



**Summary Review of
the Relationship,
Context, &
Solutions**

Housing: A Basic Human Right





CONTENT

EXECUTIVE SUMMARY Infographic

INTRODUCTION 01

Relationship 02
Social Determinants of Health
Housing and Health

Context 10
Housing Issues in Colchester County
Summary of Statistics

Solutions 16
What is Already Being Done?
Next Steps

Appendix 1

Appendix 2

References

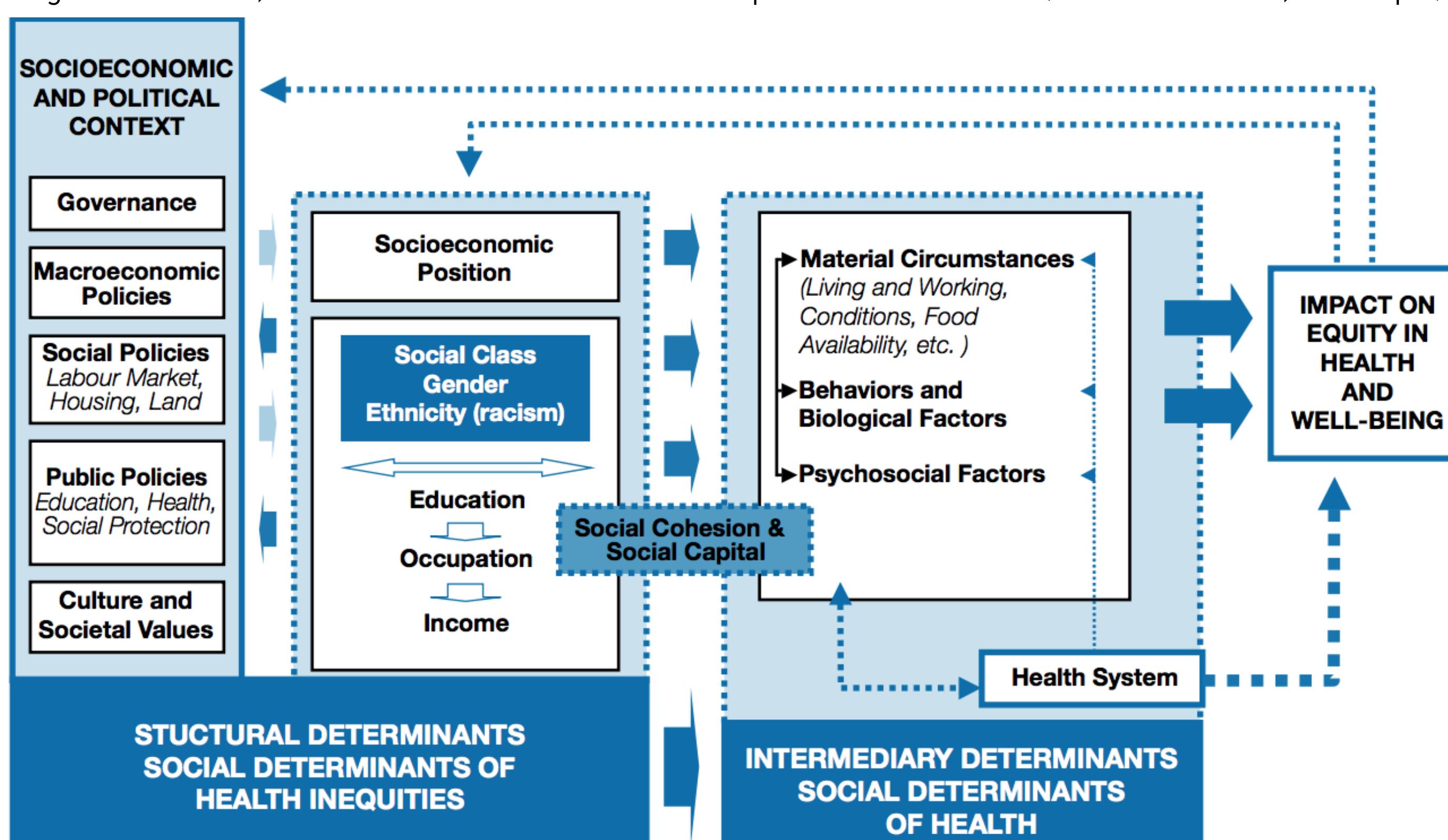
Housing Issues within Colchester County

A Glance at the Facts & Figures: Executive Summary Infographic

Housing & health

The relationship between health and housing is complex - housing is both a determinant of, and is determined by, health. Like health outcomes, housing outcomes are often a result of the influence of external factors that exist largely beyond the individuals' control. In social science and public health research, these external factors are known as the "Social Determinants of Health" (SDOH). See Figure 1 for an overview of the SDOH - in this figure, housing is shaped at each level, from macro sociopolitical contexts, to socioeconomic position, and material and personal factors. This demonstrates the interconnected nature of the SDOH and shows how addressing the root-cause of the issue requires thinking and action that have focus on the root-cause, or sociopolitical context.

Figure 1. WHO, Commission on SDOH conceptual framework (Solar & Irwin, 2010 p6).



From a health and social justice perspective, healthy housing should be safe, warm, and dry. Housing that is unaffordable, overcrowded, cold, in disrepair, or that is otherwise in poor condition, may be harmful to the physical and mental health of the residents.

Housing issues often arise from, or are categorized as issues relative to one or more of the following factors:

- Affordability;
- Adequacy (i.e., repair needs, or housing condition);
- Suitability issues (i.e., enough space for all residents).

Colchester data

Affordability

18% of Colchester residents are considered to fall below affordability standards. 10% of homeowners and 44% of renters spend more than 30% of their income on shelter costs (i.e., rent/mortgage, fuel, municipal services, etc.).

Adequacy

13% of households within Colchester County are considered to be in "major need of repair".

In Core Housing Need

4% of homeowners and 22% of renters are considered to be "in core housing need". Furthermore, 35% of lone-parent and 66% of First Nations home renters are considered to be "in core housing need". "In core housing need" means that the resident is spending more than 30% of their income on shelter costs and their house falls below one or standards including adequacy, affordability, and suitability.

(CMHC, 2011; Statistics Canada, 2011; Statistics Canada, 2016)

(...Yet, low-income assistance for shelter costs provides only \$535 per month.)

\$746 is the median monthly shelter cost for home renters

12% of rental tenants live in subsidized housing

34% of individuals within Colchester County earn less than \$20,000 annually after tax

\$725 is the median monthly shelter cost for homeowners

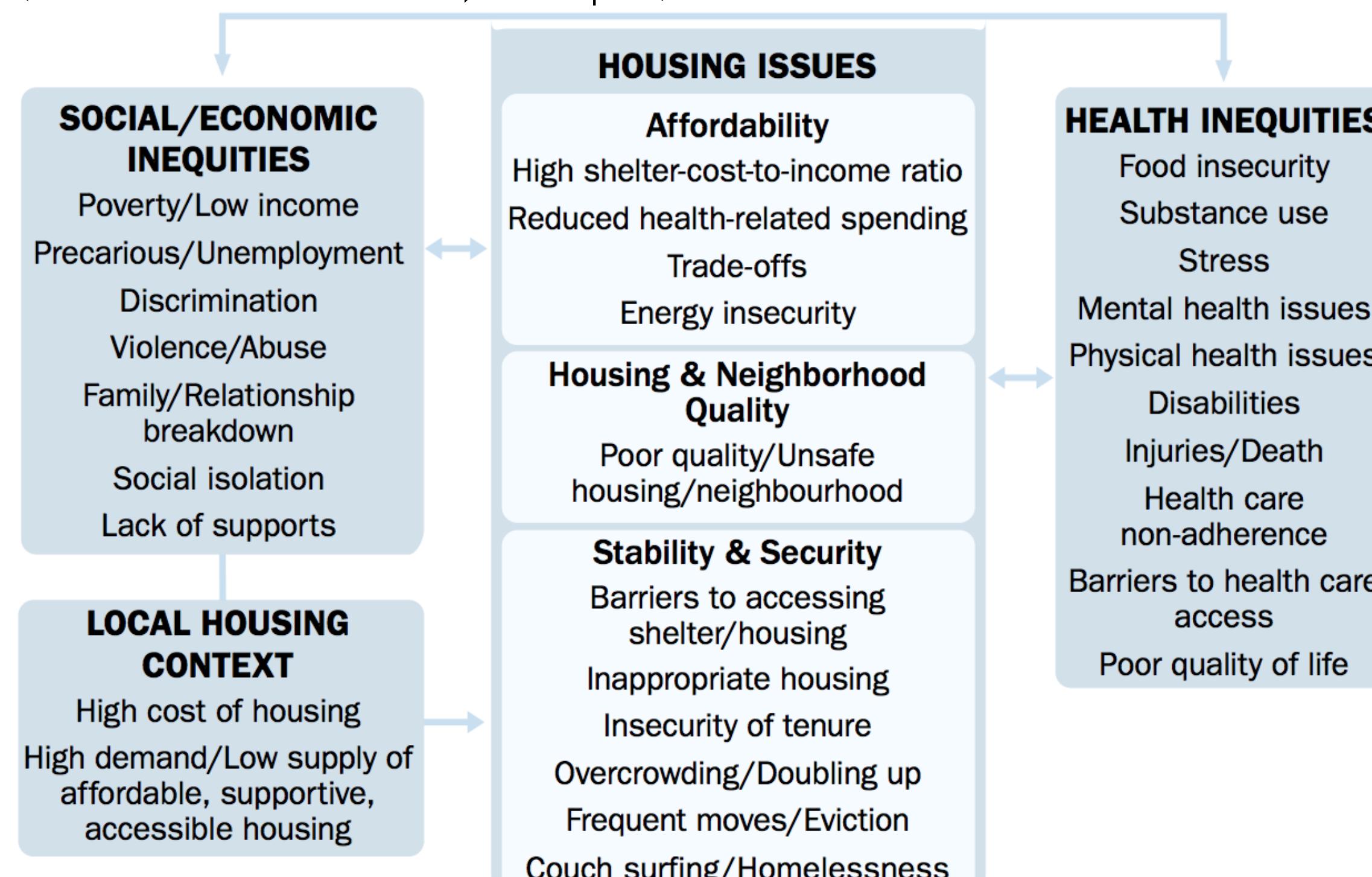
What can be done?

