

ON THE BENEFITS OF AFFORDABLE HOUSING

An Assessment of Recent Literature for Municipalities
2017

Research Report
Table de Quartier Sud de l'Ouest-de-l'Île

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EXECUTIVE SUMMARY

If the basic familial household unit should be the building block of society, then too by extension is the space within which it rests – the home. It is a space that can either be allowed to hinder prosperity or be strengthened to nurture a household's vitality, stability, and development; a cage to restrict it or a garden to foster growth. Ensuring that affordable and adequate housing is available for all Canadians is essential in advancing that process as unaffordability can be a significant burden and gatekeeper against a household's success. Unfortunately, housing unaffordability remains a significant challenge for many Canadian households and it is a problem that stands to rise in major urban centres as the demand and the cost of housing increases.

Unaffordability is traditionally defined as a household budget that allocates in excess of 30% of the overall household's income to housing. Currently, close to 15% - one in seven – Canadian households do not have adequate housing available to them at that standard of affordability. The financial strain of unaffordability can be a drain upon the household with negative effects including limited adequate housing options, strained budgets, poor nutrition, stress, frequent and disruptive moves, and loss of quality of life. At extremes, unaffordability can lead to homelessness, a state that affects an estimated 35,000 Canadians on a given night and 235,000 who experience it in some form each year.

Beyond securing homes at affordable rates for households, affordable housing policies have been associated with a broad set of other benefits – social, health, developmental, and economic – within the literature on affordable housing. This research document explores those benefits to qualify them and further an understanding of housing's value for a municipality that may be considering affordable housing policies. Furthermore, the document explores green affordability as a significant development for housing and the specific context of a municipality in the Montreal region, the City of Dorval, pairing its community's concerns with potential benefits.

Social Benefits

Affordable housing can be an important asset in achieving several social benefit outcomes. Through reducing the shelter burden of a household, affordable policies can bring stability to the household through improving its overall sense of wellbeing and housing and life satisfaction, as well as potentially providing home security through mitigating the risk of financially induced negative moves. Housing policy also as a significant role in facilitating community cohesion, particularly related to social mix and social networks. Crucially, affordable housing is a significant measure to assure housing is available at all stages of the life cycle as households can find themselves unable to meet market pricing at different stages in life. This is particularly true for seniors who tend to lack purchasing power in retirement. Affordable housing options not only aid them economically, but if housing emphasizes community, adaptability, and transportation, it can provide an important social safety net. The literature also finds that there is no significant causal relationship between the introduction of affordable or social housing and increased rates of crime. Providing the proper context, housing can be a positive or neutral contributor to a neighbourhood. Additionally, if affordable housing policy allows for a household to move to a safer neighbourhood, it can reduce the likelihood residents are at risk of victimhood or in becoming involved in crime. Lastly, homelessness remains a significant unresolved socioeconomic challenge in Canada and Housing First strategies can be a spearhead in providing aid to the estimated 235,000 Canadians who experience homelessness in some form each year. In particular, there is evidence

to suggest that affordable housing policy is a preferable cost avoidance strategy in averting the costs of inaction attributed to homelessness inflicted economically upon society.

Health Benefits

Though a move to affordable or social housing is often correlated with improved health outcomes, improving housing affordability is no guarantee of improved physical health as underlying intervening factors can be significant determinants on outcomes. The method or policy through which affordability is administered can have a key determining effect. If affordable housing policies result in access to improved housing quality, such as newer or renovated lodgings, then benefits attributed to those policies can include those related to: indoor environment quality, air quality, proper insulation, and reduced overcrowding. Improved health has the secondary benefit of reduced absenteeism at school and work, thus contributing to those outcomes and improved overall performance. Additionally, as rent reduction improves the fiscal health of the household, it can also improve housing-related stress and its negative impact on mental health and other areas such as cardiovascular health. Furthermore, additional household budget alleviated by rent reduction can lead to improved diet as funds are made available for better quality food. Finally, if affordability policies lead to improved quality housing and thus improved health, it contributes to a spillover impact of reduced health costs for both the individual and the state along with a lessened demand on healthcare services. Naturally, many of these benefits are contingent on affordability improving the physical conditions of the lodging itself beyond a state of negative influence on health. If a household was not previously in conditions detrimental to their health and they are making a lateral move in terms of adequacy, there will likely be insignificant observable effect on their health attributable to the move.

Developmental Benefits

Housing affordability has a foundational role, but is not a sole determining factor affecting development and reducing housing costs alone does not improve education or employment outcomes. However, it can be part of the solution in providing a secure household environment that will “encourage transitions” in education and income. Housing unaffordability is a gatekeeper; quality schools are often socially-stratified and employment opportunities too are not “randomly distributed”. Higher quality public education is often found in neighbourhoods with higher tax revenues and where job opportunities are concentrated, housing prices tend to rise. Therefore, location is a key determining factor. The degree to which policy can improve access to place-based opportunities is key to affordability’s positive developmental impact. The literature shows that housing quality has a significant impact on development outcomes especially for children as both educational performance and future earnings can be negatively impacted by a lack of adequate housing, housing instability, stress, and negative neighbourhood environments. However, there are intervening factors related to the family situation that can positively or negatively influence outcomes. Finally, the literature notes the importance of combining providing homes at affordable rates with integrative programs to provide employment resources. When that is done successfully, employability and wages have been shown to increase.

Economic Benefits

A review of the literature finds that the introduction of affordable housing policies leads to generally positive economic results at three levels of analysis. At the household level, the primary benefit attainable through the introduction of affordable housing measures was the improved fiscal

health of the household. For low-income renters, affordable housing was found to have a direct role in stabilizing the household and reducing the “minimal required earnings to cover other expenses” in addition to augmenting and complementing income assistance.¹ Practically, this translated into less of a rent induced burden and additional household species to spend on other necessities along with surplus goods and services in their local communities. At the local community level, a primary concern of citizens is for the impact affordable housing can have on neighbouring property values. Fortunately, research demonstrated those fears to be unfounded and instead showed affordable housing units can be successful and beneficial additions to a community in the proper setting. Additionally, though unquantified, a business case was expressed for employers located in areas with high unaffordability that affordable housing could be a means to improve employee retention and prevent their flight for cheaper residence outside their regions of operation. Minor spillover benefits were received from increased individual incomes of low-income renters who are likely to spend that money locally. At the macro-societal level, affordable housing programs demonstrated their value in two ways: first, as economic drivers in generating positive net returns on investment and job creation and second, as proactive measures of cost avoidance, mitigating the costs of inaction associated with unaffordability. Finally, this section’s examination of various policy-devoted works revealed that to achieve economic benefits traditionally associated with affordable housing, it requires a careful consideration of context, socioeconomic conditions, and location – particularly at the individual level.

Affordable Housing and the Environment

This section of the research illustrated three major points for a reader with relatable and illustrative examples from various regions, but significantly Canada and Montreal from a review of the literature. First, the goals of sustainable community building and the goals of affordable housing are irrevocably linked and as such, should be considered jointly in municipal policy outlays. Urban sprawl – a detriment to sustainable community building – is precipitated by rising unaffordability as households are forced by unaffordability to seek cheaper homes further from the city centre. Awareness of that connection can allow cities to meet the challenges of housing unaffordability and sustainability together with proper planning. Second, green-affordable housing provides a diverse set of secondary benefits beyond the primary benefits of energy efficiency and monetary savings for the household that extend to a community or society. Energy efficient homes have been shown to be beneficial for the fiscal health of a household, guarding them from energy poverty as well as providing secondary benefits such as improved quality of life and respiratory health achieved through improved indoor air and indoor environment quality. Finally, this review demonstrated the cost-effectiveness of green-affordable developments which were found to either demonstrate cheaper or on-par costs with conventional counterparts in general, and marginally more expensive hard costs related to construction. The Bois Ellen Residence in Laval, Quebec and the Coteau Vert Co-operative in Rosemont are two such examples of successful green affordability in the metropolitan area of Montreal.

Context Matters

In seeking to understand the causality and transferability of cases and findings from the literature, the following conclusions were determined. Though it was heavily emphasized in the literature that there was a dearth in Canadian studies, it was also clear that context is highly

¹ Steve Pomeroy and Maude Marquis-Bissonnette, *Non-Housing Outcomes of Affordable Housing* (Ottawa: Canada Mortgage and Housing Corp., 2016). 34.

important for outcomes tied to affordable housing policymaking. As there are inherent limits to the transferability of a given case study, all case studies can provide valuable insight into the potential social or economic benefits attainable through affordable housing developments. A municipality should take note that regardless of comparability – at greater or lesser degrees – that comparability has limits; those examples can be instructive lessons in best practices or as prompts for benefits-related goals, but the particular case of the municipality is, naturally the paramount consideration. As such, the policies or cases explored in this report should not be seen as a roadmap to follow, but should instead be taken as a catalogue of the beneficial effects affordable housing can and has achieved, and as a source of inspiration in achieving their own goals. The needs of their own citizens, the conditions of their own housing situation, their own available sources of funding, and the policies they consider remain features that can enhance or detract the trending benefits of affordable housing. Careful consideration in policy is thus imperative to secure affordability and associated benefits.

Likewise, the lines of causality between affordable housing and the outcomes generally associated with them remain a matter of debate, in particular with those related to employment. Indeed, from introduction to the ultimate result of a given benefit, intervening factors obscure the line of causality. There is no one reason for these difficulties in establishing causality; as some authors have noted, there is a lack of studies overall and a general evaluative framework, or a set of common indicators in the literature through which to approach or study the economic benefits and costs of affordable housing (Buzzelli 2009; Frontier Economics 2014; Pomeroy and Marquis-Bissonnette 2016). Indeed, just as providing affordable housing is “not an exact science” and that “there a one-size fits all solution”, the literature is as varied in approach, methodology, and issue of interest (i.e. some are broad general studies whereas some focus solely on the differing affect one organization type can have vis-à-vis another).² Nevertheless, those studies which have been conducted point towards several predominant trends of benefits arising alongside the introduction of affordable housing. Crucially, this survey of the literature observed that despite those blind spots in the study of affordable housing, most authors adamantly affirmed the importance of affordable housing as a foundation for individual and societal success and emphasized the necessity to maintain funding to programs that facilitate affordability. As a foundation, however, some benefits cannot be achieved through “affordable housing alone” though they can be the “result of affordable housing being better able to meet tenants needs than alternatives”.³

² Nathalie Pierre, *A Safer Haven: Innovations for Improving Social Housing in Canada* (Ottawa: Canadian Policy Research Networks, 2007), iii-iv.

³ Frontier Economics, *Assessing the Social and Economic Impact of Affordable Housing Investment: A Report Prepared for G15 and the National Housing Federation* (London, UK: G15 and the National Housing Federation, 2014), 8.

FOREWORD: WHO WE ARE

Our Mission

The Table de Quartier Sud de l'Ouest-de-l'Île (TQSOI) is a non-profit organization that unites all citizens and individuals involved in local community organizations, institutions, businesses and political life to improve the quality of life and to favour social development in the south of the West Island. Social development lies at the heart of the TQSOI's work. As a community hub and network, we provide an opportunity for people of all socioeconomic and cultural backgrounds to come together to:

- Create connections
- Voice and identify local needs and concerns
- Establish priorities and actions
- Advocate for responsible planning that fosters a good quality of life

The South of the West Island has traditionally been regarded as a wealthy sector, and its social development needs have long gone unrecognised. Wealth does exist in this territory, but we also know that there are vulnerable neighbourhoods and important social issues obscured amidst this wealth. Thus, the decision to form a community council became an obvious and necessary one. Active members of the community chose to unite and establish a roundtable whereby local stakeholder could address many of the local populations' concerns and issues encountered in the South of the West Island. As a community council, we aim, among other things, to address hidden poverty dispersed in the community. The establishment of a multi-sectorial network is fundamental in the effort to unite different active forces in the Southern West Island, in order to build a comprehensive vision of local priorities, and to align all efforts and actions with the aim of improving quality of life for all – especially those who are socially and materially disadvantaged.

The TQSOI works to build a healthy community by promoting:

- Opportunities for vulnerable people
- Sustainable development
- Food security
- Urban planning
- Transportation
- Elimination of poverty and social exclusion
- Affordable and social housing
- Accessible community and institutional services
- Student success and employability



INTRODUCTION

If the basic familial household unit should be the building block of society, then too by extension is the space within which it rests – the home. It is a space that can either be allowed to hinder prosperity or be strengthened to nurture a household's vitality, stability, and development; a cage to restrict it or a garden to foster growth. Ensuring that affordable and adequate housing is available for all Canadians is essential in advancing that process as unaffordability can be a significant burden and gatekeeper to the household's success. The purpose of this report is to demonstrate to a reader the important benefits that which affordable housing can provide to the individual, but also those which extend to a local community and Canadian society. By emphasizing housing as an issue greater than four walls and a roof - and instead as a crucial factor in the success of the family, the community, and Canadian society - this report can serve as an instructive tool for a municipality in considering affordable housing policy within its jurisdiction. The stability of the home, and through it the household, is therefore linked to the prosperity of the whole of society as the success of the Canadian home is thus the success of Canada itself. While not an entirely comprehensive review of all achievable benefits, our hope is that this report will capture a more complete portrait of what can be attained when affordable housing measures are properly tailored to meet the goals and needs of a locality.

In exploring this matter of affordable housing, this report shall answer the following: In the available literature, what are the noted benefits that can result from the introduction of affordable housing at three levels: the individual, the community, and the society? How are these general benefits relevant for the specific needs and goals of the city of Dorval? Finally, what limitations are observable in the literature's assessment of the benefits of affordable housing and how should they be considered if a municipality were to take them as an approach to policy? From a review of recent literature, one finds that a wide range of benefits have been observed to associated with the implementation of affordable housing practices in the following areas: social, health, education, employment, and economic. In the case of Dorval, a city whose situation is characterized by interests in sustainability and combatting demographic challenges for seniors, those under 25, and new immigrants, the most relevant benefits are those related to housing's role in facilitating social mix and social sustainability, and the potential economic benefits at the household and community level. Though the ideal comparable and transferable case study to Dorval is absent, the examples and lessons from the literature are nonetheless of significant value to the municipality to inform their own decisions regarding affordable housing practice. Finally, our research observed that studies and reports in the literature found that while affordable and adequate housing can be a foundation for that range of benefits, it is not a guarantee of that result nor is it in all cases a necessary causal factor; among others, the specific socioeconomic context, goals, and policies are important intervening factors between housing built and benefits gained.

ABOUT THIS STUDY

A wide net was cast in the undertaking of this study and as a result, research spanned a variety of databases and included academic and grey literature. The temporal scope aimed predominantly for literature published after 2007, though some exceptions are included outside that window. Among the sources gathered are planning reports, census data, municipal publications, public policy studies, housing case studies, and various academic journals and papers. Among key databases were the online libraries and collections of the Canadian Mortgage and Housing Corporation and the Société d'habitation du Québec. Finally, ample use was made of the McGill University library network which provided access to a breadth of academic literature - including graduate research – as well as grey literature.

The ideal preference for key sources were closely transferable case studies to pair with the municipality under review. The absence of such studies led to an expansion of the scope of research beyond the local region of Montreal to include studies outside of Quebec – predominantly those in the United States, but also a small number outside North America, such as one comprehensive study conducted in London, UK. Indeed, this need to broaden the scope reflected findings of literature reviews by experts in the field that noted a relative dearth of Canadian literature. However, as this report's conclusions will reflect, seeking – or indeed isolating – one's focus of study to pure, highly localized case studies, though valuable, is both difficult given the limited availability and impractical for the purposes of this report as a general study. As there is an innate difficulty with case study transferability – as context is incredibly important - all cases studies can provide degrees of important illustrative value, regardless of region or indeed sameness to the municipality under focus.

Preceded by contextual background on the issue of housing unaffordability in Canada, the body of this report is organized thematically around four major categories of benefit: social (household stability, community cohesion, the life cycle, crime and safety, and homelessness), developmental (education and employment), health, and finally, economic. A separate section focuses on green housing, the environment, and considerations therein for affordable housing. The last section of the report contains an assessment of a Montreal metropolitan area municipality – in this case the City of Dorval – and seeks to pair generally observable benefits and the socioeconomic and housing needs of the municipality to demonstrate the utility of affordable housing policy action. That focus is followed by a final review of the literature's findings regarding case transferability and causality.

