
ONTARIO'S LONG-TERM REPORT ON THE ECONOMY



Ministry of Finance



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Foreword

Three years ago, our government released its long-term report on the economy. As with past documents, this report looks 20 years into the future and outlines how Ontario's economic potential will be shaped by opportunities and challenges.

One of government's central responsibilities is to plan for the long term. As a forward-looking government, we track demographic and economic trends and projections and put measures in place today that will help address the challenges of tomorrow. The impact of some of those trends is already being felt. Take, for instance, the aging of our population. As of 2016, more Ontarians now turn 65 each year than turn 15, and the number of seniors in the province is projected to almost double by 2040. We are already responding to this shift through the expansion and transformation of social services and health care. Ontario's leadership role in facilitating an important enhancement to the Canada Pension Plan serves as an excellent example of how changes made today will not only improve future quality of life, but also generate a significant, positive economic impact.

Ontario's strength has always been our people. Our highly skilled workforce will continue to be our competitive edge. Whether retraining laid-off workers, helping skilled immigrants bridge into new careers or transforming student assistance to provide free college or university tuition for students with financial need, our government is focused on preparing people of all ages for success in a changing and dynamic economy. To offset projected slower labour force growth, we must continue to broaden labour force participation and focus on innovative ways to improve productivity.

Equally important to training people for the jobs of the future is ensuring that Ontario is home to those jobs. Ontario's diversified economy has positioned us well in our recovery from the 2008 global financial crisis and in weathering changes to currency valuations or commodity prices. Employment continues to grow and our unemployment rate has been below the national average for the past 20 months. Our plans to stay at the forefront of both the global shift to a low-carbon economy and transformative, potentially disruptive, technologies will lead to greater employment opportunities and economic growth, as will our competitive corporate income tax rates and our focus on modernizing regulations and reducing business costs.

Since 2014, Ontario has experienced stronger economic growth than the rest of Canada and most G7 nations. Private-sector economists expect this trend to continue for the next few years. The benefits of this growth, however, have not been uniformly experienced across the province. Looking ahead, significant differences in regional population growth patterns will continue to be driven by industry and demographic trends. Whether in the short or long term, inclusive growth that works for all is key to preparing Ontario for a bright future.

In the coming months, I will be tabling the *2017 Ontario Budget*. Underpinned by a commitment to putting the Province's finances on a sustainable basis, our plan has allowed us to beat our deficit targets seven years in a row while also making critical investments in the public services Ontarians rely on. With Ontario's population expected to grow by approximately 23 per cent over the next 20 years, we recognize that our infrastructure must be expanded and renewed. Our historic investments in building hospitals, schools, public transit and roads will not only strengthen our economic climate, but our communities as well, keeping people connected to each other and to critical services.

While some of the issues confronting Ontario are clearly outlined in this report, it is more difficult to anticipate any new challenges that may emanate from an evolving global environment. There is potential that the rise in protectionism associated with Brexit and the new U.S. administration could impact economic growth, both here at home and internationally. Amid uncertainty, we are confident that global markets will continue to value our expertise, products, services and resources.

As I look ahead, I am confident that through our plan to grow the economy and create a dynamic business climate, we will build on what we have accomplished together and foster greater opportunity for more Ontarians.

Original signed by

The Honourable Charles Sousa
Minister of Finance

INTRODUCTION

In accordance with the *Fiscal Transparency and Accountability Act, 2004*, Ontario's *Long-Term Report on the Economy* presents a long-range assessment of Ontario's economic and fiscal environment. This report:

- Describes anticipated changes in the economy and in population demographics over the next 20 years;
- Outlines the potential impact of these changes on the public sector and on Ontario's fiscal policy during that period; and
- Analyzes key fiscal policy issues that the Minister of Finance believes are likely to affect the long-term sustainability of the economy and of the public sector.

Looking beyond Ontario's current economic and fiscal environment allows the government to focus on long-term decision-making. The decisions it makes in the next few years will prepare Ontario to deal with the opportunities and challenges of the coming decades. While the future can never be known in detail, it is useful to assess the broad trends that will shape Ontario's economic, fiscal and social environment.

These trends include:

- An aging and more slowly growing population, in Ontario and many parts of the world;
- Potentially slower economic growth in many regions of the province, owing to slowing workforce growth;
- Growth in the trade in services continuing to outpace the trade in goods;
- The rise of non-standard forms of employment, including part-time and short-term work; and
- Provinces and territories will face significant fiscal challenges over the long term, while the federal government's fiscal position is projected to be more sustainable and improve over the same period.

Ontario's economy is already transforming in response to these long-term forces. Global competition has led to the restructuring of Ontario's manufacturing industry towards more advanced production. The service sector is also capturing new markets through innovations in product design and customer service. Increasingly, many services are traded internationally. Ontario's future prosperity hinges on more firms, producing both goods and services, continuing to seize opportunities in the global market. The Province is supporting this by helping businesses scale up to become internationally competitive and increase exports. This report considers these and other forces that will affect Ontario between 2016 and 2040, and examines their implications for Ontario's long-term economic and fiscal prospects.

Content of Report

The report is divided into four chapters and includes an overview of the major challenges and issues that Ontario may face, as well as the actions the government is taking now to prepare the province for the future. The report does not examine issues that the Province is considering in the short term, such as housing affordability, electricity prices and the path to a balanced budget.

Chapter I: Demographic Trends and Projections

Demographic change has a significant impact on Ontario's long-term economic and fiscal outlook. Demographic analysis and projections are important to help the government and society better prepare for population change, aging and migration at the provincial and regional levels. For example, demographic studies yield data to aid the development and location of health, education and transportation systems and facilities and estimates of funding required for seniors' services, and to inform policies to support labour force growth, a key driver of economic growth.

Chapter I presents demographic trends unfolding in the province and discusses their potential future path and implications. It also provides population projections and discusses some of the implications of these projections.

Key trends include:

- Population growth will continue but the pace will moderate;
- Immigration will account for a predominant and rising share of population growth;
- Seniors will make up a much larger share of the population;
- Population growth will be concentrated in the Greater Toronto Area (GTA);
- Slower growth will occur in the core working-age group; and
- Economic growth in many regions of the province will potentially slow, owing to slowing workforce growth.

Suggested policy approaches and current government initiatives to help address the key challenges presented by these demographic trends include:

- Supporting continued and enhanced labour force participation by seniors, youth, women, Indigenous peoples and people with disabilities through initiatives such as the Youth Job Link program and the Partnership Council on Employment Opportunities for People with Disabilities;
- Modernizing and improving the delivery of quality health care for seniors through increased access to the Ontario Drug Benefit Program for low-income seniors and programs that support seniors in their communities and encourage aging actively;
- Supporting seniors' incomes by increasing retirement savings through the agreement among federal, provincial and territorial governments to enhance the Canada Pension Plan (CPP); and
- Improving the economic conditions of all regions of the province by putting in place growth plans for the Greater Golden Horseshoe and Northern Ontario, creating regional economic development strategies and making investments through regional development funds.

Chapter II: Economic Trends and Projections

Taking a long-range perspective on Ontario's economic future is important for assessing the impact of government policy and fiscal sustainability. The inclusion of a long-term assessment within a government's budgetary framework is recommended by the Organisation for Economic Co-operation and Development and it has been adopted by a number of national governments. The long-term projections outlined in this chapter are based on a reasonable set of assumptions and are broadly in line with private-sector forecasts for Ontario.

Chapter II describes the broad economic trends unfolding in the province and discusses their potential future path and implications.

Key trends include:

- Economic growth to continue but at a slower pace than in the past, similar to other advanced economies and primarily due to slower growth in the working-age population;
- Labour productivity growth is a key driver of Ontario's prosperity and is projected to continue to grow at its long-term historical pace;
- The structure of the Ontario economy will continue to shift from goods-producing to service-producing sectors;
- Ontario exporters face challenging global competition, but fast-growing emerging markets present new opportunities for growth; and
- Transformative technologies will pose both opportunities and challenges to Ontario's economy.

The government is improving Ontario's long-term economic prosperity and increasing business productivity by:

- Investing in a highly educated labour force to prepare workers for tomorrow's economic opportunities through supports for young learners, investments to expand access to postsecondary education and implementation of the Highly Skilled Workforce Strategy;
- Encouraging innovation such as new and transformative technologies and implementing the Business Growth Initiative to help businesses take advantage of these opportunities and scale up for future growth;

- Investing in public infrastructure to support existing jobs, create new jobs and improve the movement of people and goods;
- Maintaining a competitive tax environment through business tax reforms that have included Corporate Income Tax rate cuts and the elimination of the Capital Tax;
- Developing a Going Global trade strategy to help businesses expand their exports and access new workers; and
- Investing cap-and-trade proceeds, as outlined under the Climate Change Action Plan, into incentives for business and industry to cut emissions through adoption of clean technologies and to maintain competitiveness.

Chapter III: Employment Trends

Economic pressures and trends, particularly those related to globalization and technological change, have had a major impact on the labour market and employment in Ontario. For most families, employment earnings make up the largest share of total income and are a key determinant of well-being.

Employment itself is an important part of many people's lives and contributes to their sense of identity. It is important to examine employment trends in detail to understand the changes that are happening and to identify which trends are likely to continue. This will help the government and society to better prepare for the changes and to respond where needed with policies and programs. This is especially the case for employees in non-standard jobs and other vulnerable workers who have been negatively affected by the changing nature of employment.

Chapter III describes the key economic forces and pressures that are affecting employment, and highlights the changes taking place and the challenges that have arisen.

Key trends include:

- A divergence between economic growth, wages and measures of well-being;
- Shifting employment from goods-producing industries, in particular manufacturing, to service-sector industries;
- Declining shares of middle-skill and middle-paying occupations, along with increasing shares of high-skill and high-paying occupations and lower-paying, non-routine manual occupations;
- A rise in non-standard forms of employment, such as involuntary part-time and temporary employment; and
- Increasing diversity of the workforce.

The government is working to create the conditions and supports to address the changing nature of employment, including:

- Examining how to modernize Ontario's labour and employment laws to better protect workers and support business through the Changing Workplaces Review;
- Increasing access to affordable, quality child care to help parents fully participate in the labour force;
- Strengthening income security through existing supports, such as the Ontario Child Benefit, and moving forward with a Basic Income Pilot to test whether a basic income would provide more predictable and consistent income support in the context of today's labour market;
- Encouraging the federal government to review Employment Insurance to improve supports for a broader range of people who lose their jobs;
- Investing in support for workers during periods of employment transition through Employment Ontario, the Youth Jobs Strategy, the Ontario Disability Support Program and SkillsAdvance Ontario;
- Improving workplace safety by implementing a strategy to prevent workplace injuries, illnesses and fatalities; and
- Employing a multi-faceted strategy to strengthen retirement security for today's workers, which includes achieving a historic agreement among federal, provincial and territorial governments to enhance CPP.

Chapter IV: Long-Term Fiscal Prospects

Fiscal sustainability is an important long-term objective for governments. It determines their capacity to make the investments and deliver the public services that protect the quality of life of residents, now and in the future. Achieving fiscal sustainability requires continual analysis of the potential impact of demographic trends and economic projections on a government's long-term fiscal outlook. For example, consideration must be given to the potential fiscal pressures associated with an aging population, a labour force that is growing more slowly, and infrastructure assets that are aging but also facing new demands related to a growing population and technological change.

Chapter IV describes the potential fiscal implications of the long-term demographic and economic trends affecting Ontario. As well, the chapter outlines steps being taken to support Ontario's long-term fiscal sustainability. This includes transforming and modernizing public service delivery, ensuring the integrity of the Province's revenue base, and working with federal–provincial–territorial partners to find forward-looking solutions to meet the challenges collectively faced by Canadians.

Key trends include:

- Demographic and economic trends are projected to increase pressure on government expenditures and revenues;
- An aging population will increase demand for health care, which will put added pressure on health care expenditures;
- A slower pace of labour force growth will increase pressure to invest in education and training to build up the productive capacity of the province's highly skilled workforce; and
- Under current policy, provinces and territories will face increasing fiscal challenges over the long term, while the federal government's fiscal position is projected to be more sustainable and improve over the same period.

The Province is taking steps to address the potential fiscal impact of demographic and economic trends. These include:

- Taking a long-term approach to managing Ontario’s finances through transformation and modernization to maintain fiscal sustainability, while continuing to invest in key public services;
- Promoting the long-term sustainability of the health care system and focusing on achieving the best possible health outcomes through the Province’s “Patients First: Action Plan for Health Care”;
- Investing in people’s talents and skills by transforming student financial assistance and working to ensure the long-term financial sustainability of Ontario’s universities and colleges; and
- Continuing to take a collaborative approach with federal, provincial and territorial partners to find forward-looking solutions to meet the challenges collectively faced by Canadians.

CHAPTER I: DEMOGRAPHIC TRENDS AND PROJECTIONS

INTRODUCTION

This chapter presents demographic trends unfolding in Ontario and discusses how the government is addressing their far-reaching implications.

The following key trends have been identified:

- Population growth will continue but the pace will moderate;
- Immigration will account for a predominant and rising share of population growth;
- Seniors will make up a much larger share of the population;
- Slower growth will occur in the core working-age group (15–64); and
- Population growth will be strongest in the Greater Toronto Area (GTA).¹

The population projections on which this demographic outlook is based are the latest from the Ontario Ministry of Finance (Spring 2016). The assumptions behind them reflect past trends in all streams of migration and the continuing evolution of long-term fertility and mortality patterns. While these assumptions are believed to be reasonable, there is always uncertainty in such projections. Therefore, while this report focuses on the medium scenario, low and high scenarios for population projections are also produced to reflect this uncertainty.²

¹ In this report, the Greater Toronto Area includes the City of Toronto and the regional municipalities of Halton, Peel, York and Durham.

² See the Ontario Ministry of Finance's website at www.fin.gov.on.ca/en/economy/demographics/projections.

Table 1.1 Highlights of the Long-Term Demographic Projections, Base-Case Scenario

Measures	Historical		Projection				
	2011	2016	2021	2026	2031	2036	2040
Population (000s)	13,264	13,983	14,788	15,614	16,428	17,205	17,802
Average Annual Growth from Previous Year Listed (%)	–	1.1	1.3	1.1	1.0	0.9	0.9
Age Distribution (%)							
0–14	16.6	15.9	15.8	15.7	15.7	15.3	15.0
15–64	69.1	67.8	65.6	63.0	60.7	59.9	59.8
65+	14.2	16.4	18.7	21.3	23.6	24.7	25.2
Total Dependency Ratio*	45	48	53	59	65	67	67

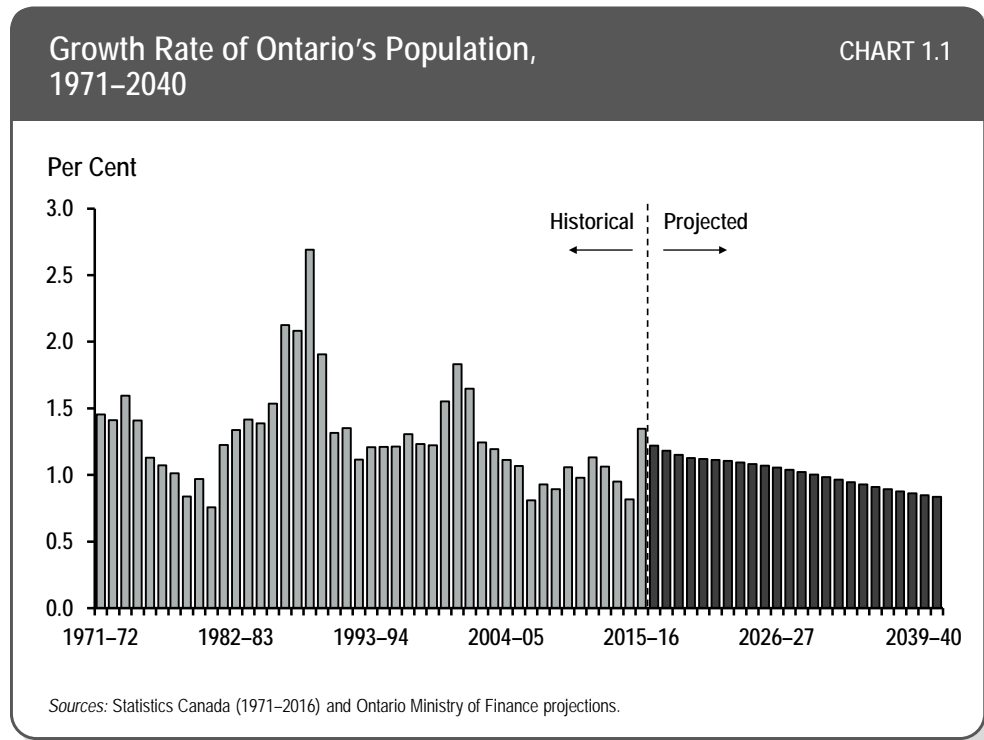
* Measured as the number of children aged 0–14 and seniors (65+) per 100 people of core working age (15–64).

Sources: Statistics Canada for 2006–2016 and Ontario Ministry of Finance projections.

Suggested policy approaches and current government initiatives to help address the key challenges presented by these demographic trends include encouraging underrepresented groups to participate in the labour market, modernizing and improving the delivery of quality health care for seniors, supporting seniors' incomes and encouraging retirement savings, and improving the economic conditions of all regions of the province.

Population Growth Is Moderating

Since 1971, Ontario population growth has averaged 1.3 per cent annually. The provincial population grew from 7.8 million in 1971 to 14.0 million in 2016, rising on average by more than 136,000 per year. Ontario's share of the Canadian population also rose, from 35.7 per cent in 1971 to 38.5 per cent in 2016.