Efforts to address housing may require a two-pronged approach. Concurrent efforts, spanning from grass-roots to government-led, should target change at both micro (individual, or programme-based) and macro (population, or systems-based) levels. Refer to Figure 1 for context on these levels of intervention.

This type of multi-tiered, coordinated approach not only seeks to help those who are in current need, but also progresses towards the sociopolitical change required to prevent housing issues for future generations.

The apparent governmental shift away from publicly-owned affordable housing infrastructure, towards private sector investment and partnership should be monitored for its' impact, and advocacy efforts should seek to protect publicly-owned social welfare supports such as those that could provide healthy, affordable, adequate housing for all who may be in need. This is critical given the interconnection and complexity of housing as a health and social justice issue. See Figure 2 below for an outline of the relationship between housing issues, inequities, and housing environments.

Figure 2. The interconnected relationship between housing and health (Toronto Public Health, 2016 p16).



Shared voice

We are stronger together. Realizing that many groups focused on SDOH issues share a common goal of targeting socially-progressive, sociopolitical change, we can maximize our effect by seeking to work together with common messaging and approaches as we progress with trying to create a healthier, more equitable society in the future.

Research

Colchester County, and Nova Scotia, needs improved qualitative and quantitative data collection relative to the SDOH, including housing. To be effective, this data would need to be publicly-available and disaggregated. Without the data, we cannot comprehensively understand the issue.

Big thinking

Without active efforts focused on addressing the root-cause of housing (and other SDOH) issues, we may not arrive at a future where housing issues are significantly minimized, or eliminated. Many housing issues arise from structural, sociopolitical conditions that enable inequity and social disadvantage - this can be changed, but only by working to address these large, influential issues through a long-term goal.



Targeted interventions

The individuals and families experiencing (often complex) housing issues today need supports now and cannot wait for generational change. Therefore, efforts also need to improve the immediate housing context with more targeted interventions, or individualized supports.



INTRODUCTION

Housing in Colchester

Housing represents a critical health and social justice issue that may negatively impact many Nova Scotians across the life-course. While many community, political, and research groups have been working to address housing issues within Nova Scotia for many years, much work still needs to be done.

In Colchester County, complex housing issues affect many individuals and families. In response to this, the Colchester AntiPoverty Network launched a Housing Sub-Committee in March of 2013. Since that time, the Network has built a partnership with Public Health and has led a variety of initiatives and events focused on poverty reduction, and housing issues as well.

This summary report seeks to consolidate some of the public health evidence pertaining to the housing-health nexus, or 'connecting point'. In doing so, it is the hope that the report will help to start important conversations and actions regarding housing needs within our local Colchester County communities.

Affordable Housing presents an opportunity for those looking to live in a more acceptable standard of Housing in the Truro area. As Mayor of Truro, I know the community is excited about this prospect along with co-operation by our respective levels of government to work together to make it happen. This will go a long way to help build our community for the better.

— *Mayor Bill Mills,
Truro (Government of
Nova Scotia, 2016a)*



Relationship

Social Determinants of Health

Health and well-being are shaped by factors that extend beyond the traditional medical mode (Graham, 2007 p108). Factors that are critical for enabling healthy outcomes include variables such as access to education, [housing](#), employment, transportation, income, food security, and childcare. These factors, commonly referred to as the '[Social Determinants of Health](#)' (SDOH) within public health and social science research, represent the primary constellation of health-mediating variables that individuals interact with within their living conditions (Mikkonen & Raphael, 2010) across the life-course (see Figure 1.), either enabling or restricting positive health outcomes (Graham, 2007 p108-9).

Figure 1. Social Determinants of Health.



More specifically, the World Health Organization (2008a) defines the SDOH as:

"The social determinants of health are the circumstances in which people are born, grow up, live, work and age, and the systems put in place to deal with illness. These circumstances are in turn shaped by a wider set of forces: economics, social policies, and politics."

As the SDOH variables may not reflect a traditional conception of 'health', they may risk being overlooked or surpassed in favour of a focus on interventions that are rooted in medicalized concepts of treatment provision, or health education. However, as the incidence and prevalence of preventable disease and premature

mortality climbs towards an epidemic level globally and locally, a growing awareness of the need to address the root-cause of poor health and disadvantaged societal position is beginning to become evident (Raphael & Bryant, 2006). Unfortunately, this increased awareness does not appear to have translated into effective action as of yet within Canada (Raphael & Bryant, 2006).

Efforts to improve population health require a basic understanding that health outcomes are influenced by social position, which is influenced by structural factors such as the labour market, the education system, and the welfare system (Graham, 2007 p107). In this sense, a person's social position is more closely related to external structural factors designed by the political-economic system, than it is by individual factors. Due to this, addressing the SDOH requires solutions that target the structural, or root causes of poor health and social position, and associated inequities, largely through a public policy approach.

While there appears to be a growing emphasis on the need to address the SDOH within Canada, to date, efforts have been criticized within public health literature (Bryant, Raphael, Schrecher, & Labonte, 2011; Raphael & Bryant, 2006). Canada lags behind many developed nations when it comes to addressing the SDOH and social inequities (Bryant et al., 2011). Researchers posit that this is due to a shift in Canada's political economic system to a climate that favours a Liberal Welfare regime (Bryant et al., 2011; Raphael & Bryant, 2006). Liberal Welfare regimes are not conducive to addressing the SDOH or inequities and are characterized by weak social support provision and a lack of income redistribution (Graham, 2007 p166-168), two factors that are critically important to the SDOH. As this report progresses, it is important to contextualize the information provided as a population-level issue that requires political-economic change through policy. As Raphael and Bryant (2006) describe, key SDOH, namely income and income distribution, housing, and early childhood education are indicative of the current policy environment within Canada. This report will focus on the housing-health nexus, given that it represents a significant social determinant of health (Raphael & Bryant, 2006).



Housing is absolutely essential to human flourishing.

Without stable shelter, it all falls apart. 

*— Matthew Desmond,
Harvard University (Desmond, 2016)*



Housing as a Determinant of Health

Housing represents a complex, multidimensional health and social justice issue that has a significant impact on health, particularly as an estimated 90% of the day is spent within built environments, with the majority of this time being spent in the home (World Health Organization, 2010). As we will explore within the coming sections, many housing-related variables interact with community and individual-level factors to produce complicated health and social outcomes, which may consequently reinforce, or exacerbate

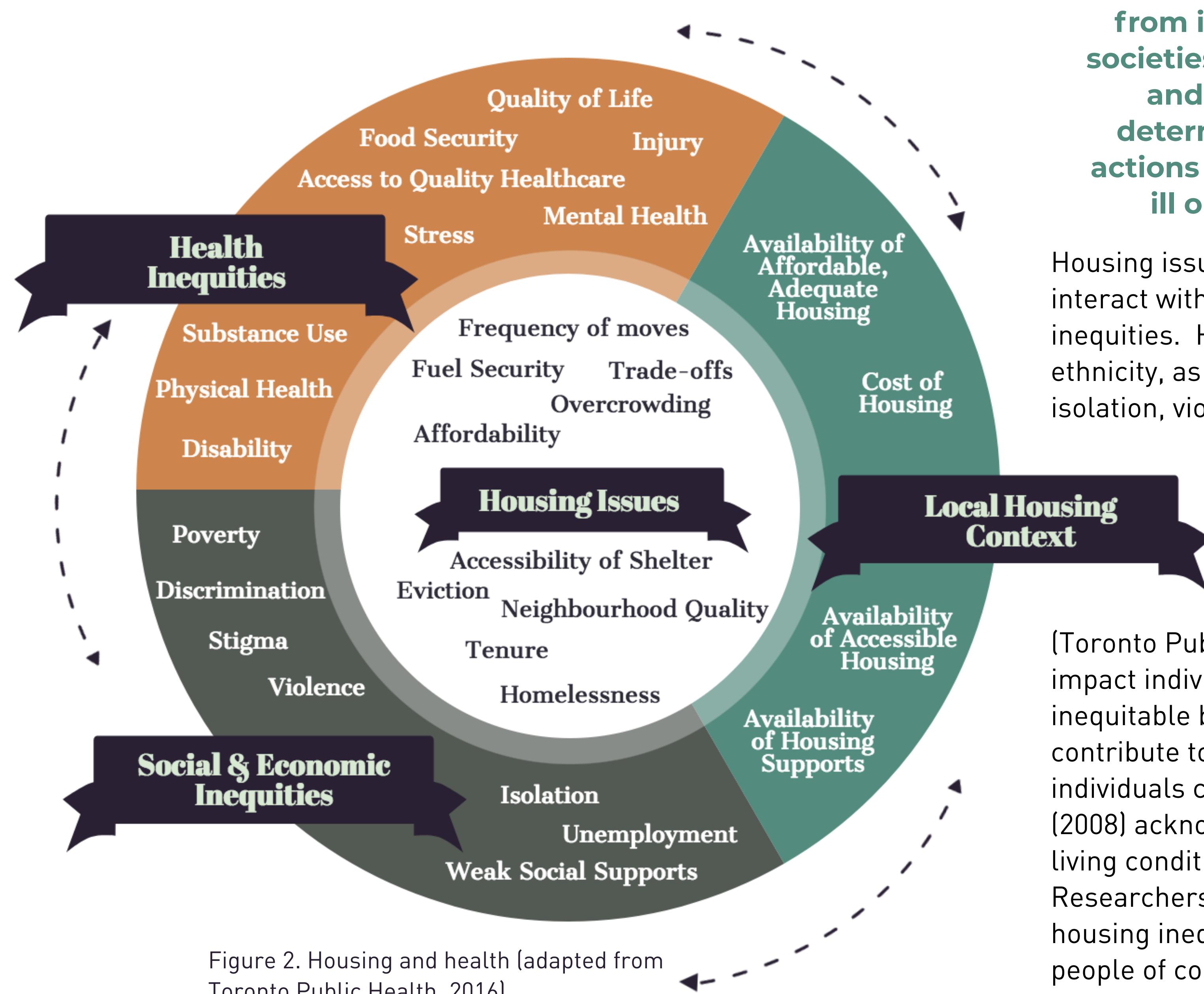
primary housing issues (Mahamoud, Roche, Gardner, & Shapcott, 2012; Toronto Public Health, 2016). In other words, housing is both a determinant of health, and is determined by health. Housing issues range from homelessness, to use of temporary shelter, homes in physical disrepair, overcrowding, inaccessible housing, isolated housing, and housing that increases risk of environmental illness. These issues vary in their relative degree of public visibility so while some housing issues within a community may be



evident, others may be less clear to the public eye.

