

A SYSTEMS APPROACH TO HOUSING POLICIES¹

PAPER 1

THINKING SYSTEMS FOR BETTER HOUSING OUTCOMES AND GOVERNANCE

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1. From Emerging Crises to Better Housing Outcomes and Their Wider Impacts

More Modern Housing Market Systems Policies

For much of the second half of the 20th century, advanced economies, though substantially less affluent than today, made major progress in building new homes and improving older structures to meet housing needs and demands. Until the 1980's national needs totals fell, and, with some major exceptions, housing prices and rents grew no more rapidly than household incomes. Canada made major housing progress in reducing housing needs and enhancing housing quality and choices.

Priorities for macroeconomic and sectoral policies, and beliefs about the best means to deliver them, changed within OECD countries through the 1980's. At what Thomas Piketty (2014) has labelled the 'end of the short-twentieth century' and as Frances Fukuyama's announced (unfortunately prematurely) 'the end of history' new policy paradigms emerged. A new emphasis on competition, free trade, enhanced globalisation, deregulation of labour and capital markets, a growing emphasis on the roles of markets in provision, and an emphasis on the merits of private property over state ownership and public provision, prevailed.

The detailed structures and state/market balance of what had become known as the 'neoliberal order' varied greatly across, and indeed within, nation states. In moving forward within that broad 'policy paradigm' there were important path dependencies in policy framings, instruments chosen, and institutions ended and created. The 'neo-liberal' framing of housing policies that have broadly held sway from 1980 to 2020, but that now appear to be in partial retreat (Raworth, 2017; Rodrik, 2015), are often simplistically treated as if they internationally uniform, and uniformly bad.

¹ The authors are grateful to CMHC for supporting this series of papers, and particularly to Lindsay Neeley, J.K. Macadam and William Meneray, and colleagues for commenting on drafts. The views expressed in these papers are those of the authors and they are presented to CMHC as opinion pieces. We are grateful to CMHC for allowing us the freedom to fully express our own views of what housing does and how it might be better governed in Canada. Our aim was to emphasise the need to govern the housing system more effectively to achieve the core aims of Canadian governments in achieving net zero whilst enhancing prosperity and wellbeing, and fairness and inclusion. Naturally we hope that these papers have neither misconstrued housing system processes or outcomes, nor can be seen as a criticism of individuals, but we are happy to defend our conclusions that a different, forward thinking governance of Canadian housing systems is urgently required.

The reality is that instead of a universal, self-regulating, flexible, market driven system across the advanced economies there evolved a patchwork of quite different and mixed housing provision systems. It is important to remember that, despite important commonalities in the directions of travel of policy, means, and aims across nations and jurisdictions, the real provision systems remain quite diverse with, often, devilish details. Moreover, there is enough applied economics evidence to suggest (Maclennan, 2012) that real housing markets have an operational character that inherently involves market failures and inflexibilities that underlying ‘competitive economy’ framework essentially ignores.

That variety and path-dependency noted, the housing policy ‘paradigm’ espoused by the advanced economies and their collective institutions such as OECD, the IMF and the World Bank clearly shifted the means and ends of housing policies and there were discernible national ‘modernisations’ of housing policy (Maclennan, 2010). Key shifts in housing policies included: reduced reliance on public expenditure to provide affordable housing; diminished willingness to use public borrowing to fund programmes; increased attention to affordable provision through non-profits, especially where they had access to private capital markets; and a switch in emphasis from property to personal subsidy regimes. A preference for home-ownership growth over rental housing growth prevailed widely but was much more deeply supported, usually by tax expenditures, in some nations and less so in others and special support for first-time home buyers became a widespread policy in the ‘Anglosphere.’

These housing policy related changes were set within, and subordinated to, wider system changes. These wider, ‘big ’system changes were also different in nature and intensity across countries, partly because existing systems exposed to the new orthodoxies of economic and public spending policies differed markedly and because different deregulations and elements of the neoliberal order met quite different political economies of acceptance and resistance. Financial deregulation was welcomed by wide majorities of consumers and voters. Taxes on property and housing were not, with widespread home-owner resistance to the removal of ownership tax supports, and especially the taxation of unearned capital gains. Few countries reformed the taxation of housing towards what was a near consensus view of optimal housing taxation embraced by professional economists. In some locations where inefficient older statist systems of housing provision (and they not all inefficient) had prevailed the advent of market pressures and more diverse non-profit means of providing homes improved housing outcomes for poorer households and communities.

Crucially, the ways in which construction sectors and land markets operated, and whether housing markets left to themselves would function effectively, and whether market supply chains would effectively replace the large tranches of public-led housing construction of earlier eras was a widely unasked question. The policy assumption, as noted above, was that housing markets were well-functioning systems, and policies paid little real attention to market failures and spillover effects, and the extent to which unreformed tax and

planning systems would shape outcomes was barely considered. In retrospect a particular major system problem was that financial deregulation induced rapid change in an already ‘fast system’, shaping new levels and patterns of housing demands whilst land ownership, planning, infrastructure, and constructions sectors often remained relatively unchanged from their always ‘slow’ system characteristics. In the absence of coherent housing market strategies cities, regions and nations have suffered significant accumulating difficulties from these imbalanced system changes.

More Difficult Housing System Outcomes.

There was nothing in the 1990’s drive to ‘modern’ housing policies that guaranteed efficient operation of housing markets, fair outcomes and inclusion, and efficient housing production. Natural capital impacts and environmental spillover effects, although recognised in principle, remained largely external to economic and housing policy debates until the start of this millennium, and in many instances until post COP 26. It is easy, and indeed commonplace, for policy commentators, to assume major adverse housing outcomes are relatively recent and their causes attributed to major system shocks, such as the GFC and the Covid-19 pandemic. More detailed housing policy analysis for advanced economies, not least the OECD’s own recent work (OECD, 2022) as well as cross-national contrast such as the findings of the Shaping Housing Futures project for Australia, Britain, and Canada (Maclennan et al, 2019), reveals that the current crises have been evolving as a problematic, often since the early 1990’s. This suggests that the ‘problem causes’ are often ineffectual housing policy systems rather than exogenous policy shocks.

