

Will Feds Answer the Call? Infrastructure Investment Lags Amidst Highly Taxed Housing Construction

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EXECUTIVE SUMMARY

Economic growth is a crucial factor for a country's overall development and the well-being of its citizens. This growth brings several benefits, including job opportunities, reduced unemployment rates, increased income levels, and higher standards of living for individuals. Moreover, economic growth leads to an increase in tax revenue for the government, which can be invested in public services such as education, healthcare, and infrastructure, ultimately improving the quality of life of citizens.

However, in the context of an aging population and declining birth rates, maintaining economic growth and sustainability has become a challenge. In Ontario, as the population ages, the number of people in the workforce decreases, leading to a shortage of skilled workers in various sectors. To combat this shortage and maintain a robust economy, immigration has become critical for the community to grow. Immigration provides a steady stream of workers with diverse skills, which is necessary to fill the labour gap and sustain the economy.

With the aging population and the need for workers, the responsibility of supporting growth falls on all three levels of government in Canada.

A primary requirement for population growth is the construction of new homes. However, building new homes in Ontario requires significant public infrastructure investment, which is primarily the responsibility of local governments. Unfortunately, local governments cannot access the fiscal benefits of growth through other tiers of government, making it challenging to fund public infrastructure investment adequately.

While the federal government enjoys the majority of the benefits of growth through the taxation of new homes in Ontario, it has not been a significant participant in funding public infrastructure investment, averaging a rate of 7.1%. The low participation of the federal government in funding growth, and its absence as a source puts a strain on local governments and residents, which has contributed to the experience of inadequate infrastructure investment and the impediment of economic growth in Canada generally, and Ontario specifically.

To understand the costs and benefits of growth better, this research report examines the sources of taxation related to the construction of new homes in Ontario and the level of public infrastructure investment that supports all population and economic growth. By examining these factors, we can gain insights into the pressures and constraints imposed upon current and new residents and their local governments.

RESULTS AT A GLANCE

The research findings highlight the following key points:

- Since 2010, Ontario has been in a housing affordability crisis, with the unaffordability of homes having increased by 58%. Much of the problem has to do with the availability of new homes.
- Ontario's population must grow to counter the effects of an aging society. Without immigration, the number of dependents (people who are too young or too old to work) would grow by 40% by 2050, compared to the number of young people who can work and support them. Additionally, by 2050, Ontario would have the same number of non-government workers as it had in 2008 without immigration.
- The construction of new homes is vital to support the population's growth, but the ability of Ontario to build new homes has been decreasing. While the population has grown by 68% since the 1970s, the number of annual new housing completions has dropped by 23%.
- Public infrastructure investment funding required to support growth trends is 30% below what economic analysis would otherwise suggest, compounding the growth problem.
- The tax burden on new housing has significantly increased and now accounts for 31% of the purchase price of a new home in Ontario, twice that on the rest of the economy. Production taxes and taxes paid on the sale of a new home are the primary contributors to this tax burden challenge.
- The government is the largest beneficiary of a new home's construction, accounting for 31% of the purchase price of a new home, three times more than residential construction builders and housing material suppliers.
- Of the 31% tax burden on a new home in Ontario, the federal government is the largest beneficiary, with a 39% share. However, the federal government contributes only 7.1% of the public infrastructure investment required for Ontario to grow. As a result of this inflated growth benefit to cost ratio, the federal government is 9.7 times better off than the province and 6.9 times better off than Ontario municipalities.

Tax burden on new housing in Ontario is 31% of the purchase price.

Governments make three times more than a builder of a new home.

A new home in Ontario has a tax burden twice that of the rest of the economy.

The federal government is the largest beneficiary of new housing at 39% share of tax revenues. It invests 7.1% in Ontario public infrastructure.

CONCLUSIONS

The research findings indicate a critical need for increased federal government involvement in funding public infrastructure investment to support growth and to ease the housing unaffordability problem in Ontario. This lack of support has arguably been a catalyst for the worst housing affordability crisis in Ontario's history. Furthermore, it hinders population growth and economic development, making it increasingly difficult to construct new homes.

Moreover, the current level of federal investment in public infrastructure in Ontario appears to be imbalanced compared to the benefits it receives from housing development. This puts the provincial government and the local governments of Ontario in a difficult position as the taxation revenues from building new homes is not allocated proportionately to those who are responsible for the required public infrastructure investment to support such growth.

While Ontario is facing an unprecedented housing unaffordability crisis, the federal government's recent proclamation of a 55% increase in immigration on pre-pandemic levels highlights the lack of understanding of the housing crisis on the ground and the fiscal and public investment imbalances that exist due to federal government policy. The uncomfortable contradiction is that the federal government's immigration policies aim to drive growth in Ontario, but it does not provide enough funding from the benefits growth to allow the province to grow. This awkward situation has been a factor in Ontario's unaffordable housing crisis and has raised concerns about Ontario's economic sustainability and the quality of life of its residents.

To promote sustainable economic growth in Ontario, the federal government must address this imbalance by increasing its involvement in funding relevant public infrastructure investment. By doing so, the federal government can support growth while sharing the burden of funding growth more equitably. This will ensure that the benefits of growth are shared more equally, creating a more sustainable economic future for Ontario and Canada as a whole.

INTRODUCTION

The economic growth and prosperity of Canada heavily rely on the development of its provinces and territories, and Ontario plays a crucial role in driving the national economy as the most populous province in the country. However, Ontario is facing significant challenges related to unaffordable housing, the underinvestment in public infrastructure, and sustainable economic growth. The need for workers and an aging population make growth imperative, which requires appropriate public infrastructure investment, and all three levels of government in Canada have a responsibility to support it.

While the federal government's immigration policies have been driving growth in Ontario, there is a lack of funding for public infrastructure investment required to sustain that growth. Housing unaffordability has reached a crisis level, with high costs deterring workers from moving to urban centers, risking wider economic damage. A large portion of renters' and new homebuyers' incomes must be spent on housing, putting them under significant financial pressure.

To restore housing affordability in Ontario, there needs to be a significant increase in the production of new homes, as found by CANCEA in 2017¹ and CMHC in 2018² and 2022³. In fact, beyond current trends, the production of new homes in Ontario would have to at least increase by over 80%. However, achieving more housing construction presents significant challenges. Municipal governments, which have traditionally led housing policy, have no access to fiscal benefits of growth. Provincial governments set goals for the province as a whole, but municipalities are primarily influenced by local residents who often oppose new housing. Furthermore, there are significant delays in the processes of approving new housing construction, and requesting approval today may not lead to those housing units being built for many years in many places.

Then there is the federal government which announced in late 2022 a record-breaking immigration target of 1.5 million new Canadians within the next three years, with plans to bring in 500,000 people in 2025⁴. While federal officials claim that this will help boost the economy, the targets are causing concern among many due to the current housing crisis in the country. The federal government seems to have ignored the situation on the ground, and it is raising questions about how current and new generations of Canadian's will be able to find affordable and adequate housing, and what impact this influx of people will have on an already strained housing market.

While governments have vocally supported the building of more housing as part of the solution for the housing shortage, it is important to consider whether this rhetoric matches with what governments are doing to encourage its construction. This report aims to investigate the sources of taxation related to the construction of new homes and who pays for the level of public infrastructure investment that supports all economic growth. Additionally, it will analyze how different levels of government share in

¹ Understanding the forces driving the shelter affordability issue, CANCEA 2017

² Examining escalating house prices in large Canadian metropolitan centres, CMHC 2018

³ Canada's Housing Supply Shortages: Estimating what is needed to solve Canada's housing affordability crisis by 2030, CMHC 2022

⁴ Canada To Welcome Unprecedented 1.45 Million Immigrants In Next Three Years www.immigration.ca

the benefits and costs of growth concerning the construction of new homes and the level of public infrastructure investment required. It is worth considering whether the taxation of housing is exacerbating the housing affordability problem and if a high tax burden on new homes is standing in the way of growth.

Objectives and Methodology

The primary objectives of this research analysis are to provide a transparent and replicable account of:

- The sources of taxation related to the construction of new homes and the level of public infrastructure investment required to support economic growth; and
- How different levels of government share the benefits and costs of growth regarding the construction of new homes and the level of public infrastructure investment.

To achieve these objectives, this research report employs a quantitative methodology that involves decomposing the economic accounts provided by Statistics Canada, the Ontario government, and the Financial Information Returns (FIR) provided by municipalities. The analysis intentionally avoids using market or proprietary information to ensure stakeholders have confidence that the results use the same data produced and used by different levels of government.

Given the unique circumstances presented by the COVID-19 pandemic, all reported numbers in this report represent the three-year average between 2019 and 2021, unless otherwise specified. To highlight the tax components associated with the construction of new homes, all percentages are expressed in terms of either the builder cost before taxes on production, such as development charges (DCs) and other fees paid. Once production taxes are added to the builders' costs, the total aligns with the definition of economic output in the economic accounts.

This methodology ensures the results presented in this report are transparent, replicable, and based on publicly available data sources. By employing a rigorous methodology, this research aims to provide policymakers and stakeholders with valuable insights into the challenges and opportunities associated with growth in Ontario.

Importance of Growth to Ontario

Economic growth is vital for the overall development and well-being of a country and its citizens. It refers to an increase in the production of goods and services in an economy over time, resulting in increased income, employment, and living standards for individuals.

One of the critical benefits of economic growth is that it creates job opportunities, reduces unemployment rates, and increases income levels, leading to higher standards of living for individuals. Economic growth also increases the government's tax revenue, which can be used to invest in public services such as education, healthcare, and infrastructure, improving the overall quality of life in the country.

