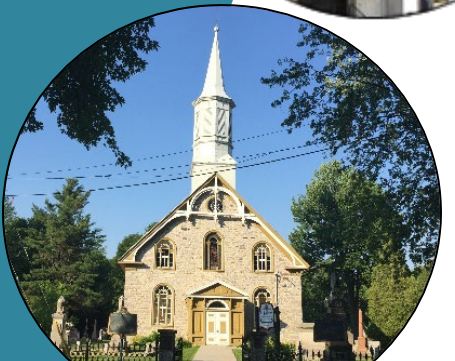
Making Reuse the New Normal – Accelerating the Reuse and Retrofit of Canada's Built Environment

Final Report



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Executive Summary

Canada became a signatory to the COP 21 Paris Agreement in 2015, committing to a 30 per cent reduction of greenhouse gases (GHGs) from 2005 levels by 2030, and a goal of net zero carbon emissions by 2050. The construction and building operation sector is widely understood to be Canada's largest single source of energy use and emissions generating nearly half of its GHGs. Rapidly accelerating building reuse offers one of the quickest ways to help achieve Canada's climate change goals. Studies have established that it takes between 10-80 years for a new "green" building to overcome the carbon impacts of its construction. Achieving Canada's climate change goals, then, will require capitalizing on the embodied energy and avoided impact possible through building reuse.

Yet building reuse is not the norm. Canada's real estate development industry and marketplace – from municipal planning, to design and construction industries, to property buyers – is geared towards new construction, which carries a heavier carbon and environmental impact than building reuse. The construction of new buildings offers the path of least resistance, and viable older buildings are needlessly discarded in this pursuit – including heritage buildings.

This discussion paper seeks to set out the key parts of the system which are holding back a potentially transformative culture of building reuse. These findings and assumptions will then be tested with a broad range of stakeholders at a Building Reuse Summit, and an action plan to address these barriers, developed. The ultimate goal is to make reuse the new normal through systemic change – key changes in regulation, creation of new financial instruments, and culture change – shifting property ownership/development culture, heritage sector behaviour, and public attitudes/marketplace bias towards new construction.

Accordingly, based on past research and interviews with key players, this discussion paper's menu of recommended measures or systemic changes that would remove barriers to reuse or put incentives in place to level the playing field was identified based on a broad stakeholder engagement and literature review process. This work sets the table for a Building Reuse Summit(s) of key stakeholders designed to arrive at a definitive shortlist endorsed and championed by industry leaders, and to help set the public policy agenda for Canada's heritage rehabilitation sector. In order to develop a targeted action plan, key questions will include: (1) which measures would have the greatest impact; (2) which measures are low hanging fruit; (3) who are the key decision makers; and (4) what work would be required to achieve the most beneficial changes to the system.

Barriers for Reuse – Summary of Recommendations

	Barriers	Recommendations
1.0	**Cultural Barriers – Attitudes and Practice Privilege "The New"**	
1.1	**Real Estate and Consumer Marketplace Perpetuates Premature Building Obsolescence**	• KEY - Remove barriers to a culture of reuse in the tax system and put incentives in place to level the playing field with new construction for consumers. • KEY - Governments at all levels should give preferential spacing consideration to existing buildings of at least 40 years old. • Require that new government-funded buildings will only be constructed when necessary, using the best quality materials possible, and ensuring maximum adaptability for future use. • Set standards for building life expectancy, material quality, and adaptability.
1.2	**Industry Culture is Biased to New Construction**	• KEY - Put transformative incentives in place – like Income Tax Credits for Heritage Rehabilitation and Heritage Property Tax Relief – that rapidly shift the market towards reuse. • KEY - Put regulatory mechanisms in place that reflect circular economy principles, placing value on the embodied emissions of existing buildings and avoided environmental impact of their retained materials.
2.0	**Physical or Technical Barriers**	
2.1	**The Risk of Unexpected Challenges and Costs**	• Jurisdictions should facilitate building reuse by providing early expert advice to troubleshoot issues and spotlight opportunities. • Create more certainty for reuse projects by specifying building construction types and flagging potential issues in advance. • KEY - Develop building profile and case study tools to help reduce risk and bring more developers into the market.
2.2.1	**Rehabilitation Costs Higher than New Construction – Inflated by Deferred Maintenance**	• KEY - Recalibrate property taxes so that vacant and fully used buildings are taxed at same rate. • Restructure capital gains recapture to make demolition by neglect less economically attractive and combine with sliding scale upwards for vacant building fees to motivate.

		• KEY - Introduce income tax credits or property tax relief for maintenance/rehab work on character/heritage buildings.
2.2.2	**Cost and Limited Availability of Skilled Heritage Workers/ Professionals**	• Require that public heritage rehab projects contract professionals and workers with heritage "certification." • Launch a pan-Canadian study to identify the gaps in building reuse/heritage skills and create a job training program that addresses these shortages.
2.2.3	**Higher Heritage Materials Costs & Insignificant Cost of Demolition and Disposal**	• Require owners/developers to demonstrate that demolition is unavoidable. • Raise demolition permit and landfill fees, and require deconstruction when demolition is deemed necessary.
2.3	**Older Building Size/Layout and Site Factors**	• Create regulatory instruments and incentives that restrict urban sprawl and make smaller, challenging old buildings attractive to commercial and residential owners/developers. • Create special concessions and flexibility to assist with site logistics for adaptive reuse projects.
2.4	**Remediation of Toxic Substances**	• Provincial-territorial governments should create funding mechanisms for hazardous substance remediation and thereby accelerate building reuse.
3.0	**Regulatory Barriers**	
3.1	**Competing Government Priorities Create Negative Heritage Outcomes**	• Actively monitor and resolve negative interactions between building reuse goals and other civic priorities and regulations. • Identify barriers to reuse in each municipality and develop strategies to mitigate, including streamlining municipal processes. • Promote innovative municipal tools and incentives to encourage retention of character/heritage properties.
3.2	**Future Development Potential – Zoning and Other Planning Regulation Thwarts Reuse and Drives Neglect**	• KEY - Institute zoning practices and updates that encourage retention of heritage and character commercial and residential buildings. • Cultivate consistency and fairness from municipal councils around development decisions. • Consider transfer of development rights processes in areas where beneficial.

		• KEY - Enable ways to increase density in character neighbourhoods and main streets while retaining existing buildings (e.g. "smart" or "gentle" density)
3.3	**Municipal Process – Longer Approval Process for Heritage Rehab, Lack of Regulatory Clarity**	• Institute clear and streamlined application processes to facilitate more rehabilitation projects. • Create special municipal offices to unify processes for adaptive reuse projects. • KEY - Accelerate processing times for heritage/character building reuse by prioritizing these projects and ensuring their processing times are competitive with other project types.
3.4	**Municipal Heritage Committees and Advocacy Groups – Clearer Goals and Pragmatic Posture**	• KEY - Clearer, stable heritage process In place, including pro-active initiatives to inventory places of heritage/character potential. • More dialogue, training, and consensus building efforts for owners, advisory bodies, professionals, and advocacy groups around evaluating rehabilitation proposals for heritage/character properties.
3.5	**Code Compliance Difficulties with Older Buildings**	• KEY - Develop a subcode for existing buildings, and ensure it is sensitive to the unique attributes of heritage buildings. • KEY - Strengthen the use of outcome-based or performance-based code alternatives and ensure professionals/owners are empowered to consider them, and inspectors trained and motivated to support them. • Create and promote a body of case studies in each jurisdiction on ways of meeting code for given various building reuse challenges.
4.0	**Economic & Marketplace Barriers**	
4.1	**Rate of Return - Low or Delayed Return on Investment (ROI)**	• KEY - Create high-impact financial incentives – such as Income Tax Credits – for building reuse projects that boost ROI, preferably those with impact early in the project.
4.2	**Financing – Difficulty Financing Rehab vs. New Construction Projects**	• KEY - Encourage CMHC, a federal new funding program, or one of the mainstream banks, to create special loan program directed at heritage rehabilitation projects. • Create innovative sources of financing such as revolving loan funds which can provide gap or much needed financing for smaller development or reuse projects.
4.3.1	**Tax Treatment – Property Tax – Rising Land Value and**	• KEY - Evaluate the negative interactions between property assessments and character/ heritage buildings at a pan-Canadian level and implement solutions.

	Property Assessment Drives Demolition	
4.3.2	**Tax Treatment – Property Tax – Significant Repair Increases Valuation**	• Develop and implement a national strategy to address the detrimental impacts property tax assessment can have on building reuse, including property tax relief measures.
4.3.3	**Tax Treatment – Income Tax – Unclear Rehab Expensability**	• KEY - Provide an amendment codifying the expensability of restoration expenses or create a new accelerated CCA class of eligible restoration costs.
4.3.4	**Income Tax – Terminal Losses (CCA and Depreciation)**	• KEY - Revise and address terminal loss provisions to ensure not they are encouraging premature demolition.
4.3.5	**GST/HST – Existing Rebates Privilege New Construction and Demolition**	• Create a rebate equal to the HST/GST/PST on a class of heritage building materials for the rehabilitation and restoration of heritage properties.

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I. Introduction

This Discussion Paper is the first phase in a larger initiative designed to help drive a transformative shift in policy and practice in order to capitalize on the essential role that reuse of existing, older and heritage buildings can play in meeting Canada's climate targets.

Reusing and upgrading existing buildings – as opposed to their demolition and replacement with new buildings, even energy efficient "green" ones – would have a substantial immediate and long-term impact in achieving carbon emission reduction targets that are an essential response to the climate crisis. Capitalizing on the embodied energy of existing buildings and avoiding the carbon emissions and other environmental impacts arising from the material fabrication and construction of new buildings should be the norm. Yet the potential to capitalize on this opportunity is hindered by systemic and cultural barriers - physical, regulatory, economic, and attitudinal – and the needless demolition of existing buildings continues apace.

Based on current interviews, international research findings, and recent insights from National Trust conferences and initiatives focused on the conservation of heritage building, this discussion paper explores why building reuse is still not happening in sufficient volume in the Canadian context – seeking to provide a comprehensive picture of the key barriers that stand in the way of older/heritage buildings playing a key role in climate emergency action. It also identifies a list of priority actions, which, if implemented, would help address the key barriers and put heritage-led development on a level playing field with new construction.

This document concludes with a proposed agenda and attendee list for a Building Reuse Summit(s) of key stakeholders in building reuse and heritage property development including: (1) developers, property owners, planners, architects, financiers, and environmental leaders; (2) senior officials from federal, provincial and municipal governments as well as strategic industry and professional associations; and (3) key sector leaders and visionaries from NGOs, advocacy groups, and academia.

The goal of the Building Reuse Summit(s) will be to test the priority actions identified in this discussion paper and arrive at a definitive shortlist of potentially transformative changes to the system, endorsed and championed by industry leaders. The outcomes will help set the public policy agenda for the heritage and building reuse sector.

II. The Opportunity

1. Accelerated Building Reuse as Climate Emergency Response

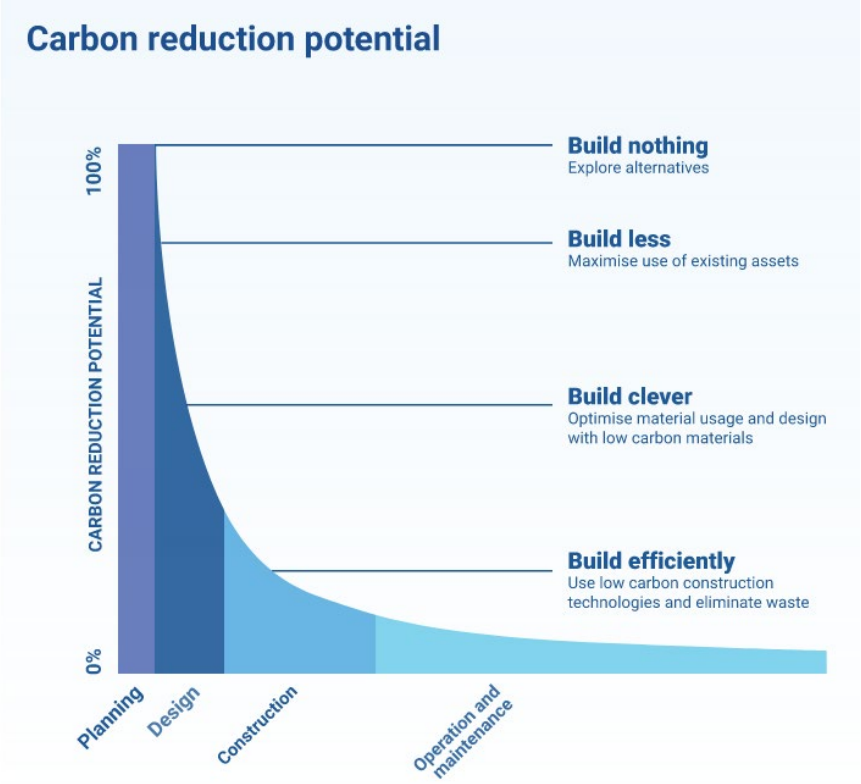
Canada became a signatory to the COP 21 Paris Agreement in 2015, committing to a 30 per cent reduction of greenhouse gases (GHGs) from 2005 levels by 2030, and a goal of net zero carbon emissions by 2050. The construction and building operation sector are widely understood to be Canada's largest single source of energy use and emissions generating nearly half of GHGs. The Intergovernmental Panel on Climate Change (IPCC) notes that, "over the whole building stock, the largest portion of carbon savings by 2030 is in retrofitting existing buildings" (B. Metz, et al). At the same time, construction and demolition activities generate about 35 per cent of Canada's landfill waste. It is clear there is an immediate need to focus on sustainable reuse, rehabilitation and retrofitting – indefinitely extending the lifecycle of the built environment that already exists.

While recent circular economy and cradle-to-grave construction literature typically focus on recalibrating new construction paradigms, a focus on building reuse is demonstrably more important and a more efficient path to achieving global climate goals. Our collective understanding of the impact building reuse can have has deepened in recent decades. Beginning in the late 1990s, studies on embodied energy said it would take 30 years for a new "green" building to overcome the carbon impact of its construction – from the mining and processing of natural resources, to manufacturing, transport, and product delivery. Contemporary research shows it can take even longer: the National Trust for Historic Preservation's 2012 report *The Greenest Building: Quantifying the Environmental Value of Building Reuse* found that it takes between 10-80 years for a new "green" building to overcome the carbon impacts of its construction. New research confirms these findings, showing that demolishing a historic building and replacing it with a new building can result in greater carbon emissions by 2050 – if we reuse what is already here we can avoid substantial carbon emissions.

Even before a new building begins operation, its construction involves intensive energy and resource use at every point of the value chain: from the extraction of raw materials and their processing and manufacturing into building components, to the distribution of materials and their construction on site. With all of these energy and material inputs, it will take decades before most new buildings pay back their carbon debt by saving more emissions than they incurred in their creation – and when an existing building is demolished, all the embodied energy, carbon, and avoided impact in its structure is lost. Retaining that embodied energy intact in existing buildings, and retrofitting them to meet high-performance standards, is now widely recognized as the most efficient strategy for reducing near- and mid-term carbon emissions and limiting climate disruption.