AFFORDABLE HOUSING IN CANADA: CURRENT CONTEXT

Defining Affordability

Affordable housing is characterized “above all, [by] the measure of ability to pay”.¹ Affordability itself is defined as a “measure of the cost of housing relative to the income of the household, expressed as the shelter-cost-to-income ratio”.² Traditionally, what is defined as “affordable” housing is spending on shelter that does not exceed 30% of pre-tax household income and that is the standard that is used as a reference point throughout this report. Furthermore, affordable housing is a term often used interchangeably with “social housing”. Often, “social housing” is used to refer specifically to housing stock that is “supplementary to the private housing market” – including public options, cooperatives, and non-profits - but both terms are frequently used interchangeably in the literature.³

When considering affordability, or rather, what is an appropriate standard of affordability, one must consider the context of a given municipality or area which is under examination. This is particularly important given that affordability is relative on a household to household basis. A standard of affordability does not always capture an accurate sense of a household’s socioeconomic position as the gravity in exceeding that 30% standard is relative to the income of a household. For instance, a household with average yearly earnings of \$80,000 that exceeds 30% spending on shelter costs does not face the same burden as a household with \$30,000 average yearly earnings that spends the same proportion on shelter costs. Unaffordability can therefore place those in lower income brackets at higher risk of negative spillover impacts of unaffordability - which can “crowd out” spending on healthy food, clothing, transportation, or education - as they have less income in raw dollars to sustain household fiscal health after housing costs are removed.⁴

The regular standard for affordability (at 30%) does not capture other aspects of acceptable housing such as adequate condition or the size being suitable for household needs. To address that blind spot, the definition of “core housing need” is occasionally used. A household is said to be in core housing need when its housing does not meet one of the three acceptability standards – adequate condition, suitable size, or affordability – and if the household would have to pay over 30% to meet all those conditions in its local market.⁵ Furthermore, the location of housing can have an impact on affordability and a household budget. It is not an uncommon phenomenon for a household that finds itself paying an excessive portion of their income on housing close to the center of a major urban area to seek more affordable housing further away in the suburbs (Gurnstein 2012). Though this urban flight may result in spending less than 30% of their income on housing, it is not necessarily more affordable for the household overall; studies have shown that depending on location and access between home, workplace, and services, such moves can lead to excessive costs on transport and additional commute time burdens which can counteract the savings on housing. That problem has led some to instead prefer an affordable-accessibility standard at no more than 45% of a household budget spent on transport and housing combined (Litman 2011; 2017). However, as the 30% standard for affordability is the benchmark most frequently used or mentioned in the literature, it will also be the standard and reference point for affordability throughout this report.

Housing Unaffordability in Canada

In Canada, contemporary trends have shown that housing unaffordability remains a significant societal challenge for a substantial number of households. For one out of every seven households in Canada, adequate housing is not available at the 30% standard of affordability which “undermines their ability to improve their lives” and which impacts “economic growth, labour markets, social service costs, and safety”.⁶ Furthermore, that unaffordability is rising: the average rent for the “bottom 40% of rental units” is “equal to nearly half of average income for the equivalent group of households”.⁷ Beyond long-term cost burdens on households and upon society because of “increased need for services” and the limitation of their human capital growth, “at extremes” unaffordability can (and has) led to homelessness.⁸ In total, an estimated 35,000 Canadians are homeless on a given night and 235,000 experience it in some form in a given year.⁹ In Canada, unaffordability is not uniform for owners and renters as renter households are four and half times more likely to be in housing need compared to owner counterparts.¹⁰ This is indeed concerning as renters are usually on average more economically vulnerable as they possess approximately half the household budget of an average homeowner.¹¹ Low-income renters are, along with recent immigrants and seniors, one of the most vulnerable demographics in terms of facing unaffordability. Renters with an income up to 19,190 per year are 18 times more likely to be cost burdened with housing unaffordability than the top 50% of Canadians across income distribution.¹² That likelihood is particularly problematic when considering that the average yearly earnings for “the bottom fifth of Canadians” was merely \$15,500 on average in 2011.¹³

A variety of programs at a federal and provincial level administer subsidies and housing aid to Canadians who struggle to meet a standard of affordability at market prices. One of the most significant organizations in this capacity is the Canadian Housing and Mortgage Corporation (CMHC) which helps nearly 600,000 households annually live in affordable homes.¹⁴ In Quebec, the Société d’habitation du Québec (SHQ) administers several rental, development, and homeownership programs to aid low-income families and seniors to bridge the affordability gap. Among its most significant programs are the AccèsLogis development program which helps fund the building of public and community social housing projects, the low-rent housing program (HLM) which maintains social housing stock with rent geared to 25% of a renter’s income, and the rent supplement program (PSL) which subsidizes rent for households to maintain a 25% rent-to-income-ratio in housing on the private market.

Some have expressed concerns that federal funding for affordable housing programs is not enough to meet the present challenges and fill the gap between incomes and increased market prices. Concerns surround the meeting of “baseline” funding requirements for the near future (Pomeroy 2015; 2017). Fortunately, the recent 2017 budget appears to make a “more predictable and long-term funding commitment” by sustaining and extending the “new quantum of funding” from the 2016 budget across an 11-year funding framework.¹⁵ However, the combination of demographic shifts such as an aging population, the aging of current social housing stock, and market trends means funding remains a significant concern as citizens – especially those in urban areas – will increasingly struggle with unaffordability (Gaetz et al 2016; Pomeroy 2015; Zon 2015). Despite those concerns, measures to meet the challenge of housing unaffordability continue to exist across the housing continuum (see Figure 1).

Figure 1 - The Housing Continuum¹⁶

Emergency Shelters	Transitional Housing	Supportive Housing	Subsidized Housing	Market Rental Housing	Market Homeownership Housing
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Subsidized housing includes programs like PSL or HLM which provide an option for low-income households unable to afford market rental or homeownership housing. Supportive housing is housing that includes services to support “special-need individuals” including support for the elderly, drug addicts, those with mental health needs, and those dealing with mental disability.¹⁷ Transitional housing is housing that “provides a temporary living environment” for those faced with short-term housing needs induced by brief unemployment or low-income.¹⁸ Furthermore, transitional housing plays a key role in “assisting individuals” make the move from shelters to stable, “self-contained” residence and is a necessary part of successful Housing First programs.¹⁹ Due to the rising cost of homeownership, increased numbers of renter households, and households’ needs not being affordability needs not being met at market prices, investment into affordable housing initiatives is necessary. As the remainder of this report will emphasize, that investment can be beneficial beyond providing homes at an affordable price.

The most significant and primary benefit of affordable housing is the very fact that low and middle-income individuals and families can live within their means at a standard of affordability. That is not a fact in dispute, and though not taken for granted in the literature, that focus on the housing itself finds less attention compared to non-housing outcomes and spillover benefits. As this report reflects the literature, in turn, this report will also expand its focus. The following section deals with the social benefits associated with the introduction of affordable housing.

SOCIAL BENEFITS

Though in the literature the term “social benefits” can be taken to mean a broad umbrella of non-economic benefits including health and education, for the purposes of this report it is used as a categorization of major benefits related to the social development and welfare of the household and society. As various non-economic benefits have warranted their own discussion sections, the present section has sought to group and isolate five key social issues most frequently referred to in the literature in conjunction with affordable housing: household stability, community cohesion, the life cycle, crime, and homelessness.

Household Stability

The application of affordable housing policies can have a positive effect in bringing stability to low to middle-income households. This is primarily achieved through the reduction of the rent burden which improves the fiscal health of the household. In addition to its positive economic effect, that relief contributes to the overall wellbeing of the household and a secure housing situation. As stability is at the core of maintaining a household’s potential as a nurturing environment for positive outcomes such as educational development, consequently, affordable housing - in stabilizing the household’s physical environment - helps provide a foundation for other benefits.

The immediate effects of policy includes lower stress caused by financial anxiety.²⁰ Furthermore, it has been shown in extensive literature reviews (Pomeroy and Bissonnette 2016) that affordability affects stability: “when housing costs are high relative to income, families tend to move more often” which can in cases lead to homelessness or being put at risk of homelessness.²¹ In a qualitative survey study of independence and wellbeing post-move into social housing, Condon et al (2010) found that for 70% of respondents stress in the household declined due to factors such as financial relief.²² Similarly, Frontier Economics (2014) observed that “higher satisfaction with housing is associated with higher life satisfaction” finding that in their own survey of tenants, “83% reported that they were satisfied” with their new home and 70% with “their lives overall”.²³

Regarding intervening factors, there are several that have been identified to have an effect by Pomeroy and Bissonnette (2016). Important ones include the family situation (i.e. marital stress, parenting competence, health) and the quality and location of the neighbourhood which not only affect stability, but also a child’s development.²⁴ Location was considered by Condon et al to be a “crucial” factor in determining social wellbeing.²⁵ The presence of intervening factors presented an issue with causality in the literature, despite that it was “clear” that housing unaffordability “is the primary reason for families to become unstable” as housing instability “does not occur in a vacuum”.²⁶ It led Pomeroy and Bissonnette to conclude that “the research does not explicitly

identify if and how housing status and affordability are associated, although it is implied that stressors such as affordability burdens may contribute to changing structure”.²⁷ However, they maintained that in reducing high shelter costs – which “can impose difficulties on families including rent arrears and eviction, which then force involuntary moves” – affordable housing retained that significant potential for positive outcomes regarding stability.²⁸

Community Cohesion: Social Mix and Social Networks

Social Mix

Affordable housing policies often deal with the matter of socioeconomic mixing, most commonly referred to as social mix which entails fostering a socially diverse community. Housing is considered to have a significant role in both social mix and in deconcentrating poverty.²⁹ Income mix is pursued for a number of rationales including improving the socioeconomic wellbeing of low income households, deconcentrating poverty, and revitalizing the state of public housing.³⁰ Social mix has been identified by the City of Montreal as a “condition for sustainable development,” “a way to enable people to stay in their neighbourhoods” to maintain a sustainable community, and a “way to avoid social segregation and to break the cycle of poverty”.³¹ Indeed, as Litman (2011) argued, policy that facilitates affordability and accessibility within a society is “the opposite of gentrification: it allows households with diverse incomes, abilities and needs to live together in attractive, diverse and dynamic neighbourhoods”.³²

Policies dealing with social mix include standards for income mix when allotting targeted proportions of the level of household income for a specific development. In a comprehensive study of income mix, Streich (2016) explored the nature and effect that it possessed when applied to cases. The study found that income mix policies were applied at various compositions with low income proportions varying from 5% to as much as 50% of development populations.³³ Streich found a lack of impact study on the economic impact of income mix, but did note that income from market units was used to increase project viability through subsidizing lower rent affordable units.³⁴ Additionally, project viability increased when up-front government capital was provided which was important in aiding early development stages.³⁵ In 2005, the City of Montreal provisioned in its Inclusionary Housing Strategy proportional targets for affordable housing with the objectives to “promote social mix”, “facilitate construction of social and community housing,” and to “stimulate the production of private affordable ownership units”.³⁶ As of 2013, it was estimated that 8,000 units were expected from completed projects and developments in progress.³⁷

Social Networks

Studies have demonstrably shown that living in a better social environment leads to improved emotional and physical health and improved communities overall; “in short, housing that promotes fulfilling social interaction improves quality of life”.³⁸ Affordable housing has the potential to help the social conditions of residents and the overall community through its capability to foster key social networks. AECOM (2011) proposed that by reducing one of the largest economic burdens on the household, affordable housing enables recipients to “participate more in a community’s economic and social life” which “promotes their integration, an essential component of social cohesion”.³⁹ That “residential stability” was also noted to cause some residents to “develop confidence” and a “feeling of belonging” which aided their integration.⁴⁰ Furthermore, they argued that “local organization and partnerships aided the employability,

employment integration”, academic success and “intercultural cohabitation” of those in developments.⁴¹ Condon et al (2010) found in a post-occupancy survey of recently moved households, that 58.8% of households said they were involved in new activities related to new social networks resultant from the move to new housing.⁴² A literature review by Frontier Economics (2014) found that the literature noted positive changes to “adult socializing and child development following home improvements, as well as increased feelings of safety”.⁴³ Naturally, benefits are contextual. For instance, Gaumer et al (2014) noted that the value of ties – in providing informational or instrumental support - is always characterized by the ability of individuals to provide that support beyond expressive, emotional support.

One concern regarding the integration of social housing residents into a community is that of overly insular social networks contained within a residence building itself. Indeed, over-reliance and isolation to a dense social network structure, which – despite being characterized by “high levels of trust and mutual obligation” – can limit diversity of support as they “lack bridges to outside resources”.⁴⁴ Conversely, wide-ranging networks “comprising weak ties” are considered preferable in “broadening knowledge and access to information” with these broadened ties considered important for upward mobility.⁴⁵ However, in a case study examining the social ties of residents in a New York City affordable housing development, Gaumer et al (2014) found evidence that residents “do not appear to have the kind of dense, potentially redundant, and locally bound networks that are often ascribed” to their households.⁴⁶ Instead, their study found that households had diverse core and overall networks which included valuable ties within residence developments and in their local neighbourhood outside the building.⁴⁷ Additionally, their study identified and confirmed findings from other studies that suggested childcare centers “act as brokers to other institutions and services” in addition to fostering connections over socioeconomic lines.⁴⁸

The Life Cycle: Seniors

The notion of a life cycle approach to affordable housing policy is important not just in terms of policy meeting the needs of citizens, but also in effectively communicating the importance of policy in convincing others of the benefits of such policy. It entails an understanding of affordable housing as a solution to meet the needs of individuals and families and various stages of their lives. Affordable housing across an individual’s life cycle would include, for example, a municipality retaining housing stock for both young low-income families and professionals “starting out” who “typically do not have the earning power” for market housing and retaining stock for seniors who, “past their prime working years,” also have difficulty finding affordable housing at market rates.⁴⁹

As stated, emphasis on this role of affordable housing has also shown to be an effective way of overcoming Not-In-My-Back-Yard (NIMBY) resistance within a municipality. Goetz (2008) noted that the term life cycle housing is “an attempt to change the public image of affordable housing by acknowledging that people’s housing needs, and their abilities to meet those needs, change as they make their way through the lifecycle”.⁵⁰ Due to the negative connotation some have for the term “affordable housing”, Goetz hypothesized that if the issue was framed in different linguistic terms, the initial resistance to a project would be less severe. In a series of qualitative survey studies, Goetz tested the linguistic effect and the differential between approval of the terms “affordable housing” and “life cycle housing”. Between the two terms, respondents

decisively responded most favourably to “life cycle housing” and least favourably to “affordable housing” suggesting the power and potential of issue-framing in this case.⁵¹

The focus of this section is on seniors for illustrative purposes and because much of the literature discussed sufficiently addresses other vulnerable segments of the population, namely low to middle income families, at most thematic levels. As a vulnerable population with traditionally lower purchasing power, affordable housing policy is important for the “context of healthy aging” and aiding the population through all stages of the life cycle.⁵² For an affordable housing program, it is as important to emphasize healthy aging as it is affordability to maximize the benefits of providing housing to seniors.⁵³ Leviten-Reid and Lake (2016) found in a study of three residences in Nova Scotia that three areas in particular – shared space, adaptability, and transportation – were important to residents themselves. Shared space was considered to be a nexus of social interaction and residents appreciated its benefits for socialization including use for recreation, events, and meals together.⁵⁴ Particularly for those living alone it was an important source of support as they could look out for reach other and monitor concerning irregularities.⁵⁵ Adaptability such as modifications that facilitated aging in place - like grab bars or walk in bathes – were also highlighted as important facets of the residences along with good access to transportation connecting them to essential services and resources.⁵⁶

Furthermore, seniors amount to a significant portion of those who receive aid in the form of affordable housing policy; in Quebec, seniors amount to 55% of the SHQ’s total clientele of 241,000 households.⁵⁷ Unsurprisingly, there are plenty of demonstrable cases of this positive impact of affordable housing in providing social benefits for seniors. A 50-unit residence for autonomous and semi-autonomous low or modest income seniors, the residents of Villa Beaurepaire in Beaconsfield, Quebec, enjoy a “social safety net” – a positive community space that entails a “safe, secure, and socially enriched environment where maintaining independence” is valued.⁵⁸ Financially, there appears to be benefits at a societal level to investing in affordable and adequate housing for seniors. Complimentary of that example, a case study of SHQ activities in Victoriaville-Warwick demonstrated that the SHQ was able to offer support for low-income seniors, comparable to that of Centres d’hébergement de soins de longue durée (CHSLD) for a fraction of the cost: \$12,000 annually per person compared to 60,000 in an equivalent CHSLD.⁵⁹ Overall, SHQ programs saved \$103 million each year for the Quebec government in its active role working with low-income seniors, an important revelation given the aging nature of some municipalities in Quebec.⁶⁰