In the context of an aging population and declining birth rates, immigration is critical for Ontario's community to grow and maintain a robust economy. As the population ages and the birth rate declines, the number of people in the workforce decreases, leading to a shortage of skilled workers in various

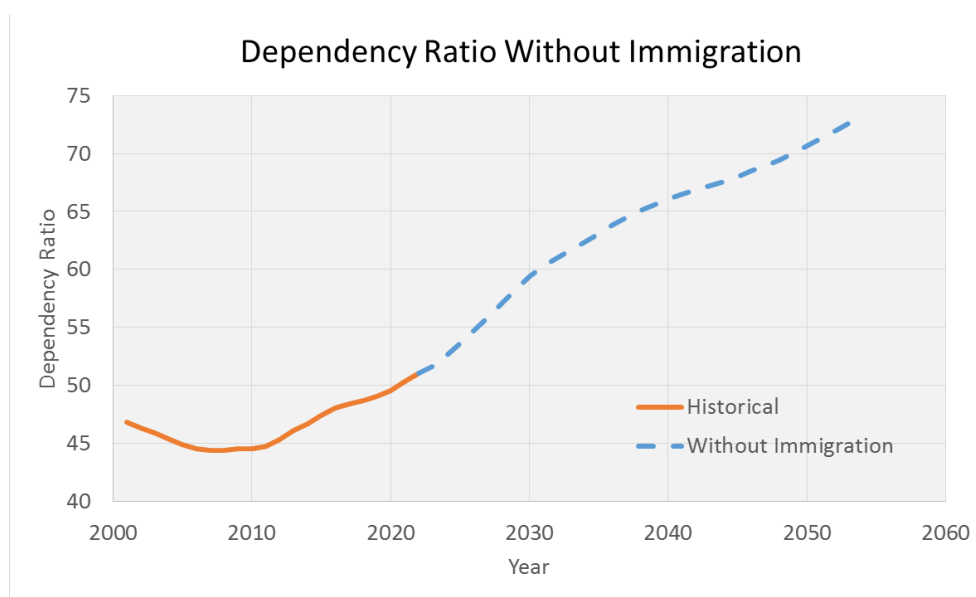
sectors. Immigration provides a steady stream of workers with a diverse range of skills, which is essential to fill the labour gap and sustain the economy.

The Dependency Ratio Problem

A dependency ratio is a measure that compares the number of dependents (people who are too young or too old to work) to the number of people who are working and able to support them⁵. It is usually expressed as a ratio or percentage and is used to evaluate the economic burden on a population's productive workforce.

A dependency ratio measures the number of people not working to the number of people working. As the ratio increases, there is a problem for future sustainability.

Figure 1 Growth in Ontario's dependency ratio without immigration



Monitoring the dependency ratio is important because it provides an indication of the pressure that a growing population can place on the working-age population to support those who are not working. In Ontario, as in many other provinces and countries, an aging population and declining birth rates have resulted in a higher dependency ratio, which means that there are fewer people of working age to support a growing number of dependents. Canada currently has a dependency ratio of 52.2%, and Ontario 50.4%. Without immigration, Ontario's dependency ratio would grow to 70.7% by 2050, roughly where Japan is currently, leading to threats to urban form, economic sustainability, long-term solvency of public pensions, health care, and long-term care systems⁶.

Without immigration, Ontario's dependency ratio would grow to 70.7% by 2050, which would be second highest in the world.

⁵ <https://www150.statcan.gc.ca/n1/pub/82-229-x/2009001/demo/dep-eng.htm>

⁶ Shrinkonomics Lessons from Japan, IMF 2020

This has important implications for the economy, as a high dependency ratio can result in increased pressure on public services and reduced economic growth. One way to address this issue is by encouraging immigration, which can help to increase the number of people of working age in the population.

Later in this report it is found that the tax burden on new homes in Ontario is twice as much as the tax burden on the rest of the economy. This is difficult to ignore when considering the housing unaffordability crisis in Ontario and its potential to inhibit the construction of new housing, all of which makes it more difficult to attract immigrants to the province and the ability to manage the dependency ratio problem. It is therefore important to address the tax policy issue to help increase the supply of affordable housing and attract new residents to Ontario, which can help to reduce the dependency ratio and support long-term economic growth.

Growth: Role of Residential Construction and Public Infrastructure

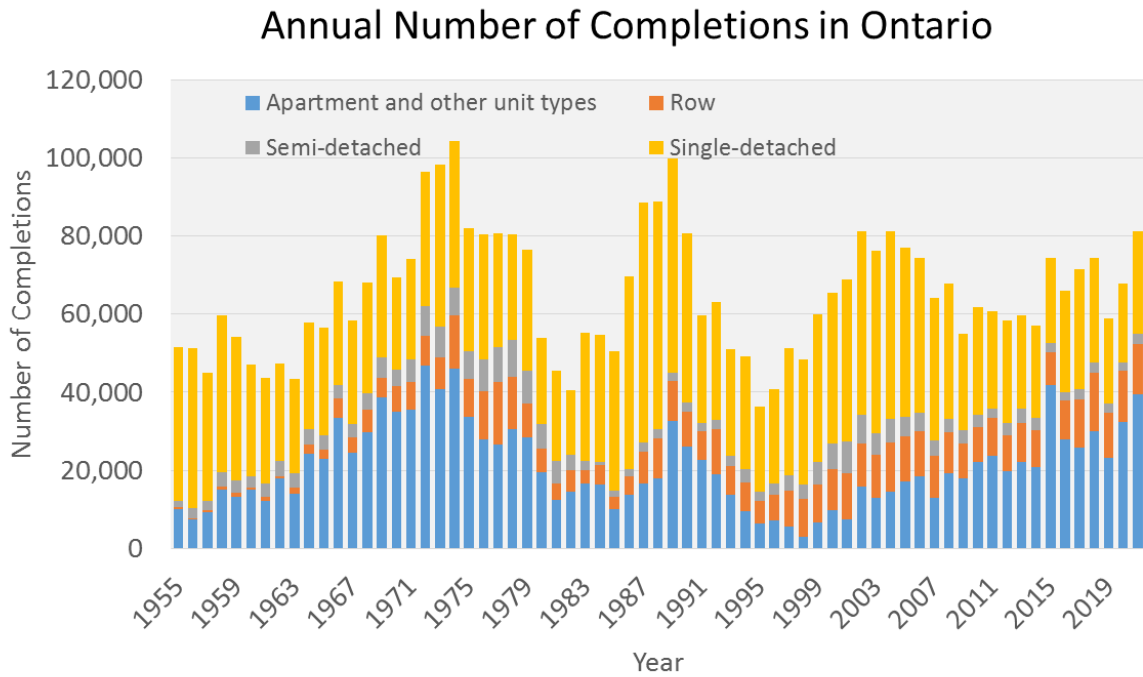
Residential construction of new homes and new investments in public infrastructure are critical to population growth and overall economic growth:

- **New housing construction:** Building new homes increases the housing supply, making it easier for new residents to move into the area. This, in turn, attracts more people to the region, creating a larger workforce and customer base, which can drive economic growth.
- **Public infrastructure investment:** Adequate public infrastructure, including transportation, energy, and communication networks, is necessary to support population growth and the expansion of businesses. This includes building new roads, bridges, public transit systems, water and sewage systems, and broadband networks. It also includes investing in schools, hospitals, and other public facilities that are critical to attracting and retaining residents.
- **Job creation:** Residential construction and public infrastructure investment create job opportunities, leading to increased employment levels and a more robust economy. This job creation can also lead to increased spending, as new workers have disposable income to spend in the local economy, further driving economic growth.
- **Quality of life:** Access to adequate housing and public infrastructure is critical to maintaining a high quality of life for residents, making the area more attractive to businesses and individuals looking to relocate.

The residential construction of new homes and new investments in public infrastructure are important to population growth, job creation, and economic growth, making them critical components of any strategy aimed at supporting sustainable and inclusive economic and social progress.

To gain a sense of Ontario's experience with building new homes, figure 2 shows the number of new housing completions since 1971.