The recent Historic England study – *There's No Place Like Old Homes: Re-use and Recycle to Reduce Carbon* - underscores these insights: "In the past there was a debate about whether it was better for the climate to demolish an old energy-hungry building (often a debatable claim) and construction of a new building. This is now widely considered a serious mistake because of the amounts of carbon emitted during the construction of new buildings. The UK's Royal Institute of Chartered Surveyors (RICS)

estimates that 35% of the lifecycle carbon from a typical office development is emitted before the building is even opened. It says the figure for residential buildings is 51%"(8).



This diagram shows that building operations is not the place for the biggest environmental gains. Reuse also creates a bigger immediate impact in achieving carbon reduction targets. Source: World Green Building Council. *Bringing Embodied Carbon Upfront* (2019).

In Canada, the need to account for embodied energy in building reuse policy and decisions were key recommendations in the 2018 House of Commons Standing Committee on Environment and Sustainable Development report, *Better Buildings for a Low-Carbon Future*:

> "Recommendation 8 - The Committee recommends that the federal government create or adopt a measurement tool to take into account the net carbon emissions avoided through adaptive reuse of existing buildings.
>
> Recommendation 9 - The Committee recommends that, as the federal government takes steps to recognize the value of embedded carbon in existing construction, it should take into account the unique characteristics of heritage buildings and the public interest in their protection"(4).

The most carbon efficient answer, then, and the one with the most avoided environmental impact, is to leave buildings intact and gain extra density in urban areas through infill and additions. For instance, one study found that retrofitting, rather than demolishing and replacing, just 1% of the City of Portland's office buildings and single family homes over the next ten years would help to meet 15% of their county's total CO2 reduction targets over the next decade (NTHP Greenest Building 84). This environmental benefit is compounded by the fact that older buildings are more "inherently sustainable"

than contemporary buildings, given their traditional construction techniques, durable materials, and repairable components (MTBA 7).

2. The Scale and Urgency of the Building Reuse Opportunity

The scale of the opportunity for capitalizing on the environmental benefits of building reuse and retrofitting is vast, with an estimated 159,707 pre-1970 commercial/industrial buildings in Canada (or 33% of the total stock of 482,000), and an estimated 2,851,000 pre-1960 residential units (or 19% of the total stock of 15,029,000). In addition, there are some 25,000 faith buildings in Canada (the vast majority of them older), and thousands of institutional and government properties. Within this subset of older buildings, heritage places make up a significant group: there are currently 23,035 recognized heritage places in Canada, about 30,000 properties in regulated historic areas, and an estimated 300,000 more on inventories of potential heritage properties.[i]

There are major gaps in the data available about older buildings in Canada and the adaptive reuse industry – for example, numbers of heritage designations and potential designations, rates of loss[ii], as well as the economic impact of the sector including the jobs it generates - and these are currently being explored by Parks Canada and other partners.

Particularly problematic is the fact that Canada does not collect adequate data on construction and demolition waste. If it did, we could gain a stronger sense of the scale of natural resources (including precious old growth timber) that are being sent to landfill. An American case study on material flows demonstrated how retaining and rehabilitating buildings reduces overall resource demand. It found that three modes of construction consumed materials and produced waste at vastly different scales when comparing construction treatments on homes of the same size: rehabilitation produced 47.3 tons of waste, new suburban construction consumed materials and produced waste equaling 182.4 tons, and demolition and new infill consumed materials and produced waste equaling 351.8 tons (Young 575). This is a critical and under-examined problem.

In the absence of comprehensive Canadian data, we can still get a sense of the urgency of the building reuse problem by looking at the striking building loss rates in certain jurisdictions. In Vancouver, between 1985 and 2014 there were 23,485 demolitions out of 68,000 detached homes, representing a 35.2% loss rate, and experts anticipate a quarter of the remaining houses (approx. 11,000) will be demolished by 2030. On the other coast, downtown Halifax has been experiencing a development boom that has seen 43 of 104 non-registered heritage buildings demolished since 2009. The core areas of the City of Edmonton, meanwhile, now reflect the aggressive demolition practices unleashed in recent decades. A 2011 study found that only 9% of downtown Edmonton is pre-1960 buildings, whereas the adjoining residential neighbourhood of Oliver retains a mere 1%. Most other historic neighbourhoods in the city exhibit modest retention rates of between 12% and 30% of their pre-1960 buildings (Edmonton Historic Board 6). These limited studies offer glimpses of a wider hidden problem: the systemic devaluation of Canada's existing buildings.

3. Research Scope and Relationship to Existing Literature

Despite the opportunity described above, reuse is still not entrenched as the norm in Canada with the construction of new buildings offering the path of least resistance for the real estate development industry and homeowners.

The field of heritage conservation is a useful source of information about efforts to understand barriers and "change the system" to encourage greater retention and reuse. To date, much of the research work on the financial gap between rehabilitation and new construction has focused on high-level insights: identifying such disincentives as unpredictable bottom lines and timelines in reuse projects; the cost of building code compliance and non-standard technical and design challenges; or the cost of special materials and skilled workers. These understandings have meant that the focus in many studies has been on design of financial incentives to close the financial gap between heritage rehabilitation and new construction.[iii] Municipal and provincial-territorial governments, for their part, have periodically done limited scoping exercises to provide context for potential policy decisions.[iv] Taken together, these examinations of the building reuse problem typically seek to identify discrete tipping points to encourage building reuse, through incentives or policy tweaks, rather than delving into broader issues like the long-term viability of the current construction ethos and marketplace in light of new societal challenges like the climate emergency.

A review of the existing literature shows that there has been limited work in Canada examining the conventional property development model (process, financing, etc.) from the perspective of the adaptive reuse proponent.[v] Indeed internationally, there has been limited research or fact-finding activities which draw on significant direct engagement with property owners and developers, seeking to understand their motivations and constraints; most available studies rely on insights on the industry filtered through practitioners, professionals, and policy makers.[vi] Also largely under-examined is the role culture plays in development, planning, and the property marketplace: for example the culturally conditioned consumer preference for "the new" with its signals of progress, or the erosion of a culture of stewardship and maintenance.[vii]

In light of these methodological gaps, there is a need for a detailed understanding of how the present real estate development system and marketplace continues to privilege and perpetuate the demolition and new construction paradigm, including via barriers like perverse hidden incentives or market distortions. It is impossible to design effective policy measures and meaningful interventions to accelerate reuse if these barriers are not fully understood. A small yet significant body of work over the past 15 years has examined these challenges standing in the way of heritage rehabilitation, and more recently that research has begun to look more pointedly at the individual systemic barriers to building reuse.[viii] Academic research on the topic of adaptive reuse, much of it emerging from Europe, has focused on decisions around potential investments in upgrading public housing, but nevertheless provides keen insights. Taken together, the generally accepted barriers to reuse identified in these studies can be categorized as follows, and will be used as the basis for organizing this discussion paper:

- Physical or technical barriers – such as building condition unknowns, or labour availability and material costs;
- Regulatory barriers – such as code compliance, property up-zoning, or process timelines;
- Economic barriers – such a rate of return, financing challenges, or tax treatment; and,
- Cultural barriers – such as construction industry practice and the culture of obsolescence.

To better understand these barriers, the focus of this discussion paper has been kept broad encompassing urban and rural contexts, areas with high or low development pressure, a range of ownership types from institutional to commercial and owner-occupied residential, and buildings on a spectrum of construction vintages and special significance – from heritage designated properties, to character structures and those merely older (generally, over 50 years of age). The ultimate goal of this discussion paper and subsequent Building Reuse Summit is a multi-pronged approach to make building reuse the new normal through systemic change – for instance, key changes in land use planning regimes and project financing - and culture change, involving a shift in property ownership and development industry attitudes, as well as marketplace bias away from new construction.

III. Barriers to Reuse: Background, Potential Solutions, and Recommendations

Introduction: Understanding Real Estate Economics and Owner Motivations

The focus of this discussion paper, as mentioned above, has been kept broad intentionally to generate a wide snapshot of the challenges facing the reuse of Canada's older buildings and heritage places. These encompass a wide-variety of ownership circumstances and property types: institutional, income-producing or owner-occupied commercial or residential buildings, heritage designated or older buildings (e.g. 50 years and up) and character homes. It also explores a wide-range of community contexts: from high-development pressure communities, which are typically large urban centres with permit applications dramatically increasing, growing economies and populations, and very active real estate markets; to low-development pressure communities which are typically smaller urban centres, towns and rural areas experiencing economic challenges, significant out-migration, and modest to low activity in real estate markets. While this discussion paper is focused primarily on the private property marketplace, it also recognizes the role of governments at all levels and institutions such as school systems and religious organizations play in helping to shape the property marketplace.

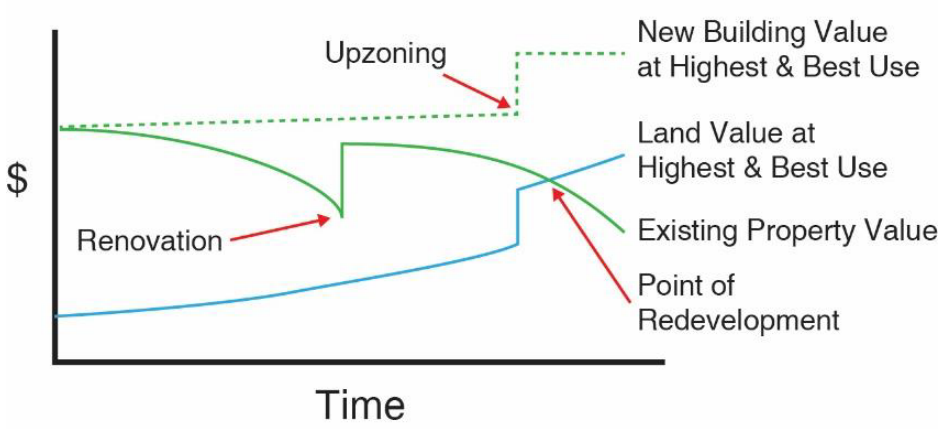
It is important to acknowledge the different kinds of motivations driving owners and investors. Experts have noted that owners of owner-occupied housing tend to place greater emphasis on intangible qualities such as aesthetic character. On the other hand, commercial real estate and income producing properties are generally valued for the net income stream they produce, so aspects of the property which affect rents and costs will have a direct impact on the value of the asset (Turner Drake 6).

It is important to bear in mind that there are different types of developers working in the commercial real estate spheres, each with distinct investment expectations:

- developers who build and sell properties – when property is developed and sold, interest is focused on the profit that can be made (for example from developing and selling residential condos, or income-producing space, like apartment or office buildings);
- investors who buy completed real estate projects; or
- developer/investors who build and hold properties – when property is developed and retained to generate on-going income, the focus shifts to the yield or return that can be realized from the equity investment in projects (eg. office buildings, rental apartments).

A recent report by Turner Drake – *Recommending Financial Incentives for Heritage Conservation Districts – Halifax, Nova Scotia* – provides an excellent starting point for a discussion of building reuse barriers, as that reports begins with an insightful synthesis of some of the key dynamics in mainstream real estate economics. The report makes the clear distinction between the two parts of real estate: the buildings, and the land on which they sit. The values of these two components change over time as buildings physically decline or lose value in the marketplace, and the land generally increases in value, particularly in urban settings. The report neatly unpacks the dynamics facing a typical building and is worth quoting at length here:

> "With proper maintenance, a building can remain safely usable for hundreds (or even thousands) of years. However, most buildings are demolished and replaced long before they reach the end of this physical lifespan. This is because the value generated by the building (either in rent, or capital value) decreases over time while operational expenses tend to increase. As the building ages, its design falls out of alignment with consumer needs, it fails to provide modern amenities and features, and it generally becomes less desirable compared to newer buildings. At the same time, the structure ages and requires more frequent and expensive maintenance, mechanical systems become less efficient and less competitive against newer technologies, and property taxes increase. Eventually operational costs will overtake the value generated, and the improvement is said to be at the end of its economic life. At or shortly before this point, owners will typically undertake significant renovations or retrofits (termed 'recapitalizing' the building) to address these deficiencies and extend the lifespan, however, some updates will not be worth the expense, and eventually it will be worthwhile for the owner to completely replace the improvement, even if it is with something essentially identical in massing and use"
>
> (Turner Drake 7).



This chart shows the cycles of reinvestment in a building, and the pressure exerted by sudden upzoning. Source: Turner Drake.

The Turner Drake report also describes how a dangerous tipping point for an older building can occur when the forces of property value, the need for building systems renewal, and re-development opportunities intersect. As land values rise over time, an "opportunity cost" will be created for the owner through the widening difference between building and land value. Ironically, "a property with a profitable, serviceable building can be worth less than the same lot if it were vacant, ready for redevelopment" (7), because the ability to exploit that "opportunity" of maximizing development potential is slowed by the presence of the existing building. A sudden change in land value, for example through upzoning, can dramatically alter the "highest and best use" potential of a parcel of land, putting pressure on older buildings and driving them towards demolition. In fact, there are a multiplicity of interconnecting forces pushing buildings towards demolition and away from reuse and this present report will now unpack these individual factors in more detail.

1. Cultural Barriers – Practice and Attitudes Privilege "The New"

1.1 Real Estate and Consumer Marketplace Perpetuates Premature Building Obsolescence

The Problem

Buildings are being discarded because it easy to do so, and the real estate and consumer marketplace continues to privilege new things over reuse. Individuals, organizations, and governments are for the most part not rewarded (economically or prestige) and so premature demolition continues. This is not an economically efficient use of existing infrastructure and it also carries a high environmental cost.

Why is this Happening?

> "I do not wish to be charming, but to be strong. I do not wish to be frozen, I do not wish to maintain things, but to act and create…"
>
> Le Corbusier, 1965 (Segger 8)

Given Canada's aggressive climate change goals, there is a rapid need to scale-up the creative reuse of existing places, not reward formulaic, status quo responses. The above quote from Le Corbusier neatly sums up the paradigm of previous generations where the excitement with building new things failed to account for its unsustainable ecological footprint. The contemporary real estate system is still deeply enmeshed with this older vision, with its continued investment in the notion of premature obsolescence, which ultimately fuels property speculation and rewards the neglect of existing buildings. Even Canada's tax system enshrines and perpetuates this dynamic. Designed as economic stimulus to aid recovery at end of the Second World War, the notion of premature obsolescence built into modern tax systems and accounting (e.g. depreciation) has helped valorize and drive a culture of consumption and disposability that we now know is unhealthy for the planet and its human populations.[ix]

The logic of obsolescence has become such a natural part of the Canadian construction industry that in many parts of Canada it is hard to find professionals, contractors, or craftspeople with the skills to maintain and renew rather than demolish and assemble new buildings. The mainstream consumer marketplace similarly reflects outdated market distortions (conditioned by three generations of obsolescence logic) by largely privileging shiny, new buildings over those that have stood the test of time. In this dynamic, building product manufacturers have stronger voices than laborers and maintainers, and demolition too easily follows the neglect and low maintenance rewarded by the tax system. There is currently little reward for property owners to think long-term about their buildings or to invest in material longevity.

The Heritage BC Report echoed these observations: "Heritage as means to steward the environment does not have a strong resonance…Heritage conservation as a means to affect climate change was raised at one meeting but the commentary was not positive: 'Heritage is not on the BC Government's radar as a way to deal with climate change. It is not in their action plan. When we are talking about preservation we are coming up against capitalism (erasure and renewal). We have trades that are built on how to take down historic structures and replace with new'" (25-26).

