



Aging-in-Place and Creating New Pathways to Homeownership

EXECUTIVE SUMMARY

Overview

Frolic is a startup from the MIT School of Architecture and Planning and The Center for Real Estate. The company was founded by finance and design researchers Tamara Knox and Joshua Morrison.

The Frolic Model allows homeowners threatened by displacement to take the equity they have in their home and leverage it with community capital to build 6-10 unit coops. This allows the original homeowner to remain on their lot while creating units that are permanently affordable for middle-income, first-time homebuyers.

Frolic creates demonstration projects through its for-profit arm, while assisting other developers in replicating the model through its non-profit arm.

The Model emerged through the work of over 180 visionary city staff, developers, community organizers, lawyers, and finance experts, each helping craft elements of the model with support from MIT's Center for Real Estate and School of Architecture and Planning. Frolic launched in 2019 in Seattle and has two projects in pre-development. Frolic won MIT's IDEAS Global Impact Challenge, was a finalist in Harvard's Real Estate Venture Competition and is a part of MIT's DesignX and Sandbox Accelerators.

Team



Tamara Knox

CEO

MCP & MSRED, MIT
B.A. Urban Studies w/ Honors, Stanford University.
Urban economics and affordable housing



Joshua Morrison

Creative Director

MCP, MIT.
Environmental Design, Brown University.
Previous: Urban planner at Fundament, the World Bank, the U.S. Department of Transportation, and Gehl Architects.



Robert Humble

Design Lead

Founder and Principal of Hybrid's Design, Build & Development Studio based in Seattle. Rob and Hybrid have received the 2019 AIA Award of Honor of their work in urban infill multi-family design, build, and development.



Alex Herbig

Development Lead

Alex helps create financial models for new project developments and market analysis to assess new project viability. Project Manager at Hybrid.

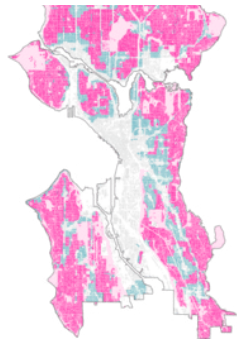


CENTER FOR REAL ESTATE



Sandbox Innovation Fund Program

Problem



Seattle
Residential Land
Zoned for:¹

- Detached SFHs
- Other Housing

81%

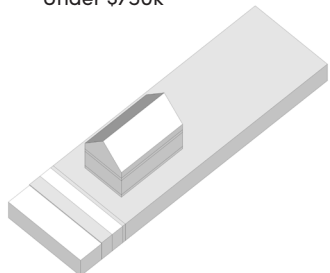
136,000 SFHs
111,000 Owner
Occupied

Single Family Upzone → Displacement

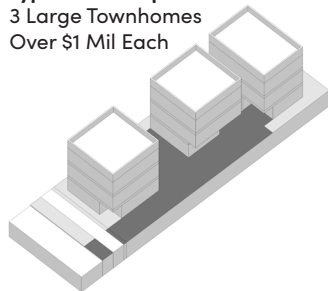
Most of urban America is made up of single family homes (SFH). In Seattle, where we are building our first two projects, over 100,000 single family lots have been rezoned. Many of these lots now allow 6-10 units. As cities work to address the affordable housing crisis, they are upzoning single family lots. This increases the value of these lots along with their associated property taxes. This forces many home owners to sell and move out of their homes. New development built on these lots is not affordable for these residents, leaving them no way to remain in their neighborhood.

Conventional developers transform upzoned lots to fit 2-3 large town-homes. These homes are then sold to high income households at a price point of close to \$1 Million. Middle and low income residents cannot afford to buy what is being built.

