

# **HOUSING HORIZONS**

models for real estate +  
community investment

HOUSING HORIZONS  
**Models for Real Estate +  
Community Investment**

**by Adrienne Pacini**

A major research project submitted to OCAD University in  
partial fulfillment of the requirements for the degree of Master  
of Design in Strategic Foresight + Innovation

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# AUTHOR’S DECLARATION

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# ABSTRACT

Toronto’s housing system is in crisis. As we persist in maintaining this failing system, we are limiting ourselves to the possibility of creating transformational change. Toronto’s housing arena is a complex organism of competing interests and influences, reinforcing a stratification between those who benefit from it and those who do not. With limited housing choices, many Torontonians are left with few opportunities to invest in their communities and to generate personal financial wealth for their futures. Through foresight methods, systems analysis, and generative design research techniques, this project asserts that we can create change in Toronto’s housing system by transforming real estate investment into an inclusive community-building tool. Housing Horizons begins by describing the evolution of the housing arena in Canada and analyzing the dynamics at play in the current system. The research then proposes several design principles for innovation: shift the power in the development industry to smaller community-based players, create wealth-generating mechanisms suitable for renters, and foster collaboration across stakeholders in the system. A city where all citizens can thrive is only possible when the housing system contributes to the wellbeing of its entire population – this vision can be realized through strategies that level the playing field for all.

Keywords: affordable housing, housing system, foresight, systems thinking, Toronto

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Looking forward to continuing this work with you.

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# Introduction

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“Any system was a straightjacket if you insisted on adhering to it so totally and humorlessly.”

– ERICA JONG, FEAR OF FLYING

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# An uncertain future

This project started with a simple question: “What does home mean to you?”; and a feeling: a feeling of defeat in the face of an increasingly uncertain future for myself and for all Torontonians.

As I write this Introduction to Housing Horizons, 82,414 families in Toronto are on a social housing waiting list and have been for an average of eight years (ONPHA, 2016a). A child in a family on the waiting list may have spent their entire elementary school career living in an unsafe, unaffordable, or inadequate housing situation. In 2017, the average price of a single-detached home in the City of Toronto hovers around the \$1-million mark (CMHC, 2017; Toronto Real Estate Board, 2017). Households hoping to enter the ownership housing market are slowly seeing that dream slip away.

These numbers are no surprise to those working in the housing sector. The affordable housing crisis is one of the wicked problems that thousands of politicians, civil servants, sociologists, geographers, urban planners, and economists have been challenged by for decades. Still, the problem worsens.

Two years ago, in December 2015, I met Tony while running a focus group at a social housing development in Brampton, Ontario. Tony had been on the social housing waiting list for five years, before losing his place in line when waitlist administrators were unable to get a hold of him. He spent a significant portion of his life moving in and out of emergency shelters, living in rooming houses where he experienced violence, vandalism, abuse, and spent many nights on the streets. In February 2017, Tony and I met again. This time, at a lunchtime outreach program in downtown Brampton.

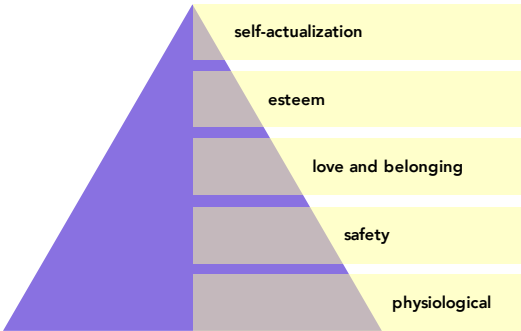


Figure 1 | Maslow’s Hierarchy of Needs

“Do you remember me?” he said.

Of course, I remembered him.

“I finally made it off the waiting list! I just moved in to my new apartment a few weeks ago!”

I was shocked. Tony spent over seven years waiting and finally had a safe, secure, and stable place to call home.

“I’m a different person now. I feel like I can be myself again,” he said.

That’s what home means to Tony. It’s what home means to many of the individuals that participated in workshops and interviews conducted for this project. Housing, as shelter, is a powerful tool that is directly related to the social determinants of health, especially: income, education, job security, food security, social inclusion, social safety network, health services, and early childhood development (Maslow, 1943). At a deeper level, a home can provide self-esteem, safety, a sense of belonging, and self-actualization, some of the building blocks of basic human needs, identified in Maslow’s Hierarchy of Needs.

For Tony, his housing is not a financial investment opportunity. It does not represent an opportunity to maximize profits or to earn a financial return. Housing is his basic need to live a healthy life.

## How might we...

Torontonians are experiencing severe housing unaffordability. This project allows us to take a step back and to better understand the problem at hand. How might we employ systems thinking to unpack the housing system and uncover where interventions and solutions may be most appropriate? How might we use foresight to shed light on where we may be headed? How might we use human-centred design to have empathy for Torontonians living in today’s system and design new models and opportunities for all? This project begins these conversations.

# Purpose

## Goals

This project aims to pose critical questions about the current housing affordability crisis in Toronto, to develop an understanding of how we got to where we are today, where we are now, where we may be heading, and how we may arrive at a new housing system in the future. This project journey was designed to achieve the following goals:

1. To start a conversation with Torontonians who are facing affordability challenges, making big housing decisions, or who are concerned about their personal housing futures;
2. To understand what change Torontonians are hoping for or might be willing to accept in the system; and
3. To begin working with the community to explore how we might provide more Torontonians with opportunities to live in safe, affordable, and adequate housing.

## Areas of inquiry

The following sections explore three main phenomena within Toronto’s housing landscape:

**Many Torontonians cannot afford homeownership in the city, and there are few housing alternatives available.**

Torontonians face a binary decision: to rent or to own? Do I grant myself the flexibility and affordability of rental in the neighbourhood of my choice or do I venture down the ownership path in hopes of building wealth and savings while I pay off my mortgage? Over three-quarters of households cannot afford the current average house price in the Toronto Census Metropolitan Area (\$696,282 in January 2017) (based on affordability calculations; requiring roughly \$162,000 annually) (CMHC, 2011b). What’s more, there is evidence that our current social, political, and financial systems favour homeowners over renters, making ownership the preferred form of tenure for upward social mobility.

**We are limiting ourselves to the possibility of transformational innovation by focusing on maintaining a failing system.**

The housing system is ingrained and intertwined within our social welfare and human services system, the financial system, and our economy. Stakeholders in each of these systems hold on to beliefs about how we should build, invest, plan, and maintain our neighbourhoods. These rules and system dynamics uphold our narrative of ownership housing as one of life’s key milestones and of real estate as a valuable financial asset.

**The world around us is changing rapidly; we must reframe the housing problem to keep up with the pace of change.**

As we work on maintaining the current housing system in the face of mass affordability challenges in Toronto, other elements of our environment are evolving faster than planners and policymakers can manage. Innovations like driverless cars, artificial intelligence, cryptocurrencies and their systems (such as blockchain), and renewable energy technologies may have the power to disrupt our housing system faster than our public policies.



# Research Question



# Methodology

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# Project methodology

This project combines tools and methods from the fields of design thinking, foresight, and systems thinking. The information-gathering and analysis components of this project follow a series of phases of divergence (where new information was gathered) and phases of convergence (where information was analyzed and synthesized).

The project methodology mirrors the steps in the design thinking methodology: problem finding, problem framing, solution finding, solution selection, and solution implementation. Six research questions guided each phase of this study.

		primary research	secondary research
problem finding	What does the housing system in Toronto look like and how did we get here? What trends and drivers are shaping the system's future?	<ul style="list-style-type: none"><li>Expert interviews (8)</li></ul>	<ul style="list-style-type: none"><li>Literature review</li><li>Signals and trends scan</li></ul>
problem framing	Where do barriers to and accelerators of change exist within the system?	<ul style="list-style-type: none"><li>Workshops (3)</li></ul>	<ul style="list-style-type: none"><li>Stakeholder matrix</li><li>Timeline and eras map</li></ul>
solution finding	What kind of change do the people of Toronto want to see?	<ul style="list-style-type: none"><li>Design principles</li><li>Value Proposition Canvas, Business Model Canvas, Ten Types of Innovation</li></ul>	
solution selection	How might we create an equitable housing system for Toronto residents?	<ul style="list-style-type: none"><li>Speculative models</li></ul>	
solution implementation	What strategies would facilitate change?	<ul style="list-style-type: none"><li>Next steps for moving forward</li></ul>	

Figure 2 | Housing Horizons project methodology

## Three Horizons Model

The Three Horizons Model was used over the course of the project methodology as a generative research tool with study participants, as an analytical tool to make sense of the primary and secondary data, and as a framework for telling this story of hopeful housing futures for Torontonians.

The Three Horizons Model is a foresight technique developed by Baghai, Coley, and White (1999) and popularized by Curry and Hodgson (2008). The model—as shown in Figure 3—aims to “connect the present with desired (or espoused) futures” (Curry & Hodgson, 2008, p. 2). The model maps “three conditions of the same system, over time, against its level of viability in its changing external environment” (Curry & Hodgson, 2008, p. 2). The X-axis reflects time, moving from the short-run to the long-run, and the Y-axis represents the system’s strategic fit within its “political, economic, organizational, and cultural” context (Curry & Hodgson, 2008, p. 7). Horizon 1 illustrates the current system, in decline. This system is slowly losing “fit” within its external context. Horizon 3 represents “one of a number of competing worlds that is desired by those who propose a different service model, a different political, cultural or institutional framework, or a different paradigm” (Curry & Hodgson, 2008, p.7). These are “proposals for transformational change” which can only be observed “in

small pockets of the future embedded in the present” (Curry & Hodgson, 2008, p.7). Finally, Horizon 2 represents a promising alternative system. It is the transition stage between Horizon 1 (in the present) and Horizon 3 (in the future). In this horizon, orthodoxies can be challenged, allowing for alternatives to “business as usual” to emerge.

References to the Three Horizons model are found throughout this paper. Insights emerging from the project’s workshops report on participants’ perspectives and mindsets related to each of the three horizons of the housing system.

Further information regarding the workshops conducted for this study can be found in the Appendix of this report.

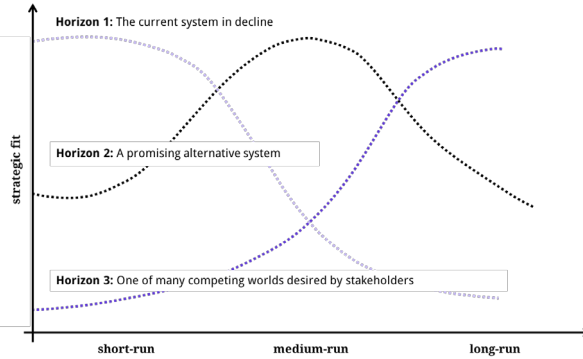


Figure 3 | Adaptation of the Three Horizons Model (Curry & Hodgson, 2008)

# Primary research

## Expert interviews

Two primary research methods were used to develop this MRP. First, semi-structured interviews were conducted with experts in housing, planning, real estate development, and personal finance. The interviews helped identify signals, trends, and drivers of change within the Toronto housing system.

The experts interviewed for this project include:

**1. Martin Blake, Vice President, The Daniels Corporation**

The Daniels Corporation is a vertically-integrated private development corporation. Martin Blake’s extensive knowledge of the real estate development industry provided a look into the pressures that the real estate industry is facing in a time of rapid immigration in Toronto. He also works at the intersection of private and non-profit housing, through the revitalization Regent Park in Toronto’s east-end.

**2. David Nugent, Chief Operating Officer, Wealthsimple**

Wealthsimple is an online digital investment manager, focused on financial planning and investments for millennials. David Nugent has unique knowledge of investment decisions, needs, and pain points of the millennial middle-class in Toronto.

**3. Sharad Kerur, Executive Director, Ontario Non-Profit Housing Association**

The Ontario Non-Profit Housing Association is a member-based organization representing 730 non-profit housing providers in Ontario. Sharad Kerur provided his knowledge of the emerging signals and trends that non-profit housing providers are concerned about when planning for their futures.

**4. Brandon Donnelley, Vice President, Slate Asset Management**

Brandon Donnelley is the author of a daily city-building blog with over 14,000 subscribers. He is also part of the team at Slate Asset Management, a real estate investment platform. Brandon provided insights into emerging technologies and models in the real estate, architecture, and development sectors.

**5. Leah Meisterlin, Assistant Professor, Graduate School of Architecture, Planning and Preservation, Columbia University**

Leah Meisterlin is one of the authors of The Buell Hypothesis, examining the cultural assumptions underlying the “American Dream” in the context of the foreclosure crisis, suburban sprawl, and the architectural public sphere. She provided her knowledge of the evolution of policies and mental models in the planning and housing policy landscape in the United States.

**6. Sarah Lever, Real Estate Sales Representative, Harvey Kalles Real Estate Ltd.**

As a real estate agent, Sarah Lever provided her knowledge of the home-buying experience from her perspective and from the perspective of her clients looking to take the leap into the housing market in Toronto.

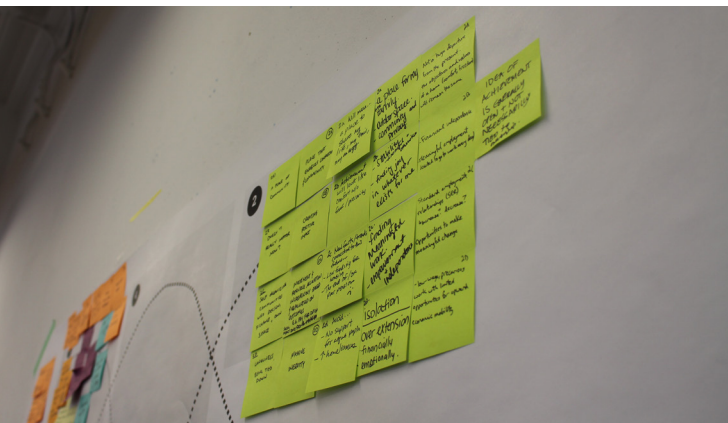
**7. John van Nostrand, Founding Principal, SvN Architects + Planners**

John van Nostrand is a recognized planner and architect. He contributed through his understanding of the evolution of the Toronto planning and architecture arenas, and through his current research on developing innovative models for designing housing to meet affordability needs in Ontario’s big cities.

**8. Ene Underwood, Chief Executive Officer, Habitat for Humanity Greater Toronto Area**

Habitat for Humanity’s Ene Underwood sees the housing system from the eyes of an innovative non-profit housing provider focused on mobilizing volunteers and communities to break the cycle of poverty through affordable homeownership in the Greater Toronto Area.





## Workshops

Second, workshops were conducted with three groups in the Greater Toronto Area communities. The workshops involved generating a shared vision of a hopeful future for Toronto's housing system and helped develop an understanding of the needs and pain points of individuals looking to design a desirable housing future for themselves and their families. Participants took part in a make tools exercise and collaborated to complete the Three Horizons Model. These methods are described further in the Analytical Tools section.

The workshops conducted for this project include:

### 1. Workshop with Greater Toronto Area residents (24 participants)

This group was recruited using a snowball method, through the Strategic Foresight and Innovation network at OCAD University. Participants were selected based on their interest in exploring the future of housing in Toronto. Participants ranged in age from 20 to 55 years: an age cohort of individuals at a stage in life where they may be making decisions about their personal housing situations.

### 2. Workshop with financial services professionals at one of Canada's largest banks (8 participants)

This group had an interest in exploring the future of housing in Toronto from their personal perspective and from a professional perspective, being employees of a large financial institution. Individuals within strategy, product development, and research departments participated voluntarily.

### 3. Workshop with housing policy and real estate development professionals (6 participants)

This group had an interest in using their industry expertise to explore the future of the affordable housing system and sector in the Greater Toronto Area.

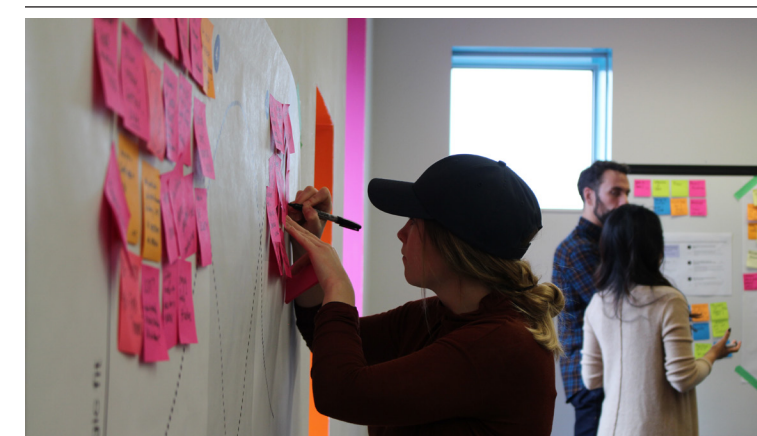


Figure 4 | Photos taken at Workshop 1



# Secondary research

An in-depth literature review was conducted to gain an understanding of the housing system and its stakeholders. Principal domains of inquiry included: the Toronto housing market, housing policy, the non-profit and private sector real estate development processes, impact investing and social enterprise, alternative housing tenure models, and foresight in the residential real estate industry.

# Analytical tools

The following tools were used to develop insights from the primary and secondary information sources. The information-gathering tools were used to collect data during the expert interviews, workshops, and literature review. The analysis tools were used to make sense of and draw insights from the information gathered.

## Information-gathering

### Signals and trends scan

An in-depth environmental scan for signals of change and emerging business models in the housing sector was conducted to develop an understanding of the external and internal factors shaping the future of housing, urban planning, and personal finance in Toronto and elsewhere. STEEPV is a conceptual framework used in the field of strategic foresight. This framework is used for scanning and classifying trends and signals in an environment and covers the key areas that must be considered: Society, Technology, Environment, Economy, Policy, and Values (Institute for Alternative Futures, 2013).

### Three Horizons model

The Three Horizons model, as popularized by Curry and Hodgson (2008) is a foresight technique which aims to connect the present with desired futures. The tool was used to guide discussions about hopeful housing futures with workshop participants and to categorize literature review findings, especially those related to weak signals of the future found in the present. A detailed description of the workshops can be found in the Appendix of this report.

### Make tools

“Make tools” is a generative design method which allows participants to connect with tacit and latent knowledge (Sanders & Stappers, 2013). The make tools exercise was used during the workshop to have participants describe their understanding and emotions around messages about Toronto’s current housing system.



Figure 5 | Photos taken at Workshop 1

## Analysis

### Stakeholder map

A stakeholder matrix was developed to map the range of players within the housing system to understand their roles, level of interest, and level of influence in driving change. The matrix reflects Mendalow’s stakeholder matrix, mapping interest and influence.

### Timeline and Eras Map

A visual timeline is included, to depict the evolution of housing policy from the municipal, provincial, and federal perspectives. The timeline is used to contextualize the current state of Toronto’s housing system. Within the timeline, an Eras Map is used to describe topics of interest over time.

### Systems diagrams and archetypes

System diagrams and archetypes have been generated to describe the complex dynamics of the housing system and to begin to identify potential leverage points and points of intervention where alternative models might emerge.

### Verge Framework

The Verge framework, also known as the ethnographic futures framework, developed by Lum and Bowman (2004) helps to bring anthropology and a human factor to the STEEPV scan. The tool was used in this project to classify the key insights that originated from the Three Horizons workshops. A detailed description of this framework can be found in the Appendix of this report.

### Value Proposition and Business Model Canvases

The Business Model Canvas and Value Proposition Canvas (Osterwalder and Pigneur, 2010) were used to help analyze the current housing models that exist and to articulate a deeper understanding of housing as a value proposition for Torontonians.

### Ten Types of Innovation

The Ten Types of Innovation framework, developed by Keeley et al. (2013) was used to analyze and compare existing innovative housing system models.

## Study limitations

Every effort was made to create and execute a comprehensive research project. The following study limitations are acknowledged:

### Time and resource limitation

Additional funding for this project could have amplified the primary research process, by producing more design elements for participants to interact with and by permitting more workshops to take place. Additional expert interviews could be conducted with other housing system stakeholders, including: politicians, planners and civil servants, and mortgage brokers.

### Sample size and participant mix

This project could benefit from additional primary research with Torontonians from more diverse socio-economic backgrounds (such as those living in emergency or transitional housing and recent immigrants).

### Research methods

The large-group workshop setting can limit responses provided by participants. Additional one-on-one interviews may provide a more comfortable setting to gain insight into individual needs.

### Access to recent and accurate data

Demographic data used are mainly from the 2011 Canadian Census, as 2016 data were not available at the time of this project. This provides a limitation especially when comparing current housing counts and prices to population and income levels from 2011.

PART 1

# How we got here

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“Canada’s housing system once had room for  
virtually everyone.”

– J. D. HULCHANSKI, 2007

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# The evolution of housing

Toronto is experiencing a housing crisis. As the cost of a place to live continues to account for the largest proportion of household spending in the city, policymakers are working to find solutions to fill the affordable housing gap. Before investigating some of these solutions, it is important to understand how we got to where we are today. Our current situation is the product of a century of policy directives; changes in societal values; and innovations across the construction, financial services, and policy sectors.

## Big shifts in history

The literature review revealed two big shifts in the historical evolution of the housing landscape in Canada and the United States, which helped compose the complex system that exists today. The six historical eras described in the next section are categorized by these shifts.

### A note on the United States context

The policy evolution timeline includes milestone events specific to the United States context. These events were seen to have widespread effects across North America, introducing new technologies and business models that would eventually make their way to the Canadian context.

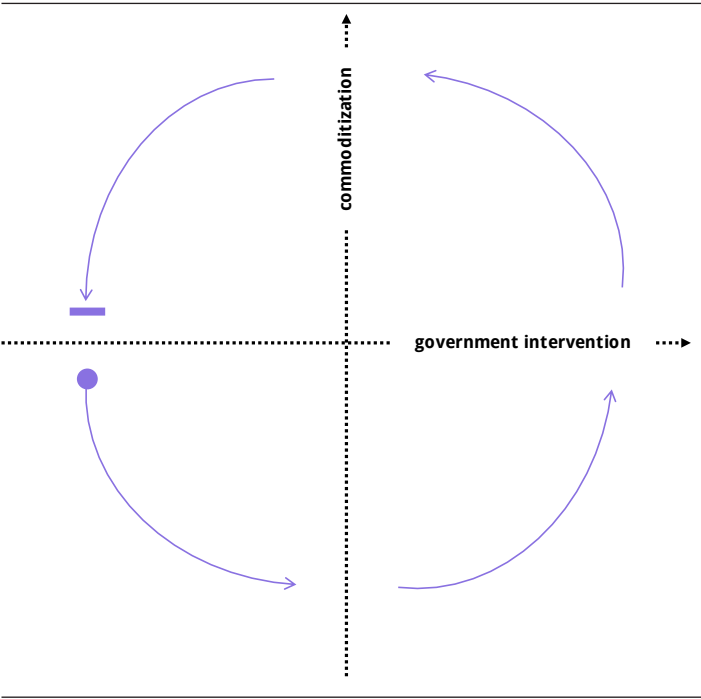


Figure 6 | Evolution of housing matrix

### SHIFT 1

*Government intervention*

**There is evidence of movement between high levels of government intervention and lower levels of government intervention in the housing system.**

Each era is characterized by varying levels of government intervention in and attention to the housing system. Types of intervention include participating in any aspect of the system: from altering interest rates, to developing housing, to providing policies and programs at the federal, provincial, or municipal levels. These shifts reflect political interest in directing the real estate market to provide housing for individuals whose needs are not met by the supply created by free market forces.