Finding a new use for an older building is always the biggest problem for developers, and there are challenges in repurposing buildings to be "market acceptable." One stakeholder noted, in order to find a good use for a heritage/character building, the developer needs to work within the limitations of a building, rather than against it, and have a creative approach. False notions, however, continue to persist that older buildings can't adapt. While some historic buildings are flexible, others are more difficult to adapt due to the construction methods and materials used, and the physical footprint they occupy. The issue is conventionally framed as the building's fault, that the "the physical form of older buildings may simply be ill-suited to modern needs" (Peter Bacon 5) or that these buildings' designs are

"out of alignment with current market preferences" (Turner Drake 13). In most cases, it is probably better characterized as a user ingenuity problem. The spacing marketplace has not had to exercise this creativity – shoehorning uses into unusual spaces – because there is an abundance of newer (with high, currently invisible, environmental footprints) spaces available. Tenants and potential owners who are neither trained nor encouraged to adjust their expectations to existing conditions. This lack of flexibility/creativity means that buildings are more easily discarded for the fresh and purpose built. The unexamined problem, however, is that the modern economy makes it easy, even financially beneficial, to throw away what currently exists for the tailored new.

Governments and public institutions also help perpetuate this dynamic through their bias towards owning/leasing new space and abandoning older buildings. The BC Ministry of Education, for instance, applies a funding formula that limits the cost of a seismic retrofit to 70% of the cost of constructing a new school; this gives an unfair advantage to new schools which usually provide significantly less square footage per student compared with historic schools, hence more "efficient" footprints.

The current residential market place in most cities contributes to the erosion of heritage areas, and threatens long-term community resilience and affordability by favouring larger replacement homes, a building type not well-positioned for long-term viability. Mid-century modern houses (about 2,000 sq.ft) in West Vancouver are being torn down because there is a bigger consumer market, and more profit for the developer, for large (6,000 sg. ft) homes. This closes the door to retaining the original smaller home and adding another home of similar size to the substantial lot.

Potential Solutions

From the 1940s onwards, the commercial, institutional, and residential real estate markets in Canada have internalized the notion of obsolescence in their thinking and will need strong signals and motivation to deviate from that well-worn path. Governments are well-positioned to show leadership and reset the national tone through the handling of their own buildings. For instance, the feasibility of locating government functions within publicly owned heritage properties should be disproved prior to offering assets for sale on the market.

In the US, the Federal Government through its Legacy Vision Policy and at least seven states require preference be given to heritage buildings and districts when securing short- or long-term space for offices, conferences, and accommodation. The policy gives priority to locating government activities in historic and other existing buildings when appropriate, thereby facilitating long-term public sector leases and creating a market for private sector heritage space. This program could be expanded, and its impact amplified, but creating a corporate and NGO rating system to recognize and publicize organizations who excel in reuse-based spacing solutions.

Recommendations

- KEY - Remove barriers to a culture of reuse in the tax system and put incentives in place to level the playing field with new construction for consumers.
- KEY - Governments at all levels should give preferential spacing consideration to existing buildings of at least 40 years old.
- Require that new government-funded buildings will only be constructed when necessary, using the best quality materials possible, and ensuring maximum adaptability for future use.
- Set standards for building life expectancy, material quality, and adaptability.

1.2 Industry Culture is Biased to New Construction

The Problem

The culture of the construction industry – from private sector and builders and developers, the public planning and development systems that regulate them, and the investors and banks who provide financing – is slanted towards new construction, and this shapes investment decisions, influences the mentorship of the next generation, and creates a self-perpetuating cycle of demolition and new construction. Industry decisions default to new construction, and industry players do not develop the skills to evaluate and troubleshoot heritage/character buildings for reuse.

Why is this Happening?

Property development is fast-paced and competitive, and Canada's construction season is short. Investors are often discouraged by the real, or perceived, restrictions on altering heritage property, and by the timelines for additional approval processes and/or the complexities of codes compliance that may come with modifying older buildings. A substantial risk in any development project is a change in market conditions during the time a project moves from launch to completion. As noted above, adaptive reuse typically takes longer to plan, approve, and execute due to physical and regulatory factors, and this lengthened timeline compounds risk and discourages developers from undertaking such projects in the first place.

Many regions note that young developers are attracted to buying heritage properties because they are "cool" and outside the mainstream. But they frequently come up against a conventional development industry culture that is skewed to new construction, and this can serve to discourage their long-term involvement in the adaptive reuse industry. One stakeholder found that mainstream general contractors continually issued Preconstruction Notifications (PCNs) when they encountered unforeseen issues (amplified by unfamiliarity with older buildings) and rapidly drove up costs. The stakeholder said that vertically integrating all aspects of the construction process within their company – from project management to contractors – was the only way to make their heritage project work and has since become that organization's biggest competitive advantage. Not all developers have the patience and resilience to develop this kind of in-house capacity.

Potential Solutions

It is important to create mechanisms to support new entrepreneurs in the reuse of buildings, and launch new financial/planning incentives to move the industry away from the demolition-new build status quo. Education for the development industry is a key starting point for making reuse and integration of existing buildings the new norm rather than demolition. Heritage planning stakeholders report that many property redevelopment proponents come with initial plans that do not even contemplate retention of existing buildings – their presumption is a blank slate and they wrong-headedly build their business case around it. In many cases, these proponents haven't even worked the costs of demolition and disposal of the existing material into their business case. But "educational" efforts are not enough if they aren't given momentum through new regulation such as heavy penalties for demolition and landfilling.

Recommendations

- KEY - Put transformative incentives in place – like Income Tax Credits for Heritage Rehabilitation and Heritage Property Tax Relief – that rapidly shift the market towards reuse.
- KEY - Put regulatory mechanisms in place that reflect circular economy principles, placing value on the embodied emissions of existing buildings and avoided environmental impact of their retained materials.

2. Physical or Technical Barriers:

2.1 The Risk of Unexpected Challenges and Costs

The Problem

Older buildings inevitably come with technical unknowns (some very challenging) and these risks are repeatedly singled out as a key barrier to reuse. These can take the form of material deterioration revealed as rehabilitation begins, structural issues like floor load capacity, building or fire code challenges, and even the need to upgrade water, electrical service or gas lines due to a property's change of use. New construction, on the other hand, is specified in advance using contemporary codes, standards, materials, and methods that are well-understood, with one of the few unknowns being geo-technical issues encountered during excavation for foundations.

Why is this Happening?

Owing to their age, many older buildings have incomplete maintenance histories and lost documentation related to design and construction. When this is coupled with a lack of contemporary expertise in historical construction methods on the part of local professionals, previously unknown issues can emerge. These can rapidly escalate costs in adaptive reuse projects, even for experienced developers. While many developers put in place a strong contingency fund to mitigate these risks, there is a perception that these risks may be too substantial for a project to be embarked upon: for a project with potential for a healthy 12-15% ROI the risks are high, but for one with only 5% ROI (typical for many adaptive reuse projects) there is virtually no margin for error.

Potential Solutions

It would be helpful to create tools, like technical manuals, calibrated to regional/local building typologies and construction practices that would provide new owners with solid insight and knowledge from similar redevelopment projects. Early access to expert advice could also be facilitated by governments to troubleshoot issues and spotlight opportunities. In the United States, these kinds of technical assistance services (e.g. ULI Technical Assistance Panel) have been created to stimulate the reuse of specific commercial buildings types. This would help take some of the guesswork out of redevelopment for new or potential owners.

Another helpful risk mitigation instrument identified by stakeholders would be project vetting services by professionals and developers experienced with heritage buildings. A mechanism could be developed where owners could get access to "certified" experts (professionals, builders, developers, or city inspectors) that have successful track records with adapting older buildings to provide advice and help avoid pitfalls. Project development training could also be provided for emerging, small-scale developers, community organizations, and public agency staff, like those provide in the United States by the Incremental Development Alliance and National Development Council.

Risk could also be mitigated for unforeseen servicing costs which can be very challenging for a project. For example, unexpected site servicing upgrades could be indemnified by the municipality, rather than by providing an upfront subsidy. With difficult properties, there should be a focus on agencies working together and forming partnerships to mitigate risk, potentially creating P4s (public-private-professional-partnership) on specific sites.

Recommendations

- Jurisdictions should facilitate building reuse by providing early expert advice to troubleshoot issues and spotlight opportunities.
- Create more certainty for reuse projects by specifying building construction types and flagging potential issues in advance.

KEY - Develop building profile and case study tools to help reduce risk and bring more developers into the market.

2.2 Rehabilitation Costs Higher than New Construction

Introduction

There is considerable variation in heritage rehabilitation projects with some costing less than constructing a new building of comparable sized, and others costing more. The image of rehabilitation as a costly undertaking persists however. The 2006 *Lazarus Effect* study of adaptive reuse projects in Ontario, found the cost difference between heritage rehab and new construction to be:

- Commercial Projects – +15% (small projects), +8% (medium-sized projects) and -38% (large projects);
- Institutional projects – +8% (small projects), +2% (medium-sized projects);
- Residential projects – –8% (medium-sized projects), +44% (large projects).[x]

There are various reasons for these higher costs including: the higher costs of professional and trades workers skilled in older buildings; the higher costs for sourcing or repairing heritage materials; site remediation (e.g. asbestos abatement); and the need to address accessibility and energy efficiency challenges. Heritage rehabilitation is typically more labour intensive than new construction[xi] and therefore the limited professional and trades workforce skilled in heritage projects can constrain competitive bidding and raise costs.

A recent Calgary Heritage Authority study found that institutional construction and restoration (the most exacting conservation treatment) of heritage buildings came at a premium in comparison to other commercial construction, but that this was counter-balanced by their high use, longevity and durability:

> "A brand new institutional building in Calgary is $455 to $560 per square foot. Pure commercial office space, which does not need to meet the durability standard of institutional buildings is about $120 to $150 per square foot. By comparison, the average value for heritage construction is about $250 per square foot more than standard institution construction, averaging $850 per square foot. This is a combined result of the scarcity of labour and materials, limited specialized consultants, and the time required for restoration projects… Approximately 70 to 90% of that cost will be spent on labour costs which will remain in Calgary." (Calgary Heritage Authority 13).

An Irish study demonstrated quite different results around costing, likely reflecting the more robust and healthy heritage rehabilitation industry in that country. The study found that the costs of reusing the existing buildings "were notably lower than the costs of replacement where the level of conservation was classified as very low to moderate – the costs of conservation ranged from 47% to 83% of the costs of rebuilding […] The costs of conserving a building requiring a very high level of conservation work was about 6% higher than replacing it with a new building" (Peter Bacon 9). These findings demonstrate the opportunity for growth in the Canadian heritage rehabilitation industry, the heightened labour intensity impact, and the price competitiveness that could be achieved.

2.2.1. Rehabilitation Costs Higher than New Construction - Inflated by Deferred Maintenance

The Problem

There are systemic factors – such as distortions in property tax treatment, or the rising value of land under a small building due to development potential – that make it attractive to some owners to defer maintenance on their property. When those properties are eventually placed on the real estate market, the structural aspects of the buildings often require so much funding for recapitalization that even if the new owner is inclined to reuse, it is cost prohibitive.

Why is this Happening?

The tax system tends to reward owners that do not maintain their properties, while owners that invest and improve get punished with higher taxes as their property value increases. Properties with heritage recognition or designation are sometimes allowed to degrade in the anticipation that their eventual demolition through neglect will open-up the site's maximum development potential. A report from Halifax notes that commercial properties are more sensitive to this as more value is bound up in development rights:

> "Where demolition controls and contextually sensitive built form restrictions limit the development capacity of a lot, the impact to value is quantifiable. The prospect of value loss due to diminished property rights can establish perverse incentives for the owner. As real estate is a capital asset and often an individual's or firm's largest single store of wealth, this value loss is experienced immediately, regardless of whether or not the

> current owner intended to sell the property or exercise their development rights. This can motivate owners to allow historic integrity to be lost in order to avoid regulations being implemented, to secure demolition permits simply to preserve their rights through grandfathering mechanisms, to allow buildings to demolish themselves through neglect, or even to proactively demolish buildings that would otherwise have been left unscathed in order to avoid the devaluing impact of impending restrictions"
>
> (Turner Drake 12).

Similarly, vacant building bylaws in Canada are focused on ensuring safety, but are not required to slow the deterioration of a building. Brandon's "Vacant and Derelict Buildings Bylaw" fee becomes more and more expensive if no work is done on a vacant property, which is intended to nudge owners to either reoccupy buildings or hasten demolish. As many properties have decades of deferred maintenance, buyers need to do due diligence to price the building accordingly, so that the purchase price allows financial space for recapitalizing. This is sometimes difficult when developers are operating in a market with high land values and abundant additional density capacity. Moreover, a recent Edmonton study identifies a problem that exists in the owner-occupied residential segment across Canada: "A big issue in the purchase and rehabilitation of older homes is that Edmonton does not seem to have a culture of maintenance. Rather than spread the cost of maintenance over multiple owners and longer time periods, homes fall into a maintenance deficit. Single owners then have to 'true-up' the deficit with large one-time investments. These investments have value for decades, but not everyone is in a position to make or manage work on this scale." (Edmonton 39).

Potential Solutions

These could take two forms: (1) address the mechanisms enabling demolition by neglect; or (2) subsidize the resurrection of properties that have experienced it.

In Vancouver, the Heritage Property Standards Maintenance Bylaw was passed in 2015 and is currently applied in the First Shaughnessy Heritage Conservation Area. The bylaw outlines minimum requirements for maintenance of property and to prevent "demolition through neglect" of pre-1940 homes in the neighbourhood. In Europe, many countries have powerful income tax incentives where owners of historic (and sometimes merely character) buildings can deduct portions of their maintenance or renewal expenses.[xii] The City of Lethbridge, Alberta has a grant program for "upgrading or adaptive reuse of historically significant, deteriorating, or functionally compromised buildings" in its downtown core. Eligible expenses include basic rehabilitation costs: "structural matters, mold & asbestos abatement, accessibility, fire protection systems, historic preservation including restoration of character defining elements, other costs deemed to be critical in addressing a historically significant, deteriorating, functionally compromised or obsolete aspect of a building" (Lethbridge 1).

In the United States, there is a more wide-spread use of expropriation as a government tool than in Canada. American cities have also created Land Banks providing a mechanism for assembling parcels of tax-delinquent or abandoned properties for redevelopment. In areas with high land values, land banks

(e.g. the Cuyohaga County Land Bank in Cleveland) also hold land purchased strategically for community uses or affordable housing.

Recommendations

- KEY - Recalibrate property taxes so that vacant and fully used buildings are taxed at same rate.
- Restructure capital gains recapture to make demolition by neglect less economically attractive and combine with sliding scale upwards for vacant building fees to motivate.
- KEY - Introduce income tax credits or property tax relief for maintenance/rehab work on character/heritage buildings.

2.2.2 Cost and Limited Availability of Skilled Heritage Workers/Professionals

The Problem

In many parts of Canada, the limited skilled labour and professional work force in the heritage rehabilitation industry, relative higher costs of that labour, and general lack of appreciation for historic building techniques, combine to suppress potential redevelopment.

