

July 2019

Impact of Rising Housing Prices on Construction Labour Markets in Canada's Big Cities:

A Report for BuildForce

Kerri Claire Neil and Barbara Neis



ACKNOWLEDGEMENTS

In May, 2019, On the Move was asked by partner BuildForce Canada if we had any research findings related to the potential impact of rising housing costs and transit times and cost on construction labour markets within large Canadian cities including particularly Toronto and Vancouver. This report summarizes relevant On the Move research and findings from a quick scan of existing research relevant to this larger question. We want to thank Bill Ferreira for triggering this review and BuildForce Canada staff for useful feedback and suggestions for earlier drafts. Findings in this report are the responsibility of On the Move and do not reflect the opinions or views of BuildForce Canada.

The On the Move Partnership: Employment-Related Geographical Mobility in the Canadian Context (OTM) is a project of the SafetyNet Centre for Occupational Health & Safety Research at Memorial University. On the Move is supported by the Social Sciences and Humanities Research Council through its Partnership Grants funding opportunity (Appl ID 895-2011-1019), InnovateNL, Government of Newfoundland and Labrador, the Canada Foundation for Innovation, and numerous university and community partners in Canada and elsewhere.

About the authors: Kerri Claire Neil (M.A.) is Communications Coordinator with On the Move Partnership.

Barbara Neis (Ph.D., C.M., F.R.S.C.) is John Paton Lewis Distinguished University Professor at Memorial University of Newfoundland, Project Director for On the Move Partnership and Co-Director of the SafetyNet Centre for Occupational Health and Safety Research.

ABSTRACT

Faced with increased demand, an aging labour force, and climate risk, there are concerns that the construction industry in Canada will face recruitment challenges over the next decade. With rising housing prices and related increases in commute times and often cost in global cities such as Toronto and Vancouver, there is concern these factors are pushing low-income residents to areas further from the downtown, potentially reducing the labour supply of construction workers in inner cities. To investigate this, we generated a preliminary synthesis of existing research on the impact of housing prices and commuting costs on labour markets in big cities, with a focus on the effects these might be having for workers in the construction sector. Overall, we found little research on urban construction labour markets in Canada's biggest cities and no studies directly linking the labour market dynamics of the urban industry to housing and commute challenges. This is an area requiring further research.

Canada's Construction Industry

Construction is a multi-billion dollar industry in Canada that accounts for 7% of the national gross domestic product and 8% of total employment (BuildForce Canada, n.d.). Spurred by economic growth and often seriously affected by financial busts, the industry can be very volatile based on shifts in the broader economy. This can pose a challenge for workers, whose livelihoods can be put at risk based on these broad shifts, and for industry in terms of recruitment and retention of qualified workers. This volatility combined with the short-term and transient nature of construction employment which is tied to the completion of projects in shifting locations, requires workers to be flexible and mobile, so that they are ready to move with the next opportunity and have access to affordable transportation that is also efficient in terms of commitments of time and resources. Managing mobility is a core challenge in the sector as reflected by frequent employer provision of mobility supports and accommodations in large, industrial projects. In urban residential and commercial construction, mobility challenges (including transportation and housing) are largely managed and financed by workers and their families.

In its annual construction industry forecast, BuildForce Canada (2019) forecasts that construction demands will continue to grow over the next decade, albeit at levels lower than those experienced over the past 10 years. Keeping pace with demand growth will be challenging in the face of the growing number of industry workforce retirements, which

are projected to outpace recruitment efforts throughout the decade. There are also significant differences between provinces in terms of construction demand. While demand for major infrastructure projects and residential housing starts is expected to decline in most provinces, Ontario and Quebec are expected to sustain demand, while British Columbia is poised to start several major projects and see increased demand for construction workers into 2028. Urban construction is expected to stay strong in Canada, and a report published by the Toronto Region Board of Trade estimated that they will need 175,000 construction-related workers over the next 15 years (Gill, 2016).

Not included in these forecasts is climate risk, which incorporates the potential for climate change to create extreme weather patterns and potentially wreak havoc on cities across the country as sea levels rise, storms grow larger, and wildfires more common, as evidenced in the Fort McMurray wild fires and experiences with flooding in Winnipeg, Calgary, Ottawa-Gatineau, and parts of Quebec. These extreme weather conditions could increase demand for construction as homes and businesses rebuild (Burke, 2018). Climate change also poses health hazards, which can lower labour productivity. A recent study by the International Labour Organization (2019) warns of the heat stress that comes with hotter seasons and the negative effect that it will have on outdoor industries such as construction. As the effects of hot summers are amplified in urban environments through the urban heat island effect, and heatwaves become more common and deadly, there are concerns for workers' occupational health and safety standards and productivity in this industry.

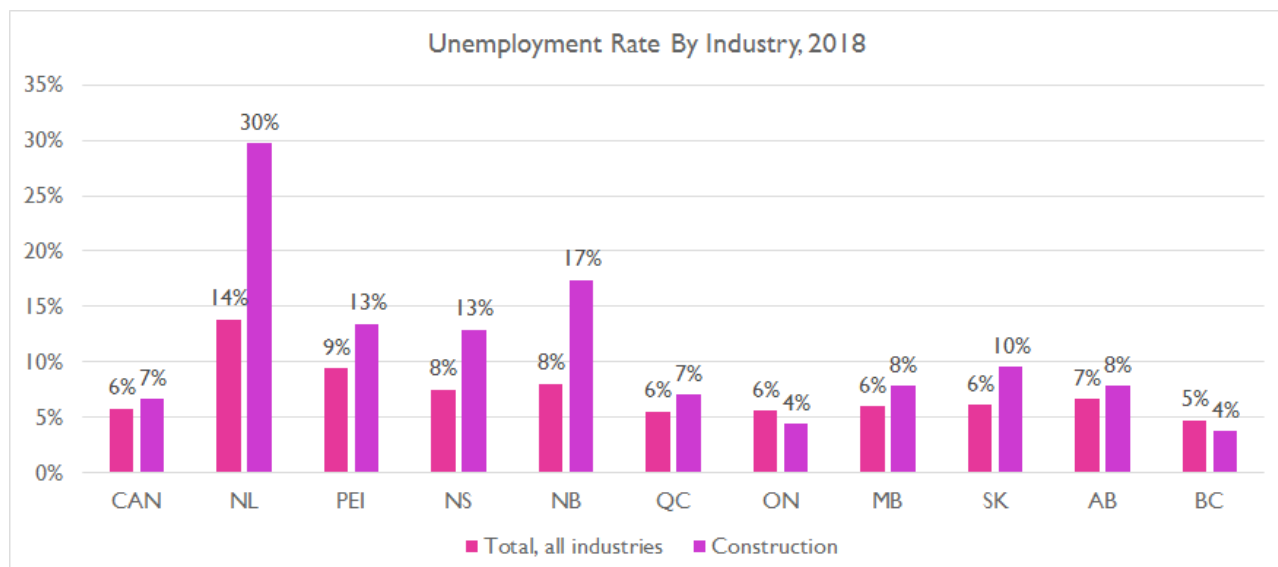


Figure 1: Statistics Canada (2019a)

