

Social Impacts of an Economic Downturn: Considerations for the City of Calgary

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Table of Contents

Executive Summary	4
Introduction.....	6
Employment/Unemployment	6
Income & Poverty	9
Housing & Homelessness	11
Livelihood Strategies.....	14
Crime	15
Domestic Violence.....	17
Physical Health & Community Health	18
Mental Health & Addiction.....	20
Non-Profit Organizations	24
Conclusion	25
References.....	27

Executive Summary

At the request of the City of Calgary, this report presents the literature on potential social impacts of an economic downturn. Nine areas were identified. The first, a key component of an economic downturn, is job loss. Indeed, research indicates that unemployment rises during economic recession. Trends suggest that already economically vulnerable groups will be disproportionately affected such as recent immigrants, Indigenous people, single mothers, those with low education, and families with young children. Two groups that were hardest hit during the 2008 Canadian recession were youth/young adults, age 15-24, and males, age 25-54.

Another noteworthy theme from the literature relates to employment composition. Research demonstrates that during economic downturn, full-time employment positions are replaced with more precarious-type work characteristic of part-time, temporary or contract work, involving low wages, few benefits and limited job security. This change is significant as this type of work is associated with rising low-income and poverty levels. Finally, reduced migration to Calgary is another likely trend that will affect the labour market. Tensions between recent immigrants/refugees and long-term Calgarians may also arise due to the perception that immigrants are taking jobs away. The need for integrative strategies with recent immigrants may be required.

A second social impact is growing poverty. Data has consistently shown that when unemployment rises, so does poverty. Much like that of employment rates, falling income levels will have a more significant impact on already economically vulnerable groups such as those working for minimum wage and those already disproportionately affected by poverty. Increased need for social assistance and food bank usage is identified in the literature. Research also suggests that as employment rates start to improve, income levels recover at a much slower rate.

A third social impact will be on housing. Housing is considered unaffordable when a family/individual pays more than 30% of income on shelter. Housing affordability in Calgary is a well-known challenge, even in times of prosperity. During economic decline, though housing prices may decrease, housing affordability is expected to continue to be a major challenge in the city especially in an environment that includes rising unemployment and dropping income levels. Housing affordability has disproportionate affects on particularly vulnerable groups similar to unemployment and poverty. In the absence of affordable housing, informal and insecure housing strategies intensify such as the creation and use of secondary suites. Homelessness also increases during a recession, often demonstrating a lag effect of months to years.

An increase in other livelihood strategies is likely such as informal economic approaches that occur outside of the measured economy. These include activities such as informal childcare, elder care, bartering, casual work, or working off the books. A rise in reliance on unconventional and potentially destructive or illegal approaches to maintain

subsistence may occur as well. However, it is not anticipated that there will be any significant rise in crime due to the economic recession. The factors that result in changing crime rates are complex and multi-faceted and it is unlikely that Calgary will see any direct relationship between the economic downturn and crime rates. Literature on domestic violence however, confirms that as unemployment increases, so does rates of domestic violence. Male job instability, decreasing household income and financial strain are all associated with a rise in domestic violence rates. Police and domestic violence shelters will see an increase in service demands.

Physical and community health will also be impacted. In the general population, mortality and life expectancy is unlikely to change during an economic downturn. However, for those on a lower-income, experiencing financial strain or unemployment, worsening physical health outcomes are expected. Reduced access and adherence to prescription drugs, resulting in destabilization of pre-existing chronic diseases is also evident in the literature.

In terms of mental health, research indicates that stress and depression are expected to rise. Agencies that provide emotional/psychological support will undoubtedly see an increase in service usage, which may act as a buffer for worsening physiological outcomes. Suicide rates may increase but also may be moderated by these same services. Use and abuse of drugs and alcohol is likely to increase amongst the unemployed. There is evidence of both short and long-term effects on children and youth in regards to mental health. It is well known that stressors in early childhood have an effect on both mental and physical health of children as they grow. Accordingly, impacts on youth merit consideration relative to education and community support. These impacts will likely result in an increased demand by youth for community and social services.

This review has identified considerable and widespread potential impacts for individuals, families and the Calgary community, resulting from the recent economic downturn. We anticipate a concerning cumulative impact of multiple stressors and factors and a heightened level of risk for many social issues, especially amongst those who are already economically vulnerable. The human service industry, particularly the non-profit sector, will feel the increased demand for service as is evident in other jurisdictions.

Introduction

Experience has taught us that economic downturns result in significant social/community impacts. As Calgary struggles with a current economic recession, the nature and extent of the impact is yet to be fully understood. To mitigate, or at least prepare for the potential effect of a continued economic downturn, the City of Calgary has asked the Urban Alliance to provide a research-based summary of key social areas that are likely to be significantly affected by the economic downturn.

The Urban Alliance reached out to several University of Calgary disciplines requesting involvement from faculty. Eleven researchers agreed to share their expertise on a range of social issues. Academic literature and research reports were reviewed. Nine prominent themes were identified from this collaborative: 1) Employment/Unemployment; 2) Income and Poverty; 3) Housing and Homelessness; 4) Livelihood Strategies; 5) Crime; 6) Domestic Violence; 7) Physical Health and Community Health; 8) Mental Health and Addictions; and, 9) Non-profit organizations.

The remainder of the report reviews each theme by summarizing existing research and identifying key trends. Each section closes with explicit statements outlining what the City of Calgary should consider in the event of an increasing or ongoing economic slowdown. While three economic scenarios are being considered by the City of Calgary, it was not possible to directly comment on each in relation to social impact changes. Instead, a general trend is presented. It can be assumed that as an economy worsens, so will the extent of the social impact.

Employment/Unemployment

Economic recessions have a profound impact on the labour market (Verick, 2009). In the United States for example, in what has been called the Great Recession (2008-2009), millions of workers lost their jobs (Thompson & Smeeding, 2013). At its height, 9.3% of the population were unemployed. In Canada, during this same period, unemployment rose from 6.3% to 8.6%, totalling 400,000 lost jobs (Pasma, 2010). Alberta experienced the greatest proportion of job loss in the country during this time at 3.3% (Pasma, 2010). Accordingly, the number of EI cases in the province dramatically increased by 242% and employment was slow to recover (Emter, 2010). The current situation in Alberta is similar. At time of writing, the unemployment rate for Calgary as of February 2016 is 8.4%, up 0.7 percentage points since January (Statistics Canada, 2016).