There is, in many OECD countries and all of the Anglosphere, a persistent misalignment of housing policy systems and goals with the outcomes achieved that decision takers have been slow to recognise. An obvious and important example is the declining home-ownership rates of successive cohorts of younger households that has been apparent for a quarter century in Australia, New Zealand, and Britain, and for a decade and more in Canada. Consequent to governments having stepped back from their interest in housing policy spending there has been an unwillingness to monitor, understand and develop coherent housing market strategies for market led housing systems. Housing policies did not manage the housing system but focussed increasingly on the diminishing funding for critically important but small scale segments of the housing system. Canada speaks of the ‘housing continuum’ but policy was, until 2016 at least, allowed to become a small, targeted set of inadequately palliative discontinuities. Policy fractures meet the housing continuum would be not unkind and not inaccurate description of the housing system policy problem.

The interaction of housing policy measures with patterns of socio-economic development and broader tax and finance systems has not fostered faster growth and fairer outcomes. Arguably, the conjunction of policy systems has fashioned an overall economic model that has seen rentier growth absorb productivity gains, diminished economic real growth and increased inequalities. That is, the failure of national economies to achieve their core

growth, productivity and wealth reflects to a significant extent the dysfunctional trinity of housing outcomes outlined above.

That set of major difficulties largely arises from the tendency for main economic, social, housing, and political systems to create and allow long term real house price increases at rates significantly ahead of real wages. Economists recognise that persistent price changes are major indicators of pressures in an economic system. The inability to address this longstanding feature of economic development since the 1980's represents not a minor but a major lacuna in economic policy making in countries such as Canada, Australia, and the UK.

The papers produced in this review note a past, persistent propensity to focus on and debate housing policies in terms of their tenure incidence and impact (rent controls, owner tax subsidies, finance for non-profits etc) and order of government control (focus on means) rather by their outcome effects (focus on ends). Allied to a narrow conception of 'housing policy' (discussed further below) and un-coordinated governance across different sectoral silos and orders of government, this concern with instruments rather than outcomes has resulted in a limited framing of housing policies so that they no longer match housing problems nor housing effects on major national goals. Housing policy needs, urgently, to refocus on system outcomes.

Old Problems, New Times: New Systems Thinking

It now seems time to address the underpinnings of the housing continuum, namely the housing system as a whole and to recognise that it is a complex system. It is a system of multiple spatial and sectoral sub-systems, all with connections to major systems such as financial and labour markets. Systems understanding and governance arrangements that match how real systems function in the 21st rather than 19th centuries are now urgently required. There are signs that both accumulated difficulties in this millennium, but new more difficult times ahead could transform current difficulties into an unexpectedly difficult crisis in housing outcomes for a significant proportion of Canadians.

Few now dispute that Canada, though generally well, if expensively, housed, shares in the triple crises now afflicting advanced economy housing systems. Housing policies, after the 1980's, were modernised in bits and pieces. The papers that follow explore whether the existing policy patchworks are any longer adequate to embrace the significant wider system causes and consequences of housing difficulties. It is becoming critical to understand how housing, not described as a spending needs total, but as a complex integrative with multiple outcomes is shaping major social and economic and environmental outcomes. If nations are to get to grips with major national objectives such as sustainability, productivity, and inclusion then clearly the effects of housing outcomes on these major goals need to be recognised.

A Modern Housing Systems Perspective: More than Social, Wider than Provincial.

In the Federal-Provincial constitutional debates of the 1990's there was a widespread view that 'housing policy' was primarily a 'social policy' and autonomy should lie at the Provincial and municipal scale. This Pontius Pilate approach to Canadian housing problems and policies is still, disturbingly, alive in the senior echelons of Federal Canada. Housing is, by its very nature, is always grounded and local. But when the focus of policy shifts from who controls the inputs to where policy effects impact then local, neighbourhood, metropolitan, regional, national. and global reaches of impacts matter. When housing policy focusses on what housing does for the economy and the environment as well social outcomes then housing policy autonomies may appropriately lie at different orders of government and, in consequence require significant cross-order collaboration. The constitutional bargaining of the late 1980's to the mid-1990's resulted in a framework of housing policy roles and autonomies for different orders of government that has, ex post, been poorly matched to how the economic, social, environmental, and spatial systems of Canada have evolved over the last quarter century.

Just as there can be no dismissal of municipal and provincial roles in addressing social and local dimensions of housing issues there can be no reasonable objection to the argument that Federal governments, dealing with the more open borders flows of financial, human, and misused natural capital of this millennium, need to be concerned about the housing actions and outcomes, that have national, even global impacts. These new times have not only changed the functioning of socio-economic systems, but they now demand new governance arrangements too. With the 'neoliberal framing' for housing policies in retreat, leaving behind their own accumulated housing difficulties, these new, difficult times may now require another housing policy paradigm shift. There is a case to be made that emphasises the systemic effects of housing outcomes and how to govern the formation and delivery of major policy missions, across diverse policy silos and orders of government, to attain them.

Canada, in common with Anglo-Saxon housing systems, and many more of the advanced economies now confronts three major sets of problematic, linked housing outcomes. Increased homelessness (however defined) is all too clear on our streets and alleyways. Rising rental housing shortages, and associated high payment burdens and low quality difficulties, have been persistent over the last decade and they are spread, by systemic connections, well beyond the largest metropolitan cores to rural communities and smaller towns too. For a growing number of, especially younger, Canadians, homeownership, and household asset building, has become both more difficult to enter and, for many, more difficult to sustain. Housing policy problems have moved significantly beyond the 'merit good' social concerns of post-war times and they must now, whilst having a clear social concern also address wider 'system functioning' effectiveness and its economic and environmental as well as social outcomes.

Conventional estimates of housing need, designed to assess the merit goods needs of last century housing difficulties, are still relevant and increasing but the spread of housing

difficulties now reaches well beyond these measures. The high costs of housing have sharply reduced the share of Canadians aged under forty who can afford to become homeowners and raised the precarity of many established owners who face changing household and employment trajectories.

