

# Do It Yourself Together

**Cooperative Communities and a Right to Build** 

How does our neighbourhood bring us together? Our time with remote working / learning has taught us that it is not the "hard" work (assignments, tasks, labor) that is affected but rather the "soft" work (informal conversations, relationship building) that has been disrupted. So how can your neighbourhood become an extended place of gathering and exchange?

This project is about community making, through a shared act of making and building, that can come to recognize the value of a much more intangible skill: cooperation. An open-source, modular system of construction allows an accessible way of building that is much more inclusionary and participatory. The accessibility brings a broader group to the table: the youth and elderly, the pragmatists and dreamers, the hustling self-employed and the white collar worker with a side passion. A cooperative model of organization, hand-in-hand with changes to local planning, allow a partnership in placemaking that is grounded in local needs and shared responsibility.

A common thread of four kinds of exchange weaves through the proposed design and starts to define what it means and what it takes to engage with one another and to truly "mix".

## Knowledge

Communal Libraries & Reading Spaces Intergenerational Care & Learning Shared Club Rooms

### Mobility

Bike Storage & Parking Carpool & Carshare Parking Electric Vehicle Charging Hubs Delivery Pick Up & Drop Off

### Year 1

Gianna on grew up 158th street in Surrey and spent countless weekends helping with her dad's makeshift projects in their garage workshop and she always found the chance to pick up a tool and build sparked something in her.

When remote learning stopped her shop classes at school, and with her mother now working from home, a backyard workroom rose to the top of the family wishlist.

With some research and advice from her shop teacher who just did a project of his own using a modular system called WikiHouse, they found a local contractor who found the system customizable and less demanding on site. Together with Gianna and her family designed and built that backyard office, rollig up their own sleeves since the system broke down the process into manageable steps.

Their neighbours started to notice and wondered about what they could do with such a space ...

## **Craft/Leisure**

Repairshops & Tool Libraries Maker Spaces & Communal Kitchens Gardens & Greenhouses Playgrounds & Plazas

## **Goods/Services**

Live/Work Spaces Locally Produced Retail Flexible Co-Workspaces



Floor Plan & Module Grid









Standard Joint Detail

### Year 3

Seeing what Gianna had built, two more families around the corner asked for advice and started to build driveway extensions on their own property. One family had sold a car as they no longer needed to commute so much and the freed-up space in their driveway was perfect for a workshop space of their own.

But things got really interesting when two families, long-time friends, decided to open up their backyards and build a two story space together. One recently bad their mother move back with them and the other bad two kids stuck at home all day. So this space had both a bedroom and bathroom on the ground floor and a play space above.

Before long this space was used not just by them but by their friend's kids as well, and soon the space started to host all kinds gatherings.

At these gatherings, people started to realized the potential for accessible shared communal spaces and the gap it was filling for the neighbourhood.

An open source system like WikiHouse empowered users with limited access to manufacturing and construction while offering key benefits:

1) Pre-engineered and modularized systems make co-production with the residents possible

2) Local and distributed manufacturing that also teaches new skills

*3)* User designed & customizable material palette allows flexibility to increase lifespan and adaptability







Panelization & Insulation











And soon enough they organized themselves to build another space.

But this was different, it wouldn't be on a private property but rather on a cul-de-sac parking island. The patch of space was an opportunity to build a shared communal room with storage locker walls for a tool library and spaces for delivery pick-up and drop-off.

It would still have a portion of space dedicated for parking (in fact now it would be weather protected), but it was perfect as a local car sharing programs grew in popularity given everyone's changing lifestyle. Another space was dedicated for communal bike parking.

The pavilion itself was not cheap to build and divisions of responsibility and maintenance became a hotly debated topic. In the end, the neighbourhood formed a cooperative dedicated to improving the built and urban conditions of the area. The model meant equal ownership, transparent financials and hard earned cooperation.

## Organizing under a Cooperative

A coop starts to unify collective visions and discover ways to share resources.

1) Mitigate Financial Risk - Cooperatives starts to aggregate buy-in across many people in order to lower risk and create scale that allows access to lenders and builders otherwise not available to individuals.

2) Alternative Economies - Cooperatives can also start to capture value by members beyond our limited financial structure. The diagram to the right is an example of the value and contribution we're all capable that cannot be so clearly quantified in dollars but are fundamental building blocks to a community. How can a community start to have more agency in their built environment? Initiatives are needed both from the top down and the bottom up.