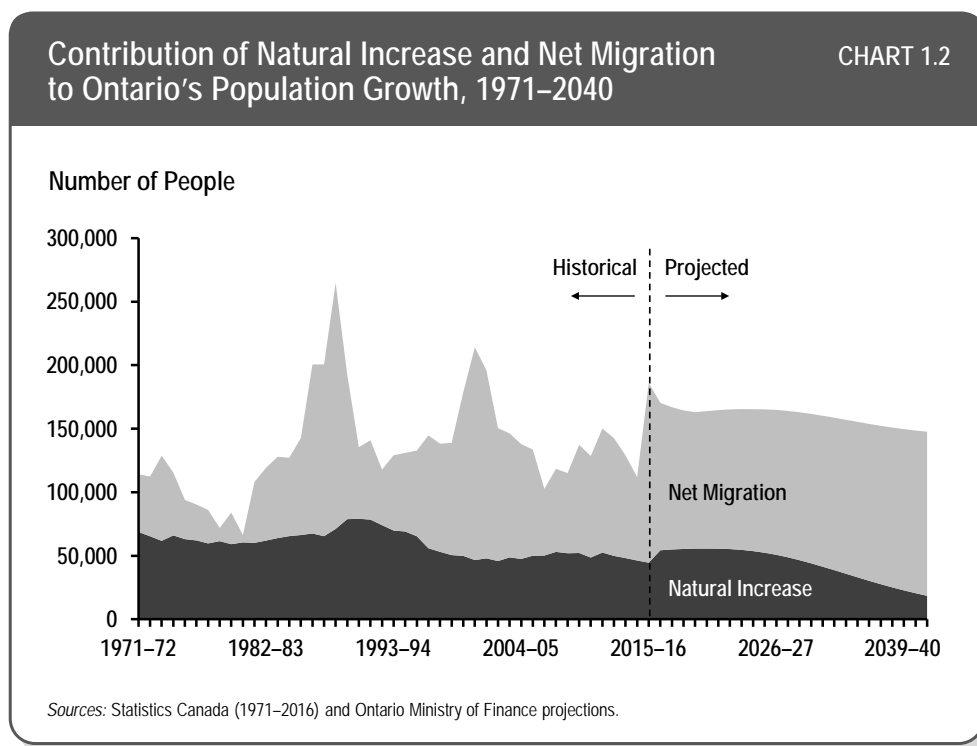


From 2016 to 2040, Ontario's population is projected to continue growing, but at a moderating pace, from 1.3 per cent in 2016 to 0.8 per cent in 2040. Overall, the provincial population is projected to increase from 14.0 million in 2016 to 17.8 million in 2040, adding another 3.8 million people over this period.

Population Growth Sustained by Immigration

Population growth occurs through natural increase (births minus deaths) and net migration (net international plus net interprovincial migration). Over the past four decades, the share of population growth accounted for by natural increase has declined, due to low fertility rates and increasing immigration. In the 1970s, about two-thirds of population growth came from natural increase. More recently, natural increase has accounted for less than 40 per cent of Ontario's population growth.

From 2016 to 2040, as projected fertility rates remain relatively low and population aging continues, this downward trend is expected to continue. By 2040, only 13 per cent of population growth is projected to come from natural increase.



As a result of this decline in natural increase, net migration is set to become even more important to sustaining population growth in the province.

The largest component of net migration is immigration. Annual immigration to Ontario is projected to remain strong. Annual immigration as a share of population is expected to remain at about 0.8 per cent of the population to 2040. This is in line with the recent increase in the immigration target set by the federal government and reflects the consensus on the importance of immigration for the demographic and economic growth of Canada and Ontario.³

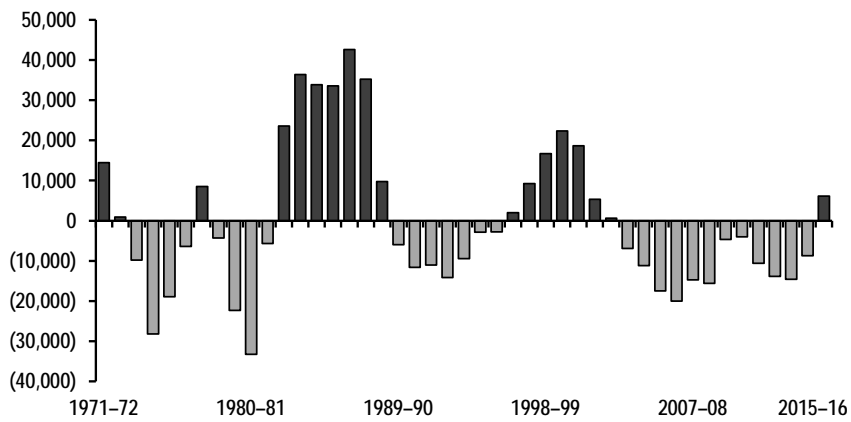
Interprovincial Migration

Historically, the contribution of interprovincial migration to Ontario's population growth has been minor, with periods of gains usually followed by periods of losses in a pattern closely tied to economic cycles. However, in any specific year, net gains or losses of people to and from other provinces have had a significant impact on annual population growth in the province.

Net Interprovincial Migration to Ontario, 1971–2016

CHART 1.3

Number of People



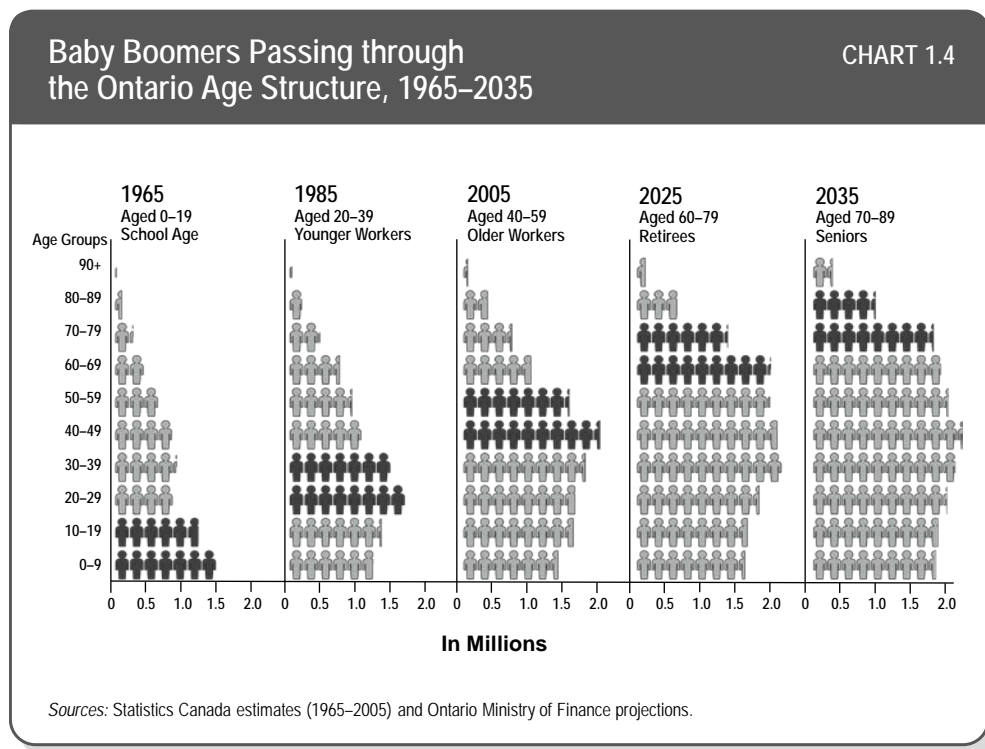
Source: Statistics Canada.

³ The target was increased from 279,200 in 2015 to 300,000 in 2016 and 2017.

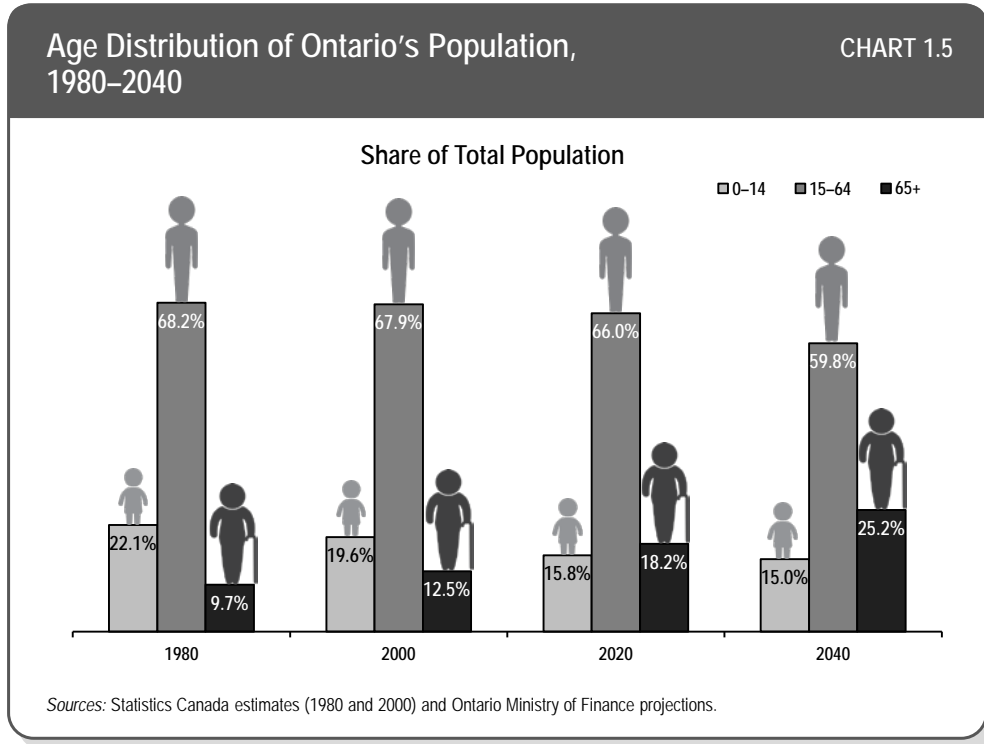
Population Aging

For decades, low fertility rates and increasing life expectancies have contributed to the aging of the population. Life expectancy at birth for men increased from 72.0 years in 1980 to 79.8 years in 2011, and for women from 78.9 years to 84.0 years. By 2040, life expectancy is projected to reach 86.4 years for men and 88.5 years for women.

In Ontario, this trend has been intensified by the aging of the baby boomer generation, born from the mid-1940s to the mid-1960s.



In 1970, almost 30 per cent of Ontario’s population was under the age of 15 and seniors accounted for only eight per cent of the population. In 2016, the number of seniors surpassed the number of children aged 0–14 (children accounted for 15.9 per cent of total population, while seniors accounted for 16.4 per cent).



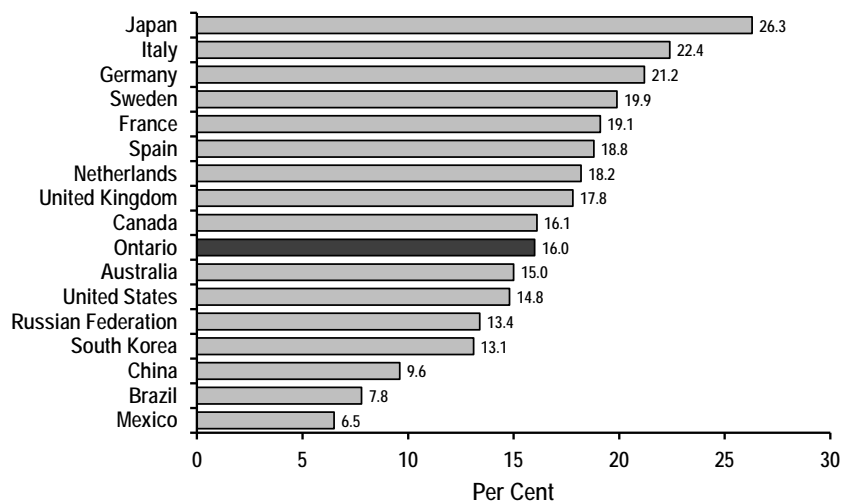
The number of seniors in Ontario is projected to almost double from 2.3 million in 2016 to 4.5 million by 2040. Even faster growth is projected for the oldest age group during this period, with the population aged 85 and over almost tripling. By 2040, seniors will account for 25.2 per cent of Ontario’s population.

Population Aging in Perspective

The pace of population aging varies around the world. In 2015, the proportion of seniors in Ontario and Canada's population was slightly below the Organisation for Economic Co-operation and Development (OECD) average of 16.2 per cent, but significantly lower than the European Union's 19.2 per cent. In Italy and Germany, more than one in five residents are already aged 65 and over. At 26.3 per cent in 2015, Japan's proportion of seniors was already higher than what is projected for Ontario in 2040 (25.2 per cent).

Share of Population Aged 65 and Over,
Ontario and Selected Countries, 2015

CHART 1.6



Sources: The World Bank and Statistics Canada.

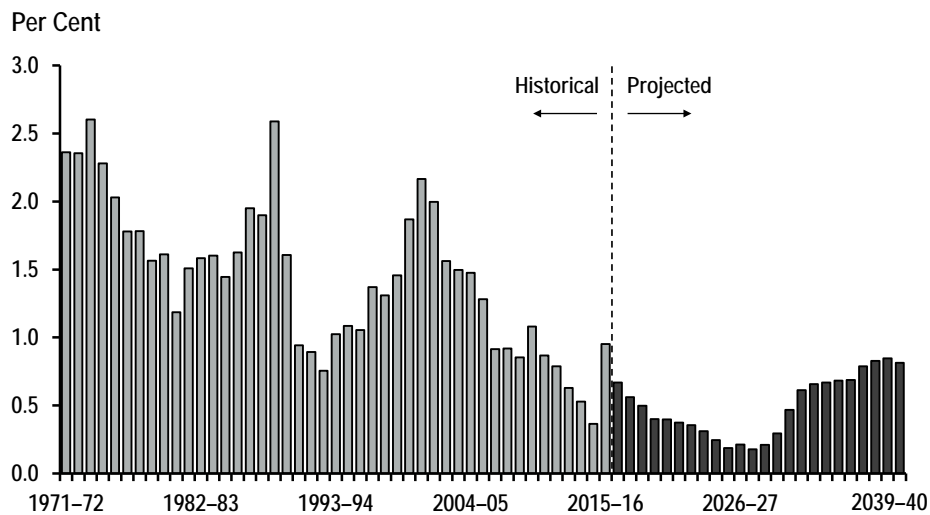
Slower Growth of the Core Working-Age Group

Historically, Ontario's growth in the core working-age population (ages 15–64) was mainly driven by young people turning 15 and immigration. Over the past 40 years, Ontario's working-age population grew at an average annual rate of 1.3 per cent. In the 1960s and 1970s, baby boomers joined the 15–64 age group, swelling its ranks. In the 2000s, their children, the echo generation, reached working age.

From 2016 until the late 2020s, the passage of large cohorts of baby boomers into retirement age will be the main factor influencing the moderation of growth in the core working-age group. By 2031, once all baby boomers have left the core working-age group, the pace of growth will increase; however, the growth rate will be slower than it has been historically.

Growth Rate of the Core Working-Age Population in Ontario, 1971–2040

CHART 1.7



Sources: Statistics Canada (1971–2016) and Ontario Ministry of Finance projections.

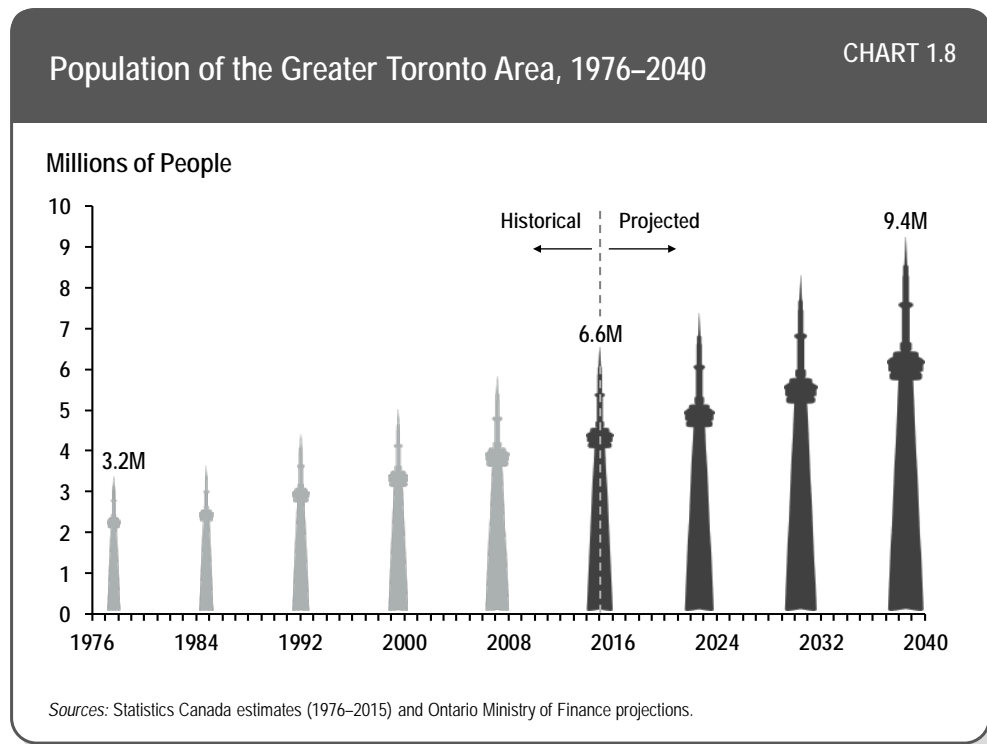
Over the period from 2016 to 2040, the core working-age population is projected to increase by 12 per cent — an average annual increase of 0.5 per cent. By 2040, Ontario’s core working-age population is projected to number almost 10.7 million and to account for 59.8 per cent of the population, down from 67.8 per cent in 2016.

Since more people now turn 65 each year than young people turn 15, future growth of the core working-age group will come exclusively from net migration.

Concentration of Population Growth in the Greater Toronto Area

As population aging continues and with less growth coming from natural increase, many regions of the province where natural increase had previously been the main or sole contributor to population growth have already started to see their population growth slow. Conversely, large urban areas, which receive most of the international migration to Ontario, are projected to keep growing rapidly. This is especially true in the Greater Toronto Area (GTA).

The GTA is one of the fastest-growing metropolitan areas in North America. Its population has more than doubled since the mid-1970s, rising from 3.2 million in 1976 to over 6.6 million in 2015 (most recent regional data available), and has experienced significantly faster growth than the rest of the province over this period. In 2015, 48 per cent of Ontarians lived in the GTA — up from 38 per cent in 1976. Immigration is the main driver of this regional growth.