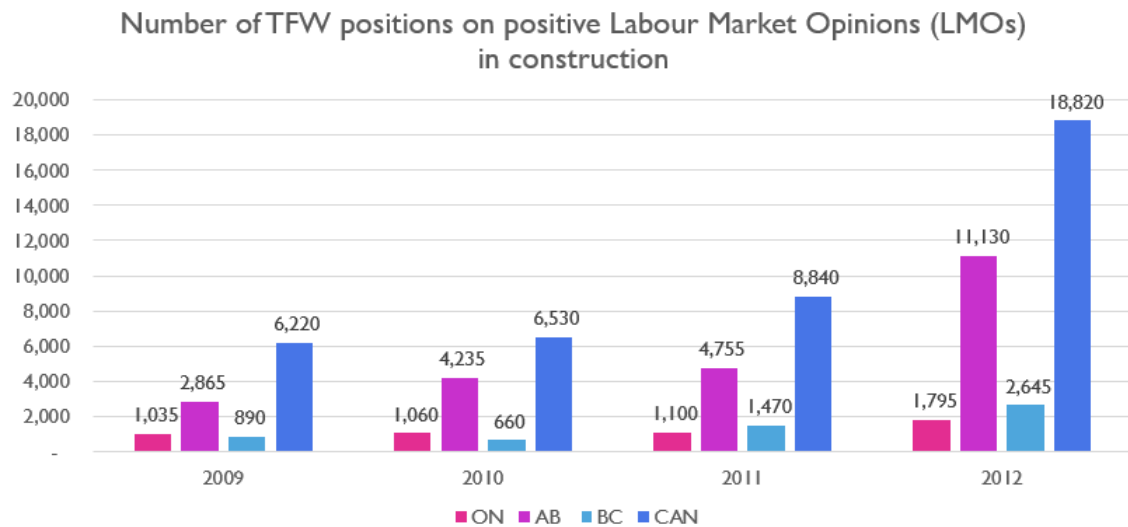


Figure 2: Reid-Musson et al., 2015

Meeting projected construction labour demand in Canada may be a challenge, as suggested by the unemployment rate of workers in this industry shown in Figure 1. While some provinces such as Newfoundland and Labrador have very high unemployment rates of workers in the construction industry, other provinces such as Ontario and British Columbia, where demand is expected to be maintained or grow, have unemployment rates lower than the provincial average for all industries, suggesting a tighter labour supply.

It is expected that interprovincial and international mobility will be required to meet demand for construction projects in British Columbia and Ontario (Gill, 2016; BuildForce Canada, 2019). To address recruitment challenges, the industry is focused on broadening its recruitment efforts to include groups traditionally under-represented in the industry to fill skills gaps including older workers, Aboriginal peoples, immigrants, and women (Construction Sector Council, 2010; BuildForce Canada, 2019). However, the volatile nature of the industry, mobility challenges and costs, and growing competition from other industries for workers with similar skills may constrain the effectiveness of industry efforts, leading to retention challenges, and limiting the extent to which labour mobility can address regional labour market imbalances. The challenges may be particularly strong in large cities like Toronto and Vancouver with high labour demand, high costs of housing, and prolonged and potentially costly commute options (Statistics Canada, 2019b).

Some construction employers are utilizing the Temporary Foreign Worker Program and other Canadian international temporary labour migrant programs to supplement their labour force. While these programs have been popular

in provinces such as Alberta and British Columbia, they have been less used in Ontario (Figure 2). There can be substantial costs associated with these programs including for labour market opinions, recruitment, transportation, and housing (Gravel et al., 2017).

Mobility and the Construction Sector

The construction industry is grounded in “temporary employment in transient worksites” (Neis et al., 2018). During any construction project, the types of trades needed will shift over the course of the project and when a project is finished, contractors and employees need to move to new locations that can be near-by or far away, depending on the type of construction and availability of work. The situation is similar with operation maintenance. As a result, labour mobility has been identified as a human resource challenge for the industry with potential consequences for recruitment and retention. Its relevance to the labour markets in the industry is reflected in two major studies on mobility carried out by the Construction Sector Council in 2007 including one on the mobile labour force (those who commute long distance to work) and those who work closer to home. A key finding of these reports was those who move for work once, tend to be consistently mobile and move for work often (Pennings, 2005; Construction Sector Council, 2007). This means workers generally have more than one employer in a given year, or are moved around by the same employer (BuildForce Canada, 2015).

Generally, the literature suggests that higher income earners in Canada have longer commutes (Axisa et al., 2012; Moos et al., 2018; Newbold et al., 2017). So (2001)

argued that rural residents trade off lower housing costs for lower wages. Some rural residents are willing to travel for higher wages, but wages need to be high enough to offset commuting costs and more people are willing to commute if it is within one hour's distance. They hypothesized that improvements in transportation that lower commuting time could increase rural populations and the number of rural commuters to urban areas. The longer distance commuting of higher income earners may be due to the relative scarcity of higher paying jobs, while unskilled jobs such as in the service sector are more plentiful and geographically diverse (Axisa et al., 2012; Newbold et al., 2017).

Due to the variant nature of the industry, construction jobs can last anywhere from a few hours to a few years (BuildForce Canada, 2015). This can make it difficult to compare incomes of construction workers as the hours have high variance. There is evidence that some employees in the trades earn higher wages than others, and this is generally associated with higher unionization and job permanency rates (Pyper, 2008). While it is difficult to find information comparing wages for urban and rural construction jobs, the higher wages offered by construction jobs and the employment they provide are often deemed the only reason that rural people choose to migrate for work (Construction Sector Council, 2007). For construction workers “[o]nly financial necessity is a sufficient inducement to work mobile, particularly necessity brought on by the inability to find work locally.” (Construction Sector Council, 2007, 16), emphasizing again the high wages that are necessary to attract these workers.

Much of the research on labour mobility in construction has focused on long distance labour commuting in the industrial segment of the industry. Since geography dictates the location of this kind of employment, workers can often be scattered across the country and undertake extended commutes. While people are drawn to distant projects that offer higher wages, the decision to go mobile is most often based on necessity rather than preference and may have a negative impact on their family, marriage, community involvement, and job satisfaction (Pennings, 2005; Construction Sector Council, 2007; Ryser et al., 2018; Butters et al., 2019). This is in contrast to construction workers who work only locally. A 2007 study by the Construction Sector Council found these workers generally have greater job satisfaction and find that their job has a positive impact on their marriage and family (Construction Sector Council, 2007). This may depend, however, on the length, complexity, and cost of daily commutes.

Others have also looked at the challenges associated with mobility for work in construction. Pennings (2005) did a study on mobile workers in the construction industry for the Construction Sector Council, and found that, while many chose to move for the higher financial incentives, such mobility had a high cost due to the expenses incurred from being mobile and the struggle of leaving their family and community behind. This finding is supported by findings from On the Move Partnership research on long distance labour commuting which shows it can have negative mental health effects, as prolonged time away from home can cause isolation, loneliness, depression, anxiety, and suicide (Barber, 2016; 2018; Ryser et al., 2018). Distance and time away from home affect not only workers, but their families as well, as when partners who are left behind have to manage the household alone for extended periods (Butters et al., 2019)¹. These factors can also have a negative impact on the home community if there are large numbers of mobile workers, and is associated with less volunteerism and community spirit, and more drug and alcohol abuse (Butters et al., 2019). Given the challenges, Pennings (2005) found most workers would avoid long distance labour migration for work if possible.

While daily commuting to work allows workers to maintain a residence in their home community, when daily commutes are extended and complex, the added time and cost associated with commuting can pose major challenges for workers and their families in terms of not only travel time and cost but also in terms of synchronizing work schedules and travel times with the work, school, and other schedules of spouses and children. These challenges would be aggravated by changes in work locations with repercussions for commute times and requirements. Neis et al. (2018) highlighted the story of “Andrew,” a construction worker whose work day plus commute took up a majority of his waking hours, leaving him just 9 and a half hours to sleep and interact with his wife and children on his working days and, because of the short-term nature of his contract, leaving the household apprehensive about having to adjust to new schedules and patterns in the future. Extended daily commuting also raises concerns around occupational health and safety including the risk of accidents on the road, and can be associated with workplace anxieties, fatigue, uncertainty, and stress (Premji, 2018; Ryser et al., 2018; Butters et al., 2019; Lippel and Walters, 2019).

1 To learn more about the family-related impacts of mobility, check out the [PEI Families Mobility and Work in Atlantic Canada Symposium](#).

Commuting in Canada's Large Cities

Daily commutes tend to be longer in Canada's biggest cities. As these urban centers grow, the amount of time people spend commuting to work has tended to grow as well. Savage (2019) found that from 1996 to 2016, the median distance from residence to place of work increased in seven of Canada's eight largest census metropolitan areas (CMAs), with only Vancouver seeing a slight decrease in distance. In all eight CMAs, more than 60% of workers travelled more than 5km to their place of work and about 10% travelled more than 25km. Toronto commuters travelled the greatest distances to work and nearly 20% travelled 25km or more to their place of work.