Major CMHC reports have, directly or indirectly, drawn attention to problematic system outcomes since the start of this millennium. The Annual Rental Housing report highlights growing rental sector pressures (CMHC, 2023, for instance). The complexities of rising housing prices in major metropolitan areas have been explored and identified and (CMHC, 2015) and recent work highlights the alarming level of increased level housing output required to rebalance housing systems without undue increases in prices and reductions in affordability (CMHC, 2022). The complexity and scale of the problem is not now a mystery, at least in CMHC.

Canadians, and housing policymakers, drawing attention to the spread and diversity of the manifestations of housing shortages and pressures, often refer to the ‘housing continuum’. However, the patterns of change in this millennium highlight the need to stress the systemic connections across and beneath that continuum. The emerging problem set in housing demands a systems approach to understanding and governing housing. The requirement for now, and the future, is a policy for the housing system that delivers the outcomes that shapes Canada’s effective achievement of its major goals. This is not how housing policy is presently understood and governed in most Canadian governments. There are hard-pressed and often meagrely supported Housing Ministers, often with mandates focussed on homelessness and traditional housing needs issues. These issues are increasingly important but there are other important economic and environmental consequences of the housing system, that reinforce difficult social outcomes. Yet, there are no Ministers with mandates for Housing System performance.

2. Aiming To Reduce Difficulties and Improve Housing Outcomes

Doing Good, But Better?

Commentators could respond to the above observations by noting that since 2016 the Government of Canada, after a decade of comparatively low commitment to housing policies (either by historical Canadian standards or contemporary policy efforts in other, say, G7 countries), have significantly raised strategic resource support for the housing sector.

New resources, new programs and new ideas have all been deployed in the National Housing Strategy. CMHC has led that strategy for the GOC that has committed resource support of \$80 billion for a decade of support. Yet some key policy outcome measures appear to be deteriorating at a significant rate. Why?

There are, as for most major programmes, critiques of CMHC programme management and assertions of needlessly bureaucratic programme formation and implementation.

Where these comments are well-based, they need to be addressed, but they are not the main concern of this paper. However, imperfections in NHS delivery fall well short of explaining the gap between ‘solutions produced’ by the NHS and the growing spread of Canadian housing difficulties.

This raises a larger, critical question of whether decision taking across Departmental policy silos and Crown Agencies within Federal Government, and indeed across policy silos at all orders of government, and between these orders of government, exacerbates housing affordability and other problematic outcomes. Does the housing system governance system actually get to grips with the functioning and outcomes of Canadian housing systems? There is an urgent need to know whether the NHS acts more like an expensive sticking plaster for the wounds caused by a systemic failure to govern housing outcomes within and across jurisdictions in Canada. Is the strategic resourcing, understanding and governance of how housing systems shape housing outcomes, and their wider consequences, appropriate to the contexts and challenges of Canada now? The flow of policy ‘fuel’, of public resource and effort, has increased but has the engine for change, the housing and related socio-economic systems, become less effective? Are the routes to policy success steeper, less obvious and more complex?

Moving beyond this initial, deliberate ‘provocation’, the set of Papers undertaken in this project has the primary purpose of reviewing whether conventional Canadian understandings of housing policy need to be revised. Do they need to be replaced with a renewed conception of government housing action as the effective governance of the overall housing system, and what, in addition to the now relatively small budgets attributed to the Housing Ministry, is required to support, through housing actions, the achievement of key economic and environmental as well as social aims.

Non-Systemic Cases and Governance.

In the course of undertaking this review interviews with policymakers, conference, and online seminar presentations, as well as varieties of published material have suggested different, major lines of action to improve the NHS, and they often reflect particular sectional interests rather than embracing a systems approach. The traditional housing and homelessness lobbies argue for more rights and resources. Academics (the authors interest) and consultants argue for more data and research. The housing industry makes cases for more support to housebuilders, often involving construction for first-home buyers.

Almost all lobbies stress the need for new supply, and some argue that supply inflexibility and house price inflation primarily arise from municipal intransigence and incompetence in zoning land and housing. The more elevated the silo of government, the more likely that ‘blame’ is laid at the door of municipalities. It is an erroneous view that has airtime across the federal bureaucracy. It is evident that supply flexibility is a problem and Bank of Canada (2022) research highlights that the patterns and causes are complex and not always predominantly driven by planning departments. Vertical fiscal imbalance,

infrastructure shortages, labour, and materials shortages, often reflecting Federal and Provincial policy decisions in non-housing siloes, all play roles in the complex supply chains and systems of housing provision.

Excess demand for housing may also reflect demand side policy stimulus. For instance, the non-taxation of housing wealth gains undoubtedly augments the investment demand for housing (including older households occupying large family homes); rapid increases in immigration targets face inherently slow housing construction responses; rationing younger households out of home ownership by stress tests may make homeownership systemically safer but it diverts housing demand into pressured rental areas.

Many of the drivers of housing market supply and demand choices are made in Ministries with little real expertise in wider housing systems and outcomes. Did the government (and crown corporation) silos undertaking their core decisions consider and have any responsibility for the housing consequences of actions focussed on other policy targets? Does a narrow remit lead to significant ‘unintended consequences’. Were they ‘unintended’ but not, with a modicum of collaborative governance, ‘unknowable’? Is silo based government appropriate for manging the housing system?

What are/were the expected overall housing system consequences of, for instance, non-conventional monetary policies, the strengthening of prudential lending policies, the production of around three thousand non-profit units per annum for all of Canada, the intended increase in immigration to 2030, the intention to move towards near net zero housing within 25 years? These are policy actions with major impacts on the housing system, yet only one of them lies primarily within the domain of the Housing Ministry.