Evidently, **housing issues** may result in, or exacerbate financial strain, leading to food and fuel insecurity. Housing that is deficient in safety, warmth, and dryness may contribute to poor physical health outcomes (Krieger & Higgins, 2002; WHO, 2010). Coupled together, housing-related risk factors may also lead to, or worsen mental health issues. Like other SDOH, housing quality, housing-related exposure, and housing-related health outcomes all carry a social gradient, with less affluent residents being disproportionately negatively impacted (WHO, 2009). As housing is a basic human right (United Nations, Article 25, 1948), impacting everyone across the life-course, it represents a critical area of focus for community health promotion and protection.

Factors that contribute to housing issues include health and socioeconomic inequities, and the local housing context (See Figure 2).



As is depicted within Figure 2, many factors influence housing outcomes, and similarly, housing issues have an outward influence on health and social inequities (Krieger & Higgins, 2002; Toronto Public Health, 2016), resulting in a feedback loop of interactions. Overall, individuals experience significantly different built and material environments according to their experience with housing quality (Mikkonen & Raphael, 2010). Unfortunately, this contributes to social divisions and inequity. Common within our society, **inequity** describes the social injustice that some groups face which may resultantly disproportionately negatively impact their capability of achieving, or experiencing positive health, well-being, and socioeconomic status. Inequities are often a result of discrimination, stigma, racism, sexism. The World Health Organization (2008a) has defined inequity as:

"Avoidable inequalities in health between groups of people within countries and between countries. These inequities arise from inequalities within and between societies. Social and economic conditions and their effects on people's lives determine their risk of illness and the actions taken to prevent them becoming ill or treat illness when it occurs."

Housing issues, along with the other SDOH dimensions, interact with, and influence, social and economic inequities. Herein, factors such as gender, race, ethnicity, as well as stigma, discrimination, poverty, isolation, violence, and unemployment

(Toronto Public Health, 2016) may disproportionately impact individuals and families, resulting in an inequitable burden of conditions that may result in, or contribute to housing issues that are beyond the individuals control. The World Health Organization (2008) acknowledges this critical link between daily living conditions, including housing, and health equity. Researchers Krieger and Higgins (2002) note that housing inequities may disproportionately impact people of colour and lower income individuals in particular. Additionally, Toronto Public Health (2016) describes in a comprehensive report on housing and health, that immigrants, and newcomers, First



Nations individuals, children and families, youth, seniors, LGTBQ individuals, individuals experiencing mental health and/or substance use issues, individuals living with chronic illness and/or disabilities, and individuals affected by violence are all at particular risk for experiencing a housing-related issue. Housing instability resulting in homelessness, poses a particular risk for those experiencing social and/or economic inequities (Toronto Public Health, 2016). The primary conclusion is that poor housing conditions contributes to, and exacerbates, health inequities and poor health outcomes (Marmot et al., 2010; WHO, 2009).

As Mueller & Tighe (2007) describe, housing is multifaceted - at a basic level it represents shelter, but housing is also where children are raised and lives are lived, and housing also represents a significant financial investment. On a less tangible level, housing enables self-expression and identity (Howden-Chapman et al., 2011; Mikkonen & Raphael, 2010).

According to researchers Mikkonen and Raphael (2010), Canada is experiencing a housing crisis, with increasing levels of unaffordable housing and a rising number of individuals and families spending more than 30% of their after-tax household income on shelter costs (this represents a significant financial risk factor; Mikkonen & Raphael, 2010). Shelter costs are typically considered to include rent/mortgage payments, heating fuel, electricity, water, municipal services, etc. (Canadian Mortgage and Housing Corporation, 2014). Much of the public health literature pertaining to housing speaks to the prominence of housing as a critical SDOH dimension (Gibson, Petticrew, Bambra, Sowden, Wright, & Whitehead, 2011; Forchuk, Dickins, & Corring, 2016; Krieger & Higgins, 2002; Mahamoud et al., 2012; Mikkonen & Raphael, 2010; Shaffi, 2017; WHO, 2008b; WHO 2012), or as an environmental justice issue (Krieger & Higgins, 2002). Unhealthy housing conditions may result in stress and maladaptive coping mechanisms such as substance use (Mikkonen & Raphael, 2010). Furthermore, children who grow up within sub-standard housing are more likely to experience poor health outcomes across the life-course, into adulthood (Mikkonen & Raphael, 2010).

Within the public health literature, housing issues pertinent to the SDOH predominantly fall within three categories spanning from the internal home environment, to the neighbourhood environment, and

to factors that pertain to housing tenure (categorized as renting and home ownership; Gibson et al., 2011). Related housing measures include a focus on affordability, suitability (home condition), and adequacy (sufficient space for each resident).

As Gibson et al. (2011) outline, [housing tenure](#) may impact health through enabling a sense of security through home ownership, or similarly, reinforcing control over one's finances through ownership. However, home ownership may also lead to increased stress and anxiety if debt, or otherwise financial hardship is present (Gibson et al., 2011). Some research studying the effects of housing tenure presents mixed results when looking at the effect of tenure on senior mental health, with findings suggesting that housing quality and financial security are perhaps more important than housing tenure itself (Howden-Chapman, Chandola, Stafford, & Marmot, 2011). This suggests that efforts to address housing issues may do best to prioritize a focus on equitable wealth redistribution (in order to effectively reduce and move to eliminate poverty), the availability of affordable housing, and the provision of accessible grants for home improvements, over efforts to increase private home ownership itself.

Beyond housing tenure, the [internal home environment](#) has a critical role to play in mediating health outcomes. Home environments that cause exposure to environmental risk factors such as lead, mold, or carbon monoxide, or that expose the residents to cold and/or damp conditions, may lead to negative health outcomes, with children and the elderly being placed at a disproportionately high risk (Gibson et al., 2011; Marmot & Bell, 2012; Mikkonen & Raphael, 2010; WHO, 2006). It may be easy to take something as ubiquitous as winter heating for granted in an area like Atlantic Canada, but individuals and families may experience fuel insecurity as a result of housing insecurity, and this may result in negative health outcomes and even 'excess winter deaths' (Marmot & Bell, 2012). This may occur when unaffordable housing costs redirect funds that would have otherwise been spent on necessities such as fuel. Moreover, research conducted in the United Kingdom found that the coldest 25% of housing may experience triple the risk of excess winter deaths as compared to the warmest 25% of housing (Marmot & Bell, 2012). Additionally, housing in disrepair has an impact on health, with research findings suggesting that dilapidated housing may increase risk of exposure to mold, dampness, and pests, and may pose risk to mental health by increasing exposure to risk factors such as social isolation or violence (Hood, 2005).



Other internal housing factors that may impact health include noise levels, exposure to indoor tobacco smoke, structural conditions that increase risk of injury or inaccessibility, and overall housing quality (WHO, 2006). Simply put, inadequate housing both directly and indirectly results in negative health outcomes (Mahamoud et al., 2012).

Moving outside of the internal home environment, **neighbourhood characteristics** play a significant role in either promoting or restricting positive health outcomes. Here, areas experiencing greater levels of deprivation, or otherwise areas of lower socioeconomic status, may have higher levels of crime or otherwise antisocial behaviour (Gibson et al., 2011). As researchers Marmot and Bell (2012) elucidate, the relationship between a neighbourhood's physical and social characteristics interact to influence local health outcomes. In addition to this interaction, the neighbourhood environment also interacts directly with health issues, potentially resulting in exacerbated poor health outcomes in a feedback loop process (Hood, 2005). Neighbourhoods that lack the structural characteristics that enable physical activity, such as sidewalk availability, the presence of outdoor recreational space, or the availability of bike lanes or paths, may result in higher levels of obesity (Hood, 2005; Sallis et al., 2009). Furthermore, areas where these health-promoting variables exist, but where the social climate of the neighbourhood is poor (e.g., areas where there is a higher prevalence of crime), may still experience barriers to achieving physically active lifestyles (Hood, 2005).

Beyond considerations of objective measures of the effect of internal housing environments and neighbourhood surroundings, research has determined that personal perceptions of the surrounding home environment, including social climate, are positively correlated with higher mental well-being outcomes (Wright & Kloos, 2007). With this in mind, offering home improvement measures may be an effective way to bolster social outcomes, including reduced fear of crime and increased community engagement (Bambra, Gibson, Sowden, Wright, Whitehead, & Petticrew, 2009).

Another key, and arguably primary dimension pertinent to the housing-health nexus is **housing affordability**. Unaffordable housing has been found to be related to poor mental health outcomes, with this effect persisting after taking into account the overall effects of financial difficulties (Mason, Baker, Blakely, & Bentley, 2013). Difficulty in meeting high, and rising, housing costs has

been found to lead to an inability to afford non-housing needs such as food, transportation (Mason et al., 2013) and the fuel required to sustain a warm household (Krieger & Higgins, 2002). Circling back to housing tenure, research demonstrates that low, or mid to low income renters may be disproportionately impacted by the mental health risks associated with unaffordable housing (Mason et al., 2013). However, as was previously mentioned, home owners may also be burdened by affordability issues and may experience anxiety due to housing debt (Gibson et al., 2011).