Crime and Safety

One concern that motivates resistance to the introduction of affordable or social housing developments in municipalities is a perception that their introduction leads to increased levels of crime. Often this is motivated by negative assumptions regarding the residents themselves. However, researchers – in seeking to understand that relationship – have found either mixed-results or “no significant relationship” between crime rates and social housing. Results that led to increased crime rates were highly context dependent; studies from the US indicated variables affecting context-based outcomes included racialized poverty, density, and the neighbourhood where developments were introduced.⁶¹ One explanation offered for the hypothesized link was that “socially assisted households [...] are often located in more distressed and poor

neighbourhoods where crime rates tend to be higher” indicating that policies toward affordable housing should consider the location-based aspects that determine outcomes.⁶²

Other literature pointed out findings suggesting that the physical environment surrounding the development can have an influence on crime rates. Frontier Economics (2014) identified that “decent housing can help in crime prevention [...] especially for young homeless people”.⁶³ Trachtenberg et al (2016) cited studies that found crime and “levels of aggression and violence” were “systematically lower” when properties were “intentionally landscaped” with high levels of vegetation.⁶⁴ A “lack of nature” not only had negative impacts on socialization due to inadequate outdoor space, but also was associated with increased mental fatigue “which in turn significantly predicted aggression”.⁶⁵ On properties that were accompanied by well landscaped vegetation, such as mature trees, crime rates were 55% lower than areas with simple barren courtyards.⁶⁶ That reduction in turn can lead to an improved sense of security and resultant relief on stress, and thus improved quality of life. Furthermore, those reductions in crime rates naturally have implications for financial cost for residents and the state in avoiding the cost of crime. Finally, being in a less violent living environment has been found to have positive impacts for educational and career development, notably for youth.⁶⁷

As the nature of specific landscaping choices identifies, the chain of causality regarding housing and crime prevention is not clear-cut as specific accompanying decisions are major determinants. The context of those choices are important. For instance, a move from inadequate and unaffordable housing to improve and affordable housing that is in poor neighbourhood conditions may not necessarily result in improved household stability. As Condon et al (2010) found, the location and nature of the neighbourhood “is as crucial” a factor in determining social wellbeing as the “design and operation of the facility itself”.⁶⁸ AECOM (2013) noted that though the work of affordable housing providers in Quebec could have a positive effect in revitalizing neighbourhoods, it did not directly prevent crime, rather, it limited its influence and opportunity to manifest.⁶⁹ Pomeroy and Bissonnette (2016) noted that social networks were key for households in their ability to “attenuate impacts of crime” and that insofar as place-based public housing, they were generally more “targeted by criminal elements”, and negative outcomes were more probable if location in neighbourhoods with high concentrations of poverty.⁷⁰ Other intervening factors include the scale and form of housing, zero-tolerance policies for residents, and the presence of positive role models.⁷¹ What can be confidently stated is that affordable housing leads to benefits associated with reduced crime rates insofar as its ability to place households in safer neighbourhoods which are more likely to facilitate social wellbeing. Indeed, safer neighbourhoods contribute to safer households.

Homelessness

Homelessness in Canada remains a significant, diverse, and unresolved crisis today as 35,000 Canadians remain homeless on a given night with at least 235,000 Canadians experiencing homelessness in some form over the course of a year.⁷² Historically, homelessness has been considered to be a problem for older, single men, yet today it has a broad demographic scope: 27.3% are women, 18.7% are youth, adults 50 to over 65 combine for 24.4%, between 28% and 34% of the shelter population are Indigenous, and 2.2% of the shelter population are veterans.⁷³ Furthermore, families have been found to stay in shelters twice as long as individuals.⁷⁴ Though there is no “one size fits all solution to homelessness,” homelessness is “*always* a housing

problem”.⁷⁵ According to studies, Housing First strategies have been proven to be an effective spearhead in combatting chronic homelessness by first putting individuals in a home and then providing them with the support they need to reorient their lives and reintegrate into society.⁷⁶

In addition to the social benefit of aiding individuals and families affected by homelessness, it is increasingly evident that doing so is a more effective economically than the alternative. Indeed, there is a significant “business case” that can be made as to why governments at all levels should concern themselves with this plight.⁷⁷ A study by Project Chez Soi in Montreal – a Housing First based research program for mental health and homelessness - found that the cost of service utilization dropped by 43% annually (\$9000 per person) for individuals in Société d’habitation du Québec (SHQ) assistance programs.⁷⁸ The SHQ is itself an effective example of affordable housing answering the challenge of resolving homelessness in supporting those in their programs who are homeless or at-risk in finding “stable housing and community services”.⁷⁹ Those “structured interventions” amounted to 1136 individuals receiving support with an annual net economic benefit estimated at \$2 million dollars per year for Quebec society.⁸⁰ At a wider economic level, estimates of the overall cost avoidance benefit for Canadian society vary: some have estimated the cost to be as much \$100,000 per homeless person per year while others have estimated the overall cost on average to be between \$30,000 to \$40,000 per year.⁸¹ With a conservative estimate of 150,000 homeless annually, that would amount to between 4.5 billion and 6 billion in costs levied upon taxpayers through healthcare, criminal justice, social services, and emergency shelters.⁸²

According to Gaetz et al (2016), funding for a solution to homelessness has declined in the past two decades which has emphasized the dire state of the crisis. Currently, federal funding amounts to \$73 dollars per Canadian each year, “considerably lower than the \$115 level of 1989”.⁸³ For 2017-2026, the predicted overall level of spending was \$22.592 billion dedicated towards the homeless problem, which was deemed insufficient to fully meet the present challenge.⁸⁴ Instead, they proposed a comprehensive “National Housing and Homelessness Strategy” which among its policies included the expansion of social housing stock, a national low income housing benefit, and an affordable housing tax credit.⁸⁵ In total, the strategy would amount to a total 10 year investment from 2017-2026 marked at \$43.788 billion, an increase of \$21.196 billion on then current spending.⁸⁶ However, given the estimated cost of not properly addressing homelessness – if for example one used the \$4.5 billion per year estimate and expanded it over a ten year period – it is clear that consideration for proactive policy is imperative, given what appears to be a significant cost avoidance potential. Most importantly, housing policy is at the core of providing a solution for the homeless crisis in Canada and improving the lives of tens of thousands of its citizens.

Summary

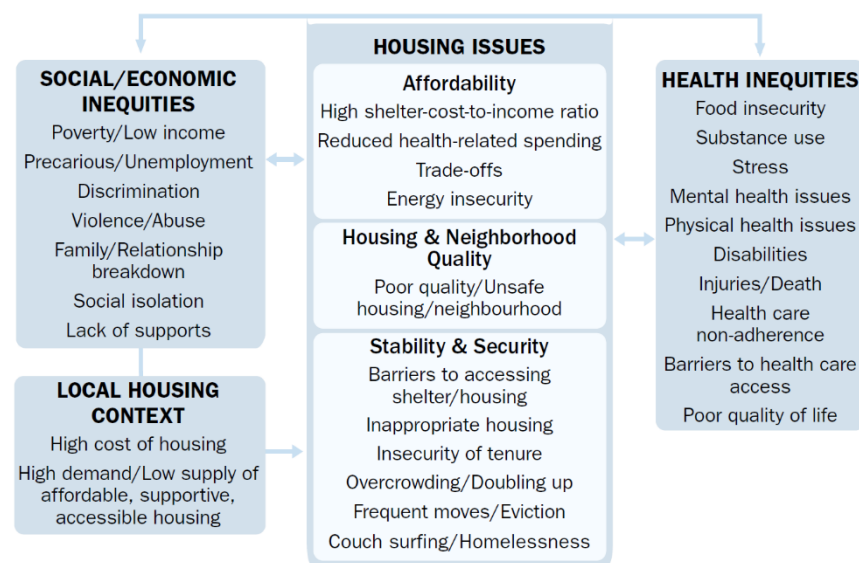
Affordable housing can be an important asset in achieving several social benefit outcomes. Through reducing the shelter burden of a household, affordable policies can bring stability to the household through improving its overall sense of wellbeing and housing and life satisfaction, as well as potentially providing home security through mitigating the risk of financially induced negative moves. Housing policy also as a significant role in facilitating community cohesion, particularly related to social mix and social networks. Crucially, affordable housing is a significant measure to assure housing is available at all stages of the life cycle as households can find themselves unable to meet market pricing at different stages in life. This is particularly true for

seniors who tend to lack purchasing power in retirement. Affordable housing options not only aid them economically, but if housing emphasizes community, adaptability, and transportation, it can provide an important social safety net. The literature also finds that there is no significant causal relationship between the introduction of affordable or social housing and increased rates of crime. Providing the proper context, housing can be a positive or neutral contributor to a neighbourhood. Additionally, if affordable housing policy allows for a household to move to a safer neighbourhood, it can reduce the likelihood residents are at risk of victimhood or in becoming involved in crime. Lastly, homelessness remains a significant unresolved socioeconomic challenge in Canada and Housing First strategies can be a spearhead in providing aid to the estimated 235,000 Canadians who experience homelessness in some form each year. In particular, there is evidence to suggest that affordable housing policy is a preferable cost avoidance strategy in averting the costs of inaction attributed to homelessness inflicted economically upon society.

HEALTH BENEFITS

The relationship between the quality of housing and its effect on the health of residents is one which has been studied at length. It is a causal relationship characterized by “strong and well-established evidence that [demonstrates] various biological, chemical, and physical exposures” found in inadequate housing have “adverse health effects”.⁸⁷ It is the unanimous conclusion from the literature that inadequate quality housing can be detrimental to one’s health outcomes including factors such as indoor environment quality, air quality, overcrowding, and poor insulation. Comparatively, however, the relationship between unaffordability and health is less studied.⁸⁸ As the following diagram from Wood (2016) illustrates, the relationships surrounding the topic are varied, interrelated, and interchanging:

Figure 2⁸⁹ – How are housing and health related?



What is clear from the findings of this current report is that affordable housing leads to improved health outcomes when it leads to improved housing conditions. Unaffordability can limit a household’s options in the market for housing that is both affordable and of sufficient quality to meet their needs, putting them in, or at risk of core housing need. As a major expenditure in household budgets generally, excessive allotments to housing in the budget induced by unaffordable options can limit expenditures elsewhere, particularly quality food, but also less direct areas such as recreation, whose absence can adversely affect health. Furthermore, a lack of affordability can cause housing instability or insecurity which can lead to detrimental health impacts ranging from relatively minor ones such as stress or at extremes those associated with homelessness.

A move into housing that is affordable is often “associated with improved self-rated health” which is significant for quality of life.⁹⁰ In a Vancouver based post-occupancy study, Condon et al (2010) found 40% of households examined reported “that their health had improved after a move to social housing” with 91% of that number citing housing related reasons as the cause of the improvement.⁹¹ Similarly, a longitudinal study cited by Frontier Economics (2014) found that

“32% of tenants reported their overall health as ‘excellent’ or ‘very good’ after moving, compared with 26% previously”.⁹² In a 2008 survey of 10,000 residents in Philadelphia found that households challenged with unaffordability were more likely to: “report fair to poor self-rated health” than those who were not, not seek necessary health resources due to cost, and have “certain health conditions” like arthritis and hypertension.⁹³ Likewise, a 2011 study in New York City of 11,000 renter households found that “higher rent burdens” were “associated with worse self-rated health and an increased likelihood to postpone health care services” due to financial reasons.⁹⁴ It also found that relationship was stronger when the rent burden was greater.⁹⁵

There are, however, intervening factors which have been cited to be obstacles in studying the “impacts of improvements” in most of the literature examined in this report.⁹⁶ For instance, beyond the condition of housing itself one cited variable impacting mental health was social networks and support which could positively or negatively offset changes to health caused by housing.⁹⁷ Another cautioned against making assumptions around the data of unaffordability as some households “undertake” relative unaffordability intentionally to live in a better home and neighbourhood.⁹⁸ Studies have also indicated that the neighbourhood or location are key intervening factors (Mueller and Tighe 2007; Freeman 2009; Condon et al 2010; Pomeroy and Marquis-Bissonnette 2016). As Pomeroy and Marquis-Bissonnette (2016) noted, though better quality neighbourhoods are often correlated with better quality homes, and thus a positive environment for healthy living, the direct home condition must nevertheless be considered as there are contextual exceptions.⁹⁹ Furthermore, a Quebec study by Leloup and Morin (2012) indicated that the form of housing could affect the health impact associated with affordable housing finding differences in outcomes between the low-rent housing (HLM) program and the rent supplement program (PSL). HLM is public housing stock owned by the Office municipal d'habitation de Montréal (OMHM) and PSL is a rent supplement program to allow households to acquire housing on the private market. Their results confirmed their hypothesis that “given their relative dispersion at the neighbourhood level” those in PSL units would be relatively higher reported wellbeing and health than HLM counterparts.¹⁰⁰ This led the authors to note the importance of diversifying the methods of funding and management of affordable housing beyond the HLM public housing model.¹⁰¹ As Maqbool et al (2015) reflected when considering the Moving To Opportunity experiment which was “strong evidence” of improved outcomes via neighbourhood improvement, de-clustering inequality and socioeconomic disadvantages is beneficial to one’s health.¹⁰² The nature of the “complex contextual and compositional factors – notably the specificities of diverse types of subsidies or vouchers” has led some to conclude that the method of intervention is significant “along with context”.¹⁰³ Indeed, as Wood indicated a combination of three indicators – the neighbourhood, the housing, and access to services – are important: “There is evidence that neighbourhoods with high poverty, inadequate and unaffordable housing, and lack of public and private goods and services are associated with poor quality of life and negative short and long-term health consequences”.¹⁰⁴ If affordable housing options can allow people to leave those neighbourhoods and enter ones conducive to their health with adequate housing and good access to services, then it can be argued that affordability leads to positive health outcomes.

A Trade-Off

A recurring theme from the literature on affordable housing and its relationship to health is the notion of a trade-off between housing and health outcomes (Mueller and Tighe 2007; Maqbool et al 2015; Raynault et al 2015; Wood 2016). The notion therein is that low-income

households, because of a combination of low-income and unaffordable rents are forced to make a Hobson's choice when selecting housing, potentially at the expense of necessities which can detrimentally affect health. This can mean trade-off between affordability and adequacy; when unaffordability is present, "the housing and neighbourhood choices available to individuals are limited" which can mean "people may end up living in poorer quality housing".¹⁰⁵ However, it can also mean a trade-off between necessities within a household budget, as one is forced to sacrifice one necessity in order to afford another. For instance, a household can be forced to choose to "eat or heat" because their budget, overly strained by rent costs, cannot allot funds for both food and heating.¹⁰⁶ Either outcome is equally objectionable and both potentially harmful to one's health; in the case of "eat or heat" it is a choice between poor nutrition or inadequate warmth - a lack of either is universally agreed to be detrimental to an individual's health.

Indeed, housing unaffordability has a repeatedly emphasized connection to both food insecurity and energy insecurity (Muller and Tighe 2007; Maqbool et al 2015; Raynault et al 2015; Wood 2016). As one Toronto tenant remarked in Wood (2016): "[we] figured out we could not afford both gas and electricity, we had to choose one or the other. Because we use electricity for other things like lighting, we chose electricity".¹⁰⁷ Notably, the United Way's *Vertical Poverty* study of tenants in Toronto found that "close to half" interviewed worried about being able to pay their monthly rent, a quarter sacrificed necessities to pay rent every month, and a third did so multiple months each year.¹⁰⁸ Similarly, a 2014 survey in Montreal remarked upon that burden, finding that 44.6% of renters spending over 30% on housing had "difficulty making ends meet every month" compared to just 19.2% of renters spending under 30% on housing.¹⁰⁹ The study found that unaffordable rent was correlated with remarkably higher rates of food insecurity as well.¹¹⁰ There has also been evidence elsewhere (namely in the United States) of individuals and households choosing to forego health insurance in order to pay unaffordable housing costs.¹¹¹ Indeed, these issues in trade-offs can be quite prevalent and affect numerous areas related to an individual's health and well-being.