Why is this Happening?

Developers repeatedly emphasize that tradespeople and architects who understand older building typologies are essential for a successful project. This specialized expertise can take the form of planning and design professionals who help ensure the project achieves conservation standards and receives development or funding approval, site managers with expertise to oversee these unique projects, or heritage trades and contractors to rehabilitate or reconstruct heritage features. The need for this specialized expertise not only raises project costs, but leaves the project exposed to the risk of labour shortages.

There is significant regional variation in Canada around the distribution of heritage expertise. Certain regions, like the Prairies, currently do not have enough heritage work to employ those with heritage skills and therefore a steady labour force has not developed. When specialized skills are essential (especially on public projects), workers from Eastern Canada or abroad are regularly brought in at additional cost – this suppresses project initiation. In Atlantic Canada, developers report that they avoid engaging local professionals and workers because they have found their experience is limited to new construction methods; determined developers work to create in-house heritage skills capacity in their firms, but this strategy does not necessarily assist with the evolution of the broader construction market.

Potential Solutions

The response to this situation is partly rooted in growing the industry and recognizing heritage building skills as distinct from new construction. There is a need for a widely recognized "certification" mechanism that recognizes and rewards heritage skills; the Government of Saskatchewan, for instance,

currently requires those bidding on provincial heritage contracts to be members of CAHP, and the federal government has similar criteria for selected projects.

Over the past decade, the UK government has sought to build the labour supply by developing initiatives to highlight labourforce deficits in certain traditional construction skills, investing in training to build industry which contribute to community revitalization and resilience. Examples of US-based initiatives include those of the Preservation Trades Network.

The creation of strong financial support and regulatory direction in Canada focused on buildings reuse, would naturally stimulate the development of a broader market for heritage rehabilitation skills: post-secondary programs and students would follow.

Recommendations

- Require that public heritage rehab projects contract professionals and workers with heritage "certification."
- Launch a pan-Canadian study to identify the gaps in building reuse/heritage skills and create a job training program that addresses these shortages.

2.2.3 Higher Heritage Materials Costs & Insignificant Cost of Demolition and Disposal

The Problem

Older and heritage buildings frequently use materials and techniques that are of higher cost compared to their contemporary alternatives. In contrast, demolition and new construction is effectively subsidized by easy access to building products and services whose lower prices do not reflect their true, long-term environmental cost, and the cost to demolish and dispose of older buildings is very low – not a significant factor in project decision-making.

Why is this Happening?

There is a limited market for heritage architectural materials (e.g. windows, roofing, and special lumber) so there are often higher costs associated with heritage rehab. While these materials are typically higher quality than contemporary ones and carry less environmental impact, they can require more frequent maintenance, thereby raising costs overall. Individual components often require a regular maintenance regime, such as wood siding that requires painting to prevent rot. Vinyl siding, by contrast, is cheaper and "maintenance free," but has a short lifecycle of approximately 20 years, after which it cannot be easily recycled. Government and industry place limited recognition or value on the heavy environmental externalities - carbon impact, ecological disruption - associated with many mainstream building materials. For the builder this means that it is cheaper to buy new products of inferior quality than to pay the higher costs, along with scarce availability, of skilled laborers who could maintain older building assemblies almost indefinitely. Moreover, the way depreciation is built into the tax system with its relatively short write-off periods, does not reward investment in durable, high-quality building products,

to say nothing of the constant changes in consumer preferences (see 1.1) which encourages constant replacement of building finishes.

Demolition permits are easily obtained "as a right" by property owners. Permit fees and demolition waste disposal costs are so low that they play almost no role in redevelopment decisions. There is some variation in demolition permit costs across Canada: Vancouver's fee is currently $321, plus $345 if pre-1940 house; in Calgary a 1,500 ft^2 house would be $337.79; Edmonton has a flat fee of $205.50; and Montreal charges $1,200 for the demolition of a primary building. None of these price points would play a significant role in redevelopment decisions, nor would the relatively low demolition waste tipping fees (eg. Calgary at $113 a tonne). One of the challenges to making policy changes around this issue is that no jurisdiction in Canada consistently collects data on C&D waste – it is all estimates.

Potential Solutions

Past solutions have been to provide grants to bridge the additional costs of specialized heritage materials (especially windows) in rehabilitation projects. A more progressive response would be to address the artificial cheapness of new construction materials which do now reflect their true environmental footprint and also raise demolition fees. Another approach that may indirectly encourage reuse is to put a value on the materials in existing buildings, and require their careful deconstruction[xiii] in extreme cases where demolition is unavoidable. The challenge with this approach, however, is that deconstruction could easily become the default approach and become another mechanism facilitating the unnecessary destruction of viable buildings.

The Green Demolition Bylaw in Vancouver introduced in 2014 requires demolition companies to recycle 73% of materials from all homes built before 1940. The program has diverted 40,000 tonnes of material from landfills, and ensured the reuse of precious old growth lumber (500 to 1,000 years old) which was used to frame Vancouver houses until the 1970s. The voluntary Toronto Green Standard incorporates efforts to curb demolition waste, by recognizing efforts to recycle at least 75% of demolition waste from mid- to high-rise residential and commercial/institutional development. How many buildings these measures diverted from the demolition/deconstruction path is not currently captured. More insight is need into how these tools can help to change marketplace behaviour and their role in shifting thinking away from demolition to in situ building reuse.

Recommendations

- Require owners/developers to demonstrate that demolition is unavoidable.
- Raise demolition permit and landfill fees, and require deconstruction when demolition is deemed necessary.

2.3 Older Building Size/Layout and Site Factors

The Problem

Older buildings and the land on which they are situation often pose particular constraints on owners/developers looking to rehabilitation or adaptive reuse. Many of these older buildings have "less efficient" floor plates – beams or stairwells breaking up the space, or hallways that are wide and do not generate rent – or are smaller generally, factors that create challenges for achieving economies of scale. The value of older places is further eroded because it is relatively inexpensive to create "purpose built" structures, and owners/renters have little incentive creatively tailor new ideas to older places. A further constraint can be the smaller lot sizes of heritage properties, or how the heritage building is situated on that lot.

Why is this Happening?

Unlike with purpose built new construction, not every inch of older buildings are likely to be developable or monetizable – for example the wide hallways in older schools affect the ability to create leasable space - and that is one of the reasons why these buildings are less popular and viable. This creates a disadvantage to contemporary structures in terms of the proportion of building space which is leasable space. Deep floor plates can also make it difficult to subdivide some industrial buildings into multiple units with access to daylight, but inserting light wells can be expensive. Older commercial buildings along historic Main Streets may have small footprints that do not meet the space requirements of many national retailers. Churches are very function-specific and don't lend themselves easily to reuse.

A 2020 Calgary study found that character residential in older areas faced unique adaptive reuse challenges because their buildings were located on small lots and positioned in the middle of those lots thereby limiting expansion and infill opportunities. In other communities, the difficulty of providing adequate parking in commercial areas was noted as a barrier, and in some cases adjacent buildings were being demolished to obtain parking for those being rehabilitated. Situated in older areas, older properties often come with site constraints arising from historic development patterns (small lots, tightly spaced buildings) as well as the realities of working on an already developed site with tighter transport circulation, surrounding buildings, and stabilization requirements for nearby infrastructure.

Potential Solutions

There is a need to create financial incentives to make heritage and character space reuse more attractive, including the development of "special development" zones. In some US cities, municipalities are incentivizing adaptive reuse by not charging additional fees for road closures and other measures.

Recommendations

- Create regulatory instruments and incentives that restrict urban sprawl and make smaller, challenging old buildings attractive to commercial and residential owners/developers.
- Create special concessions and flexibility to assist with site logistics for adaptive reuse projects.

2.4 Remediation of Toxic Substances

The Problem

Older buildings and sites often need to address toxic substance abatement, mitigation, or remediation; these substances include vermiculite, asbestos, lead paint, mercury, petroleum products, and even PCBs. While these remediation activities must be undertaken even if a contaminated building is demolished, it is persistently seen as a barrier to reuse, and can even act as a deterrent to minor building improvements, or proper maintenance activities.

Why is this Happening?

Older buildings often contain hazardous environmental contaminants, either arising from the building materials used, or through use over time. The irony is that the toxicity of many contemporary building products (replacing older compromised ones) will only be recognized over time, a dynamic that again provides new construction products with a competitive advantage to reuse and rehabilitation. Owners must work the additional costs of remediation into their business plan for redevelopment, and this can quickly undermine the viability of the overall plan. For instance, a downtown school in Atlantic Canada was recently demolished due to challenges arising from asbestos contamination.

Potential Solution

The Canadian Brownfield Network has identified priorities to assist with the remediation and revitalization of industrial areas, and there is considerable overlap with adaptive reuse of heritage and older buildings. The Network says that more funding is needed for projects, greater linkages made between housing, climate change and brownfields to encourage funding, and more intergovernmental collaboration to activate these challenging sites including property development awareness initiatives and sharing technical methods. They say that speeding up process of approvals would encourage more brownfield renewal: making the review process more local and simplifying the administrative dimensions.

The Tax Incentive Grant (TIG) in Ontario provides a way to recover money spent on brownfield remediation through property tax. Those companies that cannot benefit from these tax credits, can potentially sell these credits (at a slight discount) to another group, and this has proven to be an effective method, particularly for condo developers. Remediation funding strategies for individual buildings could build on those instruments developed through work on larger brownfield sites.

Recommendations

- Provincial-territorial governments to find ways to ease the burden of hazardous substance remediation and thereby accelerate reuse.

3. Regulatory Barriers:

3.1 Competing Government Priorities Create Negative Heritage Outcomes

The Problem

Efforts to address key issues can have an unintended negative impact on building reuse: climate emergency policies push the construction of new green buildings; responses to the housing crisis expedite the demolition of older housing stock; parking policies penalize adaptive reuse projects; public health promotes fresh, new touchless buildings; and intensification sees the elimination of existing buildings for new larger ones as a universally positive result.

Why is this Happening?

There is a strong need for greater coordination and oversight of government priorities to avoid these unintended negative impacts. There is a need for better harmonization of policy goals, and more effort needs to be put into thinking holistically and efficiently about achieving overarching strategic goals, whether they be transportation policies, parking regulations, or initiatives addressing climate change.

Intensification goals frequently come into collision with heritage and building reuse initiatives. Prioritizing reuse does not preclude the dense neighbourhoods we need and isn't in conflict with intensification. There is broad societal recognition that we need the footprints of our communities to be more efficient, with greater density to lower energy use for transportation, limit urban sprawl and the loss of agricultural land. But there has been limited incentive for owners to actively and creatively weave together old and new on a broad scale. There are many case studies, but larger trends that continue to see existing buildings demolished remain in place. As the Ontario Heritage Trust observed in its Recommendations on Ontario's Cultural Heritage Strategy, "There is a tension between growth and development and heritage conservation" (20). One can see this tension at play in many Canadian municipalities which have an abundance of cheap, suburban developable land, weak or unfocused urban intensification policies, and a large stock of underutilized heritage/character buildings.

Carl Elefante, past President of the AIA, recently spoke to this false tension: "Existing buildings are a resource for growth. Every city and town in the [United States] has dozens, hundreds, even thousands of abandoned and partially occupied buildings. Simply occupying every floor of every existing building would absorb years of demand for growth and revitalize countless neighbourhoods. Renewing existing buildings is the smartest smart-growth strategy" (2018).

Potential Solutions

There is a need to recalibrate initiatives at all levels to support the retention and retrofit of character and heritage areas. For instance, unintended barriers to reuse, such as minimum parking requirements, are now being reexamined. Many municipalities have removed minimum parking requirements civic-

wide, including recently the City of Edmonton. In Chicago, parking requirements are reduced near transit and on designated "pedestrian" Streets.

There are examples where municipal governments came together with a unique coordination/streamlining of city process to ensure good outcomes for a key heritage site. One of these is the Distillery District in Toronto, redeveloped in the early 2000s, where the municipality worked to harmonize regulations that were frequently in conflict - heritage, building code, and zoning. The solution was that early in the Distillery District Project there was a code report created to address issues common on the site, and then with each of the approximately 130 active building permits this code report was referenced and explained. The city went further by assigning one plans/codes examiner, one zoning examiner, and one heritage examiner for the duration of the project, thereby ensuring continuity of corporate knowledge and minimizing contextual explanations for inevitable changes along the way.

Recommendations

- Actively monitor and resolve negative interactions between building reuse goals and other civic priorities and regulations.
- Identify barriers to reuse in each municipality and develop strategies to mitigate, including streamlining municipal processes.
- Promote innovative municipal tools and incentives to encourage retention of character/heritage properties.

3.2 Future Development Potential – Zoning and Other Planning Regulation Thwarts Reuse and Drives

The Problem

Beyond the physical constraints of the site and existing building discussed above (1.3), the reuse and rehabilitation of older buildings is often suppressed by the future developed potential of a property which is dictated by municipal regulation: there is either too much development opportunity, or too little, to stimulate activity. This is a particularly important factor in areas with high-development pressure areas. Heritage designation, overlays, or zoning restrictions, can be seen to limit development potential and owners may choose to speculatively hold a property and subject it to demolition by neglect, until there is an opportunity remove the building completely and maximize their return on investment. Conversely, an older building on a site zoned for a considerably higher density, or with the opportunity to obtain more density through the politicized process of upzoning, will also inflate land values, encourage speculation, and contribute to demolition by neglect. Intensification policies can contribute to this dynamic and create an unintended barrier to building reuse.

Why is this Happening?

Municipal regulation dictates where growth is directed in a community influencing resale prices for properties and determining development potential. Zoning is a powerful land use tool – governing building use, level of occupancy, height, scale, parking, setbacks, open spaces, signage and more – that can facilitate or hinder building reuse and rehabilitation. Current density allocations in some Canadian municipalities may be too high for retention of existing buildings to be a viable option. In recent years, there has been a shift away from 1950s era zoning, focused on single-use areas and low-density, to a contemporary model denser mixed-use development. While this shift is laudable, Canadian municipalities are seeing that in areas where zoning allows new construction that is much larger than what currently exists, small buildings become vulnerable to disinvestment and demolition. Tension between the present limitations/controls on development potential, if any, and the development opportunity and profit potential in the future.

In 2009, for instance, the Downtown Halifax Plan increased building envelopes for height and massing substantially, and also identified 104 currently undesignated buildings with heritage potential. The city's downtown subsequently experienced a development boom that has seen 43 of those 104 buildings with heritage potential, demolished. Upzoning a heritage property, then, quickly puts its future at risk. Once a heritage property is upzoned significantly it is very difficult to save the building and in most urban areas the best outcome is likely some kind of facadism. Property owners feel that municipalities are "taking development rights" away from them if a property becomes designated or zoned differently from surrounding properties. Even if an owner doesn't intend to develop it immediately, they can sell the property to a buyer for a lot more money than selling to another owner who is eager to protect and conserve the building.

Difficulties arising from these kinds of zoning increases are compounded as zoning increases are "grandfathered" for existing owners and virtually impossible to reverse. Applications for spot rezoning, or "upzoning," for greater density on sites, can also have a ripple effect on other properties in the immediate area. These potential "flexibilities" create precedents that drive copy-cat spot zoning requests (difficult for municipal councils to refuse) and can suppress investment in existing buildings in the immediate area. Consistency over time around zoning decisions is challenging at the municipal level due to the changing composition of elected councils, the loss of corporate memory, and the calculus of short-term political considerations.