Unemployment in Calgary is predicted to reach 9% by 2016-2017, and remain higher than the norm for Alberta until 2021 (Center for Spatial Economics, 2016). This is not unlike the high unemployment rates experienced in Ontario beginning in 2008 which peaked at 16% in Windsor, 9.1% in Hamilton, and 9.2% in Toronto in 2009 (United Way Centraide of Windsor Essex, 2015; Social Planning and Research Council of Hamilton,

2013). Although Hamilton's unemployment rates recovered quickly to their pre-recession state (6.2% in 2014), youth unemployment remains high at 15% (Hamilton Community Foundation, 2015).

Who is primarily affected by unemployment? Pasma (2010) examined unemployment data from the 2008-2009 Canadian recession. She found that the following groups sustained the most job losses:

- Young people
- Men age 25-54
- Families with young children
- Single mothers
- Those earning low wages
- Those without post-secondary education
- Indigenous people
- Immigrants (who came to Canada within the last 5 years)

The City of Calgary (2010) reported similar findings during this period. Employment among female-lone-parent households significantly dropped, as did employment for immigrants and Indigenous people.

Groups that experienced the most absolute job loss was young people, age 15-24, and men age 25-54 (LaRochelle- Côté & Gilmore, 2009). Men in Canada experienced the largest employment decline between October 2008 and October 2009 at 10.8%, though this drop can be attributed to the fact that men also comprise the largest employment category in the country (Pasma, 2010). Further, men were likely more affected because they dominate sectors that were particularly hit in 2008 such as manufacturing and construction (LaRochelle- Côté & Gilmore, 2009).

There is also substantial data to suggest youth may be particularly impacted. In the U.S. for example, those who had the highest job losses during the recession were young adults age 18-24 with low levels of education (Thompson & Smeeding, 2013). In general around the world, youth ages 15-24 face higher unemployment rates than adults and are at greater risk for joblessness during an economic downturn (Verick, 2009) due to a lack of skills, experience, and financial resources (International Labour Organization, 2006). Young people were some of the most affected in terms of job loss during both the U.S. and Canadian recession (Danziger, Chavez & Cumberworth, 2012; LaRochelle- Côté & Gilmore, 2009; Pasma, 2010; Ruckert & Labonte, 2014; Thompson & Smeeding, 2013). This course was also apparent in Calgary, as data from 2008 indicates that youth employment fell by 11.9% (City of Calgary, 2010).

In addition to rising unemployment, the composition of employment also changed during the recession. The 2008 downturn resulted in a greater loss of full-time work followed by a rise in precarious-type employment characteristic of part-time, temporary or contract work, with low wages, few benefits and limited job security (Arsenault & Sharpe, 2009; McMaster University et al., 2013; Pasma, 2010). This pattern was also seen in Calgary

during the 2008 recession. Full-time employment fell by 2.8% while part-time employment rose by 10.5% (City of Calgary, 2010). This is noteworthy because precarious-type employment contributes to financial insecurity and low-income (Chui, 2011; Shier, Graham, Fukuda & Turner, 2015; Standing, 2011). Certain groups of people make up the greater part of these types of workers. Women, for example, comprise the majority of the precariously employed in Alberta. In 2011 for example, women accounted for 70% of part-time workers in the province (Parkland institute, 2012). Immigrants are another group that is commonly insecurely employed (City of Calgary, 2010). Polanyi et al. (2014) found that immigrants are disproportionately represented in these types of work situations, often remaining for decades before acquiring secure employment.

Migration

Another consideration regarding employment composition is migration. There is a strong connection between human capital resources (the availability and willingness of people to work) and economic development (Stefanescu, 2011). Even outside of an economic downturn, “the waning of the birth rate and of fertility, the increase in life expectancy and the ageing of the population trigger important imbalances on the labor *[sic]* market, in the public sector and even in the financial-banking system” (Stefanescu, 2011, p. 53). Typically when there are imbalances in the labour market, the economy relies on migration to fill its labour needs.

The term “migration” refers to the movement of people either into or out of a city, and can include international and domestic moves. Beets and Willekens (2009) explain that the decision to migrate depends on whether a person believes that there will be either social or financial benefit to them and/or their family; it does not need to be based in evidence or probability. In relation to Calgary, how the city’s economic situation is framed within the media, and how experiences of (un)employment are shared among family and friends can influence migration towards or away from the city (Beets & Willekens, 2008).

In describing how perception of the probability of finding a job can influence migration, a report produced for the European Union on the impact of the global economic crisis on migration highlighted:

A financial crisis and an economic recession reduce the probability of finding a job and will therefore depress the intention to migrate. Fewer people in search for employment will migrate if they are aware that less jobs requiring the skills migrants bring are available. For instance the construction sector and part of the service sector are hit hardest by the recession. Consequently migrants in search for jobs in these sectors are less likely to migrate unless intervening factors, such as the availability of social capital (e.g. migrant networks) or migrant brokers, reduce the cost of migration and increase the likelihood of finding a job (Beets & Willekens, 2009, p. 2).

While the scale of migration in the European Union compared to Calgary is significantly different, the core issues are likely similar and a decrease in migration to the city is likely.

It is further important to note that during an economic downturn, regardless of whether there is an influx or a downturn of international immigration to Calgary, tensions between newly arrived and long-term Calgarians may increase, largely due to the unsubstantiated claims that immigrants “take jobs” away from Canadians (Papademetriou, Sumption & Somerville, 2013). This may be especially important due to the recent arrival of Syrian refugees. While immigration policy is outside of the political purview of the city, integration policies will be especially important during an economic downturn (Papademetriou et al., 2013).

Anticipated trends:

- ~ Unemployment rises during economic downturns
- ~ Men will be most likely affected by unemployment
- ~ Employment composition changes during economic downturns to more precarious-type work (which, in turn, contributes to increases in poverty)
- ~ Unemployment trends suggest that already economically vulnerable groups will be disproportionately affected such as recent immigrants, Indigenous people, single mothers, those with low education, families with young children and youth
- ~ Migration to Calgary will likely drop
- ~ Need for integrative strategies with recent immigrants may be required

Income & Poverty

Loss of income and increasing poverty are common outcomes from an economic downturn and widespread unemployment. Thompson and Smeeding (2014) describe that in the United States, median household incomes began to decline following the 2008 rise in unemployment. Unemployment continued to remain high at 9.5% into 2010 while median household income continued to fall. In 2013, even with a drop in unemployment, the median household income had still not recovered to pre-recession levels. This suggests that with rising unemployment, household incomes will drop and with that, may take time to improve, even when the employment rate recovers.