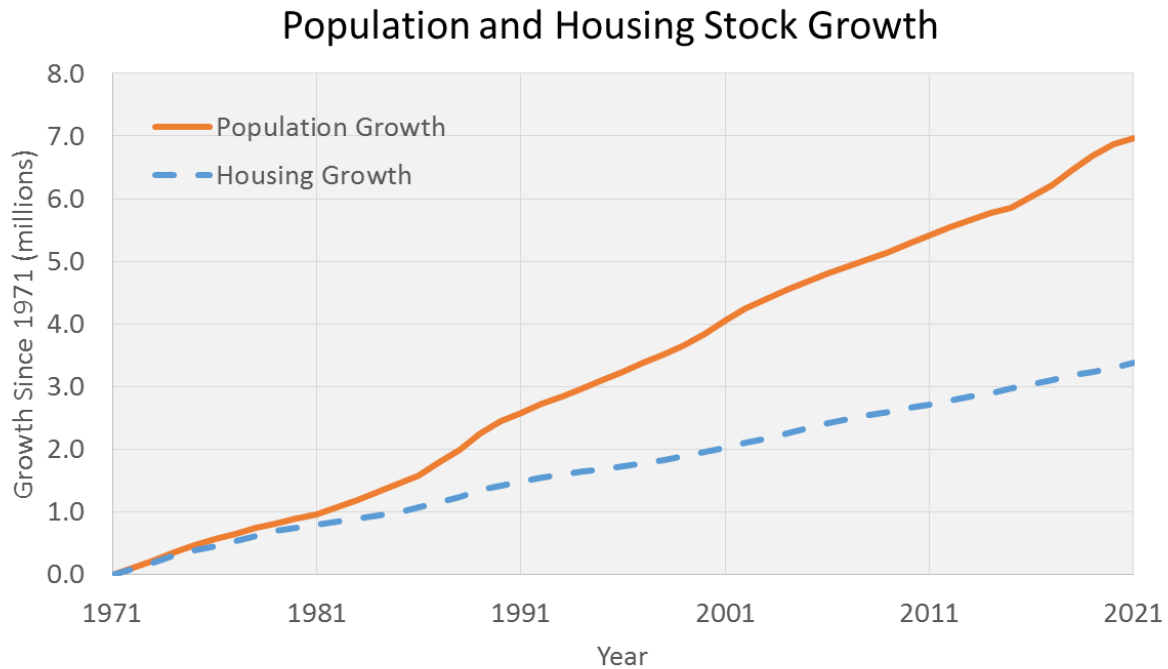
Figure 2 Housing completions since 1971 in Ontario



While the population has grown in the past by 68% since the 1970's, the number of annual new housing completions has dropped by 23%. The production of new homes has not been keeping up with population growth, with younger generations and new residents having to squeeze into more unsuitable dwellings.

Population
↑ +68%
Building of new homes
↓ -23%

Figure 3 Growth in housing and population since 1971



The challenge of declining rates of new housing relative to population growth is exacerbated further by the stagnant levels of public infrastructure investment. In the past decade, although the Ontario economy has grown in real terms by approximately 18% and its population has increased by 12%, public infrastructure investment levels have remained under invested. Research suggests that public infrastructure investment and maintenance should be above 4% of economic activity to promote growth and sustainability⁷. At current levels, investment in Ontario public infrastructure is 30% below what economic analysis suggests it should be and the levels of investment have not increased in real terms as a percentage of GDP for the past 10 years.

At current levels, investment in Ontario public infrastructure is 30% below what economic analysis suggests it should be.

This is consistent with Canada's poor track record with public infrastructure investment. A more recent study found that, in terms of export and transportation infrastructure investments, when compared to other countries, Canada's investment levels have dropped significantly in the past five years. The nation now invests only half as much as Australia and 64% of what the UK invests in relation to GDP⁸.

⁷ Public Infrastructure Underinvestment: The Risk to Canada's Economic Growth, CANCEA 2017. Infrastructure Update 2018, CANCEA 2018

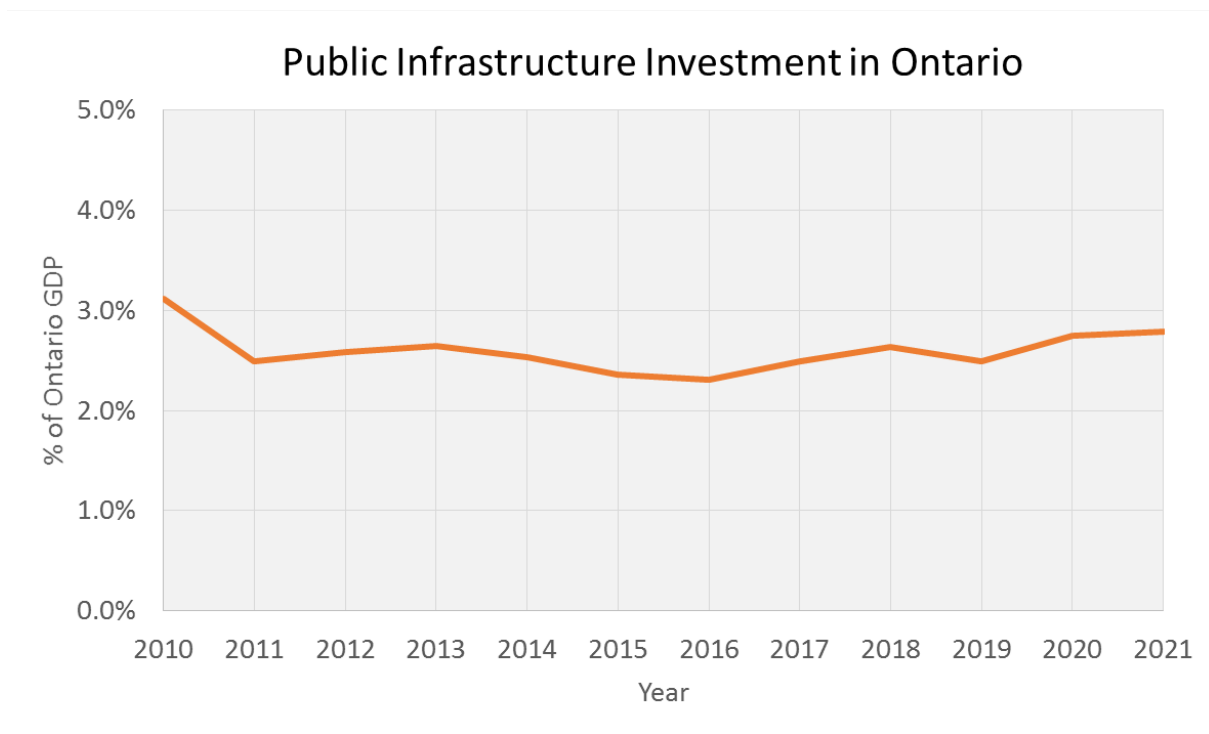
⁸ Exports and Transportation Infrastructure Analysis for the Canadian Construction Association, CANCEA 2022

Additionally, the volatility⁹ of transportation infrastructure commitments in Canada is considerably higher than its peers, at 3.6 times the average, 10 times more than the US, and double that of Mexico¹⁰.

Public infrastructure investment in Ontario refers to all investments made by all levels of government. This includes federal, provincial and municipal investments in:

Public Infrastructure Investments in Ontario	
Transportation engineering infrastructure	Marine engineering infrastructure
Waterworks infrastructure	Electric power infrastructure
Sewage infrastructure	Communications networks
Commercial buildings	Oil and gas engineering construction
Other engineering construction	Other Infrastructure Categories: aboriginal services, defence services, educational services, government business enterprise, hospitals, and nursing and residential care facilities
Institutional buildings	
Transportation machinery and equipment	

Figure 4 Public infrastructure investment as a percentage of GDP



⁹ The idea of the volatility of infrastructure investments, as opposed to stable and predictable investments, was introduced in the RRCAO study “Public Infrastructure Underinvestment: The Risk to Canada’s Economic Growth”, CANCEA 2010.

¹⁰ Exports and Transportation Infrastructure Analysis for the Canadian Construction Association, CANCEA 2022

Barriers to the construction of new homes and investment in public infrastructure are a significant constraint on growth in several ways:

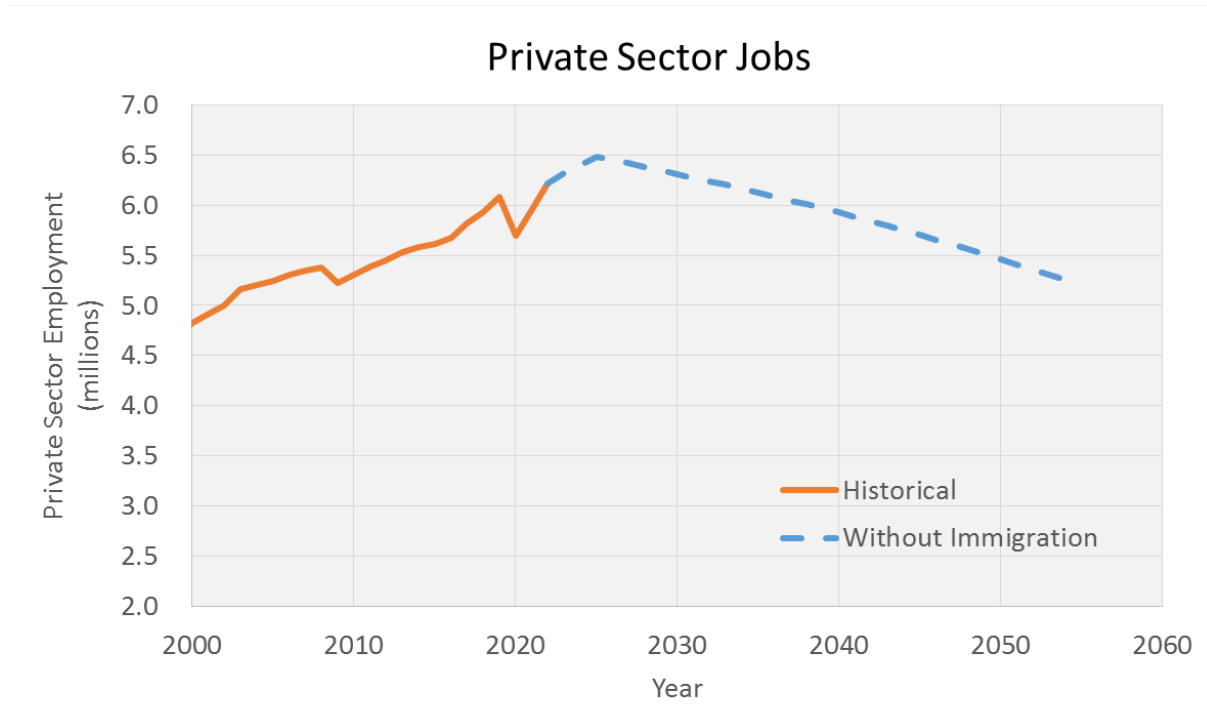
- **Housing affordability:** High taxation rates on new residential construction increases the cost of purchasing new homes, making it less affordable for families and individuals. This can lead to a shortage of housing, increasing rental prices and reducing population growth in the area.
- **Infrastructure deficits:** Lack of investment in public infrastructure can lead to a deficit in essential services, such as transportation, healthcare, and education. This makes Ontario less attractive to new businesses and individuals, hindering population growth and economic activity.
- **Business investment:** Without adequate public infrastructure, businesses are less likely to invest in the province, reducing job opportunities and economic growth potential.
- **Demographic changes:** The province of Ontario will face an increasing dependency on fewer workers if economic immigration does not occur. If immigration were not to occur, Ontario would have the same number of non-government workers by 2050 as it had in 2008, which threatens Ontario's ability to generate real economic substance¹¹. Refer to figure 5.
- **Reduced government revenue:** The lack of economic growth resulting from barriers to construction and infrastructure investment can reduce government revenue from taxes and fees, limiting the resources available to invest in essential public services¹².