### SHIFT 2

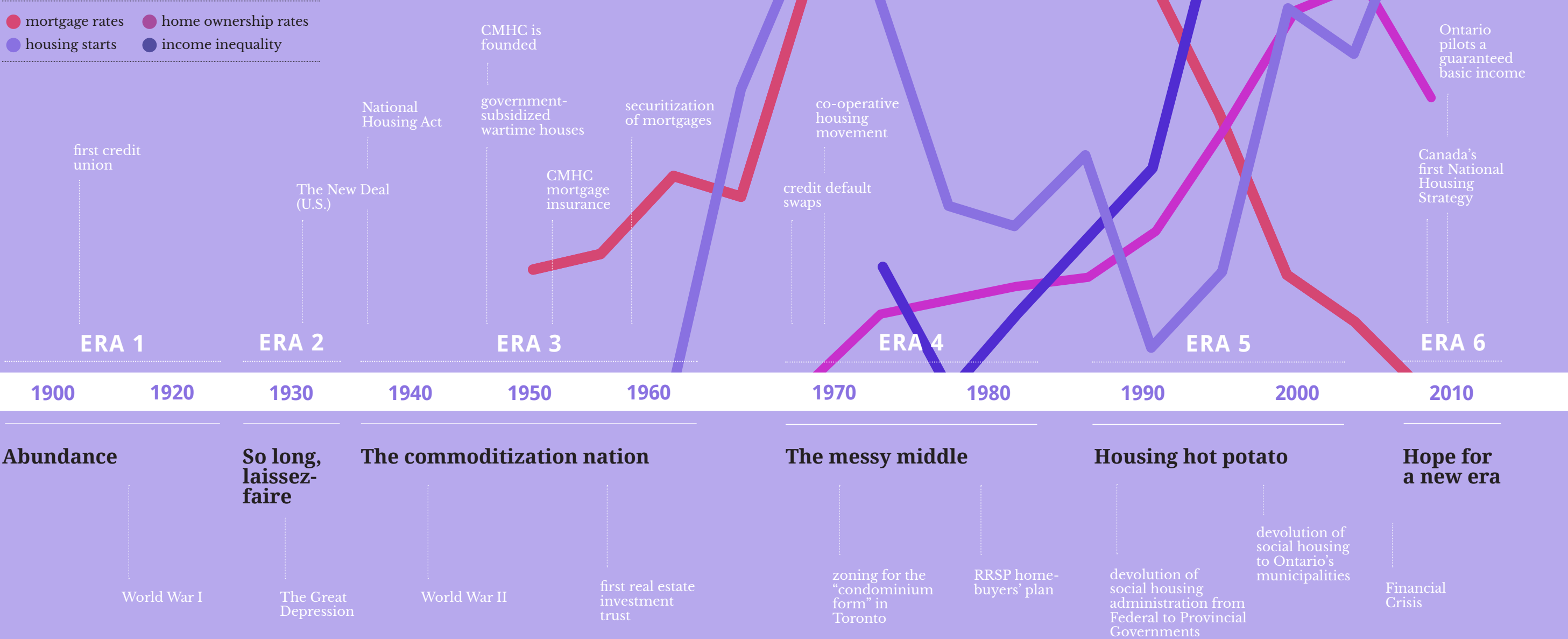
*Commoditization of housing*

**There is evidence of movement between treating housing as a basic need and as an asset.**

The housing evolution timeline depicts technologies, policies, and events that reflect our current mental models of housing as well as the associated products, services, and policies that exist in the housing market. Historical shifts between mindsets of housing as a basic need and housing as an asset were determined based on signals of a societal emphasis on the intrinsic value of the house (the value in and of itself) versus an emphasis on the extrinsic value (or instrumental value) of the house (the house as a tool or instrument for achieving something else).

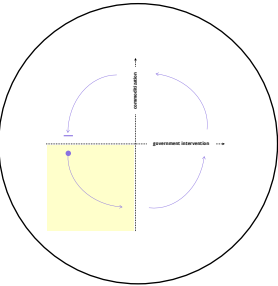
# Housing eras

There were several key milestones, trends, and technologies that played a role in solidifying today’s complex housing system in Toronto. The following timeline describes these events across six eras in history.



# Eras in the evolution of housing

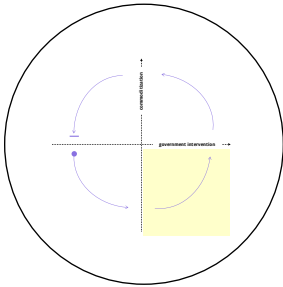
The following six eras in the evolution of housing mark moments of varying levels of government intervention and commoditization of housing in history. This analysis reveals key events and shifts which solidified many of the dynamics at play in today's housing system.



## ERA 1 Abundance (1900s to 1920s)

This era is characterised as a time of low government involvement and lower levels of commoditization of housing.

Era 1 was an era of abundance. There was a large supply of undeveloped, affordable land for newcomers and pioneers looking for farmland. According to the Canadian Human Rights Commission (n.d.), one could purchase 160 acres of land for ten dollars. Families built their own homes (CHRC, n.d.). In 1900, household sizes were large, with an average of five persons per household (CHRC, n.d.).



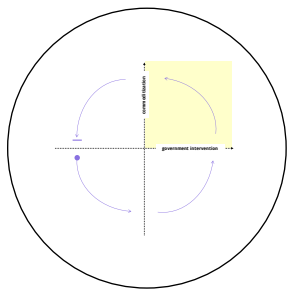
## ERA 2 So long, laissez-faire (1930s)

This era is characterised as a time of high government involvement and lower levels of commoditization of housing.

Prompted by the Great Depression, North America experienced a transition from laissez-faire capitalism in the United States, to a time of public sector investment in programs and policies related to banking and monetary reform, affordable housing, social security, and tax policy, among others.

During this era, President Franklin D. Roosevelt introduced the New Deal in the United States (1933) in response to the widespread unemployment and economic downturn following the Great Depression. Along with the Fair Labor Standards Act (1938), which set minimum wages for workers for the first time, the U.S. Housing Authority was introduced with a goal of financing low-income housing projects (The American Presidency Project, 1999). This was one of the first political acknowledgements of the role of housing as a social determinant of health. These new policies and programs set the groundwork for new ways for the government to involve itself in the daily lives of its citizens. This era also demonstrated the depth of integration across all facets of public policy and outcomes in the housing system.

Following the Great Depression, new building code standards were introduced, which increased construction quality standards. This reform forced housing prices to increase, as it became more expensive to build (Linneman & Megbolugbe, 1992; Mayo, 1997). As house prices started to rise, housing became a lucrative investment opportunity and more investors began to purchase housing based on speculation of a financial return (Linneman & Megbolugbe, 1992).



### ERA 3

#### The commoditization nation (1940s to 1960s)

This era is characterised as a time of high government involvement and high levels of commoditization of housing.

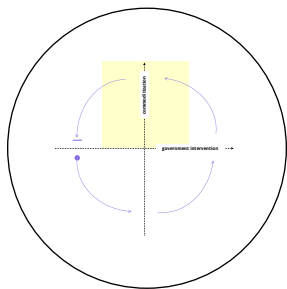
As housing prices started to rise during the period between the 1940s and 1960s, the financial services industry slowly became more intertwined with the housing system. This introduced new system dynamics and a new set of stakeholders looking for a role in the system.

While the notion of the American Dream was coined in 1931 by writer and historian, James Truslow Adams, the propagation of housing as households' primary mechanism for wealth creation came into the discussion with the growth of the North American housing and real estate markets. The advent of the secondary mortgage market is largely responsible for this growth. U.S.-government-sponsored enterprises, Fannie Mae (the Federal National Mortgage Association) and Freddie Mac (the Federal Home Loan Mortgage Corporation) were products of the U.S. National Housing Act, founded to create a liquid secondary market for mortgages, bringing mortgage-backed securities (MBSs) into the mainstream investing world (Medina, 2015). The proliferation of MBSs was one of the first steps in moving our mental model from housing as a basic need to housing as a commodity; a revenue-generating asset.

Evidence of this shift can be found at the system-level from political, economic, and societal perspectives. For instance, researchers noted that the relationship between poverty and housing tenure became stronger; renter households were far poorer than owner households. In the 1950s, there was an adoption of a new understanding of the purpose of social housing in Canada from "urban renewal" to "housing of last resort" (ONPHA, 2015b). Unlike other jurisdictions, where social housing can be something to be proud of, social housing in

Canada would act as "transitional income support", as opposed to a permanent housing option for families (ONPHA, 2015b; S. Kerur, personal communication, September 28, 2016).

After World War II, North Americans saw a movement to lower density standards in urban areas (Linneman & Megbolugbe, 1992). The Toronto suburbs of today saw spikes in population growth beginning in the 1940s. As World War II veterans made their way back to Canada, the federal government created Canada Mortgage and Housing Corporation (CMHC) to build housing to accommodate these families (Bryant, 2007). CMHC's mandate would expand to providing mortgage insurance to commercial banks in Canada to reduce lending risks (CMHC, 2011a). CMHC's emphasis on building the ownership housing sector (Hulchanski, 2007b) was reflected in a series of policy directions aimed primarily at promoting ownership (over rental) as the ultimate goal for families. According to Hulchanski (2007a), these initial ownership policies planted the seed for a "dual housing system", solidifying inequalities between owners and renters (Hulchanski, 2007a).



#### ERA 4

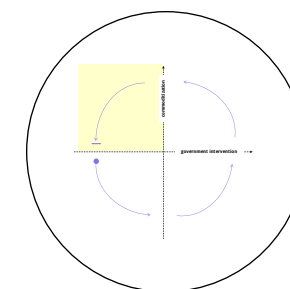
##### The messy middle (1970s to 1980s)

This era is characterised as a time of changing government involvement and increasing levels of commoditization of housing.

As the secondary mortgage market gained traction, credit default swaps and other financial innovations emerged. Governments in Canada made significant investments in housing. During this time, policy directives related to what and how the government would invest were volatile. By 1976, the average household size was down to 3.1 individuals (CHRC, n.d.).

During this era, the Federal Government in Canada showed keen interest in owning the affordable housing problem in Canada. Over the course of this twenty-year era, their policy directions and level of investment evolved and eventually petered away. The 1970s brought more housing affordability challenges with higher levels of inflation (Spence & Nelles, 2013). The City of Toronto introduced new municipal legislation, creating the “condominium form”. This reduced the financial feasibility of creating purpose-built rental apartments, as municipal zoning bylaws now permitted medium- and high-density apartment units to be sold as individual condominiums (Hulchanski, 2007a). Increased competition for land put stress on the primary rental market and commenced the condominium-development wave that Torontonians see today. The housing sector incentivized ownership development, allowing real estate investment and speculation to grow in Canada’s cities (Linneman & Megbolugbe, 1992).

In this era, the federal government made some of the largest investments in public housing stock in Canadian history. Shortly after, in the early 1970s, a shift began toward building more mixed-income developments (Suttor, 2016). New models like co-operative housing form began to challenge our use and



#### ERA 5

##### Housing hot potato (1990s to 2000s)

This era is characterised as a time of low government involvement and high levels of commoditization of housing.

With hot housing markets and capitalism stronger than ever, housing prices increased and Canadian governments began to reduce their involvement in building and operating social housing. The 1990s brought an end to “active federal policy” around housing in Canada (Suttor, 2016).

##### The devolution of social housing

The devolution of social housing to local municipalities in Ontario (known as the 47 service managers) may have been an unmemorable event for most Canadians living in market-rate housing. What housing providers believe is that this was event that solidified a province-wide reframe of social housing as a welfare program (ONPHA, 2015b; S. Kerur, personal communication, September 28, 2016). With this change came a shift from federal and provincial governments providing housing (by building and developing the bricks and mortar), to providing programs and incentives for the private market to take on this role in Canada (Mayo, 1997; ONPHA, 2016). It forced the policy debate to revolve around determining which



level of government to hold accountable to which element of our housing system (Hulchanski, 2007a; Pacini & Starr, 2001). The Ontario Non-Profit Housing Association (ONPHA) describes the period between 1996 and 2000 as the “first extended period without government funding for new affordable housing for fifty years” (ONPHA, 2015a). During this period, almost no non-profit housing was built in Ontario. Part of this political decision stemmed from the growing understanding of the social determinants of health and the need for a systems-based approach to solving the unique problems faced by each municipality (ONPHA, 2016). However, housing advocates argue that the devolution represented a significant divestment of federal dollars in the non-market housing sector.

Mass affordability challenges

In the early 2000s, the average absorbed price of single- and semi-detached homes in Toronto began a steady climb from \$276,476 in 2000 to \$540,757 in 2009; a 96-percent increase, or an average increase of 7.8% annually. For comparison, between 1990 and 1999, house prices decreased by 30.4% or an average of 3.8% annually (CMHC, 2017a).

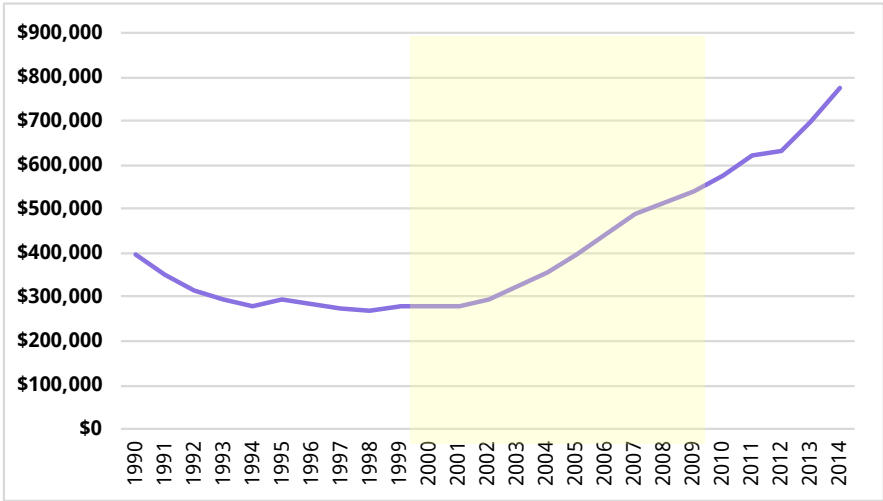


Figure 7 | Average absorbed semi- and single-detached dwellings for Toronto; 1990 to 2014 (CMHC, 2017b)

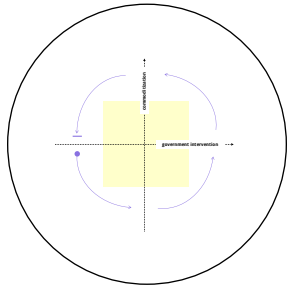
In the early 2000s the dualism of housing policy in Canada continued, where CMHC helped 746,157 homeowners with mortgage insurance, surpassing the total number of social housing units in Canada (633,300) (Hulchanski, 2007a). Decades of policy-making used the housing continuum in the figure below to depict the desired end goal of Canadian housing policy (CMHC, 2016). Placing home ownership as the endpoint on this continuum signals a general policy direction toward moving individuals along the continuum to an end state of being an owner (Rohe & Stegman, 2007; Linneman & Megbolugbe, 1992). Scholars investigated the psychologies of housing tenure and note that the ownership and single-family home mentalities are reflected in how people perceive their level of success compared to their peers (Rohe & Stegman, 2007). Accordingly, individuals living in rental or non-market housing may experience different levels of status, success, and self-esteem than homeowners (Prince, 1995; Rohe & Stegman, 2007).

Non-Market Housing				Market Housing	
emergency shelters	transitional	supportive	subsidized	rental	ownership

Figure 8 | The housing continuum (CMHC, 2010)

Global wake-up call

The 2008 global financial crisis brought the complex world of real estate speculation into light (Marcinkoski, 2015). We gained a deeper understanding of the complexity of the relationship between the financial system and the housing system (Larson, Eastman & Bock, 2015). The United States bailed out the big banks by purchasing billions of dollars’ worth of mortgage-backed securities and instituted the Dodd-Frank Act (2010) to help regulate the financial industry (Barofsky, 2012). Some have questioned how today’s affordability challenges may have been addressed, had the bailout money been directed to supporting the thousands of families who were affected by foreclosures (Martin, Meisterlin & Kenoff, 2011).



## ERA 6

### Hope for a new era (2010s)

This era is characterised as a time of flux, where debates over government involvement are frequent and increasing house prices are making the homeownership dream more unattainable.

In Toronto, housing affordability challenges reached a new high when the average absorbed price of a single-detached dwelling exceeded \$1 million. With all three levels of government on the hook to ensure its constituents have access to housing that is affordable to them, this moment of urgency presents an opportunity for new financial, design, policy, construction, and mental models to emerge in the housing sector.

The real estate development sector was built on the economic structures and financial products that commoditize housing. Housing quickly became the single largest investment for most households, and a thriving industrial sector that provided jobs and economic stimulus (Prince, 1995; Miller, 2014). It is estimated that every one-dollar investment in housing results in a 1.4-dollar contribution to gross domestic product in Canada (Prince, 1995).

### National Housing Strategy

For Canada’s housing sector, 2016 brought a new and more hopeful era emerged with Prime Minister Justin Trudeau’s election. A National Housing Strategy for Canada was announced in 2016, signalling the potential for renewed commitment from all levels of government on housing. This strategy can help introduce new working relationships between policymakers and real estate developers. Other human services systems are also seeing their role in working with the housing sector to eliminate homelessness and to provide affordable housing for all Canadians.

# Summary

- Our current situation is the product of a century of policy directives; changes in societal values; and innovations across the construction, financial services, and policy sectors.
- There is evidence of movement between high levels of government intervention and lower levels of government intervention in the housing system.
- There is evidence of movement between treating housing as a basic need and as an asset.

## Design implications

The way we define housing has changed over time, along with the ways we relate, connect, create, consume, and destroy elements of our housing system. This evidence shows our housing system is receptive to changing political agendas and policies; many elements of the sector are highly regulated and many households rely on non-market housing for shelter.

In a new era, there is a need to redirect the policy focus toward understanding how government intervention influences individuals’ housing preferences – where and how people want to live, housing design preferences, and tenure types.

Public policy incentives and programs influence our collective understanding of housing as a basic need for survival. These policies incite system players to behave and treat housing in a certain way, based on these shared mental models.

Today, we live in a world where government involvement in the housing system and beliefs around the commodification of housing are widespread. Part 2 of this report will explore the implications of these mindsets – the effects on the wider system and its stakeholders. There will be winners and there will be losers...

## PART 2

# Where we are now

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“In 1966, a Chicago landlord told a court that on a single property he had made \$42,500 in rent but paid only \$2,400 in maintenance. When accused of making excessive profits, the landlord simply replied, ‘That’s why I bought the building.’”

– MATTHEW DESMOND, EVICTED: POVERTY AND PROFIT IN THE AMERICAN CITY

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# How the system works

Before moving into a deeper discussion of the housing system in Canada, it is important to define the boundaries of the system examined in this report.

Housing contexts are determined by planning, policy, and economic factors, unique to the geographic area, including zoning bylaws, planning regulations, tax policy, factors affecting the construction industry (such as the cost of materials and labour), political climate, demographic trends, citizen values, and topographic characteristics. A desire to conduct significant primary research with individuals on their experiences in the housing system, the current discourse, and the sense of urgency and need in the Toronto housing market made Toronto, Ontario the natural geographic context for this study.

For this study, the housing system in Toronto includes the following supply- and demand-side elements, based on Gharajedaghi’s elements of the “iterative process of inquiry for understanding complexity,” as described in Table 1 (Gharajedaghi, 2011).

## Demand-side

### Key elements

This part of the system includes:

- Existing and future renter and owner households in Toronto (such as new immigrants, other migrants, and people forming new households); and
- Investors and operators of residential developments.

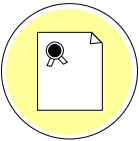
System elements	Description
Structure	What are the system’s components?
Function	What are the system’s outputs?
Process	How are the functions of the system produced?
Context	Why is the system doing what it’s doing?

Table 1 | J. Gharajedaghi’s elements of iterative process of inquiry for understanding complexity

## Supply-side

### Key elements

There are three key elements of the supply-side of the housing system: policy-making, real estate development, and financing.



### POLICY-MAKING

#### Structure

This part of the system includes:

- City of Toronto departments responsible for housing policy and planning policy;
- Province of Ontario ministries including Ministry of Municipal Affairs, Housing, Community and Social Services, Children and Youth Services, Health and Long-Term Care; and
- Government of Canada ministries, including Ministry of Finance, Families, Children and Social Development, Infrastructure and Communities, and Public Service and Procurement.

#### Function

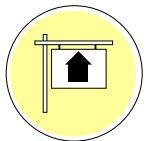
This system produces zoning bylaws, policies and programs that create regulations and incentives for housing development and allocate funding for housing programs.

#### Process

The policy development process can follow the design methodology, moving from problem finding to policy implementation. Elected officials approve the legislation, strategies, and programs.

#### Context

This part of the system is working to stimulate the development of below-market-rate housing, to ensure that we build complete communities and that we preserve the natural environment.



REAL ESTATE DEVELOPMENT

Structure

- This part of the system includes:
- Private sector developers;
  - Non-profit and public sector developers;
  - Architects and planners;
  - Real estate lawyers;
  - Construction companies;
  - Property management companies; and
  - Other consultants, such as development consultants, engineers, and designers.

Function

The real estate development system creates several outputs along the development process spectrum: from serviced land to architectural designs and drawings, to operational housing.

Process

This system banks and packages land, develops land and buildings (construction), operates real estate, and renovates and redevelops buildings.

Non-profit developers may also work with government ministries to collect housing subsidies and provide other services, such as support services for older adults.

Context

The private-sector real estate industry develops real estate to earn a profit on either the sale of or the rental revenue from the dwellings. Non-profit and public sector developers’ primary mission is to house households that cannot afford to live in market-rate housing in the city.



FINANCING

Structure

- This part of the system includes:
- Mortgage lenders (namely, commercial banks and credit unions);
  - Real estate asset management, including real estate investment trusts (REITS); and
  - Insurance providers.