Who brings these different policy actions together into a coherent set of actions for good housing system outcomes? Not least, rising real housing prices and rents ahead of incomes are the core signal of contemporary housing system stresses. Which Minister, in Federal and Provincial governments reports on these issues to Prime Ministers, Premiers and Cabinets and develops mitigation strategies. Ad hoc increases in NHS budgets will not readily resolve these issues within any likely future budget limits. System reform, as much as additional system support, will be essential to improving Canada’s housing outcomes.

The prevalence of multiple lobby interests, often with a clip of magic bullets, and multiple government siloes whose ‘non-housing’ decisions directly, but often unintendedly, impact housing outcomes all call for a more systemic problem understanding and governance. Housing markets have to be seen as complex systems with multiple policy relevant outcomes that impact different policy sectors, may have local to global effects and shape future as well as current outcomes. In consequence the housing system may require a cross- sector, cross-order system of governance rather than fractured silo governance across sometimes disunited orders of government.

Thinking what that approach might look like, and how it may evolve, requires a relevant conception of what housing is, an informed understanding of housing the system functions (clearly the well-functioning housing market assumption after the 1980's have been made redundant by decades of difficult outcomes) and what the outcomes the system generate do for Canada and Canadians. As ground clearing for this series of essays it is essential to develop a contemporary policy-relevant definition of housing and the housing system.

3. Defining and Exploring What Housing Means

Housing: A Modern Definition.

There is a multiplicity of definitions of 'housing', as both a noun and a verb (see 2016 volume). That variety is seldom reflected in the high-level design of and debate about housing policies. Macroeconomic analysis typically deals with simple numbers of homes started and completed, or the total value of residential investment and wealth. In the realms of traditionally defined housing policies definitions used primarily reflect political value judgements about the 'merit good' or needs requirements for housing investment.

Over time such estimates have become more refined and less aggregative, for instance instead of some summary estimate of 'housing needs' there will be more disaggregated requirements in relation to dwelling types or social needs group, such as single -person housing for the elderly versus general family needs groups. And in Canada, needs are defined in relation to both aspects of the physical inadequacies and excessive payment burdens for households and they form estimates of homes 'needed' on an aggregated waiting list of merited or deserving cases. More sophisticated local needs analysis may explore different housing types and broad locations required to meet demands and needs for categories of clients and types kinds of places.

Do these policy definitions of housing help us understand what housing is and, more importantly, does? More subtle explorations of what housing is (and is defined by) with social policy purposes in mind, such as by Mallett (2004), reveal the weakness of these aggregate needs 'numbers' as they disregard the range of different facets of housing that contribute to the wellbeing of for households. By doing so they assume away the range of ways in which housing contributes to wellbeing. This critique of typical policy definitions, whether just aggregate numbers or needs estimates, also applies to understanding the economic impacts of housing outcomes on important aspects of the economy.

Here the focus is on developing an economically oriented definition that builds a better understanding of how housing outcomes might impact the household and the economy. The arguments below are unapologetically repeated in each of the three Project Papers because re-understanding what housing is and does is a key element in shaping better housing outcomes!

In a recent review of meanings of ‘housing’ Maclennan and Miao (2015) noted, from an economic perspective, that the term housing is both a verb/adverb and as a noun. Verb and (Adverb) definitions emphasise the *Activity* aspects of housing that have often been at the core of economic cases for housing. In order to produce the home or dwelling (a complex, durable structure), a range of economic activities is required, including creating, maintaining, exchanging, and using these structures. Housing must be, inter alia, designed, planned, financed, built, sold, rented, repaired, and improved. It is these activities, and consequent income and employment effects, that government policies target when they implement stabilization policies raising investment in the housing sector.

Exploring housing (the home, the dwelling) as a noun highlights how limited aggregate numbers are as guide to good policy. Housing is not a simple commodity, such as apples or oranges, but has multiple attributes or characteristics that also vary from property to property and place to place. This complexity is not dealt with simply by quality adjusting price statistics or mapping variety because, as is explained further in Paper 1, it also impacts the ways in which housing markets are likely to function as real systems. The key dimensions, or attributes, or characteristics, of dwellings considerations are that:

- *Housing is a physical entity that consists of a designed physical structure of connected and sheltered spaces and systems, constructed of materials and components (pipes, wires etc.) using capital (including developer’s ingenuity as well as equipment), materials, labour (from designers to bricklayers) and land or existing property.*
- *Houses, once built, are durable capital goods (and assets).*
- *Houses are, usually, locationally fixed.*
- *Purchasing housing (bought or rented) buys the consumer the accessibility of the dwelling relative to a range of metropolitan sites that the household will use and acquires the characteristics of the neighbourhood context.*

At any time, there is a marked variety of housing products within a metropolitan area, as houses differ in their characteristics or attributes. Individuals and households have different resource constraints but also quite different lifestyle and housing preferences. Households then select, as far as their resource constraints and market information allows, the best set of dwelling characteristics (house) that they combine with other goods and services (and their own time) to produce flows of different housing ‘services’. These housing attributes, that shape not only household wellbeing but their capabilities for social and economic activity, include:

- *A home provides privacy and space for living, impacted by housing size, type, design and quality (shelter and comfort).*
- *The design and quality of a dwelling impacts its thermal efficiency and influences the variety and cost of domestic energy systems used.*
- *The time and cost of connections that household members make to travel to connect the different, often widespread, locations at which they pursue*

different consumption and production activities (such as work, school, shopping, and leisure)

- *The immediate neighbourhood context of the private amenities, public services, physical environments, and social networks that revolve around the dwelling, and that now plays such a demonstrably important element in arguments for '10-15 minute neighbourhoods' as well as strong and weak connections with neighbours (including accessibility, social capital, and peer group effects)*
- *Home based electronic/internet connectivity, that is becoming an increasingly important housing attribute for both household consumption and production (working at home)*
- *Affordability, as paying for all these attributes to produce the required set of 'housing services' typically absorbs 20 to 30 percent of household incomes; housing costs have a major effect on residual incomes available to households to save and consume (household consumption and inequalities); for home - owners both the extent and form of their debt taken to purchase their home and the past and expected housing capital gain in their dwelling are all key household financial characteristics associated with the scale and stability of their net assets (influencing savings, housing asset accumulation, debt exposure effects)*
- *Housing tenure also matters as it influences who gains from price increases and reflects rights of security and control over the use of the dwelling (security, asset accumulation) a key economic system within the economy.*

From Attributes to Outcomes.