Like that of unemployment, those who are already economically vulnerable are most at risk. Arsenault and Sharpe (2009) reported that during the 2008 Canadian recession, income losses had the greatest impact on households at the economic bottom. Indeed, those employed in minimum wage jobs suffered the most job loss during this period (Pasma, 2010). Loss of employment and income typically leads to increases in poverty. Research has consistently shown a strong relationship between unemployment and poverty; when unemployment increases, so does poverty (Arsenault & Sharpe, 2009).

Pasma (2010) estimated that during the Canadian recession of 2008-2009, poverty increased from 9.2% in 2007 to 11.7% in 2009 (using after-tax LICO data¹)- a surge of close to one million people. While it is unclear how poverty levels in Calgary will be affected, in general, poverty disproportionately affects Indigenous families, recent immigrants, those with disabilities and families led by a female lone parent (Campaign 2000, 2015). The affects of poverty are obvious in the rise in government social assistance rates that occurred during the 2008 recession (Pasma, 2010). Ontario experienced a 22% rise in social assistance reliance between 2008 and 2010 (Falvo, 2010) and Alberta saw a jump in social assistance cases from just below 26,000 in 2008 to over 40,000 in 2010 (The Caledonian Institute of Social Policy, 2015).

In addition to increases in social assistance, food bank usage also surged. Foodbanks Canada (2009) recorded an 18% increase of food bank need during the economic recession. This is the largest year-to-year increase ever recorded. Alberta fared the worst, experiencing the highest rise in use in the country at a striking 61% increase. In Calgary, the Calgary Food Bank recorded a 32% increase in food hampers and 1500 new clients over a three-month period from December 2008 to February 2009 (United Way of Calgary, 2009). Pasma (2010) adds that importantly, food bank need does not represent the true level of food insecurity. Food insecurity, or reliable access to affordable and nutritious food, is estimated to be 4-5 times greater than food bank use (Goldberg & Green, 2009). The effects of food insecurity, especially on children, are well documented. Long-term mental health effects of food insecurity in children and youth such as depression and suicidal ideation have been reported (McIntyre, Williams, Lavorato & Patten, 2008), as have cognitive, academic and psychosocial development (Alaimo, Olson & Frongillo, 2001).

Anticipated Trends:

- ~ Loss of income anticipated especially for lower income earners
- ~ Even when employment rates rise, income levels may take time to recover
- ~ When unemployment increases, so does poverty
- ~ Those who are already economically vulnerable are at greater risk for poverty
- ~ Increase in social assistance is anticipated
- ~ Food insecurity likely to increase
- ~ Food insecurity likely to affect children's mental health and school performance
- ~ Demand on food banks likely to increase

¹ LICO (Low Income Cut-Off) is the most frequently used poverty measure by Statistics Canada. It indicates the level at which a family is spending approximately 20 percentage points more of its income on basic necessities than the average family of similar size in a community of similar size (Pasma, 2010).

Housing & Homelessness

Housing Affordability

According to the Canada Mortgage and Housing Corporation (CMHC) (2016), housing is considered affordable if shelter accounts for no more than 30% of before-tax income. The Westman Centre for Real Estate (2015), through the University of Calgary, caution that this description is limited however, and that housing affordability reflects more than financial measurement. They add, “personal ethno-cultural identity, family, work, health, and/or substance-use status may all have effects on affordability and personal interests in housing” (p. 1). Affordability therefore needs to recognize both market and non-market based solutions to housing by considering how social and economic characteristics shape housing experiences and chances.

While much work in the recent past has focused on affordable housing in relation to providing highly subsidized housing to individuals with low-incomes (Calgary’s Community Housing Affordability Collective, 2015), it is also necessary to consider affordability and its relationship to the complexities of housing and population needs. For example, with the recent economic downturn, housing affordability does not just impact low-income households, it impacts households at all income thresholds (Westman Centre for Real Estate, 2015).

It is estimated that across Canada, 18.5% of households are spending 30% or more of their income on housing (Statistics Canada, 2011). In a paper for the OECD Economics Department, Cheung (2014) determined that housing affordability in Canada had worsened disproportionately for low-income households. She reported that while renters have a higher degree of risk related to housing affordability, the bottom 20% of mortgage owners (as classified by income) spend 70% of their income on mortgage payments. Furthermore, a 2% mortgage rate hike could cause 10% of Canadian households to drop into the category of having unaffordable housing.

Individuals who rent are in a much more precarious situation than homeowners in Canada, according to research by Moore and Skaburskis (2004). Among categories of tenure, renters are the highest proportion of households paying more than 30% of income on shelter, with the highest percentage paying more than 50%. These researchers claim that market conditions are likely to affect renters to the greatest degree because they are more likely to be young people who have not yet saved enough to make a down payment or purchase, and have no means by which to avoid housing price increases. Those with the highest shelter-cost-to-income ratios are recent immigrants due to low incomes, young age, renting, and integration difficulties (Moore & Skaburskis, 2004). Canada’s national housing history is defined by high land and home prices in urban centers that drive home seekers and builders to move further towards the outskirts of cities (Cheung, 2014). However, the long term increased transportation costs often offset savings from purchasing homes in suburbs (Cheung, 2014). Increasingly, and especially in times of recession, cities are experiencing the suburbanizing of poverty. A financial analysis of the 2008 recession in the

United States of America discovered that in the nation's 100 largest metro areas, two-thirds of poverty growth occurred in the suburbs (Kneebone, 2010) suggesting the decentralization of services may be warranted.

Calgary, in recent years, has experienced a booming economy leading to increased immigration and growing housing rental and purchase prices (Westman Centre for Real Estate, 2015). Yet, even within a thriving economy, the city has struggled with affordable housing (City of Calgary, 2016). According to the Calgary's Community Housing Affordability Collective (2015), of 86,750 households in Calgary in 2014, 1 in 5 were estimated to be unaffordable. Further, 10.5% were deemed in core housing need (indicating those with an annual household income that would not be adequate to cover average market prices) and 15,000 more households in extreme core housing need (at risk of becoming homeless). It is unclear how the current economic climate will affect housing affordability, but it is anticipated that affordable housing will continue to be a significant need in the city.

Informal & Precarious Housing

In the absence of affordable housing, informal and insecure housing strategies persist. Informal housing constitutes a form of "hidden homelessness" and include approaches such as illegal basement and secondary suites (Tanasescu, Chui and Smart 2010). These measures allow people to earn an income as well as provide housing that is more obtainable for lower-income people. Yet, informal housing is often rife with health and safety issues, overcrowding, abuse and exploitation (Tanasescu & Smart, 2010).