If immigration were not to occur, Ontario would have the same number of non-government workers by 2050 as it had in 2008.

¹¹ This risk is compounded by the fact that nearly one in four employed workers in Ontario work for the government which crowds out private enterprises, particularly at the small business level.

¹² Again, this issue is significantly compounded by the high levels of public sector employed workers in Ontario.

Figure 5 Private sector labour market without growth



Investing in the capital stock of public infrastructure and housing is crucial for promoting population growth. Failure to make such investments may hinder growth by creating a shortage of housing for new residents and inadequate infrastructure for residents to live, work, and engage in leisure activities. Therefore, it is imperative to prioritize investments in public infrastructure and housing to support sustained economic and social development.

Overall, barriers to the construction of new homes and investment in public infrastructure significantly limit population growth, reduce economic potential, and create social and debt financing challenges. It is, therefore, essential to address these barriers to promote sustained economic growth and development.

BUILDING A NEW HOME IN ONTARIO

Breakdown of costs

The construction of a new home can be broken down into the following components:

- Input of goods and services used by a builder such as raw materials (including land), architect services etc. These costs are referred to as indirect costs and any taxation related to those are called indirect taxation;
- Federal and provincial taxes on production;
- Local taxes on production and other local government fees, which include development charges, building permit fees etc.;
- Wages and benefits for construction workers. These in turn produce personal income tax revenues for the province and the federal government;
- Builder margins before taxes and financial costs. These in turn produce corporate income tax revenues for the province and the federal government;
- Federal and provincial sales tax which is paid on the sale of the new home. Rebates are accounted for with the net revenue being reported¹³;
- Land transfer taxes which are charged by the province and the City of Toronto upon the transfer of title to a new home.

The following table is a deconstruction of the economic accounts that relate to the production of a new home in Ontario. The results are the aggregate results for Ontario.

Table 1 Components of the final purchase price of a new home in Ontario

	Annual Value (\$B, 3 year average)	Percent of Builders Cost before Production Taxes
Input Goods and Services	\$29.9	56.6%
Wages and Benefits	\$14.7	27.8%
Margins	\$8.2	15.6%
Total Builder Cost before production taxes	\$52.8	100.0%
Production taxes (including development charges)	\$4.5	8.6%
Total Builder output (cost)	\$57.3	108.6%
Net Provincial Sales Tax	\$3.0	5.7%
Net Federal Sales Tax	\$2.9	5.5%
Land Transfer Taxes	\$1.8	3.3%
Total Purchase Cost	\$65.0	123.1%

¹³ Note that the rebates are marginal (federally), and capped (provincially) as the value at which a home is sold exceeds the limits of those homes that would qualify. Also note that the value of a home that is used as the test for a sales tax rebate includes production taxes such as development charges.

Regarding Ontario's aggregate results, the construction of new homes generates a total builders' cost of \$52.8 billion. However, an additional \$12.2 billion in production, sales, and transfer taxes are added by the time the new home is sold, representing an additional 23.1% on top of builders' costs. It is important to note that all tax credits and rebates have been taken into account, while real estate fees and legal expenses of the sale have not been included in this analysis.

The meaning of the aggregate numbers presented can be challenging to comprehend. Therefore, to make it more relatable to those Ontarians that seek to buy a new home, the following table shows the results when the totals are divided by the number of Ontario housing completions. These results provide an approximation of the average cost of building a new home in Ontario, making it easier for Ontarians to understand the costs associated with purchasing a new home.

Table 2 Average cost components per dwelling constructed in Ontario

	Annual Value (\$, 3 year average)	Percent of Builders Cost before Production Taxes
Input Goods and Services	\$432,945	56.6%
Wages and Benefits	\$211,608	27.8%
Margins	\$118,339	15.6%
Total Builder Cost before production taxes	\$762,892	100.0%
Production taxes (including development charges)	\$66,910	8.6%
Total Builder output (cost)	\$829,802	108.6%
Net Provincial Sales Tax	\$43,536	5.7%
Net Federal Sales Tax	\$41,710	5.5%
Land Transfer Taxes	\$25,326	3.3%
Total Purchase Cost	\$940,374	123.1%

As can be seen in Table 2, the three-year average price paid for a new home in Ontario is about \$940,400 before real estate and legal fees. This is over 15 times the Ontario median household after-tax income over the same period. Production, sales and transfer taxes that are added by the time the new home is sold is 2.9 times the Ontario median after-tax income household income.

Production, sales and transfer taxes that are added by the time the new home is sold is 2.9 times the Ontario median household after-tax income.

Total Taxation Revenues

The cost to the builder, before any production taxes and fees, makes up 81.1% of the \$940,400 to purchase a new home. The balance of 18.9% are taxes paid, being on average \$177,500 per dwelling¹⁴.

Given the objective of the research is to understand all the taxation embedded in the cost of a new home, the costs are further decomposed by the income and corporate taxes that are paid as part of the

¹⁴ Note that production taxes and fees vary considerably across Ontario and can be well above the 8.8% on average as reported here. Also note that sales taxes and transfer fees apply to production taxes as well.

building process. Table 3 shows that the purchase price of a house contains at least 31% of taxation revenues in total. Note that tax on land value appreciation held by a builder has not been taken into account as it is unknown.

Table 3 Average tax burden per residential dwelling constructed in Ontario

	Average per Dwelling	Total Taxes	Type of Tax				
			Income Tax	Corporate Taxes	Sales Taxes	Production Taxes	Transfer Taxes
Input Goods and Services	\$432,945	\$45,291	\$28,392	\$10,614		\$6,284	
Wages and Benefits	\$211,608	\$54,613	\$54,613				
Margins	\$118,339	\$20,394		\$20,394			
Production Taxes	\$66,910	\$57,659				\$57,659	
Provincial Sales Tax	\$43,536	\$43,536			\$43,536		
Federal Sales Tax	\$41,710	\$41,710			\$41,710		
Land Transfer Taxes	\$25,326	\$25,326					\$25,326
Total Purchase Cost	\$940,374	\$288,528	\$83,005	\$31,009	\$85,246	\$63,942	\$25,326
Percent of Purchase Price		30.7%	8.8%	3.3%	9.1%	6.8%	2.7%

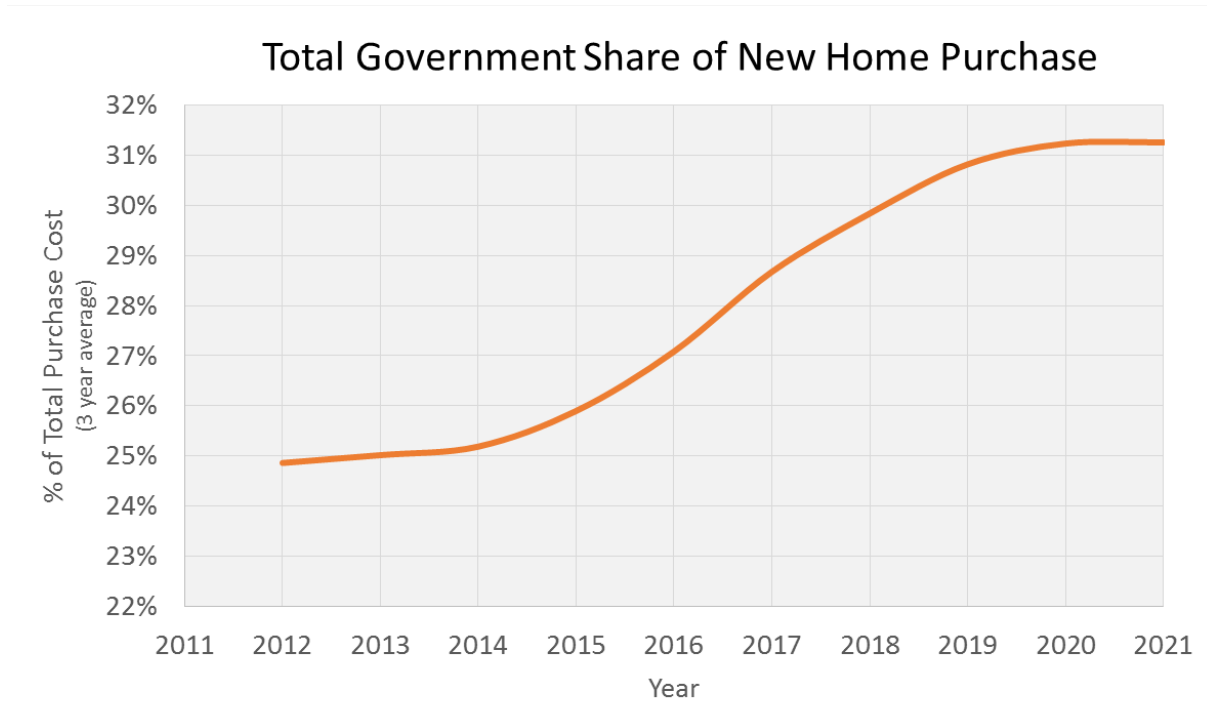
With the total taxation contained in the construction of new home at 31% of its purchase price, at the average purchase price of \$940,400, \$288,500 is taxation revenue paid to some level of government. Sales taxes are the largest tax source at 29.5% of total tax, with income taxes embedded in the wages paid at 28.8% being the second. Production taxes including development charges are a close third at 22.2% of total tax.