Function

This system produces the financing and insurance required to build, purchase, and operate real estate development projects.

This part of the system also creates mortgage-backed securities (MBSs) and other financial products.

Process

Financial institutions can provide capital in the form of mortgage loans by charging interest on the loan. Banks may sell packages of diversified residential mortgages to other investors in the form of MBSs.

Context

The stakeholders in this system operate to earn a financial return on the loans and other financial products it issues. This element of the system also works to provide a liquid market for capital to promote economic growth through real estate development.

# Stakeholder tensions

The system’s complexity is evident. Tensions between stakeholders with competing interests and levels of influence also contribute to the functions and processes that constitute Toronto’s housing situation. These dynamics are described in this section. The stakeholder matrix in Figure 8 is a representation of research conducted to map the landscape of actors and to explore the competing interests and levels of influence in the system. This process is also used to help prioritize areas and opportunities for intervention and innovation in the housing system.

## Competing interests and influence

**Stakeholders in the system maintain competing interests and levels of influence.**

Our housing conditions inform more and more aspects of our daily lives. Over time, we have seen increasing numbers of interests come into play in the housing and real estate development space. A key outcome of the expert interviews and literature review is an understanding of stakeholder roles, influence, and incentives

that exist in the current system. This analysis helps identify where resistance to change might exist within the system and what strategies might be successful in promoting acceptance of change.

Stakeholders in the housing and real estate development systems; their relative interest, influence; and a hierarchy of their needs are depicted in Figure 8. In this context, influence (along the Y-axis) is the stakeholder’s power over a system’s elements and outcomes. Interest (along the X-axis) is the likelihood that the stakeholder participates in actions involved in exercising their influence. The analysis also includes an important distinction between actors with a high level of interest in maintaining the current system, versus those with an interest in changing the system. This differentiation brings critical tensions to light: in a complex multi-stakeholder system, many competing agendas must be reconciled (Kaplan Financial Knowledge Bank, 2012). Some of the most influential stakeholders are described here.

A detailed stakeholder hierarchy of needs can be found in the Appendix of this report.

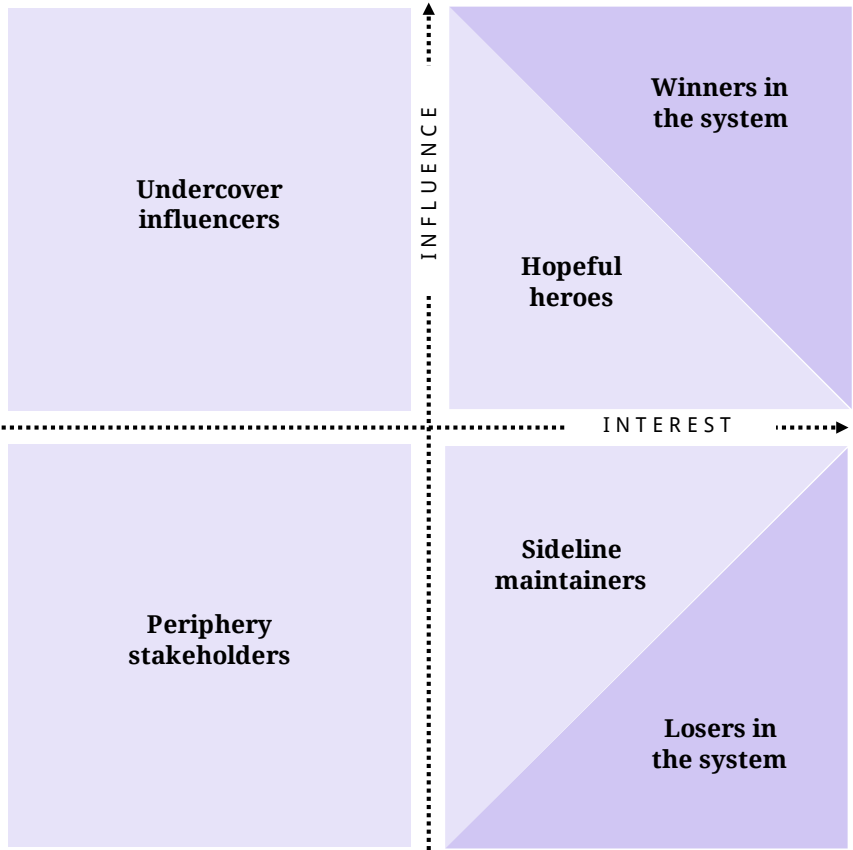
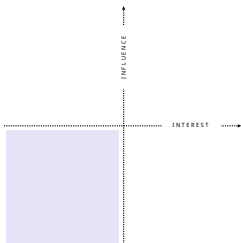


Figure 9 | Stakeholder matrix adapted from Mendalow’s Matrix



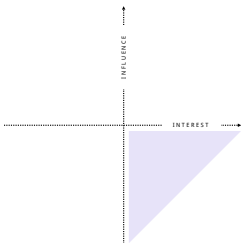
System stakeholders

PERIPHERY STAKEHOLDERS

Low interest | Low influence

This group includes groups that can still be considered parts of the housing system but do not own any part of the system, nor do they have a high level of influence to create change.

This box would include stakeholders who have connections to elements of the system that are less volatile or prone to change. These groups might have some interest in making changes to improve the housing system, but may not be likely to exercise their limited power in this case. This segment includes groups such as police and law enforcement, and civil and environmental engineers.



SIDELINE MAINTAINERS

High *maintain* interest | Low influence

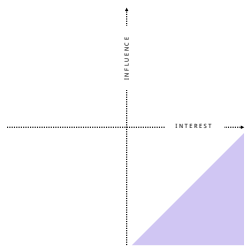
The sideline maintainers have a high level of interest in upholding the status quo as they profit off current models. However, they do not exert high levels of influence on the system.

Realtors

Real estate agents have low levels of influence in creating dramatic changes to the housing system, as they do not own any part of the system. Their business model, however, depends on the status quo: demand for ownership housing and the value their customers attribute to their services (willingness to pay a certain percentage of the sale of their home or fees to a realtor).

Property managers

Property managers of current rental buildings in the primary or secondary rental market have an interest in maintaining certain aspects of the present system, including the business model of rental housing and the attractiveness of rental as a substitute to home ownership.



LOSERS IN THE SYSTEM

High *change* interest | Low influence

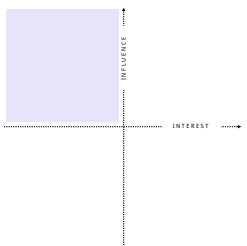
The losers in the system have a strong interest in creating change. Nevertheless, they do not have a high level of power to create change in the system. This is the group most in need of change; the group for which we ought to design.

Renters

Renters, especially: households living in housing that is not affordable to them, renter households aiming to enter the ownership market. Over 60% of families in Toronto cannot afford the average house price in the city (CMHC, 2011). Of renter households, roughly two-thirds are living affordably and may dream of one day owning a home (CMHC, 2011). Workshop participants belonging to this group expressed an interest in a shift to a new system, with many feeling a sense of defeat against the current housing market. Given the limited number of attainable housing options for many of these households, their level of influence to “vote with their dollars” and walk out on their current situation can be non-existent.

People living in core housing need

People living in core housing need are part of households whose housing needs, concerning either affordability, adequacy, or suitability, are not being met. They are considered in core housing need if they cannot afford an alternative housing option in their neighbourhood. These groups have exceptionally low influence in the system as they are often on the verge of homelessness or are struggling to maintain a healthy standard of living in their current home.



UNDERCOVER INFLUENCERS

Low interest | High influence

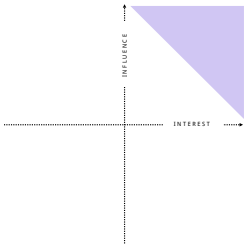
The undercover influencers currently have a low level of interest in the system but have a high degree of influence. This puts this group in the position to act, should they move to a higher level of interest in creating or blocking change in the system. This is the group we might choose to engage in a plan to improve the current system for individuals most in need.

Employers

Employers; especially: employers of moderate-income workers. While local employers may not feel directly connected to the housing system in Toronto, and thus have a lower level of interest in acting, they may have the opportunity to create large-scale change, given their bargaining and economic power. Should Toronto’s largest employers (such as George Weston Ltd., Onex Corp., Hudson’s Bay Co., or Royal Bank of Canada, who, combined, employ almost 400,000 individuals) acknowledge a correlation between increasing housing affordability challenges for their workers and productivity levels, this group could quickly become Hopeful Heroes (The Globe Investor, 2016).

Foreign investors

Foreign investors of real estate in Toronto have influence through their capital investment in the Toronto housing market. These players have less influence than Toronto employers, as they are not currently working collectively. Foreign investors also do not have bargaining power at the policy-level if they are not Canadian citizens. They may have less interest in executing their power to either maintain or evolve the system, as they can move their investment elsewhere.



WINNERS THE SYSTEM

High *maintain* interest | High influence

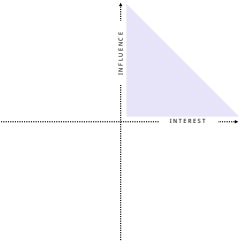
The winners in the system are those who are benefiting from the current state of affairs. They have a high level of influence which they exert to maintain the current ways of doing things (including current business models, social programs, and structures). This is the group that may experience the biggest loss should a large-scale change come about the system.

Financial institutions

Canada’s big five banks likely have the highest influence and interest in maintaining the current housing system. They hold almost 68% market share when it comes to mortgage lending in Canada (McLister, 2013). Royal Bank of Canada (RBC), for instance, holds the largest market share (16.96% or \$198.2 billion in residential mortgages), which represents 48% of their loan book (Royal Bank of Canada, 2015).

Landowners

A prominent driver of increasing real estate costs in Toronto has been the rise in land prices. The cost of land contributes to roughly 20% of the cost to develop a typical apartment building in Toronto (depending on location). Landowners hold influence given their financial stake in the real estate market, and thus have a high interest in maintaining the status quo of forever increasing housing costs (Taylor, 2015).



Current homeowners

Current homeowners (assuming they are not in housing that is unaffordable to them) possess power in their asset that is quickly appreciating in value in the Toronto market. They can exercise this power by selling their house, refusing to sell, or by leveraging their home to make other investments (in real estate or elsewhere). This group has an interest in maintaining the current system, especially having spent years paying off a mortgage, with the promise of financial returns upon sale. They have also likely been paying in municipal property taxes, creating a sense of entitlement to the benefits of real estate investment in Toronto.

Private landlords

Private landlords are benefiting from low vacancy rates in this growing real estate market (CMHC, 2017a). Households that could have previously afforded to own a home are being forced to rent, creating a sellers’ market for private residential rental landlords.

HOPEFUL HEROES

High *change* interest | High influence

The hopeful heroes are those who are highly interested in altering the system and who have the influence to do so. We may find a champion for change within this group. These stakeholders ought to be engaged in any plans or proposals for system innovation on an ongoing basis.



**Social entrepreneurs**

Social entrepreneurs and impact investors are investors seeking a measurable social or environmental impact alongside a financial return, and entrepreneurs looking to solve social problems. This group has the potential to have high influence and interest in changing the current system toward one that provides affordable access to housing for all Torontonians. Their grit, willingness to take on risks, and passion for finding a solution drives their action. This group includes those already engaging in social-purpose real estate activities such as Artscape and Centre for Social Innovation in Toronto.

**Municipal Government**

Municipal government, in this case, the City of Toronto. This stakeholder has high influence, given its role as the service manager for housing policies and programs in the city. The City has the power to allocate funding to change the housing system. The civil servants and elected officials within the City of Toronto also have a high level of interest in moving the needle on affordable housing, as it is quickly becoming an issue that is affecting more than half of Toronto residents who are living in unaffordable housing (CMHC, 2011).

**Provincial Government**

Provincial government, in this case, the Province of Ontario. This level of government may have access to funding that could be allocated to systems change but have not demonstrated consistent annual funding commitments for programs and service that would challenge the status-quo. The Province is also being torn in many other equally important directions, namely to create change in the health system, spreading their level of interest thin.

**Federal Government**

Federal government, in this case, the Government of Canada. The Federal government is actively making decisions that affect the housing market, through the role of the Minister of Finance in determining tax rules in the housing system, interest rates, and funding for social and economic development programs (Trudeau, 2016). The Federal Government has recently shown increased interest in the housing system with the launch of Canada’s National Housing Strategy.

**Ensuing dynamics**

This stakeholder analysis provided preliminary insights into tensions and competing interests within the housing sector in Toronto. The following section unpacks some of these dynamics further, to illustrate where innovations may be successful within the space.

# System dynamics

This section, describing the housing system dynamics at play, reveals some of the barriers to change within the system. The analysis covers the households, policymakers, real estate development, and financing layers. The exercise of system mapping informs the solution finding phase by identifying promising points of intervention for creating system change.

## Housing consumption dynamics

### DYNAMIC 1

**Housing is an emotional investment and reflection of our values.**

For many, housing is an emotional investment and a reflection of our values. The workshops in the study helped understand how individuals define home and what beliefs and values our housing situations represent for Torontonians.

When asked “What does home mean to you?” workshop participants provided responses such as:

- “A space where I feel comfortable”
- “Safe and secure”
- “Reset and rejuvenation”
- “Storage unit; home base”
- “A place of serenity, a refuge, a place to relax”

- “Reflection of my values and a space for consistency”
- “A place for community connection”
- “A place where family and friends gather”
- “A space to re-energize and create meaning with my community”
- “Security; hilarity”

During the Three Horizons exercise, participants discussed the distinction between the current value proposition of ownership housing versus rental housing. The discourse around ownership housing often related to the extrinsic value of housing as an instrument for creating wealth, whereas the dialogue around rental housing focused predominantly on the intrinsic value of the house, as shelter. This concept and resulting system dynamics are explored further in this section.

**“The house as a symbol of self is deeply ingrained in the American ethos.”**

– Rohe & Stegman, 2007

**“Ownership gives people control of their living environment, and thus perceived control of other aspects of life.”**

– Rohe & Stegman, 2007



DYNAMIC 2

The social need outweighs market demand for housing.

To describe the products of Canada’s housing policy, David Hulchanski of the University of Toronto distinguishes between:

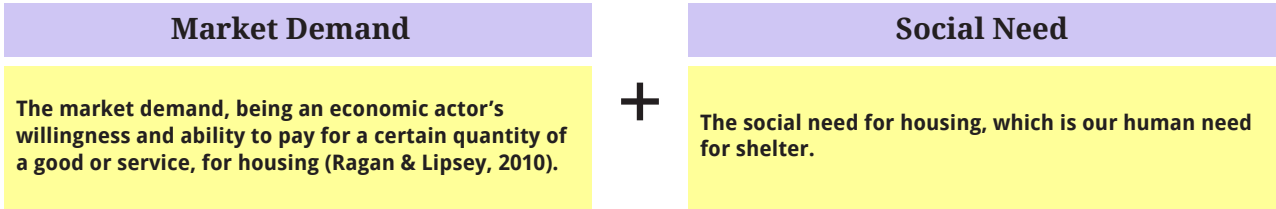


Figure 10 | Market demand versus the social need for housing

Hulchanski notes that the social need exists more strongly in the rental market than in the ownership market. This need is a product of the income disparity between renter and owner households: renters “cannot generate enough market demand” for housing that meets their affordability needs (Hulchanski, 2007a). In the City of Toronto, the largest proportions of renter households are one-person families (41.6%), followed by couples with children (14.9%), couples without children (14.9%), and female lone-parents (13.3%).

Household Type	Renter Households
Couple with children	18.4%
Couple without children	14.9%
Lone male parent	1.7%
Lone female parent	13.3%
Multiple family	1.5%
One-person family	41.6%
Other non-family	8.7%

Table 2 | Proportion of renter households by household type for Toronto; 2011 (CMHC, 2011)

Despite increases in housing price between 2006 and 2011, the homeownership rate in Toronto remained stagnant (54.4% and 54.6% in 2006 and 2011, respectively) (CMHC, 2011). Of households earning \$100,000 and over, ownership rates remained high, at 81.2% in 2011.

This income disparity means the ownership market frequently affects outcomes in the rental market (Hulchanski, 2007b). For instance: of renter households, 32.9% are in core housing need compared to 11.5% of owner households in Toronto (as shown in Figure 12) (CMHC, 2011).

System dynamics

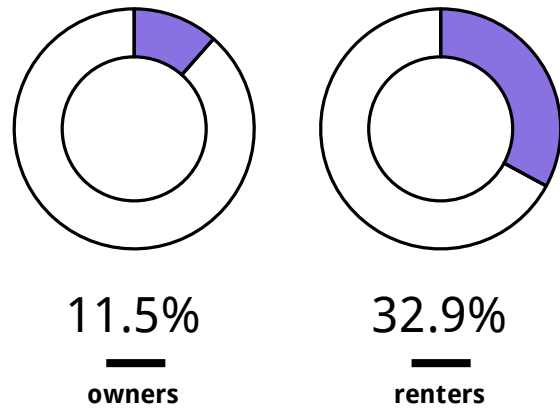


Figure 12 | Percentage of owner and renter households in core housing need for Toronto; 2006 and 2011 (CMHC, 2011)

“Market mechanisms don’t work for the rental sector.”

– J. D. Hulchanski, 2007

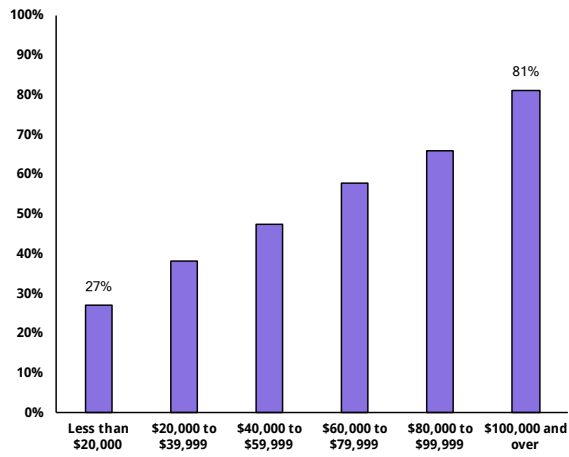


Figure 11 | Home ownership rates by before-tax household income levels for Toronto; 2011 (Statistics Canada, 2011)

Economists and planners attempt to pinpoint the drivers of the gap between supply and demand in the housing market. A report out of the Fraser Institute suggests that municipal land use regulations have a significant impact on the supply side, by making development costs higher than what the local household can absorb (Green, Filipowicz, Laeur & Herzog, 2016). The initial cost of land is also one of the key determinants of a viable real estate development project (Petrick, 2014).

Barriers to change

- There are few incentives in place to encourage private landlords to develop purpose-built rental using grants from the Federal and Provincial governments (ONPHA, 2015b).
- The cost of inputs to housing development, including land costs, construction materials and labour, consulting fees, and municipal development charges outpace rents and house prices households can afford, given current wages in salaries in Toronto.

DYNAMIC 3

Our housing policy favours ownership – many are feeling the pressure to reach that milestone in life.

The Policy Evolution timeline outlined in Part 1 of this report illustrated the transition in our collective mental model of housing serving the intrinsic value as shelter, to its extrinsic value as an asset. With this transformation came products and services geared to the “homeowner” customer segment, many of which reinforce the economic disparities between owners and renters. This dynamic can also impact our societal view of owners as being a higher class of Torontonians.

Disproportionate investment in assisting Canadians to reach the homeownership dream strengthen inequalities between owners and renters and incentivize more households to purchase homes.

The Success to the Successful systems archetype describes this dynamic. As policy directives and funding for programs that support homeownership (over rental) increase, real estate developers and housing system players (such as financial institutions) have greater incentive to create products and services for this segment. For instance, commercial banks issuing lines of credit to homeowners. These activities may reinforce the potential for upward social mobility for homeowners and thus validate government policies and

programs geared towards assisting households to move into the ownership market. Given limited public budgets and resources, this means less funding for access to affordable rental for low-income families. Without significant investment in this infrastructure (quality, quantity, and appropriateness) and fewer wealth-generating mechanisms in the market for this customer segment, renters may have a more difficult time climbing the social stratification system. For investors and policymakers, these outcomes can paint an unfavourable picture of the potential economic impacts of providing affordable rental housing to those in need. This phenomenon is reflected in Hulchanski’s dualism of housing policy argument, where he notes CMHC provided financial assistance to 746,157 homeowners with mortgage insurance versus 633,300 social housing households in 2000 (Hulchanski, 2007a).

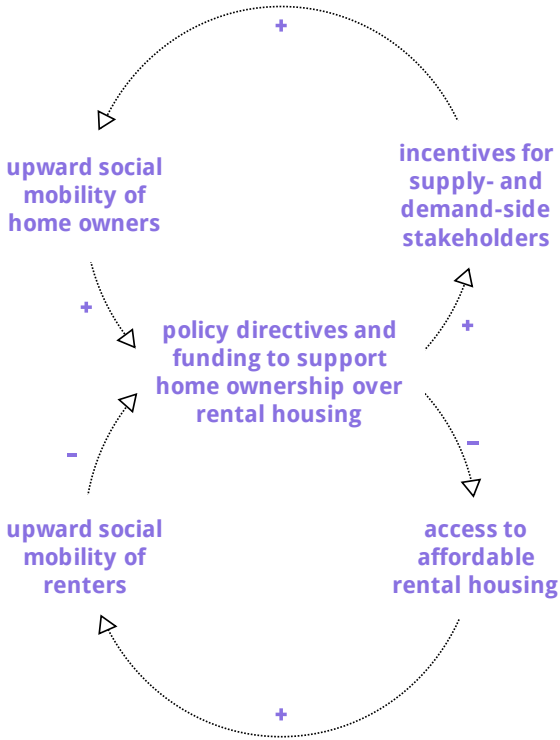


Figure 13 | Success to the Successful system archetype; perpetuating wealth generation among homeowners over renters

Canadian homeowners have access to many financial incentives and benefits that renters do not.

The Policy Evolution timeline described the gradual ramp-up of tax incentives for homeowners in Canada, all of which exist today:

- Owners pay no capital gains tax on their investment when selling their house;
- Owners can borrow up to \$20,000, interest-free from their RRSP to use towards a down-payment;
- Owners can earn rental revenue on their home by renting out the entire dwelling, creating a secondary suite unit, or by renting out a portion of their residence;
- Lines of credit allow owners to borrow from their earned equity in their homes to pay for other significant life expenses such as their children’s education;
- Owners who own a business can benefit from tax breaks for using their “home office”;
- Reverse mortgages allow owners to divest from their homes to pay for alternative housing as they age;
- Owners are eligible for tax breaks for energy-efficiency retrofits to their home; and
- Owners are eligible for tax breaks for aging-in-place retrofits to their home.