The immigrant population is a group particularly vulnerable to dependence upon informal housing (Tanasescu et al., 2009). It is well known that housing outcomes for immigrant populations in Canada have been declining for the past 20 years (Rea, Mackey & LeVasseur, 2008; Tanasescu & Smart, 2010). Research conducted in Calgary by Tanasescu and Smart (2010) found that in the face of little alternative, many Calgary newcomers are forced to depend on social networks for housing; situations that are often informal or illegal and result in exploitation and abuse, particularly for single women. Tanasescu and Smart also determined that the primary reason for housing problems amongst immigrants in Calgary was due to low-income and unemployment, areas acutely at risk of increasing during an economic downturn.

Another group, Indigenous people, are also at high probability of being insecurely housed. Using data from Alberta Seven Cities' Partnership on Housing and Homelessness, Shier et al. (2015) determined that precarious living is on the increase with this population. Overrepresentation in homeless populations and other major contributors include lower employment rates, lower income, addiction and increased migration to urban centres (Shier et al., 2015) as well as a history of colonization, residential schools and current systemic discrimination (McMaster University et al., 2013).

Women are a final group often precariously housed. Because women face more risk of violence on the streets such as sexual assault (Khandor & Mason, 2008), women will use

various strategies to avoid the streets and homeless shelters. These include staying with friends or acquaintances (Weber Sikich, 2008), becoming involved with men who have homes (Kladowsky, 2006), exchanging housing for sex (Neal, 2004), remaining in abusive relationships (Tutty et al., 2009), staying in unsafe and over-crowded housing (Bopp, et al., 2007) and sleeping in cars (Scott, 2008).

Informal housing strategies are a survival tactic during tough economic conditions and a lack of affordable housing. Use and dependence on this method, especially amongst vulnerable populations such as immigrants, women and Indigenous people, should be anticipated in Calgary's economic downturn. The need for affordable housing is emphasized to mitigate this impact and to decrease the risk of homelessness.

Homelessness

When informal housing strategies fail, people become homeless. In general, research has identified poverty, unemployment, housing costs/eviction, addictions, mental health issues and domestic violence as precursors to homelessness (Culhane et al., 2003; Laird, 2007; Echenberg & Jensen, 2012; Tutty et al., 2009; Weber Sikich, 2006). Notably, these are all factors that are likely to increase during an economic recession. The majority of the homeless are single, adult men (Segeart, 2012). Yet, key populations facing unique risk include youth, Indigenous people, women and families (Gaetz, Donaldson, Richter & Gulliver, 2013). Other groups likely at risk include people with disabilities, but research to date is scant.

Evidence from previous recessions suggests homelessness does indeed increase (Falvo, 2009, 2010; National Alliance to End Homelessness, 2011; Sard, 2009). Kitchener-Waterloo, Ontario for example, experienced higher shelter use during, and following, the 2008 recession (Coplan, 2013) as did numerous regions in the United States (Sard, 2009). A notable trend from the homelessness literature suggests that rates of homelessness have a lag effect in times of economic recession. In 2010 for example, Falvo predicted homelessness in Toronto would have a delayed effect of three to five years following the 2008/2009 recession. Indeed, the first six months of 2015 saw the largest spikes in emergency shelter use (City of Toronto, 2016). Wood, Turnham and Mills (2008) explain the delayed effect is a result of people exhausting every option (such as informal housing strategies) prior to turning to a homeless shelter. The National Alliance to End Homelessness (2011), based in the United States, also cites homelessness as a lagging indicator – the full impact of the recession on this social issue often takes months or years before it is actualized.

Laird (2007) reported that within the Canadian context efforts were made to respond to the national housing crisis by increasing shelter spaces. Identifying the massive migration of people to Alberta from 2001-2007 and with the population increase of 10%, affordable housing became a major concern. The 2008 City of Calgary Biennial Count of Homeless Person reported an 18% increase in homelessness from 2006-2008. However, Calgary also has a strong homelessness support system, as it was the first city to implement the 10-year plan to end homelessness in 2008 in response to the surge in homelessness

(Gaetz et al., 2013). Since this time, the Calgary Homeless Foundation (2016) is currently reporting a 15% decrease in homelessness. Sorenson (2010), in a trend analysis of homeless counts in Edmonton from 1999-2010, likewise indicated that while homelessness increased from 1990 – 2008, a decrease was also noted between 2008-2010. Sorenson attributed this to a strong economy and enhanced social policy such as the Housing First approach.

Based on the current literature, it is possible the Calgary recession will also result in increased homelessness, perhaps following the delayed pattern evident in Toronto and the U.S. However, it is also conceivable that homelessness in Calgary will be somewhat buffered due to the comprehensive homelessness social service system.

Anticipated trends:

- ~ In other regions homelessness has increased as a result of recession, often lagging months or years following
- ~ Calgary has a coordinated response to homelessness, therefore it is unclear from the literature how homelessness will unfold in our city during the recession
- ~ An increased demand on homeless shelters/homeless service system is likely
- ~ Affordable housing will continue to be a need
- ~ Renters and low-income earners are at particularly heightened risk related to housing insecurity
- ~ Recent immigrants, Indigenous people and women are at greater risk for housing insecurity
- ~ Anticipated that a rise in informal housing strategies will occur (such as illegal suites)

Livelihood Strategies

It is no surprise that when people lose their jobs, their livelihood is threatened. If more than one member of a household becomes unemployed, it may prove difficult to pay for housing and food. When people are faced with these situations they often turn to informal economic strategies to get by. Research in many contexts, including work conducted during the 1980s recession in Calgary, demonstrates that when the formal, or official and measured economy declines, there is often a substantial increase in informal, or underground economic activities to fill the gap in people's budgets and to allow them to preserve what they value (Smart, 2001; Tanasescu, Wing-tak & Smart, 2010; Marjit, Kar & Chaudhuri, 2011; Mingione & Goodrick, 1991; Neuwirth, 2011; Chen, 2012). These activities may buffer, to a lesser or greater degree, the decline in formal economic transactions. In a 110-country comparison, Canada was estimated to have an informal economy measuring 16.3% of GDP in 1999/2000, compared to 8.8% in the U.S. and 27% in Italy (Schneider, 2002).

Informal survival strategies include bartering (Humphrey 1985; Williams 1996), informal childcare (Latif, 2006), informal elder care (Costa-Font, Karlsson & Øien, 2015), tutoring, casual work, working “off the books”, interest free loans from family, informal renting of rooms or suites in houses (described above) (Tanasescu & Smart, 2010), and moving back in with family members (Cooke & Belanger, 2006; South & Lei, 2015). These examples are economic activities where the good or service is itself legal, but the ways in which it is transacted does not conform to regulations and other rules applying to it in the particular jurisdiction (Portes, Castells & Benton, 1989; Smart & Zerilli, 2014). Informal survival strategies can also include illegal activities however, such as sex work, drug dealing, and burglary (Bourgois, 2003; Smart, 1988; Sullivan, 1989), all examples of economic activities where the good or service is illegal.