Another issue is that many zoning regulations define structures that do not meet current development standards or uses as "non-conforming," which can discourage investment. Despite recent mobility trends in many communities, high parking minimums can also pose a barrier as zoning often includes formulas requiring a minimum amount of parking based on the allowable use.

Potential Solutions

There is an overall need for greater consistency and vigilance around how zoning is currently applied and zoning change requests are handled. A few Canadian municipalities have developed sophisticated density transfer systems as a response. The Vancouver Transfer of Density (TOD) program, for example,

was created as a way to provide a financial incentive for heritage rehabilitation projects. If a heritage building occupies a site which is zoned for greater floor space ratio (FSR) or density, the City may allow the potential density from the heritage property to be transferred to another property elsewhere, to encourage the retention of the heritage resource. These programs have demonstrated value over time for encouraging heritage conservation projects, but, as one report notes, "only in those cities where the potential market for transfers and bonuses is not undermined by pernicious variance approval practices unsupported by policy direction" (HTFC 27).

Various Canadian cities have created programs to help retain character residential buildings in identified neighbourhood, recognizing the need to create additional density on sites that will make rehab projects financially viable, while ruling out (or limiting) demolition. Relaxations to underlying zoning regulations – for example, building setbacks, building height, density, land category – are utilized by several cities to encourage conservation of heritage assets, particularly for buildings where conservation or adaptive reuse may not be otherwise possible.

The City of Calgary is working to create incentives of additional development potential and property tax benefits to spur the retention of housing stock in "character areas." In an unusual innovation, the value of these incentives would be scaled up or down according to the concentration of character assets in a particular area. City of Victoria incentivizes owners to preserve historic houses by allowing multi-family rental and condo conversions and the subdivisions or properties. The District of West Vancouver has recently taken the unusual step of crafting a Heritage Revitalization Agreement that increased density on a heritage property, and allowed a property subdivision exception, to allow for the heritage building's conversion to a short-term rental and ensure project viability.

A strategy in US cities for addressing the problem of non-confirming uses for heritage buildings (such as corner stores) has been to introduce more flexibility around the creative use/reuse of heritage buildings in certain areas. The City of Denver zoning code, for example, includes using a "compliant" rather than non-conforming status for these heritage properties. Another strategy, followed by such cities as Baltimore and Miami, is to adopt context-sensitive, form-based zoning that recognizes the diverse contexts and building patterns found in cities, from dense downtown cores to lower density neighborhoods (NTHP Untapped).

Recommendations

- KEY - Institute zoning practices and updates that encourage retention of heritage and character commercial and residential buildings.
- Cultivate consistency and fairness from municipal councils around development decisions.
- Consider transfer of development rights processes in areas where beneficial.
- KEY - Enable ways to increase density in character neighbourhoods and main streets while retaining existing buildings (e.g. "smart" or "gentle" density)

3.3 Municipal Process – Heritage Rehabilitation Projects Have Longer Timelines and Lack Regulatory Clarity

The Problem

Reuse and rehabilitation projects on the whole seem to experience longer permit processing times than outright development projects, as properties are unique, often involve change of use. In many jurisdictions, stakeholders report that heritage rehab projects have additional time burdens, such as requirements for additional documentation (e.g. heritage evaluation) or lack of clarity regarding the documentation required. These disincentives can dampen industry appetite for heritage projects, especially when compared to new build projects that can be processed more quickly under current procedures.

Why is this Happening?

The time required to develop and execute a project involving heritage conservation is often longer than a more conventional new construction undertaking. Unclear rules and processes are identified as a key problem and developers quickly become wary of what are seen as subjective design guidelines and lengthy review processes. Requests for change of use and change of zoning, in particular, can precipitate lengthy processes in most jurisdictions. One developer talked about a particularly challenging project involving adapting a church into an event space which took over four years to get a building permit – most developers aren't prepared to handle the carrying costs of this kind of limbo. The Vancouver Heritage Review found that city's permit process for heritage projects was viewed as overly complicated, compared to new construction projects, and thus creating a substantial disincentive: "There is an opportunity to simplify/streamline the requirements for certain conditional projects (heritage/character retention) that should be eligible for priority processing. (Vancouver 2017 21).

Another key problem comes from conflicting municipal policy objectives (mentioned above in this report), arises from the ambiguity or unpredictability around rules for developing buildings of heritage significance, which leads to uneven or slow permitting that has large financial consequences for the building owner. A lack of communication as well as contradictory requirements between different regulators and municipal or government departments results in project delays, lack of guidance and confusion for proponents. This uneven cooperation between agencies is another significant barrier to developer's taking risks on executing stellar projects.

Many stakeholders foreground the crucial role municipal staff play in the process, but point to challenges created by under-staffing or regular staff turnover, which disrupts corporate knowledge. Low staffing levels not only slow existing processes, they also lower policy development capacity, including building blocks like getting heritage into municipal or regional plans. In many smaller municipalities, the staff person responsible for heritage is also responsible for many other portfolios - such as active transportation, development approvals, and recreation – and the heritage portfolio encompasses a small fraction of their time. Under these circumstances, if a staff person with heritage planning skills takes a leave of absence, then the heritage programs are severely compromised. The lack of resources

(financial and human) available to initiate programs, services and funding incentives for preservation, is a fundamental problem.

Potential Solutions

Clear rules for development are key, according to heritage economics expert, Randall Mason: **"**Regulations make markets work better in many ways by establishing "rules of the game" and guaranteeing public benefits. Developers and investors are not daunted by the presence of regulations – what they seek is certainty and transparency about regulations, or rather an accurate view of risk backed by judicial effectiveness." (Mason 65-66).

Stakeholders note that municipalities could speed rehabilitation-oriented development considerably by streamlining processes and providing additional help and services to these projects; staffing and attention currently tilted towards suburban greenfield development and stronger policy measures are need to tip the balance towards reuse. It would be very effective, it was noted, if civic funds were targeted at preparing buildings (for example addressing water, electrical, or gas servicing challenges) that were deemed most important to an entire neighbourhood's revitalization. Some American cities like Los Angeles and Vancouver, Washington have created dedicated staff positions to promote, facilitate, and expedite the review and permitting process for adaptive reuse projects.

Another valuable incentive to heritage conservation is easing the burden generated by the development review processes. One strategy could be to provide training for staff and professionals/developers on overcoming the heritage rehab related challenges in the development process. There is a need to move to a system that rewards adaptive reuse proponents with rapid permit review and approval processes that are almost indistinguishable from standard permit reviews. These efficiencies could be achieved through outright exemptions from design review process for select building alterations or additions, or the delegation of approval authority to municipal staff for minor changes. Others, like the Vancouver Heritage Review, suggest efficiencies could be created by shifting some decisions out of the municipal bureaucracy entirely, through a system where "certified" professionals, rather than municipal staff, could sign-off on major maintenance/repair permits. This kind of response would, of course, be dependent on the development over time of strong heritage professional expertise in a community or region.

Recommendations

- Institute clear and streamlined application processes to facilitate more rehabilitation projects.
- Create special municipal offices to unify processes for adaptive reuse projects.
- Accelerate processing times for heritage/character retention projects by prioritizing them and ensuring their processing times are competitive with outright projects.

3.4 Municipal Heritage Committees and Advocacy Groups – Clearer Goals and Collaborative Spirit Needed

The Problem

Municipal heritage committees perform a regulatory role by advising municipal councils on heritage significance and proposed changes to heritage properties. Local heritage NGOs and advocacy groups perform different roles by critiquing municipal policy and decision-making, pushing for solutions to individual or systemic issues, and generally raising the public profile of heritage resources. Together, these heritage groups help to create a climate of heritage conservation in a community. While well-intentioned, the views of these heritage entities are sometimes seen by the real estate industry unpredictable and inconsistent, and that more building reuse projects would take place if there were clearer heritage standards and goals.

Why is this Happening?

A lack of certainty around what is "heritage" and how it should be handled is seen as a strong deterrent for developers and owners to tackle revitalization of heritage properties. Stakeholders signal that the last thing an investor wants to be told after project drawings are underway is that the property has heritage status: in their eyes, it creates a blanket new proposition for the city to intervene in a property and means additional approvals will be required. The *Standards and Guidelines for the Conservation of Historic Places in Canada* were intended as a tool to help clarify good heritage practice, but they are open to interpretation, which has frequently engendered challenging debate. There are also concerns that heritage policy tools are being used inappropriately by community groups to attempt to prevent growth or change in their communities.

Heritage and urban design advisory panels are also identified as a challenge as there memberships rotate frequently and they can provide inconsistent recommendations to planners and municipal councils. One stakeholder recalled how a project was delayed for 18 months while waiting for permits on replacing windows: various iterations of window shop drawings shuttled between the heritage committee and other municipal stakeholders.

The public consultation process is also seen as a challenge. At its worst, public consultation can leave both the project proponent and members of the public frustrated with the process and unsatisfied by its results. At its best, it can provide for a constructive dialogue that allows all parties to gain a better understanding of the opportunities and constraints, and create a vehicle for exploring and expressing the heritage values a place holds for the community. Developers often invite community members to the process early to share the project vision with them in an informal setting. It is important to establish professionalism at meetings with heritage consultants to foster trust between groups. Stakeholders say that more education for heritage review bodies and organizations on the vetting of heritage projects would help with building consensus.

Potential Solutions

Creating more certainty about heritage or character property status is crucial. Conducting municipality-wide surveys/inventories of character/heritage buildings, to identify areas of importance and opportunity, is a very useful tool. A handful of Canadian cities have conducted inventories of this type to varying degrees, including Westmount, Toronto, Hamilton and Calgary.

Leading municipalities provide detailed guidelines to property owners (particularly residential) and their design professionals to help manage change well, based on the *Standards and Guidelines for the Conservation of Historic Places in Canada*. Westmount, for instance, applies a categorization process that identifies whether the architectural significance of a building is neutral, important, significant, or extraordinary. Depending on what level of significance the building's categorization indicates, a property is subject to a set of rules that have to be followed. Given this categorization, owners can generally predict what kind of intervention will likely be accepted by the Planning Review Committee.

There is a general need to foster productive dialogue between the development and heritage communities to share challenges, troubleshoot win-win compromises, and develop best practices, with any eye to leveraging heritage sector expertise and rapidly accelerating building reuse. Forums within the heritage sector – across all silos from academic to design, planning and advocacy – for regular exchange and debate around current issues are also needed to inform, build consensus, and raise the level of public discussion.

Recommendations

- KEY - Clearer, stable heritage process In place, including pro-active initiatives to inventory places of heritage/character potential.
- More dialogue, training, and consensus building efforts for owners, advisory bodies, professionals, and advocacy groups around evaluating rehabilitation proposals for heritage/character properties.

3.5 Code Compliance Difficulties with Older Buildings

The Problem

The requirement to comply with new codes - for fire, safety, accessibility, energy, seismic – triggered by a structure's change of use is often one of the biggest hurdles to overcome when undertaking the revitalization of older/heritage buildings. Canada's current national codes do not have requirements for existing buildings. In the absence of this, Canadian codes - for fire, safety, and accessibility - privilege new buildings and while they accept "alternative compliance methods" or "equivalency" opportunities, the quickest and easiest path for the design and building inspection community is to stringently follow code - this creates a powerful disincentive for reusing older structures. Stakeholders across Canada consistently flag code compliance issues as a critical irritant holding back the adaptive reuse or

retrofitting of existing buildings, and spurring massive, unnecessary interventions and sometimes outright demolition. Ever increasing seismic and energy efficiency requirements, are creating further challenges for the retrofitting of older buildings.

Why is this Happening?

Each province establishes its own building codes by either adopting the National Building Code as a model code, or modifying it to suit their regional needs: it has been modified and added to in BC, Alberta, Saskatchewan, Manitoba, Ontario, Quebec and Nova Scotia, while the remaining provinces and territories have adopted the National Building Code as is. The purpose of these codes it to establish consistent minimum standards to be followed by the construction industry in each province, and these can have a influential effect on the construction culture and tone across Canada. A 2008 report for Parks Canada on building codes and heritage places identified these key issues: "Universal access requirements, exiting issues, and fire suppression (sprinklers). It has also identified the general agreement, among people interviewed, that in Canada, most architects opt to apply the most rigorous code, in order to ensure all bases are covered and to expedite the acquisition of a building permit. In this regard, the new objective-based codes, introduced in 2005, are usually not fully taken advantage of. A need to improve the understanding and application of objective-based codes was identified" (Heritage Conservation Directorate, 1).

Current Codes Have a New Construction Bias - The absence of national code requirements for existing buildings is resulting in a patchwork approach to dealing with alterations to existing and heritage buildings across Canada. This causes confusion in the industry, among regulators and building owners/operators, and results in both unsafe practices and the needless destruction of building components and even entire structures. A new National Building Code is now in development by the Canadian Codes Centre at the National Research Council., and a Joint Task Group on Alterations to Existing Building is working on a new section dedicated to existing buildings to address these deficiencies. Actual code development is done through standing committees of recognized individuals, and it will be essential for experts with knowledge of heritage buildings and sustainable building practices to be involved in these committees to ensure better building reuse outcomes.

Municipal Building Inspectors and Staff are Not Always Flexible or Supportive - While there is considerable variation in experience across Canada, the majority of stakeholders report how challenging it is to work with local building inspectors on building reuse. Many inspectors are not willing to "put their necks on the line" and sign off on code equivalencies, a situation that often comes down to inspector awareness and relationship. The 2008 Parks Canada report makes note of this dynamic:

> "There is a lot of misuse/resistance to taking advantage of the new objective-based codes, because code officials and municipalities want to avoid lawsuits. Question of indemnity. There is a level of comfort related to being very specific to the code or choosing to employ strategies that have met the code in previous projects. The quicker things are approved, the quicker architects and builders can get a building permit –breeds a destructive

> approach. Following the code to the letter is an obvious way to ensure code is followed without hassle" (Heritage Conservation Directorate 39).

One stakeholder for this Discussion Paper noted that senior key people in one municipality were willing to step outside contemporary building techniques and put their credibility on the line to support equivalencies – these were often a case-by-case or situational discussion. It was noted that there were often better results when inspectors were able to come onto a site and have them involved early in the in project development.

Hiring Code Consultants is Often Necessary to Find Alternative Solutions - Stakeholders note that ways to meet code can be found in challenging situations through the hiring of Code Consultants, but these solutions come at a high cost, one that many developers will not be willing to pay. Municipal building departments will frequently only accept these alternative solutions or relaxations when they are documented in a report signed and sealed by a registered professional, resulting in costs to the developer that not are typically anticipated in the project budget and can be tens of thousands of dollars. One stakeholder pointed to a project that involved a simple solution to a problem, but required high consultant fees to achieve. While the developer wanted to retain a character-defining open staircase that ran up the middle of a historic commercial structure, the building inspector initially wanted the staircase entirely enclosed (at considerable loss of floorspace and character). After codes specialists from inside and outside the province were brought in, a smoke baffle was found acceptable and the staircase remained in place. This entire process involved considerable added costs and time to the project that most developers would not be prepared to absorb.