As for renters, they are eligible for tax deductions on their rental payments but have virtually no other government-sponsored incentives or wealth-generating opportunities associated with this tenure type (besides subsidies for those who cannot afford a home at all). For many renters living in secondary rental housing, it can be difficult to obtain a valid receipt to qualify for this tax break.

Policies for owners and renters are different because we see the two tenure types as deserving of dissimilar types of welfare.

Policies geared towards owners are met with different economic, political, and welfare rationales than those for renters, and use different mechanisms for distributing benefits (Hulchanski, 2007a). This dualism reflects the concept outlined earlier in this report related to the difference between focusing on the intrinsic versus the extrinsic value of housing. Often, policies for owners are born of a “social security” mindset, where the goal is to provide universal benefits or “rights” to citizens. This approach emphasizes the economic benefits that emerge from steady demand in housing markets. Rental policies, however, are based on a “social welfare” mindset, where the goal is to provide the minimum standard to low-income households “without competing with market mechanisms” (Hulchanski, 2007a).

“Owners certainly consider the non-taxation of capital gains on the sale of their houses to be an entitlement (not a welfare-type subsidy). Few politicians in a country where a vast majority of voters own the house in which they live (or hope to own it one day) even mention this inequity in the treatment of owners versus renters.”

– J. D. Hulchanski, 2007

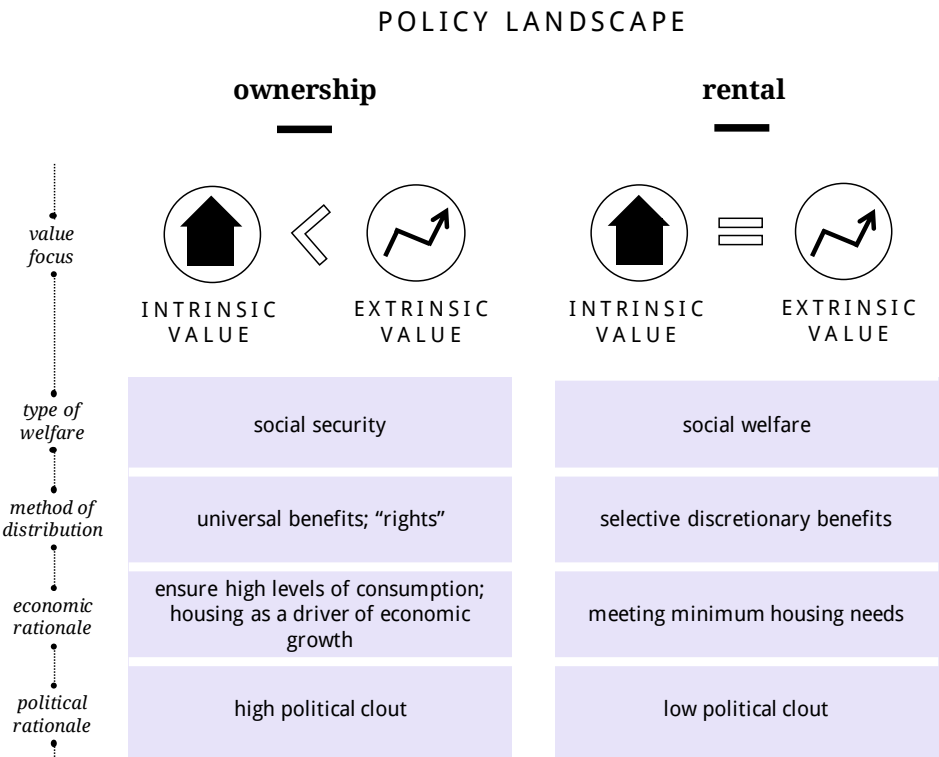


Figure 14 | The policy landscape in Canada; dualism between owners and renters (Adapted from: Hulchanski, 2007a)

When non-profit organizations like Habitat for Humanity put forth their business cases for funding for affordable ownership housing for low-income families, one of their main rationales for this type of housing is in reinforcing the extrinsic value of housing as a mechanism for wealth creation (E. Underwood, personal communication, October 3, 2016). Our general understanding of who is “deserving” of ownership housing makes providing ownership housing to low-income families seem like a hand-out instead of a “hand-up” (Habitat’s approach).

The other obstacle in the push for spending on affordable housing is in the difficulties faced in capturing system savings from improving housing outcomes for people (ONPHA, 2015b). For instance, Table 3 compares the costs of various government-supported housing options. While these savings are quantified, governments must pass them on to citizens in a measurable way to put forth the argument of increased spending on affordable housing as a cost-saving mechanism for society.

Housing Situation	Approximate Monthly Cost
Affordable rental housing	\$541-\$701
Emergency shelter	\$1,357-\$2,291
Hospital (acute)	\$10,900-\$27,968
Long-term care	\$3,843
Institutional (jail)	\$4,333-\$7,750

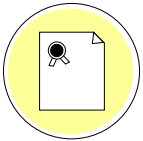
**Table 3 |** Average cost of housing Canadians in government-supported housing; figures are combined averages of cost estimates from (ONPHA, 2015b; Pomeroy, 2005; Gaetz, 2012.)

Barriers to change

- For individuals requiring support services, in-home care, or accessibility features, security of tenure is critical for uninterrupted access, especially given the intertwining of the housing and welfare systems (Hulchanski, 2007b; Prince, 1995).
- The homeownership dream is a deeply ingrained social pressure experienced by many in Toronto.
- Non-housing sector industries have a financial incentive to create products and services for the more affluent population segment (owners); lower-income households have weaker economic power to demand alternatives.
- Property taxes are an essential municipal tool and revenue source for the City; owners maintain their dominance in the system by leveraging their collective voice and voting power to avoid property tax increases.

**“The idea of supporting what Habitat is doing [providing ownership housing to low-income families], for most politicians, feels like an oxymoron in the GTA.”**  
*– Ene Underwood, CEO, Habitat for Humanity GTA, 2016*





# Policy-making dynamics

## DYNAMIC 4

**Housing policy development often requires coordination between all levels of government.**

The affordable housing issue is a wicked one. In attempts to respond to this complexity, five Provincial government ministries and twelve Federal government ministries are mandated to work on ensuring all Canadians have access to affordable, safe, and adequate housing. From a public policy perspective, this allows for more collaborative policy-making across ministries (for instance, the federal Minister of Finance is mandated to work with the Minister of Families, Children and Social Development on removing the goods and services tax on new social housing developments). The setback, however, is in decisions made at the Provincial level that do not address local housing market issues (Linneman & Megbolugbe, 1992). For example, a policy like inclusionary zoning or density bonusing may only be effective in an environment where land prices are high (such as Toronto).

**This system complexity creates another deterrent for developers to build housing that does not promise a high return on investment.**

From the developer’s perspective, the intricate chain of command required to acquire land, financing, and building approvals complicates the development process, increasing financial risk along the way.

## DYNAMIC 5

**Housing policies mainly focus on maintaining the current system.**

Since the devolution of housing administration to the local municipalities in 2001, the housing system in Canada relied almost entirely on market mechanisms to allocate an equilibrium of supply of a range of housing options at prices demanded by all households (Hulchanski, 2007a). What private-market homeowners often forget, is that all housing in Toronto is subsidized, in one way or another (Medina, 2015). Any tax break in place for owners is a housing subsidy. Highways built by our public infrastructure departments, spanning into the suburbs also subsidize the cost of living a great distance from the workplace. Another example of this discrepancy is between tax rates which are 0.5081190% for residential (single-family) dwellings versus 1.5290188% for multi-residential buildings (generally, rental apartment buildings of more than one dwelling) in Toronto (City of Toronto, 2015). This policy decision indicates an incentive to own a single-family dwelling.

**Short-term fixes on the housing system prevent system-level long-term changes to emerge.**

Figure 14 illustrates the effects of creating short-term policy solutions that “shift the burden” of the housing affordability issue. For instance, by offering second

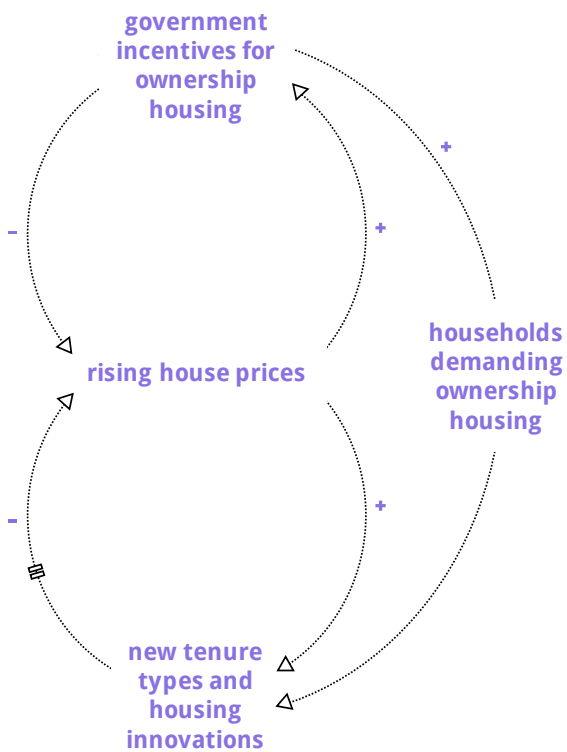


Figure 15 | Shifting the Burden systems archetype; reinforcing the a “Horizon 1” mindset

mortgages, we open homeownership up as an (artificially) affordable option for more households, distracting us from coming up with alternative housing models that could have large-scale impacts on housing affordability. Evidence of this is the lack of innovation in the mortgage market in recent years. The 2008 Financial crisis was an example of potential effects of these types of “fixes” on the overall economic stability of a nation: allowing the financial industry to create incentives for households to purchase homes they could not afford, instead of addressing the core housing affordability issues.

Barriers to change

Given the deep relationship between the health of the housing system and the state of the economy, we are stuck in a “keep-the-lights-on” mindset instead of acknowledging that we may be living in a system in decline.

DYNAMIC 6  
The speculative real estate environment distorts our ability to understand the size of the social need for housing.

Figure 16 describes two demand-side groups dipping into the same pool of real estate supply: Toronto households looking to purchase homes as their primary residence and all other investors buying housing either as second homes, for investment purposes, or for earning rental revenue.

Municipal housing studies that inform policy at the local level attempt to quantify the need and demand for housing in a municipality. As the supply of housing increases, however, it is not a guarantee that the growing local population will absorb the additional housing stock.. Real estate’s attractiveness as an investment opportunity creates this tension between local Torontonians who are seeing housing (primarily) for its intrinsic value and those who are seeking residential real estate for its extrinsic value. Currently, governments do not have tools to provide residents with priority for new housing developments in Toronto. As depicted in Figure 16, as the

return on investment of housing increases, demand for housing (as an investment) increases (Linneman & Megbolugbe, 1992). Escalating demand for real estate investments also fuels the secondary mortgage market and an increase in demand for financial investments like mortgage-backed securities, which move investors farther away from their investments (the homes, themselves) (Badger, 2012).

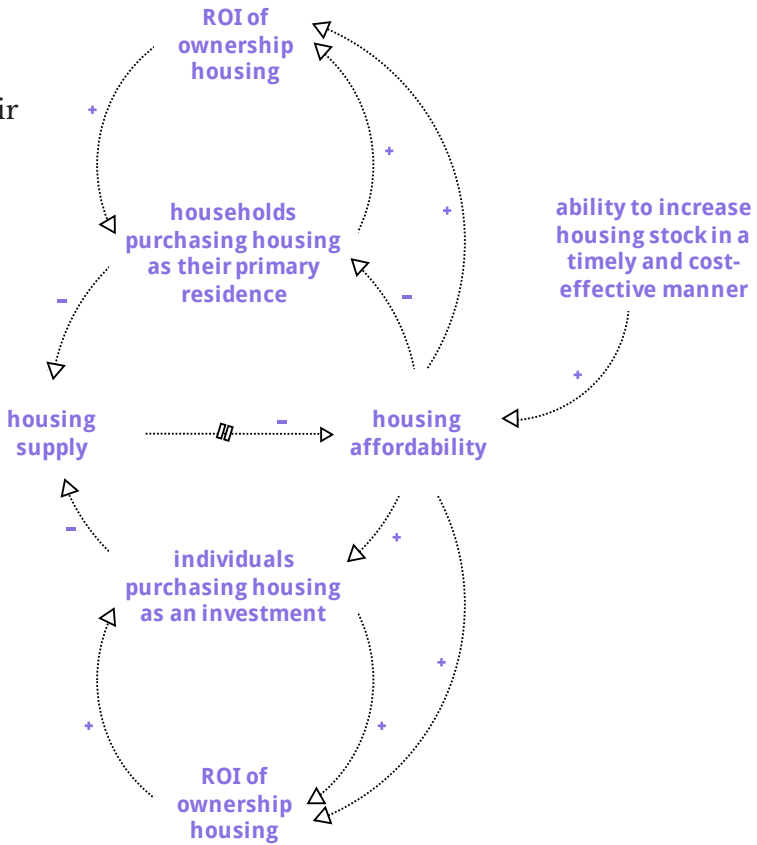
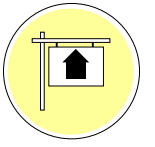


Figure 16 | Tragedy of the Commons systems archetype; investors capturing the supply of ownership housing



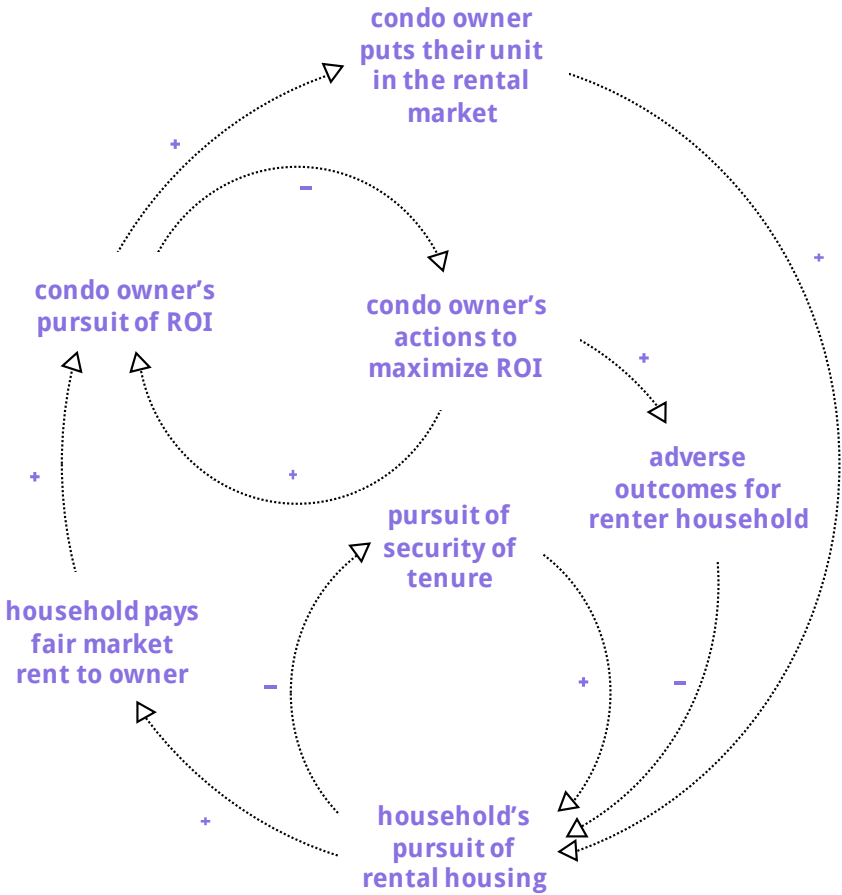
# Real estate development dynamics

## DYNAMIC 7

**The secondary rental market does not provide Toronto renters with adequate security of tenure.**

The source of rental housing in Toronto is mainly created by investor-owned condominium developments, turned rental units. These units are part of the secondary rental market . Incentives for private developers to build ownership housing outweigh those for constructing purpose-built rental: the highest return on investment comes from building high-quality housing. To build a rental dwelling, the developer must assume operations of residential development upon completion or find a buyer (often a pension fund, mutual fund, or REIT) to purchase and operate the building. For developers, this increases the risk of an already-risky development process (B. Donnelly, personal communication, October 5, 2016). The condominium pre-sale phase in an ownership development allows developers to secure early-stage funding for the project and to prototype design ideas with buyers and to re-design elements of the building based on feedback from buyers before construction begins (B. Donnelly, personal communication, October 5, 2016). The result: almost no additions to the primary rental market in Toronto in recent years (CMHC, 2017a).

What does this mean for renters? Households do not experience optimal security of tenure. In Toronto, landlords can terminate a lease to either: work on significant upgrades to the dwelling, to sell the property, or for themselves or a family member to move in (Government of Ontario, 2016). Until rent control policies were recently reintroduced, landlords could increase your rent simply by providing notice if your home was built after 1991. In a purpose-built rental, landlords are less likely to sell the entire building, and thus eviction happens generally in the case of the tenant breaking the terms of their lease (CMHC, 2017c; Government of Ontario, 2017). This power dynamic



**Figure 17 |** Accidental Adversaries systems archetype; pitting secondary rental market renters against condominium owners



between stakeholders in secondary rental market situations creates an adversarial relationship between renters and landlords. Landlords are incentivized to pursue a return-on-investment on their property, meaning they make decisions (such as selling their dwelling or raising the rent) that have consequences for the renter, who has limited power in the relationship. When the landlord raises the rent or sells the property, the home no longer provides security of tenure to the renter, who must either vacate the dwelling or pay higher rents. Figure 17 illustrates this relationship.

**Sometimes, our efforts to make rental housing the affordable choice in the housing market backfire.**

On the surface, rental controls benefit renters by reducing the potential for spikes in rental payments. A pattern observed in the housing community is that this restriction creates a disincentive for developers to build rental housing, as returns on investment are limited (Linneman & Megbolugbe, 1992; Ruddy, 2017). This behaviour limits the supply of rental housing, thus reinforcing a market of high average rents. However,

despite rent controls in Ontario in recent years, there have been almost no new additions to the purpose-built rental stock. The stagnant rental supply is a strong indication of the complexity of the supply-side housing gap in the rental market and the need for a systems-level understanding of the incentives and levers built into real estate economics.

*Barriers to change*

- If real estate investment demand continues to grow, purpose-built rental construction may remain unattractive for developers; and
- Private individuals hold most of the real estate wealth in the absence of a healthy non-profit housing sector in Toronto.

## Financing dynamics

### DYNAMIC 8

**Property-backed investment models favour a defined type of real estate developments.**

The market funds real estate developments if they're low-risk, high-return (Heller, 2016). In turn, project risk can become a key determinant of housing prices, passing the costs associated with higher risks on to consumers (Mayo, 1997). This funding environment causes the most significant barriers for non-profit housing providers (Girvan, 2014). The lack of capabilities in the non-profit sector, paired with lenders and investors' general unfamiliarity with affordable housing operations, means there is a financing gap in the affordable housing space.

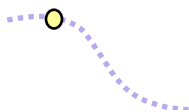
There may be a role for impact investing in social purpose real estate. MaRS Centre for Impact Investing produced a study on the role of social finance in providing financing for supportive housing developments. The report noted one of the main challenges in the social finance space: finding a pipeline of investment-ready opportunities for the capital (Spence & Nelles, 2013). Social purpose real estate developments have limited cash-flow potential (Heller, 2016). For instance, in an affordable housing development where rents are controlled at 80 percent of average market rent

(AMR), rental revenues would cover only a proportion of operating costs. This profit restriction makes financing this type of project less attractive to investors, given lower mortgage appraisals (Heller, 2016). Additionally, investors often "require an exit to generate a return" which, in the case of a purpose-built rental, would not provide security of tenure to residents (Kuznetsova & Shiel, 2014). Without the option to sell off their investment, impact investors can incur opportunity costs greater than the gains of their investments (Kasper & Marcoux, 2014).

*Barriers to change*

- Financial institutions act as gatekeepers who are very cautious with NFP clients (Girvan, 2014)
- The banking and investment industry is heavily regulated (D. Nugent, personal communication, September 23, 2016)
- Private sector financing is difficult to secure due to a low rate of return (social housing context: tenants generally cover only a portion of operating costs in social housing buildings in Ontario; non-profit housing developments have limited cash flows)





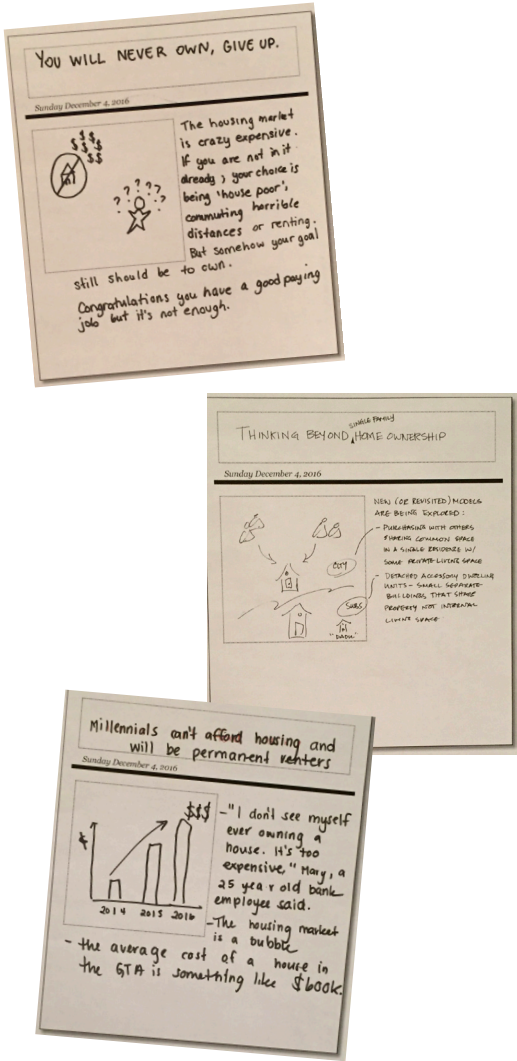
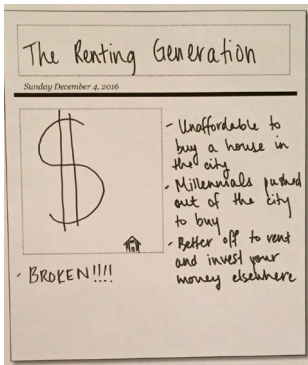
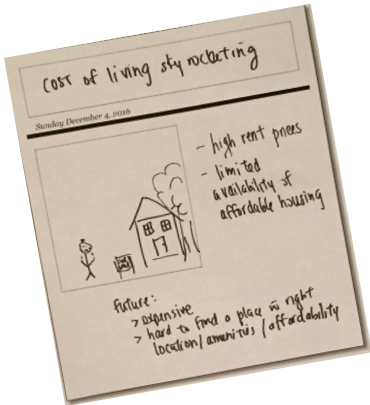
Hearing from  
Torontonians in a  
Horizon 1 mindset

Living in a system in decline

Workshop participants recounted their interactions with the housing system in Toronto and what it’s like to experience the system dynamics at play in Horizon 1.