Housing affordability may also be related to the development of regions or neighbourhoods that are structured to facilitate income segregation. Researchers studying this have found that income segregation is associated with chronic health conditions such as obesity, mental health issues (Hood, 2005), as well as the creation of "pockets of poverty" within neighbourhoods and communities (Barnes, 2012). Researchers recommend avoiding income segregation by promoting and implementing mixed housing developments (Bambra et al., 2009). Mixed housing developments may lead to improved perceptions of neighbourhood safety (Bambra et al., 2009). Overall, the rising cost of housing coupled with a lack of affordable housing options may result in affordability issues that lead to complex negative outcomes that extend beyond the traditional context of housing, leading to critical food and fuel insecurity (Toronto Public Health, 2016) and poor(er) physical and mental health outcomes.

Another dimension of housing issues includes **homelessness**. As Shaffi (2017) describes, homelessness is a "complex condition that has a significant impact on nearly every SDOH". While some of the risks associated with homelessness may be more obvious, such as a lack of predictable shelter, other factors may be less visible, including lack of continuity of healthcare services and social supports (Shaffi, 2017). Individuals experiencing homelessness are at compounded risk due to the potential lack of consistent protection from exposure to the physical environment, coupled with diminished access to the range of health-protecting SDOH factors (Waldbrook, 2015). Consequently, the experience of homelessness may lead to poorer physical and mental health outcomes (compared to the general population), with homeless individuals being between 8-10 times more likely to die early (Mikkonen & Raphael, 2010). Variables such as substance use may increase the risk of experiencing homelessness either through evictions due to drug use, or by the downstream effects of substance



use such as unemployment (Toronto Public Health, 2016), as may mental health issues, although there is debate regarding whether or not health issues predate, or result from, the experience of homelessness (Shaw, 2004).

Addressing homelessness is a key component within a broader strategy to ameliorate the overall socially-focused housing context. Transition housing (a midway point between in-patient services, such as for psychiatric care, and public or private shelter such as renting, owning, or emergency shelter use) is a necessary component to any housing system or strategy (Green, 2005). Importantly, transition housing should be supportive, integrating comprehensive social and health services and supervision within safe, affordable housing (Buccieri, 2016; Green, 2005; Kisely, Parker, Campbell, Karabanow, Highes, & Gahagan, 2008). Offering this type of integrated supports within transition housing has been found to result in improved self-reported health, decreased substance use (Kisely et al., 2008), and improved future housing tenure amongst those who have previously experienced homelessness (Green, 2005). Furthermore, ensuring the availability of supportive transition housing may help to reduce the disproportionate numbers of individuals who are experiencing concurrent mental health and housing issues (including homelessness) that are accessing supports from emergency departments (Forchuk, Reiss, & Mitchell, 2015). Researchers Forchuk et al. (2015) describe how it is crucial to address both social (including housing and poverty) and mental health issues concurrently, particularly as individuals experiencing mental health issues are at particularly high risk of also experiencing concurrent poverty and housing issues (Forchuk et al., 2015).

Gilderbloom, Squires, and Wuerstle (2013) offer a thoughtful critique of a perhaps mainstream perception of homelessness wherein those experiencing homelessness are believed to be impacted by physical or mental health challenges, or otherwise are unmotivated to effectively participate within modern-day competitive society. Instead, Gilberbloom et al. (2013) posit that the experience of homelessness is predominantly a result of structural conditions at the political-economic level, as opposed individual-level factors. Perhaps developing this understanding and tailoring solutions to be congruent with this political-economic approach may help to challenge stigma associated with homelessness.

According to researchers Desmond and Gerhenson

(2016), involuntary job loss and involuntary housing loss are significant contributing factors to employment and housing security. The inclusion of housing in this relationship underscores the importance of housing as a key SDOH and a critical area of concern for policy-makers concerned with job security and participation in the labour market, particularly as housing loss is known to be a significant predictor of job loss (Desmond & Gerhenson, 2016). Given that previous analysis has found that the Atlantic Canada provinces may prioritize labour market integration as a key strategy to address homelessness (Government of Canada, 2015), it will be important to note moving forward that housing stability may indeed be a stronger prediction of future job security (Desmond & Gerhenson, 2016). Among other factors such as affordability, housing instability is influenced by variables such as couch-surfing, overcrowding, and eviction (Desmond & Kimbro, 2015). Understandably, eviction has a significant impact on health outcomes. A study looking at the effects of eviction on single mothers has found that eviction may lead to mental health issues and material deprivation, with effects persisting for at least two years post-eviction (Desmond & Kimbro, 2015). Overall, efforts to address housing stability have been found to be most successful when they not only control costs, but when they also enable individuals and families to exert influence over their housing arrangements (Desmond & Gerhenson, 2016). At a fundamental level, the multi-dimensional nature of homelessness as a housing and broader SDOH issue requires ensuring the availability and accessibility of safe, affordable, appropriate housing for anyone in need (Gaetz, Gulliver, & Richter, 2014).

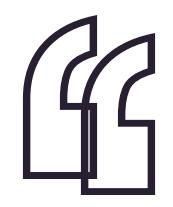
To reiterate the link between SDOH outcomes (including housing) and sociopolitical factors, Graham (2007) has outlined that social and health inequities are caused by societal structural conditions and systems that include the labour market, the educational system, and the social welfare system. Within this construct, equity is either improved or worsened by a society's structural conditions. In order to improve health and social inequities and population-outcomes, a nation must choose to prioritize and implement policies and systems that increase social protections through focusing on equal, equitable wealth redistribution and the provision of comprehensive, accessible social welfare supports that are available to the entire population.

How a nation approaches this issue is largely indicative of its categorization of Welfare State typology (Esping-Andresen's analysis of Welfare State regimes; Ebbinghaus, 2012). Generally, the purpose of a Welfare State is to "provide people with essential resources



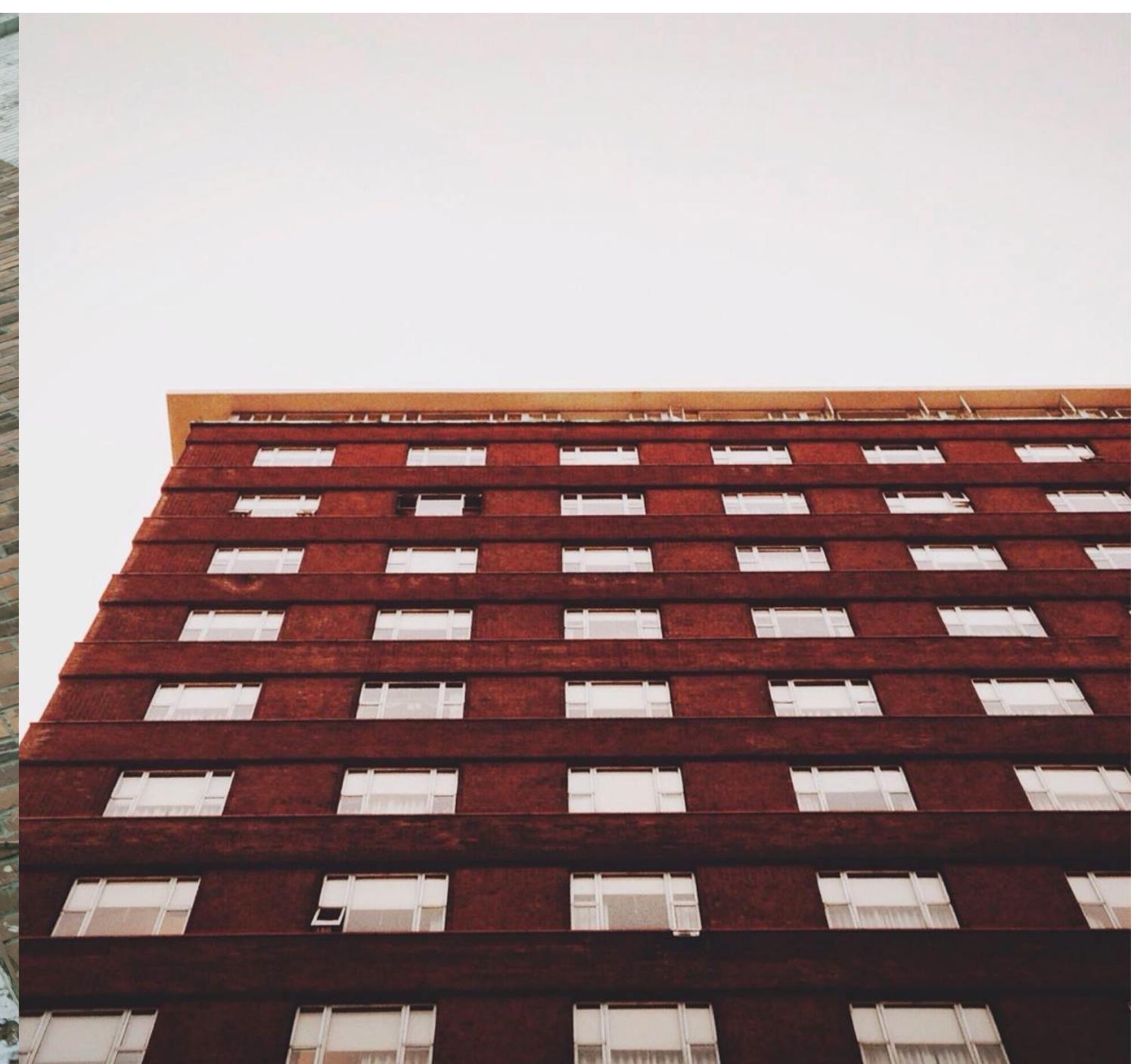
independently of their economic circumstances" (Graham, 2007 p165) and "to maintain people's incomes when the market fails to provide for them - during unemployment and old age", and to provide "services like education and health care" (Graham, 2007 p165). Welfare States play a key role in redistributing wealth and resources across the life-course (Graham, 2007 p166). Canada, like the United Kingdom and the United States is classified as a Liberal Welfare State (Bryant et al., 2011; Raphael & Bryant, 2006). Liberal Welfare States are the least socially-progressive, or protective, with such governments prioritizing market freedom over social protections (Bryant et al., 2011; Raphael & Bryant, 2006). This type of system is not conducive to the policies and approaches required to address societal inequities, including those that are most pertinent to housing issues. While Canada does provide universal healthcare coverage and a free public education system, the Nation's social welfare protections are considered to be weak and insufficient to address the SDOH and the associated inequities experienced across the country (Bryant et al., 2011; Raphael & Bryant, 2006). As Graham (2007 p166) outlines, social supports that are means-tested, providing a safety net for only the poorest groups, are not able to address the inequitable gap between "the rich and the poor", and therefore are not able to address inequities within the SDOH. Means-tested supports are indicative of Liberal Welfare States, whereas Social Democratic systems (such as the Nordic countries) seek to enable "equality of the highest standard" (Graham, 2007 p166) by ensuring strong labour market policies and redistributing wealth in an equitable way across the whole population.