Economics research has been good at establishing the existence of the complexity of housing as a good. Hedonic house price studies have been used to identify the economic significance of different, distinctive attributes of housing (Malpezzi 2003). Typically, the physical characteristics of dwelling design, size, layout, and internal amenities that provide shelter have been at the forefront of housing policy assessments of housing needs.

However, regarding housing policy as primarily about providing adequate shelter is not enough. The key role of houses and households in place policies and the impacts of neighbourhoods on outcomes, for children and teenagers for instance, is now well recognized (see van Ham et al. 2012). The home is increasingly becoming a wired hub for household activities that spread well beyond the neighbourhood into the global. Faster and better internet, embedded in the physical structures of the home, will place the household in a home surrounded by a world of accessible information and the connectedness to global social and economic networks. Increasingly the home is becoming (much accelerated by household adjustments to the Covid-19 pandemic) a place to learn and work as well as rest and play.

Connections over time, as well as living space, matter for households in their housing choices. Time matters too. Memories play a key role in reshaping ‘house’ into ‘home’. Expectations about future house prices play a key role in housing decisions as homeownership has come to constitute the major source of both wealth and debt (mortgages) in many advanced economies.

Connectivity, as much as shelter style, size, and quality, should lie at the core of the definition of housing.

This definition highlights the ways in which housing activities and the outcomes for different housing attributes (distance from employment opportunities, degree of overcrowding, neighbourhood connection) can play into individual wellbeing but also metropolitan economic performance. At the same time, this flags up the likely multiple systemic connections from housing outcomes and the empirical challenges of capturing these multiple housing effects. The durable, complex nature of the commodity also has important implications for the likely real functioning of housing markets, and that they are unlikely to perform in the well-functioning ways beloved of commentators and officials who know much about mainstream economic theory but little about the real functioning of housing markets. These issues are pursued in Paper 2.

4. What Does Housing Policy Mean?

Mismatching Understandings and Problems.

A preliminary review of strategic housing issues in Canada (MacLennan et. al., 2022), following on from similar research for Australia (MacLennan et.al., 2021), highlights how system difficulties are moving towards housing crisis. This looming difficulty cannot be ignored but it also cannot be resolved by simply increasing fiscal resources for housing. Much more needs to be achieved, not least a potential doubling of annual housing output if national goals are to be achieved. But there is unlikely to be, in proportion to the problem scale, that much more public resource. The innovation, to do much more with not much more, lies in a significant, urgent rethinking of the governance of housing policies.

The ways in which governments (as well as lobbies, researchers, and commentators) define housing, conceptually ‘model’ housing systems, frame policy questions, and distribute policy autonomies (across government sectors and levels) appears to have contributed to problematic contemporary governance and outcomes. An improved understanding of what housing is and its role as one of the major integrative systems in the lives of Canadians, essentially a systems approach to both understanding housing and how it might be better governed are required. ‘Fractured’ housing policymaking and programme delivery does not lead to an effective housing ‘continuum’ nor best harness its outcomes to key social, economic, and environmental missions.

Typically, ‘housing policies’ have been interpreted as the programmes of spending, regulation and research controlled by Housing Ministries. In Canada, as elsewhere, the primary functions of Housing ministries have been aimed at the social, ‘merit’ good goals of providing adequate and affordable housing for poorer households. The 1970’s typically added concerns about rehabilitating older housing as support for public sector housing investment fell and non-profits began to develop wider roles. Overlaps with social security Departments have grown since the 1980’s with the switch from ‘dwelling’ to ‘person’ subsidies. Through the 1990’s addressing homelessness was added to housing portfolios, though not in all cases, reinforcing links to social security, health, and a range of programmes. By the start of the millennium a proliferation of schemes to boost home-ownership rates has overlapped housing interests with finance departments and regulatory authorities.

From the late 1990’s onwards, until the NHS introduction in 2016, Ministerial budgets to achieve that broadening range of tasks, shrank. Increasingly, with markets given enhanced roles in driving Canadian housing outcomes, it was government’s ‘non-expenditure’ market intervention instruments, mainly tax, prudential regulation, monetary policy and land use/planning regulations that shaped consumer and provider choices in owner and rental markets. In effect the majority of housing choices in Canada fall beyond the scope and autonomy of the Housing Ministry. So do many, but not all of the housing system consequences. Housing Ministries seem to be in an inevitably no win position with limited budgets but burgeoning ‘housing problems’ driven by systems and policies over which they have little apparent influence.

A further consequence has been that the wider impacts of housing outcomes on the environment and the economy have received relatively scant attention in overall policymaking. Within the economics, and finance oriented, and powerful, parts of governments there has generally been a narrow focus on the consequences of housing outcomes (primarily limited to shaping investment and multiplier effects in stabilising macro-economic downturns). Paper 2 explores how housing outcomes may shape local and metropolitan economic growth and change. Environmental impacts of housing outcomes have played little role in shaping housing policies (with new residential development in Canada having one of the ‘dirtiest’ carbon footprints in the advanced economies) and the ways in which better housing outcomes can ease the transition towards net zero carbon by 2040 are considered in Paper 3.

Looking over the OECD as a whole, with so many departments of governments using policy levers, and embracing policy aims, that involve housing effects, that outweigh housing spending programmes in scale and impact, it is remarkable that governments have given such scant attention to integrated action. Recent shifts of housing ministries, in a few countries, to ‘Infrastructure’ portfolios have improved some connections. Few countries have a Cabinet Sub-Committee or Minister responsible, for ‘housing system performance’ that brings together the array of policy levers and actions that impact not just social but economic and environmental outcomes too. Functioning systems and

governance systems have to be at the core of better housing policy thinking. This notion is explored in Paper 4.