The system is failing a significant proportion of Toronto households who cannot afford the average price of ownership housing, based on CMHC affordability standards. Based on the understanding of the system dynamics at play, as explored in the previous section, there are deeply engrained forces committed to maintaining the existing structures and orthodoxies.

Torontonians are exposed to a fair share of gloomy news stories about the housing affordability crisis in the city. This discourse provokes dialogue and discussion of personal housing futures, especially for households looking to break into the home ownership market. The following messages emerged from the Horizon One discussions among workshop participants:



System dynamics

INSIGHT 1

We are flooded with messages of the future.

Workshop participants took part in an exercise where they were instructed to create images of newspaper articles depicting the strongest narratives they are hearing about what the future of housing will be like for them in Toronto.

Common themes emerged from this exercise, pointing to an overall sense of uncertainty and loss of hope for the homeownership dream. However, participants also pointed to opportunities for new models and ways of living to come to the mainstream: sharing spaces and making the shift to accepting smaller dwellings in alternative forms (such as laneway housing).

These findings are a signal of the urgency of the housing affordability challenge and the breadth of the population that the issue is now affecting.

Figure 18 | Make Tools exercise from Workshop 1

INSIGHT 2

**We are dissatisfied with the status quo.**

Workshop participants overwhelmingly agreed that the way Toronto is dealing with the issue of affordable housing is not keeping pace with the growing need. The following themes came out of the workshop:

**Participants feel social pressures to enter the ownership market and fear admitting defeat if they cannot purchase homes.**

Workshop groups discussed comparing themselves to previous generations, where access to ownership housing was in reach for more middle-income households. One of the biggest concerns raised was the fear of not being able to afford the desired housing option and that setting the goal of homeownership may be a recipe for failure. Many participants in their late-20s described the social pressures around their housing decision: the pressure to own a home as a symbol of success. In the face of high housing prices, participants described an emotional desire to own a home overcoming the rational decision to make a more affordable choice.

**A lack of alternatives makes people feel powerless in the system.**

Participants described the anxiety surrounding making one of the biggest financial decisions of their lives given the current housing market in Toronto: putting all their savings into one investment. Without feasible alternatives (to renting or owning), participants described the feeling of having to take whatever they can get in the housing market.

**Futures are becoming more unpredictable.**

Precarious work environments are tied to our unpredictable futures. Participants described their uncertain futures of work as affecting their ability to make decisions about housing today. They hope to make decisions that will meet their needs at different stages of life.

INSIGHT 3

**But, it's not all that bad.**

There are some things participants want to keep from the current system. They sense renewed pressure and enthusiasm for moving the needle on addressing housing affordability in Toronto and discussions of embracing new mental models for housing.

Participants want to continue to explore possibilities related to:

- Using planning tools to create diverse and vibrant neighbourhoods;
- Thinking strategically about zoning decisions to ensure mixed-income communities; and
- Alternative modes of transportation and the urban design features that come with them.

# Summary

- Housing is an emotional investment and reflection of our values.
- The social need outweighs market demand for housing.
- Our housing policy favours ownership; and many are feeling the pressure to reach that milestone in life.
- Housing policy development often requires coordination between all levels of government.
- Housing policy has largely been focused on maintaining the current system.
- The speculative real estate environment distorts our ability to understand the size of the social need for housing.
- Toronto renters’ security of tenure is jeopardized when relying on the secondary rental market for rental supply.
- Property-backed investment models favour a specific set of real estate developments.
- We are flooded with messages of the future.
- We are dissatisfied with the status quo.

## Design implications

There is significant investment in this problem at all levels of government – yet, policymakers cannot completely understand the social need for housing: many assumptions are made based on readily-available demographic data such as household information (size, count, and type), income levels, and other economic indicators. There is an opportunity to develop new data tools to understand housing need and preferences for Torontonians at all income ranges.

The households most in need are also those with the lowest level of influence over the future of the housing system. This cohort may have difficulty envisioning an alternative future, given the complexity of the housing system. There is an opportunity to redistribute power to this cohort, to provide policymakers with a richer understanding of their housing preferences, and to provide this group with the tools to design their destinies.

The system analysis demonstrates how political this issue is. A small group of housing system stakeholders hold most of the power. Entire economies bank on the maintenance and growth of the sector, and more specifically of the mortgage market. Innovators must be mindful of the level of influence of these stakeholders and the implications of disrupting our economic system.

This section provided an analysis of the current situation. While the housing system appeared to be deeply ingrained and solidified within all aspects of life in Toronto, drivers of change are on the horizon. These drivers may have the power to shift some of our current paradigms and help make room for new ways of providing housing in Toronto. These are explored in the next section, Part 3.

## PART 3

# Where we could be

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“It is always wise to look ahead, but difficult to look further than you can see.”

– WINSTON CHURCHILL

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# Drivers of change

A key element of the strategic foresight methodology is environmental horizon scanning – the process of searching for changes in the environment that may implicate the future of the sector in question. For this study, STEEP-V taxonomy was used to conduct the initial scan for signals of change. The scan included conducting secondary research (the literature review) and primary research (in the form of expert interviews). This section provides a summary of some of the key trends and drivers of change on the minds of real estate, financial services, non-profit housing, and planning experts. The Verge Framework was then incorporated as a second layer of analysis to describe the anthropological elements of each of the trends described. A separate inventory of notable innovative models in housing, real estate, and finance is also included in the Appendix.

## Trends on the horizon

The housing system is exposed to trends and drivers of change in the social, technological, environmental, economic, political, and values-based spaces.

The following eight higher-order trends are described in this section, along with a list of signals of change and an analysis of the implications of each of the observed patterns:

### Demand-side housing boom continues

CONSUME | *Demand for housing in Toronto continues to outpace supply.*

### Power to the social enterprise

RELATE | *Demand for housing in Toronto continues to outpace supply.*

### The big-city takeover

CONNECT | *Rural and suburban dwellers desire to trade-in car keys and big yards for the downtown dream.*

### The next age of finance

CONSUME | *Alternative finance models are becoming more prevalent, especially in the non-profit and social innovation spaces.*

### Growing inequality outpaces inclusion efforts

DEFINE | *A shift in social values brings inclusivity to the forefront of political discussion, as the gap between rich and poor widens.*

### Transparency, accountability, and decentralization

RELATE | *A shift in social values brings inclusivity to the forefront of political discussion, as the gap between rich and poor widens.*

### Construction innovation

CREATE | *New construction and building design technologies help make housing developments feasible.*

### Space for a new Canadian dream

RELATE | *New values, labour economies, and family structures pave the way for new ways of living in the city.*



# Demand-side housing boom continues

CONSUME     Demand for housing in Toronto continues to outpace supply.

## Characteristics of this trend

### Growing and aging population

Over the next 20 years, Toronto will experience a large-scale demographic shift. By 2037, the Ministry of Finance expects the City of Toronto’s population to increase by roughly 33% from 2,731,571 to 3,623,399 (Statistics Canada, 2016; Ministry of Finance, 2011). The proportion of older adults in Toronto is increasing rapidly: the number of seniors in Ontario is expected to quadruple in the next 20 years (ONPHA, 2015b). The population is also living longer than previous generations.

### New household types

As our population ages, we begin to see more multi-generational households forming. Single women are also forming their own households and are now seen as a separate customer segment in the eyes of real estate developers (M. Blake, personal communication, September 15, 2016). More non-family households are also forming co-buying relationships as housing prices continue to increase (Heron, 2016).

### Immigration, refugees, and globalization

The immigration rate in Canada remains stable at over 200,000 individuals per year since 2000 (Statistics Canada, 2016a). This trend is mainly driven by federal government policy for accepting refugees. We are also seeing a steady influx of refugees landing in Canada, with no signals of this rate slowing down (Statistics Canada, 2016b). This trend

## COUNTER TRENDS

- Potential immigrants seeking more affordable urban centres
- Toronto renters turning to the suburbs for more affordable ownership opportunities
- A decline in the desire for ownership housing, leading individuals to accept more precarious living situations (such as short-term rental arrangements)
- Potential for future increases in interest rates, which could deter investors in hot housing markets like Toronto

## SIGNALS OF CHANGE

- Increases in foreign housing ownership in Canada (D. Nugent, personal communication, September 23, 2016)
- Increasing incidences of shadow mortgages and tax evasion in the Vancouver housing market (Thompson, 2016)
- Provinces are paying closer attention to land claims with First Nations (Sherman, 2016a)
- British Columbia introduces a tax on foreign buyers (Sherman, 2016b)
- Toronto was North America’s fastest growing housing market in 2016 (E. Underwood, personal communication, October 3, 2016)
- In July 2016, the GTA experienced the greatest year-over-year gains in sales over \$1 million (Marketwired, 2016)
- In 2016 Justin Trudeau called for 20,000 Syrian refugees to be admitted to Canada
- The average social housing waitlist in Ontario reached 168,711 households in 2016 (Vink, 2016)
- London, UK introduced a ban on the sale of newly built homes as second homes (Mohdin, 2016)

is driven, in part, by political unrest worldwide. Threats of an increase in climate change-related disasters could result in more climate refugees as well. With increased globalization also comes more opportunities for cross-border flow of investments and digital banking technologies allow for foreign investment in housing in Toronto and around the world (B. Donnelly, personal communication, October 5, 2016).

## Implications

Toronto’s population is growing and diversifying. This means the sector must find new ways to increase the supply, while keeping diverse needs in mind: culturally-appropriate options for newcomers and dwellings that meet aging needs (such as accessibility features, including elevators, wheelchair radius, and customized kitchens). This might prompt innovations in building and construction techniques to reduce the cost of modified housing units.



# Growing inequality outpaces inclusion efforts

DEFINE *A shift in social values brings inclusivity to the forefront of political discussion, as the gap between rich and poor widens.*

## Characteristics of this trend

### Social stratification and housing

In the public policy arena, there is a growing understanding of the role of housing markets in reinforcing social inequalities for marginalized groups in Toronto (E. Underwood, personal communication, October 3, 2016; B. Donnelly, personal communication, October 5, 2016). In a time of high income inequality, government spending on poverty reduction is dwindling (Girvan, 2014). Many Canadians with mental health issues, for instance, often cannot find adequate housing (Spence & Nelles, 2013). Of all social housing residents in Ontario, roughly 23,000 are living with a severe mental illness (Spence & Nelles, 2013). Social housing landlords experience additional pressures to provide the much-needed supports to their tenants, to help them maintain successful tenancies (ONPHA, 2015b).

## COUNTER TRENDS

### The role of private developers

Private developers in Toronto do want to participate in the affordable housing space; The Daniels Corporation is currently working with Toronto Community Housing in the Regent Park Revitalization project (M. Blake, personal communication, September 15, 2016). All levels of government are paying close attention to issues such as land claims with First Nations, discrimination in the rental industry, the impact of foreign homebuyers on local housing affordability (Sherman, 2016a; Thompson, 2016; Beekman, 2016; Sherman, 2016c).

### New hope for government involvement

After the large-scale divestment from public housing, a new hope for government involvement came with the release of the National Housing Strategy. This is an important signal, indicating that housing is back on the political agendas of all levels of government.

## SIGNALS OF CHANGE

- A new law in Seattle requires landlords to rent their housing units to qualified applicants on a first-come, first-served basis (Beekman, 2016)
- Palo Alto government rejects Mark Zuckerberg’s large-scale housing compound development (Fast Company, 2016a)
- Harvard professor asks Airbnb to eliminate profile photos to curb racism (Fast Company, 2016c)
- Canada launches its first National Housing Strategy (2016)
- Over 60,000 individuals attended the Women’s March in Toronto (2017)



The increased concentration of persons with mental illnesses and disabilities in social housing reinforces the social stratification system by geographically excluding these groups from access to social capital that transcends mixed-income neighbourhoods (ONPHA, 2015b; Kerbo, 2012).

## Implications

Societal empathy for Torontonians in need may be growing. Deeply engrained system dynamics are still reducing social mobility among low-income groups, especially related to accessing housing and health services.

# Power to the social enterprise

RELATE     *Governments push non-profits to lead the way in affordable housing; citizens take matters into their own hands.*

## Characteristics of this trend

### Social enterprise

As government funding allocations become aimed primarily at catalyzing private development of affordable housing (instead of financing operating costs), non-profit housing providers are feeling the pressure to function with business mindsets. Non-profit providers recognize Federal and Provincial governments’ shrinking interest in taking on additional real estate investment risk by developing affordable housing. By moving toward a social enterprise model, non-profits are hoping to shield themselves from these fluctuations in government assistance. Even Ontario’s Long-Term Affordable Housing Strategy urges housing providers to transform their business models to operate like enterprises.

Non-profits are investing in leadership development and capacity-building more than ever. New models and technologies for shared administrative outsourcing are emerging, provided by organizations like Centre for Social Innovation, Tides Canada, and Capacity Waterloo (Cave, 2016). These models also help shrink the digital divide between the private and non-profit sectors, allowing non-profits to work more efficiently and to incorporate evidence-based decision-making into their organizational strategies.

## SIGNALS OF CHANGE

- The Toronto Mayor’s Task Force on the future of Toronto Community Housing recommends the municipal housing authority be in the hands of a new non-profit organization (McIntyre, 2016)

### Post-ownership

- New models for sharing space and resources continue to appear:
- Common Coliving, created to provide flexible housing for young urban professionals (Kessler, 2016b)
- WeWork is a coworking space in New York; the organization is testing its first residential offering, WeLive (Kessler, 2016a)
- Libraries for other shared resources such as Toronto Tool Library
- An American real estate development company is working on a model for sharing the revenues generated from real estate renovations with long-term community members (Peters, 2016)

### This trend is driven by:

- Tensions between heightened expectations of government programs (due to limited budgets) and resistance to increasing higher taxes (especially property taxes in Toronto);
- A competitive market for capital that seeks high returns and low risk; and
- Workplace technology is becoming more affordable.

## Implications

A wave of social enterprises solving problems once tackled by governments may result in more piecemeal responses to local needs.

RELATE *Citizens expect new levels of transparency and accountability from the private and public sectors.*

Characteristics of this trend

Evidence-based policy- and decision-making

As citizen expectations for transparency and accountability grow, governments and non-profits incorporate mechanisms and strategies for evidence-based policy- and decision-making. With the long-form census reinstated in Canada, all citizens will have access to higher quality public data. The census profiles contain variables that are particularly relevant to housing policy, including household counts, sizes, incomes, and characteristics.

Citizen engagement for decentralized urban planning  
Public engagement methods, such as the National Housing Strategy’s LetsTalkHousing.ca campaign and City of Toronto’s TOcore: Planning Downtown project, inform large-scale strategies and plans at the federal, provincial, and municipal levels.

Corporate social responsibility

The proportion of companies issuing corporate responsibility reports in the US continues to rise (Gillespie, 2016). Benefit corporations (a legal form of for-profit incorporation) are currently legislated in 31 of 50 American states and legislation is underway in Canada (Koehn, 2017). This legal form frees corporations from making decisions based solely on maximizing shareholder value.

Blockchain revolution

Blockchain technology (the technology which made the

COUNTER TRENDS

- As technology advances and populations increase rapidly in urban areas, local governments are working to regulate these new products and services to maintain order in our cities
- Increased levels of surveillance and citizen monitoring provides governments with unprecedented access to private information

SIGNALS OF CHANGE

- Justin Trudeau reinstates the long-form census in Canada in 2016
- Toronto Hydro worked alongside Opus One to build a micro-grid for the Athlete’s Village, at the 2015 PanAm Games in Toronto (Gillespie, 2016)
- United Nations Habitat is running “urban agenda” public consultations around the world (Employment and Social Development Canada, 2016)

Bitcoin currency possible) is allowing systems to decentralize transactions away from traditional financial institutions to help people share and trade resources on a secure and open digital ledger. Organizations like FarmShare in the United States are using the blockchain to power their community-supported agriculture (CSA) model by fostering community and spreading financial risk across their members (Bodell, 2015). The blockchain is also being used to share resources and real estate in rural settings (Bodell, 2015).

In a similar vein, hydro micro-grids are expected to grow to a \$20-billion market annually by 2022 (Grimes, 2016). This technology is a networked energy system where energy sources (such as renewable energy) can disconnect from the energy grid and operate autonomously. Grimes (2016) notes that “early adopters of micro-grids have already started to implement micro-grid pilot and demonstration projects across the province.”

Implications

Torontonians have access to more tools to address urban problems that were once in the hands of the public sector. Technologies for decentralization, networked communities, and readily-available open-source data can democratize city-building. There are more opportunities for building grassroots urban communities connected via shared resources, using technologies like the blockchain.

# The big-city takeover

CONNECT *Rural and suburban dwellers continue to desire to trade-in car keys and big yards for the downtown dream.*

## Characteristics of this trend

### New transportation technologies

Planners are thinking about housing and urban space design in a car-free era; up until recently, the number of cars in a city has been directly related to the types of housing we can build. For instance, a single-detached dwelling that once required 1.5 parking spaces may now need fewer than one space (City of Toronto, 2016). As public transit investments begin again in Toronto and as Uber builds a name for itself as part of the municipal transit system (this is already the reality for residents in an Orlando subdivision), households are rethinking the need to own multiple vehicles (Sisson, 2016). According to Brandon Donnelley, “transportation has always been the driving force behind the design of cities” (B. Donnelly, personal communication, October 5, 2016).

### Neighbourhood animation

Toronto Mayor John Tory refers to the Pokemon Go craze at the Toronto Harbourfront’s Jack Layton Ferry Terminal in summer 2016 as “disruption” (Sherman, 2016). The augmented reality game turned the city into a video game playground, raising concerns about overcrowding and safety hazards, and shedding light on the next generation of urban gaming.

Plans for Rail Deck Park (announced August 3, 2016) and The Bentway in Toronto signal large-scale investments in placemaking and public space. The Reimagining Yonge project in North Toronto also aims to improve the public realm and the pedestrian experience.

### COUNTER TRENDS

As new transportation alternatives reduce travel times between cities and suburbs, living outside of the city may become more desirable and feasible for many.

- Uber started their driverless car program in Pittsburgh (High, 2017)
- TransPod in Toronto is working on making the Hyperloop a reality, which would allow people to travel between Montreal and Toronto in less than 30 minutes (Bambury, 2016)
- Amazon board member suggests roping off part of Seattle highway for self-driving vehicles (Fast Company, 2016b)

The revival of Toronto suburbs and the Complete Communities movement may also make suburban living more desirable for families in the future.

### SIGNALS OF CHANGE

- Biko bike sharing company wants to help Vancouver reach its goal of being the world’s greenest city by 2020 (Narvey, 2016)
- Seattle gives tenants transit passes instead of parking spaces (Jaffe, 2015)

### Hubs of innovation

In his well-known *The Rise of the Creative Class*, Richard Florida spoke about urban centres as destinations for the “creative class”, that is highly-skilled individuals working in science, engineering, research, art and design, and media (Florida, 2012). We are witnessing start-ups are locating in the Toronto-Waterloo area that may have once located in the San Francisco Bay area (Freeman, 2016). Economic geographers note similarities between the Toronto-Waterloo corridor (along Highway 401) and the tech corridor along California’s Highway 101 (Freeman, 2016). The MaRS Discovery District recently became home to tech companies like Facebook and Airbnb. Toronto is also home to emerging tech players like Wealthsimple (robo-investment advising), Shopify (e-commerce), and FreshBooks (cloud accounting software). As part of Canada’s Innovation Strategy, the federal government is dedicating \$800 million over the next four years to strengthen these innovation clusters through promoting start-up incubators and accelerators like the one at the MaRS Centre (Freeman, 2016).

## Implications

Housing and transportation are deeply linked. Modes of transportation affect the built form of housing (such as the need for a driveway, garage, or parking space) and zoning bylaws (including the number of required parking spaces). Desired modes of transportation used can also shape people’s choices in where to live: if travel time can be significantly reduced from the suburbs to an individual’s place of work, living further away from one’s job may be more feasible. Housing and development are also often planned around access to public transit.



# Construction innovation

CREATE *New construction and building design technologies help make housing developments feasible.*

## Characteristics of this trend

### Six-storey wood frames

According to Ene Underwood of Habitat for Humanity, the biggest story in affordable housing is the new Ontario Building Code permitting six-storey wood frame buildings. Using wood frames is an affordable alternative to steel-framed buildings, meaning higher density dwellings can be built at lower costs.

### New building and construction technologies

New 3D printing technologies could present affordable alternatives to housing design and construction. Robots and artificial intelligence may also simplify and even automate some of the roles of architects and builders.

### Reducing carbon emissions

Several 2016 Federal and Provincial Minister mandate letters in Ontario call for governments to work together to reduce carbon emissions in the province. These policies often come with funding for green building retrofits, advancement of renewable resource technologies, and low-carbon building methods and materials.

## COUNTER TRENDS

As climate-change-related environmental disasters increase, costs of natural resources that are used as inputs to housing production may become more volatile

## SIGNALS OF CHANGE

- Architects in Amsterdam are 3D printing small buildings out of recyclable bio-based material (McLeod, 2016)
- The Ontario Building Code now permits the construction of six-storey wood frame buildings (E. Underwood, personal communication, October 3, 2016; B. Donnelly, personal communication, October 5, 2016)

## Implications

Building codes and zoning bylaws will need to keep up with changes in construction techniques and materials, as new construction innovations may introduce new housing designs and types. Building Code changes, such as the six-storey wood frame code, require taking on new risks for construction companies who must introduce new processes for building differently. Without funding for testing new building techniques, a code change like this may not receive full uptake (B. Donnelly, personal communication, October 5, 2016).



# The next age of finance

CONSUME *Alternative finance models are becoming more prevalent, especially in the non-profit and social innovation spaces.*

## Characteristics of this trend

### Impact investing

Commonly referred to as social finance, impact investing is an investment opportunity that produces a financial return along with a measurable social impact or outcome. The size of the impact investing market in Canada is expected to increase from \$4 billion to \$30 billion over the next ten years (Spence & Nelles, 2013). Wealthsimple’s David Nugent describes their socially-responsible portfolio as their fastest growing offering, a signal that there is a growing appetite for this investment type (D. Nugent, personal communication, September 23, 2016). There is also interest in investing in affordable housing as a social finance opportunity, although there are few investment-ready opportunities to do so (Spence & Nelles, 2013). Heller (2015) identified real estate as being the “next frontier” in social finance (Heller, 2015).

### Crowdfunding

Online platforms like Kickstarter and GoFundMe are moving to the mainstream. Community bonds are social-finance-meets-crowdfunding investment opportunities that allow individuals to invest in real estate project (such as the Centre for Social Innovation) that they care about, while earning a financial return.