Looking at the data from the 2016 Census, it is clear that in general, workers in Toronto have the longest commuting times, with 37% travelling for 60 minutes or more one way (Figure 3). Despite having lower housing costs, workers in Montreal have on average a longer commute than those in Vancouver. This could be due to the urban form of Vancouver, which has a more decentralized concentration of jobs (Chowdhury et al., 2013). Broken down by occupation, workers in trades, transport and equipment, and related occupations resident in these cities are less likely to have long commutes of 60 minutes or more than workers on average in Montreal and Toronto, but not in Vancouver. However, the proportion of these workers with long commutes in Toronto is higher than in the other two cities (Figure 3).

Census data capture average commute times and distances

during the week prior to the census (Statistics Canada, 2015). But commute times and distance can vary a lot on a daily and seasonal basis for all kinds of reasons. Furthermore, the census measures distance travelled in a straight-line as the crow flies but actual commuting patterns are rarely linear (Savage, 2019) and often change as commuters look for the best route on particular days and in light of particular traffic, weather, and other conditions. Travelling by public transit is often multi-modal and includes wait times and thus public transit commutes are, on average, longer than those by car. Construction workers, like other Canadian workers with no fixed workplace (a growing proportion of the Canadian labour force) are more likely to engage in long commutes. Construction workers with low incomes, who are precariously employed and who are recent, visible minority immigrants, may confront additional challenges related to the impact of income and discrimination on housing options and to the poorer quality public transit options provided to the lower cost housing areas where they end up living (Premji, 2018).

Housing costs and household incomes in large city labour markets in Canada

The positive association between commute times and income found in the literature does not entirely explain the long commute patterns found in cities like Toronto, where 37% of the employed labour force commuted 60 minutes or more for work in 2016 (Figure 3). To better understand this phenomenon we looked at housing prices in Canada's biggest cities.

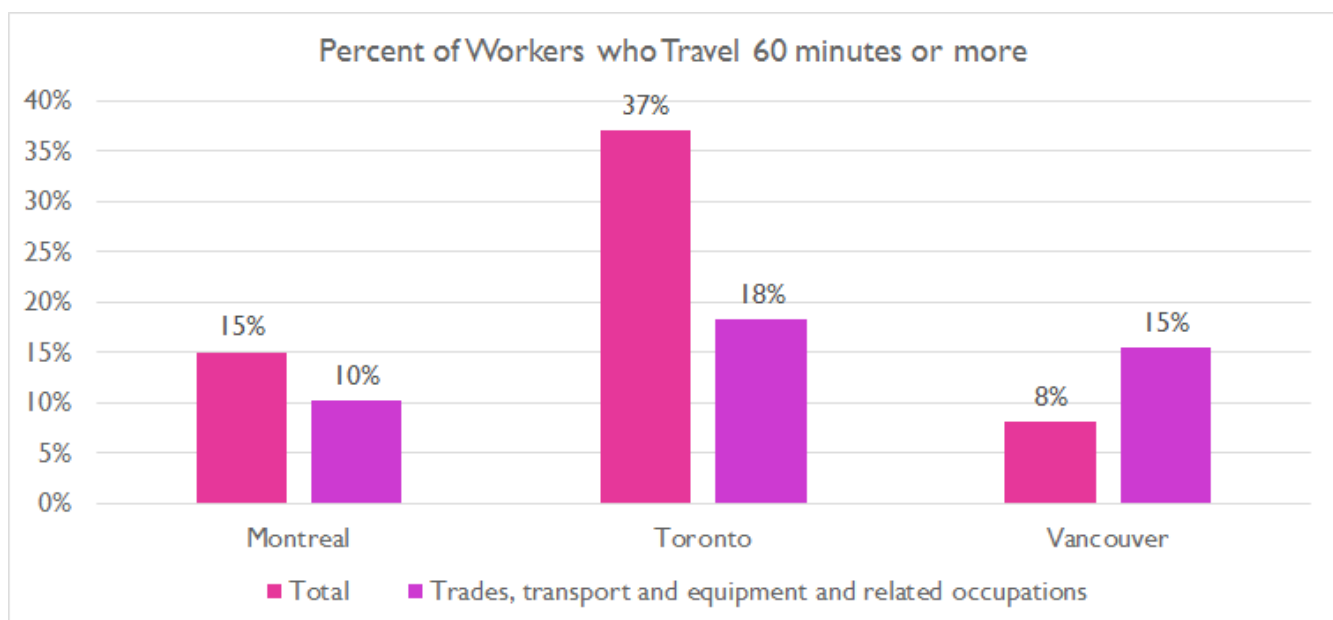
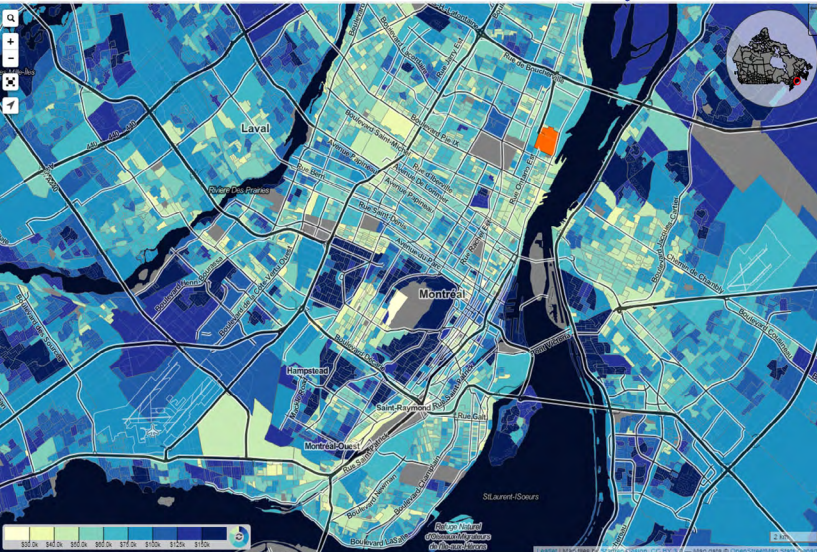
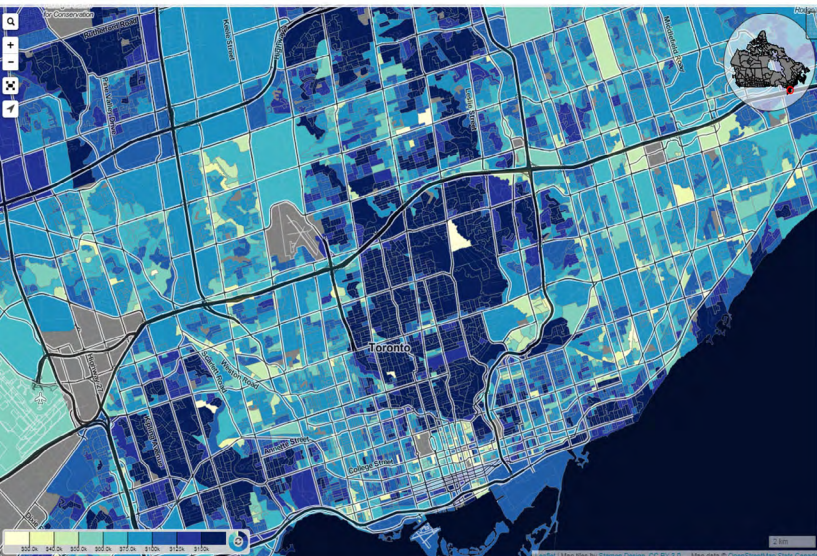


Figure 3: Statistics Canada (2019b)