Existing Property Value:
Under \$750k



Typical Development:
3 Large Townhomes
Over \$1 Mil Each



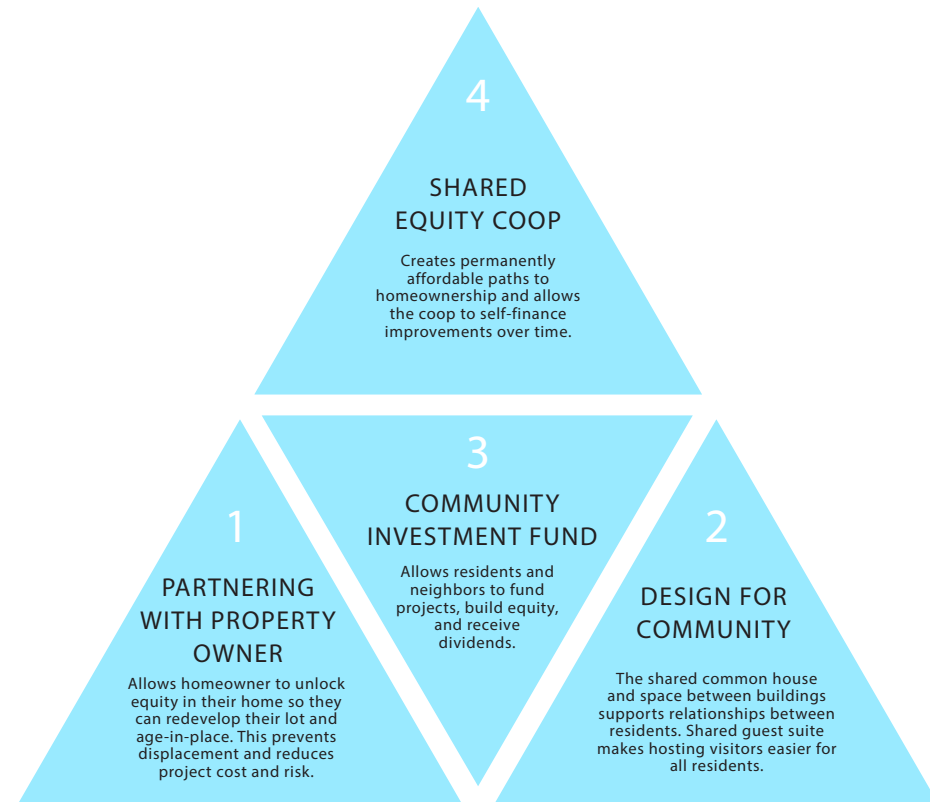
Tenants of the Model

Realigning the Goals of Development

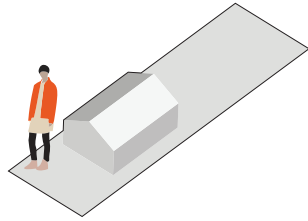
We looked at how cities, communities, designers, and developers are working to address this challenge across the U.S. and Europe. In our research, we pulled apart each step of the development process and experimented with how it might be redesigned around the goals of social justice, community ownership, long-term quality, and aging-in-place. The Frolic Model involves 4 interconnected strategies. These can be used in isolation, but are most impactful when combined.



The Frolic Model is inspired by the Amish concept of a frolic - a process of community co-creation, in which hundreds of families raise a barn in one week.



How it Works



1

Partner with Property Owner

Co-developing with a land owner unlocks single-family homes for redevelopment while allowing the original homeowner to remain on their site and age-in-place. This allows them to tap into their equity without being displaced. It also allows the developer to secure land without using upfront capital. These reduced costs translate to lower prices of the units built.



Common house and guest suite on the ground floor facing the street.

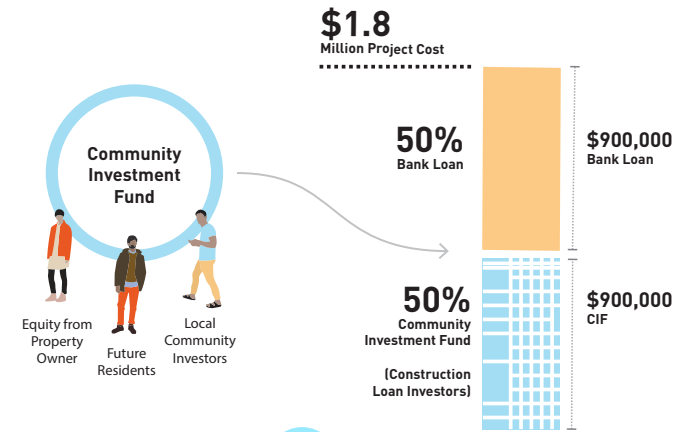
8 self sufficient units with common walkway connecting entrances.