Potential Solutions

Create Heritage Building or Rehabilitation Codes - The approach two US states have taken to codes offer potent possibilities. California's Historical Building Code blazes a unique path by maintaining acceptable life-safety standards thought regulations that are performance oriented rather than prescriptive. The code "identifies issues that allow architects and engineers not to be prescriptive, but rather performance-based (eg. if it has stood for 100 years with satisfactory performance, then that can say a lot)" (Heritage Conservation Directorate 7). The State of New Jersey Rehabilitation Subcode is standalone and user friendly. "Adopted in 1998, the New Jersey Rehabilitation Subcode was the first comprehensive set of code requirements for existing buildings. It is a stand-alone subchapter and, therefore, it contains all the technical requirements that apply to a rehabilitation project. Creates specific paths for reuse projects to meet code… Subsequent studies indicated that the application of the Subcode clarified and streamlined the rehabilitation process for all existing buildings, resulting in a 19% saving in overall project costs. This represents a huge incentive for heritage rehabilitation" (Donald Luxton 27).

In its 2020 submission to the Joint Task Group on Alterations to Existing Buildings, Heritage BC suggests that Canada's National Building Code include "a new Part 11 that distinguishes between Heritage Buildings and Existing Buildings… based, in part, on existing codes which address upgrade requirements

for existing building such as Part 11 of the Vancouver Building By-Law and Part 11 of the Ontario Building Code."

Strengthen Equivalencies/Alternative Solutions and Collect Case Study Precedent - The 2017 Vancouver Heritage Review suggests flexibility needs to be enshrined accepting non-conformance while ensuring life safety: **"**Heritage and character buildings inherently do not conform to existing standards and codes. They were often built at a time prior to zoning and building codes and reflect a use of technology, design and materials that is not always consistent with current standards. In many ways, these differences have inherent strengths, and the actual performance of an historic structure should be accepted as a baseline, rather than trying to force conformance to existing standards, except where life-safety could be compromised" (Donald Luxton 17). There is a need to gather a compelling body of case studies. Given that many projects have found success in overcoming complex code problems, cities could create and promote a database of known solutions to challenges that may be encountered in reuse projects given local/regional building typologies.

Smooth Municipal Process and Facilitate Early On-Site Inspector Involvement - Building inspectors should be involved during initial conversations with the Heritage and Planning Departments to eliminate potential late problems in the permit stage. Extra permit fees could also be removed for reviews of an alternate solutions or minor relaxations related to a building reuse project. The Vancouver report suggests an even more proactive approach to reducing code risk: " Consider, in consultation with Building staff, new fire and life safe review process for heritage (and potentially character) buildings that could potentially include: Any building constructed prior to ~1970 could be offered the opportunity of having a Certified Professional provide a comprehensive fire and life safety upgrade report"(Donald Luxton 26).

There is also the need to provide adequate staffing and coordinated technical assistance and ensure qualified people who can make a special heritage assessment. A central municipal officewhere developers can get help navigating complex regulatory processes, including guidance on addressing complex code challenges through examples would also be very beneficial. Los Angeles established a task force for adaptive reuse projects, which developed expertise in the challenges building reuse projects face and used it to speed-up permitting and plan review (Untapped 19).

Recommendations

- KEY - Develop a subcode for existing buildings, and ensure it is sensitive to the unique attributes of heritage buildings.
- KEY - Strengthen the use of outcome-based or performance-based code alternatives and ensure professionals/ owners are empowered to consider them, and inspectors trained and motivated to support them.
- Create and promote a body of case studies in each jurisdiction on ways of meeting code for given various building reuse challenges.

4. Economic Barriers:

4.1 Rate of Return – Low or Delayed Return on Investment

The Problem

Investors are looking for a reasonable ROI on real estate projects, but the reality in the commercial sector is a lower ROI with heritage buildings (with many falling in the 2-7% range); this is a cash-on-cash rate of return comparable to bond rates, so rehab projects are frequently seen as not being worth the risk. Another challenge is that the cost of many older buildings is inflated by land value and development potential so reuse becomes less attractive and "highest and best use"- typically demolition and new construction – becomes the compelling option.

Why is this Happening?

Construction projects and real estate in general in Canada is considered a high risk investment. As a result, a higher ROI is typically expected than other financial investments (e.g. bonds and stocks). For the majority of developers, 20-30% ROI is the industry standard, while others have expectations of 10-15%. The ideal scenario is low rehab cost, low property value, and high marketability after rehab. In many cases, taking a "heritage" approach to a property means foregoing significant additional development potential. In city centres and higher density areas, zoning encourages developers to favour higher floor area ratios over the lower density most often found in heritage properties. High land values and property acquisition costs in these areas increase pressure to maximize development potential as does the ingrained concept of "highest and best use" deployed by real estate appraisers and developers.[xiv] In economically challenged communities with lower rental and leasing rates, the expense of heritage rehabilitation can be hard to justify and there is the temptation to minimally invest in properties.

Every developer has a different internal rate of return projections and expectations: looking at a cash-on-cash rate of return, can they make reasonable profits given income, expenses and mortgage carrying costs? Some stakeholders said it is a myth that adaptive reuse reduces ROI, that older buildings are often cheaper as they are already constructed, and often with materials and practices that far exceed today's standards. Heritage projects are most frequently undertaken by patient developers/investors who are building a portfolio of highly marketable, income-producing properties and are willing to take out little or no profit as a means of "buying" commercial investments.

ROI expectations are a complex issue with considerable variation based on whether it is a commercial, rental residential, or condo development, whether there is the expectation of a quick sale, or a long-term investment. ROI is used to evaluate the efficiency of an investment, usually in comparison to the efficiency of a number of different investments. Making the potential ROI worth their risk is a primary challenge for all participants, whether they represent organizations large or small.

Also, concerns were expressed around typical operating costs annually for older buildings ($2.00/sq.ft.) as compared to new buildings ($0.50/sq.ft.). An Atlantic Canadian community recently lost three contiguous designated heritage buildings in downtown where the owner expressed maintenance cost to be too high to justify rehabilitation.

Potential Solutions

Given the diversity of the heritage development community, the key to ensuring a compelling ROI will be to select and pursue a variety of heritage financial measures at all three levels of government that can be combined to strong effect and align well with a diverse existing range of development and investment models. Insights from stakeholders demonstrate that small changes to the incremental rate of return on investment can make a big difference in investment decisions. Measures that provide front-end capital and can quickly increase cash flow would be very beneficial. Ideally, any range of financial measures would involve a mix of as-of right (entitlement) incentives and discretionary incentives, so that the program as a whole could address the various related goals of equity, public confidence in the program, and the direction of incentives to priority projects.

For income-producing properties, a non-refundable income tax credit for heritage rehabilitation has been consistently endorsed by those in the heritage real estate development industry. In the United States, Federal Historic Preservation Tax Incentives Program provides a 20% non-refundable income tax credit for certified rehab for heritage buildings and a 10% credit for substantial rehab on pre-1936 non-heritage buildings. Over 30 States have non-refundable income tax credits for historic preservation rehab (e.g. Virginia – 25% for commercial and owner-occupied residential), and these can be combined with Federal Tax Incentives.

In the US, these non-refundable tax credits can be used to offset the building owner's federal tax liability, but many building owners transfer these credits through syndication to a corporate investor in exchange for additional equity capital that can be utilized for long-term financing of the project. Non-profit groups can also syndicate tax credits to corporate investors. Syndication ensures that the building owner can share in the benefit of the tax credit even if the owner is not in a taxable position, or not liable for tax. In Canada, the ability to transfer depreciation and tax credits between corporations is more restricted. However, opportunities exist to use limited partnerships to bring in outside investors, who would then claim their proportionate share of the tax credits and any depreciation allowances

Recommendations

- KEY - Create high-impact financial incentives – such as Income Tax Credits – for building reuse projects that boost ROI and have an impact early in the project.

4.2 Financing – Difficulty Financing Old vs. New Projects

The Problem

Lending from Canadian banks and secondary markets is often a challenge for developers seeking to adaptively reuse older buildings. Difficulty financing old vs new projects. Canadian banks are typically looking for certainty, do not want to be involved in "staged" investments, and generally not prepared for the risks inherent in modifying older buildings.

Why is this Happening?

There is difficulty in obtaining financing from Canadian banks for heritage rehabilitation projects particularly for newer players or those working with unusual properties where a conventional business plan is hard to develop. Owing to this uncertainty in financing options, and lack of support from banks and lenders, the majority of projects must be either self-financed or privately financed to secure funds

Generally speaking, new construction is seen as less risky for lenders: one can tailor the new structure precisely to market expectations and develop a solid pro forma for lenders. Heritage rehab involves the unknowns of adapting older buildings, and this uncertainty can be a barrier to obtaining financing from Canadian banks.[xv] Banks for the most part do not want to be involved in "staged" investments and are not prepared for the risks that come with adapting older buildings. When debt capital can be obtained from private lenders, the lending rates for heritage projects is often twice as much as new construction (e.g. 11-13% versus 6 -7% for new construction). Moreover, with heritage rehab there may also be a narrower tenancy market due to heritage imposed limits on meeting modern user and tenant needs.

Lenders often gravitate towards developers who can use reliable formulas and precedence to determine project cost or an expected loan-to-value ratio. These formulas are a poor fit for many reuse projects, as each project is unique. Banks need comparables to assess risk and need 4 to 10 other buildings to understand market value. The loan to value ratio most banks can offer is frequently inadequate. For example if an older buildings costs $3 million to buy and $4 million to renovate, banks will typically only offer to extend 50% of the value of the property to the developer, which is not enough to launch rehabilitation project. Bank checklists for financing don't provide flexibility on comparables, so heritage buildings fall through the cracks.

Other challenges are numerous. Smaller projects can be difficult to finance overall as a result of inverse economics of scale and the higher percentage of small project budgets devoted to soft costs. The most difficult financing is for early project, pre-development and up-front construction costs with many existing incentives generally oriented toward later phases and operating costs. in areas suffering from poor economic conditions or population loss is also difficult for traditional lenders, who calculate return on investment based on established markets. The reality of high development costs and low returns means that many projects in weak markets are not feasible without government subsidy.

Potential Solutions

The European Investment Bank (EIB) provides loans which finance heritage restoration and urban renewal measures. Relatively large heritage projects can be financed by stand-alone loans, directly negotiated between the EIB and the borrower, who may be a level of government or private organization. Smaller heritage project loans are often channeled through regional or local governments. Many European countries have their own national or regional public development banks which will often have heritage related investment among their funding spectrum. Another alternative form of funding could be to create ethical investment funds geared to financing heritage rehabilitation; this provide a way to harness the capital held by heritage supporters in the general public and create a uniquely beneficial pool of capital.

Canadian stakeholders suggest that creating a source for loans for heritage rehabilitation projects outside the mainstream banks, who are reluctant to extend loans, would be very effective. A dedicated heritage loan fund with in-house expertise, could be creative with amortization to provide developers with much need cashflow up front. Most loans are amortized over 17-18 years, but the heritage loan fund could amortize at a rate of 25 or even 50 years to create higher cashflow for heritage building owner. This loan system does not need to be interest free to be effective: prime plus 2% would still be a strong benefit. For small projects, loan guarantees for heritage rehabilitation are currently in use in Ontario municipalities like Hamilton or Markham. A level of government would insure private financing (typically low-cost) for the purposes of purchasing and revitalizing significant heritage property by guaranteeing all or part of a loan or mortgage. The lender registers a lien to the amount of the loan against the title of the property.

Tax Increment Financing (TIFs), another investment mechanism, uses anticipated growth in property taxes from a development project to finance public sector investments in an area. TIFs have been used extensively for brownfield and distressed area redevelopment in the US but remain relatively underutilized in Canada. Chicago's Neighborhood Opportunity Fund uses fees from development rights purchased in the downtown core to support projects on commercial corridors in underserved neighbourhoods.

Revolving funds for heritage rehabilitation are another potential mechanism. A pool of capital is created and reserved for the conservation of structures, and loaned on condition that the funds will be returned for reuse in similar activities. This often involves conservation related conditions (e.g. protective easement/covenant) and is typically used for "at-risk" or low-return properties that otherwise might not be funded. Loans are usually at a lower interest rate or flexible terms that traditional lenders and secured by a mortgage registered against the title to the land. One of the challenges is that demand may outstrip the funding supply and conditions typically placed on property as basis for loan. Models of revolving funds are the Historic Ottawa Development Inc. or the Architectural Heritage Fund in the UK.

Recommendations

- KEY - Encourage CMHC, a federal new funding program, or one of the mainstream banks, to create special loan program directed at heritage rehabilitation projects.
- Create innovative sources of financing such as revolving loan funds which can provide gap or much needed financing for smaller development or reuse projects.

4.3 Tax Treatment - Introduction

The existing framework of municipal, provincial and federal taxation both reflects and influences the way property is used, and this particularly applies to heritage property.

4.3.1 Tax Treatment - Property Tax – Rising Land Value and Property Assessment Drives Demolition

The Problem

Two property tax circumstances can push an existing building towards demolition: (1) highest and best use, and (2) the tax advantages of surface parking lots. Existing buildings can be priced out of the land they sit on as property tax rates can be grossly inflated by their development potential/land value. Conversely, the lower property taxes rates for surface parking lots in many Canadian jurisdictions can provide another push for owners to demolish their buildings and await future development.

Why is this Happening?

Heritage development observers note that the current property tax model encourages developers to knock down underused buildings and build parking lots for the benefit of reduced taxes. A common perception is that taxes tend to reward owners that do not maintain their properties, while owners that invest and improve get punished with higher taxes as their property value increases.

In Canada, commercial property assessments can be calculated on the income approach, under which taxes reflect the value generated by the building. Others assessments, particularly for unoccupied buildings or underdeveloped properties, are calculated using the cost approach, where the property value is a combination of building value, and the land value (Turner Drake). The land value portion is typically set for an area based on sales numbers, which glosses over the differences in development capacity between those containing heritage buildings or are unoccupied land. Existing buildings, then, can find themselves subject to a property tax level which reflects the value of empty land, which may encourage property owners to seek demolition of the existing building and redevelopment.

Taxes owed on structures are another significant deterrent to developers purchasing properties and creating a sound business case. Efforts need to be made to remove this burden created by previous owners through distortions in the existing tax structure on properties ripe for redevelopment.

Potential Solutions

The issue in Ontario has been that the province assesses property tax rates based on the cost-approach which focuses on the "highest and best use" of the site and not on the building that currently exists. This means that as nearby developments get larger and more valuable, reassessments of older, smaller buildings rise as the tax system assumes the property the existing building sits on is worth the same per square foot as the properties where much larger buildings now stand. In Toronto, a social innovation hub, 401 Richmond, brought a spotlight to this situation when its property tax increase was projected to increase 130% over three years – potentially pricing this renowned social incubator out of its own home. In response to community pressure, the City of Toronto created a tightly defined new property tax subclass for "Creative Co-Location Facilities" that would see 401 Richmond and about a dozen similar buildings receive 50% tax subsidies.

Recommendations

- KEY - Evaluate the negative interactions between property assessments and character/ heritage buildings at a pan-Canadian level and implement solutions.