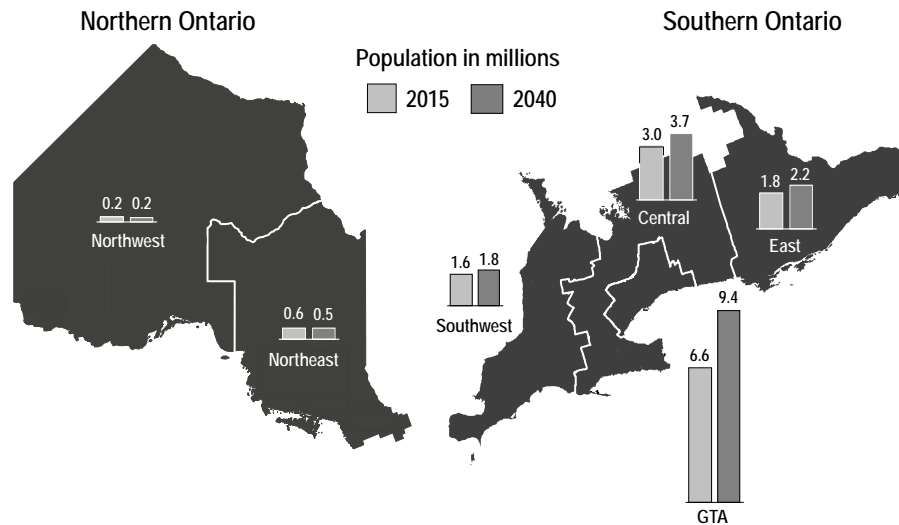
The GTA remains attractive to newcomers, with more than 80,000 people immigrating to the region every year, and this trend is projected to continue. The GTA's total population is expected to grow by another 2.7 million people by 2040, to reach almost 9.4 million. The region will experience more than two-thirds of provincial population growth over the period. It is projected that 52.6 per cent of Ontarians will live in the GTA by 2040.

The GTA is also expected to remain the region with the youngest age structure. All major age groups will see faster growth than anywhere else in the province. The GTA is, and will remain, the region with the highest proportion of working-age people in its population and the lowest proportion of seniors in Ontario. The proportion of seniors in the GTA's population is projected to rise from 14.1 per cent in 2015 to 22.5 per cent in 2040, while the proportion of the core working-age population is projected to decline from 69.7 to 62.2 per cent. Within the GTA, the proportion of seniors will rise faster in the suburbs than within the City of Toronto.

In the rest of the province, the population will keep growing, but at a slower pace. Central and Eastern Ontario are projected to see population growth of more than 20 per cent to 2040. The population of Southwestern Ontario will grow by about 10 per cent, while the North as a whole is projected to maintain a fairly stable population. Throughout the province, large urban areas are generally projected to grow faster, while some remote and rural areas are projected to continue experiencing long-term population declines.

Population of Ontario Regions,
2015 and 2040

CHART 1.9



Sources: Statistics Canada (2015) and Ontario Ministry of Finance projections.

Central Ontario

While the population of Central Ontario is projected to grow by 705,000, or 23.8 per cent, from 2.96 million in 2015 to 3.66 million by 2040, the region's share of provincial population is expected to decline slightly from 21.4 to 20.6 per cent.

All three major age groups are expected to see growth in Central Ontario to 2040, with seniors growing at the second fastest rate in the province (+97%), after the GTA. The proportion of seniors in the region's population is projected to grow from 17.8 per cent in 2015 to 28.3 per cent in 2040. The share of the core working-age population in the region will decline from 66.6 per cent in 2015 to 57.3 per cent by 2040.

Eastern Ontario

Eastern Ontario is projected to experience population growth of 417,000, or 23.2 per cent, to 2040, from 1.80 million to 2.22 million. The City of Ottawa is projected to grow from 957,000 in 2015 to 1.32 million in 2040. The rest of the region as a whole is also projected to experience growth, but below the provincial average.

Eastern Ontario is expected to remain the region with the second highest share of the core working-age population in the province in 2040 (58.7 per cent), after the GTA. All major age groups are projected to continue growing in Eastern Ontario. The proportion of seniors in the region's population will rise from 17.2 per cent in 2015 to 26.8 per cent in 2040.

Southwestern Ontario

The population of Southwestern Ontario is projected to grow by 169,000, or 10.5 per cent, from 1.61 million in 2015 to 1.75 million by 2040. In the Southwest, the number of children is projected to remain stable as a whole to 2040, while the working-age population is projected to experience a small decline (-5.7 per cent). The number of seniors is projected to grow more slowly than the provincial average in the region (+78 per cent); however, the proportion of seniors in the region's population will remain the second highest in Ontario after the Northeast, rising from 18.1 per cent in 2015 to 29.1 per cent by 2040. The core working-age population accounted for 65.7 per cent of the region's population in 2015, but will account for only 56.1 per cent by 2040.

Northern Ontario

The population of Northern Ontario is projected to remain relatively stable to 2040, with a slight decrease of 2.1 per cent, from 798,000 in 2015 to 781,000 by 2040. Within the North, the Northeast is projected to see the population edging down by 19,800, or 3.5 per cent, from 559,000 to 539,000. The Northwest is projected to experience slight population growth of 3,300 people, or 1.4 per cent, from 239,000 to 242,000.

In the past, Northern Ontario's positive natural increase has offset part of the losses it experienced through net migration. However, natural increase in the North as a whole is now negative. As a result, the population is aging faster in the North than in the rest of the province.

The proportion of children in the region's population is projected to decline from 14.4 to 13.4 per cent and from 16.9 to 15.6 per cent for the Northeast and Northwest, respectively. For the core working-age population, the proportion is projected to decline from 65.7 to 55.3 per cent for the Northeast and from 66.2 to 56.6 per cent for the Northwest. The proportion of seniors in the Northwest population is projected to rise from 16.9 to 27.8 per cent. The Northeast had the highest proportion of seniors in the province in 2015, at 19.9 per cent, and the region will continue to have the oldest age structure to 2040, with its share of seniors reaching 31.3 per cent.

Addressing the Implications of Ontario's Demographic Outlook

This section discusses how the Ontario government is addressing the far-reaching economic and fiscal implications stemming from Ontario's demographic outlook to 2040.

Supporting Future Labour Force Growth

As the population ages and the pace of growth in the core working-age group slows, Ontario's labour force will not increase as rapidly as it has in the past. This could contribute to a slower rate of future real gross domestic product (GDP) growth in the province. Therefore, policies that support future growth in the labour force are important. Encouraging faster productivity growth can help mitigate the impact of slower labour force growth. This is discussed in further detail in Chapter II: *Economic Trends and Projections*.

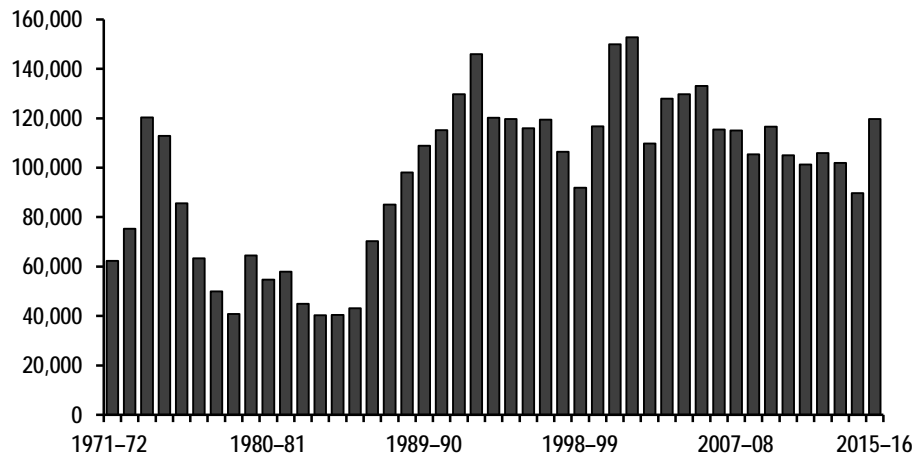
Immigration

Immigration has always contributed significantly to Ontario's economic growth and it will continue to be an increasingly important source of growth in the labour force. Highly skilled immigrants also support the development of a knowledge-based economy and help foster Ontario's international trade through commercial and cultural ties with countries of origin.

Annual Immigration to Ontario 1971–2016

CHART 1.10

Number of Immigrants



Source: Statistics Canada.

In 2015, 103,621 immigrants came to Ontario, of which 55 per cent were economic immigrants, the highest proportion among provinces. Ontario is a highly desirable destination for international immigrants because of its open, inclusive and culturally diverse society and its competitive business environment. However, Ontario's immigration levels are largely determined by federal targets and policies. For instance, the decline in the number of immigrants between 2005 and 2011 (see Chart 1.10) reflects the federal government's policy of spreading immigrants more evenly across the country, primarily through expansion of the provincial nominee program.

While the allocation for the Ontario Immigrant Nominee Program increased from 1,000 in 2012 to 5,500 in 2016, the 5,500 allocation represents only about five per cent of immigrants who came to Ontario in 2015. To ensure that its workforce has the skills and qualifications needed by employers, Ontario must work with the federal government to ensure that immigrants selected through federal and provincial programs better match the province's labour market needs and are able to find employment commensurate with their experience. The *Ontario Immigration Act, 2015*, will assist the Province as it works with the federal government in recruiting, selecting and admitting skilled immigrants.

As immigration becomes even more important in sustaining labour force growth in Ontario, the Province will continue to provide support through policies on immigrant selection, settlement, integration and training. Ontario has put in place a number of programs to help newcomers integrate smoothly into the labour market. Among these are the Newcomer Settlement Program, which assists up to 80,000 immigrants annually by providing information on key services such as housing, language, employment and job training; the Ontario Bridge Training program, which helps skilled newcomers integrate into the labour market by gaining their licence or certificate in their profession or trade; and tuition-free adult language programs to help immigrants improve their English or French language skills.

Older Workers

Many older workers face barriers to staying in the workforce. Retaining older skilled workers, even part time, benefits the economy in a number of ways. It retains leadership talent and allows for mentoring and knowledge transfer to younger generations. It also helps to ensure an adequate supply of skilled tradespersons, especially in occupations with a high proportion of older workers. Policies to reduce workforce barriers include supporting flexible retirement plans such as the gradual reduction of working hours while contributing to pension plans; providing flexible work schedules; offering opportunities for older workers to upgrade skills; supporting work/life balance; and promoting the health and well-being of employees in the workplace.

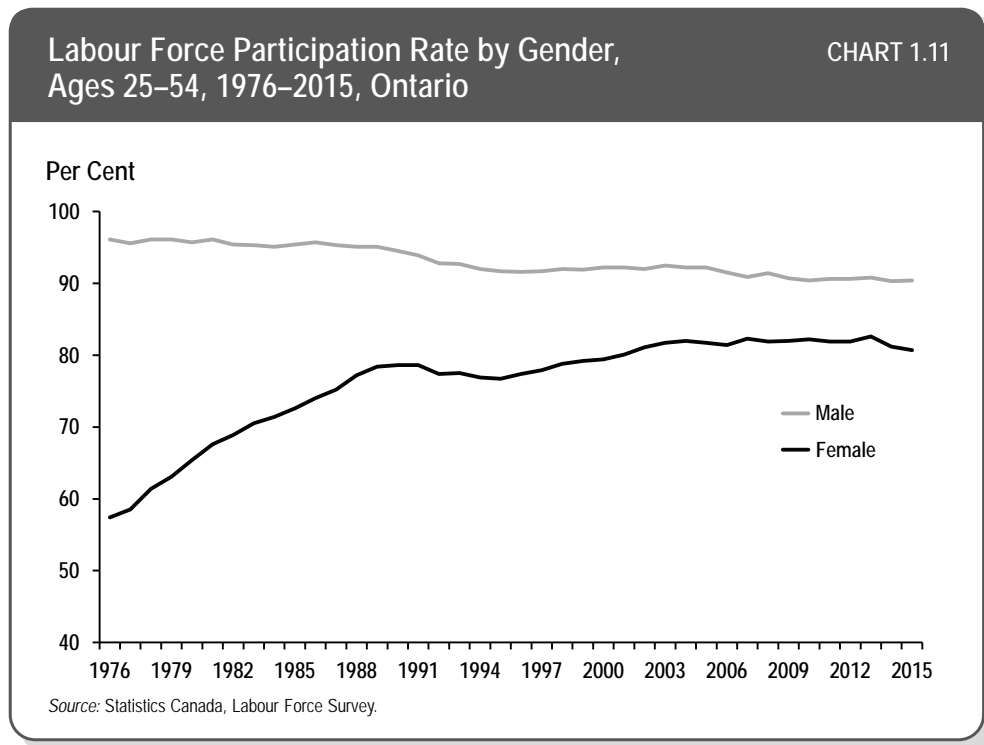
Youth

Initiatives geared towards increasing youth employment and incentives for earlier entry into the labour market can help boost Ontario's workforce. As more jobs are expected to require postsecondary education and training in the future, it is important that Ontario continue to support increased participation in higher education. With the introduction of the Ontario Student Grant, starting in the 2017–18 school year, Ontario is making postsecondary education even more attainable for all young people — ensuring access for all who qualify, regardless of family income. The Province is also working to expand experiential learning opportunities across the education system, so that postsecondary graduates will be better prepared to enter the workforce. For more information on the government's investments in postsecondary education, see Chapter II: *Economic Trends and Projections*.

Although Ontario has a world-class education system, youth unemployment remains high and persistent, and many young people still lack the specific skills needed to participate successfully in today's job market. The Province is continuing to put programs in place to help with this. For example, the Youth Job Connection program offers marginalized youth intensive supports beyond traditional job search and placement. These include job-readiness training, job matching and paid job placements, and hiring incentives for employers. Ontario's Youth Job Link program helps students and youth who do not face significant employment barriers but who could benefit from some extra help to plan their careers and transition to the labour market, by giving them access to job search resources and helping them find a job, including summer employment.

Increasing Women’s Labour Force Participation

It is important to remove gender equity barriers so women can participate fully in the labour force and earn fair wages for their work. Women’s labour force participation has increased significantly over the last 30 years for core-aged (25–54) women, from less than 60 per cent in 1976 to more than 80 per cent in 2015. The gap between participation rates for men and women has also narrowed over this time; however, it has remained stable for the last 10 years and stood at 9.7 percentage points in 2015.



For more information on encouraging women’s labour force participation, including the government’s commitment to add 100,000 licensed child care spaces over the next five years, see Chapter III: *Employment Trends*.

People with Disabilities

Research suggests that people with disabilities represent an untapped labour pool.⁴ In 2011, the employment rate for people with disabilities in Ontario was 45.5 per cent compared to 72.8 per cent for people without disabilities.⁵ It is clear that while some people with disabilities have successfully integrated into Ontario's labour market, many continue to face barriers to employment including ableism and pervasive myths around the abilities of people with disabilities, employer misperceptions and misinformation, procedural barriers in the recruitment process, and fragmented employment and training services that do not always meet the diverse needs of people with disabilities.

As announced in the *2016 Budget*, Ontario is taking a whole-of-government approach, working across ministries and with people with disabilities, employers, educators, service providers and other key partners to develop a provincial employment strategy for people with disabilities. Building on the advice of the Partnership Council on Employment Opportunities for People with Disabilities, the strategy will help connect more people with disabilities to job opportunities and more businesses to a talented labour pool. It will be a comprehensive, made-in-Ontario plan that will offer a better service experience for people through streamlined access to employment and training services that recognize an individual's diverse needs and goals. Employers will also be engaged as active partners in breaking down barriers for people with disabilities and promoting inclusive workplaces.

Aboriginal People

Compared to the non-Aboriginal population in Ontario, the Aboriginal population is significantly faster growing and younger. Young people, aged 15 to 24, make up 19 per cent of Aboriginal employed people, compared to 13 per cent of non-Aboriginal employed people. Between 2007 and 2016, Aboriginal employment in Ontario grew by 39 per cent compared to six per cent for the non-Aboriginal population. The Province is investing to support Aboriginal learners at Ontario's nine Aboriginal institutes. The Aboriginal Economic Development Fund is designed to increase access to employment and training opportunities for Aboriginal people.

⁴ Path to 2025: Ontario's Accessibility Action Plan.

⁵ Statistics Canada, Canadian Survey on Disability, 2012.

The government is also supporting the future growth and enhanced quality of the Province's labour force through continued investments in education, skills and training. For more details on how these investments contribute to Ontario's productivity and standard of living, see Chapter II: *Economic Trends and Projections*.

Addressing the Aging Population

With projected population growth of 3.8 million by 2040 and a near-doubling in the number of seniors in the province, the government's capacity for delivering the appropriate services and programs will come under increased pressure.

Health Policies to Support the Aging Population

The government will continue to make progress with its Patients First: Action Plan by putting patients first, providing faster access to care and investing in Ontario's health care system for the long term. Many seniors prefer to receive care at or close to home. To assist with this, the Province will continue to invest in high-quality home and community care, which is often less costly than care provided in hospitals or long-term care homes and can be just as effective.

Since 2003, Ontario has nearly doubled long-term care home funding to about \$4 billion per year, and also provided funding to encourage long-term care home operators to accelerate the redevelopment of more than 30,000 long-term care home beds by 2025.

The Province has introduced a number of programs to modernize and improve the delivery of quality care to seniors. For example, in 2016, a province-wide consultation was launched to facilitate a new dementia strategy to improve access to quality care for people living with dementia and boost support for their caregivers.

The Province has also increased access to the Ontario Drug Benefit program for more low-income seniors, who can now apply for reduced prescription fees. In addition to making the influenza vaccine available for everyone, Ontario has expanded its immunization program to offer the shingles vaccine free of charge for all seniors aged 65 to 70, which will contribute to reducing emergency department visits and hospitalizations.

To help keep seniors in their communities and aging actively, Ontario is continuing to invest in programming such as the Seniors Community Grant Program, the Age-Friendly Community Planning Grant Program and the Elderly Persons Centres network.

Supporting Seniors' Incomes in an Aging Population

As the population ages, it will be important to ensure that programs are in place to encourage retirement saving and support seniors' incomes. This will help reduce pressure on future workers to support seniors' incomes over the longer term.

Ontarians and Canadians can take pride in their retirement income security system. Those reaching age 65 can become eligible for income support programs such as the federal Old Age Security and Guaranteed Income Supplement (GIS) programs, and Ontario's Guaranteed Annual Income System. These programs help most seniors, especially those without adequate savings, avoid poverty. Other income available from the Canada Pension Plan (CPP), workplace pension plans and personal savings enables most of today's seniors to live with dignity in retirement.

However, current trends, including fewer workers having access to workplace pension plans and increasing longevity, have made it more difficult for workers to save enough for a comfortable retirement.