2

Design for Community

During our research, we discovered that people who interact regularly with their neighbors have a higher quality of life. The carefully designed common space in our projects encourage relationships between neighbors and allow for less isolated living. We design our projects using best practices from the design of co-housing communities.

Our projects have 6 - 10 self-sufficient units, each with private entrances, kitchens, bathrooms, and space to host. Each project also includes a common house with shared dining space, a kitchen and a guest room residents can reserve. The common house and guest suite provide each resident the benefits of larger units without the wasted space.



3

Pool Equity from Community

We establish a Community Investment Fund, which leverages the equity the original homeowner has with community capital to help finance the project and give non-accredited investors access to real estate.

Construction loan investors receive a return comparable to a conventional real estate project and are bought out once the project is built. A new set of community investors help finance the stabilized asset and receive a yearly dividend of 5%.

This fund allows the original property owner and future residents to contribute any equity they have in their current home(s) into the project. This reduces the total amount of construction and permanent loan needed from a bank. Once a construction loan is secured and all equity raised, the project gets built.

a

Blanket Mortgage

In its stabilized phase, the project takes a permanent loan with a financial institution, covering approximately 50% of its total value.

Community Investment Fund

Community members and residents (who have additional equity to invest beyond their resident share) are able to own part of the coop as a silent investor. They receive a 5% yearly dividend. This allows local community members who do not own a home an opportunity to invest in the real estate market.

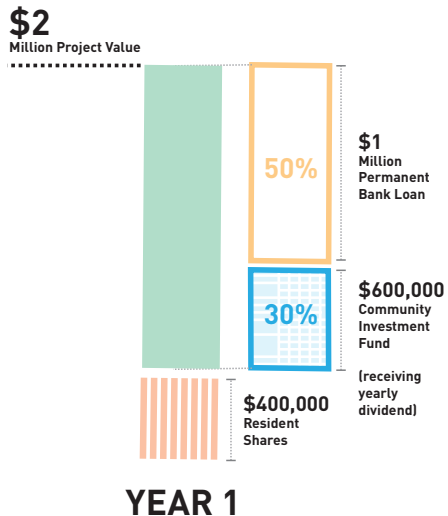
Resident Shares

Owning a share gives a resident the right to live in a unit and a vote on the governing board of the coop.

For the generic project shown, a resident share costs \$50,000. A resident can purchase this share by buying it outright, or taking a personal mini-mortgage for their share, with a \$5-10,000 downpayment. (Verity Credit Union and the National Coop Bank both have share loan products).

In addition to purchasing a share, a resident also pays a monthly coop fee. This fee helps pay off the blanket mortgage and the community investors. It also covers operation & maintenance expenses for the project.

Residents who are also silent investors in the project offset their monthly coop fees through CIF share dividends. The longer a resident stays in the project, the more CIF shares they earn through refinance events.



b

Value Growth

If, hypothetically, the value of the project grows by 10%, the overall equity pie increases proportionally.

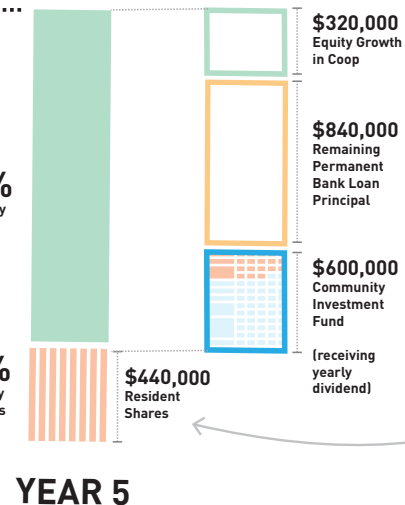
The Coop as a whole owns 80% of this equity growth. In this example, the Coop grows \$320,000 in equity through its share of overall project value and the bank principal that has been paid off.

Resident share value also grows proportionally with the overall market. This means if a resident buys their share for \$50,000, their share is now worth \$55,000.