To live in an adequate shelter means more than a roof over one's head: It means to have a home, a place which protects privacy, contributes to physical and psychological well-being, and supports the development and social integration of its inhabitants - a central place for human life.

— Bonnefoy (2007 p413)





Context

Snapshot of Housing in Colchester County

27,036

↳ Median income after-tax among income earners ¹

34% (16630)

↳ Individuals with an annual income of less than \$20,000 after tax ¹

\$725

↳ Median monthly shelter cost for home owners ¹

\$746

↳ Median monthly shelter cost for home renters ¹

13%

↳ Of households are in major need of repair ²

375

↳ Senior housing units provided by Housing Nova Scotia ³

73

↳ Affordable housing program units provided by Housing Nova Scotia ³

\$605,887

↳ From April 2014 to October 2014, \$605,887 was provided to 46 homes in Colchester in the form of grants and forgivable loans from Housing Nova Scotia ³

12%

↳ Of rental tenants live in subsidized housing ¹

20

↳ Family public housing units provided by Housing Nova Scotia ³

86

↳ Families on Housing Nova Scotia wait list ³

55

↳ Non-elderly singles on Housing Nova Scotia wait list ³

133

↳ Seniors on Housing Nova Scotia wait list ³

In Colchester County, 10% of individuals who own their own home spend more than 30% of their after-tax income on shelter costs (e.g., monthly rent/mortgage payment, property taxes/Condominium fees, cost of electricity, heat, and municipal services) leaving them at risk of financial shortfall and food, fuel, and housing insecurity. Among those who rent, the percentage is much higher: 44%. ¹



Context of Housing & Health within Colchester County

Looking beyond the statistics, Nova Scotia's current premier (2017), Stephen McNeil with the Liberal Party, has stated that "housing is Nova Scotia's biggest issue" (Gorman, 2016). McNeil also describes how the differing contexts between rural and urban regions require unique approaches, with rural communities in particular, requiring an emphasis on affordable, publicly-owned housing infrastructure (Gorman, 2016).

Housing Nova Scotia is the governmental corporation responsible for addressing many of the housing needs faced by low and low-to-middle income Nova Scotians. Their services and supports range along a continuum of high to low-level supports; from emergency shelters and transitional housing, to independent social housing, and rental supplements, and home ownership (Housing Nova Scotia, 2015b). The bulk of their services fall within three categories: grants for home repair/adaptation, loans and mortgages, and administrative duties relative to housing agreements (Housing Nova Scotia, 2015b). Housing Nova Scotia has also stated numerous more broad housing-related concerns facing Nova Scotia today including (Housing Nova Scotia, 2015b):

- **Rising cost of real estate and rent;**
- **Decreased infrastructure development dedicated to affordable housing;**
- **Lack of affordable housing options for middle-income earners;**
- **Free market practices/unregulated market forces;**
- **Decreased/lost federal funding.**

According to a report by Housing Nova Scotia presented to the Nova Scotia legislature in 2016, the most pressing factors pertaining to housing in Nova Scotia include (Housing Nova Scotia, 2015b):

- **Out-migration from rural communities;**
- **Aging housing infrastructure;**
- **Housing affordability;**
- **Energy costs;**
- **Long-term federal funding;**
- **The aging population;**
- **The complexity of housing needs;**
- **Changing household types;**
- **Low incomes;**
- **Disability.**

To provide context relative to the scale of available supports that are accessible to some Nova Scotians who are considered to be most in need according to an income-based inclusionary process, Housing Nova

Scotia offers 1,050 (160 family and 890 senior) housing units within the Cobequid region (encompassing Colchester County), with senior citizens representing the primary demographic accessing supports (Housing Nova Scotia, 2015a). Due to an aging housing stock, where the majority of homes were built between 1954 and 1994, the current public housing infrastructure risks energy inefficiency (Housing Nova Scotia, 2015a). In addition to the services offered through Housing Nova Scotia, Nova Scotia's Department of Community Services facilitates access to supportive housing for individuals requiring integrative care, or support with daily living that fall outside of long-term care facilities such as senior citizens homes, such as through the 'Disability Support Program'.

Unfortunately, the housing supports and services that are available within Colchester County may not be sufficient. In 2014 it was reported that a long wait list for services existed, including 133 seniors, 86 families, and 55 non-senior single individuals (Colchester Municipal Council, 2014). However, as reported within a Municipal Council Meeting in Colchester, just over \$600,000.00 in grants and loans had been shared amongst 46 households in Colchester County between April and October, 2014 (Colchester Municipal Council, 2014). Just how many other families and individuals who may be in need of housing-related supports, but who were unable to access governmental supports, is unclear.

For emergency shelter services, Colchester County citizens may access temporary shelter from one homeless shelter in Truro. The Truro area shelter, 'Hub House', provides room for 16 individuals, with beds for ten men and four women over the age of 16 (Curwin, 2017). Housed at a previous location in 2016, the Truro emergency shelter was housing an average of 6-8 people per night, with numbers increasing during the winter months (Tetanish, 2016). Beyond this, there is an emergency shelter (and services) called 'Third Place Transition House' that is available to women and children who are victims of domestic violence, as well as 'Millbrook Family Healing Centre', which provides shelter (and other supports) for Mi'kmaw First Nations women and children who are in need.

Indicative of the broader housing security issue within Colchester County, it is worth noting that of the 21,763 persons that were served by the Colchester Food Bank in 2015, over 6,500 were children. This food bank, serving all of Colchester County provided a total of 9791 food boxes, totalling 529,395 pounds of food overall to clients in 2015 (Colchester Food Bank, 2015). Unfortunately, by the



next year, 2016, these numbers increased to 24,570 persons served, including over 8,000 children. Food box provision had increased to 10,598, and total pounds of shared food reached 560,383 (Colchester Food Bank, 2016).

As housing and food security are related, these numbers are indicative of not only a food security issue locally, but also of a broader poverty and SDOH challenge, and this issue may perhaps be greater than the available numbers indicate. Consider that while the median cost of monthly shelter in Colchester County is \$746 for home renters, low-income financial assistance supports for eligible recipients amounts to only \$535 for a non-shared rental unit. This assistance is only provided to those who are most in need, leaving individuals and families who live above the means-based tested poverty line, but who are still experiencing financial hardship, in a difficult situation where they may potentially experience, food, housing, and food insecurity. Therefore, the current available housing-related supports may not be sufficient enough to enable individuals to escape the SDOH cycle of poor housing, and potentially, poor health outcomes.

Due to the complexity of housing as a public health and social justice issue, housing issues appear differently across communities and regions. Regional demographic, structural, and socioeconomic factors may all contribute to differential housing contexts. For example, within Colchester County and beyond, housing issues vary according to the prevalence of regional demographic characteristics such as rurality, age demographics, ethnic and cultural variations, socio-economic gradients, as well structural factors including the labour market, the educational system, and the public transportation systems, and how these factors align with the SDOH.

While data limitations render difficulty in exploring and understanding housing issues comprehensively, some datasets exist that enable a review of housing at the county and municipality level (e.g., 'Canadian Mortgage and Housing Association' data and 'Statistics Canada National Housing Survey'). The following data table presents findings from the Canadian Mortgage and Housing Association's 2011 survey. For definitions of each variable, please see Appendix 1.

Table 1. Total household and housing issues in Nova Scotia, Colchester County, and Truro (CMHC, 2011).

	Total Households	Below Housing Standards	Below Affordability Standards	Below Adequacy Standards	Below Suitability Standards
Nova Scotia	369,760	106,945 - 29%	71,155 - 19%	35,2275 - 10%	75,248 - 20%
Non-senior	273,395	79,175 - 29%	50,905 - 19%	26,545 - 10%	12,050 - 4%
Senior	96,365	27,770 - 29%	20,250 - 21%	8,730 - 9%	1,045 - 1%
Colchester County	20,305	5,820 - 29%	3,720 - 18%	2,155 - 11%	615 - 3%
Non-senior	14,540	4,135 - 28%	2,415 - 17%	1,635 - 11%	550 - 4%
Senior	5,765	1,685 - 29%	1,305 - 23%	525 - 9%	65 - 1%



Particularly pertinent to the landscape of Colchester County, rurality has been found to lead to greater health disadvantage compared to urbanity (Matz, Stieb, & Brion, 2015). Rural areas tend to have a higher prevalence of low-income residents and within the population, there may be lower levels of secondary education completion (DesMeules et al., 2008). However, some research looking into the differential health outcomes experienced by rural and urban dwellers cautions that the effects may be mixed and small, and that better understanding of how the determinants of health vary between and within different rural regions is needed (Lavergne & Kephart, 2011). Nonetheless, this urban-rural differential may indicate a need to consider regional differences in housing needs. It is likely that rural residents may require different policies and supports than urban dwellers. The housing context in Colchester County is likely to vary in accordance with regional location and its' relation with the social gradient, age demographics, and ethnic origins for example.

Like the rest of the province, demographic trends within Colchester County include an aging population. The Atlantic Seniors Housing Research Alliance (2009; 2010; a research group based out of Mount Saint Vincent University) has described in numerous reports how seniors want to remain housed in their own homes for as long as possible, yet have housing repair needs, and may often be unaware of the social and housing-related supports and services available to them. Efforts to address the SDOH and to improve population health indicators should embrace the need to include a focus on seniors health and well-being. Beyond this, it is important to recognize that making supports available is not enough - seniors (and other groups) need to be effectively informed of the supports available to them, otherwise uptake may not be strong or equitable. As research suggests that poverty within more elderly populations is a growing trend and a significant concern (Grenier, Barken, Sussman, & Rothwell, 2016), a focus on providing accessible supports to seniors relative to housing and other SDOH dimensions should be a top priority. From a systems perspective, it may be beneficial to have more in-depth local qualitative and quantitative data regarding the issues, barriers, and opportunities presented to seniors (and other groups) in relation to housing. Without data, it is difficult to understand the context and to build the adequate level of support required to implement effective solutions.