Financial Gainers from a New Home Build in Ontario

By taking into account the costs and taxes paid as part of constructing a new home in Ontario, it was found that the total taxation contained in the purchase of a new home is 31% of its final price.

Over the past 10 years, there has been a notable increase of 26% in the share of a new home that goes to government. This trend is largely driven by the price inflation of homes, which has allowed for large revenue increases in land transfer taxes and sales tax revenues. In addition, development charges, which also contribute to the amount of land and sales tax paid, appear to be aligning with housing market values, which further compounds the government's share of a new home.

Figure 6 Government share of new home purchase price



Once the purchase costs of a new home are adjusted for the cost of land and raw materials, and considering what industry stakeholders gain on an after-tax basis from the building of a new home, it is found that the stakeholder with the largest returns is the total taxation revenues of government at 31%. Construction workers, on an after-tax basis, are the second largest beneficiary at 17.0% of the cost of a new home. The after-tax margins of developers and suppliers are the lowest beneficiaries¹⁵.

Government is the largest beneficiary from the process of building a new home in Ontario at 31%.

¹⁵ While land and materials represent 23% of the purchase price of a new home, it is not being counted as the line item doesn't represent an obvious stakeholder in the building process.

Table 4 Take home breakdown from a new dwelling as percentage of final purchase price

Recipient	% of Final Cost of Purchaser
Governments	31%
Value of Land and materials	23%
Construction workers (after tax)	17%
Supplier workers (after tax)	11%
Developer margin (after tax)	10%
Supplier margins (after tax)	7%
Total	100%

It is worth noting that any gains made, and taxes paid, from the change in land values held by developers have not been included in the calculation of their margins, as it is unknown¹⁶. If some developers engage in “land banking,” it may lead to higher margins, not from building new homes, but from real estate investment, which is a different activity.

Given the after-tax net margin of 10%, it is difficult to justify the risk of being a residential developer based solely on building margins. The process and costs associated with local zoning rules, building approvals, and rising production taxes, in the form of development charges, make residential development a high-risk venture.

Over the past 25 years, real estate investment has experienced a significant increase in land values which has arguably compensated ‘land banking’ builders for the risks inherent in building a new home. If increasing land values have artificially supported the building of new homes, the risk is, once land values stop rising, builders will be disincentivized to continue their engagement in the business of building new homes and housing production will decelerate. A potential disengagement by builders in the production of new homes is a problem for the planning of growth by governments.

Taxation revenues from housing and the general economy

The preceding analysis focused on how much tax is generated as part of the entire process of producing a new residential dwelling. This had included taking into account tax revenues paid as part of the supply chain (input goods and services), taxes paid by construction workers and the developer, and taxes paid as part of the sale of the new dwelling.

At 31% of the cost to purchase a new home, the tax burden appears to be quite high. A natural question is how this tax burden compares to the tax burden on the rest of the economy. A comparison of the tax burden on the building of a new home in Ontario to the rest of the economy can be made by either considering taxation on economic output or on economic activity. “Economic output” and “gross

¹⁶ Also not included in the total taxation revenue of government is taxation related to gains in land values and property taxes paid by developers on that land.

domestic product (GDP)” are similar concepts, but there is a technical difference between the two measures.

Economic output is a broad term used to describe the total value of goods and services produced by an economy over a given period, usually a year. This measure includes the output of all industries, including manufacturing, construction, services, and agriculture, and it takes into account changes in prices over time. In terms of residential construction activity, the concept of economic output is synonymous with the total builders cost of building a new home.

Gross domestic product (GDP) is a specific measure of economic output that is used to compare the size and growth of different economies. It is the monetary value of all finished goods and services produced within a country’s borders in a specific period. GDP is often used as a key indicator of a country’s economic performance and is frequently used to compare the economic performance of different countries. In terms of residential construction activity, the concept of GDP is synonymous with the total incomes and margins that are generated from a residential builder’s activity.

If the accounting of either economic output or GDP is used, then taxation revenues must also be accounted for in the same way.

In terms of economic output measures, the ratio of direct taxes on the construction of a new home to its economic output is 31%, which is the same as the percentage of tax reported earlier. Conversely, the ratio of direct taxes on the rest of the economy’s output is 16.3%. In other words, the construction of new homes in Ontario is taxed at 1.9 times the rate of the rest of the economy, in terms of direct economic output.

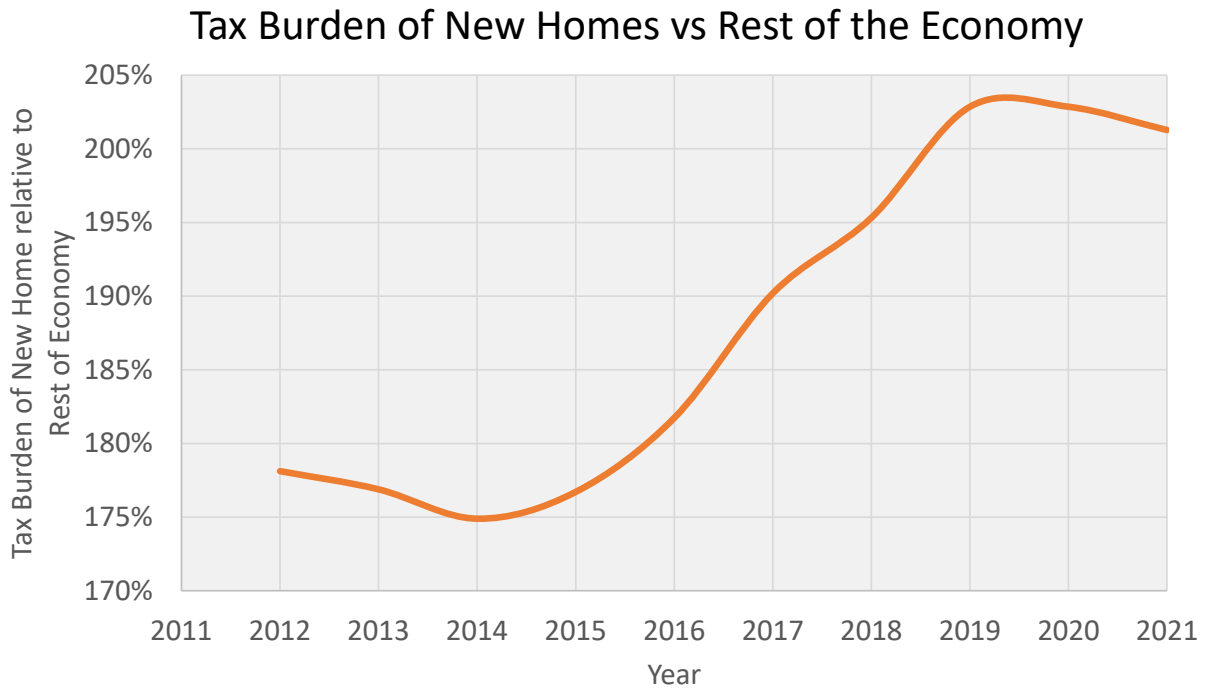
In terms of GDP measures, the ratio of direct taxes on the construction of a new home to the GDP it generates is 63.5%. On the other hand, the ratio of direct taxes on the rest of the economy’s output is 30.9%. This indicates that the construction of new homes in Ontario is taxed at 2.09 times the rate of the rest of the economy, in terms of direct GDP.

In terms of policy direction and argument, it is reasonable to assert that the construction of new homes in Ontario is subject to twice the tax burden compared to the rest of the economy.

The construction of new homes in Ontario is subject to twice the tax burden compared to the rest of the economy.

Figure 7 shows the three-year rolling average of the relative tax burden of a new home in Ontario using both the economic output approach and the GDP approach mentioned above.