At present housing policy, in Federal and Provincial Canada, remains ‘reductionist’ (‘non-systemic’) in thinking and seems to be cut down to scales, roles and conceptions that have carried over from the merit good-welfare emphasis of the pre-1990’s. In that ‘framework’ for housing thinking, policy goals were simplified; provision and allocations systems were assumed to work relatively effectively; the organisation of housing dimensions of policies within single (housing ministry) sectors of policymaking and spending were seen as unproblematic; and, critically, policies focussed debate on scales of inputs rather than the value of outcomes.

Housing policy expenditure resources, after the mid-1990’s, were reduced and regarded as essentially a redistributive issue (contrast, for example, the typical assessments of transport and housing infrastructure spending within budgetary allocation processes). Provinces, as noted above, laid claim to control of housing policy expenditures and programmes precisely because they were perceived, and pursued, as a social policy programme. Many of the ‘Fractures’ in housing policy at Federal levels were replicated, with variations, at sub-national scales.

These are tough, but hopefully, fair comments. If Canada is to make better housing progress, we have to ask, ‘Is all, or any, of the present housing policy paradigm relevant to the functioning social and economic systems and the challenges that face governments now?’ If the framings for housing and wider policies that emerged in the 1980’s were relevant and met with political beliefs and priorities at that time, are they still relevant?

5. Challenging Systems

Some commentators would argue that difficulties today reflect the accumulated difficulties driven by these prevailing policy settings; others, that priorities have changed and inclusion and zero carbon have progressed to top-line policy priorities almost entirely in this millennium; yet more that the world has changed. Regardless of whether changed ideas, shifted priorities or a different world matter most we can readily accept Sargut and McGrath’s (2014) observation that ‘Managing a business is fundamentally different from 30 years ago’. For governments, the business of housing is the effective governance of the housing system, so how has the world changed for delivering that role? How is it different?

Extraordinarily Difficult Times

Since the GFC of 2008, with its lasting effects, there has been a sequence of global shocks, and peaking secular trends, that have major and uncertain implications for citizens, communities, investors, businesses, and governments. These include, the strengthening of long trends, such as advanced economy population ageing and the advance towards critical global warming levels and the imperative for zero carbon policy actions now, comingling with the shocks of Covid-19, the sharp switch from Globalisation to Slowbalisation, and the shocking Ukraine War. These are individually

world changing events and processes. At the same time there are strands of optimism with waves of technological progress in artificial intelligence, genetic engineering, and energy sciences.

These changes require persistent and high quality government for a nation to successfully navigate from year to year, let alone election to election. They are difficult times in which both to resource major policy changes and to rethink their governance. However, the case for rethinking housing policy governance in Canada, briefly outlined above, that implies an almost ‘edge of chaos’ moment for the Canadian housing system is, despite the difficulties, imperative.

But Time for a Change!

These arguments can be illustrated by the ways in which major roles of housing in the economy are managed. Housing is, and was, the largest component of consumer expenditure in Canada. It is the most widely held asset of households and acquiring these home-ownership assets has meant that mortgages have become the largest component of household debt. Housing is big in the economic systems of households, cities, provinces, and the nation but what are the headline housing market outcomes. The burden of housing payments is at record levels in all sectors, and regions, of Canada as real house price increases and rents have typically outstripped income growth. The home-ownership ratio, and especially for the under 40’s, is falling as home-ownership appears to have evolved from a savings to a speculation system. The ratio of household debt to GDP is at a record level too. And Canada is close to the top of international indicators of concern on these housing system issues.

Looking at these economic outcomes related to housing it is clear that outcomes are more than social and more than local. Whilst housing provision is, by its nature, ineluctably local as it is grounded street by street and lot by lot, its effects or outcomes are inevitably local, with a metropolitan, regional, national, and even global reach. Housing choices usually impact well beyond the household and the neighbourhood.

Economic consequences of housing outcomes are not limited to the local. Imbalanced housing markets impair inter-urban labour mobility. What happens in market instabilities and pressures in Vancouver and Toronto does not stay in Vancouver and Toronto. Since the middle of the last decade pressured places in pressured provinces appear to be inducing pressure spillovers into second-tier cities, towns, and rural areas.

The geography of the lives of many ordinary Canadians have changed in ways that mean local and provincial housing markets are more open, and they display more connected system wide effects through the sectoral and spatial subsystems of the national housing market. Flows of foreign capital and labour connect, and ‘open’ metropolitan markets in ways unimagined even a quarter century ago.

For emphasis, the greenhouse gas effects, produced Canadian home by home and street by street, arising from poorly insulated and fossil fuel dependent homes, and sprawling patterns of residential development, have truly global consequences. The recursive effects from consequent global warming damages Canadian homes, and raises their insurance costs from coast to coast, via hurricanes, floods, forest fires and storm surges. Multi-sector, multi-level housing effects and their consequences.

Housing systems in different places and provinces have idiosyncratic features, but they are driven by a mix of global, national, and more local drivers and the outcomes of housing systems have consequences in a much wider system of sub-systems. Housing concerns must go well beyond meeting localised social merit good needs. Embracing social, economic, and environmental outcomes and with complex non-local geographies of impact, the policy concern has to refocus on how housing (activities and attribute outcomes), for all households, is essential economic, social and environmental infrastructure that has to be locally produced within a national system of diverse local sub-systems. Housing, viewed in that broader sense, is a policy concern for individuals, communities and for municipal, metropolitan, provincial, and federal governments. We need to ask not just what Canada can do for our housing, but what our housing does for Canadians.

Three elements of rethinking how ‘housing business’ should be done differently appear to be important. First, the understanding of housing as a complex system is required. Second, the recognition that the housing system produces multiple significant outcomes impacting a range of key government ‘missions’ that go well beyond traditional ‘housing needs’ concerns. Third, the effective governance of the housing system to best achieve these outcomes requires recognition of the importance of all orders of government, not least the Federal Government that has to have governance and accountability systems for the ‘housing system’. Whilst the adequacy and affordability of decent homes for poorer Canadians has to remain a core concern it can no longer dominate housing policy framing and governance and the policy focus has to be the effective management of the overall housing system. Understanding complex system functioning and effective complex system governance now have to lie at the core of housing policies for all governments in Canada.