### FinTech and customer expectations

Smartphone ubiquity brought the platform wave (and companies like Airbnb and Uber). Cloud computing followed shortly, and now banking customers are expecting similar interactions with financial institutions. This shift is bringing

## COUNTER TRENDS

- A call for more humanized interactions with financial services professionals
- A search for tried and true low-risk, reliable investment options in an increasingly uncertain economic future

## SIGNALS OF CHANGE

- Many government departments across Canada have issued RFPs for social impact opportunities (Cave, 2016)
- Government of Saskatchewan implemented a social impact bond (Cave, 2016)
- Bank of America investment strategist declares that “impact investing is hitting the mainstream; a tipping point”(Gillespie, 2016)
- According to a U.S. Trust study, 93% of millennials surveyed believe that a company’s social and environmental impact is key to their investing decisions, up from 74% two years ago (Gillespie, 2016)
- Royal Bank, Bank of Montreal, TD Bank, CIBC, and CIBC all created or invested in FinTech innovation labs in Canada and the U.S. (Woods, 2016)
- Manulife Financial Corporation recently established a new role of Chief Innovation Officer (Galang, 2015)
- Citi Bank Group analysts declared banking’s “Uber” moment will occur with “the shift to mobile distribution being the main channel of interaction between customers and the bank” (Woods, 2015)
- Popularise is a start-up that allows people to crowdsource developments that they want to see in their communities

mobile peer-to-peer money transfer apps, virtual reality technologies, and other digital banking services. The Economist (2016) notes today’s “superstar companies are digital companies with huge market valuations and few assets” (think: Snapchat and Twitter).

### This trend is driven by:

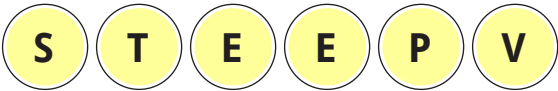
- Declining cost of technology
- Ubiquitous smartphones
- Changing user experience design expectations
- An increasingly competitive market for capital, seeking low risk and high returns
- A growing desire for bringing belonging and community back into urban neighbourhoods

## Implications

New opportunities and offerings in the personal finance space create wealth-generating alternatives to homeownership. Mortgage and lending innovation could be the next space for disruption by FinTech companies.

# Space for a new Canadian Dream

RELATE *New values, labour economies, and family structures pave the way for new ways of living in the city.*



## Characteristics of this trend

### Developers define new housing customers

Martin Blake of The Daniels Corporation notes the importance of creating dwellings that meet the needs of their changing customer demographics. A key design consideration has been creating spaces in condominium developments that are suitable for mothers with children (for example, ensuring that doorways and lobbies are wide enough for strollers). Developers also appreciate the need for culturally-appropriate housing options, especially for the large (and growing) immigrant population in Toronto.

The new consumer is also defined by family structures that are becoming more common: lone-parent households with children and couples without children. This shift is happening as couples are deciding to have children later-on in life. Experts observe more risk aversion among millennial investors and low financial literacy when it comes to home-buying (D. Nugent, personal communication, September 23, 2016). In contrast, young people are more engaged investors, in that they want to be aware of the social impact of their investments (D. Nugent, personal communication, September 23, 2016). Recent university graduates in this era also carry high levels of student debt (Statistics Canada, 2014).

### Concern for carbon footprint

Toronto’s urban planning and development policies (such as Ontario’s Five-Year Climate Change Action Plan and input for Canada’s National Housing Strategy) introduce

recommendations for reducing environmental impact. Strategies include funding green building retrofits, to promoting intensification of urban centres where land is already serviced and where residents have access to a variety of transportation options.

As the price of solar continues to drop, developers are hearing people looking for environmentally-conscious real estate options (M. Blake, personal communication, September 15, 2016). Workshop participants also noted that they would be willing to make trade-offs to reduce their environmental impact.

### The rate of change is increasing, making personal futures more uncertain

The housing affordability crisis in Toronto reached a point where households earning under \$162,000 can no longer afford the average price of a home in the Greater Toronto Area. Toronto Life reports high levels of uncertainty around whether coming generations will live as prosperously as their parents.

Automation, artificial intelligence, and digitization threaten to replace workers

from the manufacturing sector to the financial services sector. The pace of change in the labour market has never been so fast. Workers are experiencing low levels of job security. Fewer than half of the workers in the GTA hold permanent, full-time employment with benefits (Warren, 2016). Households making financial investments in housing that represent 50 percent or more of their total household income are betting against their expected future earnings, which may not increase at the pace that they might hope. As interest rates continue to decline, there is also an expectation that interest rates will remain low. The other dilemma with a higher proportion of individuals working in precarious employment situations is their difficulty in qualifying for mortgages and in submitting a successful rental application to a landlord. This uncertainty is coupled with the cost of living and of raising a family increasing (D. Nugent, personal communication, September 23, 2016).

Retirement-savings glut

Savings rates in Canada are at roughly 5 percent (compared to the 15-to-20 percent recommended by Wealthsimple) (D. Nugent, personal communication, September 23, 2016). Employer-provided pensions are hard to come by (and especially if you’re working in the “precarious employment” economy). The Province of Quebec recently mandated every company over 20 employees to have retirement savings plans for their employees. Researchers talk of a “great wealth transfer” on the horizon, although there is uncertainty about the size of this handover (Toronto Life, 2016). Inter-generational transfers of housing assets are also not straightforward: aging parents who cannot afford to or qualify to live in the limited supply of retirement and supportive housing may end up being cared for at home by their children.

COUNTER TRENDS

- According to Altus Group’s most recent survey of consumers, only 40% of millennials (and 41% of Baby Boomers) said they would prefer to live in a smaller home in a central area than a larger home in the suburbs (Carras, 2016)
- The “neo-rural” movement: a small subset of people who are looking to live in rural settings, returning to the fundamental values of the first settlers

SIGNALS OF CHANGE

- New CMHC mortgage-lending policies attempt to reduce risk of mortgage defaults in Canada
- OpenDoor.com was created to improve the home selling and buying experience for current and prospective homeowners
- Ottawa-based developer ModBox is using VR to design and market an upcoming residential development project (BuzzBuzzNews, 2016)
- The start-up, Point, provides an alternative to traditional home equity loans, making home ownership more attainable for households (Matthews, 2016)
- Washington Adopts ‘First-of-its-Kind’ Carbon Reduction Rule (Dawid, 2016)
- Representatives from governments around the world achieved consensus on a United Nations document that can serve as a guide to sustainable urbanization (Kinney, 2016)
- New Democratic Party Member of Parliament, Niki Ashton is hosting town halls about precarious employment, listening to the grievances of young people from Halifax to the West Coast (Teitel, 2016)

Implications

In the case of a shift away from homeownership and pensions becoming less common (especially given precarious work environments), households will rely heavily on individual retirement planning. The absence of employer-sponsored saving provides an opportunity for new mechanisms for wealth-generation.

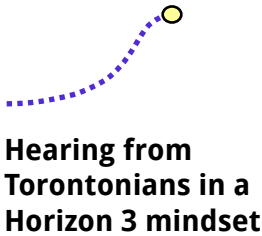
# A hopeful future

## Emerging innovations

The environmental scan yielded evidence of organizations in policy and planning, real estate, and finance creating new products and services to meet some of the changing housing system needs in Toronto and elsewhere. The Appendix of this report provides a summary of several products and services that challenge the status quo. These emerging innovations are signals of where we might be headed in the future.

### Many current models rely on the current narrative.

The nine models described in this section challenge orthodoxies in the housing system. However, the models rely on maintaining the narrative and market structures supporting real estate as an asset and on the assumption that that asset will continue to increase in value. There may be an opportunity to challenge this narrative and to consider a world in which housing is not treated as an asset – where the price of housing does not increase consistently over time.



## Co-designing a hopeful future

A person’s housing situation is directly linked to many other community and urban planning elements, from where they send your children to school, to where they access healthcare services, to where they grab their morning coffee. The housing-model-innovation discussion spans envisioning new tenure models, to rethinking land-use planning design, to discussing neighbourhood and community elements that individuals hold dear. The following section of this report describes the findings of the Horizon Two discussion of the Three Horizons model workshop which aimed to develop a shared vision of a hopeful housing future for a group of Torontonians.

Another goal of this exercise was to guide participants in moving away from the first-horizon mentality (where we are fixated on “keeping the lights on” and creating innovations that maintain the failing system). Curry & Hodgson (2008) note that it is easy to default to the conversations focused on designing solutions that help us maintain current structures and ways of doing things. Part of the value in using the Three Horizons model is to encourage a shift in that dialogue to shed light on how stakeholders might co-design a shared vision for an alternative in Horizon Three.

Workshop participants collaborated to develop visions for a hopeful future in Toronto’s housing system. Three key insights emerged from the discussion.

INSIGHT 1

**There’s an opportunity to re-focus the housing discourse to a conversation about neighbourhood and community.**

Workshop participants described new ways to define housing and our paradigms within the system. Common themes included:

- A desire to allocate a greater portion of their income away from shelter costs and toward other parts of life such as personal growth and life experiences;
- Participants felt a general sense of housing being a life milestone and a key indicator of success, although many were willing to explore alternative narratives where housing is more aligned to its purpose as shelter and as a fundamental human need; and
- A desire to explore other tenure models, beyond the binary “rent or own” decision.

Participants talked about moving back to housing “basics” – privacy, safety, stability, and self-expression:

- An inclination to see housing as a reflection of one’s values and identity;
- A place where you have control over your space and experience;
- A constant, stable piece of your life; and
- The ability to afford to live in my neighbourhood comfortably.

There was a desire to use housing as a tool to organize people and to develop relationships:

- To live in communities that foster meaningful interactions and connections with neighbours;
- To use the housing system to integrate and support our aging population; and
- And to have the option to live in environmentally-friendly and sustainable dwellings.

INSIGHT 2

**There is an opportunity to use housing and real estate assets as tools to distribute power and wealth in Toronto.**

Participants discussed opportunities to spread the societal wealth through creating inclusive real estate models in Toronto by:

- Creating a housing system that provides housing to all;
- Encouraging more government involvement in housing Torontonians affordably;
- Creating models for renters to use their shelter spending as savings tool, like homeowners’ mortgage payments; and
- To use the housing market to reinvest in communities to generate broader social impact.

Finally, participants are looking for more housing choices that fit their individual life stages. These include:

- Challenging the social norms around owning a home in your adult life; and
- Creating flexibility for homeowners through providing alternative mortgage models.

INSIGHT 3

**There is an opportunity to think differently about the millennial customer segment.**

Workshop participants expressed a willingness to accept new housing models and configurations. Just as Martin Blake described his organization’s shift to thinking about single women as a unique customer segment, there is an opportunity to design housing options for a new millennial mindset.



The primary and secondary research conducted over the course of this project revealed several opportunities for movement towards this type of model:

- People are becoming more comfortable with smaller spaces (M. Blake, personal communication, September 15, 2016)
- Empty nesters want to remain in their neighbourhoods, and many individuals are looking to age-in-place (B. Donnelly, personal communication, October 5, 2016)
- There is still a desire to own a home, that can't necessarily be captured by the rental market (B. Donnelly, personal communication, October 5, 2016)
- Many wealthier millennials want to rent; the middle-to-lower class millennial wants to own (D. Nugent, personal communication, September 23, 2016)
- Home does not have to be a ground-related product (E. Underwood, personal communication, October 3, 2016)
- More and more families are living with children in condos; this is becoming more acceptable in Toronto (M. Blake, personal communication, September 15, 2016; B. Donnelly, personal communication, October 5, 2016)
- Macro-economic events during formative years can affect risk attitudes in investing: millennials have witnessed significant traumatic events in their formative years (Larson et al., 2015)
- Young people are, for the first time, more likely to live with their parents than a spouse (Thompson, 2016)
- Customers want personalized offers, with speed, convenience, and automation (Woods, 2016)

# Summary

- There's an opportunity to re-focus the housing discourse to a conversation about neighbourhood and community.
- There is an opportunity to use housing and real estate assets as tools to distribute power and wealth in Toronto.
- There is an opportunity to think differently about the millennial customer segment.

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## Design implications

The foresight trends point to several potential changes to the housing landscape in Toronto. They provide provocation for a new mental model of housing to emerge.

There is evidence of trends such as decentralization and a movement away from government involvement in all aspects of housing and human services. However, innovators must study the implications of introducing new housing models on all stakeholders (including low-income communities and suburban neighbourhoods). Many government policies are in place to regulate housing resources and to (aim to) redistribute access to housing. There is an opportunity to introduce policies that redistribute real estate wealth, as well.

Finally, to ensure sustainability, there is an opportunity to create housing models that do not rely on the current narrative and trend of increasing house prices and return-on-investment in the housing sector.

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This section explored some of the signals of change on the horizon. The next step is to develop new models for real estate and community investment. To do so, we must design strategies for bringing forth innovation in the housing system by clearly defining the opportunity space and empathizing with stakeholders working in various parts of the system, with different beliefs, knowledge, and experiences. These ideas are outlined in Part 4.

## PART 4

# How we could get there

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“Change the dream and you change the city.”

– THE BUELL HYPOTHESIS, 2011

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# Making room for change

The housing system went through several periods of change in the last century. Policy-making, real estate development, and real estate financing all evolved in response to local and global events, shifts in values and paradigms, and demographic trends. The most recent events, namely the 2008 Financial Crisis, the election of Justin Trudeau, and the call for Canada’s first National Housing Strategy signal an opportunity for change in the way we understand, allocate, build, and legislate our housing and urban planning resources in Toronto. There is hope for a new era; the difficulty lies in making change happen.

## Changing the conversation

Curry and Hodgson’s Three Horizons model appeared throughout this report as a tool to generate primary research with Torontonians and to make sense of insights gathered through all research methods. The tool is “based on the observation that businesses, technologies, political policies, and even whole civilizations exhibit life-cycles of initiation, growth, peak performance, decline, and even death” (Hodgson, 2008). That said, when a system is in decline or is losing strategic fit with its environment (whether it be cultural fit, financial feasibility, or otherwise), there is space for a new system to emerge and to disrupt our current ways of doing things. This section describes where and how that change might take place, by making room for Horizon 3.

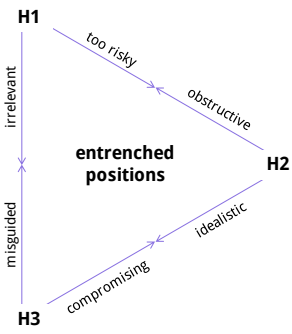


Figure 19 | Three Horizons strategic dialogue; entrenched positions (Curry & Hodgson, 2011)

## Changing the conversation can enable us to accept an alternative future.

The first step in getting to a preferable future system in Horizon Three is to let go of systems that need to fail or that no longer meet society’s needs. This report asserts there is evidence of Horizon Two (emerging innovations) and Horizon Three (what Hodgson calls “fringe activities” or “pockets of the future in the present”) in today’s Horizon One. The Three Horizons model contributed to a deeper understanding of individual mindsets of stakeholders with a high interest in maintaining the system, versus those with a high interest in changing the current system. Hodgson refers to these mindsets as entrenched positions, which are identified in Figure 19. The diagram describes individuals’ perspectives in each of the horizons and the ways in which their entrenched positions cause them to perceive alternatives in other horizons.

## Obstacles to transformational change

### There is a need for transformational innovation in Toronto’s housing system, and several obstacles are standing in the way.

Housing lies at the intersection of several industries suitable for innovation. The foresight trends scan provided evidence of signals of change that may

affect the future of several sectors, all of which are connected to the housing system:

- Real estate
- Lending and consumer banking
- Legal profession
- Construction
- Credit scores
- Residential moving

There is potential for innovating on the periphery, in one of these sectors that may be more accepting of change, before making large-scale changes at the core of the housing system.

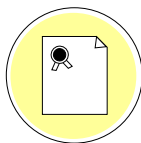
### One of the main obstacles impeding innovation in the housing space is risk.

Inputs to real estate development are costly and transaction times are often lengthy. For instance, the time and resources involved in locating and purchasing land in a city like Toronto can be one of the biggest barriers for smaller developers or non-profit housing providers looking to build housing. In addition, there are few organizations and government bodies funding innovation in the housing sector. CMHC recently introduced a Housing Innovation Fund, mainly geared towards projects with sound business plans. Creating strategies to mitigate risk and allow for prototyping and failure may allow smaller players to participate in the housing development space and to test new models.

## System orthodoxies

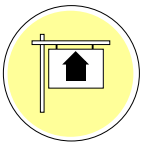
**There are many housing system orthodoxies worth uncovering.**

These orthodoxies exist in the domains of policy-making, real estate development, and financing.



### POLICY-MAKING

- Development proposals are approved based on demand in a thriving real estate market, not based on the need for housing in a community.
- The City of Toronto maintains a comprehensive waiting list for households requiring social housing; other households' needs are met by the market supply of housing.
- Moderate-income individuals do not have control or influence over developments built by the private sector.
- Policymakers cannot legislate what the private development sector creates. Housing renovations and upgrades are time-consuming, complicated projects.



### REAL ESTATE DEVELOPMENT

- Real estate developments are coordinated and built primarily by large industry players.
- Only experienced developers can provide housing.
- Tenure types are not fluid.
- Social housing providers add to the housing stock by building and operating rental housing buildings.



### FINANCING

- Homeowners must provide a down-payment upon purchase.
- There is little room for risk-taking and prototyping in the real estate industry.
- Mortgage payments are associated with a specific dwelling.
- Financial institutions are the gatekeepers to home ownership by being the main issuer of mortgages.

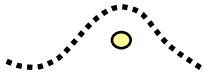
# A call for a new business model

A business model shift constitutes finding new ways to make money and to serve customers differently (Keeley, Walters, Pikkel & Quinn, 2013). The mortgage product, secondary rental housing offering, and the real estate development process share characteristics of businesses that Keeley et al. (p. 134) suggest are indications for focusing on a new business model, namely when:

- “There is a significant group of customers that would love to use the primary offerings in a market, but can’t afford them or rationalize their expense;”
- “There are few variations or experiments in processes, organizational structures, and supply chains in an existing market;”
- There may be “ways to change a market’s generally accepted profit model;” and
- There may be “ways to structure assets and/or do work in surprising ways that will change the fundamental economics of a market.”

## Challenging the narrative and building consensus

Changing the housing system requires more than a policy created to incentivize different behaviours or a strategy to invest more money in affordable housing. Workshop participants spoke about the wider mental model shifts that must take place to allow a preferable future (in Horizon 3) to come to life.



### Hearing from Torontonians in a Horizon 2 mindset

#### INSIGHT

**Torontonians call for more accountability and transparency in our housing system.**

In Horizon Two, workshop participants raised several questions around accountability, transparency, and equity in Toronto’s housing system. The following questions are questions workshop participants were most curious about; they are provocations of and signals to an alternative future for housing in Toronto:

- Citizens ask what rights they have to land and access to housing, as members of the Toronto community?
- How far can we push the housing affordability issue before access to housing is treated, once again, as a basic need?
- Who holds power and accountability in the housing system; should developers take responsibility for the buildings that they build and their effects on neighbourhood prosperity?
- Can we strike a balance between hyper-regulated spaces versus citizen-owned indoor and outdoor spaces in the city?
- What kind of trade-offs are people willing to make regarding private space to access other shared community benefits and amenities?
- Will there be an end to the 25-year mortgage phenomenon without an end to the ownership housing dream?
- Can we gain stability and consistency in our lives through another means, besides homeownership?
- Should we be spending our resources on maintaining the current system or building a new one?



# Summary

- Changing the conversation can enable us to accept an alternative future.
- There is room for transformational innovation in Toronto’s housing system, and several obstacles are standing in the way.
- There are many housing system orthodoxies worth uncovering.
- Torontonians call for more accountability and transparency in our housing system.

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## Design implications

Torontonians, politicians, and other housing players recognize the need for change to improve the affordability issues and inequities created by our current system. There is a willingness to innovate but within a low-risk tolerance threshold. Real estate development is inherently risky due to high up-front costs required, the number of consultants and professionals involved from different sectors, and the highly-regulated planning and development environment. There is an opportunity to de-risk the development process and an opportunity to innovate in an adjacent, lower-risk space to improve housing outcomes for Torontonians.

Change will take collaboration and openness to challenging our commonly-held belief systems that govern the housing, social services, and public policy sectors in Toronto.

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The need is clear. The previous sections described why innovation is required and how we might begin the conversation. When solving a wicked problem like the provision of affordable housing, there are many possible solutions (too many to enumerate), each with the potential to contribute to better future outcomes for Torontonians. Here are four to start us off...

## PART 5

# New models for real estate and community investment

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“Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody.”

– JANE JACOBS

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# Design principles

The following design principles emerged from the primary research with Torontonians and are statements to guide idea generation for new strategies and business models in the housing system. These nine principles can inform innovations in the way we consume housing, and the way we develop and finance real estate.

1

Foster a sense of place-based belonging in one’s community or neighbourhood.

A sense of belonging is a key attribute of good neighbourhoods (Kearns & Parkinson, 2001). As more households are priced out of the homeownership market and as a desire for flexibility and mobility rises, individuals may search for new ways to build a sense of belonging in their geographic communities.

2

Create more affordable equity-based housing options to generate a sense of pride and ownership.

This principle involves creating new ways for Torontonians to build equity either in real estate assets or their neighbourhoods, possibly by lowering the barrier-to-entry (the down-payment requirement) to foster a sense of pride, accountability, and success.

3

Foster trust and collaboration across stakeholders in the system.

A model that fosters trust and collaboration may introduce transparency into the real estate industry by making proposed developments, housing policy decisions, bidding information, and the rental application process more open and accessible to the public.

4

Introduce more stability to housing outcomes in the face of uncertain financial futures.

Individuals experience anxiety over their uncertain financial futures given the rapid changes in employment and job security. This principle might inspire models to ensure housing creates a sense of stability and security over the course of one’s life.

5

Promote personal agency and autonomy over housing decisions by giving people more choice and control.

Reduce the feeling of being limited to the binary rent-versus-own decision by creating more choice in tenure. More affordable options may also take form in different housing types such as laneway housing or other intensification projects.

6

Shift some of the power in the development industry to smaller community-based players.

This principle may involve finding ways to prioritize socially-impactful real estate developments. This may involve reducing barriers to entry for non-profit developers and landlords to help this segment gain real estate market share.

7

Create alternative wealth-generating mechanisms suitable for renters.

Households living in rental dwellings cannot currently use their rental payments to build equity or to save for their future. This principle might involve redirecting their rental payments to an equity-building financial product or creating a new investment vehicle designed specifically for renters.

8

Create a solution that is environmentally and financially sustainable over time.

Provide more options for environmentally-sustainable housing that individuals can understand and measure. This principle also involves ensuring the affordability of housing over time.