What happens in the informal economy is important because its scale may be substantial enough to influence overall economic management interventions (de Soto, 1989; Feige, 2007; Hart, 2010). If informal transactions grow while formal jobs are lost, economic decline may not be as severe as it appears (Bromley, 1978; Lippert & Walker, 1997). If people lose formal income, their housing, or both, they will look for alternative livelihood strategies. These influence the effects of economic downturns, and should be incorporated into any well considered modelling of the likely social effects.

Anticipated Trends:

- ~ Rise in informal livelihood strategies such as caregiving, informal finance and bartering of services
- ~ Rise in reliance on unconventional and potentially destructive or illegal approaches to maintain subsistence

Crime

It is a common assumption that as the economy declines crime increases. However, in general, there is no clear relationship established in the literature linking economic recession and crime (Drisberg, Guzman & Vuong, 2009). As Uggen (2012) explains, “this is not because crime is unrelated to economic conditions, but because it is related to so many other things as well” (p. 1). Malby and Davis (2012) examined police-recorded crime data for 15 countries around the world during the period of the global economic crisis. While they conclude that economic factors overall are associated with crime they also found no particular pattern of economy and crime association consistent across countries. In Canada, for example, they found the recession had no significant effect on crime rates while in other countries, it did.

Other research suggests that unemployment in particular, has a small but significant positive effect on property crime (Lin, 2008). Altindag (2009) for example, investigated the

impact of unemployment on crime using data from 33 European countries. He found that a 1% increase in unemployment increases property crimes by 2%. This 1% increase is consistent with other studies (Levitt, 2004). Phillips and Land (2012) likewise reported a relationship between high unemployment rates and property offences such as break and enter, larceny and vehicle threats. However, Andresen (2012) found that unemployment was only positively associated with crime over the long-run (sustained high-unemployment); over the short-term, there was a negative relationship found. Reports on violent crime show similar inconsistencies. Lin (2008) found no relationship between unemployment and violent crime whereas Andresen (2013) reported unemployment as a significant predictor of violent crime across Canadian provinces.

Ultimately, it is difficult to draw any clear conclusions from the literature on the association between economic recession and crime (Ruddell & Jones, 2014; Uggen, 2012). Studies show contrasting results, some use singular variables such as unemployment, while others use multiple economic measures (Andresen, 2013). Not only is the motivation behind violent or personal crime significantly different than the motivation behind property crime, but also each economic recession has been triggered by differing conditions and resulted in various consequences (Ruddell & Jones, 2014). Numerous economic stressors, current economic conditions of marginalized groups, and the availability of social supports such as unemployment benefits all converge to influence the rates of crime (Ruddell & Jones, 2014).

Data from the City of Calgary (2010) suggests that there will not be any significant rise in the crime rate due to the current recession. For the period of 2008-2009, coinciding with the 2008 economic recession, there was no indication of a rise in crime. In fact, numbers reveal a decline during this period for both person-related crimes as well as property-related crime.

Anticipated Trends:

- ~ It is not anticipated that there will be any significant rise in crime due to the economic recession.
- ~ The factors that result in changing crime rates are complex and multi-faceted, from changing police priorities to residential mobility, and it is unlikely that Calgary will see any direct relationship between the economic downturn and crime rates.
- ~ Over the much longer term, sustained economic decline may result in some changes to particular crime rates, but these impacts will not likely result in across-the-board changes to the crime rate.

Domestic Violence

By examining data from the U.S. Census and the National Survey of Families and Households for the U.S. Department of Justice, American researchers Bensen and Fox (2004) found that domestic violence occurs more often in households facing economic difficulties. Further, when that household is located in an already disadvantaged neighbourhood, the prevalence of domestic violence significantly increases. Three specific economic effects from this research are important to highlight. First, male job instability was determined to be associated with an increase in domestic violence. These same researchers reported that women whose male partners experienced two or more periods of unemployment (over the 5 year study) were three times more likely to be abused than women whose partners had stable employment. Second, income levels were found to affect domestic violence prevalence. As household income increases, the likelihood of domestic violence decreases. The third financial effect highlighted in this research is financial strain. Couples who reported high financial distress had a rate of violence three times that of couples with lower levels of financial stress (Bensen & Fox, 2010). This research suggests that male job instability, decreasing household income and financial strain are all associated with a rise in domestic violence rates – factors all anticipated to increase during an economic downturn (Thompson & Smeeding, 2013).

During the U.S. economic recession, indeed, domestic violence agencies reported increases in number of calls for help citing job losses and financial stress as factors (Chowdhury, Islam & Lee, 2013). These reports are consistent with U.S. data in which 56% of American police departments recorded a rise in incidents of domestic violence since the start of the 2008 recession (Ruddell & Jones, 2014). While similar regional data for Canada is unavailable (Ruddell & Jones, 2014) domestic violence reports in Windsor increased steadily during and following the recession (United Way Centraide of Windsor-Essex County, 2015a).

Claire Renzetti (2009), a leading domestic violence scholar in the U.S., summarized the literature on domestic violence and economic stress in response to the recent U.S. economic recession. She noted a reciprocal association in the literature between domestic violence and economic hardship. While research confirms the work of Bensen and Fox (2004), it also identifies how domestic violence affects a woman's ability to obtain and maintain employment. For example, Renzetti (2009) reports that victims of domestic violence are more likely to arrive late at work, be absent from work, and have more physical and psychological problems that can impact their work performance. She further adds that abusers can attempt to sabotage women's employment. An employed woman can be felt as threatening for some men, especially if the men are unemployed or underemployed.

Anticipated trends:

- ~ As unemployment rises, domestic violence is anticipated to rise
- ~ As household income declines, domestic violence is anticipated to rise
- ~ As financial stress increases, domestic violence is anticipated to rise
- ~ Police and shelters will likely see an increase in calls
- ~ Abused women may not be able to maintain employment/find work

Physical Health & Community Health

Intuition suggests that economic downturns are likely to be associated with substantial changes in health and mortality. However, during economic crises, available data points towards a more complex scenario. For example, in the US during the great depression life expectancy actually rose from 57.1 years in 1929 to 63.3 years in 1933 (a very large increase), possibly due to factors such as coinciding prohibition of alcohol consumption and lower levels of driving (Uutela, 2010).

