING			

2.88%
30
360
\$106,050.00
\$600,950.00
\$1,669.97



IN Code Minimum

Annual Energy Cost



Income-Based Rent

10