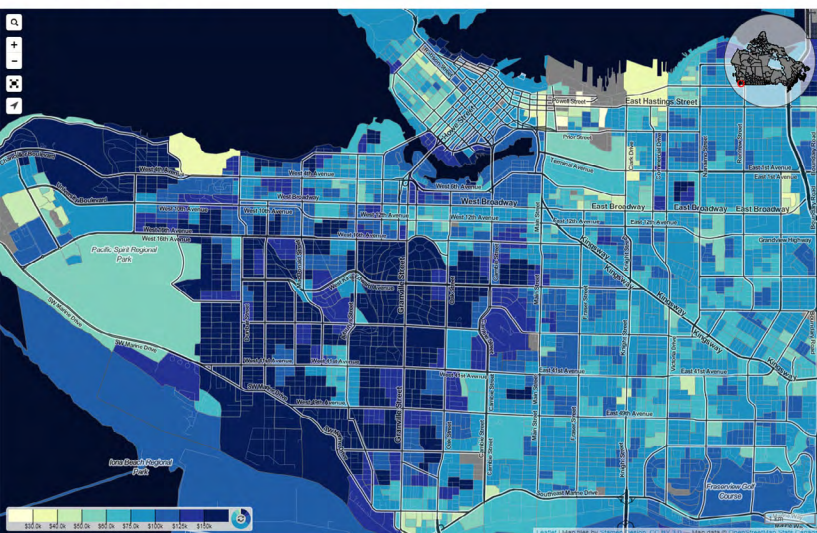
Household Total Income, 2015



Montreal



Toronto



Vancouver

Housing prices in Canada's biggest cities are fairly high, even by global standards. CBRE (2019) found that Vancouver had the fourth highest average property price in the world, with average rent prices of \$1,042 USD. While average property prices in Toronto were lower, average monthly rent was similar at \$1,026 USD. Vacancy rates in these cities hover at about 1%, below the 3% minimum that is considered healthy for a metropolitan city (CMHC, 2018a; CMHC, 2018b; Cohrs et al., 2017). Montreal, by contrast, has managed to maintain fairly low housing and rent prices, and though vacancies have declined and put pressure on the market, they still hover at about 3% and new regulations by the City are aiming to maintain the stock of affordable housing (CMHC, 2018c; CBC News, 2019).

Based on the Canadian Census, Census Mapper (n.d.) breaks down each province by postal code to compare a variety of data points collected by the Census. Figure 4 visualizes Canada's largest CMAs categorized by household income, where light yellows signify low income (less than \$30,000/year) and dark blues signify high income (greater than \$150,000/year). As shown, Montreal has the most variety in average household income with multiple areas close to the downtown with low average incomes, while it appears that Toronto and Vancouver both have large areas within the city where average household income is very high and lower average income areas are concentrated more outside the main downtown core. These high household incomes can translate to higher housing costs, as those with higher incomes are better able to afford more expensive houses and condominiums.

However, these maps do not show the full picture, as the extremes can get lost in the averages. While there is a lot of wealth concentrated in downtown Toronto and Vancouver, there is a lot of poverty in these areas as well. This is shown in Figures 5 and 6, which map the low-income populations in Toronto and Vancouver. Comparing these maps, it is clear that there is significant income inequality within both cities, as the areas with the greatest proportion of low income earners also have the highest average incomes. The city center is also where most low-income youth in Toronto live (Figure 7), suggesting the high average household income reflected in Figure 4 can obscure the presence of some lower income households.

Figure 4: Census Mapper (n.d.)

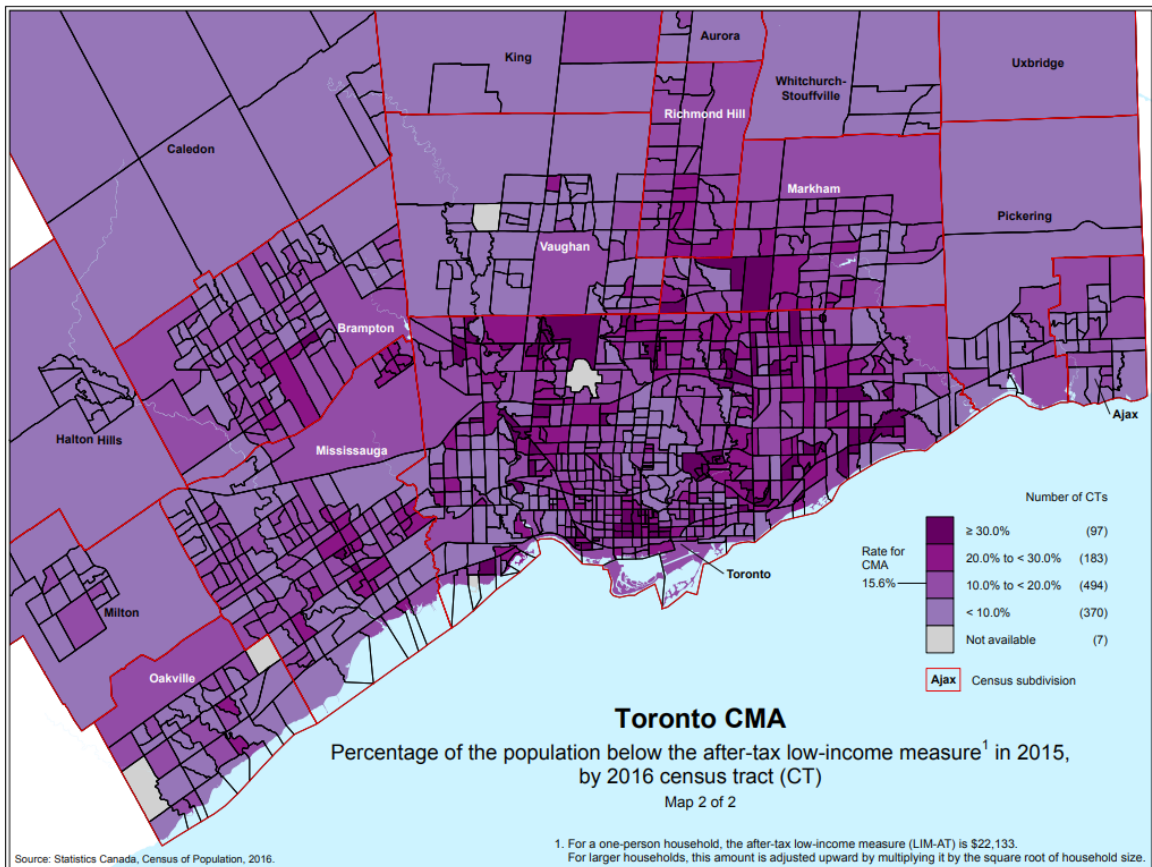


Figure 5: Statistics Canada (2016a)