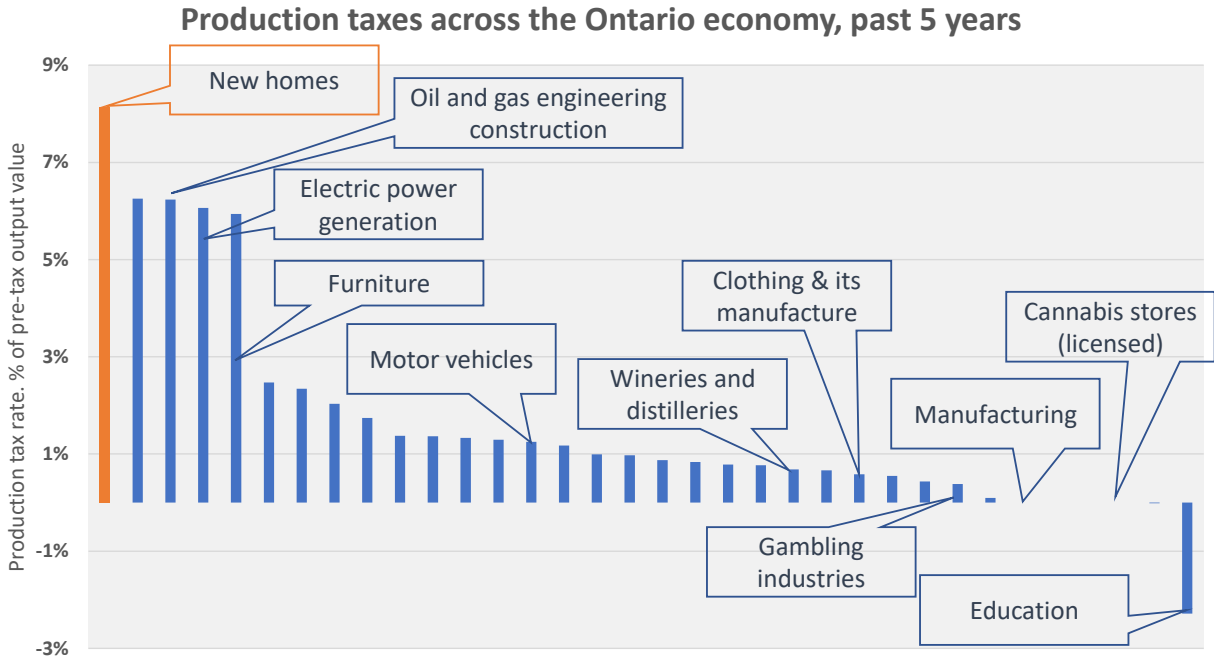
Figure 7 Tax burden of new home compared to the rest of the economy



The tax burden on a new home in Ontario versus the rest of the economy has been growing and has increased generally by 13% over the past 10 years.

The key driving factors of the difference between the tax burden on new homes and the rest of the economy are generally property transfer taxes, production taxes such as development charges and sales taxes. Production taxes on residential construction are the highest out of the 231 industry sectors (refer to figure 8).

Figure 8 Production taxes by industry sector



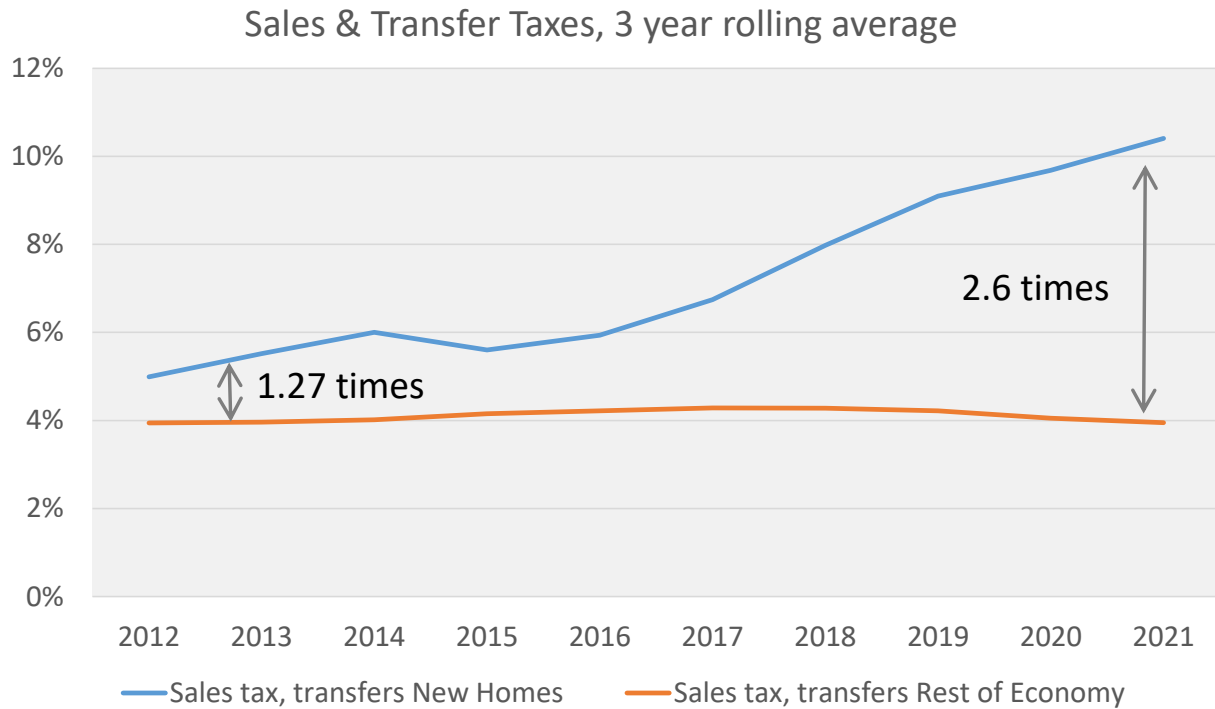
The key argument raised for high production taxes on homes is that it takes infrastructure investment to make them valuable. Yet, after analyzing the economic accounts, it appears that housing is an outlier, while the production and sale of other infrastructure dependent products (e.g., cars, electronics, communications), are not charged for the infrastructure that makes them valuable.

Additionally, as can be seen in Figure 9, taxes that are incurred on the sale of new home in Ontario is 2.6 times more than the general economy, given that nearly the full scheduled rate of sales tax by the province and the federal government are applied and the application of additional land transfer taxes. The federal rebates decline to zero if the price exceeds \$450,000, being 54% of the average builders cost of a new home in Ontario. Provincial rebates are capped if the price exceeds \$400,000, which results in an average provincial sales tax of 5.1%. At the average builders cost of a new home, the imposition of land transfer taxes by the province is 1.8% and the City of Toronto is 1.8%.

The construction of new homes in Ontario is the highest-taxed sector in terms of production taxes.

Taxes at the point of sale of new homes is 2.6 times more than the rest of the economy.

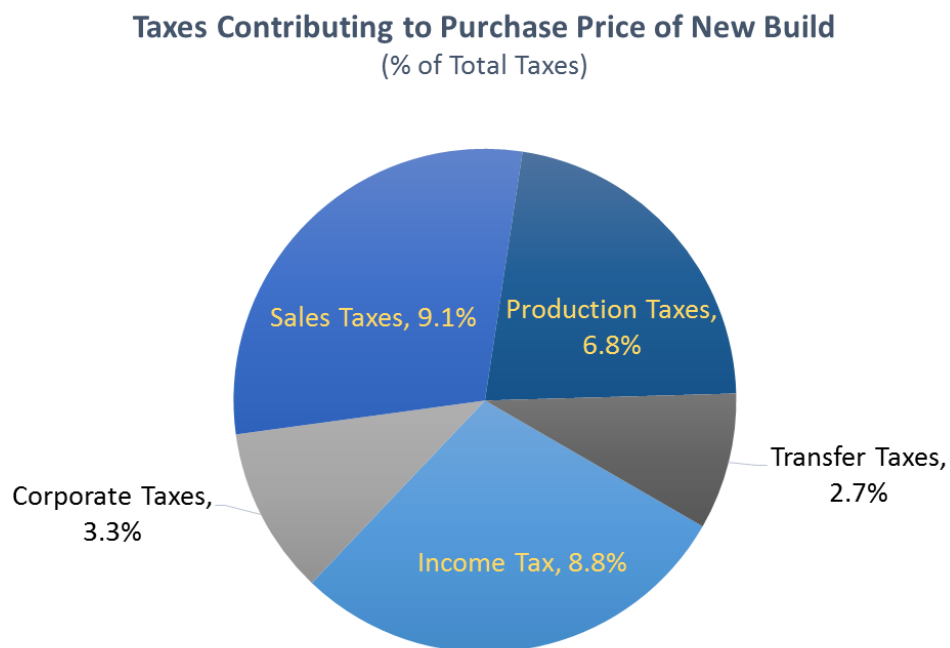
Figure 9 Tax burden of new home compared to the rest of the economy



In total, as shown in Figure 10, over half of the taxes on a new home are sales taxes, production taxes and transfer taxes, which accounts for the reason why the construction of new homes in Ontario is subject to twice the tax burden compared to the rest of the economy.

High production, sales and transfer taxes explain why new homes are taxed twice as much as the rest of the economy.