The European Regional Office for Europe examined relevant literature in preparation for policy and planning reports for the 2008 global financial crisis (European Parliament, 2012; Uutela, 2010). These reviews summarized evidence of diminished smoking, alcohol use, diminished body mass index and dietary fat consumption corresponding with times of increased unemployment, which may account for paradoxical declines in mortality. In other words, some lifestyle changes that occur during times of economic constraint may diminish rather than increase health risks. However, caution is required since broadly defined changes (such as declining alcohol consumption) may mask more subtle changes (such as increased binge drinking) (Modrek, Stuckler, McKee, Cullen & Basu, 2013).

The literature provides several examples of physical health outcomes in countries and regions that have experienced economic crises. For example, in Greece, unemployment rates reached 14.2% and the GDP fell 3.5% in 2010. A systematic review of physical health consequences included a rise in HIV infections, high rates of complications and death from infectious disease epidemics (including HIV epidemics in the intravenous drug user population, H1N1 influenza, and West Nile Virus), and high rates of vertigo and tinnitus, likely as a result of increased distress and anxiety (Simou & Koutsogeorgou, 2014). Rates of stillbirths also increased rapidly by 32% between 2008 and 2010 (Quaglio, Karapiperis, Van Woensel, Arnold & McDavid, 2012). In Lisbon, Portugal, unemployment rates rose from 7.6% to 12.9% between 2001 and 2011, and purchasing power per capita fell 15%. Premature mortality (death before the age of 70 years) rose, especially for the middle social classes, likely because austerity policies most disproportionately affected this social class (Nogueira, 2016), suggesting disparity in population-based health effects from economic downturns. Therefore, sub-populations that are most targeted by austerity policies resulting from economic downturns are more likely to experience negative physical health

outcomes. A final example is from the United Kingdom. Here, unemployment rose from 4.5% to 7.1% from 2008 to 2009. Self-reported poor health status increased from 25.7% to 29.5%, respiratory health problems rose by 20% and cardiovascular health problems increased by 5% (Astell-Burt & Feng, 2013).

The evidence linking economic recession and health consists of both individual and aggregate (at the country or regional) level data. On an individual level, there is strong and consistent evidence that demonstrates lower income, financial strain, and unemployment are associated with worsened physical health outcomes. Increased incidence and prevalence of chronic diseases such as cardiovascular disease (Kaplan & Keil, 1993), cardiovascular risk factors (including hypertension, obesity, diabetes, and metabolic syndrome) (Bird, Lemstra, Rogers & Moraros, 2015; Kaplan & Keil, 1993), gastrointestinal disease, and respiratory diseases (Adler & Ostrove, 1999) have been reported in the literature. Further, greater risk of unhealthy behaviours, including lower frequency of exercise and increased smoking (Kaplan & Keil, 1993; Macy, Chassin & Presson, 2013), as well as poor nutrition (Suhrcrke & Stickler, 2012) are present and contribute to the increased incidence of cardiovascular chronic diseases.

Also at the individual data level, unemployed people have greater risk of death (Suhrcrke & Stuckler, 2012), with a two-fold higher risk of death over 5.5 years duration for the unemployed compared to the employed, after adjusting for health behaviours and social class (Morris, Cook & Shaper, 1994). Yet, at the aggregate level, the data is inconsistent related to mortality and life expectancy (Suhrcrke & Stuckler, 2012). Generally, a 1% rise in unemployment is associated with increased rates in suicides and homicides, but decreased rates of deaths from traffic accidents, and a 3% rise in unemployment is associated with alcohol related deaths (Karanikolos et al., 2013).

The inconsistency between individual aggregate level data can be explained as, “those that do fall into unemployment during a recession are indeed likely to suffer worse health. At the population health level, however, this effect appears to be more than compensated by improvements in the average health of the rest of the population” (Suhrcrke & Stuckler, 2012, p. 648). The Social Determinants of Health literature suggests that population-level barriers to basic levels of income and community supports impose risks of debilitating health and well-being.

Reduced access and adherence to prescription drugs, resulting in destabilization of pre-existing chronic diseases is also evident. Law, Cheng, Dhalla, Heard and Morgan (2012) determined that in Canada, those with no drug insurance have a 4.5-fold increased risk of non-adherence to medications while those with low income have over a 3-fold increased risk of non-adherence to medications. What’s more, they found that approximately 35.6% of those with an annual household income <\$20 000 and no drug insurance were non-adherent to prescription drugs, citing cost-related barriers as the reason. Among those with no drug insurance and an annual household income between \$40 000 to \$79 999, over 20% experience cost-related medication non-adherence (Law et al., 2012). Destabilization of chronic diseases may result in presentation of high risk acute medical conditions such as acute myocardial infarctions, stroke, and death, with a 50% increase in these outcomes for

those with diabetes in lower income groups compared with higher income groups (Booth, Bishara & Lipscombe, 2012).

Anticipated trends:

- ~ For those with a lower income, experiencing financial strain or unemployment:
 - ~ Worsening physical health outcomes
 - ~ Increased incidence and prevalence of chronic disease
 - ~ Greater risk of death
 - ~ Reduced access and adherence to prescription drugs
- ~ Those most affected by austerity policies that result from an economic downturn, even if not low income or unemployed, also face worsening physical health outcomes
- ~ Mortality and life expectancy in the general population are unlikely to change

Mental Health & Addiction

Mental Health

The World Health Organization identifies poverty, unemployment, job insecurity and job stress as risk factors for mental illness (WHO, 2011). There is a growing body of research to support how population mental health is negatively impacted in times of economic decline (Wahlbeck & McDaid, 2012). A recent and emerging literature has addressed the impact of the global economic crisis or the Great Recession (post-2007) on population mental health at the country-level (i.e. known as the influence of “macro-level social conditions”). Most of this research focuses on data from Europe and the United States, but there are some theoretical and empirical findings that are specific to overall population health and mental health in Canada (i.e. Frank, Davis & Elgar, 2014; Latif 2010, 2014, 2015).

There is a consensus that common mental health issues such as depression and elevated stress can be expected to increase in frequency during times of financial hardship (Lai, 2011; Modrek & Cullen, 2013; United Way Centraide of Windsor-Essex, 2015a; United Way of Calgary, 2009; Wahlbeck & McDaid, 2012). In a meta-analysis on the effect of unemployment on mental health, Paul and Moser (2009) found that unemployed people had higher rates of distress (34%) than employed people (16%). Further, they determined that gender, occupational status and duration of unemployment were moderating factors. Men, blue-collar workers and those who have longer-term unemployment had a higher effect size than women, white-collar workers and short-term unemployment. A final conclusion from their analysis was that unemployment resulted in worsening mental health in countries that are economically less developed, have unequal income distribution or weak employment protection systems.