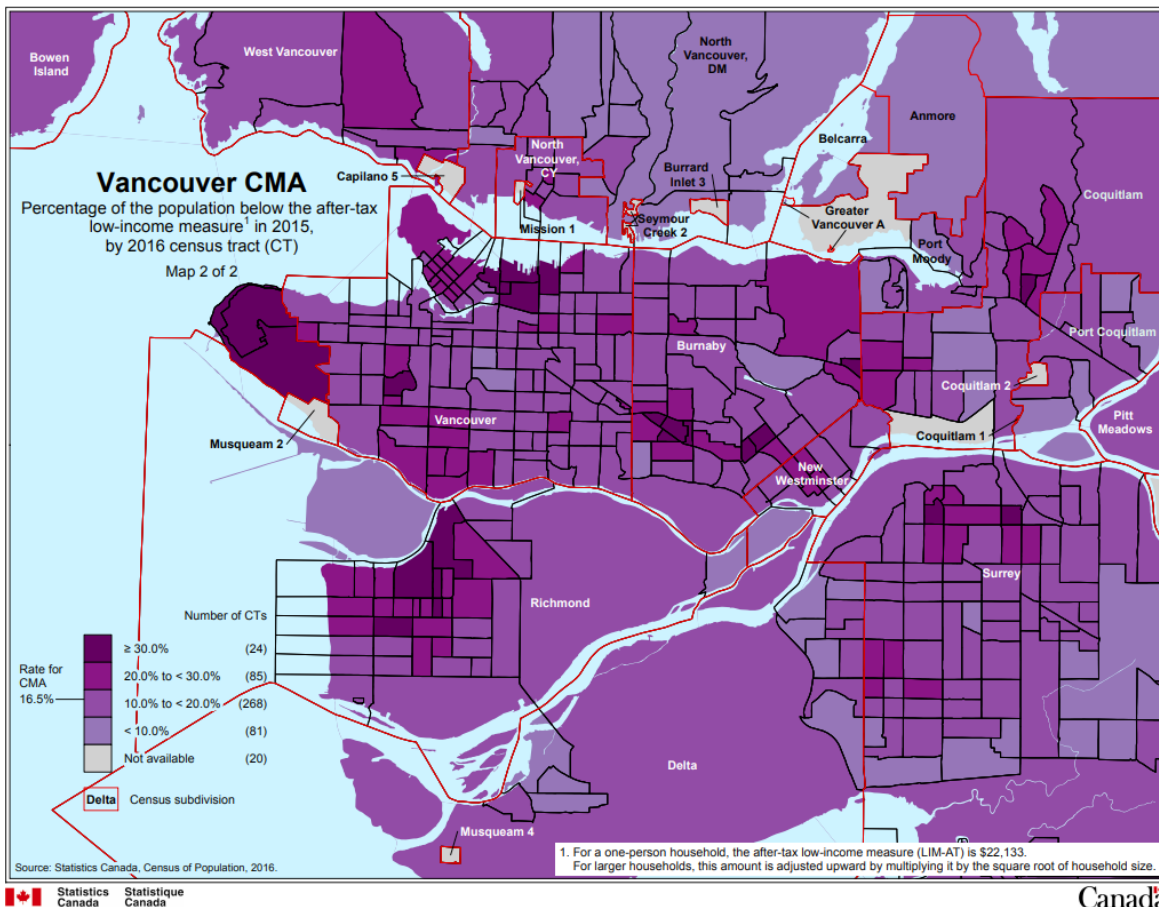


Figure 6: Statistics Canada (2016b)

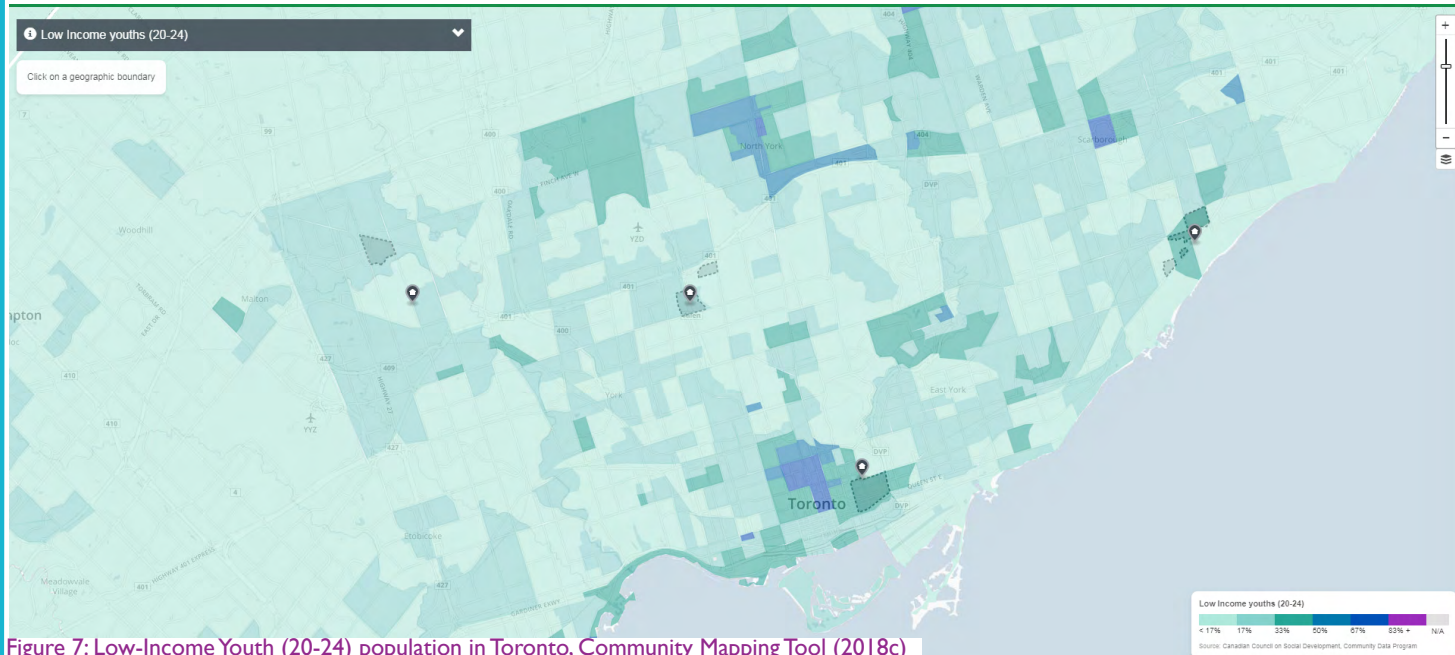


Figure 7: Low-Income Youth (20-24) population in Toronto, Community Mapping Tool (2018c)

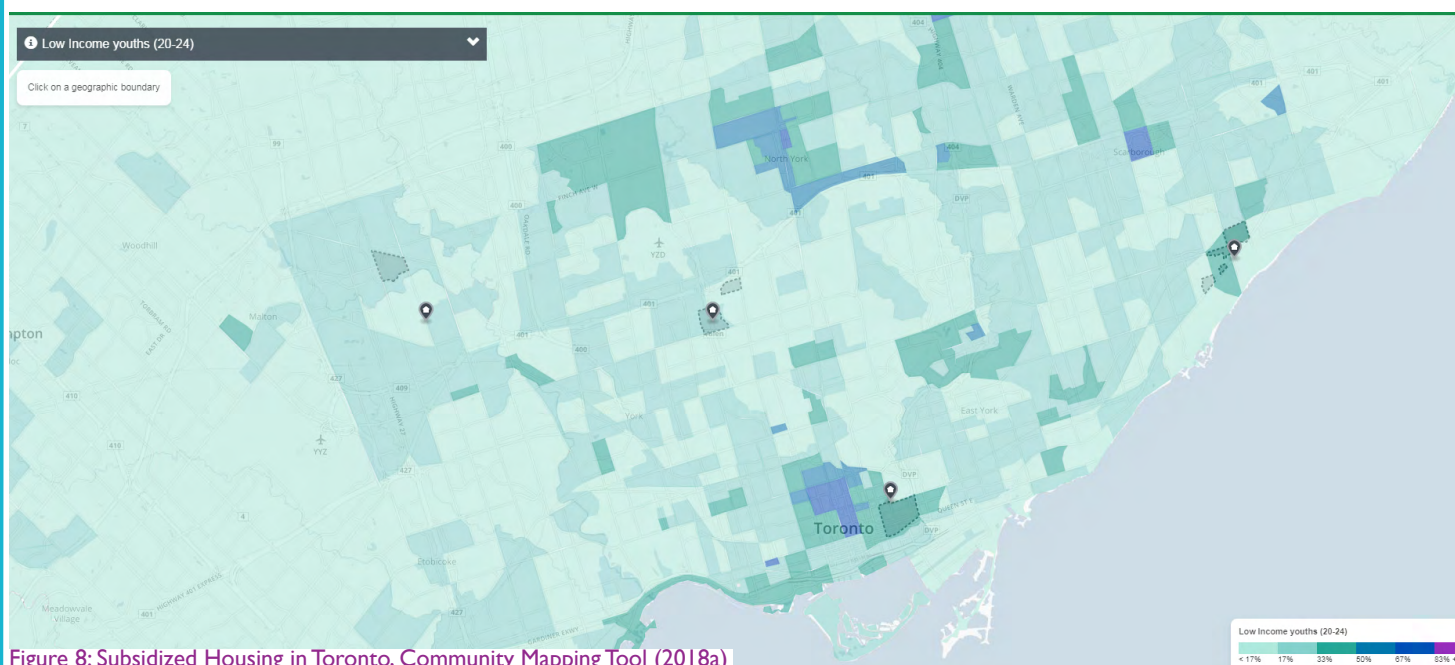


Figure 8: Subsidized Housing in Toronto, Community Mapping Tool (2018a)