As the data presented within Table 1 indicates, Truro and Colchester County as a whole are experiencing significant housing issues, particularly in relation to housing affordability (where housing that incurs shelter

costs in excess of 30% of annual household income is considered to be unaffordable) and adequacy (housing that is in major need of repairs is considered to be inadequate; for more detailed definitions, see Appendix 1). Looking beyond a population-focus, there are various sub-populations within the Colchester region that appear to be disproportionately negatively impacted by housing issues. For example, compared to the general population, lone-parent households appear to be more likely to be 'In Core Housing Need' (see Appendix 1 for a definition of "In Core Housing Need"): 8% of lone-parent home owners and 35% of lone-parent home renters (CMHC, 2011). First Nation's households are also more likely to be 'In Core Housing Need' compared to the wider population, with 5% of homeowners and 66% of home renters having been found to be 'In Core Housing Need' (CMHC, 2011). See Table 2 for an overview of the 'In Core Housing Need' status averages for Colchester County and Nova Scotia, from a whole population perspective.

Table 2. Total households in 'core housing need' by tenure type (CMHC, 2011).

	Total % of Population In Core Housing Need	% of Owners In Core Housing Need	% of Renters In Core Housing Need
Nova Scotia	12.5%	6.5%	28.1%
Colchester County	9.2%	4.4%	21.7%

A review of provincial, housing-related data from Nova Scotia 211 (211 is a web and phone-based, free, confidential connection point to a wide variety of government services and supports) provides some insight into the provincial context of housing needs within Nova Scotia. According to the data, among all calls received in 2015, 19% related to 'basic needs', of which, 40% concerned housing/shelter (Nova Scotia 211, 2016). Among the unmet needs reported by 211 (unmet needs occur when a caller contacts 211 for help, but 211 is unable to meet that need), 33% of calls were about basic needs, of which, 42% pertained to housing/shelter (Nova Scotia 211, 2016). Nova Scotia 211 also reported that among all referrals made to Housing Nova Scotia for housing-related supports, the majority concerned access to public housing, the senior citizens assistance program, and the provincial housing emergency repair program (Nova Scotia 211, 2016). Province-wide, the majority of referred callers through 211 were female and senior citizens (Nova Scotia 211, 2016).



Colchester & East Hants County Community Health Snapshot

Because the health-housing connection is inseparable

30%

Drink Alcohol Heavily
(Drink 5+ drinks during
1+ occasion each month)¹

47%

Meet Monthly Minimum
Recommendations for
Physically Active¹

24,570

Persons were served
by the Colchester Food
Bank in 2016, a 13%
increase from the previous
year²

24%

Smoke Tobacco¹

29%

Meet the Daily
Recommended Servings
of Fruits and Vegetables¹

6-8

People per Night Use
Temporary Shelter during
Summer Provided by Truro
Homeless Outreach Society³

43%

Daily Activity
Limited due to
Pain¹

68%

Have a Strong/Very Strong
Sense of Community
Belonging¹

68%

Have 1+ Chronic
Conditions¹

54%

Perceive their
Health to be Very
Good/Excellent¹

46%

Binge Drank in the
Past Month - Grade 12
(Provincial Average; 5+
drinks in one sitting)⁴

55%

Have Used Cannabis -
Grade 12
(Provincial Average)⁴

10%

Are Low Income¹

18%

Of Youth (19-24)
Are unemployed¹

9%

Of Adults are
Unemployed¹

1. Nova Scotia Health Authority, 2016. Community health network fact sheets: Colchester East Hants community health network. NSHA, Halifax: CA.

2. Colchester Food Bank, 2016. Annual Report. Colchester Food Bank, Truro: CA.

3. Tetanish, R. September 15, 2016. Truro homeless shelter can't open without volunteers. Shelburne County Coastguard, Shelburne: CA.

4. Asbridge, M., Langille, L. 2013. Nova Scotia Student Drug Use Survey, 2012. Nova Scotia Department of Health and Wellness, Halifax: CA.



The potential for better outcomes for vulnerable populations starts with secure housing; secure both physically and financially. Improving health, education, employment and/or social outcomes is much more likely with the benefit of secure housing.

— *Jim Graham, Programme Facilitator,
Affordable Housing Association of Nova Scotia
(Government of Nova Scotia, 2013a p10)*



Solutions

Policies & Initiatives to Address Housing-related Issues in Nova Scotia

While the preceding section outlined a variety of available supports and services for individuals experiencing issues with housing in Nova Scotia, the data indicates that the system still needs to be improved. Further, as the data presented previously highlighted, housing issues and inequities are a considerable concern within Colchester County. Many families and individuals are struggling to meet the high cost of shelter and our growing population of senior citizens may be challenged to access the supports and services required to remain healthily and happily in their own homes. Our First Nations communities continue to experience significant hardship, inequity, and injustice as the housing data demonstrates. It is possible that accessing housing supports remains stigmatized and may require navigating through complicated processes managed by various governmental departments and organizations. And even after navigating the system, means-based testing requirements may leave many who are in need, but who are above the cut-off point, without effective supports. Ignoring, or failing to effectively address the housing problem will end up costing the government and local society more than it would cost to fix the issue (Gaetz et al., 2014). As Gaetz et al. (2014) describe, Canadian communities are "nearing a crossroads" regarding housing issues and homelessness. Inadequate and decreased federal funding for public housing, decreasing wages, decreasing availability of affordable homes, and declining social support have left us on track to experience worsening housing issues.

Locally in Nova Scotia, efforts to progress housing as a public health and social justice issue have become prominent in the past decade, with Nova Scotia's Housing Strategy (Government of Nova Scotia, 2013a) emphasizing the need for a commitment to addressing issues related to affordability, accessibility, and a concept known as 'Housing First'. Housing First represents a commitment to providing access to affordable, suitable, and acceptable housing as the first step in the course of treatment for individuals experiencing mental health and/or substance

use issues and who are concurrently experiencing problems accessing long-term, appropriate housing. Housing First builds on a model of integrative care wherein an individual is housed and concurrently provided with the social and health-related supports required to best enable them to live healthy, independent lives over the long-term.

Nova Scotia's Housing Strategy also outlines three main themes within which many of the report's recommendations fall (Government of Nova Scotia, 2013a). These include:

- **"Fostering healthy, vibrant and diverse communities;**
- **Ensuring affordable housing choices for owners and renters;**
- **Providing pathways to equity and home ownership".**

More specific recommendations or action plans include a focus on developing mixed communities that offer a variety of housing types and prices, designing communities that promote good health and well-being, and providing "housing options for seniors and vulnerable populations". The report concludes with specific action steps (see page 23: https://novascotia.ca/coms/hs/Housing_Strategy.pdf) that follow a two year timeframe, but the effect, uptake, and reach of these actions appears unclear (Government of Nova Scotia, 2013a).

Accompanying the Housing Strategy was a Discussion Paper (Government of Nova Scotia, 2013b). This report highlighted how an emphasis on "partnership and change" would purportedly enable the growth of community-centric developments through collaboration with community, government, 'social enterprise', and the private sector. The Discussion Paper claims that "the public housing solutions of the past are not always working for people", but fails to provide citations, or to clarify what was not working well (Government of Nova Scotia, 2013b). How can we make public housing better? An important question is



raised in a section of the report that discusses the expected outcomes associated with market-based versus government-based housing solutions. Here, the report highlights how free-market practices would not solve the provincial housing issue, but would rather likely lead to a focus on developing greater proportions of unaffordable housing such as "luxury and high-end developments" (Government of Nova Scotia, 2013b). In the end, this section of the report concludes that a mixed private/governmental approach would be best to address housing needs within Nova Scotia, but the logistics and rationale behind this is not entirely clear unfortunately.

Beyond the provincial strategy, there are numerous governmental groups and non-governmental organizations (NGOs) that are dedicated to improving housing-related, and therefore health-related outcomes across the province. As mentioned previously, Housing Nova Scotia is responsible for the provision of a range of housing supports for individuals and families in need of support. Additionally, the Department of Community Services arranges supportive housing for individuals who may be unable to live independently without mental health related supports (this does not include nursing homes, as these fall under the operation of Housing Nova Scotia). From a public health perspective, some units within the Department of Health and Wellness, as well as the Nova Scotia Health Authority, Public Health, and Mental Health and Addictions, may include housing as a health issue within work profiles to varying extents, but the scope of this is unclear. Beyond this, it appears as though advocacy efforts focused on advancing housing issues as a health and social justice issue onto the governmental agenda have largely been led by local non-profit and non-governmental organizations.

Presently in Colchester County, there are some local and provincial efforts underway, some led by government, others by non-profit organizations, to help address housing issues (see Appendix 2 for a list of these organizations). The scope and effect of such efforts warrants exploration. Efforts include a focus on the following themes:

- **Availability of emergency shelters;**
- **Availability and suitability of public housing;**
- **Housing improvement grants for senior citizens;**
- **Incentives for developers and landlords to provide acceptable low-income housing;**
- **Grants for home improvements to increase accessibility;**
- **Supports for senior citizens to receive in-home care to enable them to remain healthy in their own home;**

- **Food Banks;**
- **Community groups advocating for individuals experiencing housing issues, as well as housing issues more broadly;**
- **National data collection providing data on housing issues in Nova Scotia presented at the regional and county level;**
- **Fuel subsidies;**
- **Low-income assistance.**

Current prevention efforts targeted at housing are insufficient due to a predominant focus on issue management, rather than primary prevention (Gaetz et al., 2014). According to Gaetz et al. (2014), the key to addressing housing issues within Canadian communities is to rectify the lack of available affordable housing units. As was outlined near the beginning of this report, housing affordability impacts a broad cross-section of the population, from young Canadians, to single parents, to senior citizens, to low income earners, and more.