4.3.2. Tax Treatment – Property Tax – Significant Repair Increases Valuation

The Problem

Property owners are penalized when upgrading buildings with property tax increases that can be very substantial. Stakeholders say this incentivizes owners to not improve or adaptively reuse buildings, so as not to trigger a property value reassessment.

Why is this Happening?

Property tax is levied against assessed values, which in turn are calculated on the basis of market value. Residential assessed values are estimated using mass appraisal methods, residential property owners are frequently concerned that conservation work may increase their property assessment either due to increases to the market value of the property itself, or by triggering a correction to their previously under-estimated property assessment.

Potential Solutions

There are a number of property tax options in use in Canada to help encourage heritage building reuse:

Property tax abatements compensate the owner of designated heritage property for any increase in property taxes following a rehab project. Any tax increase due to rehab project is phased in over several years, and providing the owner a period to adjust to property tax increase. One of the downsides is that it may not be substantial enough to provide an incentive to initiate work. For example, the New

Brunswick Property Tax Abatement program provides a four-year tax reduction: no increase in property tax the first year, 25% of increase the 2nd, 50% the 3rd and 4th, and 100% the 5th.

Property tax credits compensate the owner of designated heritage property for the costs of a rehab project. Rather than providing a grant for project costs, the municipality provides a one-time credit on property taxes. A tax credit will be issued for 35 - 50% of the value of rehab work on a heritage building, which can be applied to property taxes for up to 10 years. This work compensates work completed rather than increased property value. Toronto, Edmonton, Winnipeg, Victoria, Regina all have examples of this program.

Property tax relief rewards the owner of designated heritage property for designating and conserving the property by providing a fixed percentage reduction in property taxes (e.g. 10 - 40%) over a period of years. As long as the owner continues to conserve the heritage property, he/she can continue to apply for and receive tax relief. Owners must be subject to a heritage easement under which the owner agrees to carry out regular conservation work to nationally accepted standards. One of the disadvantages is the need to reapply periodically undermines the predictability of the measure. Also, condo (strata) residential developers will not be able to recoup the full value of this relief from prospective purchasers. A strong example is the Ontario Heritage Tax Relief Program, where over 30 municipalities have adopted this measure.

Recommendations

- Develop and implement a national strategy to address the detrimental impacts property tax assessment can have on building reuse, including property tax relief measures.

4.3.3. Tax Treatment - Income Tax – Unclear Expensability for Heritage Restoration Work

The Problem

The Canada Revenue Agency currently disallows the expensability of building restoration costs in a given tax year, and instead requires capitalization over many years. This discourages beneficial reinvestment for immediate tax benefit purposes.

Why is this Happening?

Many heritage projects involve significant expenditures to bring a building back to its original state, and in some cases, to improve upon that state given advances in materials, demands of government regulation, and client preferences. The Canada Revenue Agency makes distinctions for tax purposes between the treatment of expenditures related to repairs (100% deductible) and expenditures considered as a betterment (treated as additions to the cost of the building a depreciated at a 5% declining balance rate).

Potential Solutions

One of the options would be for the federal government to consider creating of a new 30% CCA class for "eligible restoration costs" for "eligible heritage properties". The creation of a separate class for eligible restoration costs would provide preferential treatment to all expenditures related to a restoration project that would not otherwise be considered as a repair. This approach would encourage more restoration projects, given the additional costs involved. An increase in a CCA rate provides a deferral in taxation as opposed to a reduction in tax. All of the restoration costs would eventually reduce income subject to tax in the years ahead. A 30% CCA class simply accelerates that process, providing a much needed up-front cash flow benefit to developers.

The financial impact of a 30% CCA class for eligible restoration costs can be simulated by using a project model focusing on the impact of the measure as a percentage of the present discounted value (PDV) of restoration project costs. A 30% CCA rate would provide an 11.2% reduction in project costs, or in other words, the value of the tax savings would be equal to 11.2% of the eligible restoration costs. This total reduction amount is comprised of 6.7% due to reduced federal taxes and 4.5% due to reduced provincial taxes. This level of support is equivalent to an 8% federal tax credit and a 5% provincial tax credit.

Following a slightly different model, Germany also provides accelerated depreciation for listed buildings. For rental properties, the owner is allowed to depreciate an historic building at 9% per annum for eight years and at 7% per annum for the following four years as an offset against rental income, compared to 2% per annum for other buildings. If a building is owner-occupied then depreciation of 9% per annum can be offset against income taxes for nine years. The owner is responsible for the upkeep and conservation of the building in order to receive these allowances and, if the building is neglected over the long term, then an owner can be forced to sell other properties they own.

Recommendations

- KEY - Provide an amendment codifying the expensability of restoration expenses, or create a new accelerated CCA class of eligible restoration costs.

4.3.4 Income Tax – Terminal Losses (CCA and Depreciation)

The Problem

Under current federal rules, buildings are rendered worthless (on paper) over 40-50 years without recapitalization, and this can drive demolition of heritage or character buildings. With depreciation or capital cost allowances, owners write off a portion of the value of their buildings each year. But the value of property (building and land) continues to rise, so if they sell the building, there will be "recapture" of all the previous depreciation. These "recapture" costs are avoided by demolishing – either proactively or through neglect – the building and selling the land as an empty lot.

Why is this Happening?

The income tax treatment of "terminal losses' dates from the time of the Second World War. Investment buildings (rental residential, commercial or industrial) are depreciable, so their book value for tax purposes goes *down* every year, even if the market (and Inflation) tend to drive the current market price *up.* After a few years, the value *on paper* (called the building's Undepreciated Capital Cost, or "UCC") may therefore be significantly below market realities. If the owner then sells the building, even if there is capital gain, any over-depreciation will be 100% taxable (this is called "recapture of depreciation"); if the owner demolishes, however, he/she not only avoids capital gain and recapture, but can also claim a *further* deduction called a "terminal loss" (50% of the UCC of the "lost" building). This is supposedly to acknowledge the disappearance of the asset from the owner's books. For example: an owner bought a $1 million building which she depreciated down to $700,000; she can sell it today for $900,000, but if so, she must pay tax on $200,000 of recapture. If she demolishes instead, she not only avoids the tax on recapture, but also claims an additional tax-deductible "terminal loss" of $350,000 (50% of the UCC).

The current depreciation, recapture and terminal loss structure is consistent with basic tax policy principles:

- ***Depreciation***: buildings should be depreciated over their useful life;
- ***Recapture***: When an asset is sold, a fair market value is determined and, if the value is in excess of the depreciated amount, the excess CCA that has been deducted in past years is "recaptured" in terms of an income inclusion upon the sale or disposition. If the value exceeds the original cost, then a capital gain is calculated and taxed at a preferential rate.
- ***Terminal Losses***: If an asset no longer exists, then any undepreciated amounts can be deducted in the year of the loss.

Most decisions by owners, which are voluntary business decisions, do not give rise to a statutory deduction (there is certainly no counterpart for the alternative option, namely rehabilitation). Nor do buildings get "lost." Finance Canada has replied that terminal losses merely acknowledge accounting realities — to which the critics reply that accounting realities follow the tax system, not the other way around.

Incentive to Trigger Terminal Losses - Buildings can be difficult to value particularly if most of the value of the sale relates to the underlying land. The intentions of the developer purchasing the property may also differ. The building may actually be an impediment to the sale if the proposed redevelopment plan of the purchaser involves the demolition of the existing building. In this case, the building has a negative value to the purchaser given the costs of demolition. The seller may also be concerned that the building may be designated as a heritage building prior to the sale, which may then compromise possible development possibilities. For these reasons, it may be in the interest of the seller to demolish the building in advance of the sale so as to trigger the terminal loss and to avoid any valuation issues that may be otherwise be raised by CRA (i.e. the building clearly has zero value because it has disappeared).

Example of Impact - The following example provides some calculations as to the impact of these different valuations. It shows the impact on the seller with a heritage building valued at $500,000 either left on the property or having it demolished. The impact of the demolition is to raise the after-tax return on the sale by $62,500 (equal to the value of the building ($500,000) times the differential tax rate between income and capital gains (12.5%)).

Potential Solutions

There is a need to examine how terminal loss provisions, or their equivalent, are handled in other jurisdictions to reduce negative impacts on heritage resources.

Recommendations

- KEY - Revise terminal loss provisions to ensure not they are encouraging premature demolition.

4.3.5 GST/HST – Existing Rebates Privilege New Construction and Demolition

The Problem

The current GST/HST regulations around the "New Housing Rebate" and "Substantial Renovations" disadvantage the rehabilitation and reuse of buildings, and potentially encourage unnecessary demolition.

Why is this Happening?

With the GST/HST's New Housing Rebate, older and heritage buildings are currently disqualified from this rebate of 2.52% of the construction cost even when new units are inserted into an existing residential building. There is also a GST/HST rebate of 36% of the GST (i.e. 1.8% of the total cost) for Substantial Renovations that is only activated when 90% of fabric of an existing building is removed/replaced.

Canada is not alone in this kind of problematic tax treatment. The UK's VAT system imposes a 20% tax rate on repair, maintenance and rehabilitation of existing buildings, while new construction activities are VAT-free. Regulations state that for a development to qualify of zero rating "any pre-existing building must have been demolished completely, all the way down to ground level" (Historic England 9).

Potential Solutions

One of the challenges with providing additional GST/HST rebates for expenditures related to heritage rehabilitation is that it would have a differential impact depending on the nature of the owner of the building. It would provide no incentive to commercial operations (since they already receive a GST/HST credit), a partial subsidy to non-profit entities, and a full rebate to owner-occupied dwellings where they do not meet the substantial renovation test. Any changes would need to contend with question of

rationale as to why the government should intervene (with differential subsidies) to help one group over another group in terms of the restoration of heritage buildings

Historic England says that redressing the inequality between new and existing property development must be priority. Similarly, Canada's GST/HST could be overhauled to encourage retention, repair, maintenance, and retrofit. This would spur a major reduction in the consumption of raw materials and energy in the built environment and align with circular economy principles. If a HST/GST/PST Rebate for Heritage Rehabilitation could be created, it would provide a rebate equal to HST/GST/PST on building materials for the repair, restoration, or improvement of a heritage property. It would provide a predictable measure and reward maintenance and additional property value created, but would be limited to owner-occupied residential properties, as commercial ventures already receive an input tax credit for the GST (or HST portion) directly.

Nova Scotia Heritage Property Rebate for owner-occupied and non-commercial properties already addresses some of these inequities in the GST/HST system. The province provides a rebate equal to the 10% provincial portion of the HST on building materials for the repair, restoration, or improvement of a heritage property paid by non-profit community, charitable, fraternal, educational, recreational, cultural or sporting organizations or institutions.

Recommendations

- Create a rebate equal to the HST/GST/PST on a class of heritage building materials for the rehabilitation and restoration of heritage properties.

IV. Summary Chart of Recommendations

As seen in the preceding sections of this report, overriding factors include the reality of a consumer marketplace driven by a culture of obsolescence, and a construction industry culture geared towards new construction. The following menu of key measures or systemic changes that would remove barriers to reuse and/or put incentives in place to level the playing field was assembled based on the stakeholder engagement and literature review process. This work sets the table for a Building Reuse Summit(s) of key stakeholders designed to arrive at a definitive shortlist endorsed and championed by industry leaders, and to help set the public policy agenda for Canada's heritage rehabilitation sector. In order to develop a targeted action plan, key questions will include: (1) which measures would have the greatest impact; (2) which measures are low hanging fruit; (3) who are the key decision makers; and (4) what work would be required to achieve the most beneficial changes to the system.

Barriers for Reuse – Summary of Recommendations

	Barriers	Recommendations
1.0	**Cultural Barriers – Attitudes and Practice Privilege "The New"**	
1.1	**Real Estate and Consumer Marketplace Perpetuates Premature Building Obsolescence**	• KEY - Remove barriers to a culture of reuse in the tax system and put incentives in place to level the playing field with new construction for consumers. • KEY - Governments at all levels should give preferential spacing consideration to existing buildings of at least 40 years old. • Require that new government-funded buildings will only be constructed when necessary, using the best quality materials possible, and ensuring maximum adaptability for future use. • Set standards for building life expectancy, material quality, and adaptability.
1.2	**Industry Culture is Biased to New Construction**	• KEY - Put transformative incentives in place – like Income Tax Credits for Heritage Rehabilitation and Heritage Property Tax Relief – that rapidly shift the market towards reuse. • KEY - Put regulatory mechanisms in place that reflect circular economy principles, placing value on the embodied emissions of existing buildings and avoided environmental impact of their retained materials.

2.0	**Physical or Technical Barriers**	
2.1	**The Risk of Unexpected Challenges and Costs**	• Jurisdictions should facilitate building reuse by providing early expert advice to troubleshoot issues and spotlight opportunities. • Create more certainty for reuse projects by specifying building construction types and flagging potential issues in advance. • KEY - Develop building profile and case study tools to help reduce risk and bring more developers into the market.
2.2.1	**Rehabilitation Costs Higher than New Construction – Inflated by Deferred Maintenance**	• KEY - Recalibrate property taxes so that vacant and fully used buildings are taxed at same rate. • Restructure capital gains recapture to make demolition by neglect less economically attractive and combine with sliding scale upwards for vacant building fees to motivate. • KEY - Introduce income tax credits or property tax relief for maintenance/rehab work on character/heritage buildings.
2.2.2	**Cost and Limited Availability of Skilled Heritage Workers/ Professionals**	• Require that public heritage rehab projects contract professionals and workers with heritage "certification." • Launch a pan-Canadian study to identify the gaps in building reuse/heritage skills and create a job training program that addresses these shortages.
2.2.3	**Higher Heritage Materials Costs & Insignificant Cost of Demolition and Disposal**	• Require owners/developers to demonstrate that demolition is unavoidable. • Raise demolition permit and landfill fees, and require deconstruction when demolition is deemed necessary.
2.3	**Older Building Size/Layout and Site Factors**	• Create regulatory instruments and incentives that restrict urban sprawl and make smaller, challenging old buildings attractive to commercial and residential owners/developers. • Create special concessions and flexibility to assist with site logistics for adaptive reuse projects.
2.4	**Remediation of Toxic Substances**	• Provincial-territorial governments should create funding mechanisms for hazardous substance remediation and thereby accelerate building reuse.

3.0	**Regulatory Barriers**	
3.1	**Competing Government Priorities Create Negative Heritage Outcomes**	• Actively monitor and resolve negative interactions between building reuse goals and other civic priorities and regulations. • Identify barriers to reuse in each municipality and develop strategies to mitigate, including streamlining municipal processes. • Promote innovative municipal tools and incentives to encourage retention of character/heritage properties.
3.2	**Future Development Potential – Zoning and Other Planning Regulation Thwarts Reuse and Drives Neglect**	• KEY - Institute zoning practices and updates that encourage retention of heritage and character commercial and residential buildings. • Cultivate consistency and fairness from municipal councils around development decisions. • Consider transfer of development rights processes in areas where beneficial. • KEY - Enable ways to increase density in character neighbourhoods and main streets while retaining existing buildings (e.g. "smart" or "gentle" density)
3.3	**Municipal Process – Longer Approval Process for Heritage Rehab, Lack of Regulatory Clarity**	• Institute clear and streamlined application processes to facilitate more rehabilitation projects. • Create special municipal offices to unify processes for adaptive reuse projects. • KEY - Accelerate processing times for heritage/character building reuse by prioritizing these projects and ensuring their processing times are competitive with other project types.
3.4	**Municipal Heritage Committees and Advocacy Groups – Clearer Goals and Pragmatic Posture**	• KEY - Clearer, stable heritage process In place, including pro-active initiatives to inventory places of heritage/character potential. • More dialogue, training, and consensus building efforts for owners, advisory bodies, professionals, and advocacy groups around evaluating rehabilitation proposals for heritage/character properties.
3.5	**Code Compliance Difficulties with Older Buildings**	• KEY - Develop a subcode for existing buildings, and ensure it is sensitive to the unique attributes of heritage buildings. • KEY - Strengthen the use of outcome-based or performance-based code alternatives and ensure professionals/owners are empowered to consider them, and inspectors trained and motivated to support them.