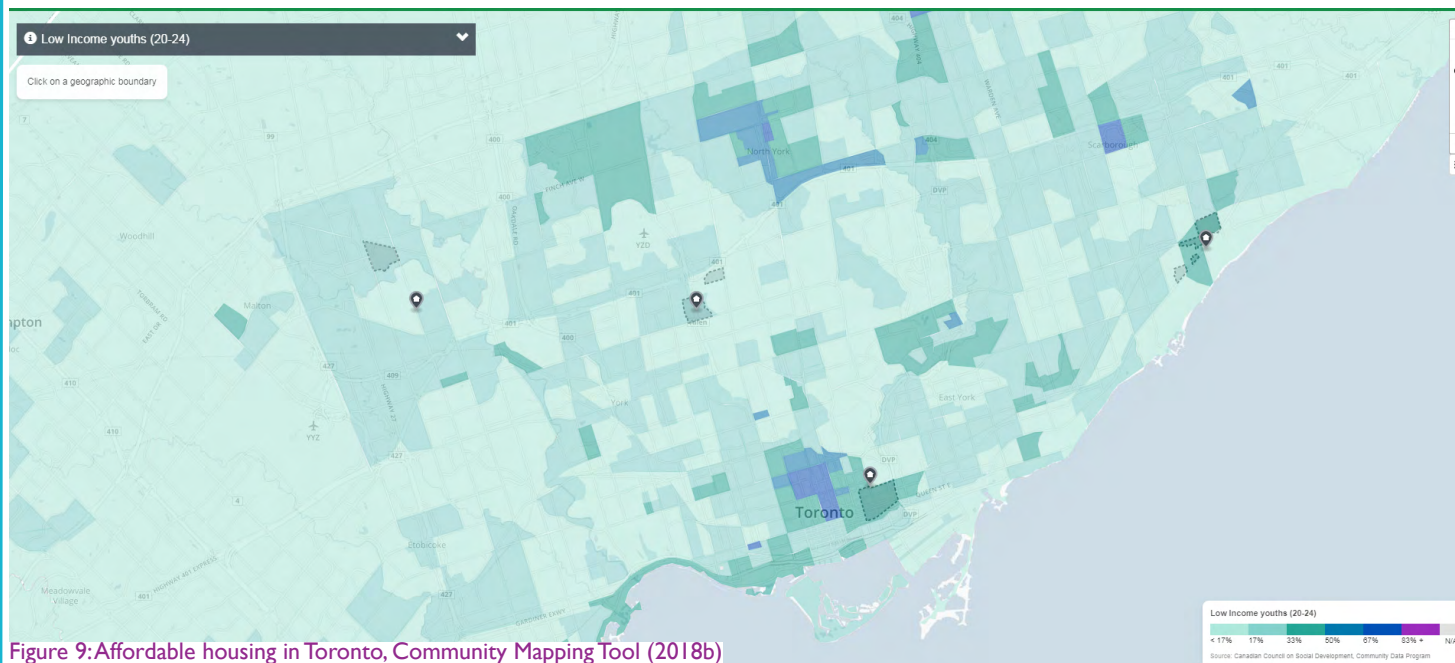


Figure 9: Affordable housing in Toronto, Community Mapping Tool (2018b)

Figures 8 and 9 show the distribution of subsidized and affordable housing in Toronto, with darker regions indicating higher proportions of applied housing units. As demonstrated in Figure 8, there is some subsidized housing scattered across Toronto, and higher concentrations of such housing in downtown regions, including neighbourhoods such as Regent Park. There is significant demand to expand such housing and in 2019 it was estimated that 102,049 were on the waiting list for social housing in Toronto (City of Toronto, 2019). There is also a range of affordable housing options across the city in Toronto, including in several neighbourhoods in the city center as shown in Figure 9. However, the range of affordable housing options does not account for the size of those apartments and it is estimated that 20 percent of tenants in Toronto feel overcrowded (Wellesley Institute, 2016).

Returning to the construction sector, with an after-tax income of about \$59,580, Figures 10 and 11 demonstrate the challenges for form workers in the Toronto housing market. While there are bachelor units (no bedroom) and 1 bedroom apartments available for less than 30% of their income (<\$1,490 per month) in parts of the city core, problems arise as families grow as evidenced by the proportions of income for 2 bedroom apartments and near unavailability of affordable three bedroom apartments closer than parts of Scarborough and Etobicoke (Figure 10). Formworkers seeking to purchase a home would likely be compelled to move outside the Greater Toronto Area, based on costs shown in Figure 11.

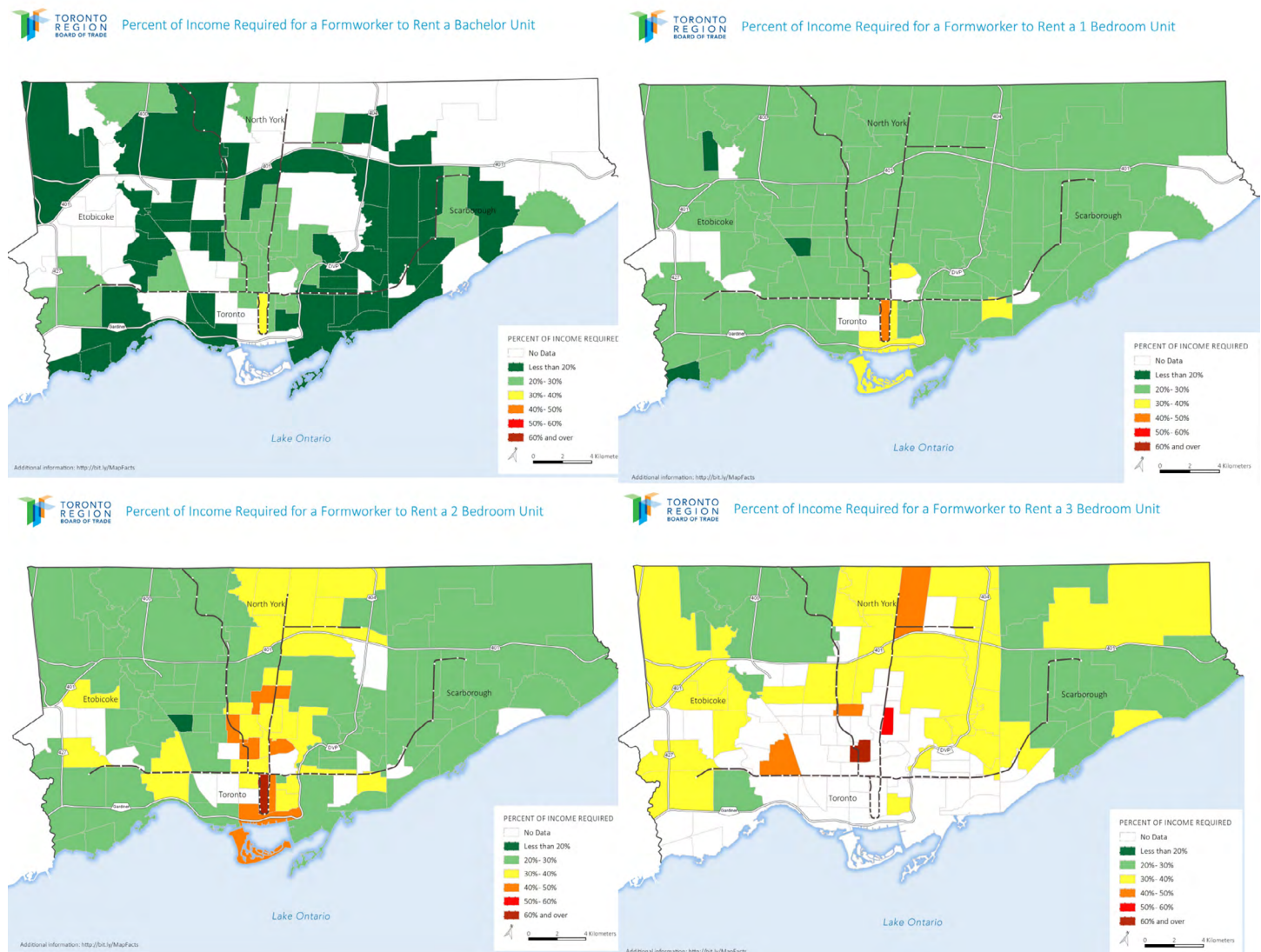


Figure 10: Toronto Region Board of Trade (2019)