To help increase retirement savings, Ontario is undertaking a multi-faceted strategy to improve retirement security (see Chapter III: *Employment Trends*). The progress made on this strategy includes achieving a historic agreement among federal, provincial and territorial governments to enhance the CPP, in which Ontario played a central role.

The CPP has remained largely unchanged for decades. In 2013, when the federal government of the day unilaterally shut down national discussions on a CPP enhancement, Ontario stepped up to address the retirement savings challenge by developing the Ontario Retirement Pension Plan (ORPP). However, enhancing the CPP was always the Province's preferred approach. Ontario's work in pressing for an improvement to the CPP and in moving forward with the ORPP ensured that a CPP enhancement remained on the national agenda. In fall 2015, the new federal government restarted national discussions, and in June 2016, a national agreement to enhance the CPP was reached. Ontario's leadership and commitment in addressing the retirement savings challenge were key to facilitating the agreement in less than a year.

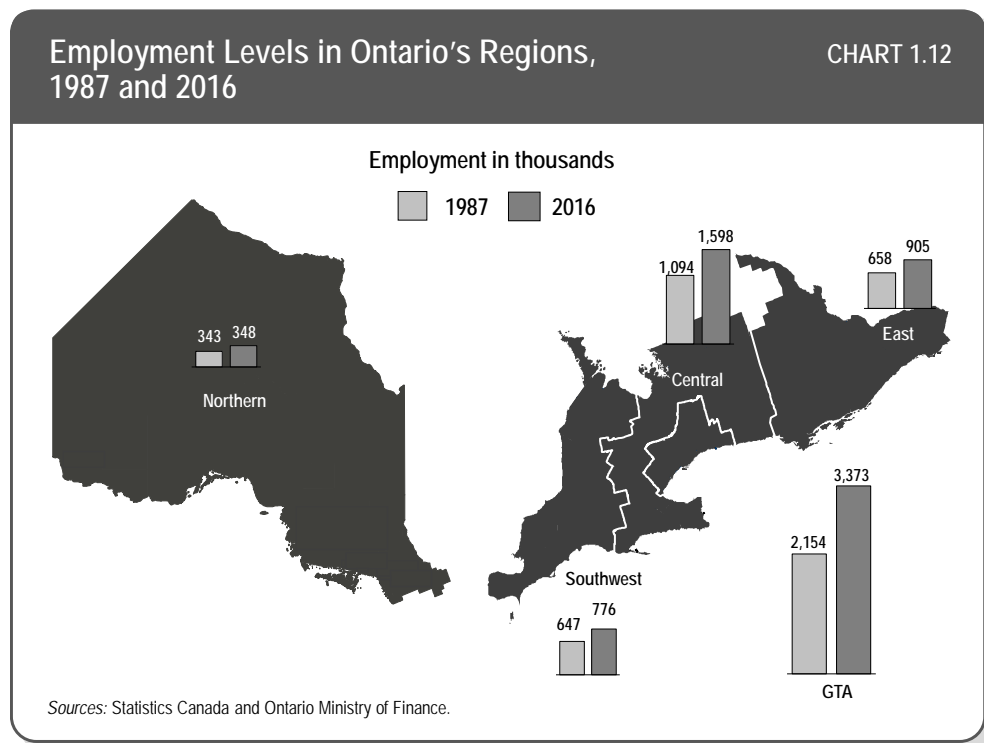
The CPP enhancement will significantly improve the retirement security of many of today's workers by providing them with a meaningful, lifelong increase in future retirement income that will also help to lessen the cost of population aging on future workers.

Although seniors' poverty has been reduced significantly over the last three decades, there continue to be some seniors, particularly those who are single, who experience poverty. To help support today's seniors living in poverty, the federal government recently increased GIS benefits to improve the incomes of the lowest-income single seniors.

Responding to Regional Conditions

Regional differences in the pace of population growth and aging will contribute to economic differences across Ontario's regions. Regional economic growth will also be affected by other factors, including the presence of natural resources and other natural endowments, the mixture of business and industry, and the availability of required skills.

Ontario's five regions vary in size, geography, economic structure and economic performance. The GTA accounts for almost 50 per cent of provincial GDP and employment. In contrast, Northern Ontario accounts for about 90 per cent of Ontario's land mass but about five per cent of its population, employment and economic activity. Though the economies of Central, Eastern and Southwestern Ontario are much more diversified than Northern Ontario's, they are less diversified and much smaller than the GTA's.



Provincial Growth Planning

The Province is committed to improving the economic conditions of all of Ontario's regions. The Provincial Policy Statement, 2014, issued under the *Planning Act*, provides policy direction on land use planning development and sets the policy foundation for regulating the development and use of land across Ontario.

The *Places to Grow Act, 2005*, allows for the identification and designation of growth plan areas across the province and the development of provincial growth plans. This enables decisions about growth to be made in ways that sustain a robust economy, build strong communities, and promote a healthy environment and a culture of conservation. To date, two growth plans have been released — the Growth Plan for the Greater Golden Horseshoe in 2006 and the Growth Plan for Northern Ontario in 2011, which have helped guide the Province's investments and actions in these regions.

Within the Greater Golden Horseshoe region, four provincial land use plans — the Growth Plan for the Greater Golden Horseshoe, the Greenbelt Plan, the Oak Ridges Moraine Conservation Plan and the Niagara Escarpment Plan — work together to manage growth, build complete communities, curb sprawl and protect the natural environment in this region.

In 2016, the Province released proposed updates to the four plans for public input and feedback. The proposed changes, if approved, would result in stronger direction to plan for livable, transit-supportive communities that can support continued economic growth. The proposed plans are expected to be finalized in 2017.

Regional Economic Development

Local businesses play an important role in sustaining regions and communities by creating employment opportunities for Ontarians. The government continues to support businesses and communities across Ontario through its regional development funds, including the:

- Southwestern Ontario Development Fund (SWODF);
- Eastern Ontario Development Fund (EODF);
- Northern Ontario Heritage Fund Corporation (NOHFC); and
- Aboriginal Economic Development Fund (AEDF).

To build competitive regions for tomorrow's economy, Ontario is committed to developing regional economic development plans in 2017. These plans would include strategies for building on the unique assets of each region and aim to address their economic challenges.

Investing in Infrastructure

Ontario's projected population growth will result in significant demand for all types of infrastructure, from transportation, health care and education, to water management and the electricity system. For instance, an aging population and a growing number of seniors living on their own will likely have implications for housing needs, public transit and the delivery of community services. Elements of support may include community hubs, which bring together a range of public services under one roof, as well as new technologies that allow people to better access and share information across communities, businesses and institutions.

The Province is taking steps to strengthen the health care system to give Ontarians faster access to the right care, with plans to invest \$12 billion over the next 10 years in health care infrastructure to help patients receive high-quality care. Students are also benefiting from modern facilities across the province that provide an enhanced learning experience and will support student achievement and well-being for generations to come. Over the next 10 years, the Province plans to provide \$12 billion in capital grants to the education sector, in response to local needs, while creating contemporary learning environments for students.

Ontario’s infrastructure investments take into account the projected uneven population and economic growth across Ontario’s regions. To support jobs and spur economic growth in less populated regions, the Province and federal government are each providing \$272 million over 10 years for infrastructure projects in municipalities with populations of fewer than 100,000 people, through the Small Communities Fund (SCF). For instance, under the SCF, the Province and federal government are funding the delivery of ultra-high-speed internet in southwestern Ontario. Through the Southwestern Integrated Fibre Technology (SWIFT) network initiative, more than 300 communities with a total population of 3.5 million will receive fibre-optic coverage. The Province also provides infrastructure funding through the Ontario Community Infrastructure Fund (OCIF), which helps small and northern municipalities address critical road, bridge, and water and wastewater projects. As announced in 2016, the OCIF is increasing from \$100 million per year to \$300 million per year by 2018–19.

For more information on infrastructure investments, see Chapter II: *Economic Trends and Projections, Infrastructure Investment* and Chapter IV: *Long-Term Fiscal Prospects, Future Cost of Infrastructure Investment*.

In Thousands Component	Historical	Projected				
	2011–16	2016–21	2021–26	2026–31	2031–36	2036–40
Start Population	13,264	13,983	14,788	15,614	16,428	17,205
Births	720	777	819	830	826	668
Deaths	479	501	547	598	661	581
Immigration	518	581	606	638	670	558
Emigration	88	85	90	93	96	78
Net Change in Non-Permanent Residents	89	42	37	38	38	30
Net Interprovincial Migration	(42)	15	0	0	0	0
End Population	13,983	14,788	15,614	16,428	17,205	17,802

Sources: Statistics Canada for 2006–16 and Ontario Ministry of Finance projections.

Table 1.3 Population of Ontario Regions, 2015–40

In Thousands	Historical	Projected				
Region	2015	2021	2026	2031	2036	2040
Greater Toronto Area	6,626	7,289	7,843	8,397	8,938	9,361
Central	2,958	3,132	3,279	3,424	3,560	3,662
East	1,800	1,911	2,000	2,085	2,161	2,218
Southwest	1,611	1,658	1,696	1,730	1,759	1,780
Northeast	559	556	553	549	544	539
Northwest	239	242	243	244	243	242
Ontario	13,797	14,788	15,614	16,428	17,205	17,802

Notes: 2015 revised estimate for Ontario. Sum of regions may not add to total.

Sources: Statistics Canada for 2015 and Ontario Ministry of Finance projections.

Table 1.4 Age Distribution of Ontario's Population, 2016–40

Per Cent of Total (%)	Historical	Projected				
Age Group	2016	2021	2026	2031	2036	2040
0–14	15.9	15.8	15.7	15.7	15.3	15.0
0–4	5.2	5.3	5.3	5.1	4.9	4.8
5–14	10.6	10.4	10.4	10.6	10.4	10.2
15–64	67.8	65.6	63.0	60.7	59.9	59.8
15–24	13.1	11.7	11.2	11.1	11.2	11.5
25–44	26.7	27.0	26.7	25.8	24.8	24.1
45–64	28.0	26.8	25.1	23.8	23.9	24.3
65+	16.4	18.7	21.3	23.6	24.7	25.2
65–74	9.2	10.5	11.5	12.1	11.4	10.4
75–84	5.0	5.6	6.9	8.1	9.0	9.7
85+	2.2	2.5	2.8	3.4	4.3	5.1

Sources: Statistics Canada for 2016 and Ontario Ministry of Finance projections.

CHAPTER II: ECONOMIC TRENDS AND PROJECTIONS

INTRODUCTION

Taking a long-range perspective on Ontario's economic future is important for assessing the impact of government policy and fiscal sustainability. The inclusion of a long-term assessment within a government's budgetary framework is recommended by the Organisation for Economic Co-operation and Development (OECD) and it has been adopted by a number of national governments. The long-term projections outlined in this chapter are based on a reasonable set of assumptions to produce an estimate for the future trend of Ontario's potential economic output. The projection is broadly consistent with prevailing private-sector forecasts for Ontario. Cyclical fluctuations in the economy will likely occur over the forecast horizon but this projection does not attempt to predict them. Rather, it reflects growth averaged out over the long term.

The following key trends have been identified:

- Ontario economic growth is expected to be somewhat slower than in the past, similar to other advanced economies and primarily due to slower growth in the working-age population;
- Labour productivity growth is a key driver of Ontario's prosperity and is projected to continue to grow at its long-term historical pace;
- The structure of the Ontario economy will continue to shift from goods-producing to service-producing sectors, albeit at a somewhat slower pace; and
- Ontario exporters face challenging global competition, but fast-growing emerging markets present new opportunities for growth.

The government is improving Ontario’s long-term economic prosperity and increasing business productivity by:

- Investing in a highly educated labour force to prepare workers for tomorrow’s economic opportunities through supports for young learners, investments to expand access to postsecondary education and implementation of the Highly Skilled Workforce Strategy;
- Encouraging innovation such as new and transformative technologies and implementing the Business Growth Initiative to help businesses take advantage of these opportunities and scale up for future growth;
- Investing in public infrastructure to support existing jobs, create new jobs and improve the movement of people and goods;
- Maintaining a competitive tax environment through business tax reforms that have included Corporate Income Tax rate cuts and the elimination of the Capital Tax;
- Developing a Going Global trade strategy to help businesses expand their exports and access new workers; and
- Investing cap-and-trade proceeds into incentives for business and industry to cut emissions through adoption of clean technologies and maintain competitiveness.

Table 2.1 Highlights of the Long-Term Projection: Base-Case Scenario

Average Growth (Per Cent)	Actual (Average)	Projection (Average)					
	1982–2015	2016–20	2021–25	2026–30	2031–35	2036–40	2016–40
Nominal GDP	5.3	3.9	4.0	4.0	4.0	4.0	4.0
Real GDP	2.6	2.2	2.0	2.0	2.0	2.0	2.1
Labour Force	1.4	1.0	0.8	0.8	0.8	0.8	0.8
Employment	1.4	1.2	0.8	0.8	0.8	0.8	0.9
Labour Productivity	1.2	1.0	1.2	1.2	1.2	1.2	1.2
Consumer Price Index	2.9	2.0	2.0	2.0	2.0	2.0	2.0

Sources: Statistics Canada and Ontario Ministry of Finance.

The Global Economy and the External Environment

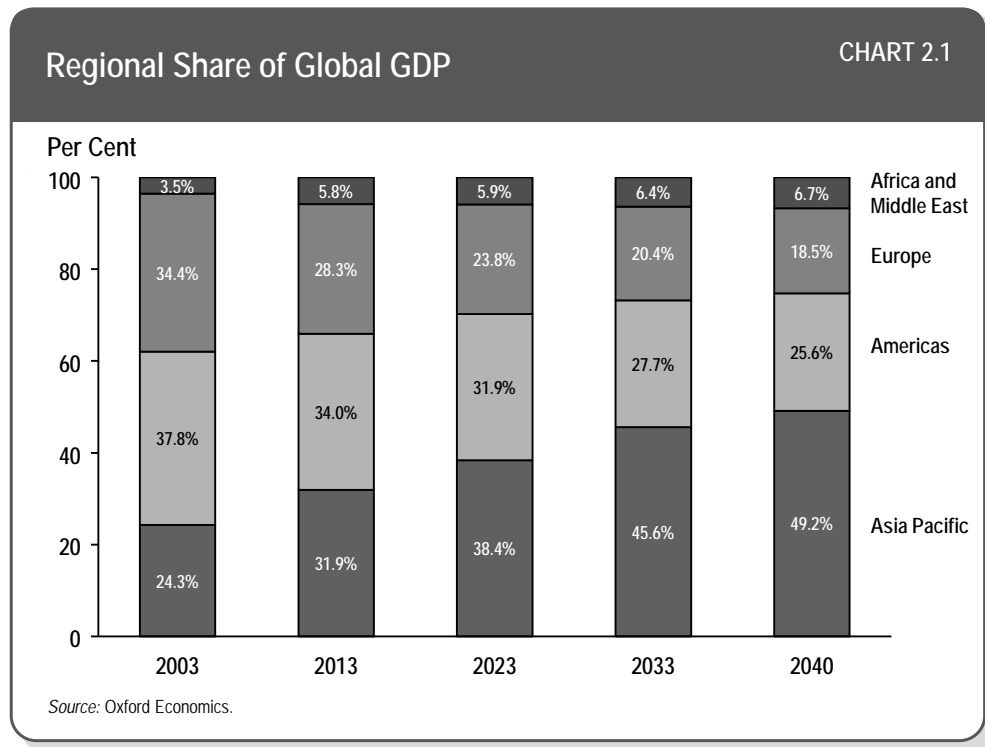
The Ontario economy is linked through trade and financial markets to other economies in the rest of Canada and North America, and across the globe. This section discusses the external factors affecting the demand for Ontario's exports, including the performance of the global, U.S. and rest-of-Canada economies; oil prices; the Canada–U.S. exchange rate; and interest rates. Major changes in any of these factors could have a substantial impact on Ontario's economy.

Table 2.2 Assumptions Overview: Key External Factors

Components	Assumptions
Global Economy	Global real GDP growth to average 3.1 per cent annually over the 2016–40 period.
U.S. Economy	Real GDP growth to average 2.0 per cent annually over the 2016–40 period.
Rest of Canada	Long-term real GDP growth to average 1.9 per cent annually over the 2016–40 period.
Oil Prices	Oil prices to climb to about \$130 per barrel (nominal U.S. dollars) by 2040. Projection assumes modestly increasing long-term real prices.
Canadian Dollar	Canadian dollar to rise to about 90 cents US by 2040.
Interest Rates	Interest rates to begin to rise from recent lows in 2017 but do not return to the long-term averages seen before the 2008–09 global financial crisis.

World Economic Growth

Two main trends are projected to drive the global long-term macroeconomic outlook. The first is the continued rise of the Asia-Pacific region (primarily China and India) as a share of total global economic output.



The second trend is a significant decline in the pace of economic growth in many regions due to slower growth in the working-age population, with the notable exceptions of Africa and the Middle East. A substantial portion of global economic growth over the past several decades has been driven by population growth. Countries that are unable to supplement population growth with advances in labour productivity will likely face a significantly lower outlook.¹

Table 2.3 World Economic Outlook

Real GDP Growth	1997–2015	2016–2020	2021–2040
World	3.6	3.4	3.0
European Union	1.7	1.6	1.1
United States	2.3	2.0	2.0
Japan	0.7	0.6	0.2
China	9.4	6.0	4.2
India	6.9	6.9	5.3

Sources: Oxford Economics, Blue Chip Economic Indicators and U.S. Congressional Budget Office.