Physical Health

In providing access to adequate housing, there are several direct and immediate effects on physical health that affordability policies can have. Primarily, improving the physical condition of the home with newer or renovated housing can "positively affect health" and reduce the health risks posed by poor housing like poor heating or ventilation.¹¹² Raynault et al (2015) argued that sanitation and affordability were "two inseparable issues" as unaffordability limits one's ability to access adequate housing, effectively "forcing" a household to occupy a "substandard" space detrimental to health.¹¹³ Indeed, as the conditions of unaffordability can emphasize a trade-offs between different necessities like electricity, heating, and food, so too it can induce a trade-off between making rent and adequate housing. Furthermore, unhealthy living conditions have a broad impact were found in a study covering Toronto, Ottawa, and Vancouver to lead to "elevated risk of serious physical and mental health problems, problems accessing healthcare, food insecurity, and numerous hospitalizations".¹¹⁴ Those already at-risk, such as those with "allergies, asthma or chronic respiratory diseases, young children, older people and those with weak immune systems" are more prone to harmful conditions.¹¹⁵

Another contributor to a lodging's inadequacy which has an impact of both physical and mental health is the appropriate amount of space it has available for a household's needs. If it lacks

the appropriate space, it is a problem of overcrowding. Crowding has been identified as an obstacle for children in completing schoolwork at home.¹¹⁶ However, it has also been identified as a factor detrimental to health. Maqbool et al (2015) noted that “by alleviating crowding, affordable housing can reduce exposure to stressors and disease”.¹¹⁷ Overcrowded conditions have been known to have adverse impacts on mental health – like increased stress or feelings of helplessness – but they are also associated with high blood pressure and risk of illness.¹¹⁸ Furthermore, it can pose dangerous health risks for infants and harm to a child’s development; as one study noted “six month old infants were found to have a 26% greater chance of symptoms of wheezing if they were living in overcrowded conditions”.¹¹⁹

Additionally, improved physical health has a cost saving impact for the individual and the government. In a general sense, it can reduce absenteeism in workers and students, improving their production and thus their career or scholastic development; healthy citizens have a greater chance of being productive citizens.¹²⁰ By reducing the risk of serious health issues not only improves quality of life for citizens, but in that respect, can have an economic impact as citizens benefit from fewer interruptions to their potential for economic output and the state benefits from a lessened demand on healthcare infrastructure. In Ontario, savings were shown to be potentially significant for an estimated 278,000 individuals in core housing need who would be “less likely to need an emergency room when no longer vulnerably housed saving \$148 per room visit”.¹²¹ Frontier Economics (2014) noted a UK study that indicated visits to one’s doctor dropped from 4.4 visits per year to 3.4 per year after a move to social housing.¹²² They also highlighted a move to affordable and adequate housing was beneficial for vulnerable populations such as seniors who are vulnerable to falls or excess cold. One estimate was that “excess cold has an estimated average treatment cost to the NHS of over £8,000 per patient due to the cardiovascular and respiratory conditions, among others, that it causes”.¹²³ In Quebec, “according to the Comité consultative de lutte contre la pauvreté et l’exclusion sociale (CCLP), 20% of health care costs can be attributed to poverty and inequality”.¹²⁴ Indeed, cost avoidance is a popular and expressive means in the literature of conveying the economic importance of non-economic issues, however, further discussion as relates to health shall be reserved for the dedicated economic benefits portion of this report.

Nutrition

As mentioned, one area in which unaffordable dwelling costs can put a strain on the budget of a household forcing savings to be made by cutting households funds is regarding food and nutrition. Writing on human capital development, Freeman (2009) noted the importance of housing - “including its cost, quality, and location” – on health and educational outcomes particularly for children.¹²⁵ Evidence regarding quality and location was clear in that relationship, and though affordability had less evidence, the existing evidence supported the “notion that reducing the amount poor families expend on housing can positively augment development of human capital”.¹²⁶ By reducing the amount a family spends on housing, more funds can be used for necessities such as better quality, healthier food, and as a result, improve their physical health.¹²⁷ It can also mean they can afford more spending on recreation such as physical activities or sports which is a further contributor to improved health.¹²⁸ As the previous “heat or eat” example emphasized, affordability - in balancing cost burdens - permits a household to attain all necessities. A study of 473 low-income families in high poverty neighbourhoods in Toronto observed a negative relationship between housing affordability and food insecurity, observing that as rent

increased, food expenditures decreased.¹²⁹ In a survey of renters in Montreal spending over 30% of their income on rent found that 27.7% were afraid of running out of food, 24.6% did not have enough, 32.5% said their food was inadequate in quality, and 19.8% relied on the use of a food bank.¹³⁰ Reflecting potential of moves to more affordable lodgings, a post-occupancy study in Vancouver found that 85% of household heads cited they had increased funds for better quality food options as a result of their move.¹³¹

Finally, studies have confirmed that a lack of food, “or the right kinds of food [...] can lead to dietary deficiencies that affect physical and mental health and have long-term developmental consequences”.¹³² Raynault et al (2015) noted that case studies have shown that those on housing assistance “have fared comparably better regarding health and food security than with similar families” without assistance.¹³³ Mueller and Tighe’s review of the literature highlighted the poor diet spillover tied to health as a result of unaffordability and its detrimental impact on child development. They cited one study conducted in five US states which found infants and toddlers in “food insecure homes were 30% more likely to be hospitalized for illness and 90% more likely to be generally in fair or poor health” than those who were food secure.¹³⁴ Food insecure children were more likely to develop learning disabilities, emotional problems, and behaviour issues than counterparts as families studied that received housing aid were “better protected from malnourishment”.¹³⁵ For children on housing waitlists suffer deficiencies in nourishment at a rate of 1 in 5 compared to children living with some form of housing assistance at a rate of 1 in 30.¹³⁶

Mental Health

In addition to its negative impact on physical health, unaffordable housing can have negative induced effects on the mental health of households. Negative mental health impacts can arise from several sources including the conditions of the neighbourhood, the feeling of having a lack of control over one’s situation, and the lack of uncertainty over one’s future.¹³⁷ Primarily, however, it is concern over balancing a household monthly budget and being able to make payments with a budget strained by housing costs that drives that stress, affecting mental health. In worst-case scenarios - such as homelessness, foreclosure, frequent moves, or being at-risk of these conditions - there is “little question that residential instability has adverse health effects”.¹³⁸ Notably, Bentley et al found in a survey of 15,000 people that “linked housing affordability stress with negative consequences on individuals’ mental health, such as depression and anxiety”.¹³⁹ Evidence also suggests that, in parallel to often being the largest portion of household budgets, the cost of housing is also the greatest share of finance related stress. The size of the “detrimental effect” that housing-attributed financial insecurity brings upon mental health is “in addition to, and larger than, those associated with financial hardship more generally”.¹⁴⁰

As with physical health, positive outcomes can be achieved for households regarding their mental health through relieving the excessive rent burdens that are largely responsible for detrimental stress. Given that in most cases poor mental health associated with unaffordable housing is attributed to concern over financial issues, affordable housing policy can bring much needed relief both to the fiscal health of the household as well as its mental health. For instance, a study in Vancouver found that households that have lower gross monthly housing expenses or those spending less of a proportion of their income on housing are more likely to report “better self-rated health and a lower likelihood of poor mental health”.¹⁴¹ It can also mitigate the realization of fears tied to not being able to meet housing costs by bringing needed security,

preventing negatively induced moves, remedying the trade-off phenomenon, and averting housing-related crises. For the homeless, Housing First programs have shown to be effective mechanism in providing homes and improving mental health for their recipients. A study of their effects showed that “upfront investments in housing supports allowed for more efficient and effective treatment, with a randomized controlled trial showing an average short-term savings of about \$2 in costs avoided for every 1\$ spent on HF services for the highest need group of users”.¹⁴² Maqbool et al (2015) wrote that affordable housing provides “families with greater residential stability” which “can reduce stress and related adverse health outcomes”.¹⁴³ That added stability can also mitigate youth drug use and put them less at risk of potentially physically harmful criminal activity.¹⁴⁴

Domestic Abuse

In other cases, a lack of affordable housing can mean individuals in situations of domestic violence or abuse have no longer term financial or housing alternatives to escape from their harmful living situations. Access to safe and affordable housing can provide abused women or men and their children an opportunity for mobility away from a situation harmful to both them and or their child(ren).¹⁴⁵ It can allow “survivors of domestic violence to escape abusive homes, which can improve mental health and physical safety”.¹⁴⁶ Yet, those options are not always present; one Canadian study found that “almost one in three women (31%) ended up going back to her abusive spouse because of a lack of housing.”¹⁴⁷ Affordable housing options can also serve members of the LGTBQ community who live in abusive living situations or are kicked out of their homes who are disproportionately in need. A demographic examination of those in shelters indicates this is an area of need: a 2013 survey in Toronto found 21% of respondents in the shelter population surveyed were LGTBQ compared to 9% of the total population.¹⁴⁸

In general, affordable housing can be a safe haven for all types of individuals with a wide range of reasons motivating need from those faced with abuse, to those with disabilities, seniors in need of supportive housing, recent immigrants, individuals with disabilities or chronic illness, to simply people with low-income who cannot afford adequate housing. Recent immigrant populations, seniors, and younger low-income households are particularly vulnerable because of their lower relative financial security. In Montreal, “where most recent immigrants live in poverty (58%) [...] their average income is almost twice lower than that of non-immigrants - \$18,103 compared with \$29,173”.¹⁴⁹ Recent immigrants were also found to be more affected by issues of inadequate and unaffordable housing; 17% of households lived in dwellings that were too small compared to 4% of non-immigrant households and over half of recent immigrant households (first five years) spent over 30% of their income on housing.¹⁵⁰ In that role as a sanctuary, affordable housing options can bring physical and mental security with oft-noted positive benefits for health as a result, mitigating the negative trade-offs that are often made between housing and the other essential needs of vulnerable households.

Summary

Though a move to affordable or social housing is often correlated with improved health outcomes, improving housing affordability is no guarantee of improved physical health as underlying intervening factors can be significant determinants on outcomes. The method or policy through which affordability is administered can have a key determining effect. If affordable housing policies result in access to improved housing quality, such as newer or renovated lodgings,

then benefits attributed to those policies can include those related to: indoor environment quality, air quality, proper insulation, and reduced overcrowding. Improved health has the secondary benefit of reduced absenteeism at school and work, thus contributing to those outcomes and improved overall performance. Additionally, as rent reduction improves the fiscal health of the household, it can also improve housing-related stress and its negative impact on mental health and other areas such as cardiovascular health. Furthermore, additional household budget alleviated by rent reduction can lead to improved diet as funds are made available for better quality food. Finally, if affordability policies lead to improved quality housing and thus improved health, it contributes to a spillover impact of reduced health costs for both the individual and the state along with a lessened demand on healthcare services. Naturally, many of these benefits are contingent on affordability improving the physical conditions of the lodging itself beyond a state of negative influence on health. If a household was not previously in conditions detrimental to their health and they are making a lateral move in terms of adequacy, there will likely be insignificant observable effect on their health attributable to the move.

DEVELOPMENTAL BENEFITS: EDUCATION AND EMPLOYMENT

Among the varied points of interests discussed within the literature on affordable housing are discussions surrounding its potential to influence educational and employment outcomes. Given the vital role housing holds at the center of peoples' lives, it intuitively prompts interest into how that living space interacts with and potentially influences outcomes at the varied stages of an individual's life. As the preceding section on health identified, poor housing conditions leading to poor health can have the spillover affect of increased absenteeism in work and school. The purpose of the following section is to examine the findings observed in the literature and the degree to which a decisive conclusion can be made for education and employment respectively.

EDUCATION

A frequent theme within the literature discussing housing and education is the significance of location as part of that relationship. Though the arguments – along with the understanding of the underlying mechanisms – may vary, research generally supports findings that demonstrate that when lower-income families move from low-income neighbourhoods to neighbourhoods with less poverty, educational outcomes tend to improve. Naturally, the location at which affordable housing is built in a community is a significant and sometimes tenuous matter as projects tend to “prioritize investments and costs over social housing issues” and developments face the challenges of the Not-In-My-Back-Yard (NIMBY) phenomenon.¹⁵¹ The nature of these exchanges over housing has been referred to by Mueller and Tighe (2007) as “the tug-of-war between property rights and the general welfare at the local level [...] a mainstay of planning practice”.¹⁵² Correspondently, the literature tends will often seek to “establish a relationship between providing social housing and positive social benefits for the local community” and impress the value of those benefits – like education - to local officials, developers, and citizens.¹⁵³

In writing on human capital development, Freeman (2009) noted that given housing's immobile nature, location was a “determining factor” for all developmental outcomes, including education.¹⁵⁴ Goods and services, including schools, are not “randomly distributed across space” and furthermore, the distribution is “stratified in such a way that often leave the poor in the least desirable neighbourhoods” which are less conducive to development.¹⁵⁵ The quality of schools is a “significant factor in determining the selling prices of houses” and “more affluent households tend therefore to live in areas with better schools”.¹⁵⁶ Since, households tend to “sort themselves by socioeconomic status” and “live near others who share” their traits, neighbourhoods, social networks, and one's interconnectedness with nearby opportunities generally become socially stratified as well.¹⁵⁷ Implicitly, that stratification as been shown to have an impact, with Freeman citing studies that have shown correlations between better development, educational, and health outcomes from those receiving subsidies and living in better neighbourhoods.¹⁵⁸ Concern for the correlative relationship between more well off neighbourhoods and better schools is itself a source of opposition. The “nexus between property values and school quality is well known” and concern arises therein over the fear of lost property value whose taxes typically fund public school system.¹⁵⁹ That relationship is also reciprocal as the quality of the school can also affect property values.¹⁶⁰

In an extensive review of affordable housing literature, Pomeroy and Marquis-Bissonnette (2016) noted that location, school quality, diversity of peers, and the neighbourhood itself were all

important intervening factors bridging causality between affordable housing policy and improved educational outcomes.¹⁶¹ Their review highlighted that there is “still no consensus on the nature” of the relationship between housing and education.¹⁶² They noted that the direct effects of affordable housing were that the reduction in housing costs enables both the access of adequate housing to improve suitability and allow the household to spend on other necessities like food which helps children perform better in school.¹⁶³ Additionally, it was noted that if housing conditions were improved, children were less at risk of health issues which could reduce absenteeism and if subsidies affected location, the benefits (or detriments) of a different neighbourhood could influence outcomes.¹⁶⁴ However, the inclusivity of findings was stressed on determining a causal link. Findings had shown location “strongly influences education attainment”, and that studies have generally tried to show that moving to a good school zone and neighbourhood can result in improved outcomes. Notably evidence shows that “low-income children do better when they attend school where the majority of students are middle and upper income”.¹⁶⁵ However, it was concluded that “reducing shelter costs [...] alone appears insufficient” to guarantee outcomes.¹⁶⁶

Given the significance of location, studies have focused in part on policies that facilitate access to location-based opportunities like education. Popular strategies have been vouchers designed to break up pockets of poverty or mixed-income developments, each characterized by the notion that giving low-income households better access to schools and services that traditionally find themselves outside poorer neighbours will aid their futures.¹⁶⁷ As a result, studies are usually shaped by an American bias as those types of voucher program are predominantly found with the United States.¹⁶⁸ These studies also touch on another commonly cited benefit in the literature: that of residential stability attributed to affordable housing policy which is argued to result in improved educational outcomes for children and teenagers. The Moving to Opportunity (MTO) experimental voucher program is a popularly cited example of location’s influence on developmental outcomes. The MTO was a program ran between 1994 and 1998 in five major US cities and examined the differing effect of an experimental voucher which encouraged moves to lower poverty neighbourhoods for families. A study of its outcomes by Chetty et al (2015) examined the economic results for those children affected by the voucher 20 years later with the knowledge of other studies that found that even a “fraction” of time spent in high-poverty neighbourhoods had negative impacts on outcomes for children.¹⁶⁹ The study examined three groups of households within the cohort of then-children who received housing support: those who received the experimental voucher that encouraged moves to lower poverty areas, those who received a Section 8 voucher with no locational contingencies, and those in a control group who received no support, but retained access to affordable housing. The program was found to be a success in its results for education as children who were in households that received the voucher prior to age 13 were found to be “significantly more likely to attend college and attend better colleges” than their counterparts.¹⁷⁰ Though it was noted that the relationship’s underlying mechanisms were not well understood, it was insisted that - irrespective of those mechanisms – the results were “adequate to conclude that providing subsidized housing vouchers to move to lower poverty areas yields larger benefits for younger children”.¹⁷¹