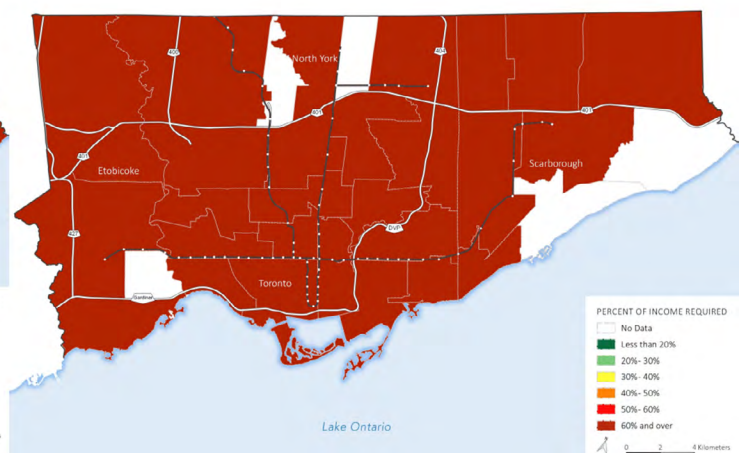
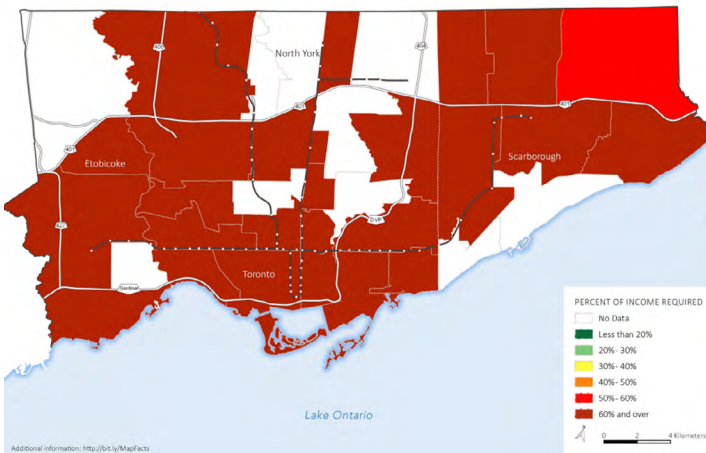
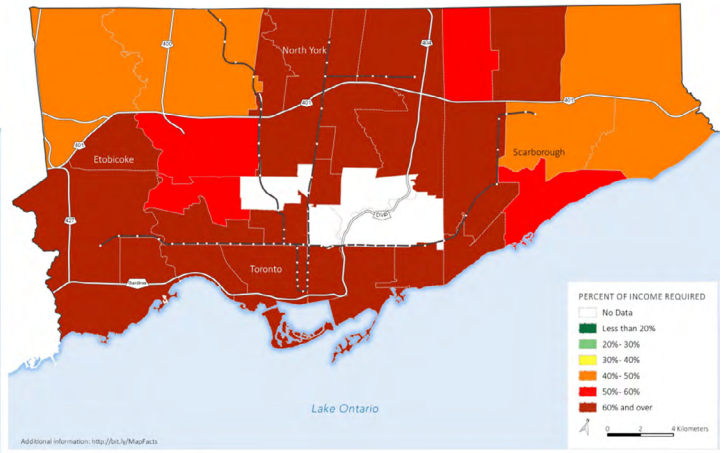
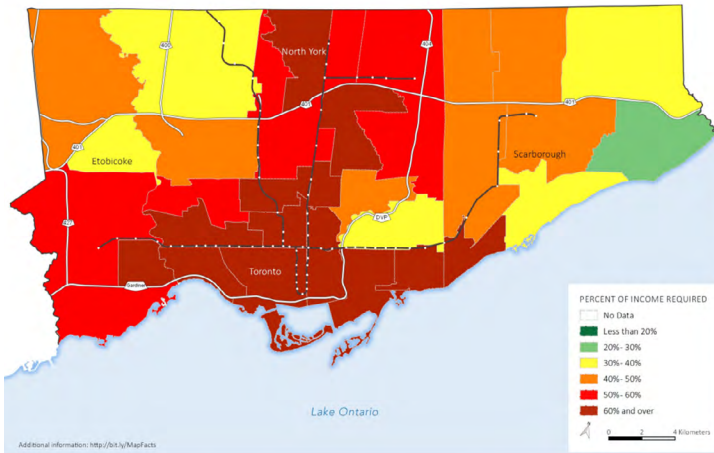


Figure 11: Toronto Region Board of Trade (2019)

The Government of Canada (2016) defines affordable housing as equal to less than 30% of total household income before taxes, while it is estimated that half of households in the Greater Toronto and Hamilton area (GTHA) spend 50% of more of their after-tax income on housing costs (Toronto Region Board of Trade, 2018). The Toronto Region Board of Trade (2018) identifies high housing costs as hurting the labour market in Toronto and is advocating for affordable housing and improved public transit to rectify the issue. The theme of improved transit was taken up in a recent article in the Toronto Star, quoted below.

“Even construction workers, who build housing, benefit from more transit”, said Andrew Pariser of the Residential Construction Council of Ontario (RESCON). ‘That’s why the industry pushes for better transit, not only as a source of employment, but because it makes it easier for workers to get to their jobs in the GTA’” (Kalinowski, 2019).

Conclusion

In itself a precarious industry sensitive to global market forces, construction relies on mobile workers who are able to change work sites and engage in work-related travel patterns, even in urban residential construction. The mobility requirements are even greater for large industrial projects in remote areas but there are sometimes more employer-provided supports for mobility in those contexts to offset cost. These long distance labour commuters often work on rotations so they don’t have to travel daily and can sometimes get extended periods at home to compensate for absence. Daily commutes are more likely to dominate urban, residential, and commercial construction. The requirement of mobility can have a negative impact on workers who must bear the costs, and scheduling and organizational challenges (related to family life and travel) of commuting. Long daily commutes are associated with both financial and health costs as they cut into leisure and rest times and can affect employment options and

daily routines for spouses and family members. In markets such as Toronto and Vancouver where employment in the region is plentiful, housing costs are high and construction incomes may be lower than on large industrial projects, as the ability of employers in downtown areas to attract the labour they require to proceed with construction is likely to be negatively affected but more research is needed to address this question.

We found no studies directly linking housing affordability and commuting issues to the availability of construction labour in these urban markets, however, the high housing prices in Canada's biggest cities may be forcing more construction workers to live further away from construction projects, especially in expensive city centers and this may affect the labour supply for these projects. More research is required to better understand this trend and quantify the impact this is having on the availability of labour in the GTHA and Metro Vancouver.

Clearly, as housing affordability decreases and population densification increases commute times, the ability of some cities to attract the skilled workers they require may become increasingly strained as workers opt for employment closer to home or further afield where rotational work and employer-supported mobility is provided.

To help address skills shortages, where these exist in urban areas, there are several groups that employers could target including women, through women in trades and technology programs. In addition, community groups across the country in urban areas such as Toronto,² Victoria,³ and St. John's⁴ that assist at-risk and homeless youth (male and female) have developed programs to teach these youth construction skills through hands-on project development. As many of these youth already live in the city centre, utilizing these programs could improve recruitment efforts and help train the next generation of construction workers for urban projects, particularly if these workers are able to retain access to affordable or subsidized housing after they are employed. Recruitment efforts in "gateway cities" such as Toronto and Vancouver could also target often under-employed and skilled new Canadians and their children to help build the construction labour force of tomorrow. While there are sometimes issues with foreign credential recognition, the Construction Sector Council

(2011) provides a helpful road map for how to hire and retain internationally trained workers that can assist in overcoming these barriers.

Still, youth and immigrants often face challenges with accessing affordable housing and may not be willing to commute long distances for construction projects once they become skilled and can access better paid work. Advocating for more affordable housing in city centers and improved public transit across the city should help address this problem, and could also create new jobs for construction workers as well. Mobility subsidies and attention to flexible work schedules that help overcome commuting challenges could help urban construction workers better manage the commute to work. This may require further research, potentially by surveying the construction trades industry and unions to learn what they are doing to address problems with commuting and identify any best practices that could be utilized by other companies.