# Community Right to Build Orders

Decentralizing control allows self organized communities to respond to their own specific needs. One model is the Localism Act in the UK that allows CRBOs for small communal uses to have expanded and expedited planning approval on certain grounds, such as that the proceeds that must be reinvested in the community.

Adopting such an legislation here would enable more collaborative projects between residents and municipality.







The focus wasn't singular. The community divided its resources and supported different initiatives.

One person had started to work with a neighbour on a backyard garden as a hobby but was now looking to build a greenhouse space where she could start a nursery and shop space for her recently launched online home store. The community chipped in its "resources" and she happily volunteered her space for classes on gardening and featured other homemade products from her neighbours on her website.

Another smaller cul-de-sac would also host a new outdoor pavilion. In this case, the weather protected spots would be fitted with EV charging ports, divisible workrooms, garden spaces, and a larger plaza for outdoor events.

Bike lanes were also added and the streets changed to one way traffic, with diminishing parking to be served at these pavilions and a new policy on street side parking. Driveway parking, a relic of a suburban model of mobility, was now an opportunity for each home to build something uniquely suited to their needs. A place for every home to both address their need and engage with others.



The oval pavilion on this page will serve as case study into a standalone project financed solely by the community.

### Land

Ownership and negotiations of the land will start with a private purchase of the street desired by the coop, with an understanding that infrastructural maintenance for servicing would be continue to be the city's responsibility.

### Construction

The construction of a comparable pavilion is range of \$ 130/sqft and at 2,900 sqft the construction cost would be ~\$377,000.

### Income Streams

There are 173 house holds on this site and a monthly \$50 contribution would generate \$103,00 annually for the coop.

Additional sources of on-going income:

- Rental fees for special events and commercial activity like farmer markets. (eg: With Vancouver Farmer Market as reference, 10 vendor stalls would generate ~\$1,600 annually)
- 2) Plantable spaces and money generated from its produce / flora.
- 3) Municipal grants and contributions as a qualified park / public amenity.

### Maintenance & Timeline

- Maintenance costs are partially offset by non-paid labor of the coop members, but otherwise equal \$1.5 sqft/year.
  - Considered as a whole, the pavilion could be paid off in 38 months.







The next project tested how well they could integrate a building in a suburban context. How to share uses under the same roof. An oval shaped pavilion spans four backyards, cut through the center by a public alleyway connected to the nearby street. This subdivided the pavilion into quadrants of use that aligned with each home's interests while allowing public access.

One home was a retired art teacher that now had a space for an art and pottery studio that had regular open classes. In another, a family who loved to host backyard BBQ's fitted out a communal kitchen that became the new go-to spot on the block to fulfill cravings. One initiative (www.dencity.build) by a member our team leverages open map data to allow homeowners to quickly determine if their property allows for a laneway home to be built according to by-laws. 257 kilmeter of GTA laneways yielded ~26,000 viable properties.



Site Use Diagram

We see a similar tool as **dencity** that can analyze single family residential blocks for opportunities of community oriented developments. Revealing deficiencies and needs for a range of amenities such as park space, recreation facilities or new uses such as coworking, remote learning and alternative mobility hubs. The **four kinds of exchanges** act as guides to show how a neighbourhood should develops.







Time flies and Gianna has now been the shop teacher at Fleetwood Park Secondary School for five years. She's the go-to person for any new projects and often brings her students to help on all kinds of projects around the neighbourhood.

At the edge of the block is a homeowner who used to run a cafe at a plaza down the street but has now decided to downsize and build an extension to his home for a bistro. It will host a communal library, coworking space and storefront that openes up to create a covered outdoor terrace for its visitors.

Gianna and her students would help design and welcome this hub of activity at a corner of their block, a block that started out like any other, but would be now a catalyst for all kinds of activities and interactions not possible before.



Another member our design team is a part of Akin, a member based cooperative that provides creative studio spaces as well as arts-based programming. Her experiences helped inform our narrative on the potential of a coop to foster places where goodwill servers as the foundation of interactions between individuals and fosters a collaborative community.

The pandemic has brought forth a reality made possible by our endlessly digital world, but we're discovering that while being connected online can help us be with one another, it can also polarize and bring fear out of our differences. This project imagines the potential for low density, single family neighbourhoods to embrace their diversity and be empowered to build and to serve one another. The cooperation we learn when we build together is more than a physical skill, but rather a social one. One that is essential for us to navigate our shared world together.