Age was identified as a determining factor – and has been in other studies such as that of Brennan et al (2014) – as after the age of 13, the “exposure effects” of the voucher no longer outweighed the disruption effects” of uprooting a household.¹⁷² Finally, a distinct economic

advantage was observed for the experimental voucher group in terms of average lifetime wages over the other two groups and the program (and those like it) were noted for their potential to disrupt intergenerational poverty. (note: that economic effect is studied at greater length in the section on employment).¹⁷³ Another qualifier – wage mix composition – was identified by Ngyuen et al (2017) suggesting that introduction into a new neighbourhood with too much relative poverty could affect outcomes.¹⁷⁴ Their study also reached similar conclusions as Chetty et al: the MTO voucher “produced beneficial and broad effects on the neighbourhood environment” of recipients.¹⁷⁵

Brennan et al’s extensive literature review examined evidence that specifically dealt with mobility, affordable housing, and the disruptive nature of household displacement. Affordable housing was noted to potentially “reduce the frequency of disruptive moves” which are a result of unaffordability and affected 10% of households that moved between 2012 and 2013.¹⁷⁶ Moves – especially at an increased numbers or higher frequency – can be incredibly disruptive for instruction, cause absenteeism, create chaotic environments within which to study, stress, disrupted peer support networks, and interference with personal relationships.¹⁷⁷ Multiple moves before the age of six can cause problems with attention spans and child behaviour.¹⁷⁸ However, mobility and displacement was highlighted to not necessarily be a negative experience; especially when moves are positive – when families move from high poverty to low poverty neighbourhoods – they benefit from access to better schools and a socially-mixed setting that can be positive for development.¹⁷⁹ Housing affordability also mitigates the potential for financially induced, negative moves as the fiscal health of the household has a more stable foundation.¹⁸⁰ However, not all mobility programs were shown to be positive. The authors identified four major reasons why such programs fail: if they lack rigour in design or implementation, if children fail to adjust after the move, policy mismatches between governmental administration, housing agencies, and school systems, and finally, the nature of a school’s curriculum (if it is stratified it is less beneficial than mixed-ability classrooms).¹⁸¹ However, programs were shown to be most successful when policies were “specifically designed to help families access neighbourhoods of opportunity, which often include strong schools” and when they facilitated upward moves.¹⁸²

Overall, it is noted in the literature that children stand to benefit from a generally positive association between the introduction of affordable housing and improved educational outcomes. Citing findings from a 2010 CMHC study, Zon et al estimated that 177,285 children in Ontario – 48% of those in core housing need – stood to benefit from “improved educational performance” as a result of housing supports.¹⁸³ Improved educational performance in that case was identified as “the difference between achieving a high school diploma and leaving school with less than a high school diploma”.¹⁸⁴ Based on part-time employment, Zon et al noted that those children stood to benefit in the long-term financially with an improved income for that employment marked at \$2,600.00 per year compared to counterparts without similar attainment.¹⁸⁵ Poor housing conditions were cited as an impediment of education performance, however, the “degree” is not usually “quantified”.¹⁸⁶ Crowding – the unsuitability of the home in providing the necessary living space (such as the appropriate number of rooms) – is one of the major cited obstructions in educational improvement. In particular, crowding has been identified as an obstacle for children in completing schoolwork at home.¹⁸⁷ In addition to reducing a student’s ability to focus or concentrate in a physically restrictive environment, crowding can also worsen health or reduce the “support available from parents”.¹⁸⁸ It can also create undue stress within the household which

impacts educational performance.¹⁸⁹ In their post-occupancy surveys of Vancouver households that had recently moved to affordable housing, Condon et al (2010) were able to conclude that the “research strongly suggests that for a majority of families in need, a move into affordable housing can have a positive impact on health, education, and social well-being outcomes”.¹⁹⁰ Inquiries into the causes of improved performances yielded the following: 78% said it was because the child was happier, 75.65% identified an improved home situation, 61% attributed it to better housing, and 41.5% and 34.1% attributed improvement to more motivated friends and a better neighbourhood respectively.¹⁹¹

However, not all educational outcomes are guaranteed. As previous evidence has indicated, there are several determining factors that can influence outcomes. For instance, a study by Horn et al (2014) of the Housing Choice voucher program combatted the notion that the program can “conceivably help break the cycle of poverty by allowing families to be more mobile and move to less distressed neighbourhoods with high performing schools”.¹⁹² They found that holders of the programs vouchers on averaged lived in near lower-performing schools than another housing program the Low-Income Housing Tax Credit which does not allow for similar mobility – it is offered to providers to open up subsidized rent in developments and is not a direct subsidy to households.¹⁹³ Additionally, with the exception of those in public housing, voucher recipients were found to near lower-performing schools in general.¹⁹⁴ Their findings emphasized the fallibility of programs and that they can be limited in effectiveness by intervening factors. Factors that impacted the program’s success included housing choices constrained by “market tightness” and “racial segregation”.¹⁹⁵ Though the racialized aspects noted by Horn et al and its nature as an American program limits some transferability to a Canadian context, the lesson for policymakers is nevertheless clear; though location is obviously important, the practical ability of a movement-based voucher policy to provide access to the location can be restricted by factors such as a tight rental market. Improving options and working with voucher friendly landlords was recommended for the US program and to also ensure that destinations were not in poverty ridden neighbourhoods. Where possible (and relevant), policies attempting to achieve similar positive, location-based ends should heed those lessons.

EMPLOYMENT

Employability and Income

Studies have sought to examine the connection between income or wage increases attributed to time spent in affordable housing to possibly identify a causal relationship therein. In general, findings are mixed and inconclusive. Interest has been motivated both by commonly cited rationales that housing can lead to opportunity and thus wages, as well as data that demonstrates a correlative relationship at the very least. For instance, a one estimation in the US cited by Freeman (2009) demonstrated that for “every year of public housing residence between the ages of ten and sixteen increases a youth’s probability of working between age twenty-five and twenty-seven by 7 percentage points, raises annual earnings by \$1,860, and reduces welfare use between twenty and twenty-seven by 0.70 of a year”.¹⁹⁶ Interestingly, those findings were further supplemented with evidence that when children lived in areas with more affordable housing, their educational and health outcomes, as well as behaviour, were greater.¹⁹⁷ In the UK, a study of employment and housing found that housing association programs helped an average of one in five participants

employment.¹⁹⁸ A financial proxy of £11,100 in income and £8,000 saved by the government in benefits was estimated based on a tenant under employ for one year.¹⁹⁹ A post-occupancy study of Vancouver households found that for 18% of families surveyed, affordable housing was “a factor precipitating improved income levels” for the household.²⁰⁰ A third attributed increased to a new full-time job, 15.8% to a raise, and 13.2% to a part-time job.²⁰¹ However, in general the authors of the study noted that results in their study and the literature overall were “mixed” with evidence lacking to be able to make decisive conclusions about any influence social housing might have on employment.²⁰² A study of households aided by the Société d'habitation du Québec (SHQ) found that the proportion of households with work as the main source of income increased from 33% to 37% after one year in SHQ housing programs with that number increasing in subsequent years.²⁰³

According to Grant and Sullivan, data demonstrates that most Canadians who are faced with the challenge of unaffordability “escape it within two years” with “a minority” encumbered for longer periods.²⁰⁴ Affordable housing, then, could serve Canadians in those transitional stages of their lives. In those cases, in which entry into affordable housing correlates with increased income, it is difficult to determine causality: did their wages increase because of their own life’s trajectory outside housing, or because affordable housing was a key part determinant of those income outcomes? However, they remained firm that there was “insufficient evidence to demonstrate that housing, on its own, can create higher income”.²⁰⁵ Despite that lack of causality showing housing as a necessary determinant, affordable housing was identified as a “critical component of strategies” facilitating transitions from lower to higher income.²⁰⁶ Particularly, if individuals need a “safe and supportive environment to encourage transitions,” then housing can play a key part in those strategies – even in the short-term.²⁰⁷ Thus, it could be argued that, in providing those conducive environments, the services provided by organizations such as the SHQ foster the basic necessary conditions for the professional reintegration of its beneficiaries.²⁰⁸

Work Effort

One criticism of affordable and social housing is that it creates a disincentive to work for beneficiaries of those programs. Some studies in the US have attempted to identify a relationship between public housing and work dis-incentivization with some success.²⁰⁹ However, it is also not a guaranteed or an observed “certainty” for outcomes; indeed, as Freeman (2009) observed the evidence that “housing assistance dampens work effort is mixed”.²¹⁰ In particular, it was noted that a “lack of both accurate data and experiments that allow researchers to rule out selection bias” remained an obstacle in observing a clear relationship in studies.²¹¹ A study of residents in low-rent public housing (HLM) in Quebec addressed the issues of work disincentives, employment, and affordable housing. The study examined 9040 residents in HLM across a 3-year period of study and found that living in HLM had no convincing impact on the level of participation – negative or positive – on employment initiatives when compared to a comparable socioeconomic group not in HLM.²¹² The study also noted that fortunately, HLM is not usually located in areas of concentrated poverty and is usually well placed geographically to allow residents to benefit from nearby services and transportation, which suggests a relationship between location and benefit outcomes.²¹³ As Freeman noted, job opportunities are not “randomly distributed [...] where job opportunities are abundant, housing process tend to rise and, conversely, where job opportunities are scarce, prices tend to stagnate and even fall”.²¹⁴ Though the relationship is “not linear – many people do not want to live in the middle of the central business district, for example”, accessibility to employment opportunities is a key “determinant” for the housing process.²¹⁵

Importance of Location

Given the inconclusive nature of housing's impact in studies, the specific context of the municipality and housing development, and potential policy must be important considerations to mitigate negative effects and retain positive benefits for proper conditions of success. Though evidence linking affordability to development is less advanced, nevertheless the "evidence that does exist is consistent with the notion that reducing the amount poor families expend on housing can positively" benefit their development.²¹⁶ Location appears to have a significant role in providing opportunities. Indeed, Freeman noted that it was a "near consensus" in both theory and empirical evidence that "housing quality and location are important for human capital development, especially for children".²¹⁷

Previously discussed in the preceding section on education, the Moving to Opportunity Experiment is one of the more popular and commonly cited examples of a program providing positive location-tied results for future earnings, education, and employment. A recent study by Chetty et al examined the program with updated evidence examining the end results of the program for the cohorts of children entering their twenties and main years of employment. Their findings revealed that children in the experimental voucher had incomes that were \$3,477 higher relative to the control group (no movement voucher)'s mean of \$11,270 in their early twenties and that children who moved before age 13 were "significantly more likely" to both attend college and attend better colleges than counterparts.²¹⁸ Compared to the Section 8 voucher, which did not encourage a move, the experimental voucher recipients were approximately twice as well off.²¹⁹ Ultimately, its results confirmed that the program – and programs like it – can play a significant role in disrupting intergenerational poverty.²²⁰ They estimated²²¹ that if moved out of public housing at an average age of 8 with an MTO-type voucher, a child's "total lifetime earnings" could increase by about \$302,000.²²² It also noted that age at the time of move was a key determining factor as positive effects dissipated and eventually were negligible after a certain age, and in some cases, could have a disruptive effect on teens by displacing them from established social situations.²²³ Brennan et al noted that the ideal age for a move remains a debated issue within the literature with suggestions for the most harmful period including, kindergarten, between grades 4 and 8, and during high school.²²⁴ Their analysis of the MTO reveals a few of the contextual qualifiers, specifically location and age, which can determine outcomes for matters like education or lifetime earnings.

Summary

Housing affordability has a foundational role, but is not a sole determining factor affecting development and reducing housing costs alone does not improve education or employment outcomes. However, it can be part of the solution in providing a secure household environment that will "encourage transitions" in education and income. Housing unaffordability is a gatekeeper; quality schools are often socially-stratified and employment opportunities too are not "randomly distributed". Higher quality public education is often found in neighbourhoods with higher tax revenues and where job opportunities are concentrated, housing prices tend to rise. Therefore, location is a key determining factor. The degree to which policy can improve access to place-based opportunities is key to affordability's positive developmental impact. The literature shows that housing quality has a significant impact on development outcomes especially for children as both educational performance and future earnings can be negatively impacted by a lack of adequate housing, housing instability, stress, and negative neighbourhood environments.

However, there are intervening factors related to the family situation that can positively or negatively influence outcomes. Finally, the literature notes the importance of combining providing homes at affordable rates with integrative programs to provide employment resources. When that is done successfully, employability and wages have been shown to increase.

ECONOMIC BENEFITS

In the case of affordable housing - as with any proposition being considered as part of a municipal strategy - the discourse naturally finds itself focused on economic costs and benefits. Indeed, what good is affordable housing policy if the policy itself is not fiscally responsible? The purpose of this section is to answer the following: what are the attainable economic benefits of affordable housing and in what conditions do they appear and can affordable housing be a positive economic contributor? To answer these questions, this section will explore evidence from the literature at three levels of analysis: the household, the community, and the society. Thereafter, a closing section will, without delving into recommendations, discuss some of the nuances involved with policy through exploring policy specific literature.

Household Level

The economic benefits of affordable housing at the household level are straightforward in concept and appeal. Indeed, they are causally intuitive. For instance, a popularly cited benefit is the increased spending power of low-income households who, unburdened by exorbitant housing costs, can use that liberated portion of their income for goods and services such as better food, clothing, or leisure. It naturally follows that their quality of life would also increase as their mental and physical health benefit as a factor of improved fiscal health because of a reduction of their “minimal required earnings to cover other expenses”.²²⁵ As our section on health has examined, decreased stress over household fiscal security leads to secondary health benefits such as the mitigation of at-risk conditions that contribute to depression or and cardiovascular difficulties.²²⁶ Human development can also be adversely affected by that economic anxiety and a lack of opportunity whether it be in employment or education. Indeed, Freeman (2009) wrote that housing unaffordability was “anathema” to the development of human capital; “parents of children forced to choose between SAT application fees” or a roof to live under will inevitably choose the roof.²²⁷

The additional income increase is even more noteworthy as evidence indicates that low to middle income households are more likely than wealthier counterparts to spend their income locally. Thus, local businesses near their residences benefit from an influx of new regular customers.²²⁸ Therefore as individual low-income households benefit, so too does the local community within which those households live as local businesses reap secondary benefits derived from customers with increased spending power. That evidence of a positive individual level impact has been confirmed in case studies of supportive housing. A study by de Wolfe (2008), examined two affordable and supportive developments in Toronto and found a generally positive overall economic and social footprint on their local neighbourhoods. The introduction of the housing was found to have strengthened the neighbourhood’s community “actions and vibrancy” with only the smallest of minority opposition expressing negative attitudes towards the project.²²⁹ Though their economic impact was considered “modest” (because of their low incomes), it was not insignificant as they demonstrated a hypothesized proclivity to frequent local shops, stores, and restaurants, and thus contributed to local economic interactions.²³⁰

Though at risk of being abstract or equivocal, that spending power has been quantified in several studies. In a general assessment of housing in the United States, Cohen and Wardrip (2011) estimated that that increased buying power could be quite significant with increases as high as \$500 USD or more per month for some family budgets.²³¹ Moreover, in Quebec, the affordable

housing programs of the Société d'habitation du Québec were found to have increased disposable income by an annual average of \$1800 CAD per home for 84,500 households.²³² Finally, a great number of households received these income boost benefits. In a post-occupancy study, Condon et al (2010) examined the impact of rent reductions on residents and found that 64.7% of household heads realized savings as a result of greater housing affordability.²³³ The greatest impact these rent savings had for families was improved nutrition, an impact reported by 32.9% of households.²³⁴ Recreation (14.1%) and the ability to return to school (9.4%) rounded out the top 3 most commonly identified results attributed to rent savings.²³⁵ Though rent (in raw dollar amounts) did increase for a quarter of the households surveyed, this resulted from a combination of “better employment situation and higher income” and their rent-geared-to-income units set at 30% of their budget, which assured affordability.²³⁶

As with other areas of affordable housing, this level of analysis is not without intervening factors; the location of the housing is an important intervening factor between housing and positive household benefits that has been frequently considered in the literature. As observed by Litman (2011), accessibility and the integration of housing into a dynamic community is both an important aspect in determining true affordability and in influencing secondary benefits like availability of services and transportation. Likewise, Pomeroy and Marquis-Bissonnette (2016) observed that the neighbourhood's own socioeconomic condition could enhance or detract benefits from the household. In particular, if the location contained a concentration of disadvantaged homes, had relatively high crime, or if it was poorly located in relation to employment opportunities and services, it could lead to employment disincentives which would cancel out subsidy benefits.²³⁷

Given that “housing is immobile” the location at which a household roots itself is incredibly important as a strong “stratification of space” often sorts households along socioeconomic lines.²³⁸ Better schools, job opportunities, goods, and services oftentimes are not usually “randomly” positioned in space; they are stratified and the poor “in the least desirable neighbourhoods” are left usually in the locations “least amenable to developing human capital”.²³⁹ Indeed, the market gatekeeper of those better conditions is unaffordability; it simply costs more to live in better neighbourhoods. As Chetty et al (2015) discovered, the Moving To Opportunity voucher experiment showed that moving a child to “a low-poverty area when young” will ultimately “increase the child's total lifetime earnings by about \$302,000” on average with the voucher program also being found to be a disruptor of intergenerational poverty.²⁴⁰ Of course, this program's outcomes have age as an intervening factor as positive results wane the older a child is at the time of a move.²⁴¹ Yet, Chetty et al's findings are illustrative of the importance of place in determining outcomes for the person and indicative of the plight of low-income neighbourhoods and the resilience of generational poverty.