Figure 10 Types of taxes contributing to the final purchase price of a new home



Federal, Provincial and Local Taxation Revenues

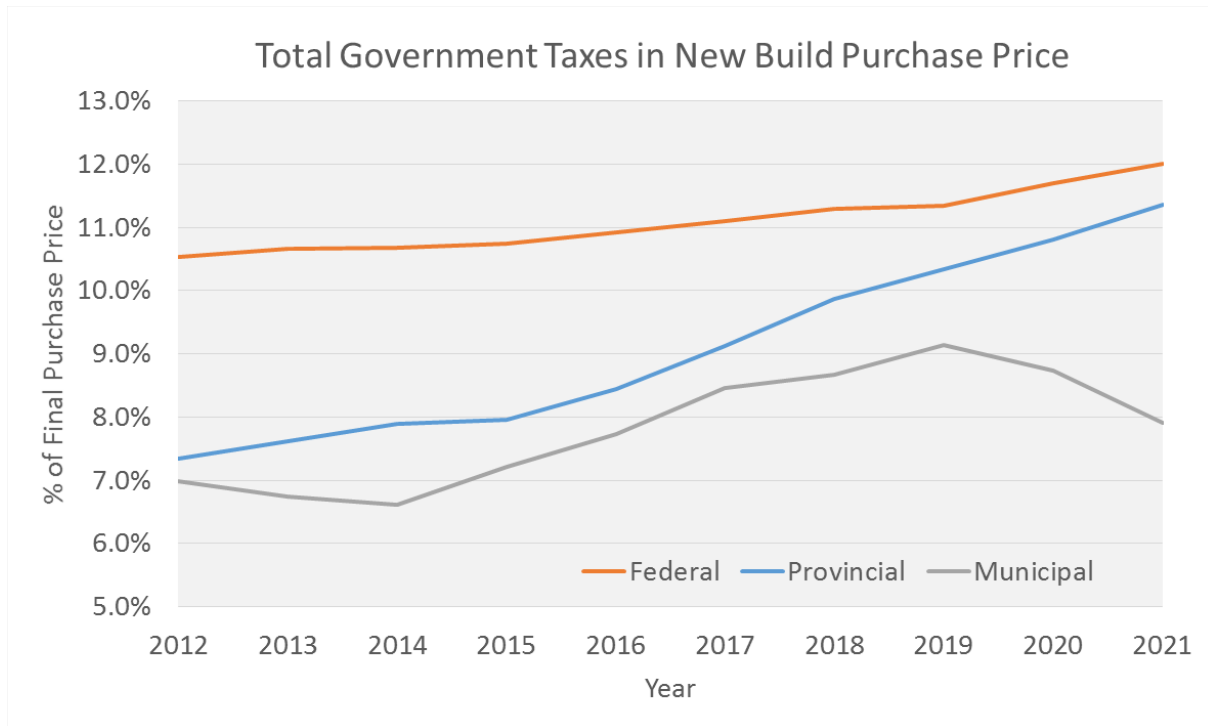
With the total taxation burden of the building and sale of a new home in Ontario measured at 31%, attention is now turned to the levels of government that are the primary beneficiaries. Table 5 shows the breakdown by each level of government and tax type.

Table 5 Tax revenue by level of government

Government	Income Tax	Corporate Taxes	Sales Taxes	Production Taxes	Transfer Taxes	Total Taxes	% of Total Taxes
Federal	\$51,860	\$18,687	\$41,710	\$263	\$0	\$112,520	39%
Provincial	\$31,145	\$12,321	\$43,536	\$4,272	\$15,196	\$106,470	37%
Local Municipal	\$0	\$0	\$0	\$59,408	\$10,130	\$69,538	24%
Total	\$83,005	\$31,009	\$85,246	\$63,942	\$25,326	\$288,528	100%

The breakdown shows that the federal government is the largest tax revenue beneficiary of a new home build in Ontario at 39% (\$112,500), with the province at 36.9% (\$106,500) and local governments at 24.1% (\$69,500). The next chart shows the rolling three-year average of each level of governments' share of the total purchase price of a home.

Figure 11 Three-year average of each level of governments' share of the total purchase price of a home



Over the past 10 years, the federal government's share of the purchase price of a new home has grown by 14%, local governments 13% and the province 55%.

TAXATION REVENUES AND PUBLIC INFRASTRUCTURE INVESTMENT

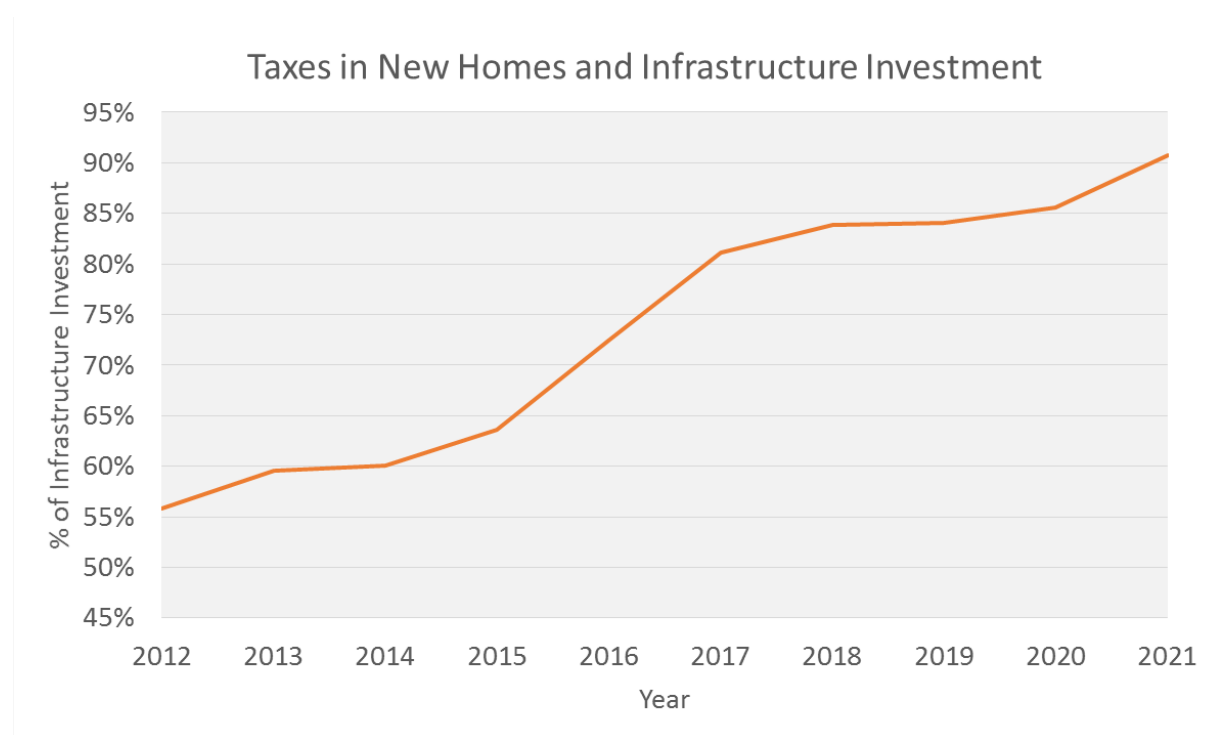
Paying taxes is crucial for the functioning of a government and for providing essential public services to citizens. Taxes provide the government with the necessary revenue to fund public services such as healthcare, education, public safety, and infrastructure development.

Two primary types of government expenditures occur, being capital investments and operational expenditures. The key difference between capital and operational expenditures is that capital expenditures are investments made by the government to create new assets or improve existing ones, while operational expenditures are ongoing expenses incurred to maintain and operate those assets. Capital expenditures are focused on long-term benefits, while operational expenditures are focused on maintaining the ongoing provision of essential public services.

In terms of the promotion and support of population growth, capital expenditures are critical. Capital expenditures, such as investments in public infrastructure and housing, create the necessary conditions for attracting new residents and businesses to an area. Operational expenditures for new residents are then paid for by the taxation revenues they generate for the government as they work and invest.

As Figure 12 shows, the taxation associated with the building of a new home in Ontario has become increasingly important to the funding of public infrastructure in Ontario. The tax burden on new homes in Ontario is now over 85% of all the total public infrastructure investment in Ontario, either from the federal government, the provincial government or local governments.

Figure 12 Ratio of new-home supported tax revenue and infrastructure investment in Ontario



While taxation revenues grow with an economy, and the economy grows with the addition of new residents, the expectation would be that, on the grounds of economic returns to government stakeholders, that the sources of funding for public infrastructure in Ontario would follow a distribution that reflects the rewards of public infrastructure investment for government (as measured by tax revenue) and the risk of investment (quantified by the amount invested in infrastructure).

One way to assess whether public infrastructure funding across government tiers is balanced is to determine whether the investment level by each tier of government is in the same proportion to the revenue it is accruing from the overall investment.

Public capital investment in Ontario accrues from all three levels of government. As reported earlier, over the past ten years, the level of public infrastructure investment in Ontario has varied between 2.3% and 3.1%. Over the same period, after adjusting for grants, transfers and government business enterprises, the funding of public infrastructure in Ontario has been shared as:

- 7.1% Federal Government
- 56.7% Provincial government
- 36.2% Local governments