Consistent with this, an increased prevalence of depression was reported in employed Albertans during the global financial crisis of 2008 (Wang et al., 2010). Latif (2015) was the first published study using Canadian statistics from the national Population Health Survey (1994-2006) on the relationship between unemployment and depression resulting from the Great Recession. His study suggested a significant positive effect of the provincial unemployment rate on depression, although heterogeneous effects were seen across population subgroups based on gender, age, marital status and education. A general recommendation arising from this consensus is that austerity measures resulting in diminished access to health care and social supports at times of financial crisis should be discouraged (European Parliament, 2012; Modrek et al., 2013; Wahlbeck & McDaid, 2012).

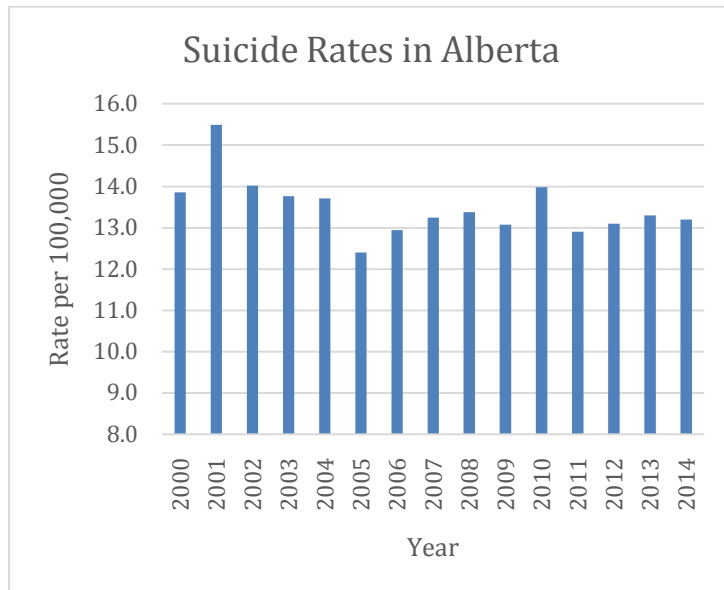
Those living in poverty, those with pre-existing mental illness and those who are “least well educated” are likely to experience more significant declines in mental health following job and housing loss (Zivin, Paczkowski & Galea, 2010). Conversely, when there are strong social protections in place, a worsening of inequities that contribute to mental health problems are less likely to occur (i.e. a “buffering” or “cushioning” effect of a strong social safety net) as seen in the context of Scandinavian countries with an established infrastructure of supports in place (Wahlbeck & McDaid, 2012; Ruckert & Labonte, 2014). However, Lam, Fen and Moen (2014) collected data that showed evidence of stronger association between job insecurity and a decline in wellbeing for *middle class workers*, supporting the notion of ‘stress of higher status’ amongst those with comparatively more at stake when job loss strikes. However it is important to note that these studies measure perceived wellbeing (happiness) as opposed to markers of psychopathology (i.e. being unhappy versus being depressed).

Suicide

A generally well-supported finding is that economic recession leads to an increase in suicidal behaviours, especially amongst males of working age (Haw et al., 2014). A paper by Reeves, McKee and Stuckler (2014) cites the Great Recession of 2008-2010 as contributing to 10,000 additional ‘economic suicides’ since 2007 in Canada, Europe, and the United States, with rates in Canada rising 4.5% (about 240 suicides more than expected) between 2007 and 2009. Yet other researchers have argued the evidence of association between suicide rates and economic downturn is not always clear-cut. Studies of the relationship between unemployment and suicide have shown mixed results and require nuanced interpretations, especially when making cross-country comparisons (Bacigalupe et al., 2015; Reeves et al., 2014) and relying on cross-sectional or ecological study designs (Frasquillo et al., 2016). Gender appears to be a factor influencing suicide rates, although the research has not always been conclusive as to whether men or women experience increased rates (both trends are reported, but typically men are shown to be at elevated risk) (Zivin et al., 2011).

In Alberta the suicide rate is approximately 13 per 100,000 population per year and has been stable in recent years. There was no clear changes evident in association with the 2008 global financial crisis, see Figure 1.

Figure 1. Annual Suicide Rate (100,000 years⁻¹) in Alberta, by Year



*Source: <https://suicideinfo.ca/Library/AboutSuicide/Statistics.aspx>, data accessed March 20, 2016, date updated February 10, 2016.

There is some contrasting evidence however, in Windsor, Ontario. For example, there was a reported increase in suicide during 2008 and over the next couple of years following before tapering off again (see Figure. 2).

Figure 2: Suicide in Windsor Ontario

Year	Local #s	Provincial Average
2008	26	11
2009	30	9
2010	35	11
2011	23	12
2012	14	9
2013	22	9

*Source: United Way Centraide of Windsor-Essex County (2015a)

Countries with well-developed social safety nets appear to be protected from the impact of economic downturns on population-wide health-related outcomes including suicide (European Parliament, 2012; Wahlbeck & McDaid, 2012). For example, a protracted economic recession in Finland was associated with diminished suicide attempts in men (Ostamo & Lonnqvist, 2001) in contrast to the experience in the Greek financial crisis, where survey research has suggested increased ideation and attempts since the start of the financial crisis (Economou et al., 2013).

Addiction

The association between economic stress, substance use and addiction is complex. Substance use and addiction can be both the cause and an effect of economic stress at the individual level – alcohol abuse can lead to unemployment but also can be initiated or worsened by unemployment. At the population level, there is documented evidence that overall alcohol consumption dips with increased unemployment rates but at the same time the prevalence of alcohol and other drug addiction rises (Catalano et al., 2011; Henkel, 2011).

In a particularly relevant study for current analysis, Compton and colleagues (2014) examined U.S. national survey data on alcohol and drug use for the periods prior to and following the 2008 economic crash. During this time, unemployment in the U.S. grew from 5.8% in 2008 to 9.3% in 2009. Results showed that heavy alcohol use, illicit drug use, tobacco use, alcohol addiction and illicit drug addiction were higher among the unemployed, with the exception of heavy alcohol use in young people (18-25), which was higher among employed youth. In general, in this U.S., rates of alcohol addiction were 50% higher in unemployed versus employed and rates of illicit drug addiction were twice as high.