9

Create opportunities for innovation by encouraging prototyping and failure in the development sector.

The real estate development process is risky, as it is highly resource-intensive. There are not many funders of innovation in policy, real estate development, and impact investing, meaning: fewer opportunities to prototype ideas and learn from failure.

# The market opportunity

## An opportunity space lies among middle-income households in Toronto.

The speculative models in this section do not solve homelessness. Rather, the models target the significant housing need in the middle-income range that is not being served by the free market. In Toronto, households in the first, second, and third income deciles often cannot afford average prices of rental or ownership housing (based on CMHC affordable housing definitions). Households in the fourth, fifth, and sixth income deciles can often afford average market rents for rental housing but cannot afford average home prices. This income cohort represents roughly 314,361 households in Toronto. This group earns between \$50,600 and

\$79,600 annually and can afford a house price between \$189,000 and \$297,000 (Ministry of Municipal Affairs and Housing, 2015). Of note, the rental stock within the affordable price range for the fourth-to-sixth income deciles is limited. What is usually available to this cohort, is the secondary rental market which may present unsuitable or unaffordable housing options (such as basement apartments that do not meet building codes). The ownership stock within this price range is almost non-existent. The demand generated by this middle-income group indicates an opportunity to design new ownership models, mechanisms for social mobility, and alternatives to the binary rent versus own decision.




	 Fourth income decile	 Fifth income decile	 Sixth income decile
Number of households*	104,787	104,787	104,787
Average income	\$50,600	\$63,800	\$79,600
Affordable house price	\$189,000	\$238,000	\$297,000
Affordable rent	\$1,265	\$1,595	\$1,990

Figure 20 | Affordable house prices and rent for City of Toronto’s fourth, fifth, and sixth income deciles; 2015 (Ministry of Municipal Affairs and Housing, 2015; \*approximate number of households, based on 2011 Census Data for City of Toronto)

# Speculative models

The following four preliminary models developed provide inspiration for stakeholders in the housing system to continue to develop business models and system innovations to improve outcomes for Toronto households. Financial analysis and pro-forma calculations have not been produced for these models, as they are primarily for provocation, to help housing system stakeholders envision new possibilities for the sector.

## The following items are identified within each speculative model:

- System elements affected
- Ambition level
- Design principles addressed
- Problems targeted
- Type of innovation proposed (based on the Ten Types of Innovation)
- Orthodoxies challenged
- A description of the innovation
- The opportunity space
- Considerations for implementation
- Implications for broader system stakeholders

# Neighbourhood Housing Collaborative



The neighbourhood housing collaborative model is a housing investment tool that helps mixed-income communities who want to save for the future by increasing access to flexible housing and real estate investment opportunities by reducing the barrier-to-entry to housing that permits building equity.



*Design principles*

<b>Foster belonging</b>	<b>Introduce stability</b>
<b>Pride through ownership</b>	<b>Generate wealth</b>
<b>Shift the power</b>	<b>Promote agency</b>

*Problems targeted*

- Down-payments can present a major affordability challenge for many households;
- Debt-aversion or a desire for flexibility can deter individuals from purchasing a traditional residential mortgage;
- If households cannot afford to own, they limit the opportunity to save for their future and generate wealth through their shelter spending; and
- Precarious employment can make regular monthly rent and mortgage payments difficult.

## Description

This model envisions a mechanism by which a diverse group of Torontonians might gain access to opportunities for building real estate equity, without the prohibiting down-payment requirement. In this model, a non-profit network would build and operate a multi-residential housing development. The development could consist of several high- or medium-rise apartments, stacked row houses, or other multiple dwellings. This model includes ideas such as:

### Membership model

Instead of moving into a traditional ownership or rental agreement, the household becomes a member of the housing network. They have the option to:

- Pay the minimum rent required to cover operation and maintenance of their unit; or
- To (seamlessly) enter a shared-equity arrangement with the collaborative, where members contribute their base rental rate, plus an investment in the neighbourhood housing collaborative fund

Additional contributions to the fund, over and above rental payments help the collaborative pay down the mortgage and provide an equity opportunity for the member. If a member decides to leave the housing collaborative, they can withdraw their equity plus interest.

All transactions could take place on an online neighbourhood housing collaborative portal, where members pay their fees and can opt-in to the shared-equity arrangement.

### Common house

Elements of the cohousing model, whereby residents in a community own their individual dwellings and share ownership of a “common house” could be incorporated. This space would be an important community-building feature and provide members with additional amenities that are not included in their private dwellings, such as meeting and study space, a shared kitchen or dining area, and guest rooms.

The shared space and amenities could be jointly used for other social enterprise activities to help reduce housing





maintenance costs. The social enterprise (such as a retail business) could also offer its members an “energy exchange” or “sweat equity” program, whereby hours spent working at the social enterprise could contribute to their membership dues in months where personal finances are tight.

Opportunities

The primary and secondary research conducted over the course of this project revealed several opportunities for movement towards this type of model:

- An increased level of interest in investing in social-purpose businesses and causes; and
- Ongoing difficulties among many households attempting to enter the ownership market.

Considerations

- The revolving fund may require anchor capital to help seed the fund, which could involve working with an impact investor (such as a community or family foundation) who would require a financial return on investment;
- The model would rely on turnover within the housing network to gain a financial return upon sale;

- The sweat equity model would require operating a viable social enterprise that could employ individuals with varying skills and abilities.

Implications

The implications of this speculative model would most greatly affect finance system stakeholders. The neighbourhood housing collaborative may require mortgage providers to consider new ways of underwriting their products which consider the additional revenue associated with the shared equity arrangements. This offering may also require collaboration with impact investing fund advisors, or other professionals experienced with developing community bond or crowdfunding finance models. For large financial institutions, this offering may displace their demand for traditional residential mortgage products, if scaled.

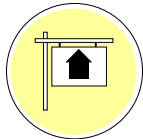
Type of innovation

This innovation would require a new business model.

CONFIGURATION	OFFERING	EXPERIENCE
<p><b>Profit model</b></p> <p>Allowing households to pay a base cost for their housing membership with the option to build equity in an otherwise “rental” accommodation; spread risk across housing members</p> <p><b>Process</b></p> <p>Adapting the rental offering to meet the needs of households seeking flexibility, yet looking to build equity in their community</p>	<p><b>Product system</b></p> <p>Integrate online rental payments with equity options through one membership portal</p>	<p><b>Service</b></p> <p>Creating a community around a shared asset; providing flexibility and self-service opt-in option to invest in the housing collaborative, without the need for mortgage brokers or investment advisory fees</p> <p><b>Brand</b></p> <p>Use the membership model to build a community brand and identity around the housing collaborative</p> <p><b>Customer experience</b></p> <p>Bring people closer to their financial investments, through opportunities to invest in their community</p>

Orthodoxies challenged

- Real estate developments are coordinated and built primarily by large industry players
- Homeowners must provide a down-payment upon purchase.
- Tenure types are not fluid.



This model is a platform that helps community agencies, non-profit organizations, other groups, and individuals who want to build and/or operate non-profit housing by developing their real estate capabilities and by reducing barriers to entry in the real estate development sector through a series of educational and professional services offerings.

*Design principles*

**Shift the power**

**Prototype and fail**

**Promote agency**

**Make it sustainable**

*Problems targeted*

- Toronto’s non-profit housing sector is dominated by a few players who have extensive experience in housing development and management;
- The development process is complex and difficult to navigate and manage, meaning there are many barriers to entry for individuals seeking to fulfill their housing needs that are not met by the market; and
- There is a shortage of affordable housing stock in Toronto: the market consists primarily of private sector developments.

**Description**

This model envisions a space for prospective non-profit housing providers to build their capabilities and test their ideas to develop new housing models. The intent of this offering is to remove some of the barriers smaller players face when desiring to develop housing. The model also provides a safe space for prototyping ideas and learning from failure. This model includes ideas such as:

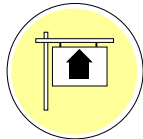
**Housing innovation lab**

A housing lab, located within a consultancy with expertise in real estate development, business model innovation, design thinking, impact investing, and strategy could provide community agencies with training and consulting services required to develop their ideas related to improving housing outcomes for Torontonians. The service offering could take place over the course of a couple of weeks, where participants are moved through the planning process including: market analysis, project concept development, financial feasibility, site selection and purchase, planning and design, municipal approvals, construction, and pre-

occupancy activities including marketing and leasing, and operation. Various program levels could be offered, such as: one-week intensive programs, prototyping exercises, annual memberships for ongoing advising, executive education, and typical development consulting services.

**Professional-services-matching**

The offering could also include services for matching prospective housing developers with other consultants and professional services required for development, including: architects, urban planners, construction management, and builders. This could happen through a referral process or by assisting customers to develop and administer their procurement process (such as issuing a request-for-proposals).



Opportunities

The primary and secondary research conducted over the course of this project revealed several opportunities for movement towards this type of model:

- The demand for affordable housing is outpacing supply and the pace at which developers are adding more units to the market;
- Housing development is a complex business with many players, competition, and organizations involved; individuals and groups interested in pursuing innovative ideas often do not have the capacity, capabilities, or resources required to pursue their project without guidance and assistance; and
- All three levels of government have identified new affordable housing supply as a priority and will be looking to the private and non-profit sectors to meet this priority.

Considerations

- The pre-construction phase of a real estate development project requires significant investment that many organizations may not have access to; and
- Non-traditional developers may also consider incorporating other revenue-generating products or services to

supplement government funding (such as running a hotel or other retail space within their building).

Implications

The HomeStarter model would most greatly affect existing real estate development system stakeholders, by introducing more smaller players in the market. This model requires developing new partnerships and collaborations between the public, non-profit, and private sectors. In particular, there may be opportunities to align this model with CMHC’s Housing Innovation Fund (introduced in 2017), by working with prospective housing providers to develop their business ideas to meet the eligibility requirements for the program. It may also be beneficial to work alongside policy-makers to design an ecosystem for housing start-ups that includes government funding considerations. This model could also involve a collaboration with ONPHA and alignment with their existing membership model for non-profit housing providers.

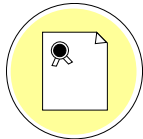
Type of innovation

CONFIGURATION	OFFERING	EXPERIENCE
<b>Profit model</b>  Bundling pricing for a series of real estate development services and offering a core product for slim margins	<b>Product performance</b>  The program would be a customizable suite of offerings ranging in price, capabilities needed, and desired timeline  <b>Product system</b>  A holistic offering is provided through building relationships with other real estate development professionals (such as architects and builders)	<b>Customer engagement</b>  Building a network and community of practice of aspiring housing developers to share ideas and best practices across the real estate development journey

Orthodoxies challenged

- Only experienced developers can provide housing.
- There is little room for risk-taking and prototyping in the real estate industry.

# On-Demand Development



This model is a housing request portal that helps city planners who want to approve development applications by creating a database of up-to-date local housing needs to incentivize developers to build the types and tenures required by Toronto households and to give policymakers a clearer picture of housing needs.

*Design principles*

- Shift the power
- Foster trust
- Introduce stability

*Problems targeted*

- Developers hold significant power in determining what types of housing are built in the city;
- The development process is risky, especially for purpose-built rental developers; and
- Policymakers have difficulty identifying the true social need for housing (as opposed to the demand for housing).

## Description

This model envisions a municipal housing request portal and database where residents inform the City of their housing status, as it changes over time. The platform could collect data such as:

- Housing status (for instance: looking for housing or not looking for housing);
- Bedroom type of housing sought (for example: one-bedroom, two-bedroom, etc.);
- Desired price range
- Desired amenities (such as appliances and shared space)
- Desired neighbourhood

Development approvals could be informed by these requests and would help city planners regulate the types of developments that are approved. A dashboard or live report of housing requests and preferences could be available to developers and policymakers on this platform.

### Gauging housing interest

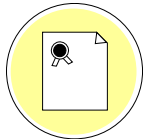
This online platform could also be used for developers to put forward designs, features, and prices of potential

residential projects during the market analysis and feasibility phase to gauge suitability and interest among households who have expressed an interest in finding housing in Toronto. This would provide developers with an additional prototyping opportunity and could yield pre-construction feedback on a proposed project.

## Considerations

- Users of the database would be concerned with maintaining an accurate database, including ensuring up-to-date data received from Torontonians on an ongoing basis;
- Additional tools, building processes and designs, and incentives will be required to create financially viable rental or ownership housing to meet the affordability needs; and
- There would also be a concern for ensuring the accuracy and privacy of the information received.





Opportunities

The primary and secondary research conducted over the course of this project revealed several opportunities for movement towards this type of model:

- This platform would give planners and developers access to data on housing preferences for the middle-income group that is often under-studied (governments have a lot of information on the very low-income groups, and developers gather extensive market data on the upper-income groups);
- Future immigrants are not captured in the Census data; as more newcomers and immigrants arrive in Toronto, this could permit prospective immigrants to request a specific housing type ahead of time and for developers and policymakers to understand the incoming housing needs
- We have a lot of information on low-income households (through CMHC’s Core Housing Need reports and through Toronto’s Housing Connections studies) and on high-income households (developers focus much of their market research on this segment); the housing sector has less of an understanding of middle-income households (deciles 4 to 6);
- Non-traditional real estate developers (such as community agencies interested in providing housing) may not have the capabilities, experience, or resources to conduct a thorough market analysis to define the need for a certain type

- of housing; this would give smaller housing players important market intel and reduce this barrier-to-entry in the development sector;
- Ubiquitous smartphones permit Torontonians to provide the City with up-to-date information on housing status on a regular basis; and
  - There may be an opportunity to incorporate these efforts with inclusionary zoning policies at the municipal level and to legislate incentives and guidelines around requiring development projects to meet current housing needs to receive approvals.

Implications

This speculative model would most greatly affect policy-making system stakeholders. This model for allocating development approvals would be a significant change in the way the development process works in Toronto. Policymakers would have to work in close collaboration with the development community to create a mutually-beneficial model for allocating development approvals based on need in Toronto. Implementation may also involve working with the housing division managing the City’s centralized waiting list for affordable housing.

Type of innovation

This innovation would require a new platform.

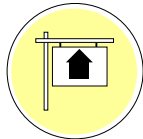
CONFIGURATION	OFFERING	EXPERIENCE
<p><b>Profit model</b></p> <p>Sharing data assets between City staff, developers, and citizens serving similar markets</p>	<p><b>Product performance</b></p> <p>Connecting the real estate and policy-making sectors to much-needed market data to help them better understand their target customer group</p>	<p><b>Service</b></p> <p>Real-time, open-source, self-service database and dashboards for housing market research; a communal resource for the housing sector</p> <p><b>Brand</b></p> <p>Increasing transparency and accountability in municipal policy-making</p>

Orthodoxies challenged

- Development proposals are approved based on demand in a thriving real estate market, not based on the need for housing in a community.
- The City of Toronto maintains a comprehensive waiting list for households requiring social housing; other households’ needs are met by the market supply of housing.
- Moderate-income individuals do not have control or influence over developments built by the private sector.
- Policymakers cannot legislate what the private development sector builds.



# One-Stop Housing Shop



This model is a simplified home-purchase experience that helps families who want to purchase a home and social housing providers who have deteriorating housing stock by facilitating a transfer of the asset to the buyer and by bundling renovation and contracting into a cohesive offering.

*Design principles*

- Generate wealth
- Pride through ownership
- Foster collaboration

*Problems targeted*

- Social housing portfolios in Toronto are aging, sometimes to the point where renovation costs outweigh new construction; and
- Ownership housing prices are out of reach for many households.

## Description

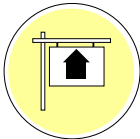
This model envisions an opportunity for social housing providers with aging portfolios to sell off entire floors or individual units to households or other non-traditional real estate developers, using the revenues to build new housing. Features may include:

- The home sale could be entirely digital, eliminating realtor fees and other transaction costs
- Households could choose to purchase the unit at a reduced cost in its current state and perform renovations themselves or on their own budget;
- Households could choose to purchase custom packages of redesign or renovation services online, ranging in price; and
- Savings could be collected through pre-negotiated contracting and renovation fees.

## Opportunities

The primary and secondary research conducted over the course of this project revealed several opportunities for movement towards this type of model:

- Allow individuals with trades skills to renovate their units, themselves, providing cost savings;
- Reduce the stigma associated with social housing by re-branding the image of the building and by providing a high-quality user experience platform for purchasing and requesting renovations and upgrades to the housing units; and
- Provide customers with a seamless and coordinated renovation service offering.



Considerations

- Some renovations and updates may be necessary before move-in, such as asbestos or mould removal;
- Unit sales would have to cover costs of the new development;
- Other innovations, such as design techniques or otherwise, would be required for the social housing provider to break even on the sales of existing units and the cost of constructing a new building;
- The social housing provider would have to ensure that this model was not simply used as an opportunity for local or foreign buyers to purchase, renovate, and flip the housing units; and
- Social housing providers would have to consider where to house current tenants while the building is under construction.

Implications

This speculative model would most greatly affect real estate development system stakeholders. Implementation would require collaborating with contractors and could involve developing a collective buying arrangement to ensure affordable renovation prices for new tenants. There would also be a concern for the wellbeing of existing tenants living in affordable housing. The relocation of social housing tenants is a socially- and politically-unfavourable decision and should only be done when budgetary circumstances do not allow for the units to be renovated.

Type of innovation

This innovation would require a new platform.

CONFIGURATION	OFFERING	EXPERIENCE
<p><b>Profit model</b></p> <p>Modifying the base-cost of housing by offering lower-quality dwellings at a reduced rate; realize profits from add-ons (renovations)</p>	<p><b>Product system</b></p> <p>Connect customers with other partner products and services (interior design, renovation, and construction companies) to create a holistic offering</p>	<p><b>Service</b></p> <p>Create an elegant, user-friendly self-service platform for coordinating all upgrades and renovations for the unit</p> <p><b>Brand</b></p> <p>Use the condominiumization and sale as an opportunity to re-brand the social housing building and reduce stigma around low-income housing</p> <p><b>Customer engagement</b></p> <p>Allow customers to shape their own experiences by customizing their home renovation and move-in options</p>

Orthodoxies challenged

- Housing renovations and upgrades are time-consuming, complicated projects.
- Social housing providers add to the housing stock by building and operating rental housing buildings.

# Moving forward

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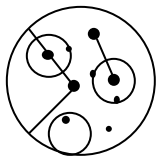
“Home is the place where, when you have to go  
there, they have to take you in.”

– ROBERT FROST, THE DEATH OF THE HIRED MAN

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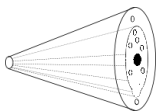
# Our journey

Meeting the affordable housing needs for all Torontonians is one of the wicked problems we face today. Addressing this need requires a robust methodology of research and analysis tools from a wide range of schools of thought and practices. This major research project took us on a journey aimed at bringing potential solutions to light. The insights gleaned from the research were made possible by employing a unique combination of systems thinking, foresight, and human-centred design approaches across the stages of the Three Horizons model.



## Systems thinking

This major research project began by exploring the current system in decline in Horizon One: how we got here and where we are today. Part 1 and Part 2 of this report examined the evolution of our housing system and the system dynamics at play today. We were reminded that our housing system has not always operated as it is today. Our evolving mental models and understanding of success, growth, and housing markets allowed many other systems to emerge, build on these shared beliefs. This analysis also involved understanding what it is like for Torontonians to live in today’s system, giving a voice to citizens to co-design the future of our city.



## Foresight

We moved into a Horizon Three mindset in Part 3 to explore what trends and drivers of change are emerging and shaping the future of our cities. This report put forth eight key trends observed in our environment and the potential implications associated with their impact on the system. During this investigation, we started a conversation with private developers, city planners, financial services professionals, and large-scale employers who are housing system experts and are interested in improving housing outcomes for their fellow Torontonians.



## Human-centred design

Part 4 outlined a roadmap for how we could get to an alternative and preferable future housing system. This section addressed the challenges that we must overcome in Horizon Two, including how we might confront the clashing values and competitive alternative paths in the discourse.

Finally, Part 5 put forth new models for real estate and community investment to challenge orthodoxies and create real change in Toronto’s housing system. The human-centred approach yielded nine design principles co-created with roughly forty engaged Torontonians.

# A new outlook

Our housing system represents the manifestation of decisions we made over the past several decades about almost every aspect of our lives: how and where we want to work, our modes of transportation, where and with whom we live, how our economy functions, and how we measure individual and collective success. This historical precedence, along with the volume of stakeholders vying to maintain or to change the current system, create a recipe for complexity and inequity between Toronto’s many population segments. What is more, the persistent dynamics ruling our housing landscape mean every policy, business model, or design innovation comes with many possible outcomes and implications for the broader community. This environment limits our ability to measure the true impact and effect of our interventions.

Through this project, we learned that the topic of housing system innovation is political. There are many competing political, philosophical, and world views on housing issues. These beliefs sit adjacent to our theories about our welfare and economic systems, meaning these views become a big part of what housing system solutions we are able and willing to

envision and accept.

We also learned that the topic of housing is emotional. Our homes remain symbols of self-identity and personal success. Many of us will not always make rational economic decisions when it comes to where, how, and with whom we want to live. System innovators must take a human-centred approach and inject empathy into new solutions and models they design.

This project asserts that we can create change in Toronto’s housing system by transforming real estate investment into an inclusive community-building tool. The research then proposes that we must shift the power in the development industry to smaller community-based players, create wealth-generating mechanisms suitable for renters, and foster collaboration across stakeholders in the system. A city where all citizens can thrive is only possible when the housing system contributes to the wellbeing of its entire population – this vision can be realized through strategies that level the playing field for all.

# Next steps

This report provides a starting point for developing models for real estate and community investment to solve Toronto’s growing housing affordability needs. The speculative models generated for this project aim to provide inspiration for individuals and industry players to investigate and design new opportunities for policy-making, real estate development, and financing in our housing system.

## Areas for further research

Given the scope of this project, several stones were left unturned. As next steps, the following research areas might be explored:

### Reducing adverse selection between renters and landlords

The On-demand development speculative model targets the information asymmetry between renters, landlords, home buyers, and developers. Further research may be conducted to analyze the dynamics and potential discrimination between renters and landlords operating within a context of asymmetric information, where landlords, mortgage brokers, and real estate agents have more information about the housing situation than the buyer or renter.

### Understanding the diversity of needs in Toronto

Primary research could be conducted with the growing older adult and senior population and with recent immigrants and newcomers to Canada to understand the specific needs of individuals and households during this phase of their life.



## Continuing the dialogue

The following exercises might take place to move toward implementation:

### Engage a multi-stakeholder group

Bringing some of the speculative models to a second prototype and implementation phase would require engaging with a multi-stakeholder group comprised of professionals within the policy-making, real estate development, and financing sectors. A working group within the housing system could validate assumptions within the models, conduct a financial feasibility analysis, and provide an implementation plan.