6. From Managing a Small Silo to Governing a Complex System: Modern Housing Policy

More than Saying System

The need to think of housing as a system is not a new thought. Indeed, the more governments have recognised ‘wicked issues’ the more frequently ‘systems thinking’ is cited in policy debate. Yet, few commentators, agencies or jurisdictions have gone beyond that insight to an exploration of ideas with a view to evolving housing governance. Some other areas of government activity have shown interest in systems thinking. For instance, environmental policies often have advocates and bureaucrats with

backgrounds in ecological thinking that typically involves a complex systems view of life and policy. Systems thinking, of a more mechanical kind, and with assumptions that lead to a focus on self-regulating and well-behaved systems lies at the heart of economic theory but ecological/evolutionary systems thinking is not widely used, although it might be appropriate, in economic policy making for real, complex systems. Central agencies within governments, such as the UK Cabinet Office, have run programme of research and continuing professional development to familiarise staff with systems thinking.

Yet politics has yet to get to grips with the need for a systems approach. In November 2015 I shared a platform in Melbourne with the then Australian Treasurer, Scott Morrison who gave an informed speech about the problems of housing affordability in Australia. He concluded with the words ‘We can’t keep doing the business of housing as usual’. When he became Prime Minister that was precisely what he did, until voters, significantly unimpressed by the environmental and housing system performance of his government, removed him from office in 2022.

Systems? What Do we Mean?

Systems are defined and discussed in more detail in Papers 2 to 4. The social science relevance of systems thinking was demonstrated in von Bertalanffy (1972), and in environmental economics by Georgescu-Roegen (1971) and more recently Gibb and Marsh (2019) have explored systems ideas in the housing context. The essence of the systems idea is that actions at one system node create effects at a range of other connected nodes through flows of energy, ideas, goods, people, and capital. There may then be flow-on effects to a wider range of nodes, or to less directly connected sub-systems. And there may be feedback or recursive effects. In some instances, the feedback effects restore activities at the initial change node to a new position of rest, balance, or equilibrium. This is a self-organising (or homeostatic) system (and equilibrium economics models fall into this category).

Other systems may behave differently and once disturbed from their initial patterns of connection and flow may change in non-linear and dynamic fashion. Some become unpredictable and chaotic. House price booms, sudden neighbourhood changes such as gentrification and ‘white flight, the vacancy rates in difficult to let housing, trajectories from poor rental housing to homelessness, and land speculations are all evidenced illustrations of how non-linear and disequilibrium phases of change may prevail in supposedly ‘well-behaved’ (homeostatic) housing systems. Systems may also have immanent, or evolutionary, properties, so that system nodes and flows change their operational experiences. For, instance workplaces where ‘learning by doing’ is important, or cities where housing pressures create new ways and locations of living.

Most systems are complicated, so that, in effect there are many connected moving parts. A Swiss watch is a complicated mechanical system. Complex systems are more than complicated, once disturbed their behaviour cannot always be predicted from the initial

conditions of the system. Governments, traditionally structured in silos, often have a ‘complicated’ perception of policy but appear to have difficulty in collaboratively governing the realities comprising complex systems. The evidence reviewed in Paper 2 illustrates how Canadian housing is best understood a complex system of sectoral and spatial sub-systems.

Complex Systems and Wicked Problems

As noted above governments are increasingly interested in complex systems as they have recognised what are labelled as ‘wicked problems.’ The resolution of these problems usually involves the outcomes of not just a single organisation or government silo but the systemic interactions of the outcomes of multiple over-lapping silos. Their complex causes require a holistic, whole-of-government, or systemic policy response. Solutions involve multiple sectors and levels of government coordinating strategies and delivery plans to capture the essential synergies between different elements of action programmes.

Although widely used, the notion of ‘wicked problem’ is rarely precisely defined nor conceptually clear but it is a useful rhetorical device to describe multiple difficulties that are inter-related and have complex causes. In their seminal contribution on ‘wicked problems’, Rittel and Webber (1973) recognised that ordinary or ‘tame’ problems are relatively simple and familiar issues for which successful policy actions are known and can be implemented within existing frameworks of government. Problems and solutions are clearly, and often consensually, defined. Actions can have clear targets, and programmes have expected durations and are readily evaluated. ‘Tame’ problems are often best resolved by special sectoral interests, or silos, of analysis and delivery.

They argue that wicked problems have a different character. Often there is, say over sectoral government departments or different orders of government, no definitive formulation of the problem. This heightens the need for really effective coordination of different government actions so that there is alignment in the use of fiscal resources and a sense of cohesion in the purposes of governments.

In a recent review of the meaning and use of the ‘wicked problems’ approach, Lönngren and van Poeck (2021) note that the Weber and Rittel characterisation of ‘tame’ and ‘wicked’ problems has been critiqued as over-stressing the differences between tame and wicked problems and science versus social science issues (Turnbull and Hoppe, 2019) and for been analytically imprecise and casually overused (Peters and Tarpey, 2019; Alford and Head 2017) and rhetorically used to support particular political agendas.

These ‘wicked problems’, often as a result of past policy neglect and failures, according to Lonngren and van Poeck (2021) typically require substantial inputs of government spending or new tax and regulation policies. Actions for change may be difficult to design and deliver within the period of single Parliaments. Pensions, social and health care for the elderly, environmental sustainability, major infrastructure renewal, appropriate defence expenditures for a more troubled world, and affordable housing are all areas of

policy where democracies appear to have difficulties in delivering the changes required to address the systems or wicked problems. In part, this reflects an unwillingness to name the problem. These, complex policy challenges, are requiring governments to rethink the ends and means of policies and to confront policy-making trade-offs they have not previously made or engaged with. New missions, new metrics and new messages are emerging in some areas of public policy, and they may now be urgently needed in housing system policies. These issues are explored further in Paper 4.