Local Community Level

Unlike the household and macro-societal levels of analysis, there is a relative lack of attention towards analyzing the impact of affordable housing at the local economic or community level (Buzzelli 2009). According to Buzzelli, this is particularly surprising as those studies which do focus on the local economic level tend to focus on one specific aspect of the potential impact of affordable housing which is contentious: property values.²⁴² A fear that the introduction of affordable or social housing might lead to detrimental consequences for neighbouring property values is a frequently cited source of anxiety in the public consciousness surrounding the issue of

affordable housing. Given that for most individuals the purchase of their home and a mortgage is arguably the single biggest financial investment they will make in a lifetime, such concerns are understandable; any potential negative impact that could affect the value of that investment would draw fierce attention and scrutiny. Unsurprisingly, the concern over property values is one of the root causes of the “Not In My Backyard” (NIMBY) phenomena which proves to be a difficult obstacle to overcome for many municipal projects. Yet, despite the nature of interest from citizens, developers, and municipalities, the literature on the local impact of affordable housing had not developed as expected beyond those interests.²⁴³

Despite the concerns and perception that introducing affordable housing lowers property values, the literature itself finds no conclusive evidence that those fears are realized (Buzzelli 2009; Ahrentzen 2008, 2009; AECOM 2011; Cohen and Wardrip 2011; Albright et al 2013). Indeed, the opposite has proven to be possible as areas where housing interventions occur can experience “a quicker increase in real estate values” compared to other parts of the “same municipality without having a negative impact” on low-income rent.²⁴⁴ This is particularly the case if the housing is replacing otherwise derelict or disused existing properties; Cohen and Wardrip (2011) observed only neutral or positive effects on property values and found developments actually had a stabilizing effect in neighbourhoods by aiding local revenue flows, reducing rates of foreclosure, and the number of abandoned and vacant properties.²⁴⁵ In a report evaluating studies on housing and property values between 1995 and 2008, Ahrentzen (2008) concluded that “there is no single, unqualified answer to whether or not introducing affordable housing lowers property values of surrounding homes”.²⁴⁶ Qualifying the results of the study, positive outcomes were found in cases with combinations of the following conditions: when housing replaced abandoned property, when low-income concentration was not excessive, when the socioeconomic condition of the host neighbourhood could bear the introduction for a proper social mix, and finally, when the quality of management was high.²⁴⁷ Naturally, this indicates that there is no hard or fast rule regarding the impact of affordable housing on property values, and instead, the context surrounding the project is the truly determining factor, not ownership type, structure, or form of subsidy.²⁴⁸

A subsequent review by Ahrentzen in 2009 of housing policy studies examined three separate American programs: Massachusetts’ Chapter 40B Developments, the HUD’s HOPE VI program, and the Low-Income Housing Tax Credit (LIHTC). Focused on mixed-income, multi-family developments, impacts were found to be generally positive, but usually context dependent. For example, in the case of the 40B Developments, no development negatively affected neighboring property values, but the results were “not generalizable” to dissimilar housing markets.²⁴⁹ In the cases of HOPE VI and the LIHTC, HOPE VI’s refurbishment and redevelopment program was found to increase property values, while the LIHTC studies found no negative impact in years one and two, and positive impacts in years three and four.²⁵⁰ However, growth rates were slowed in some cases and Ahrentzen concluded that regional context and the number of cases prevented generalization of the program’s results.²⁵¹ Taken together, these studies indicate that outcomes for property value variation are partially dependent on the particular local or regional housing market’s context. In addition to the general context of a housing market, Albright et al (2013) noted that the lack of negative impact on property values was not a guaranteed outcome in the case of Mount Laurel; intervening factors such as active municipal involvement and good management of the development once occupancy began were notable features in averting negative impacts like property value decline or increased crime rates.²⁵²

Lastly, another local impact of affordable housing discussed was the role it could play in the retention of workers in a locality and in averting manpower flight in search of less expensive housing options. Cohen and Wardrip (2011) found that in a national survey in the United States of 300 major companies, 55% of said companies acknowledged “an insufficient level of affordable housing in proximity” to their bases of operation.²⁵³ Furthermore, two-thirds of that number “believed that the shortage negatively affected their ability” to retain parts of their workforce.²⁵⁴ Finally, in 184 of 210 markets studied, a retail worker could not afford a one bedroom apartment below 30% of their monthly income.²⁵⁵ Not only is this a critical issue for low-income workers, but it is also of interest to municipalities for the essential service workers such as nurses or police officers that ideally would benefit from living in proximity to their workplaces given the nature of their shift work. A most extreme example of this was noted by Gurnstein (2012) as the unaffordability in the city of Vancouver had led to the low recruitment numbers and job applications for their police department and only 1/10 of their police officers lived within the city itself.²⁵⁶

Macro-societal Level

Beyond more focused studies and reports, there are illustrative examples of the wider net economic effects of affordable housing policies, programmes, and developments. Buzzelli highlighted that a frequently considered issue at this level was in answering “the question of what we would collectively lose in the absence of social housing”; without “assistance”, a market “failure” would “surely raise social spending” and costs for governments that failed to address unaffordability.²⁵⁷

In the province of Quebec, the Société d’habitation du Québec (SHQ) has been at the forefront of affordable housing development and two impact studies conducted in 2011 and 2013 are indicative of the positive economic benefits of their activities. The SHQ is a key provider of affordable housing units for low-income or vulnerable citizens within Quebec and helped more than 241,000 households in 2010-11 with the funding of new units, replacement, and modernization of old units.²⁵⁸ In 2010-2011, the Quebec government invested \$608 million into the SHQ to support the organization’s mandate.²⁵⁹ An analysis of its economic expenditures and investments that fiscal year found that the initial investment generated \$1.4 billion in economic activity in the province, meaning that for every dollar invested into SHQ programs, \$2.3 were injected into the overall economy.²⁶⁰ In terms of overall wealth creation, the study estimated the economic net benefit to be \$1.027 billion dollars - 3.7% of Quebec’s GDP in 2010 – which included the creation of 7,300 person-years of construction work (10% of the hours of residential construction employees in all of Quebec in 2010).²⁶¹ In total, induced job creation amounted to 13,758 person years of work in the 2010-2011 period studied.²⁶²

In addition to its role as a driver of job creation and economic activity, the study stressed the vital role the SHQ played in cost reduction and avoidance; not only did the SHQ generate new positive benefits, it also mitigated negative costs present in society in areas of healthcare, crime, and productivity. Indeed, there is a “business case” to be made for municipalities in taking up “proactive” housing solutions in dealing with the most vulnerable members of society.²⁶³ In providing housing and tackling poverty, the SHQ helped reduce the pressure placed on the healthcare infrastructure of the province as “according to the Comité consultative de lutte contre la pauvreté et l’exclusion sociale (CCLP), 20% of health care costs can be attributed to poverty and

inequality”.²⁶⁴ Notably, estimates for the SHQ found that for every 200 supervised housing units for the homeless built, \$8.1 million dollars in annual savings were generated for public services such as healthcare.²⁶⁵ A study by Project Chez Soi in Montreal – a housing first research program for mental health and homelessness - found that the cost of service utilization dropped by 43% annually (\$9000 per person) for individuals in SHQ assistance programs.²⁶⁶ SHQ assistance also saved \$25 million dollars in public funding in its role in adapting homes for seniors, delaying entry into more costly long-term care facilities.²⁶⁷ Though these are but a few of the monetizable cost avoidance benefits produced by the SHQ, they sufficiently capture the invaluable nature of affordable housing programs for the province of Quebec on a greater scale.

These studies of the SHQ reveal generally positive outcomes on a province-wide level and capture an example of an effective affordable housing program that provides important primary benefits (such as savings on rent for low-income homeowners) and cost avoidance (such as healthcare savings attributed to better housing). Furthermore, they help to provide a monetized perspective to non-fiscal benefits which can often been discussed in abstract or intuitively with a lack of translation into economic effects. They work to demonstrate how proactive policy on that scale can aid in averting costs of inaction and societal burdens associated with housing unaffordability. A stand-out contribution were the efforts made to remedy homelessness and improve job prospects for those involved in their assistance program. Viewing affordable housing as an investment beyond the home itself – for example, those in line with Projet Chez Soi’s findings - is significant as studies have shown that the spillover costs of inaction can often be quite high on household spending power, homelessness, and healthcare costs. For instance, the cost of providing a social housing unit is \$25 to \$31 per day compared to an emergency shelter bed at \$69 per day, a jail cell at \$143 per day, and a psychiatric inpatient bed at \$665 per day.²⁶⁸ A study in British Columbia similarly estimated that the province could save \$12,000 per homeless person helped off the street and placed in supportive and adequate housing.²⁶⁹ In effect, affordable housing can seemingly “pay for itself” by offsetting cost-burdens associated with inaction.²⁷⁰ As one study in Oregon found, an “annual state return rate of 25.5% was received on investments into social housing.”²⁷¹ Indeed, stressing the importance of cost avoidance is simply another effective way of illustrating the economic benefits of increasing housing affordability.

Policy-Based Study

In a work studying the impact of affordable housing on the development of human capital, Freeman (2009) pointed towards the tendency in the literature to focus on comparative analyses of different forms of housing assistance.²⁷² Indeed, examples of policy-based studies are prolific and have previously been discussed in this report, such as those which discussed the developmental benefits of the Moving To Opportunity voucher program (Chetty et al 2015; Nguyen et al 2017; Owens et al 2017). Similarly, analyses of economic benefits are usually more developed in the literature when dealing with specific policy implementations, however, these are also more frequently American-based studies. As we have seen, sometimes those are quite focused – even to a singular aspect of policy such as that of the impact on property values (Ahrentzen 2008, 2009; Albright 2013). There are also, however, ones which focus on the broader economic impact of affordable housing policies. Among the different policies examined in literature is the American Low-Income Housing Tax Credit (LIHTC) which began in 1986 as a federal funding program for low-income housing.²⁷³ Between 1986 and 2010 the program had subsidized the building of 1.5 million rental housing units.²⁷⁴ Burge (2011) examined the degree to which the American Low-

Income Housing Tax Credit (LIHTC) properly translated into benefits for the renters themselves. Burge's analysis revealed the program to be an "inefficient mechanism for generating benefits to low-income households" as their rent savings for were "a relatively small fraction of the program's costs".²⁷⁵ Resultantly, it was implicitly argued that developers and investors benefitted "significantly" from the program overall.²⁷⁶ Despite that relative inefficiency, the program retained value in providing housing and non-housing benefits. A study by Mitchell and McKenzie (2009) in the state of Missouri found that as "an economic engine", the program lead to both short and long-term economic benefits as a provider of significant construction jobs, long-term operations employment, and economic activity.²⁷⁷ In urban areas, this accounted for \$6.40 in gross state product per dollar of increased spending.²⁷⁸ In the short term from 2001 to 2005, between 3,000 and 14,6000 jobs were created per year with an additional 1,544 jobs per year projected to be generated over a subsequent twenty-year period.²⁷⁹

Another American program that has been studied has been the Section 8 housing voucher program, one which some of our previously discussed studies examined in comparison to the Moving to Opportunity experimental voucher. In 2011, the Section 8 voucher provided rent assistance to 5.2 million individuals in 2.1 million low-income households in the United States subsidizing their rents and helping to pay necessary utilities.²⁸⁰ In a comprehensive cost-benefit analysis of the program's first-year effects, Carlson et al (2011) examined on a per-individual case basis the net social and economic benefits of the program for the individual and society. Their results confirmed that "participants benefit substantially" from the program with an estimated mean net benefit of \$9,066 with minimum and maximum estimates measured at \$5,369 and \$17,553 respectively.²⁸¹ Considering the costs for nonparticipants (including government) which had negative net results for mean, minimum, and maximum estimates— which is unsurprising given it is a first year study unable to capture a long-term image – on the whole, it was concluded that it was "likely" that Section 8 vouchers meet "the efficiency standard of positive net benefits".²⁸² Though self-stated caveats and limitations included the inability to consider all variables in their analysis and that estimates were based on samples of voucher recipients and not "the universe of voucher recipients", this study is nevertheless an important illustration and attempt at capturing an economic picture of a major affordable housing program's overall benefits and costs.²⁸³

On other occasions, there are comparisons of costs associated with distinct types of housing project. A necessary form of analysis – as the housing itself has a variety of types – one examination is that of the choice between building new units or redeveloping existing edifices as affordable housing. In a comprehensive report on affordable housing redevelopment and regeneration, Harvey and Streich (2015) examined eight Canadian case studies of major projects to identify the processes, outcomes, and challenges of these developments. Their full report demonstrated that numerous approaches for redevelopment were valid, impressing upon the reader that projects can succeed under the stewardship of numerous types of partnerships between organizations: public, for-profit, or non-profit. To be successful, projects required skill in both physical redevelopment and tenant relations and a strong commitment to an at-times time-consuming and costly process in the short run. Indeed, one recommendation – especially with larger projects – was to phase redevelopment over several years to facilitate financial viability.²⁸⁴ All eight major projects nevertheless achieved their goals and benefits typical of affordable housing developments, including the Benny Farm development in Montreal. Originally an apartment complex for veterans, it was successfully redeveloped into large income-mix

development housing 2,000 individuals in a diverse set of housing units and types of households, 28% of which are affordable units.²⁸⁵

Completely understanding the costs and benefits of a given development is difficult to achieve. Clearly, affordable housing projects can vary in organization, form, design, and type of subsidy which adds complexity to evaluating associated benefits. For instance, as Wilkins et al (2015) confirmed in a comparative lifecycle cost-benefit analysis of new and acquisition-rehab developments, redevelopment can be more cost-effective than new construction. Their results found that over a 50-year life cycle, new development costs were 25% to 45% higher than acquisition-rehab projects.²⁸⁶ According to the authors, a life-cycle approach was an effective means to compare two different methods of housing and assess their economic costs in an “apples-to-apples” comparison.²⁸⁷ It also allows for a greater assessment of a project beyond up-front costs. Charron (2017) noted that often the “overall capital cost” of a development is “the only metric that is reported and examined” in examining housing affordability which “only provides part of the affordability picture”.²⁸⁸ By narrowing one’s scope solely to capital cost fails to examine the multifaceted value of the investment of a project in the long-term.²⁸⁹ Indeed, focusing solely on capital costs would forgo analysis of operational (energy and utilities, maintenance, and management), end of life (residual value and disposal), and externalities (impact to society and environment) costs and benefits. Though life cycle studies would seem a solution, Charron cautioned against overreliance on that method of evaluation as there “are many unknowns in the analysis that require assumptions” about that can “significantly impact the projected value”.²⁹⁰ One author examined in Charron’s literature review argued that investors could not rely on the transferability of those types of cost benefit analyses due to the problem of shifting “default variables” upon which such assumptions were made. Examples included, fuel price rises, investor discount rates, and financing costs.²⁹¹ Those assertions, in part, led to the conclusion of the inherent limitation of transferability amongst cases: “Social and affordable housing providers would benefit from a cost-benefit study that was adapted to their context”.²⁹²

Summary

A review of the literature finds that the introduction of affordable housing policies leads to generally positive economic results at three levels of analysis. At the household level, the primary benefit attainable through the introduction of affordable housing measures was the improved fiscal health of the household. For low-income renters, affordable housing was found to have a direct role in stabilizing the household and reducing the “minimal required earnings to cover other expenses” in addition to augmenting and complementing income assistance.⁴ Practically, this translated into less of a rent induced burden and additional household species to spend on other necessities along with surplus goods and services in their local communities.