The results from this study are consistent with numerous other studies, including longitudinal research that followed the same individuals over time (see Catalano et al., 2011 and Henkel, 2011 for reviews). Studies that have examined the mechanism of the association propose a stress model – unemployment causing increased stress causing increased use and abuse. Very limited research exists on social contagion and the effects of unemployment on family members, including spouses and children. There is also little work on underemployment and “precarious employment” and its association with substance use and addiction (Benach et al., 2014; Compton et al., 2014).

In terms of the three scenarios, all include an increase in unemployment so it is clear that use and abuse of substances should be anticipated. The effects of this increase are widespread and include indirect costs such as loss of productivity and employability, direct health care costs, including treatment costs and related physical health effects, direct law enforcement costs, and other direct costs such as fire damage, vehicle collision damage, and prevention programming (Rehm et al., 2006).

Children & Youth

There is scant research that specifically addresses the potential effects of an economic recession on youth health (Pfoetner et al., 2014), although a considerable body of research has addressed the impact of economic decline on child health and development in general (Dubay & Zarabozo, 2013). This analysis therefore attends to the potential effects on youth mental health through the lens of population-level mental health and by considering unemployment and economic inequity as a key social determinants of the mental health of a family unit.

There are both short and long-term effects on children and youth in regards to mental health. The future building blocks of positive and resilient child mental health are put at risk when parent and caregiver capacity during the critical windows of pregnancy, infancy and early childhood is comprised. Studies of youth trajectories following economic downturn show increased rates of crime and psychiatric care amongst youth who were born just prior to an economic recession period (Paananen et al., 2012). Cohort studies show that stressors accumulated in early childhood have an effect on both mental and physical health of children as they grow (Rajmil et al., 2014). A recent systematic review concluded that there is evidence to suggest that the “economic recession may also have a severe and long-term impact on mental health in children and young people, especially if they face stress within the family as a result of economic hardship or parental unemployment” (Frasquillo et al., 2016, p. 36).

Data from children’s mental health centers in Windsor, Ontario supports these claims. The United Way Centraide of Windsor-Essex County (2015b) noted an immediate increase (50%) in referrals for youth services in 2008. Youth from the city of Windsor reported alcohol consumption higher than provincial average (2008-2011), while only 80% of Grade 10 students passed the provincial literacy test, (2012-2014) compared with 85% of their provincial peers (United Way Centraide of Windsor-Essex County, 2015b). This is concerning given the link often drawn between literacy and criminal activity, and between literacy and poverty.

Anticipated trends:

- ~ Suicide rates may increase but also may be moderated by the availability of social networks (support) and the buffering effect of social protections (programs)
- ~ Stress and depression are expected to increase
- ~ Agencies that provide emotional/psychological support will likely see an increase in service use. This may act as a buffer.
- ~ Use and abuse of drugs and alcohol is likely to increase amongst the unemployed
- ~ Impact on youth merit consideration relative to education and community support and will likely result in an increased demand for community and social services

Non-Profit Organizations

Literature related to the impact on non-profit organizations was also uncovered during our search for the social impacts of a recession. Hildebrant and Wilson (2010) examined the issue of the economic downturn specifically on the non-profit community in Ontario. In a community survey, 311 community agencies delivering social services responded. Findings include an increase in demand directly linked to the economy for 68% of the agencies. While demands for services increased so did the number of clients, including the need for more crisis intervention services. Compounding the situation, the agencies also reported decreasing revenue. Of concern were cuts in donations from the

private sector (44%), foundations (39%), the United Way (32%) and the federal government (20%). This contributed to challenges, including the need to fundraise by almost half the agencies and a 30% rate of staff layoffs.

The report also noted “the inadequacy of public policy to deliver the basics of income security, food and housing were shaping the crisis on the ground. Holes in the social safety net increased the vulnerability and heightened the stress and anxiety experienced by community members caught in the downturn” (Hildebrant & Wilson, 2010 p. 9). This impact was also felt by community agencies in terms of stress due to increased workloads and fewer resources. Similar work conducted in Calgary in 2008 found that 80% of participating social service agencies reported a 5% increase in service demand over a six-month period, 60% of agencies had a 6-25% service increase and 17% experienced over 25% increase in service demand (United Way of Calgary, 2009). A comparable report by the Calgary Chamber of Voluntary Organizations (2009) indicated that charities and non-profits were under duress during the 2008 recession. One of the key focal points of this report was the concern for staff in non-profits and the stress that increased demands play on their well-being given funding shortages, risks of stopping services, less time to do the work required, lower wages on the front lines and increased burnout.

Similar experiences were reported in the Greater Toronto Area (GTA) during the 2008 recession. A survey of 413 non-profit organizations across the GTA indicated that many organizations (97%) felt the immediate pressure for increased service demand (food banks, employment services, credit counselling, mental health counselling and crisis services, and suicide prevention), at the very time that they were navigating the squeeze from the multi-year provincial cuts to social programs and increased restrictions to employment insurance (Social Planning Network of Toronto, 2009).

Anticipated trends:

- ~ Non-profits will feel the increased demand in services
- ~ Staff of non-profit organizations will feel heightened pressure with heavier workloads
- ~ In the case of funding shortages, layoffs in this sector are likely

Conclusion

This review has identified considerable and widespread potential impacts for individuals, families and the Calgary community, resulting from the recent economic downturn. While individual factors and considerations have been presented, it is difficult to account for the compounding effects of multiple deleterious factors. We anticipate a concerning cumulative impact of multiple stressors and factors and a heightened level of risk for many social issues, especially amongst those who are already economically vulnerable.

It is important to note that low and middle income Calgarians may be at heightened vulnerability to moving below a sustainable level of income, housing and social security. This invites prudent consideration in ensuring a targeted, relevant strategy, particular to this economic context, for maintaining resource stability. Recognizing initiatives such as local and provincial efforts to proactively address housing and homelessness issues, for instance, invites continued planning and innovation.

The themes identified in this report relay areas of risk and as such invite consideration for a plan and infrastructure of support in optimizing community level resilience and health amidst current social and economic pressures. This highlights the role of both the formal services sector as well as informal networks and supports (e.g., community and neighbourhood level resources), particularly given the potential for increased service demand in the support system, as has been demonstrated in previous recessions and economic downturns in Calgary and other jurisdictions. Research suggests as well that infrastructure and supports that are in place may buffer effects and lead to better outcomes than expected in some domains, as people are able to mobilize support from their networks and formal services.

This report highlights multiple challenges for the City of Calgary at this difficult time of economic downturn. While recognizing these critical points of pressure upon our community, the spirit of Calgary is that of a vibrant city, liveable for all residents. Accordingly, finding ways to proactively address social and economic risk, including particular impacts confronting the most vulnerable, emerges as an important priority moving forward.

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