Systems Thinking and Housing Policies

The last two decades have, arguably, seen research understandings of ‘housing’ move from constituting, primarily, a ‘merit good’ poverty problem to a multi-faceted society and economy-wide wicked problem. Households implicitly understand that too as there is a strong case to be made that a rising proportion of households are facing increasing complexities in how they do their ‘housing business’ of in making housing choices and paying for them. The social and economic lives of individuals and households and their now longer life cycle trajectories have become more complex. Politicians, in dealing with the range of housing related issues that arise in their constituency meetings, understand this issue too. The markets and systems in which people and capital are allocated to homes have become more complex. The goals and mechanisms of governance have new dimensions of complexity too.

Policy thinking within bureaucracies has not always dealt with these changes and new complexities well. For instance, home-ownership systems are implicitly assumed to behave as they did half a century ago, and the mantra of the ‘well-functioning’ market system’ has survived in policy thinking because outcome failures are seen not as market failures but policy and planning failures. Market failures and policy fractures interact to shape a sometimes dysfunctional housing system. Canada, like the other advanced economies, will continue to rely on a predominantly market system for housing. The imperatives are to address the market failures and create efficient markets and have a national housing market strategy that overcomes the policy ‘fractures’ between policy silos and different orders of government.

A clear sign of failed policy in complex systems is when recurrent actions fail to resolve a constantly re-emerging difficulty (Einstein’s definition of ‘madness’ is helpful here!). Housing policies in this millennium display this failure in their two obvious policy expenditure domains. The first is that home-ownership interventions to boost first-owner purchase rates do so in the short term but raise prices and entry hurdles for the next cohorts of potential owners. The second is that marginal annual additions to new affordable and non-profit housing output will somehow stem the rising burdens of low income renters and diminish homelessness. Decades of research in the advanced economies of the Anglosphere confirm the recurrent failure of these policy actions. Outcome, and there are other examples, confirm that a complex system is in play, and that the policy interventions have sometimes made outcomes worse. Housing policies may have been sticking plaster when what may be needed is systems oriented reform.

Sticking plaster policies will not work in housing systems that are becoming more connected and complex, regardless of the causes of that complexity. Housing systems are changing and the outcomes becoming more problematic. And a systems perspective on policy alerts us to the likelihood that they will change again in the decades ahead. This is critical, because unless an evolving systems perspective is adopted in housing thinking and strategizing it becomes harder to make sense of the present and understand the future. We have to recognise that unless a better understanding of what the housing system is and does then ‘the degree of complexity may lie beyond our cognitive limits’ and with unrecognised system changes ‘the past behaviour of a complex system may not predict its future behaviour.’ The policy wisdoms of the post 1980’s housing consensus saw housing ministries around the OECD with reduced budgets that then, to meet delivery targets, squeezed residual budgets on strategic thinking, information and research staff and built no coherent housing knowledge systems. Although the NHS has reversed some of this decline there may be a limited capability outside of the largest provinces and metropolitan areas to quickly develop housing systems thinking.

Canadian governments, from top-down to bottom-up housing governance entities, have, however, to begin to change their meanings of and missions for housing and better housing outcomes. Jones (2021) says systems thinking is ‘The framework for seeing interconnections *and* a discipline for seeing and understanding the whole system from structures to root causes’, and he could have added, framing the more effective actions to achieve lasting change. It helps to identify key leverage points for actions and so much of social and economic policy in Canada, arguably, fails to see housing as a key leverage point and system for so many policy actions. Policymakers do not think of home as, literally, the key integration point and locus of social and economic life and policy effects. They should. Charity may well begin at home, so also does productivity, and sustainability.

Jones also tells us that policymakers need to evolve and learn theories for change, not just of change. That will require new integrated thinking across silos, governments, disciplines, and stakeholders. It leans to collaborative, partnership models of governance. Importantly in moving towards new housing governance CMHC is a locus of nationwide housing system expertise, probably unmatched in the OECD, which can not only better frame the ‘housing system’ but also deliver and advise on new partnership approaches to governance. Within the Federal departments and agencies does it have the capacity, defined by its persistent housing expertise, to become the Federal systems catalyst and integrator in a way that a traditional Housing Ministry would find it difficult to do?

7. Moving Forward

Governments have to start the processes of reconfiguring policy actions to engage with current housing systems and problems by recognising that they are dealing with a complex system. Housing policies, broadly defined, have to be brought even further in from the cold, and a focus on the core problems emphasised.

Good housing policies require a clear understanding of desired programme outcomes, existing problems and of the processes and policies that produce them, and how housing system functioning produces multiple outcomes. To deliver that housing policy approach it also requires policy autonomies, cultures, evidence, regulations, taxes, and spending, as well as strategies and delivery systems, that are flexible and mutually supportive in reacting to them. In reshaping future housing policy governance, the imperative is to develop both a better understood housing system functioning and outcomes framework and also a system of policy management that might best address adverse wicked outcomes prevailing in and reinforced by housing systems.

Until such a systems perspective is embedded at Federal level there remains the danger that the unintended housing consequences of the major ‘settings’ of a wide range of, unintegrated, policy actions, across multiple policy sectors and orders of government may now be shaping adverse housing outcomes. And they are doing so considerably faster than conventionally defined Housing Ministries, and National Housing Strategies, can deal with them. If these circumstances continue then substantially resourced ‘housing’ strategies, including the NHS, may be seen to fail and to have served only as a (welcome) palliative for some but no wider solution for all.

These are, for an introduction, strong statements of the desired, general direction of change required for Canadian housing policies. In the second and third Papers of this series literature reviews and discussions with policymakers are used to explore these ideas. They consider two dimensions of housing outcomes and their recursive effects, namely housing effects on metropolitan/local economic outcomes and the effects of housing outcomes on meeting net zero carbon targets. Similar reviews could be usefully undertaken regarding housing and social outcomes, housing interactions with financial system, and housing interactions with the fiscal systems of Canadian governments. In the final Paper, recognising the absence of these wider reviews, suggestions are made to shift to a better governance of the Canadian housing system.

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