References

- Axisa, J.J., D. M. Scott, K. Bruce Newbold. 2012. Factors influencing commute distance: a case study of Toronto's commuter shed. *Journal of Transport Geography*, 24: 123-129.
- Barber, L. 2016. Construction-phase extended commuting and uneven regional development: Work, households and communities in Newfoundland and Labrador's new extractive economy. *The Extractive Industries and Society*, 3(3):640-648.
- Barber, L. 2018. Inside the Mobilities Regime of Newfoundland and Labrador's Construction Megaprojects: Experiences of Rotational Work Close to Home. *Labour / Le Travail*, 81:187-212.
- BuildForce Canada. N.d. Fast Facts. [BuildForce Canada](#).
- BuildForce Canada. 2015. Meeting Construction and Maintenance Workforce Challenges: National Industry Strategy. *BuildForce Canada*.
- BuildForce Canada. 2019. Construction and Maintenance Looking Forward, National Summary: Highlights 2019-2028. *BuildForce Canada*.
- Burke, D. 2018, December 30. Who will rebuild after a climate disaster as workers retire and weather worsens? [CBC](#).
- Butters, L., H. Hall, G. Halseth, S. Markey, L. Ryser, and K. Vodden. 2019. Policy Synthesis: Community Impacts of Labour Mobility.

2 Eva's "[Construction and Building Maintenance \(CBM\) Training Program](#)"

3 [BladeRunners](#)

4 [Impact Construction](#)

CBC News. 2019. Montreal aims to boost affordable housing as rental market tightens. [CBC](#).

CBRE. 2019. Global Living 2019. [CBRE](#).

Census Mapper. N.d. Average Income Explorer by CensusMapper. [Census Mapper](#).

Chowdhury, T. A., D. M. Scott, and P. S. Kanaroglou. 2013. Urban Form and Commuting Efficiency: A Comparative Analysis across Time and Space. *Urban Studies*, 50(1): 191-207.

City of Toronto. 2019. Social Housing Waiting List Reports. [City of Toronto](#).

CMHC. 2018a. Rental Market Report: Greater Toronto Area. *Canada Mortgage and Housing Corporation*.

CMHC. 2018b. Rental Market Report: Vancouver. *Canada Mortgage and Housing Corporation*.

CMHC. 2018a. Rental Market Report: Montreal. *Canada Mortgage and Housing Corporation*.

Cohrs, A., M. German, and G. Haines. 2017. Getting to 8,000: Building a healthier rental market for the Toronto Area. [Evergreen](#).

Community Mapping Tool. 2018a. Subsidized Housing, Toronto, 2016; generated by Kerri Neil, using *Pathways to Education Canada Community Mapping Tool* (date accessed: June 27, 2019)

Community Mapping Tool. 2018b. Affordable Housing, Toronto, 2016; generated by Kerri Neil, using *Pathways to Education Canada Community Mapping Tool* (date accessed: June 27, 2019)

Community Mapping Tool. 2018c. Low-income youth (20-24) population, Toronto, 2016; generated by Kerri Neil, using *Pathways to Education Canada Community Mapping Tool* (date accessed: June 27, 2019)

The Construction Sector Council. 2007. Working Local: A Study of Labour Mobility in Canada's Industrial Construction Sector. *The Construction Sector Council*.

The Construction Sector Council. 2010. The State of Women in Construction in Canada. *The Construction Sector Council*.

The Construction Sector Council. 2011. Construction Employer's Road Map to Hiring and Retaining Internationally Trained

Gill, P. 2016. Building Infrastructure, Building Talent. [Toronto Region Board of Trade](#).

Government of Canada. 2016. Towards a Poverty Reduction Strategy – A backgrounder on poverty in Canada. *Government of Canada*. Cat. No.: Em20-53/1-2016E-PDF

Gravel, Sylvie, Stéphanie Bernstein, Francisco Villanueva, Jill Hanley, Daniel Crespo-Villarreal, and Emmanuelle Ostiguy. 2017. "Le Recours à l'Embauche Des Travailleurs Étrangers Temporaires Dans Les Secteurs Saisonniers Au Québec: Le Point De Vue Des Employeurs." [Canadian Ethnic Studies](#) 49 (2): 75-98.

International Labour Organization. 2019. Working on a warmer planet: The impact of heat stress on labour productivity and decent work. [International Labour Organization](#).

Kalinowski, T. 2019. They cook Toronto's food, and build its houses — but can they afford to live here? [Toronto Star](#).

Lippel, K. and D. Walters. 2019. Regulating health and safety and workers' compensation for the mobile workforce: now you see them, now you don't. *New Solutions*, 29 (3).

Moos, M., N. Revington, and T. Wilkin. 2018. Is there suitable housing near work? The impact of housing suitability on commute distances in Montreal, Toronto, and Vancouver. *Journal of Urbanism: International Research on Placemaking and Urban Sustainability*, 11(4): 436-459.

Neis, B., L. Barber, K. Fitzpatrick, N. Hanson, C. Knott, S. Premji and E. Thorburn. 2018. Fragile synchronicities: diverse, disruptive and constraining rhythms of employment-related geographical mobility, paid and unpaid work in the Canadian context. *Gender, Place & Culture*, DOI: 10.1080/0966369X.2018.1499616

Newbold, B., D. Scott, and C. Burke. 2017. Immigrant status and commute distance: an exploratory study based on the greater Golden Horseshoe. *Transportation*, 44(1), pp.181-198

Pennings, R. (2005). Working Mobile: A Study of Labour Mobility in Canada's Industrial Construction Sector. *The Construction Sector Council*.

Premji, S. "It's Totally Destroyed Our Life": Exploring the Pathways and Mechanisms Between Precarious Employment and Health and Well-being Among Immigrant Men and Women in Toronto." *International Journal of Health Services*, 48(1):106-27.

Pyper, W. 2008. Skilled trades employment. *Statistics Canada, Perspectives on Labour and Income*, 9 (10), Catalogue no. 75-001-X

Reid-Musson, E., Buckley, M., & Anderson, B. (2015). Building Mi-grant Precarity: Employment, Citizenship & Skill in Toronto and London's Construction Sectors. [Working Paper](#).

Ryser, L., G. Halseth, S. Markey, and M. Morris. 2018. On the Move: Labour Mobility and Community Capacity. [On The Move Partnership](#).

Savage, K. 2019. Results from the 2016 Census: Commuting within Canada's largest cities. [Statistics Canada](#).

So, K.M., P.F. Orazem, and D.M. Otto. 2001. The effects of housing prices, wages and commuting time on joint residential and job location choices. *American Journal of Agricultural Economics*, 83: 1036-1048.

Statistics Canada. 2015. 2016 Census of Population questions, long form (National Household Survey). *Government of Canada*.

Statistics Canada. 2016a. Toronto CMA – Percentage of the population below the after-tax low-income measure in 2015, by 2016 census tract (CT), Census of Population. *Government of Canada*.

Statistics Canada. 2016b. Vancouver CMA – Percentage of the population below the after-tax low-income measure in 2015, by 2016 census tract (CT), Census of Population. *Government of Canada*.

Statistics Canada. 2019a. Table 14-10-0023-01 - Labour force characteristics by industry, annual, annually. *Government of Canada*.

Statistics Canada. 2019b. 2016 Census of Population. Table: Main Mode of Commuting (10), Commuting Duration (6), Time Leaving for Work (7), Occupation - National Occupational Classification (NOC) 2016 (11) and Sex (3) for the Employed Labour Force Aged 15 Years and Over Having a Usual Place of Work or No Fixed Workplace Address, in Private Households of Canada, Provinces and Territories, Census Metropolitan Areas and Census Agglomerations, 2016 Census - 25% Sample Data. *Statistics Canada*. Catalogue no. 98-400-X2016335.

Toronto Region Board of Trade. 2018. The Housing Policy Play-book. [Toronto Region Board of Trade](#).

Toronto Region Board of Trade. 2019. Priced Out: These were the people in your neighbourhood. Construction Formworker –

housing maps. [Toronto Region Board of Trade](#).

Wellesley Institute. 2016. Submission to National Affordable Housing Strategy Consultation. [Wellesley Institute](#).

Yaropud, T., J. Gilmore and S. LaRochelle-Côté. 2019. Results from the 2016 Census: Long commutes to work by car. *Statistics Canada*.