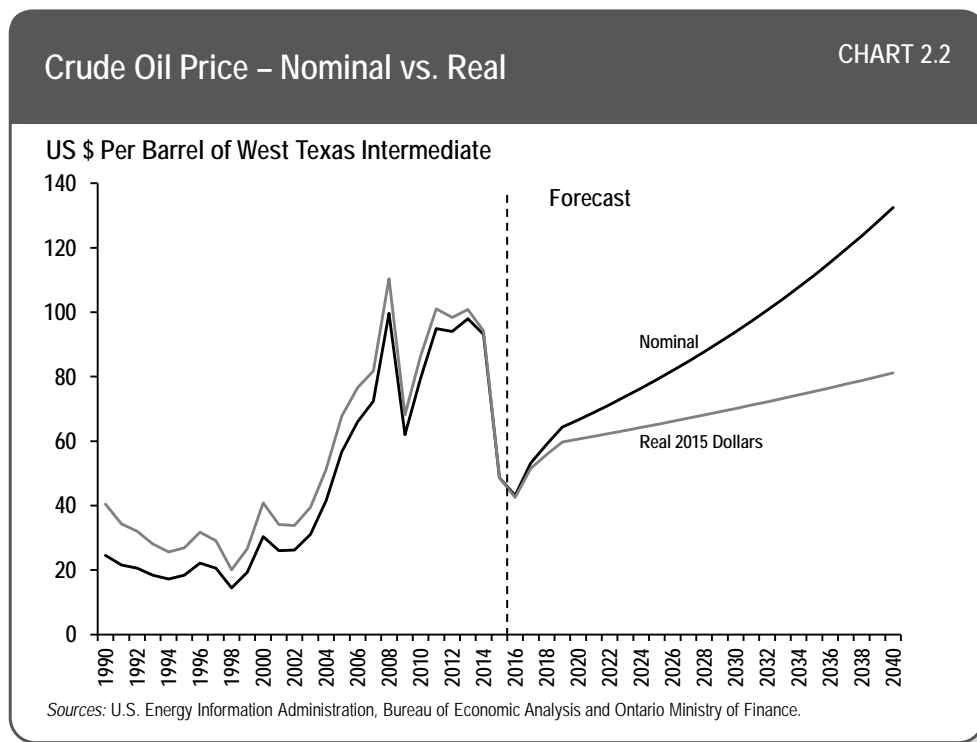
This projection assumes that long-term global real gross domestic product (GDP) growth will average 3.4 per cent annually between 2016 and 2020, decreasing slightly to 3.0 per cent annually from 2021 to 2040.

¹ The Economist Intelligence Unit, “Long-Term Macroeconomic Forecasts: Key Trends to 2050,” 2015.

Energy and Commodity Markets

Crude oil prices remained relatively stable, near \$95 US per barrel between 2011 and 2014, before plunging to below \$50 US per barrel, reflecting a considerable increase in North American supply from shale oil formations, weaker global demand and rising output from the Organization of the Petroleum Exporting Countries (OPEC). Oil prices have recently recovered somewhat, back to about \$50 US per barrel.

Oil prices are assumed to rise modestly in real terms over the long term, consistent with the assumption that oil will continue to become more expensive to extract and emerging market demand will remain relatively strong. By 2040, oil prices are assumed to be about \$130 US per barrel.



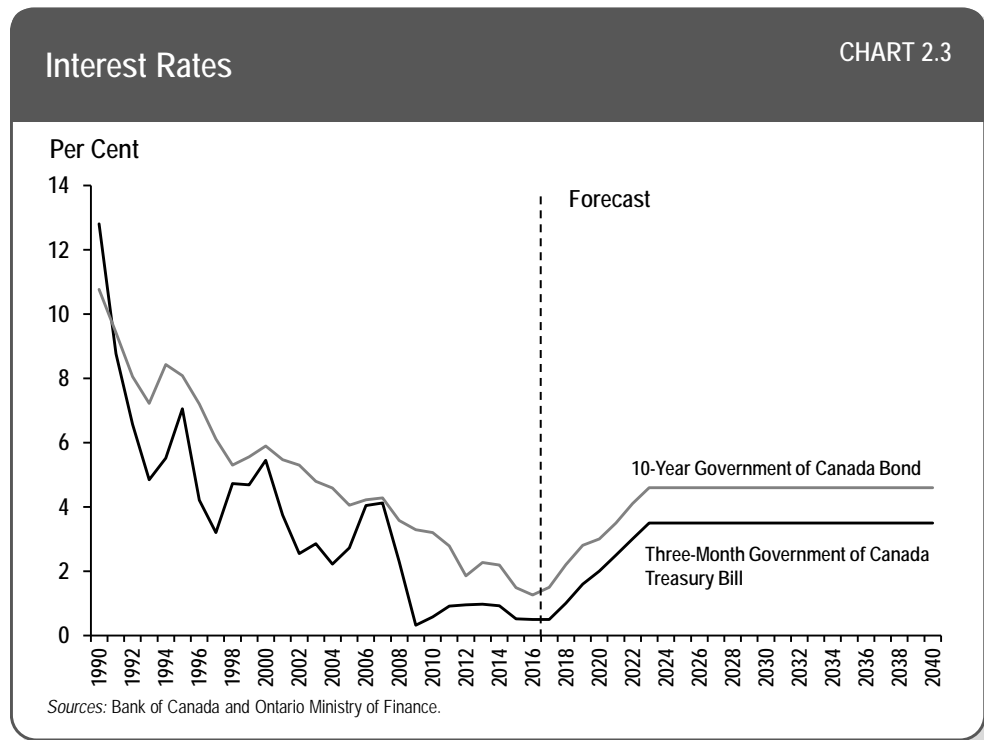
There are considerable risks around this forecast. Recent experience has shown that significantly more oil may be available globally at a lower price than previously thought. Moreover, growth in long-term oil demand will be tempered by an increasing focus on curbing greenhouse gas emissions.

Interest Rates

The rate of interest impacts the cost for people to borrow money for a new home or to start a business. It also affects the ability of individuals to save for retirement and the cost for governments to borrow to invest in infrastructure.

In response to the 2008–09 global financial crisis, central banks pushed short-term interest rates to all-time lows and kept them there for an extended period. However, interest rates were already trending down in the decades before the financial crisis. This long-term structural decline reflects a number of factors such as lower potential output and productivity growth, shifting demographics and a global “savings glut.” These developments suggest that the neutral rate of interest — that is, the rate consistent with stable long-term inflation — may have fallen permanently.²

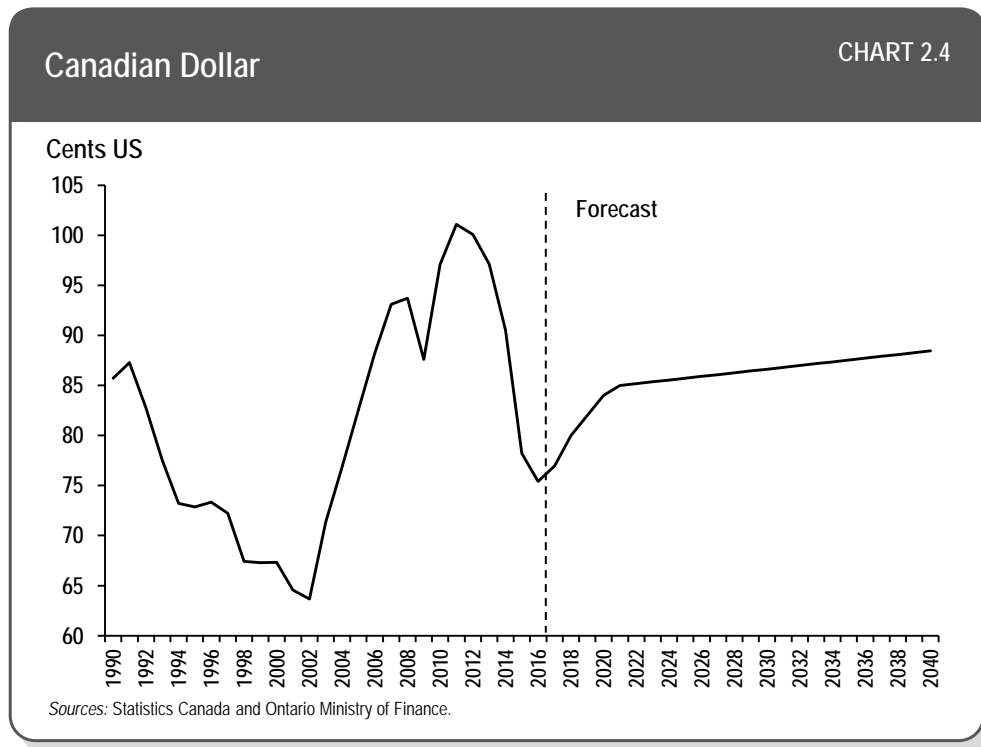
Given all this, over the long term, the yields on 10-year Government of Canada bonds are projected to settle at 4.6 per cent, on average, and three-month Government of Canada Treasury bills are expected to average 3.5 per cent.



² Council of Economic Advisors, “Long-Term Interest Rates: A Survey,” July 2015.

Canadian Dollar

The Canada–U.S. exchange rate is projected to recover somewhat from its recent lows before slowly trending higher over the long term, consistent with modestly rising real commodity prices.

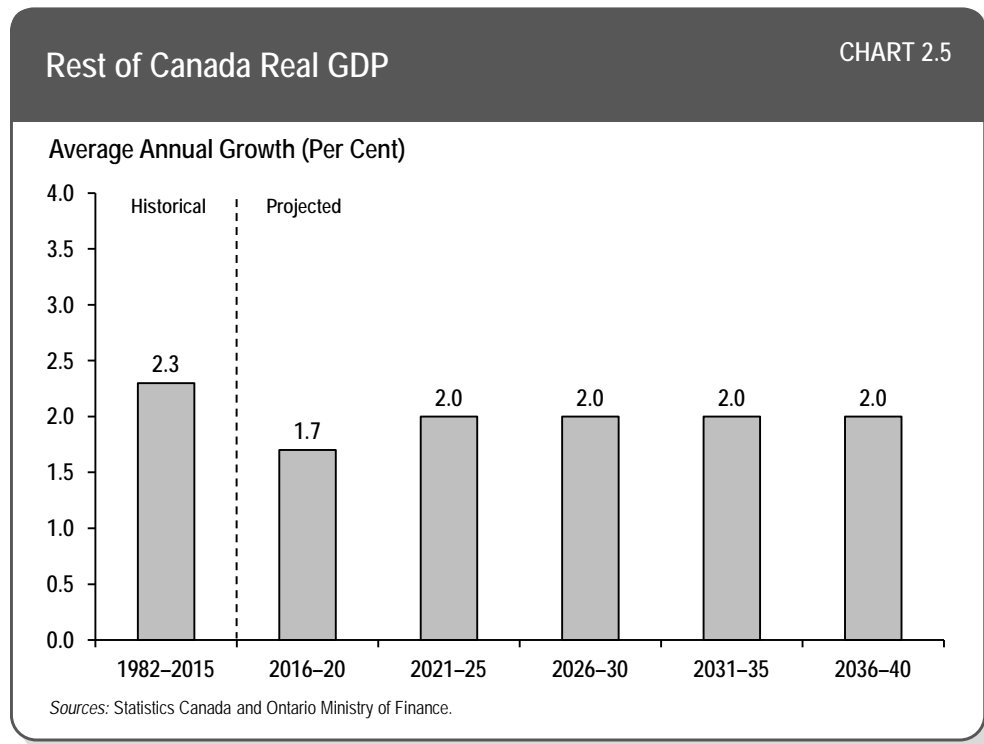


The outlook for the Canadian dollar is relatively favourable for Ontario exporters compared to the 2006–14 period. However, improvements in relative competitiveness are set against a backdrop of increasing global competition and lower commodity prices that may somewhat temper the long-term benefits of a lower Canadian dollar for exports.³

³ André Binette, Daniel de Munnik and Julie Melanson, “An Update – Canadian Non-Energy Exports: Past Performance and Future Prospects,” Bank of Canada Discussion Paper, October 2015.

Rest of Canada

The rest of Canada will continue to be an important destination for Ontario exports and is expected to continue to grow at a modest pace after recovering from the recent significant decline in oil prices.

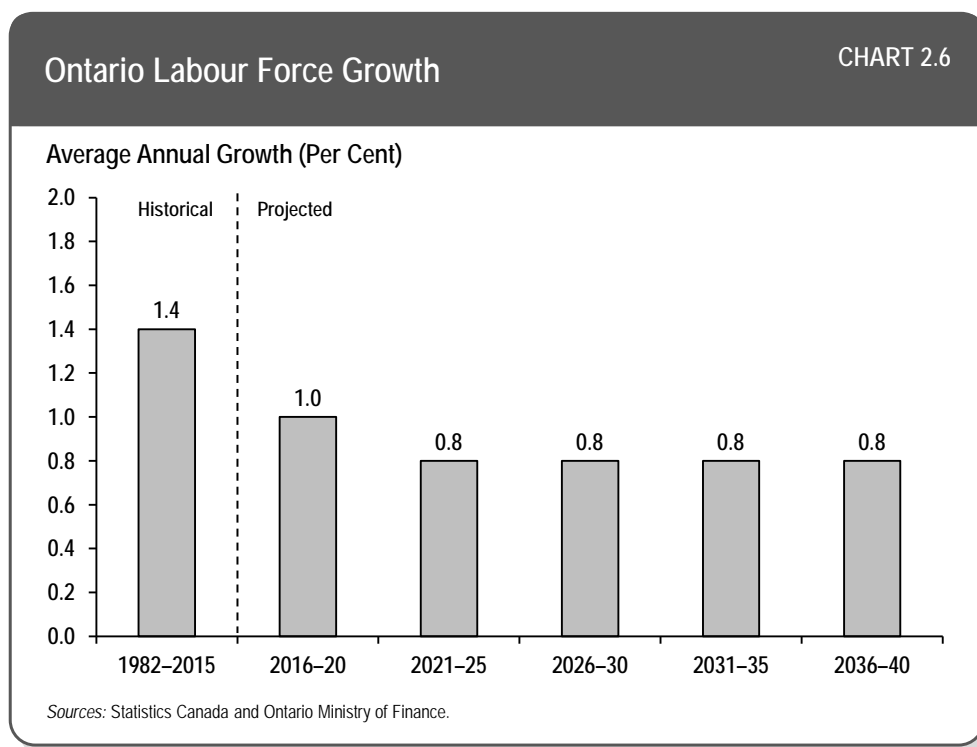


Ontario's Potential Economic Output

The most important determinants of long-run economic growth are the supply of workers and the growth in their productivity, which in turn are supported by innovation and growth in the capital stock.

Population and Labour Supply

One of the most important long-term challenges Ontario faces is slowing growth in its working-age population.

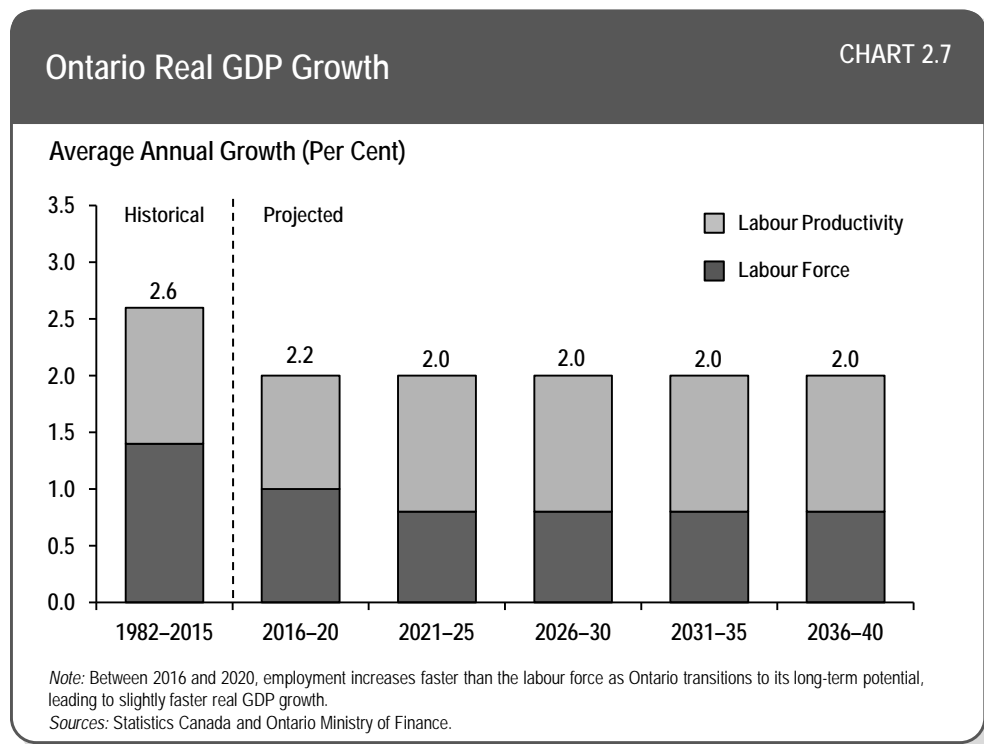


A declining overall labour force participation rate, combined with a slower growth rate in the core working-age population for most of the forecast horizon, means significantly slower projected labour force growth than Ontario has historically experienced. (Chapter I: *Demographic Trends and Projections* provides additional details on the underlying source projections used to build this labour force outlook.)

Productivity

The rate of productivity growth is key to determining Ontario's long-term potential output. Particular importance is placed on this factor since growth in the working-age population is expected to decline over the forecast horizon.

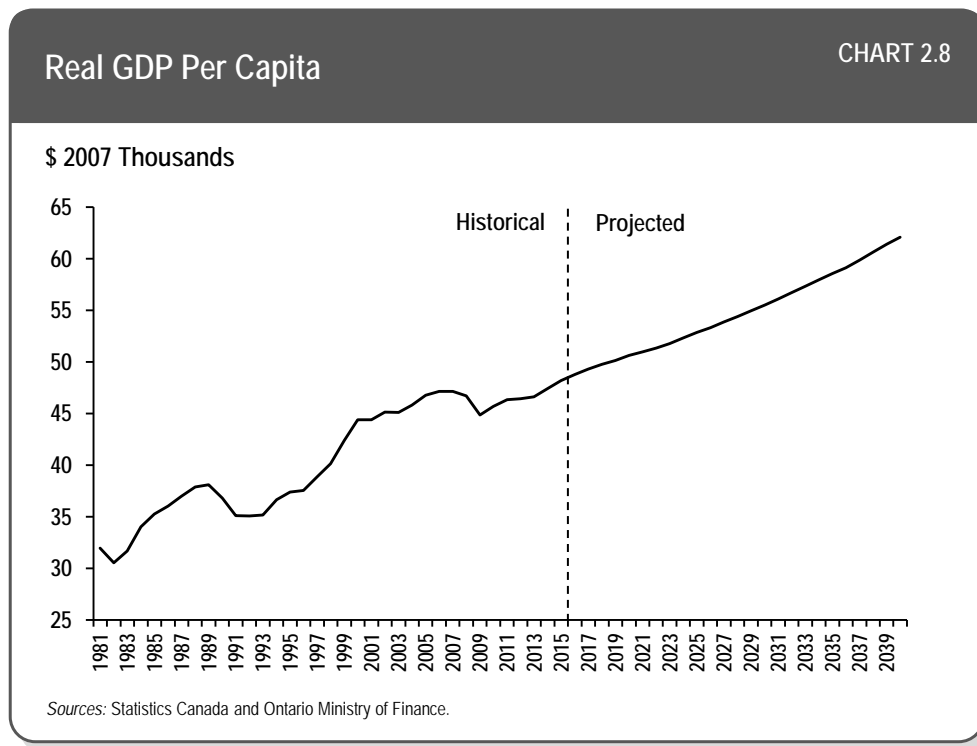
This projection assumes that, between 2016 and 2040, Ontario's productivity growth will average 1.2 per cent — the same as the long-term average from 1982 to 2015.