Beyond housing affordability, housing strategies should also be cognizant of issues pertaining to adequate housing, appropriately sized for the respective residents, as well as housing that is affordable to heat (Thomson & Thomson, 2015). Findings suggest that adequate, warm housing leads to improved school and work attendance (Thomson & Thomson, 2015). Housing interventions focused on enabling warm housing may also tangentially increase the amount of usable living space within a home - an outcome that is associated with improved dietary, privacy, relational, leisure, and recreational outcomes (Thomson, Thomas, Sellstrom, & Petticrew, 2013). Other home-based interventions targeted at the internal environment that have been found to be effective in improving residents' health include making improvements in home ventilation, increasing fresh air supply, off-gassing, controlling for pests, prohibiting tobacco smoke in common areas particularly, replacing water fixtures, ensuring adequate heating and cooling systems, and providing effective insulation (Breysse et al., 2011). Overall, interventions targeted at improving neighbourhood and internal-home (i.e., a household's internal condition and quality) physical conditions are recognized as an effective way to improve health outcomes and to reduce health inequities (Marmot et al., 2012).

As governments are responsible for ensuring citizens are afforded the prerequisites for good health, housing therefore is, and should be considered to be, a public policy issue (Mikkonen & Raphael, 2010). This is particularly true given that Canada is signatory to various international human rights declarations that stipulate the guaranteed provision of shelter (Mikkonen & Raphael,



2010). According to a former United Nations Special Rapporteur on Adequate Housing, Miloon Kothari (2007), the state of inadequate housing and homelessness in Canada is a "national emergency". As Kothari (2007) describes, this status is all the more alarming when one considers that Canada is one of the richest countries globally. Kothari (2007) goes on to decry the trending decrease in federal funding for housing coupled with a focus on the private sector and home ownership, have contributed to, and exacerbated the issue. Reliance on the private sector is ineffective and not socially-progressive. Canada lags behind most developed countries within the Organization for Economic Co-operation and Development in regards to investment in affordable housing and continues to have "one of the smallest social housing sectors among developed countries" (Kothari, 2007).

Current trends in homelessness in particular are related to federal divestment in social housing funding and infrastructure in the 1980's, a time where widespread cuts to Canada's welfare system began (Gaetz et al., 2014), and where a similar shift towards neoliberalism was evident in many areas across the world (Harvey, 2005). Gaetz et al. (2014) continue, explaining how despite a national population increase of nearly 30% over the past quarter century, federal annual investment in housing and housing issues has declined by nearly 50%. More recently, some new federal funding directed towards housing has emerged, but this has been limited (Gaetz et al., 2014). Further to this issue, Canada as a whole has been identified as "falling behind" other developed nations in regard to housing issues that relate to poverty, income inequality, and governmental investment in and funding of affordable housing (Piat et al., 2014).

Looking beyond perhaps the more traditional conception of 'housing issues', working towards recognizing and addressing the impact of labour market forces on the SDOH including housing is another important avenue to explore. Here, the progression towards unregulated labour markets has led to the development of working conditions that facilitate temporary work opportunities, where low pay and insufficient work have become the norm (Shier, Jones, & Graham, 2012). Potentially contributing to employment instability, within this type of labour system, individuals are forced to frequently adapt to employer needs and changes, making it difficult to successfully remain attached within the labour market (Shier et al., 2012). As employment instability and housing instability are connected, this remains an important consideration for any strategy seeking to address housing issues. More broadly speaking, researchers have called attention to the need to address the structural determinants of housing and related SDOH

variables including and extending beyond labour market factors, if housing issues are to be addressed (Piat et al., 2014). Interestingly, it has been noted that provincial governments within Atlantic Canada placed greater emphasis on the need to strengthen labour market integration as a method to improve housing issues, compared to the rest of Canada (Government of Canada, 2015).

On a more focused scale, efforts to improve local housing contexts should also seek to apply best-practice methods within transitional housing (as previously discussed), where a coordinated approach to social and health care is provided in an accessible, person-centred, integrated manner (Buccieri, 2016). Developing a system providing supportive transitional housing is one key step, however efforts also need to ensure that individuals are able to easily access such supports when in need. To accomplish this, developing clear communications and linkages with front-line staff such as crises services and emergency staff, can help to ensure that housing issues are screened for, and when a need is identified, that the individual is connected to the best available supports (Forchuk et al., 2015). Similarly, uptake of Housing First models may help to enable a refocus away from provision of emergency shelter space, towards a system that is more focused on providing long-term, permanent housing solutions, with associated supports targeted to provide rental subsidies and dedicated efforts to help with community integration (Piat et al., 2014). However, researchers elaborate that Housing First cannot be the only strategy to address homelessness within a community, but rather is effective when operating alongside prevention and emergency services supports (Gaetz, Scott, & Gulliver, 2013). Of note, a governmental publication outlines how Atlantic Canadian provincial governments placed emphasis on recognizing the need to invest in supportive, transitional housing as a key strategy to address housing issues (Government of Canada, 2015).

Moving ahead, researchers put forward that housing policy should seek to improve the supply of affordable, quality housing (particularly public housing), should focus on providing mixed housing that disables income segregation, and that elicits increased federal funding for public housing programs offered to lower income Canadians (Mikkonen & Raphael, 2010). A focus on disabling income segregation through implementing "scattered site housing" (where public housing units are offered in a range of locations, focused on building diverse, healthy neighbourhoods), may lead to greater community empowerment and potentially, decreased cost compared to the provision of public housing units within congregate



sites (Barnes, 2012). While this may be ideal, some barriers to success may include more complicated logistics, particularly concerning more supportive, or integrated care forms of housing, and greater strain on property management resources (Barnes, 2012).

An example of a local housing initiative is exemplified in the case of the former Alice Street Elementary School. This site was intended to 'revitalize' the local neighbourhood and to help fill an affordable housing gap (Sullivan, 2013), however, no evaluation of the project could be found at the time of writing this report.

Within the health promotion field, neighbourhood-level interventions are sometimes referred to as "area-based interventions" - here, the concept is that by improving variables related to a place, the health outcomes among those living in that place may also subsequently be improved (O'Dwyer, Baum, Kavanagh & Macdougall, 2007). While there may be difficulty in measuring the effect of area-based interventions accurately, these interventions may indeed help to address health inequities (O'Dwyer et al., 2007) and have been found to be effective when applied to the external housing environment (e.g., broader community; Gibson et al., 2011). Targeting area-based interventions to focus on variables such as improving access to effective public transportation, traffic control, well-lit streets and sidewalks, availability of public services, and accessibility to the wider community, may help to promote local positive well-being (Wright & Kloos, 2007). Beyond this, efforts to improve housing conditions have been found to lead to lower rates of premature mortality, improved mental health outcomes, and fewer physician visits (Marmot et al., 2012). Additionally, recognizing the complexity of housing issues as they fall within a social ecological model that encompass the SDOH, it will be important for advocates and professionals who focus on particular sub-populations or issues pertinent to mental health or social well-being in particular, to embrace strategies and solutions that exist beyond their traditional sector (Forchuk et al., 2016).

Among other things, this recognizes the need to coordinate housing efforts across infrastructure, health, community services, labour, and environmental sectors. From an environmental perspective, investment in energy efficient and green-energy housing stock (both new developments and renovations to older stock) may not only help to decrease greenhouse gas emissions (a requirement for future public health goals), but may also lessen the cost of fuel, thereby decreasing shelter costs to an extent (Gibson et al., 2011; Marmot et al., 2010; WHO, 2010). This is particularly important given the significant carbon footprint and greenhouse gas emissions associated with

housing (Jouni & Amegah, 2016). In this sense, housing contributes to environmental degradation and climate change (through the production of house-building materials, transportation of raw materials, the building of housing, and through impacts associated with household operations like heating and cooling; Jouni & Amegah, 2016). On the flip side of this issue, housing is also affected by climate change and environmental degradation. Current human-attributable climate change is projected to cause increased environmental precipitation, flooding, and hurricanes, which would result in higher levels of mould within housing environments (Jouni & Amegah, 2016), thereby increasing the risk of adverse health outcomes.

Given the cross-cutting threat posed by climate change and environmental degradation to health, well-being, survival - SDOH-focused efforts moving forward (including ones that seek to address housing issues) should be cognizant of environmental risks and implications. These risks and implications may appear distal and disconnected from everyday lives in Colchester County, but the risks associated with climate change will abide by no borders. Browne and Rutherford (2017) argue that due to the magnitude of current environmental issues, environmental impacts and concerns can 'no longer be viewed as only the domain of environment departments'. The researchers go further to call for an 'environment in all policies approach', akin to the United Nations' 'health in all policies' mandate (Browne & Rutherford, 2017). Within this type of approach, or model, environmental considerations would be built into all stages of governmental decision-making (Browne & Rutherford, 2017). According to Nova Scotia's Ecology Action Centre (nd), 80% of Atlantic Canada's coastline is considered to be at risk, or highly sensitive to rising sea-levels, with projections estimating a sea level rise of 70 millimetres by 2100. A Canadian Broadcasting Corporation article highlighted research that estimated a 2.5 meters by the same year (CBC ,2017). Areas such as the Tantramar Marsh and other low-lying, or coastal areas are at particular risk of frequent, or permanent flooding, not to mention other negative effects associated with climate change.

The World Health Organization (2010) has recommended that new housing stock be built with public health protection in mind, stating that building improvements may enable the primary prevention of disease and injury relative to the home environment, in turn reducing healthcare costs and lessening individual suffering. And by adding in a focus on environmental impacts, long-term public health outcomes may be better assured. Some researchers label this type of approach where housing development codes and guidelines are designed to



improve home environmental quality, a "Healthy Homes" approach (Krieger & Higgins, 2002). Here, public health departments and advocates may play a role in developing Healthy Home building guidelines, assessing home environmental quality, and advocating for affordable, healthy homes (Krieger & Higgins, 2002). Given that substandard housing is both a health and social justice concern that affects multiple aspects of physical and mental health, and where these impacts are known to disproportionately impact certain groups of people, leading to social and health inequity, addressing housing issues should be a paramount concern for elected officials, public health officials, and community (Krieger & Higgins, 2002). Furthermore, substandard housing may also be an environmental justice issue wherein the inequitable social gradient that affects and contributes to housing outcomes are reflective of discrepancies in power, income, and assets (Krieger & Higgins, 2002).