At the local community level, a primary concern of citizens is for the impact affordable housing can have on neighbouring property values. Fortunately, research demonstrated those fears to be unfounded and instead showed affordable housing units can be successful and beneficial additions to a community in the proper setting. Additionally, though unquantified, a business case was expressed for employers located in areas with high unaffordability that affordable housing could be a means to improve employee retention and prevent their flight for cheaper residence

⁴ Steve Pomeroy and Maude Marquis-Bissonnette, *Non-Housing Outcomes of Affordable Housing* (Ottawa: Canada Mortgage and Housing Corp., 2016). 34.

outside their regions of operation. Minor spillover benefits were received from increased individual incomes of low-income renters who are likely to spend that money locally.

At the macro-societal level, affordable housing programs demonstrated their value in two ways: first, as economic drivers in generating positive net returns on investment and job creation and second, as proactive measures of cost avoidance, mitigating the costs of inaction associated with unaffordability. Finally, this section's examination of various policy-devoted works revealed that to achieve economic benefits traditionally associated with affordable housing, it requires a careful consideration of context, socioeconomic conditions, and location – particularly at the individual level.

AFFORDABLE HOUSING AND THE ENVIRONMENT

In a period in which concerns for the Earth's climate have risen to new heights, it is no surprise that governments at all levels have increasingly integrated environmental sustainability strategies within their public policy outlays. That recognition has led to the implementation of new green strategies and studies in a variety of areas from urban planning to building design. Furthermore, environmental concerns have resulted in a boom in the green building industry in the past decade and a nationwide "market transformation".²⁹³ In the interests of informing municipal considerations for sustainability strategies, the environment, and affordable housing, the following section will examine the potential benefits that can result from a combination of green building and affordable housing. To those ends, this section will: explain the green building industry in Canada, outline a necessary linkage between affordability and sustainability, present benefits of green affordable housing from the literature, demonstrate its green-affordability's cost-effectiveness, and finally, explore cases from the Montreal metropolitan area.

Green Building in Canada

Green building, "recognized globally as a method and practice for addressing climate change, minimizing energy and resource demands, and for building more resilient and healthy communities", has become a growing industry and important part of the Canadian economy.²⁹⁴ The major presence of green building standards comes in the form of LEED certification for buildings across multiple industries including residential, commercial, institutional, and industrial. LEED certification provides "third-party verification that a building, home or community" was designed to achieve various "human and environmental health" goals including sustainable site development, energy efficiency, and indoor environmental quality.²⁹⁵ A growing standard with "flexibility", the rating system has four levels of certification (platinum, gold, silver, and certified) recognizing application of its standards to varying degrees for developments.²⁹⁶ In 2014, the industry generated \$23.45 billion dollars in GDP and supported 297,890 direct full-time jobs – more jobs than the forestry, oil and gas, and mining industries combined (270,450 jobs).²⁹⁷ Additionally, the overall estimated economic impact of green LEED constructions certified from 2005-2015 will include \$62.3 billion in total GDP generated, 701,700 jobs created, and provide \$128 billion in gross output over their life cycles.²⁹⁸

The overall growth and recent success of the green building industry is particularly interesting as green building and LEED construction standards are voluntarily adopted measures by developers and owners. According to a study produced for the Canada Green Building Council, that surge in adoption was "driven by a business case that demonstrated positive return on investment" over building life cycles.²⁹⁹ Between after commercial and institutional construction, residential development is the third highest grossing build form and will have accounted for 5.87% of jobs, 5.82% of direct income, 6% of direct GDP, and 6.3% of direct gross output generated by LEED constructions (in 2015) over their lifecycles.³⁰⁰ Despite that relative smallness, residential green building nevertheless retains a sizeable portion of the overall outputs of total green building.

Linking Affordability and Sustainability

Unlike several of the previously explored benefits that can arise from affordable housing policy, environmental benefits are not as directly attributable; indeed, they are part of a benefit set attributable to green housing. In that respect, affordable and green housing represent separate

conceptualizations that are nevertheless complimentary despite the misperception that green building cannot be affordable – an obstacle frequently identified by authors (Trachtenberg et al 2016; Charron 2017). However, as the remainder of this section will present that first, these two concepts should be considered linked by a municipality and, second, that there is ample evidence to suggest that green building can be affordable – thus allowing a development to combine the associated benefits of affordability and green-friendliness.

In recent years, the City of Vancouver has in examined improved approaches towards sustainable development in a metropolitan area in part due to environmental concerns, a growing population, and a rising cost of living (Lee et al 2008; Gurnstein 2012). One measure proposed by the city was an EcoDensity Charter in 2008 which sought to increase density “strategically” to provide “economies for mass transit”, the support of “commercial development in neighbourhoods”, and to reduce “energy and infrastructure costs per person” and an improved “ecological footprint”.³⁰¹ However, this charter faced the criticism that it failed to address housing unaffordability beyond environmental goals which makes it an interesting case study of the importance of intermeshing sustainability and affordability. For instance, critics of the charter have argued affordability should be a “central plank” in a revision of the charter.³⁰² Without proper attention to housing affordability – as the charter discussed it only in abstract – they argued that density itself is not a guarantee for affordability as it does not tackle root causes such as land costs. The “bottom line” maintained was that increased “density has accompanied a major reduction in affordability due to market forces responding to the number of people who would like to live in Vancouver”.³⁰³ Density itself was not intrinsically considered to be an obstacle, but without affordability properly considered, the dual goals of sustainability and equity could not be met; as a “precipitating factor in sprawl”, unaffordability leads to higher emissions and clogged roadways as low to middle income residents are forced to seek homes in the suburbs.³⁰⁴ For that reason, it was argued that housing affordability is “as much an environmental issue as higher densities and green building codes, if not more”.³⁰⁵

Related to these issues of sustainable development is urban sprawl. As an increasing relevant issue with which growing cities are faced, it is significant as the further one is forced to displace from their work or necessary services in search for adequate and appropriate housing, the greater the spillover costs for the individual and the community. This is particularly troubling as there is ample statistical evidence to indicate that the solution to unaffordability for a household is not found from moving away from the metropole’s center (Litman 2011; Gurnstein 2012; Charron 2016; Litman 2017). Indeed, beyond increased emissions, the additional costs of transport associated with sprawl can be detrimental to a household budget, which in turn can lead to less overall household funds to spend on goods and services. For that reason, it has been argued to instead see affordability as part of a larger accessibility strategy in a locality. In two related studies, Litman defined affordability beyond the standard of 30%, instead introducing a notion of affordable-accessibility capping housing and transport spending at 45% of a household’s total budget (2011; 2017). The argument was simple: housing was not truly affordable if located in “isolated areas with high transportation costs”, disconnected from necessary services.³⁰⁶ When a household is able to rely on the combination of affordable housing and an integrated sustainability strategy, that is “if a building can be placed in a location where occupants do not need to own a vehicle” they benefit from large annual savings.³⁰⁷ As Litman stated, affordable-accessibility

“supports truly sustainable development” and therefore finds itself to be a concept that bridges environmental and housing concerns.³⁰⁸

Benefits of Affordable Green Housing

As Gurnstein argued, housing affordability is “as much an environmental issue as higher densities and green building codes”; indeed, if a widespread population cannot reasonably afford housing in green developments, then the positive environmental impacts of those developments are implicitly limited.³⁰⁹ This is particularly concerning for as has been discussed: rising housing unaffordability is an issue that affects not just those in extreme poverty. Together, building towards green affordability – and not simply one goal irrespective of the other – can help accentuate and enhance mutual sets of benefits. Among the many associated benefits of affordable green housing, the two most significant are the improved fiscal health of the household - which can save a significant percentage of their income and potentially invest it elsewhere - and energy conservation and emission reductions.

The cost of energy can have a significant impact on the fiscal health of a household and that is further reason to consider green building as critically tied to affordability and the household (Trachtenberg 2016). The US Department of Energy estimated between 8% and 14% of household income was spent on energy, a third of which was dedicated to heating or cooling needs – 3-5% of gross annual income.³¹⁰ Even at low rates of gains, improved energy efficiency and cheaper homes can therefore proportionately aid a low-income household and thus improve the overall fiscal health of the household. However, energy efficiency rates tend to be quite significant; a comparative study of green in four US states found on average residents spent 12% to 14% less on energy per square foot annually, which naturally translates into a monetary savings.³¹¹ In addition to energy related monetary savings, it has been shown in cost-benefit analyses that residents and homeowners can attain varying degrees of non-energy related savings as part of a set of secondary benefits.³¹² An example of this is the Salus Clementine multi-residential building in Ottawa – an affordable housing residence for those with mental illness – which was able to translate savings in energy into more funds towards its services for residence.³¹³ Additional benefits of green affordable housing noted are the reduction of crime rates in communities, an improved sense of security, less renter turnover, and improved mental (Charron 2017; Trachtenberg 2016).

Finally, the combination of affordable housing and energy-efficient, green-friendly construction appears to have the potential second order effect of contributing to positive health changes for occupants. Evidence would indicate that this is strongly related to a residence’s indoor environmental quality – warmth, humidity levels, air quality - which has shown to lead to improved cardiovascular health (Charron 2017). A recent study which examined energy efficiency and ventilation in 123 modern homes built between 2010 and 2012 in the same area and price range in Austria sheds light on this connection (Wallner et al 2017).³¹⁴ Across a series of 3000 measurements of indoor air quality, researchers found that the air quality in the energy-efficient, mechanically vented homes had higher quality indoor air than conventional counterparts.³¹⁵ Those results were reflected in comparative occupant research surveys examining the impact on the health of occupants for control and test groups across the move to the new housing. Through 575 total interviews set three months and one year after the moves, the post-occupancy study found that the test groups (in mechanically ventilated homes) reported their health had improved significantly at greater rates than those in naturally ventilated homes.

Inspired by a previous Canadian study and one of a “first” in studies examining the “perceived health of inhabitants in highly energy-efficient homes”, these results provide some useful insight into secondary benefits of affordable-green housing.³¹⁶ As the energy-efficient homes in the study were built to passive house efficiency standards - the same types of homes that were built as part of the affordable-green developments in this section’s Rosemont and Laval case studies– the results are encouraging for this report’s considerations. Significantly, the results corroborate data³¹⁷ gathered in a Canadian study (Leech et al 2004) which occurred under similar parameters in finding self-reported health benefits after the first year of post-occupancy.³¹⁸ Though the study touts increased *perceived* health benefits, those perceptions – regardless of accuracy– are nevertheless positive indicators of increased quality of life and comfort for a household in its home environment. Additionally, as our previous section on health indicated, there is a relationship between affordable housing and health benefits, but there are specifics attributed to affordable-green builds as well, often related to air quality. Notably, findings from a 2013 study of an affordable housing complex in South Bronx supported the hypothesis of the beneficial effect of LEED Platinum-certified buildings on respiratory health as symptoms of asthma – and negative side effects such as episodes and missed school or work – were reduced (Garland et al 2013).³¹⁹ The combined results of these studies are yet further evidence of importance to understand environmentally-friendly housing and affordable housing as important goals to achieve simultaneously due to the implicit favourability of combining benefits. In doing so, a municipality places itself on track in building a healthy and sustainable community.

Isn’t it more expensive?

Economically, green affordable housing units haven been generally shown in studies to be no more expensive than their conventional counterparts to produce. In a comparative study of green affordable housing projects and non-green affordable projects across four US states, researchers found evidence to support that hypothesis that green housing did not hinder cost-effective development (Trachtenberg et al 2016). That “perception of high costs” was proven to be unfounded as they discovered that an experienced developer can build LEED certified units at premiums as a low as 1% for hard costs with the average premium found to be at 1.84% across the study.³²⁰ When all costs – across the lifecycle of the build – were considered, green developments were 5% less expensive on total construction costs per square foot compared to non-green equivalents.³²¹ Hard costs – costs associated with construction and materials – were indeed found to be 2% higher, but soft costs – contractor services, architects, pre-development, permits - were conversely 13% lower.³²² A separate case study of 85 multifamily affordable housing projects in Pennsylvania - 32 green, 53 non-green - found that the two types shared nearly identical build costs on average: \$169/ft² for green compared to \$165/ft².³²³

One way in which green housing can retain affordability is through its construction and overall design, done in specific ways to lower long-term costs by holding the home to green energy efficiency usage standards. Beyond LEED, the Passive House Standard is one of the more popular (and rigorous) targets that green building developments seek to emulate and sets a base standard for yearly usage of 120KWh/m²/year.³²⁴ As its name indicates, it prioritizes passive measures – including optimal thermal insulation, window shielding and shading, and airtight mechanical ventilation – to improve efficiency. Importantly, despite varied annual climate cycles, Canadian homebuilders have succeeded at meeting targets in all regions - including Montreal - and cost-

benefit life cycle studies found that builds styled in the Passive House fashion were economically cost-effective (and cost redeeming) in the long-term for owners and residents (Charron 2017).³²⁵

One caveat to findings supporting the cost-effectiveness of green housing was that reaching cost-benefit targets on the construction of green affordable developments was an outcome sometimes tied to the experience of the developer (Trachtenberg) (Charron). One example from Nova Scotia demonstrates this phenomenon. When Housing Nova Scotia built their first home to Passive House standard, they did so at \$130/sq.ft.³²⁶ However, when building their second Passive House project, and having learnt lessons regarding the efficient installation of environmental measures, a similar unit was produced at a comparatively more affordable cost of just above \$100/sq.ft.³²⁷ Additionally, though standards are consistent, the exact specifications and choices to achieve them have varied and numerous options for a developer to explore. Some of those options are more cost-effective than others in the short and long-term respectively and research has pointed to the difficulties and successes of specific means and methods for outfitting to those standards (Charron 2017).

Cases of green affordability

As this review has indicated, green affordability is far from a theoretical concept unemployed in the field with examples across North America. In the Montreal metropolitan region, two recently built multi-unit residential buildings – the Couto Vert in Rosemont and the Bois Ellen Residence in Laval – are excellent cases of affordable green housing.

The Bos Ellen Residence is a 166-unit co-operative for families, individuals, and seniors that was built with Passive House specifications in mind in an effort to seek peak energy-efficiency at an affordable price. When its proposed energy conservation measures were taken into account, the development would sport a 42% reduction in overall energy use and an approximate 70% reduction in heating energy compared to Quebec average household use in a review of its efficiency.³²⁸ Though that does not meet Passive House's rigorous standard, it did surpass the Quebec *Novoclimat* standard of 25% less energy use compared to fellow residences in a given locality.³²⁹ Significantly, its budget was less than 10% larger than a "conventional" social housing project in Quebec.³³⁰

Likewise, similar successes in green affordable projects can be found in the Coteau Vert Co-operative which accounts for 95 of the 155 affordable units at an mixed-income, multi-unit residential complex known as *Les Ateliers Rosemont* in Montreal. An "example of a holistic approach" to sustainability "taking in social, economic, and environmental aspects", the co-operative is an example that sustainability features can be successfully implemented at cost-effective rates.³³¹ Its base build is very similar to that of the Bois Ellen cooperative regarding the standard sustainability functions it carries out, but the project was outfitted to facilitate environmental additions in the future – budget permitting – with a net zero energy standard in mind.³³² As of 2016, the project has met nearly identical energy efficiency and budgetary marks as the Bois Ellen development, hitting a goal of 40% energy use reduction with a budget between \$110/sq. ft. and \$120/sq. ft. – a spending level just at 10% above average for social housing.³³³

In addition to its affordability, its residents have broadly enjoyed secondary benefits – like those previously mentioned. A quantitative and qualitative post-occupancy study of energy

efficiency, indoor air quality, and resident experience collected results indicating an overall positive set of improvements for residents.³³⁴ Specifically to indoor air quality, a correlation was observed between real and perceived quality – both of which were positive.³³⁵ Residents noted an improved quality of life citing green space, accessibility to transport and services, feeling of control from a community perspective, and a better sense of security.³³⁶ Given its similarities to Coteau Vert, some measure of transferability is also likely, indicating broader indication of benefits for this type of green building. Together these two projects are significant examples of successful green housing projects which achieve key benchmarks in sustainability at modest increases to build cost while retaining the goals of affordability for their residences

Summary

This section of the research illustrated three major points for a reader with relatable and illustrative examples from various regions, but significantly Canada and Montreal from a review of the literature. First, the goals of sustainable community building and the goals of affordable housing are irrevocably linked and as such, should be considered jointly in municipal policy outlays. Urban sprawl – a detriment to sustainable community building – is precipitated by rising unaffordability as households are forced by unaffordability to seek cheaper homes further from the city centre. Awareness of that connection can allow cities to meet the challenges of housing unaffordability and sustainability together with proper planning. Second, green-affordable housing provides a diverse set of secondary benefits beyond the primary benefits of energy efficiency and monetary savings for the household that extend to a community or society. Energy efficient homes have been shown to be beneficial for the fiscal health of a household, guarding them from energy poverty as well as providing secondary benefits such as improved quality of life and respiratory health achieved through improved indoor air and indoor environment quality. Finally, this review demonstrated the cost-effectiveness of green-affordable developments which were found to either demonstrate cheaper or on-par costs with conventional counterparts in general, and marginally more expensive hard costs related to construction. The Bois Ellen Residence in Laval, Quebec and the Coteau Vert Co-operative in Rosemont are two such examples of successful green affordability in the metropolitan area of Montreal.