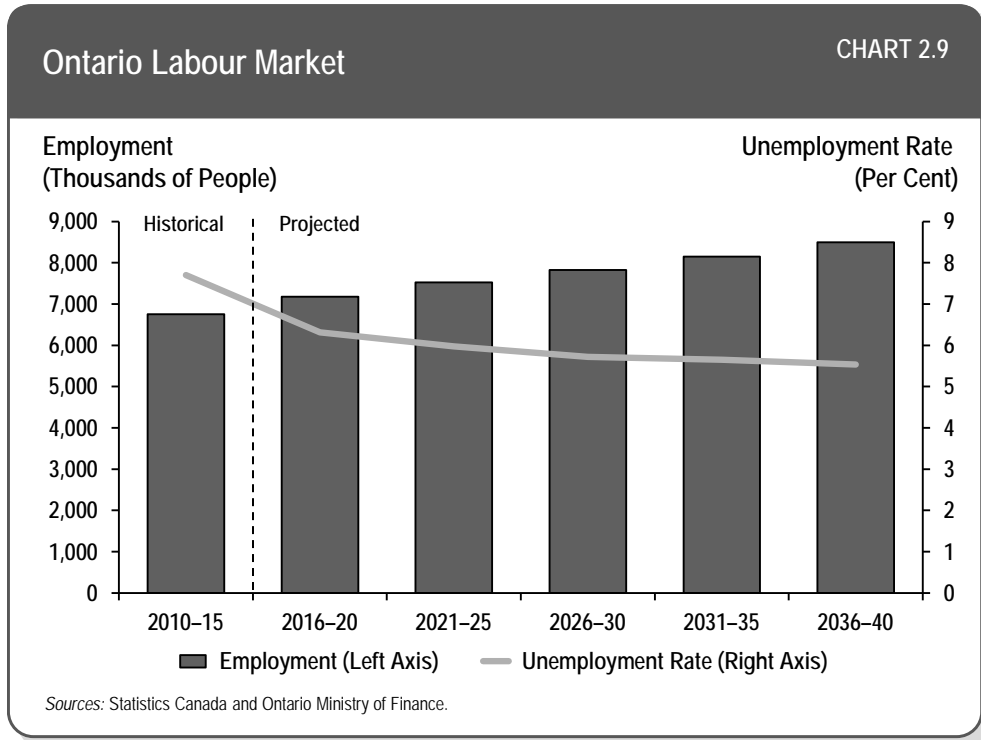
Details of the Ontario Economic Outlook

The Ministry of Finance is projecting long-term, average, annual real GDP growth of 2.1 per cent between 2016 and 2040 in Ontario, slower than the 2.6 per cent average growth from 1982 to 2015, as a result of slower projected labour force growth.

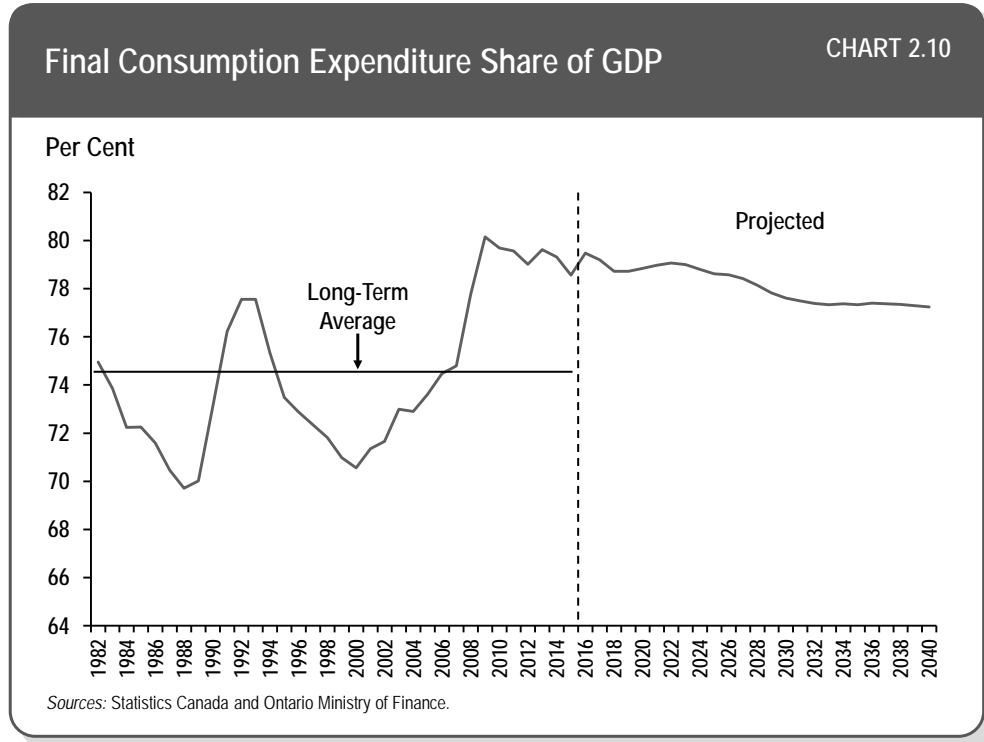
Real GDP per capita is expected to improve, reflecting continued growth in real GDP. Real GDP per capita rose 50 per cent from \$32,000 in 1981 to \$48,000 in 2015. The Ministry of Finance projects real GDP per capita will further increase by 29 per cent to \$62,000 by 2040.



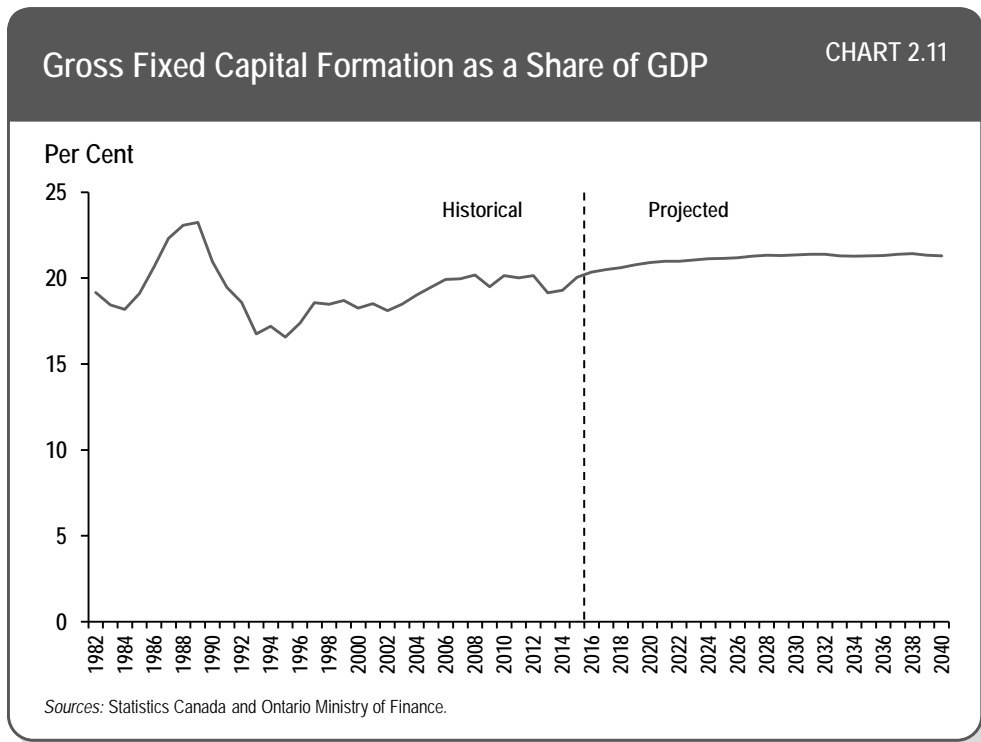
The total number of employed people in Ontario is projected to grow, on average, from about 6.8 million between 2010 and 2015 to about 8.5 million between 2036 and 2040. The unemployment rate is projected to decline, on average, from about 7.7 per cent between 2010 and 2015 to about 5.5 per cent between 2036 and 2040. Rising incomes and employment will support continued growth in household spending over the projection period.



Final consumption expenditure as a share of the economy is expected to decline slightly from recent highs but to remain above the long-term historical average.



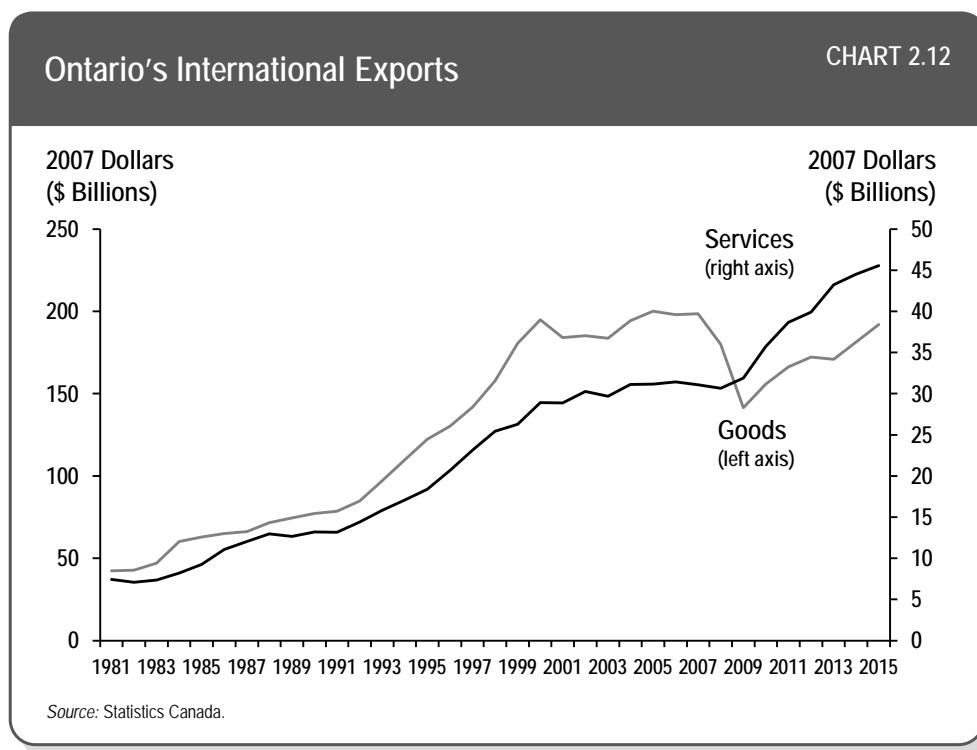
Gross fixed capital formation is expected to grow slightly faster than overall GDP over the projection period. Growth in public and private investment is an important part of growth in potential output, particularly in light of slower growth in the working-age population. As outlined later in the chapter, the government has put measures in place to enhance growth in private-sector capital stock by significantly lowering the marginal effective tax rate on new capital investment. The Province has also committed to continue making significant public-sector investments.



External Trade and the Ontario Economy

Economic growth in the rest of Canada, the United States and globally will continue to support growth in Ontario exports.

Ontario's international trade in goods, which was negatively impacted by the slowdown in the U.S. and global economies as a result of the 2008–09 financial crisis, has almost recovered to its pre-recession high. Over the last 10 years, growth in Ontario's international exports in services has surged ahead by 46 per cent.



The United States remains Ontario’s primary destination for international merchandise exports, representing 80.5 per cent of the total in 2015. An increasing share of goods and services exports is integrated into the production of other products and Ontario is an important contributor to these global value chains.

Canada is also a major destination for American exports. According to the U.S. Census Bureau, 35 states have Canada as their largest export partner, with many of these states having Ontario as their number one export market.



While the United States remains Ontario’s primary international trading partner, over the past 10 years Ontario has been diversifying its exports to other markets abroad. For example, Ontario’s share of its merchandise exports to the fast-growing Chinese market doubled between 2005 and 2015. In addition, Ontario’s share of its exports destined for the European Union, Mexico and Hong Kong has continued to expand.

Canada–European Union Comprehensive Economic and Trade Agreement (CETA)

The Canada–European Union (EU) Comprehensive Economic and Trade Agreement (CETA) is one of Canada’s most far-reaching trade initiatives. It sets new standards in the trade of goods and services, investment, non-tariff barriers, government procurement, and other areas such as labour and the environment.

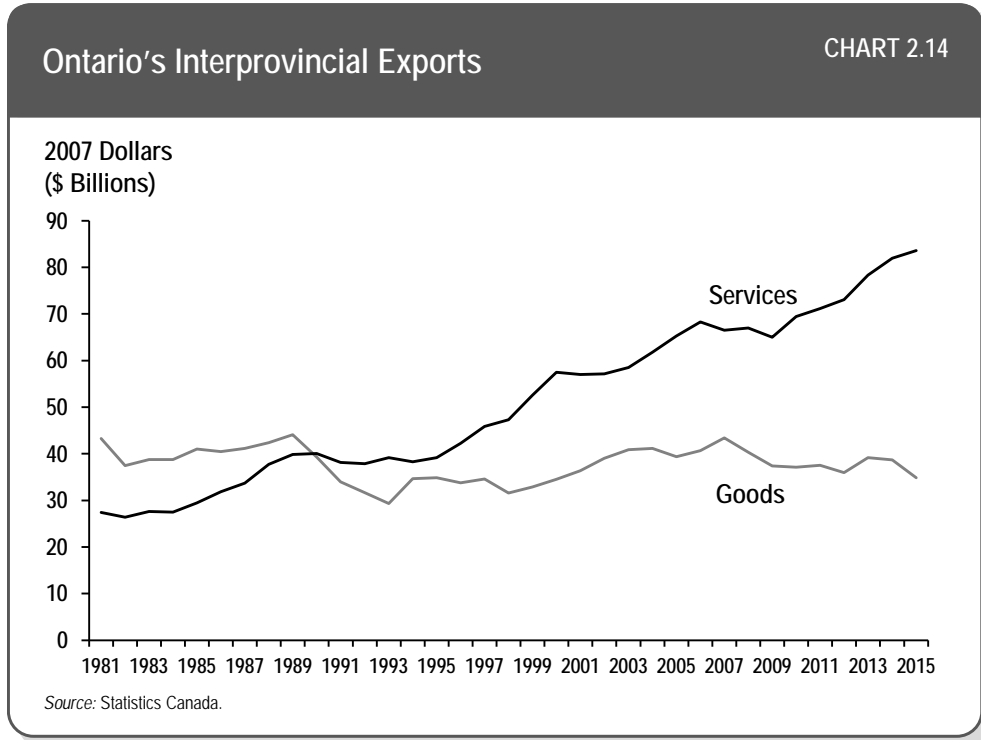
Preferential access to the EU’s large and dynamic market offers significant opportunities. The EU is the second largest economy in the world and Canada’s second largest trading partner after the United States. It is also the second largest importing market for goods globally, with the EU importing more annually than the size of Canada’s GDP.

What Does CETA Cover?

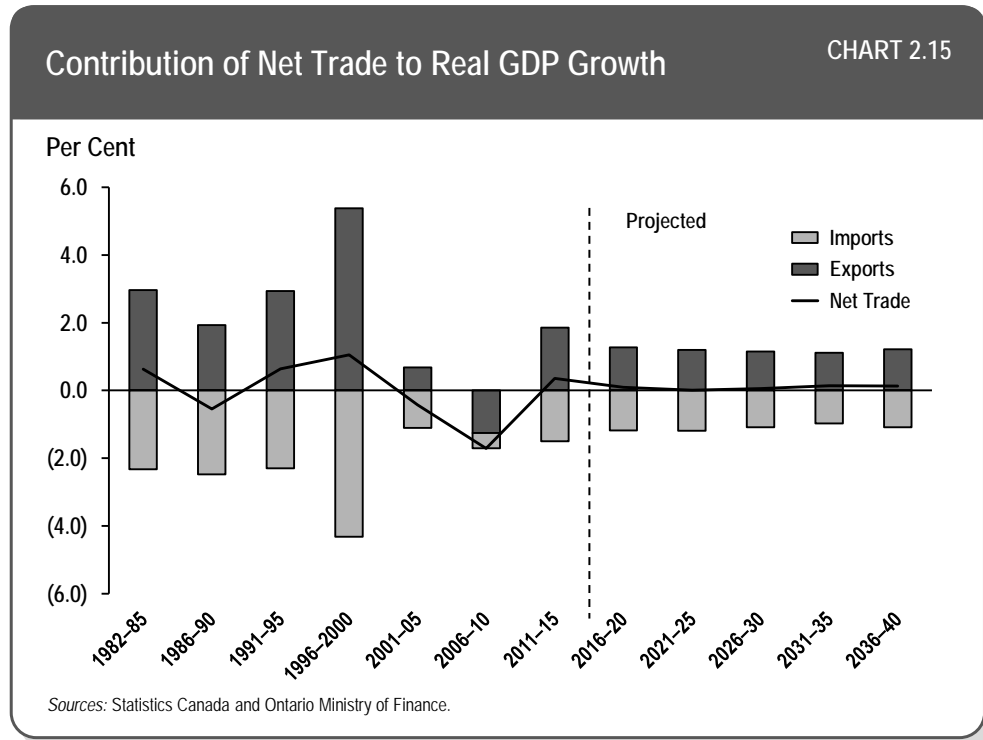
CETA essentially covers all sectors and aspects of Canada–EU trade, aiming to reduce or eliminate barriers. The agreement addresses tariffs, product standards, investment, professional certification and many other areas of activity.

Improving access to EU markets provides new opportunities for Ontario producers, manufacturers and exporters, and greater certainty, transparency and protection for investments, generating significant benefits for Ontarians and contributing to long-term prosperity.

The rest of Canada also continues to be an important destination for Ontario goods and services, representing 34 per cent of total Ontario exports in 2015. Real interprovincial service exports, in particular, have about doubled over the last 20 years.