### Mobilizing Toronto’s largest employers

As per the stakeholder matrix in Part 2, large employers in Toronto are characterised as “undercover actors” with low-interest and high-influence in the housing system. This group has the potential to be a strong voice for change by supporting its low- and medium-income employees in pursuit of affordable housing. As Toronto’s creative and technology sectors grow, employers will depend on attracting talented workers to the city. This will require ensuring Torontonians have affordable and desirable housing options.

## A hopeful future

This project involved uncovering some of the intricacies of the housing world from the perspective of stakeholders from the policy-making, real estate development, and financing sectors. While the research revealed many ways to frame the housing affordability problem, it also presented a variety of solutions available to Torontonians.

There is no shortage of individuals ready to create change in the places that they live, work, and play. This became evident over the course of this project, in the knowledge, experience, and expertise of those interviewed and in the energy and enthusiasm of local residents who shared their time, thoughts, and innovative ideas with me during one of three workshops.

The time to create change is now, as all three levels of government align their mandates to eradicate homelessness and to provide sustainable, affordable housing for all Canadians. My hope is for this report to spur discussion and inspire action to approach the wicked problem of housing affordability in new ways; to challenge our mental models and our understanding of what home means to Torontonians and Canadians now and in the future.

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# Appendices

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# Appendix A: Glossary

## Affordable housing

Housing is considered affordable if shelter costs account for less than 30 percent of before-tax household income. Affordable housing is a broad term that includes housing provided by the private, public, and non-profit sectors as well as all forms of housing tenure (CMHC).

## Blockchain

“A blockchain is a public ledger of all Bitcoin transactions that have ever been executed. It is constantly growing as ‘completed’ blocks are added to it with a new set of recordings. The blocks are added to the blockchain in a linear, chronological order.” (Investopedia)

## Cohousing

“Cohousing is a concept that came to North America in 1988 from Denmark where it emerged in the early 1960’s. It describes neighbourhoods that combine the autonomy of private dwellings with the advantages of shared resources and community living.” (Canadian Cohousing Network)

## Complete communities

“Complete communities meet people’s needs for daily living throughout an entire lifetime by providing convenient access to an appropriate mix of jobs, local services, a full range of housing, and community infrastructure

including affordable housing, schools, recreation and open space for their residents. Convenient access to public transportation and options for safe, non-motorized travel is also provided.” (Smart Growth Ontario)

## Condominiumization

“To condominiumize something means to change an existing building or complex into condominiums (condos).” (Gimme-Shelter)

## Extrinsic value

Extrinsic value (or instrumental value) of something is the value of that thing as a tool or instrument for achieving something else.

## Strategic foresight

“Strategic foresight is a planning-oriented discipline related to futures studies, the study of the future.” (Wikipedia)

## Household income

“The total income of a household is the sum of the total incomes of all members of that household.” (Statistics Canada)

## Housing continuum

“The housing continuum [includes all housing types] from temporary emergency shelters through transition housing, supportive housing, subsidized housing, market rental housing or

market homeownership.” (CMHC)

## Human-centred design

“Human-centered design is a creative approach to problem solving. It’s a process that starts with the people you’re designing for and ends with new solutions that are tailor made to suit their needs. Human-centered design is all about building a deep empathy with the people you’re designing for; generating tons of ideas; building a bunch of prototypes; sharing what you’ve made with the people you’re designing for; and eventually putting your innovative new solution out in the world.” (IDEO)

## Inclusionary zoning or housing

“Inclusionary housing programs are municipal programs that use the development regulations and approval process to oblige private developers to provide a portion of affordable housing within their new market projects.” (InclusionaryHousing.ca)

## Density bonusing

“Density Bonuses offer developments a level of density that surpasses the allowable Floor Area Ratio (FAR) in exchange for amenities or housing needed by the community. These amenities typically include parks, heritage preservation and affordable housing, but offering increased density in exchange for greener development can also be seen as an amenity to the community.” (Government of British Columbia)

## Income decile

“The population in private households is sorted according to its adjusted after-tax family income and then divided into 10 equal

groups each containing 10% of the population.” (Statistics Canada)

## Intrinsic value

“The intrinsic value of something is said to be the value that that thing has “in itself,” or “for its own sake,” or “as such,” or “in its own right.” Extrinsic value is value that is not intrinsic.” (Stanford University)

## Market-rate housing

Market housing includes all rental and ownership housing that is not government-subsidized (CMHC).

## Mental model

Mental models are “internal images of how the world works” (Senge, 1990); they “reflect the beliefs, values, and assumptions that we personally hold, and they underlie our reasons for doing things the way we do” (Maani and Cavana, 2007)

## Modified unit or dwelling

“A modified unit is generally needed for household members who are confined to a wheelchair and/or will benefit from lowered counter tops. Some may have widened doorways and hall space, roll-in showers or modifications to allow an individual confined to a wheelchair to use the kitchen and bathroom.” (Peel Access to Housing)

## Multiple dwellings

Multiple dwelling are all dwellings containing more than one residential unit within the building (CMHC).

Non-market housing

Non-market housing includes emergency shelters, transitional housing, supportive housing, and all other forms of housing that are government-subsidized (CMHC).

Orthodoxies

“A belief or a way of thinking that is accepted as true or correct.” (Marriam-Webster)

Placemaking

“Placemaking is a multi-faceted approach to the planning, design and management of public spaces. Placemaking capitalizes on a local community’s assets, inspiration, and potential, with the intention of creating public spaces that promote people’s health, happiness, and well-being.” (Wikipedia)

Primary rental market

The primary rental market includes all purpose-built rental dwellings (CMHC).

Rent-geared-to-income housing

“Rent-geared-to-income (RGI) housing is subsidized housing. The rent is based directly on the tenant’s income, usually 30 per cent of the gross monthly household income. If you receive social assistance, the rent charges are based on the rent benefit set by the Ontario government, rather than 30 per cent of the gross monthly income. RGI housing subsidies are most often available in publicly-owned social housing, but are also available in co-operative, non-profit and private housing.” (Housing Connections Toronto)

Row house

“A ‘Row (Townhouse)’ dwelling is a one family dwelling unit in a row of three or more attached dwellings separated by a common or party wall extending from ground to roof.” (CMHC)

Secondary mortgage market

“A secondary mortgage market is the market where mortgage loans and servicing rights are bought and sold between mortgage originators, mortgage aggregators (securitizers) and investors. The secondary mortgage market is extremely large and liquid.” (Investopedia)

Secondary rental market

The secondary rental market includes all rented dwellings that are not purpose-built rental structures. This category is comprised of rented condominiums and all other privately rented dwellings (CMHC, 2017).

Service manager

Also known as the 47 Consolidated Municipal Service Managers (CMSMs), service managers are Ontario municipalities and district social services administration boards responsible for delivering human services. The Social Housing Reform Act (2000) designated the CMSMs responsible for managing social housing programs across the province (Ministry of Municipal Affairs and Housing).

Shelter costs or shelter spending

“Shelter costs for owner households include, where applicable, the mortgage payment, the costs of electricity, heat, water and other municipal services, property taxes and condominium fees. Shelter costs for tenant households include, where applicable, the

monthly rent and the costs of electricity, heat, water and other municipal services.” (Statistics Canada, 2017)

Social determinants of health

The social determinants of health are the primary factors that shape the health of Canadians (Mikkonen & Raphael, 2010).

Social enterprise

“A social enterprise is a business operated by a charity or non-profit organization that sells goods and/or services in the market place, for the dual purpose of generating income and achieving a social, cultural and/or environmental mission.” (Toronto Enterprise Fund)

Social finance and impact investing

“Impact investing is the growing movement to invest in ventures and initiatives that will create positive impact in their communities and provide a financial return.” (MaRS Centre for Impact Investing)

Social housing

Social housing is one category of affordable housing, usually referring to rental housing subsidized by the government (CMHC).

Social mobility

“Social mobility, movement of individuals, families, or groups through a system of social hierarchy or stratification. If such mobility involves a change in position, especially in occupation, but no change in social class, it is called “horizontal mobility.” An example would be a person who moves from a managerial position in one company to a similar position

in another. If, however, the move involves a change in social class, it is called “vertical mobility” and involves either “upward mobility” or “downward mobility.” (Encyclopaedia Britannica)

Social purpose real estate

“Property and facilities owned and operated by mission-based organizations and investors for the purpose of community bene t and to achieve blended value returns.” (Social Purpose Real Estate Collaborative)

Supportive housing

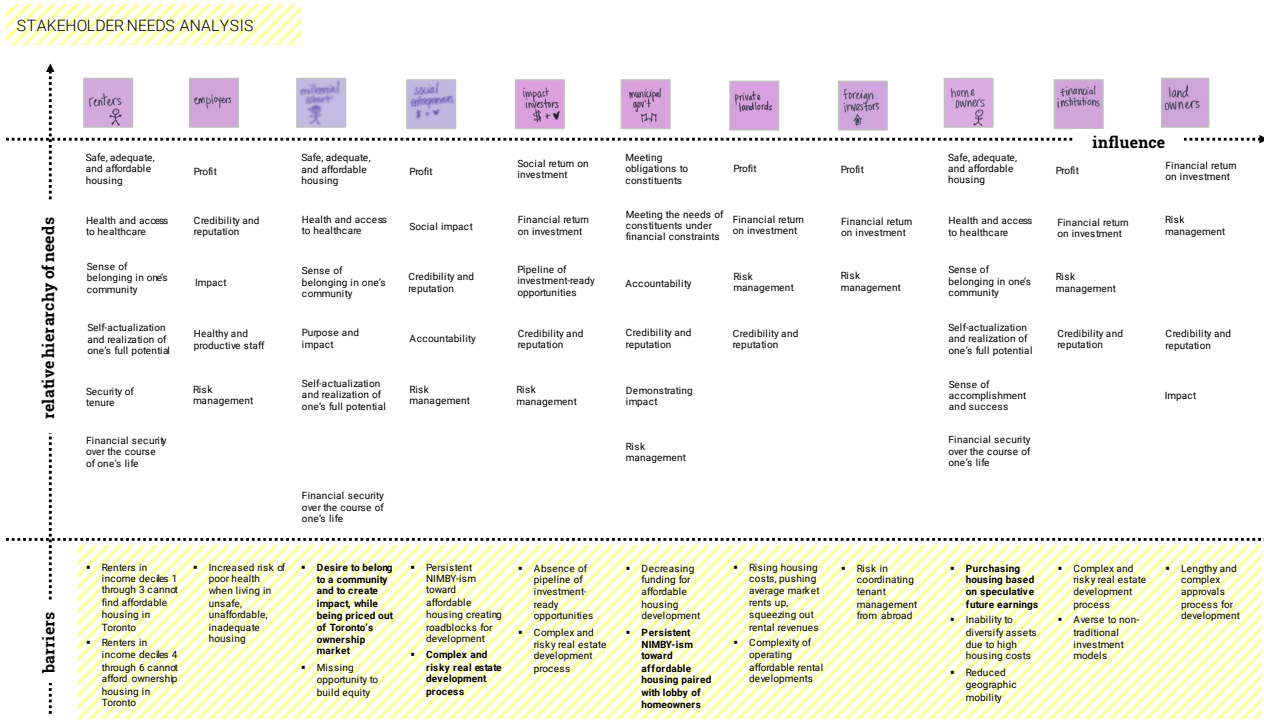
“Permanent Supportive (or Supported) Housing (PSH) combines rental or housing assistance with individualized, flexible and voluntary support services for people with high needs related to physical or mental health, developmental disabilities or substance use.” (Homeless Hub)

User experience design

“User Experience Design refers to the judicious application of certain user-centered design practices, a highly contextual design mentality, and use of certain methods and techniques that are applied through process management to produce cohesive, predictable, and desirable effects in a specific person, or persona (archetype comprised of target audience habits and characteristics).” (UXdesign.com)



# Appendix B: Stakeholder hierarchy of needs



# Appendix C: Verge framework

The following section applies the Verge Framework to each of the eras to describe the implications of some of the trends, events, and phenomena attributable to each time-period. The framework is made up of six elements (Lum & Bowman, 2004):

## Define

The Define domain speaks to the concepts, ideas, and paradigms we use to define ourselves and the world around us. This includes things like worldview, paradigms, and social values and attitudes.

## Relate

Deals with the social structures and relationships that organize people and create organizations. Here we look at things like family structures, business models, and governance structures.

## Connect

Encompasses the technologies and practices used to connect people, places, and things. Connect looks for things like information technology, urban design, and language.

## Create

Concerned with the technology and processes through which we produce goods and services. This is all about things like manufacturing, efficiency, and rule-making.

## Consume

About the ways in which we acquire and use the goods and services we create. This domain is about issues like modes of exchange, consumer preferences, and marketing.

## Destroy

About the ways in which we destroy value and the reasons for doing so. Here we are concerned with phenomena like violence and killing, waste, and attempts to undermine rules and norms.



# Appendix D:

## Primary research

### Interview guide

The following interview guide was used to conduct the expert interviews for this project:

#### Introductions

Hello, my name is Adrienne Pacini. Thank you for agreeing to participate in this interview. Our conversation should last no longer than 60 minutes. During this interview, we will discuss the most critical emerging trends related to your work and your industry.

*Interviewer to revisit contents of the Interview Participant Consent Form.*

Do you have any questions before we begin?  
Allow interviewee to ask questions.

#### Semi-Structured Interview

- The interviewer will go through the following questions with the interviewee:
- What is your name, your position at your organization, and the name of your organization?
  - Can you provide a brief description of what your organization does?

- hat social, economic, political, technological, environmental, and values-based trends in your industry and elsewhere are shaping the future of the work that you do?
- Which of these trends is most likely to keep you up at night?
- What are some emerging innovations in your industry that you are aware of?
- Does your organization currently play a role in affordable housing in Toronto?
- In what way (if any) do you see our organization as being a part of the housing system in Toronto?
- How might shifts in housing consumption patterns affect your business?

#### Clarifying Questions

Can you expand on that?  
Can you provide any additional details or examples?

#### Conclusion

Thank you for participating in this interview.

## Workshop guide

The following templates guided the three workshops conducted for this project.

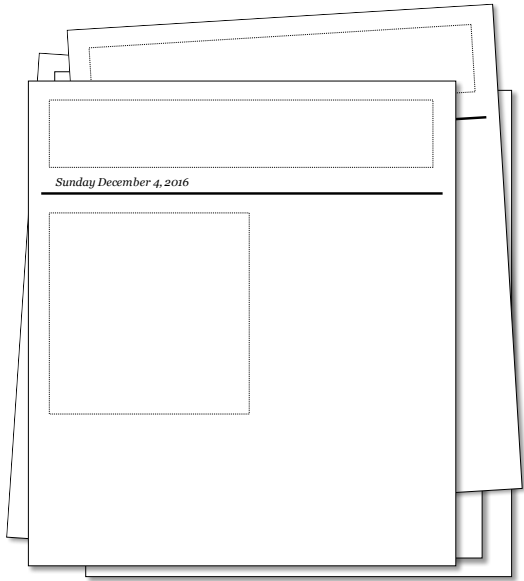
### OPENING EXERCISE

What are the strongest messages you're hearing about:

- The housing system today; and
- What the future of housing will be like for you, living in Toronto?

Think about headlines and conversations in the media, at work, or at home.

5 minutes



### THREE HORIZONS EXERCISE

What might equitable and desirable housing opportunities look like for you and the the Toronto community?

**In your groups, work on populating all 5 sections of the Three Horizons model. Use the following questions to help guide your discussion.**

Allow for 1 to 2 minutes of individual reflection at the beginning of each new section.

- 1** What does the current prevailing system look like?
- 15 minutes
- What does "home" mean to you?
  - What does "achievement" look like for you?
  - What concerns do you have about your future housing situation?

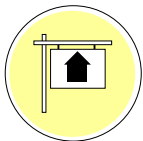
- 2** What will your preferable future look like?
- 15 minutes
- What will "home" mean to you?
  - What will "achievement" look like for you?
  - What new facts or trends are connected to this future?
  - What future are we trying to avoid?

- 3** What signals of the future are you seeing today?
- 15 minutes
- What seeds are being planted by businesses, government, and society that hint to a possible alternative future?
  - What inspires you or gives you hope about the future of housing in Toronto?

- 4** What are the clashing values and competitive alternative paths that will be played out?
- 15 minutes
- What big decisions will we have to make before we can enable an alternative future to emerge?
  - Do you know of any innovations that might lead to a different housing situation for you in the future?

- 5** What pieces of the present do we want to keep in the future?
- 15 minutes
- What elements of the current system should still exist in the future?
  - How is the system creating positive outcomes for Torontonians today?

# Appendix E: Existing innovations



## Habitat for Humanity

Habitat for Humanity is a non-profit charitable organization that created a new mortgage and construction financing model. The organization's goal is to provide low-income families with access to affordable ownership housing. Habitat provides families with a second no-interest, no-down-payment mortgage geared to the household's income (the mortgage payment will never exceed 30 percent of household income). Low-income families (usually with children) apply to live in a Habitat home. They are selected based on level of need, willingness to become partners in the program, and ability to repay the mortgage.

Habitat makes their housing affordable by having families contribute 500 hours of sweat equity to the project, by soliciting construction material donations from organizations like Home Depot, by collaborating with the local municipality for below-market rate land, and by generating revenue through the Habitat ReStore which sells used furniture to the public.

### Challenging orthodoxies

Habitat created a unique model by challenging several orthodoxies in the housing system:

- Homebuyers must provide a down-payment to secure a conventional mortgage with a commercial bank or financial institution.
- Low-income families live in subsidized rental housing.
- Homeowners reap the financial rewards of the appreciation of their asset upon sale of their home.
- Charitable organizations do not run revenue-generating businesses.



## Point

Point is a private sector organization that strives to make ownership more affordable by investing in a share of your home's future appreciation. Point describes itself as an "alternative to traditional home equity loans", where the company buys in to real estate properties as a partner. This upfront investment means lower down-payments for households.

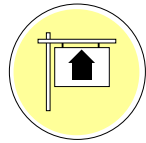
### Implications for the system

On the demand-side of the equation, Point is helping household afford ownership housing that they may not have afforded otherwise. Point becomes another stakeholder in the system relying on the steady upward climb of the housing market for wealth generation.



## Options for Homes

Options for Homes is a non-profit charitable organization that helps people achieve homeownership by passing along cost-savings from reduced spending on marketing and sales and by limiting amenities and features in buildings. Options also offers down-payment support by issuing second mortgages to residents.



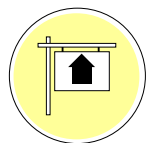
## Open Door

Open Door is an American company that simplifies the home buying and selling processes. Open Door reduces the risks and hassles involved in selling your home by purchasing the property immediately. Customers receive an offer immediately (within 24 hours; based on sales data for the neighbourhood and other factors) and will schedule a closing date based on your schedule, in as fast as three days. By selling your house directly to Open Door, you do not incur a realtor's commission fee.

### Challenging orthodoxies

Open Door created a unique model by challenging orthodoxies in the housing system:

- Selling your home is a complicated process that must involve a real estate agent.

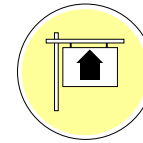


## WeLive

WeLive is a membership-based short-term rental housing accommodation in New York City and Arlington, Virginia. WeLive designs its housing to foster and facilitate interactions between residents in amenity spaces and organized activities and events. Each unit is equipped with all bedding, tableware, kitchen tools, housekeeping, and concierge services. Members can also connect through the WeLive mobile app.

### Implications for the system

Although WeLive does not provide housing that is more affordable than market rent, the living situation is an experiment in designing community vibrancy into a high-density living situation. The offering is marketed towards young professionals and would likely create a homogeneous community of middle-to-high-income individuals (spending 30 percent of income on rent, a WeLive member in the New York location would have to earn roughly \$76,000 annually).

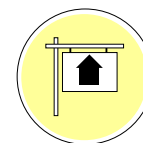
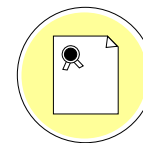


## Cohousing

Cohousing is a model that “combines the autonomy of private dwellings with the advantages of shared resources and community living” (Canadian Cohousing Network, 2016). In a cohousing neighbourhood, residents own their own homes and own shares in a “common house” with amenities such as a dining room, guest rooms, office or library space, and laundry. This configuration allows for a mix of private space within units and shared space in the common house. Cohousing residents often also take part in designing their community.

### Implications for the system

This model can help pass cost-savings of reduced amenities on to home-buyers who develop their own housing and share amenities that might otherwise be located within their unit (such as laundry facilities). The model also promotes intergenerational communities and social interactions.



## Laneway Housing

Laneway housing is a model by which home owners are permitted (via zoning bylaws and building code regulations) to build an accessory dwelling or a small house, generally built above an existing dwelling's lane-facing garage.

# Appendix F:

## Three Horizons snapshot

The following table provides a synthesized report of common themes and messages arising from the Three Horizons workshop. The Verge Framework overlays the table, to provide an additional level of analysis and of societal implications of a system-wide shift to a new horizon.

Verge Framework	Horizon 1 <i>Declining abundance</i>	Horizon 2 Constraints + scarcity	Horizon 3 New found abundance
Define	<p>Fear of admitting “defeat” against the housing market, in light of social pressures.</p> <p>Pressure and enthusiasm for moving the needle on this discussion and embracing new mental models</p>	<p>What rights do our citizens have to land and access to housing?</p>	<p>Take the housing goal out of the rat race to allocate shelter costs to other parts of life</p> <p>Back to basics: privacy, safety, stability, and self-expression</p>
Relate	<p>Communal assets and sharing, back from its hiatus after the suburbia/private property wave</p> <p>Acknowledgement of the vast systemic structure that underpins our current narratives, and their impacts on equality</p>	<p>Wizard of Oz: who is behind the curtain? Who holds the power and the accountability?</p>	<p>Re-focus the housing discussion to a conversation about neighbourhood and community</p>
Connect		<p>How far can we push private vs. shared space? What’s the optimal balance?</p> <p>Using planning tools and the community to create diverse and vibrant neighbourhoods</p>	
Create	<p>Call to action on housing, largely aimed at refocusing on meeting the needs of our own population</p>		<p>Using housing and real estate as a tool to distribute power and wealth in Toronto</p>
Consume	<p>A lack of alternatives makes people feel like slaves to the system.</p> <p>It’s getting harder for people to make risky long-term decisions in the face of rapid change and uncertainty in their lives.</p>	<p>Are we looking for the end of ownership or the end of the 25-year mortgage?</p>	<p>Looking for more housing choice that fits individual life stages</p> <p>The ease of transaction and affordability of the rental market with privacy, stability, and community through owning</p>
Destroy		<p>Should we be spending our resources on maintaining the current system or light a match?</p>	