THE MUNICIPALITY: DORVAL IN FOCUS

Though this report was prepared with a general focus for a broader potential set of municipalities, the following section examines the demographics, socioeconomic and housing situations, and the goals of a municipality in the greater metropolitan area with the purpose of tailoring a benefit set that meets those needs. The municipality that is the focus of this portion of the report is the City of Dorval in Quebec.

A Municipality in Motion

Located on the western portion of the Island of Montreal, in 2016 Dorval boasted a slowly growing population of 18,980 citizens (+772 individuals since 2011).³³⁷ Regarding household income, the municipality is relatively prosperous when compared to the City of Montreal as its households enjoy median after tax incomes of \$49,067 compared to \$39,897.³³⁸ However, its citizens possess the lowest median after-tax income in the South of the West Island which overall is \$70,582 annually across the municipalities of Baie-D’Urfé, Beaconsfield, Dorval, Kirkland, Pointe-Claire, St-Anne-de-Bellevue, and Senneville.³³⁹ The number of local income individuals (13.8% of population) reflects those income dynamics as Dorval (is relatively better and worse off compared to Montreal (24.6%) and the South of the West Island (9%) respectively.³⁴⁰ Housing in Dorval is characterized by a relatively high renter-owner ratio (when compared to fellow Southern West Island municipalities) as 41% of its households were renters compared to 59% owners, but comparatively low compared to Montreal with 61% tenant households.³⁴¹ Median monthly shelter costs are \$873 for owned dwellings and \$729 for rented dwellings.³⁴² Critically, the number of tenant households that are faced with unaffordability and pay over 30% of their total income on housing is approximately 1,311 households, or 40.1% of all tenant households in Dorval.³⁴³ Unfortunately, social housing options are quite limited in Dorval, with non-market alternatives of social or community housing absent for low to medium income individuals or families under 65.³⁴⁴

Demographically, Dorval is faced with a process of gradual, but significant changes for three segments of the population: those under 25, seniors, and immigrants. As with many municipalities, Dorval is likewise faced with the prospect of an aging population; the city is expecting a 35% increase in its over 65 demographic by 2024 and a continued reduction of its under 25 population to a share of 23% of the population the same year, a demographic drop from 27% in 2006.³⁴⁵ Another challenge Dorval has is in accommodating a growing immigrant population which is expected to “form more than 30% of the population” by 2024.³⁴⁶ These changes are particularly significant for the issue of housing as those three demographics - seniors, younger individuals and families, and recent immigrants - have been traditionally shown to be highest at risk of housing unaffordability.

To meet its current socio-demographic needs and those in the immediate future, Dorval has prepared to advance proactively into the next decade and a half, issuing a statement of intent in a broad municipal agenda titled: *The Sustainable Master Plan, 2015-2031*. The plan is a comprehensive long-term vision for the municipality to maintain continued community sustainability through 2031 and among its goals are included targets for social mix, optimal density, transportation, biodiversity, building energy efficiency, and significant for the context of this report, affordable and quality housing. Among its multifaceted ambitions is an expressed interest in meeting the challenges of a shifting population composition. This includes not only

seeking to reverse the decline of its younger population, but also retaining its senior population and accommodating the arrival of new immigrants.³⁴⁷ For housing, the plan provisions to “offer 10% of new housing units as affordable and social housing including a range of housing styles where the value is less than the average cost of housing.”³⁴⁸ Additionally, in recognition of an aging rental stock (the average age for housing properties is between 50 and 60 years old), the city identified targets for a renovation program of 1,280 rental units by 2031 – 40% of total in 2011.³⁴⁹ Moreover, the city plans to consolidate its inhabited sectors through “gradual densification of housing around the two train stations” as part of facilitating an integrated community structured around key intermodal poles, notably including plans for mixed-use redevelopment of the city’s core central urban sector.³⁵⁰

As an important part of its community sustainability agenda, expanding affordable housing options has been identified by the City of Dorval as a significant interest to facilitate its socio-demographic development. As this report has made clear, affordable housing policy has the potential to comprise a diverse set of benefits beyond the relief of the burden of unaffordability itself. Indeed, all the benefits of affordable housing on the individual and community level (both economic or otherwise) are of interest for a municipality. However, the nature of Dorval’s developing socioeconomic situation and related challenges enhances an interest in maximizing benefits for specific target populations to meet demographic goals and interests in social mix.

The three key demographic groups – those under 25, seniors, and immigrants – stand to benefit the most from the improved fiscal health of the household attributed to rent relief and resultant increased disposable incomes. Providing options for these three affordability-challenged groups within the municipality – given housing’s role in social mix - would also contribute to their accommodation and retention of those key demographics, improved household security and stability, and improved community cohesion in Dorval. By emphasizing the importance of the lifecycle in housing, the city can both effectively communicate the necessity of affordable housing to its citizens and meet its principle of facilitating “affordable intergenerational” housing.³⁵¹ Already, the city has recognized the importance of housing “specialized” to the needs of seniors in this regard.³⁵² Regarding health, if affordable housing introduced in Dorval leads to residents moving out of housing detrimental to their health or development, then housing policy has potential to improve the health of citizens and consequently lessen the demand on local healthcare services in the West Island. Furthermore, if health is improved it can lead to improved individual development in school and at work by factor of reduced absenteeism. Given that the housing of 445 private households in Dorval did not meet suitability standards in 2011, it is both possible that health was adversely affected by those conditions and that positive changes to their housing through increased affordability could improve their health.³⁵³ There is also contextual potential for improved economic and employment outcomes at the household and local level. Finally, Dorval has expressed interest in green building and energy efficiency as it identified a target of 30% of all projects to be LEED certified.³⁵⁴ Should some affordable housing projects be included as part of that goal, households would benefit from long-term economic, energy, and health benefits tied to green-affordable builds and the municipality’s sustainability strategy would be augmented on the residential end. Furthermore, given the city’s emphasis on inter-modality and integrated transportation, affordable-accessibly is itself a guiding principle worth pursuing as it both contributes to an improved carbon footprint and the quality of life of citizens.

Though there is a wide spectrum of benefits tied to affordable and social housing, as the literature would not, context is paramount in achieving many of those benefits beyond the primary benefits associated with household fiscal health. Therefore, the manner by which the municipality approaches introducing affordable housing is significant and is a process that requires commitment and policy tailored to its needs and socioeconomic context.

On Transferability, Linkages, and the State of the Literature

Among the challenges faced in compiling this report, was the oft noted dearth in literature of Canadian literature, and more specifically, a lack of studies focused in Quebec and the Montreal metropolitan region (Buzzelli 2009; Condon et al 2010; Pomeroy and Bissonnette 2016). Though this might contribute to an unfamiliarity with the geographic areas examined in studies observed, the lack of examples found is mitigated by other key findings from the literature, notably the importance of context in attaining attributed benefits. That is to say, that because context is so important – the local housing market, the socioeconomic attributes of the community, the dedication and policies of the municipality – it is truly rare to find a given case study example that which is perfectly transferable to a new development's own context. In Dorval's situation, a case study of an affordable housing development elsewhere, with closely comparable socioeconomic conditions – such as housing affordability data, average income, and housing need – would have been an ideal resource. However, even in a comparative situation such as that, housing might result in different degrees of benefits (lesser or greater) depending on the approach of the municipality towards a new development. As repeated case studies in this report have shown, policy and municipal-community involvement were often instrumental in assuring a project's success, socially, economic, or otherwise.

Notably, Leviten-Reid et al (2016) found in their study of three types of affordable housing developments that organizational form may be consequential in determining outcomes, particularly those related to social benefits. That study found that positive social results were more often correlated to projects that had the organizational involvement of community-based non-profits or zero equity cooperative organizations compared to projects primarily ran by for-profit organizations or developers. They found that the non-profit developments pursued social support initiatives “and beyond” related to “both housing development and community life” whereas the private for profit was “not connected” with local input or social organizations which had implication for the development of the community.³⁵⁵ One example of this was the decision by the for-profit to not include common community spaces in the project due to concerns over cost.³⁵⁶ They concluded that though for-profit developments were still vested with the potential to build affordable housing, their likelihood as a “bricks-and-mortar strategy” to provide secondary social benefits was lesser compared to the social mission and “community-build” models of non-profit developments.³⁵⁷ As other areas of this report have indicated, maximizing the benefits of affordable housing usually occurs when a locality takes initiative *beyond* merely building homes. As de Wolfe (2008) noted about supportive housing – that is housing that “combines bricks-and-mortar” affordability with “special supports to meet the physical and mental health needs of tenants” – aided tenants with necessary integrative aid and contributed to “great neighbourhoods”.³⁵⁸ These findings were not dissimilar to Albright et al's study (2013) which showed the positive impact of an involved community on a development, this example of the influence of organizational form illustrates but one of many variables for consideration when

approaching the policy side of affordable housing. Indeed, these studies are demonstrable examples of the key dynamic between policy choice, housing type, and second order benefits.

As there are inherent limits to the transferability of a given case study, all case studies can provide valuable insight into the potential social or economic benefits attainable through affordable housing developments. A municipality should take note that regardless of comparability – at greater or lesser degrees – that comparability has limits; those examples can be instructive lessons in best practices or as prompts for benefits-related goals, but the case of the municipality is, naturally the paramount consideration. As such, the policies or cases explored in this report should not be seen as a roadmap to follow, but should instead be taken as a catalogue of the beneficial effects affordable housing can and has achieved, and as a source of inspiration in achieving their own goals. The needs of their own citizens, the conditions of their own housing situation, their own available sources of funding, and the policies they consider remain features that can enhance or detract the trending benefits of affordable housing. Careful consideration in policy is thus imperative to secure affordability and associated benefits.

Another challenge in this report was answering the question of causality and whether decisive conclusions could be made about the cause and effect relationships affordable housing had on the benefits that were correlated or attributed to its development. An important question, it was a recurring topic of discussion in the literature, appearing in material relevant to all sections which handled affordable housing's different cost-benefits sets for specific interests. Indeed, as Freeman (2009) observed, the notion that excessive costs impact human capital development has “strong intuitive appeal” but that literature examining the empirical evidence is “relatively scarce”.³⁵⁹ This report as more updated survey of benefits found in the literature – which was meant to capture the changes in consensus from 2009 to present by using updated literature reviews and studies – has indicated that in that intervening time the studies that have appeared have increasingly attempted to demonstrate that link and fill gaps in analysis. However, a comprehensive image of the benefits and costs of affordable housing remains elusive.

Likewise, the lines of causality between affordable housing and the outcomes generally associated with them remain a matter of debate, in particular with those related to employment. Indeed, from introduction to the ultimate result of a given benefit, intervening factors obscure the line of causality. As Pomeroy and Marquis-Bissonnette in their extensive literature review observed: “there is weak empirical support for the belief that living in affordable housing on its own, whether place based or via portable allowances, generate discernable positive outcomes in the area of employment and earnings”.³⁶⁰ They did however note that there is a significant methodological challenge present in analyzing the results of affordable housing programs, namely a “critical impact of program selection bias” related to the recipients themselves – the nature of their destitute situations prior to receive support makes it difficult to observe a positive impact of the subsidies.³⁶¹ In other words, “it is not because they are in assisted housing that people are poor; people are in assisted housing because they are poor and disadvantaged”.³⁶² Likewise, Owens (2017) noted the limited impact of the MTO housing choice voucher on education, employment, and health, but conceded nevertheless the key role it played in alleviating the largest economic burden placed on the household.³⁶³ Like Pomeroy and Bissonnette, Owens noted that the vouchers reveal – specifically in that their impact was not as large as expected – is just how disadvantaged and economically in need the recipients were.³⁶⁴

Regarding health, Grant and Sullivan (2010) noted that though many studies have identified a strong correlation between housing and health and socio-economic outcomes, “few studies rigorously demonstrate causal links” therein.³⁶⁵ The “strongest scientific evidence” of a causal relationship between improved housing and health comes from studies that examine links with specific ailments.³⁶⁶ Notably, this observance of causality was demonstrated in our previous section on green affordability which discussed the effect of green affordable housing on respiratory health (CMHC 2016; Garland et al 2013; Leech et al 2004; Wallner et al 2017). As stated by Grant and Sullivan, “high household occupancy density, poor air quality, and inadequate ventilation are clearly associated with the incidence of respiratory and contagious diseases” in part because it is easier to isolate the cause and effect relationship from intervening factors, thus reducing the number of variables with which one must contend.³⁶⁷

There is no one reason for these difficulties in establishing causality; as some authors have noted, there is a lack of: amount of studies, a general evaluative framework, or a set of common indicators in the literature through which to approach or study the economic benefits and costs of affordable housing. (Buzzelli 2009; Frontier Economics 2014; Pomeroy and Marquis-Bissonnette 2016). Indeed, just as providing affordable housing is “not an exact science” and that “there a one-size fits all solution”, the literature is as varied in approach, methodology, and issue of interest (i.e. some as broad as general studies whereas some focus solely on the differing affect one organization type can have vis-à-vis another).³⁶⁸ Nevertheless, those studies which have been conducted point towards several predominant trends of arising benefits associated with affordable housing. Crucially, this survey of the literature was able to observe that despite those blind spots in the study of affordable housing, most authors adamantly affirmed the importance of affordable housing as a foundation for individual and societal success and emphasized the necessity to maintain funding to such programs. As a foundation, however, some benefits cannot be achieved through “affordable housing alone” though they can be the “result of affordable housing being better able to meet tenants needs than alternatives”.³⁶⁹

CONCLUSION: CONTEXT AND POLICY MATTERS

The purpose of this report was to demonstrate the broad swath of potential benefits associated with affordable housing found in the literature for the purposes of informing a municipality of the vital role housing can have for a household, a community, and society. In general, one finds that there are significant potential benefits spread across several thematic areas of interest. Across this review of evidence in recent literature, and despite the limitations of the source material, it is nevertheless clear that affordable housing policy can lead to secondary benefits for an individual, a locality, and a society at large. Evidence at hand has demonstrably shown that beyond housing outcomes, affordable housing is a “backbone” of good social policy and a foundation from which many non-housing related benefits can result; it is “not solely an end unto itself but a means to other ends” (Pierre 2007).³⁷⁰ However, one must note that achieving those benefits is not a guarantee. As this review has indicated, when considering the benefits of affordable housing, the context, commitment, policies, and goals of the local municipality matter. Though general benefits and trends can be observed from the establishment of affordable housing, ultimately the benefits derived from those endeavors for citizens, municipalities, and society at large depends on the strategy with which agents of change approach their respective contexts. It is therefore important to understand the benefits tied to affordable housing as a diverse spectrum within which some outcomes are affected by different decision-making processes; every case of affordable housing is different and unique and not all cases are of all benefits. To that end, good policies must follow good intentions to assure the attainment of desired benefit-outcomes.

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