Figure 13 Infrastructure investment in Ontario by level of government funding

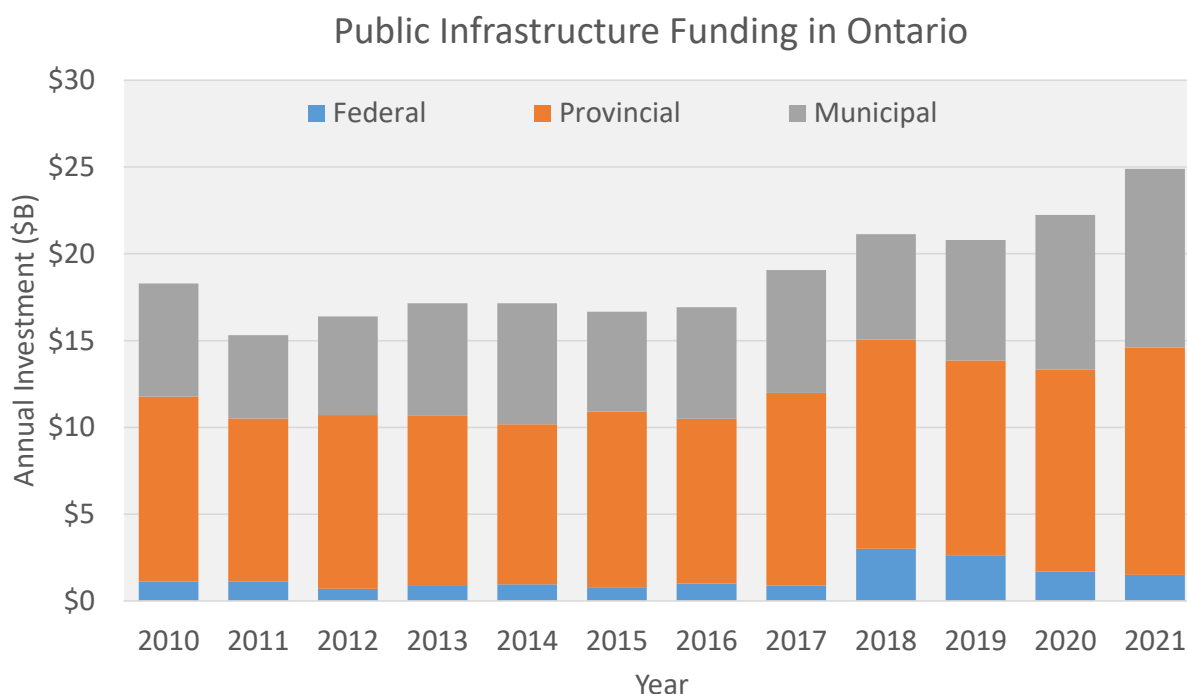


Table 6 Comparison of infrastructure funding and housing-related revenue by level of government over the last decade

Government	Share of Public Infrastructure Funding	Share of Tax Revenue from New Housing	Ratio
Federal	7%	39%	5.50
Provincial	57%	32%	0.57
Municipal	36%	29%	0.79
Total	100%	100%	

Now contrast this against the tax burdens on the production of new homes in Ontario, as shown in Table 6. The table shows that the federal government on average over the past 10 years receives 39 cents of every \$1 of tax revenue generated from the construction of a new home in Ontario, yet it only pays 7 cents of every \$1 invested in public infrastructure in Ontario. Put another way the federal government shares in 5.5 times more taxation revenue from the construction of a new home in Ontario than its investment share in public infrastructure in Ontario. This represents 9.7 times more than the provincial government and 6.9 times more than Ontario local governments.

The current level of federal investment in public infrastructure in Ontario seems to be disproportionate to the benefits it receives from housing development. The Ontario government is facing a challenging predicament as it struggles to balance the taxation revenues realized from the building of new homes against the costs of their own infrastructure investment.

These findings are consistent with the general economic results found in 2016, which showed that Ontario's government struggled to cover the costs of their infrastructure investment through increased taxation revenues from economic growth. This is because the federal government is a significant beneficiary of the investment in public infrastructure and the construction of new homes, yet without complementary investment in either.

The construction of new homes in Ontario seems to be an attractive avenue for generating taxation revenues by all levels of government, as people require a place to live and cannot opt-out of paying these taxes. However, this taxation burden on new housing contrasts significantly with the taxation burden on the rest of the economy, which is half of that of housing. The production in the rest of the

Does growth pay for growth?

The federal government receives 39 cents of every \$1 of tax revenue generated from the construction of a new home in Ontario, yet it only pays 7 cents of every \$1 invested in public infrastructure in Ontario.

The federal government growth benefit is 9.7 times more than the province and 6.9 times more than municipalities.

economy is often discretionary, and demand is more responsive to changes in price, making it easier for people to adjust their spending accordingly.

From an economic perspective, housing is generally considered demand inelastic up to a certain point. Demand inelasticity occurs when changes in the price of a product has little impact on the quantity demanded. In other words, consumers are willing to pay a relatively high price for a product even if the price increases. Private industry can take advantage of this by setting higher prices for their products and increasing their profit margins.

However, in the case of housing, there is a limit to demand inelasticity, and it is usually at the expense of immigration and growth. That is, people may choose not to move to high-priced housing markets, ultimately affecting the growth of the economy.

In the case of Ontario housing, governments seem to have benefited from the demand inelasticity of housing. Unlike private industry, the federal government through immigration and the provincial government through mandated population growth targets can exert demand pressure on the housing market while simultaneously taking advantage of the demand inelasticity of housing, thereby taking advantage of the fact that people have to have a home to live in. The compounding of both these phenomena has led to increasing taxation revenues for the government, resulting in the observed increase in the taxation burden on new homes.

Moreover, the federal government has the discretion to set immigration levels independently of other levels of government, which allows them to enjoy the largest share of taxation revenues without investing a proportionate share in public infrastructure required to support population growth. This has placed a considerable amount of pressure on:

- Ontario municipalities that are unable to access the taxation revenues associated with growth; and
- The province, which can access the taxation revenues associated with growth but has been crowded out by the federal government, given that government's preference to receive a majority of the taxation revenue benefits associated with growth without making corresponding investments in growth.

Investment in public infrastructure is critical to support economic growth and prosperity. However, the current balance of investment and rewards between the federal government and other levels of government in Ontario seems to be unfair, particularly when viewed against the taxation burden on housing in Ontario. The federal government is contributing too little compared to the amount of revenue it generates from infrastructure investment in Ontario.

CONCLUSIONS

The research findings reveal that the construction of new homes in Ontario carry a tax burden twice that of the rest of the economy, and that the difference is largely made up of production, sales and transfers taxes. At 39%, the federal government receives the greatest proportion of taxation revenues generated. Yet, the federal government invests only 7% in the public infrastructure of Ontario that is necessary for new housing construction growth and the subsequent growth of the economy.

With the federal government's growth benefit being 9.7 times more than the province and 6.9 times more than municipalities, there is an urgent need for the federal government to either increase funding of public infrastructure investment to support growth in Ontario or transfer more of its proceeds back to the Ontario provincial government and Ontario municipalities. This support is crucial given the historically high levels of housing unaffordability in Ontario and the need to increase housing construction significantly to avoid hindering population growth and economic development.

The current level of federal investment in public infrastructure in Ontario is imbalanced relative to the tax revenue it receives from housing development. The Ontario provincial government and Ontario municipalities are left in a challenging position, with taxation revenues from building new homes failing to match the necessary public infrastructure investment.

The federal government's recent proclamation of a 55% increase in immigration on pre-pandemic levels further highlights the fiscal and public investment imbalances that exist due to federal government policy. This situation seems extreme and counterproductive to Ontario's economic sustainability and growth.

The federal government's immigration policies are meant to drive population and economic growth in Ontario. Yet, by not providing sufficient funding for growth to the province and its municipalities it is promoting unaffordable housing and putting Ontario's economic sustainability into question. In effect, the federal government is benefiting from Ontario's continued efforts to grow while hindering its economic health and jeopardizing the future of Canadian generations.

To promote sustainable economic growth in Ontario, the federal government must address this imbalance by increasing its funding of public infrastructure investment. This will enable the federal government to support growth while sharing the burden of funding more equitably. Ultimately, this will ensure that the benefits of growth are shared more equally and create a more sustainable economic future for Ontario and Canada as a whole.

APPENDIX: DATA SOURCES

The following Statistics Canada data sources were used in the analysis:

- **11-10-0191:** Income statistics by economic family type and income source
- **17-10-0005:** Population estimates on July 1st, by age and sex
- **17-10-0006:** Estimates of deaths, by age and sex, annual
- **17-10-0008:** Estimates of the components of demographic growth, annual
- **17-10-0014:** Estimates of the components of international migration, by age and sex, annual
- **17-10-0015:** Estimates of the components of interprovincial migration, by age and sex, annual
- **17-10-0016:** Estimates of births, by sex, annual
- **18-10-0005:** Consumer Price Index, annual average, not seasonally adjusted
- **34-10-0126:** Canada Mortgage and Housing Corporation, housing starts, under construction and completions, all areas, annual
- **34-10-0135:** Canada Mortgage and Housing Corporation, housing starts, under construction and completions, all areas, quarterly
- **36-10-0221:** Gross domestic product, income-based, provincial and territorial, annual
- **36-10-0450:** Revenue, expenditure and budgetary balance - General governments, provincial and territorial economic accounts
- **36-10-0478:** Supply and use tables, detail level, provincial and territorial
- **36-10-0489:** Labour statistics consistent with the System of National Accounts (SNA), by job category and industry
- **36-10-0595:** Input-output multipliers, provincial and territorial, detail level
- **36-10-0608:** Infrastructure Economic Accounts, investment and net stock by asset, industry, and asset function
- **36-10-0610:** Infrastructure Economic Accounts, economic impact by asset, industry, and asset function
- **98-10-0015:** Population and dwelling counts: Canada, provinces and territories, census subdivisions and dissemination areas
- **98-10-0041:** Structural type of dwelling and household size: Canada, provinces and territories, census divisions and census subdivisions
- **98-10-0123:** Census family structure, presence of children and average number of persons per census family: Canada, provinces and territories, census metropolitan areas and census agglomeration
- **98-10-0233:** Dwelling condition by tenure: Canada, provinces and territories, census divisions and census subdivisions
- **98-10-0307:** Immigrant status and period of immigration by place of birth: Canada, provinces and territories, census divisions and census subdivisions

In additional, Ontario municipal financial information returns (FIR) from 2010 to 2021 were also used:

- [Municipal Financial Information Returns Datasets](#)