\$2.2 Million Project value

80% Owned by Coop

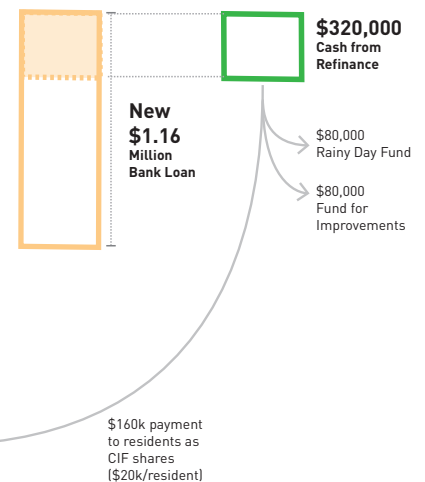
20% Owned by Residents



c

Refinance Events

At certain intervals, the coop can then take a new bank loan for this increased amount (called refinancing) or take a line of credit on this new value. When this happens, the coop suddenly receives \$320,000 in cash.



Distribution of Funds from Refinance

Half of the cash from the refinance is placed into a Rainy Day Fund and Fund for Improvements. The other half is used to "buy out" community investors from the Community Investment Fund, and transfer ownership of their shares proportionally to residents.

Under this example, residents will then each receive \$20,000 worth of shares, and begin receiving a dividend of \$1,000 / year. The longer they live in the project, the more shares they will accrue and the more dividends they will receive.

When residents move from the project, they sell their resident share but retain ownership of their CIF shares. They then become a silent outside community investor in the project, and continue receiving their dividend. Over time, the new residents will buy out their shares.

When community investors are bought out, we give them the option of cashing out their share value or transferring their share to a new project. This allows each Frolic project to help support the next.

4

Establish Shared Equity Coop

By separating the housing security and investment vehicle aspects of homeownership, we allow more people to access housing security and invest in real estate.

Once the project is built, construction financing is replaced with permanent financing. Permanent financing is made up of resident share purchases (20%), equity from the CIF (30%) and a blanket mortgage (50%).

As the project increases in value, the coop is able to refinance to capture its equity growth. These refinance funds are used for building improvements and maintenance, and to buy out original investors in the CIF, giving more equity to residents.

As resident shares only add up to 20% of the total project value (and thus 20% of unit value) throughout the life of the project, the downpayment needed is roughly 1/5th of a comparable unit. This reduces the threshold of purchasing a unit through generations while not capping equity growth.

Company Structure

Our company has two activities. The first is identifying and organizing property owners and future residents. Currently, we have a waitlist of 18 property owners and 46 future residents in the Seattle market. This has happened with virtually no marketing.

The second activity is building projects and licensing other developers to build projects that we arrange. We charge a fee of 3% of project hard costs for arranging the project and 5% for developing the project. Additionally, we retain 5% of CIF shares, which will pay dividends from each project that we build.

Scalability

Our model unlocks a large market of land by partnering with homeowners vulnerable to displacement. As homeowners vulnerable to displacement enter retirement age and cities upzone their land to encourage densification, there is a growing market of low-income single-family homeowners who are vulnerable to displacement and looking for a way to stay in their neighborhoods.

In Seattle, New York, L.A. and Portland alone, there are over 1.7 million owner-occupied single family homes. Portland and Seattle have recently rezoned many of these lots and other cities are following suit. By providing an alternate option to selling their property for homeowners wanting to age-in-place, we are tapping into a massive market.

Current Projects



Frolic 1

Central District, Seattle

Overview: 7 Units

4 One-Bedroom Units

3 Two-Bedroom Units

1 Common House with kitchen and dance studio that can double as a dining area

1 Guest Suite

+ Shared p-patch and outdoor terrace

Architect: [Hybrid](#)

The space between units has seating, bike parking, and greenery, promoting small daily interactions.



Frolic 2

Columbia City, Seattle

Overview: 10 Residences

2 Two-Bedroom Cottages

1 Two-Bedroom Attached

5 One Bedrooms

2 Studios Attached

2 Common Houses with kitchens and flex space that can double as a dining area

1 Guest Suite

Architect: [Allied8](#)

Estimated Avg. Share Price: \$75,000
(Share Loans Available)