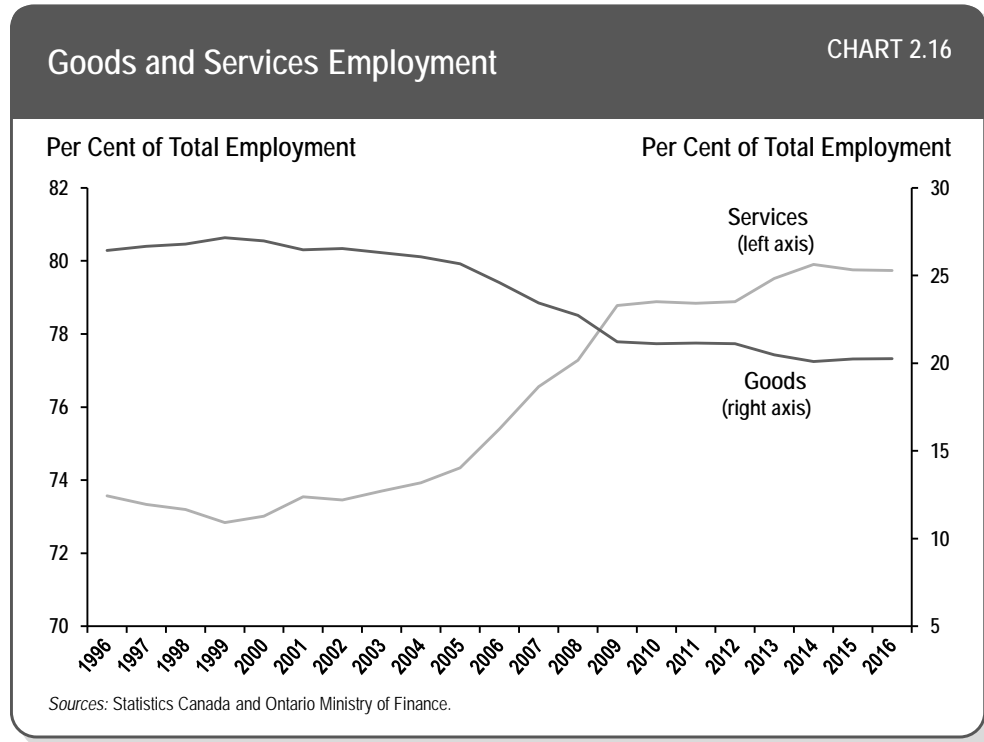


The volume of exports and imports can be quite volatile from year to year. The Province has taken steps to help increase exports through its Going Global trade strategy. Net trade is expected to contribute modestly to real GDP growth over the long term.



Sectoral Evolution of the Economy

As service-based exports have grown in importance, Ontario's economy has evolved from goods-producing to service-producing industries. The share of Ontario service industry employment as a per cent of total employment increased from 73.6 per cent in 1996 to almost 80 per cent by 2016.



A closer look at the structure of the Ontario economy shows that the decline in manufacturing's share of employment has been offset by gains in a wide variety of private and public service sectors. These trends are expected to continue over the long term, albeit at a somewhat slower pace.

**Table 2.4 Employment Share of Major Ontario Sectors
(Per Cent)**

Sector	1996	2006	2016
Goods-Producing Sector	26.4	24.6	20.3
Manufacturing	17.5	15.4	10.7
Other Goods-Producing Industries	8.9	9.1	9.5
Private Services-Producing Sector	51.7	53.8	55.5
Wholesale and Retail Trade	15.0	15.7	14.8
Transportation and Warehousing	4.7	4.6	4.7
Information and Cultural	2.7	2.7	2.1
Financial Services	5.2	5.4	5.8
Real Estate and Rental and Leasing	2.0	1.9	2.1
Professional, Scientific and Technical Services	6.1	7.0	8.5
Management, Administrative and Support	3.4	4.5	4.7
Arts, Entertainment and Recreation	1.8	2.2	2.4
Accommodation and Food Services	6.0	5.8	6.5
Other Services	4.7	4.0	3.9
Public-Sector Services	21.9	21.6	24.2
Education	6.6	6.9	7.2
Health Care and Social Assistance	9.7	9.8	12.0
Public Administration	5.6	4.8	5.0

Note: Other goods-producing industries include agriculture, fishing, forestry, mining, utilities and construction.

Source: Statistics Canada, Labour Force Survey.

Alternative Productivity Scenarios

This section describes alternative scenarios for economic growth, based on alternative paths for productivity. It provides an explanation of why productivity growth might be higher or lower than has been assumed in the base-case economic projection. Details of the high and low economic growth scenarios are provided in the Appendix.

High-Growth Scenario

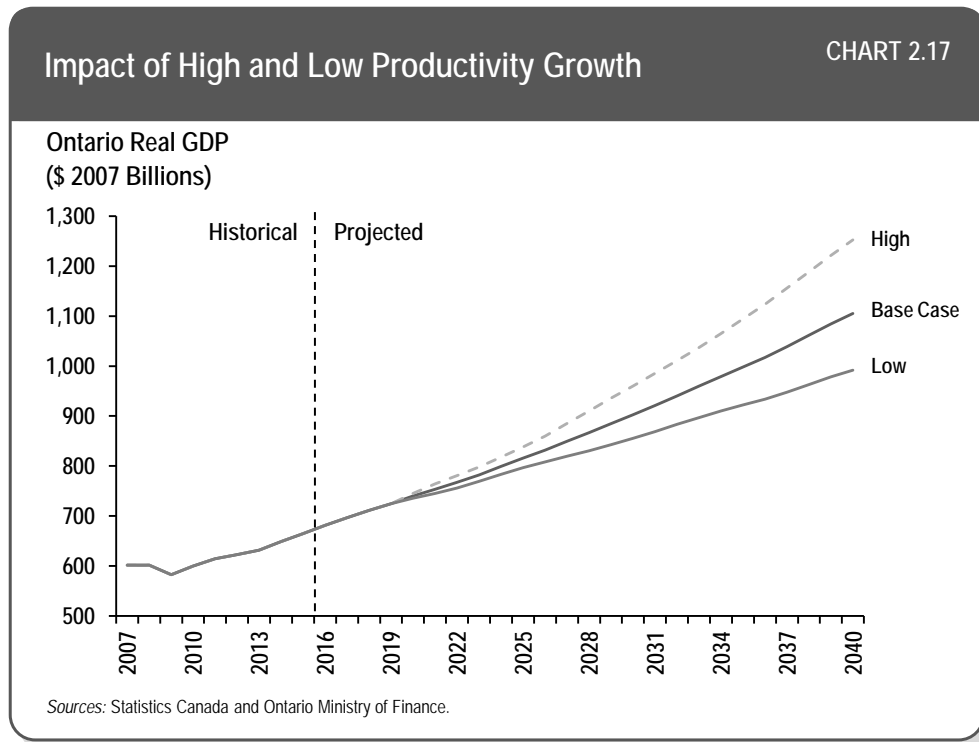
In the high-growth scenario, a path of higher investment, greater payoffs from technological progress and increasingly diversified trade to faster-growing emerging market economies leads to productivity growth that is, on average, 0.3 per cent per year higher than in the base case over the 2016–40 projection period.

Low-Growth Scenario

In the low-growth scenario, Ontario is less successful in encouraging businesses to invest and in diversifying its trade in the face of growing international competition. In this scenario, labour productivity is assumed to grow at an average annual pace of 0.3 per cent more slowly than in the reference case.

Impact of Alternative Productivity Growth Assumptions

By the end of the forecast horizon, Ontario real GDP is projected to be \$1,105 billion (2007 prices). Under the high-productivity scenario, real GDP is expected to grow to \$1,253 billion in 2040, while under the low-productivity scenario, real GDP would grow to \$992 billion. These alternative scenarios illustrate that small changes in the annual growth rate of productivity can result in considerable differences in the size of the economy over the long term.



Risks to the Outlook

An important risk to Ontario's aims of increasing and diversifying global exports is the recent trend towards increased trade protectionism across the globe, such as the United Kingdom's vote to leave the European Union and the protectionist sentiments expressed by the new administration in the United States. These potential trade barriers are particularly worrisome in light of the continued weak global growth outlook.

Another key risk to Ontario's long-term growth and export prospects arises from lowered U.S. potential economic growth projections. A number of U.S. forecasters, including the Congressional Budget Office (CBO), have recently lowered their long-term projections of U.S. potential economic growth. In particular, the CBO has lowered its long-term projections for both labour force and productivity growth.

Recent advancements in the field of artificial intelligence have the potential to automate some of the work traditionally done by human labour. This emerging technology could result in huge economic benefits but could also potentially disrupt the livelihoods of many Ontarians. This risk is discussed further in Chapter III: *Employment Trends*.

Other Perspectives on Long-Term Growth

Currently, only two private-sector forecasters produce long-term projections for the Ontario economy — the Conference Board of Canada and the Institute for Policy Analysis at the University of Toronto.

Table 2.5 Comparison of Ministry of Finance Projections to Other Forecasts, 2016 to 2040, Average Annual Growth
(Per Cent)

Ontario Forecasts	Real GDP	Employment	Output/ Employee	Source Population
Conference Board of Canada	2.0	0.8	1.1	0.9
Institute for Policy Analysis at the University of Toronto	2.1	1.0	1.2	1.1
Ontario Ministry of Finance	2.1	0.9	1.2	1.1

Although the details of the two forecasts differ slightly, the Ministry of Finance's projections are largely consistent with these views of the long-term growth of the Ontario economy.

Enhancing Productivity Growth

Productivity growth is a critical driver of economic prosperity and living standards. Productivity growth in Ontario's economy is important because it is linked to more rapid wage increases in real terms, lower prices for consumers, higher profits for businesses and increased tax revenues to support key public services.

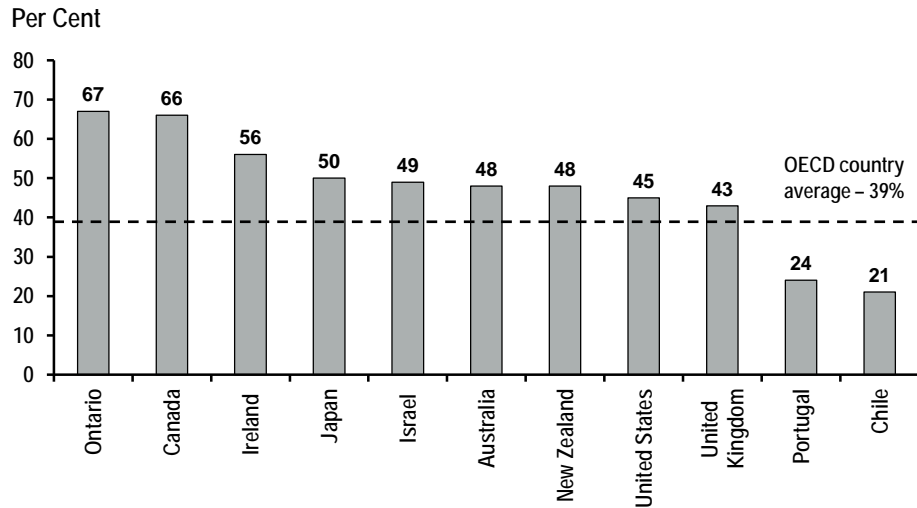
The Province continues to take action to improve Ontario's long-term economic prosperity and increase productivity growth in the business sector.

Highly Skilled Workforce

A highly educated labour force, equipped with the knowledge and skills needed to compete successfully in the global economy, is vital for boosting Ontario's productivity and increasing its standard of living. The talents and skills of Ontario's workers are consistently identified as one of the province's greatest strengths in continuing to attract economic investments and growth. Ontario has made significant investments in education and skills training, from full-day kindergarten to postsecondary education. These investments are crucial to maintain the advantage Ontario derives from its highly educated workforce. In 2016, the Province had a higher postsecondary education attainment rate (68 per cent) than all OECD countries, including Canada.

Share of Adult Population with Postsecondary Education Credential, Ontario and Selected OECD Countries — 2015

CHART 2.18



Notes: Postsecondary education includes university and college credentials, as well as college-based apprenticeship and training programs not leading to a college diploma. Adult population includes population aged 25 to 64.
Sources: OECD and Labour Force Survey special tabulation for Ontario.

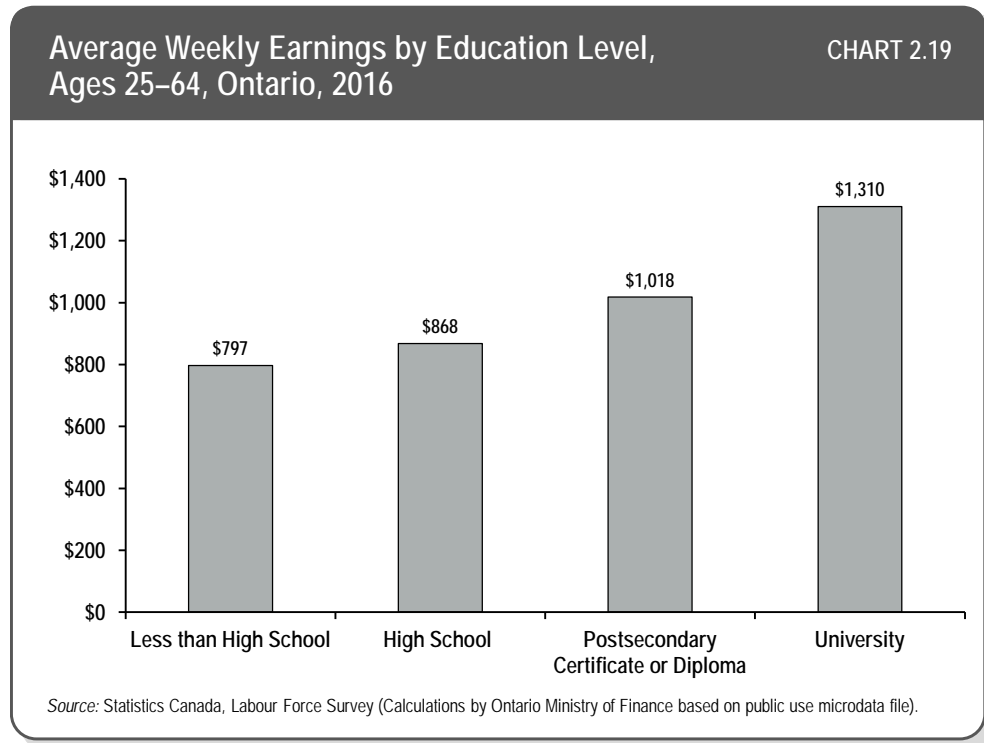
Ensuring Early Learning Success

The government has implemented full-day kindergarten for every four- and five-year-old in the province and will be increasing licensed child care spaces to help ensure that Ontario’s youngest learners get the best start in life and have future learning success.

The government’s strategy for education, “Achieving Excellence: A Renewed Vision for Education in Ontario,” places the focus on achieving excellence, ensuring equity and promoting well-being, as well as on 21st century teaching and learning skills, for primary and secondary school students. To achieve these goals, the Province has initiated several programs, such as the Innovation, Creativity and Entrepreneurship (ICE) element of the Specialist High Skills Major (SHSM) program, which provides students the opportunity to focus on a specific economic sector while acquiring a high school diploma. The ICE training in SHSM programs will allow students to understand the world from the perspectives of others and to generate new ideas, while giving them the confidence to develop strategies to implement and sustain their ideas while considering the impacts and consequences that their innovations have on the world around them.

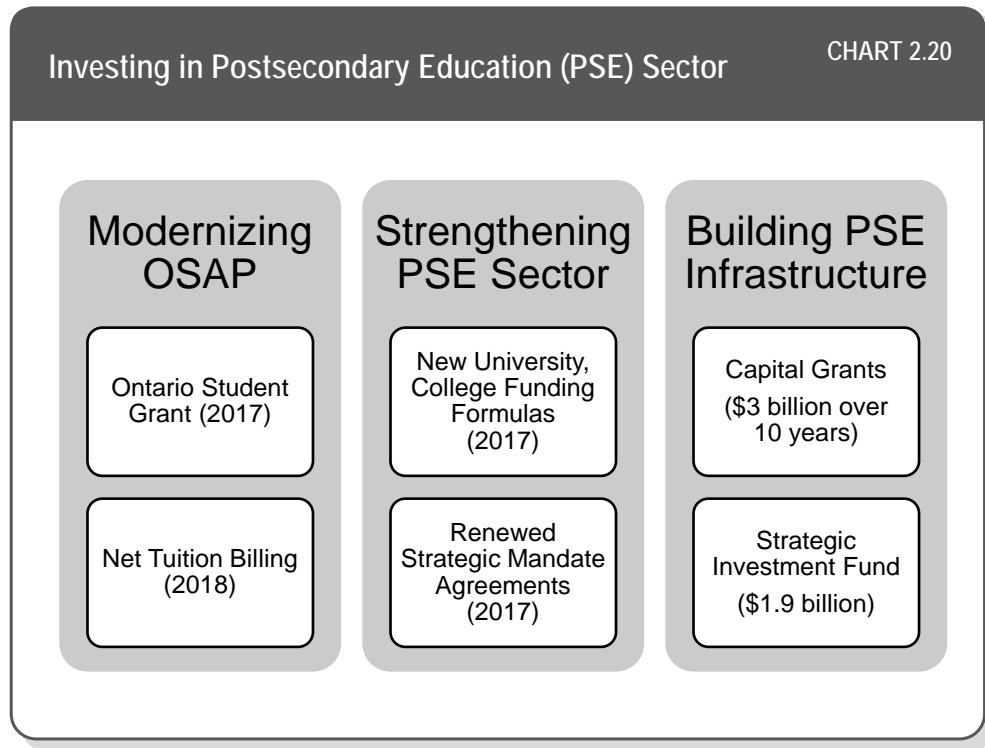
Investing in Postsecondary Education

In addition to increasing productivity, educational attainment has a strong association with income for individual workers. Core-aged (25–64) workers with a university degree earn an average of \$1,310 a week, 51 per cent more than those with only a high school diploma (see Chart 2.19).



The Province is continuing to invest in postsecondary education to prepare today's students for well-paying jobs in the future knowledge economy. In the *2016 Budget*, the government announced its commitment to invest \$3 billion over the next 10 years to improve postsecondary education infrastructure and expand access to high-quality college and university education. Ontario has also collaborated with the federal government and with colleges and universities to implement the Post-Secondary Institutions Strategic Investment Fund. This initiative will lead to shared investments of more than \$1.9 billion in research, innovation and training infrastructure at Ontario's postsecondary institutions.