		• Create and promote a body of case studies in each jurisdiction on ways of meeting code for given various building reuse challenges.
4.0	**Economic & Marketplace Barriers**	
4.1	**Rate of Return - Low or Delayed Return on Investment (ROI)**	• KEY - Create high-impact financial incentives – such as Income Tax Credits – for building reuse projects that boost ROI, preferably those with impact early in the project.
4.2	**Financing – Difficulty Financing Rehab vs. New Construction Projects**	• KEY - Encourage CMHC, a federal new funding program, or one of the mainstream banks, to create special loan program directed at heritage rehabilitation projects. • Create innovative sources of financing such as revolving loan funds which can provide gap or much needed financing for smaller development or reuse projects.
4.3.1	**Tax Treatment – Property Tax – Rising Land Value and Property Assessment Drives Demolition**	• KEY - Evaluate the negative interactions between property assessments and character/ heritage buildings at a pan-Canadian level and implement solutions.
4.3.2	**Tax Treatment – Property Tax – Significant Repair Increases Valuation**	• Develop and implement a national strategy to address the detrimental impacts property tax assessment can have on building reuse, including property tax relief measures.
4.3.3	**Tax Treatment – Income Tax – Unclear Rehab Expensability**	• KEY - Provide an amendment codifying the expensability of restoration expenses or create a new accelerated CCA class of eligible restoration costs.
4.3.4	**Income Tax – Terminal Losses (CCA and Depreciation)**	• KEY - Revise and address terminal loss provisions to ensure not they are encouraging premature demolition.
4.3.5	**GST/HST – Existing Rebates Privilege New Construction and Demolition**	• Create a rebate equal to the HST/GST/PST on a class of heritage building materials for the rehabilitation and restoration of heritage properties.

V. Next Steps – Planning for the Summit

This document sets the table for a Summit of key stakeholders in building reuse and heritage property stewardship and development, including income-producing and commercial, institutional, and owner-occupied residential.

Attendees at the Summit will include developers, property owners, planners, architects, financiers, and circular economy leaders; senior officials from key federal, provincial and municipal governments; senior officials from key industry and professional associations; and the leaders of key environmental and climate change action NGOs, and heritage academics.

The goal of the Summit will be to confirm priority reuse barriers, test the priority actions identified in this discussion paper and arrive at a definitive shortlist of potentially transformative changes to the system, endorsed and championed by industry leaders. The ultimate goal is to accelerate the culture of building reuse to support climate, affordable housing, heritage, and community resilience goals. The outcomes will help set the public policy agenda for the heritage sector.

As this discussion paper is a nation-wide snapshot, it may not entirely reflect the local and regional variation in experiences on the ground; Calgary and Vancouver reports show that understanding unique development ecosystems is essential for success. Accounting for the impact and severity of reuse barriers in advance of the summit, then, will be important to assess. The collection of feedback on the discussion paper and its circulation, will be essential in advance of the Summit, as these critiques and additional insights will inform the Summit agenda and help ensure the meeting stays focused on overcoming broadly held issues.

1. Building Reuse Summit - Potential Attendee List, by Sector (DRAFT)

Development Industry and Land Economics

1. Development Firms (Selected) – key heritage development firms; mainstream firms with adaptive reuse experience; Canada Lands Company.
2. Associations (Real Estate, Construction, Property Management) – Canadian Construction Association, Canadian Home Builders' Association (CHBA), Canadian Renovators' Council, Building Owners & Managers Association (BOMA), Canadian Real Estate Association (CREA), Appraisal Institute of Canada
3. Development Institutes & Business Associations – International Downtowns Association (IDA); Ontario Business Improvement Area Association (OBIAA) etc.; Urban Development Institute (Pacific, Quebec), Urban Land Institute (AB, Toronto, BC)
4. Heritage and Real Estate Economics/Strategic Insight - Heritage Economics – Donovan Rypkema, Heritage Counts team (Historic England), David Listokin (Rutgers) Marc Denhez, Robert Shipley; Real Estate Economics - Neil Lovitt (Turner & Drake), Michael Von Hausen (SFU),

5. Other Key Owners and Actors (Social Enterprise and Religious) – social innovation/revitalization groups (e.g. Artscape, CSI, cSPACE); religious organizations – asset management, disposal, revitalization, and adaptive reuse (e.g. United Church of Canada, etc)

Finance

1. Banks and Private Lenders – Big five banks and others (e.g. real estate loan expertise); private equity real estate investment firms (e.g. Allied REIT, KingSett Capital)
2. Public Institutions - CMHC, Federal Infrastructure Bank, Green Municipal Fund

Professional Associations, Think-Tanks, and NGOS

1. Professional Associations – Royal Architectural Institute of Canada (RAIC), Canadian Institute of Planners (CIP), Canadian Society of Professional Engineers; consulting code writers / alternative compliance path specialists, key conservation architects and engineers
2. Environmental and Green Buildings – Pembina Institute, International Institute for Sustainable Development, World Resources Institute, Smart Prosperity Institute, Canada Green Building Council (CaGBC), Zero Net Carbon Collaborative, Climate Heritage Network.
3. Heritage – National Trust National Council (provincial heritage organizations), Indigenous Heritage Circle, BC First Peoples Cultural Council, Canadian Association of Heritage Professionals (CAHP), Canada's municipal heritage NGOs (e.g. Edmonton Heritage Council, Heritage Winnipeg), Association of Preservation Technology (Technical Committee on Sustainable Preservation,) ICOMOS Canada, National Trust for Historic Preservation Policy Lab, Historic England, Historic Environment Scotland, Europa Nostra.
4. Urbanism Think Tanks, Associations, and Influencers – Canadian Urban Institute; urban thinkers (e.g. Jennifer Keesmaat, Brent Toderian); Congress for New Urbanism;
5. Urban and Rural Resident Associations – neighbourhood and community associations; rural (eg. National Farmers Union)

Government Policy Makers, Crown Corporations and Regulatory Bodies

1. Federal, Provincial-Territorial Departments – Heritage, Environment including Climate Action departments, Infrastructure, Economic Development (e.g. federal regional development or provincial agencies), Urban & Rural Affairs
2. Public Built Assets – PSPC and federal Depts.; Provincial-Territorial govts.; municipal govt –asset management departments; School boards, post-secondary institutions, etc
3. Municipal – FCM; planning and building departments; Municipal economic development.
4. Building Code – NRCAN, Canadian Association of Consulting Energy Advisors
5. Insurance – Insurance Bureau of Canada

Educational Institutions – Heritage, Real Estate, and Rural/Urban Studies

1. Heritage Programs – National Roundtable on Heritage Education members.
2. Architecture, Planning, Rural Studies Schools – Université de Montréal, Carleton University, University of Waterloo, Queen's University, University of Winnipeg, University of Waterloo, etc
3. Real Estate Programs – Mount Royal, University of Guelph (Housing and Real Estate Management), UBC (Real Estate Division),

2. Agenda for the Building Reuse Summit

The global pandemic has put temporary pause to the original idea of the Building Reuse Summit as an in-person meeting. The proposed location was to be Montreal, co-hosted by the National Trust and Héritage Montréal, beginning with inspiring tours of some of that city's most innovative heritage developments by experienced local developers like Nathalie Voland and Georges Coulombe. An evening presentation would have reviewed the key points of the discussion paper, which was provided in advance. These pre-working session experiences would have built relationships across the various sectors represented at the Summit in preparation for the working session on the second day.

It will be more challenging to create a collaborative and collegial environment among participants using online meeting functionality. However, there will no longer be a requirement to travel, reducing the time commitment and cost for participants, and a 'virtual tour' of inspiring heritage developments can include projects across the country. There is also the opportunity to connect this Canadian initiative with those of international and national organizations: ICOMOS, CAHP, Climate Heritage Network, Architecture 2030, Zero Net Carbon Collaboration, National Trust for Historic Preservation, Europa Nostra, United Kingdom (Historic England and Historic Scotland), National Trust of Australia, and Association for Preservation Technology (APT).

Consideration will be given to breaking up the agenda as originally conceived into a series of shorter working sessions – organized by category of barrier – with a revolving cast of participants tailored to the subject at hand.

The provisional agenda for the working session includes the following components:

1. Words of Welcome and Acknowledgement of Sponsors
2. Introductions
3. Confirm the key barriers to reuse
4. Debate and prioritize the priority action items to address key barriers
5. Strategy Development:
    a. Identify key actors, partners, and leverage points
    b. Assign lead agency
    c. Identify potential champions and strategic organizations to engage
    d. Draft a staged action plan.

3. Projected Outcomes

The Building Reuse Summit will use a multisectoral discussion to launch a shift to more responsible stewardship of the built environment, in order to achieve dramatic carbon reduction and climate change action impacts, and curb consumption of natural resources leading to needless ecological disturbance. This would be a unique undertaking yoking together siloed development industry and property ownership streams (commercial, institutional, and residential) in a common shared project.

The immediate outputs:

- A definitive list of changes championed by industry leaders, that would put building reuse and heritage development on a level playing field with new construction – for example, favourable lending programs, favourable review and permitting processes, incentives that would encourage recycling buildings, and disincentives to discourage demolition waste.
- A Communications Plan to get the word out (e.g. press conference and/or media release, Op Eds, web events, conference events, and communications efforts with partners including national associations)
- Compelling presentation material that would become part of the eventual "Playbook for Vibrant Heritage Places" (a separate related project)

The work coming out of the Building Reuse Summit will set the table for the desired long-term impact: changes to the system at the federal, provincial-territorial, and municipal levels.

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End Notes

[i] In Mississauga, there are a total of 144,295 properties, and of these 292 are designated, and 3,485 are listed (inventoried) but not designated. Many other urban areas generate similar ratios of designated to inventoried properties.

[ii] Scale of Heritage Building Loss – The 1999 CIHB revisted study showed that out of Alberta's 85,317 listings of historic places –47,358 in rural and small communities – over 35.4% of Alberta's historic buildings had been lost, with the number for Calgary of 52%. In Edmonton, the municipal inventory lists 1143 places, of which 147 (13%) are designated as MHRs and listed on the Register and 996 (87%) are listed on the Inventory. The city estimates that it loses 10-15 inventoried properties per year from its Inventory through demolition. This represents a loss rate of 1.5% per year or about 30% over 20 years.

[iii] For example: Pickard 2009; Peter Bacon 2014; Oram 2014; etc.

[iv] Brenda Manweiler Report, City of Calgary report from Cariou intern, Turner and Drake, National Trust Financial Measures to Encourage (2014), etc.

[v] Marc Denhez's examination of the financial barriers are an exception as is the recent exception Turner Drake report from Halifax.

[vi] There are significant exceptions like Shipley, Parson, and Utz's "Lazarus Effect," much of Donovan Rypkema's work such as "The Investor Looks at a Historic Building," the National Trust for Historic Preservation's "Untapped Potential" and city-specific "Retrofitting" reports, and the National Trust for Canada's Financial Measures to Encourage Heritage Development" report. From the owner-occupied perspective, Vancouver Heritage Foundation and Edmonton Historical board reports contain small but insight-rich collections of case study interviews with property owners.

[vii] Recent important academic studies by Daniel Abramson's and Francesca Russello Ammon are providing powerful insights into the constructed nature of obsolescence.

[viii] This has been chiefly through publications and presentations from Place Economics, Historic England's "Heritage Counts" report series, the National Trust for Historic Preservations "Retrofitting" and "Untapped Potential" initiatives, and the National Trust for Canada's "Financial Measures" and "National Heritage Incentives Study."

[ix] See these books chronicling this dynamic: Daniel Abramson, *Obsolescence: An Architectural History*; Marc Denhez, *The Canadian Home*; Francesca Russello Ammon, *The Bulldozer: Demolition and Clearance of the Postwar Landscape*

[x] Shipley, Parsons, and Utz. The Lazarus Effect: An Exploration of the Economics of Heritage Development in Ontario. Waterloo: Heritage Resources Centre, 2006. 9-13.

[xi] A 2002 Michigan study found that in new construction about 50% of cost is labour and 50% materials, whereas for rehabilitation projects the ratio is typically 70% labour and 30% materials. Michigan State Historic Preservation Office. *Investing in Michigan's Future: The Economic Benefits of Historic Preservation*. October 2002.
[xii] "In France and Germany, maintenance expenses are deductible from income tax with different rates, depending on whether the building is open to the public or not. Deductibility in Ireland and Belgium is more restrictive and requires defined opening times. In most cases, the work must be undertaken according to a pre-agreed scheme. Italy allows flat rate deductions according to the value of the building but the work must be pre-certified as necessary. The Netherlands is somewhat more generous and allows the offset of all expenditure on maintenance and repairs to historic buildings, and will also allow expenses arising from some improvement work to be offset. Spain allows a 15% tax credit for expenditure on listed buildings. The system in Denmark is distinctively different as it is operated by an independent organisation and is based on a formula that estimates decay per annum in historic buildings. France also operates a scheme that allows expenditure incurred on loan interest, maintenance, repair and improvements to buildings to be offset against tax on rental income from these properties. This provided even if the specific building is not of noted historic interest, provided it is located within a designated conservation area or an area zoned as being of architectural, urban or landscape importance." (Peter Bacon 13)
[xiii] Mark Gorgolewski has explored how building deconstruction, which thought it has had limited uptake in Canada, has becoming standard practice in Europe; countries like Belgium and Denmark are showing leadership, particularly in reusing difficult building materials. What has been found is that pre-1940 buildings built of simpler materials are more easily disaggregated and reused. One of the challenges with mid-century buildings onwards is that they employed greater use of composite materials from which it is more challenging to generate reusable materials.

[xiv] Real estate appraisers define "highest and best use" as "the reasonably probable and legal use of property, that is physically possible, appropriately supported, and financially feasible, and that results in the highest (monetary) value." In Canada, development potential is generally established by municipalities acting on authority given to them by the province to decide on zoning, which often allows for greater density and height than what currently exists. When property values are determined based on development potential (i.e. "highest and best use") developers often have an expectation that they are entitled to build to the allowed density as a minimum.
[xv] Shipley, Parsons, and Utz. *The Lazarus Effect: An Exploration of the Economics of Heritage Development in Ontario.* (Waterloo: Heritage Resources Centre, 2006), 16. This report noted that those involved in heritage development "found demand significant enough that the market would bear the additional costs that arose from uncertainty. No project investigated failed to report moderate to high income generation and many developers feel that bank reluctance to recognize the value of heritage and adaptive reuse projects, especially where experienced project management is involved, is unjustified and fails to recognize good business opportunities."

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