To enable a local and broader future where housing issues, determinants, and conditions are improved, concerted advocacy efforts are required to elicit the public and political support required to garner effective, sustainable political action, particularly as housing is fundamentally a macro public policy issue (Mikkonen & Raphael, 2010). Furthermore, as Canada is signatory to various international human rights declarations that stipulate the guaranteed provision of shelter (Mikkonen & Raphael, 2010), socially-progressive political action is all the more warranted. One part of a multidimensional advocacy strategy may do well to include an effort to attach meaningful, translatable social costs to poor housing and living conditions (Mueller & Tighe, 2007). Full consideration of the complexity of housing issues is warranted when designing and acting on housing-related policy solutions, services, or interventions. For example, efforts to improve physical internal and external housing conditions may lead to increased rental, or shelter costs. For lower income individuals and families, this may be problematic and may result in displacement, or financial insecurity (which has an array of negative downstream effects such as food and fuel insecurity; Thomson et al., 2013). Furthermore, funds targeted at providing fuel subsidies for lower income individuals may not be sufficient given the rising cost of fuel (Thomson et al., 2013). Policies and interventions that impact housing (whether these be from a social welfare or business perspective) may improve public health, but also risk disadvantaging public health and health equity (WHO, 2008b). Municipal and regional planning may facilitate the development of sprawling communities wherein a lack of affordable housing, little access to local amenities, and inadequate/non-existent public transportation may hinder

social, health, and health equity outcomes (WHO, 2008b). Alternatively, the World Health Organization (2008) outlines how "good policy" and planning are prerequisites for good health, and how this can enable both immediate and long-term positive health and societal outcomes.

Increasing research relative to the housing needs of Nova Scotians also represents a top priority. Without increased research in this area, advocacy efforts may struggle to build an effective enough case to elicit change. Research is also needed in order to assess how the current housing supports system is working and where gaps remain. By applying quantitative and qualitative research methods to gather both numerical, process-oriented, and first-voice data, research can be used as a catalyst for housing-related change (when made available publicly, in disaggregated form). In order to gain a comprehensive understanding of current local housing issues, research should target not only individuals through traditional methods such as survey administration, but also through analyses focused on the structural determinants of health and housing issues - this way, research may go beyond understanding what people are experiencing, by gaining a better understanding of why and how as well (Graham, 2007 p160). Additionally, local and national health-related surveys would provide a more comprehensive of the SDOH if they were to collect data related to health, housing, and community metrics within one integrated survey (Jacobs, Wilson, Dixon, Smith, & Evens, 2009).

Any effort to address broad housing issues moving forward would be best served within a multi-departmental approach that recognizes the complex, SDOH and sociopolitical context of housing (Marmot et al., 2010; Piat et al., 2014), and that strategically utilizes leadership by key stakeholders (Mahamoud et al., 2012). This type of coordinated approach to advancing housing issues onto governmental agendas may be more likely to achieve the housing-related policy success that is required to reverse and improve housing current negative housing trends (Mahamoud et al., 2012). It is possible that seeking to address housing issues through a comprehensive, social ecological approach that focuses on the SDOH would promote housing-focused efforts that target the broad home-environment, extending into the surrounding community, where issues such as social isolation, community recreation and action, and barriers to participation may be effectively targeted and addressed (Marmot et al., 2012).

This multi-sectoral focus should be sure to extend into public policy, where researchers recommend that housing policy be linked with public health, health services,



income, and job-loss policies (Mikkonen & Raphael, 2010). On a more macro scale ('macro' meaning upstream factors that exist and act beyond the individual level), addressing the root-cause of housing issues, and other SDOH issues, requires sociopolitical change. Targeting this level of change could enable socially-progressive shifts within our built environments as these environments are designed and implemented relative to political systems. The 'built environment' is considered to include the physical constructs of our daily environments, including variables such as grocery stores, unhealthy commodity stores retailing products such as alcohol, public school buildings, public transportation services, active transportation enablers like sidewalks, outdoor recreation space such as parks, and public housing structures, and more. While this is an understandably daunting preposition in scope, it is a necessary goal that can be approached by taking concerted, organized, small steps towards enabling socially-progressive societal change over time. So, while advocacy efforts must continue on progressing more immediate-term solutions, or aids to support those who are currently in need, concurrent efforts should also be continuously moving forward to advocate for sociopolitical change, directed towards building a societal and political system that values and treats social and health equity, and social justice, as paramount.

Aside from addressing housing issues directly, other macro-level goals that would indirectly improve housing issues include, but are not limited to:

- **Seeking to advance the provision of a universal living wage;**
- **Working to improve population health through evidence-based public health policy;**
- **Improving senior care services.**
- **Improving childcare services;**
- **Improving transportation links for rural communities;**
- **Improving equitable access to healthcare services;**
- **Improving access to supportive education;**
- **Shifting Canada's welfare system towards a Social Democratic approach;**
- **In summary, comprehensively addressing the Social Determinants of health.**

Addressing housing within the SDOH model requires structural changes within our sociopolitical system, with long-term efforts targeted at changing our Welfare State typology from Liberal to Social Democratic (see

Section one for a brief review of Welfare State typologies and their relation to health and the SDOH).

Building concerted advocacy efforts focused on governmental action and community understanding is a priority for advancing effective housing efforts. Many housing-related organizations exist across Nova Scotia (see Appendix 2). While there is diversity in need and while geographical and jurisdictional boundaries may present a barrier, a common voice may strengthen the advocacy efforts of those seeking to progress housing policy and solutions. One voice may be effective at a local level, but a collective voice may have more impact provincially and nationally (similar to how powerful industry groups effectively capitalize on the use of trade associations).

As demonstrated within this report, the complexity of housing issues and the immediacy of the current need locally and elsewhere, requires approaches that target multiple levels of intervention - from individualized solutions focused on effective emergency services and supportive care provision within transitional housing, to upstream targets focused on policy and further, or otherwise, sociopolitical change. The spectrum of needed solutions, big and small, requires concurrent advocacy strategies, operating within strategic, short and long-term frameworks. A concerted, collaborative effort focused on a shared goal of creating healthy, supportive, equitable communities can be embarked upon by the collective of individuals and groups working to address the SDOH. This, coupled with significantly improved SDOH and population health research within Nova Scotia (made publicly available), alongside valid, transparent evaluations of efforts to address housing and other SDOH issues, is required in order to see positive long-term change.

As we have come to learn, one important piece of this interconnected SDOH puzzle is housing - by advocating for evidence-based, socially-progressive change, local community members in the near and far future may have hope of a better, more equitable, local housing environment. While the many, diverse, non-profit organizations, social activists, public health researchers, and environmental campaigners across the province may appear to have vastly different goals and agendas, we may be surprised to learn that the fundamental barriers that need to change in order to enable goal realization, are the same. So let us work together to build a responsive, active democracy where people and the SDOH are put first.

“ What else is a nation but a patchwork of cities and towns; cities and towns a patchwork of neighborhoods; and neighborhoods a patchwork of homes? ”

— *Matthew Desmond,
Harvard University*



*Creating Awareness and Taking
Action Against Poverty in
Our Communities*



Appendix 1

Data Definitions Explained

The following definitions pertain to some of the key data presented within this report. Definitions were obtained from the Canadian Mortgage and Housing Corporation (CMHC, 2014) website, accessed through the following link: http://cmhc.beyond2020.com/HiCODefinitions_EN.html

"Below Housing Standards: Housing below standards refers to housing that falls short of at least one of the adequacy, affordability and suitability housing standards.

NOTE: The total number of households below housing standards will not be the sum of the number below the individual standards since some households are below two or more housing standards. For example, a household living below both the affordability and adequacy standards would be counted as being under both standards, resulting in double counting when the two standards are added together.

Below Affordability Standards: Affordable housing costs less than 30% of before-tax household income. Shelter costs include the following:

- For renters: rent and any payments for electricity, fuel, water and other municipal services;
- For owners: mortgage payments (principal and interest), property taxes, and any condominium fees, along with payments for electricity, fuel, water and other municipal services.

Below Adequacy Standards: Adequate housing does not require any major repairs, according to residents. Major repairs include those to defective plumbing or electrical wiring, or structural repairs to walls, floors or ceilings.

Below Suitability Standards: Suitable housing has enough bedrooms for the size and make-up of resident households, according to National Occupancy Standard (NOS) requirements. Enough bedrooms based on NOS requirements means one bedroom for:

- Each cohabiting adult couple;
- Each lone parent;
- Unattached household member 18 years of age and over;
- Same-gender pair of children under age 18;
- Any additional boy or girl in the family, unless there are two opposite gender children under 5 years of age, in which case they are expected to share a bedroom.

NOTE: A household of one individual can occupy a bachelor unit (i.e. a unit with no bedroom).

In Core Housing Need: A household is said to be in core housing need if its housing falls below at least one of the adequacy, affordability or suitability, standards and it would have to spend 30% or more of its total before-tax income to pay the median rent of alternative local housing that is acceptable (meets all three housing standards)."



Appendix 2

Groups with a Focus on Housing in Nova Scotia

The following list is not exhaustive and only includes non-profit groups whose primary focus includes 'housing'. This list, presented alphabetically, is compiled based on a brief internet search and is therefore limited and risks unintentionally leaving out relevant groups.

- Affordable Housing Association of Nova Scotia
- Antigonish Affordable Housing Association
- Colchester AntiPoverty Network
- Community Links
- Community Services
- Digby and Area Affordable and Supportive Housing Group
- Habitat for Humanity
- Housing Nova Scotia
- Hub House
- Kabuki Housing Cooperative
- Metro Community Housing Association
- Public Health
- Shelter Nova Scotia
- South Shore Housing Action Coalition
- Tri-County Women's Centre

Additional Groups:



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