Assisting Students with Education Costs



Ontario also continues to expand and guarantee access to higher education and help students with postsecondary education costs, so that every qualified student wishing to attend college or university can afford to. The government is continuing to modernize the Ontario Student Assistance Program (OSAP) by introducing an integrated application process in 2018, which will let students apply for college or university and for OSAP at the same time. As well, it will allow them to receive their net tuition estimate at the same time as their offer of admission.

Investing in Ontario's Workforce

Recognizing the strategic importance of continuing to invest in Ontario's workforce to ensure that people are prepared for jobs that are increasingly technology-driven and knowledge-based, the government set up the Premier's Highly Skilled Workforce Expert Panel. The panel's final report in June 2016 made several recommendations to help Ontario's workforce adapt to the demands of the knowledge economy.

The government and its partners are now implementing a Highly Skilled Workforce Strategy to better align education, training and skills development with the demands of a changing global economy and the opportunities for innovation discussed below. This strategy is focused on making progress in key areas, including improving access to labour market information, expanding experiential learning and boosting investment in workers' skills.

As recommended by the Highly Skilled Workforce Expert Panel's report, governments, employers, labour, and education and training institutions must work together to increase workplace training opportunities. Studies show that employers in Canada invest less per capita in workplace training than international competitors such as the United States. According to the Conference Board of Canada, Canadian employers' spending on per-employee learning and development decreased from \$1,249 in 1993 to \$800 in 2015, although there has been a slight upward trend in recent years.⁴

⁴ The Conference Board of Canada, *Learning and Development Outlook*, 13th Edition, 2015.

Strengthening Innovation

Innovation is defined by the OECD as the implementation of a new or significantly improved product, process, marketing method or organizational method.⁵

Innovation and technological change are important to an economy as the key long-term drivers of economic growth and prosperity.

Discussions of innovation often distinguish between gradual improvements to technologies and transformative technologies, which create new markets or disrupt existing activities. Modern examples of transformative technologies include the personal computer and the Internet, which have reshaped productive activities in the economy, as well as people's personal lives.

Over the coming decades, transformative technologies could have a disruptive impact on Ontario's economy, affecting existing occupations and reshaping Ontario's labour market (as discussed in Chapter III: *Employment Trends*).

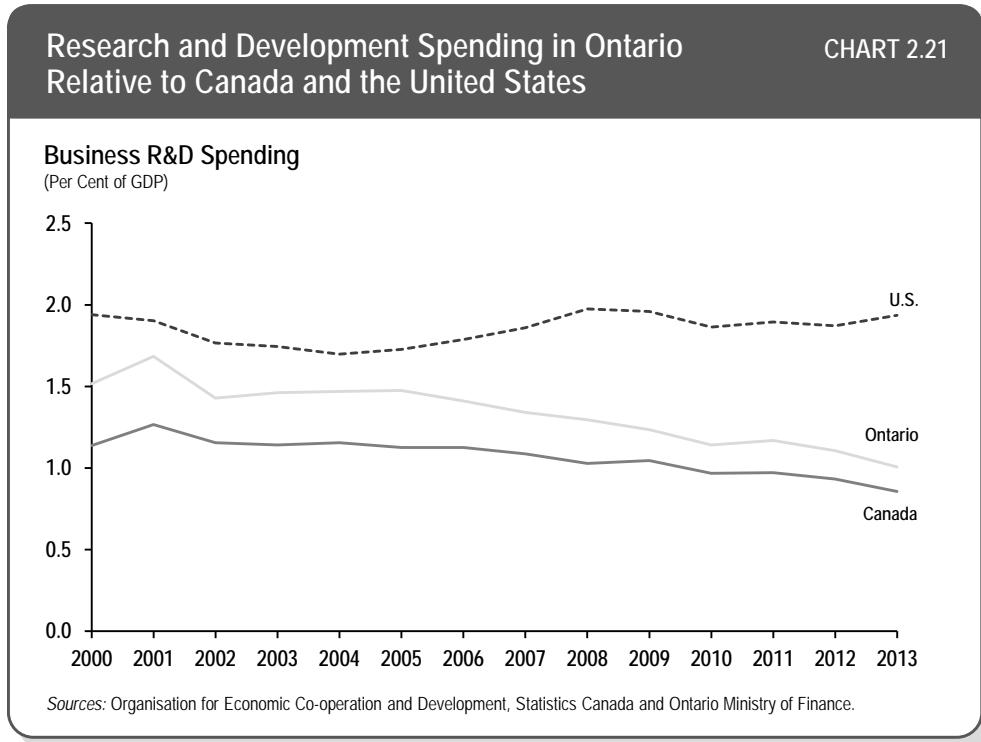
Some of these technologies could include:

- Artificial intelligence;
- Quantum computing;
- Continued advances in mobile telecommunications;
- Regenerative and personalized medicine;
- Smart technologies that enable linkages between objects, computers and communication devices (the "Internet of Things"); and
- Clean technologies that improve the production of existing goods, create new goods or generate sustainable sources of energy.

Ontario has a long history of developing pioneering technologies, such as insulin, the pacemaker and the telephone. This track record has been supported by the province's world-class research institutions and an attractive business environment that encourages research and development (R&D) and entrepreneurial activity. As a result, Ontario's economy is well positioned to benefit from the development, adoption and diffusion of transformative technologies.

⁵ Organisation for Economic Co-operation and Development/Eurostat, *Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data*, 3rd Edition, 2005.

Despite this potential, opportunities presented by transformative technologies and other forms of innovation are hindered by challenges in Ontario’s innovation ecosystem. These challenges include weak business R&D spending, underinvestment in information and communications technologies, weak multifactor productivity growth relative to other advanced economies such as the United States and weak intellectual property protection.



To better position Ontario to realize opportunities presented by transformative technologies, the Province continues to support innovation across all sectors of the economy. Between 2003 and 2013, the government spent almost \$5.5 billion to support R&D activities across the province — 80 per cent of which was spent on R&D in universities, colleges and research hospitals.⁶ This investment is in addition to tax credits for R&D provided by the Province to support Ontario businesses.

⁶ Statistics Canada, “Gross Domestic Expenditures on Research and Development in Canada (GERD), the Provinces, and Territories,” Catalogue No. 88-221-X, 2015.

Business Growth Initiative

To foster a more dynamic business environment, Ontario is also implementing the Business Growth Initiative, a five-year, \$400 million plan to support the development and adoption of innovation and advanced technologies across the economy and help entrepreneurial firms scale up into medium-sized and large businesses.

A number of programs have been launched as part of the Business Growth Initiative, including:

- ▶ The ScaleUP Ventures Fund, which is targeting a final fund size of \$75 million, including a \$25 million commitment from the Province, to support a venture capital fund that also provides mentorship to Ontario-based startups and entrepreneurs;
- ▶ The \$32.4 million Scale-Up Voucher Program, to be used by companies to fund activities such as specialized talent development and recruitment, as well as intellectual property protection services;
- ▶ The \$28.8 million Small Business Innovation Challenge pilot program to help participating small and medium-sized enterprises (SMEs) develop and demonstrate innovative technology solutions; and
- ▶ The Red Tape Challenge, which engages businesses, stakeholders and the public in identifying regulatory improvements and lessening compliance burdens for business.

Jobs and Prosperity Fund

Ontario continues to work with businesses through the Jobs and Prosperity Fund, a 10-year, \$2.7 billion fund created to support strategic economic investments for Ontario companies and sectors. Increasing innovation and enhancing productivity growth are two of the program's key criteria. The fund has leveraged significant investments across Ontario in sectors such as advanced manufacturing, information and communications technology, and life sciences.

Infrastructure Investment

Modern and reliable public infrastructure offers long-term benefits to Ontario's economy. It promotes growth, helps increase private-sector productivity and positions Ontario as a global competitor. Infrastructure also enhances Ontarians' quality of life by providing access to improved schools and hospitals, moving people and goods, and connecting communities.

Ontario is served by a vast portfolio of public infrastructure — including bridges, hospitals, government buildings and colleges — with a replacement value of close to \$550 billion. The government owns approximately 40 per cent of these assets either directly or through broader public-sector organizations, such as hospitals, schools and community colleges. Many of these assets are aging, with the average Ontario hospital being 45 years old and the average school 38 years old. Continued improvement of asset management planning is required to ensure that existing infrastructure is adequately maintained and new assets are built as required.

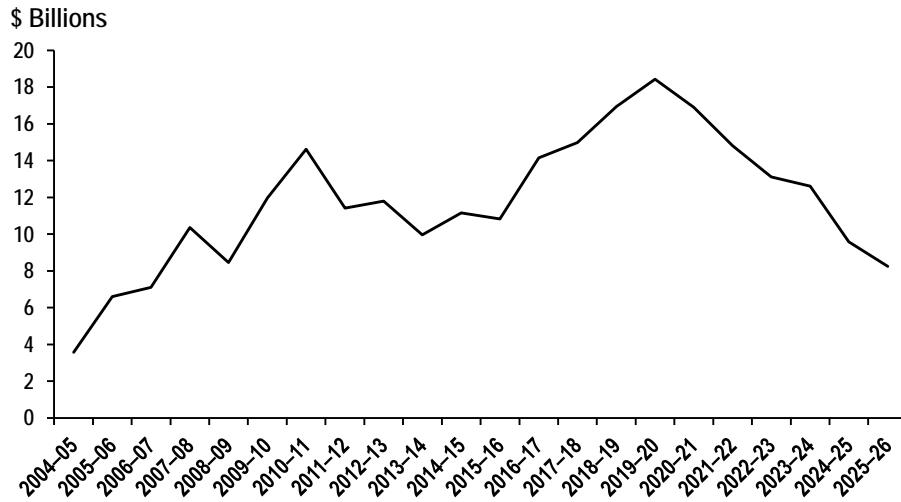
Sufficient investment in infrastructure renewal is an important component of a highly functioning economy. Well-maintained infrastructure, such as roads, highways and bridges, lasts longer, saving taxpayer dollars in the long run. Beyond renewing the Province's existing infrastructure, further investments will be required to meet future demographic and economic needs. Important planned investments include increasing child care spaces, investing in health care and postsecondary education, and further integrating the province's transportation network.

"With improved transport systems, cities could take more advantage of urban agglomeration benefits and firms would become more competitive."

*David Dodge and Richard Dion
Infrastructure Investment for Longer Term Growth in Ontario*

Historical and Planned Infrastructure Expenditures

CHART 2.22



Notes: Planned figures (2016-17 to 2025-26) are as of 2016 Ontario Economic Outlook and Fiscal Review. Figures subject to change. The infrastructure plan includes investments in Moving Ontario Forward for public transit, highways and other priority infrastructure projects. Figures exclude third-party investments in hospitals, colleges and schools, and unassigned federal contributions to provincial infrastructure investments.

Source: Ontario Treasury Board Secretariat.

In the *2016 Ontario Economic Outlook and Fiscal Review*, the government committed to continue making public infrastructure investments of more than \$160 billion over 12 years, starting in 2014-15. In the short term, these investments will support jobs in businesses that build, maintain and service assets and provide related services. In the medium term, the economy will benefit from improved roads and public transit, moving goods to market faster, helping manage congestion and reducing commute times. In the long term, these investments will support a more productive economy, stimulating competitiveness and attracting the business investment and talent needed for economic prosperity.

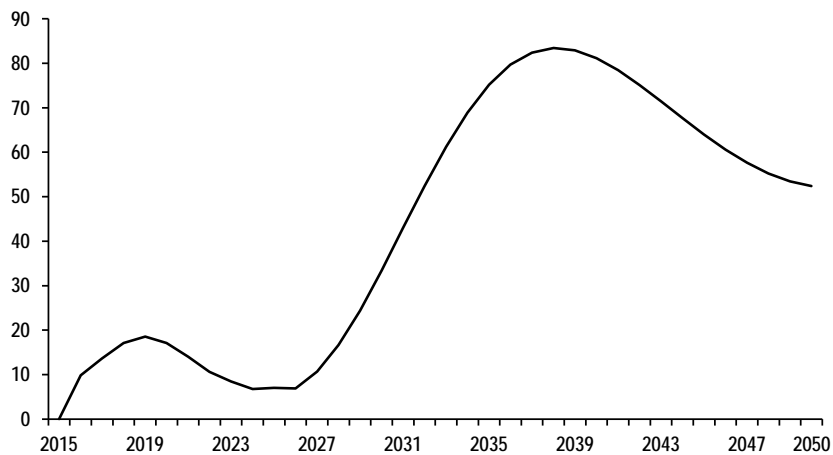
Economic Benefits of Public Infrastructure Spending in Ontario

The government has commissioned a study by the Centre for Spatial Economics (C4SE) to assess the broader economic impacts of Ontario's infrastructure plan. The analysis assesses the impact of direct investment spending from 2016–17 to 2025–26 and importantly also looks at the impact of long-term economic growth and productivity. Given the uncertainty of potential business cost savings and productivity growth resulting from the plan, the study assesses alternative scenarios of the potential cost savings.

Economic Impact of Ontario Government Infrastructure Plan

CHART 2.23

Ontario Real GDP (Billions of 2015 Dollars)



Source: Centre for Spatial Economics (C4SE).

The study finds that, over the long term, the discounted present value of real GDP in Ontario rises by up to almost \$6 on average per dollar of public infrastructure spending.

The competitiveness of private businesses in Ontario is tied to the quality of public infrastructure. The Province's plan will support a high standard of living provided by public infrastructure.

Recognizing the importance of strategic infrastructure investments, the government enacted the *Infrastructure for Jobs and Prosperity Act, 2015*, which calls for a strong focus on the needs of existing assets and their management. As the Act requires, the Province is developing a Long-Term Infrastructure Plan over the next year. Its main objectives include:

- ▶ Broadly defining Ontario’s infrastructure needs and priorities and the government’s strategy to address these needs;
- ▶ Demonstrating excellence in Ontario’s asset management and infrastructure planning;
- ▶ Incorporating opportunities for innovation into a robust, evidence-based process for infrastructure planning; and
- ▶ Setting the stage for technical analysis of asset management plans.

In January 2017, the Province released an “Infrastructure Update,” which serves as a first step to delivering on the next long-term infrastructure plan. This document was complemented by the release of an interactive website that currently includes a sample of more than 500 key projects already underway in Ontario.

Infrastructure decisions also need to take into account a number of far-reaching trends such as technology. In the health care sector, this means using the most modern technologies in hospitals, such as the new Humber River Hospital — Ontario’s first fully digital hospital. In the education sector, broadband internet connections can allow students in remote areas to take courses online that are not offered locally. Further broadband access allows all students access to up-to-date resources and worldwide connections to others/experts, and increases equity for students with special education needs who require technology for learning.

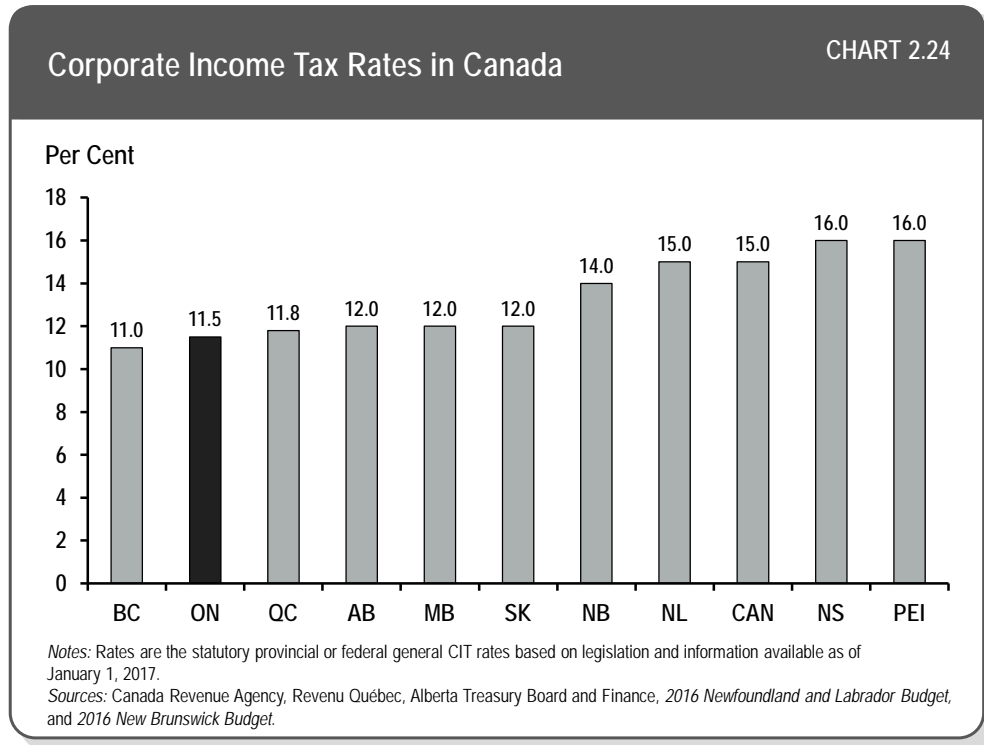
Climate change is another important factor that needs to be taken into account in infrastructure decisions. Ontario’s Climate Change Strategy encourages integrating climate change considerations, such as environmental impacts and resiliency, into infrastructure planning and decisions. Incorporating climate resilience into infrastructure planning can yield significant cost savings in the long term, and infrastructure investments can help mitigate climate change by reducing greenhouse gas (GHG) emissions, with greater use of green infrastructure emerging as a cost-effective way to achieve this.

Tax Competitiveness

The Ontario government is committed to lowering the costs of doing business by maintaining a competitive tax environment. The following business tax reforms have cut taxes and lowered compliance costs, significantly enhancing Ontario's tax competitiveness and business investment climate:

- Moving to the Harmonized Sales Tax (HST), along with reducing Corporate Income Tax (CIT) rates and eliminating the Capital Tax, is providing businesses with about \$9.6 billion of tax relief per year;
- Significant cuts to high Business Education Tax (BET) rates are resulting in ongoing savings of over \$200 million per year for Ontario businesses; and
- The HST and streamlined CIT administration are reducing business compliance costs by more than \$635 million per year.

Ontario's general CIT rate was reduced in stages from 14 per cent in 2009 to 11.5 per cent in 2011 and is now the second lowest in Canada. With a provincial general CIT rate of 11.5 per cent and a combined federal–provincial general CIT rate of 26.5 per cent, Ontario's general CIT rate is competitive within Canada and internationally.



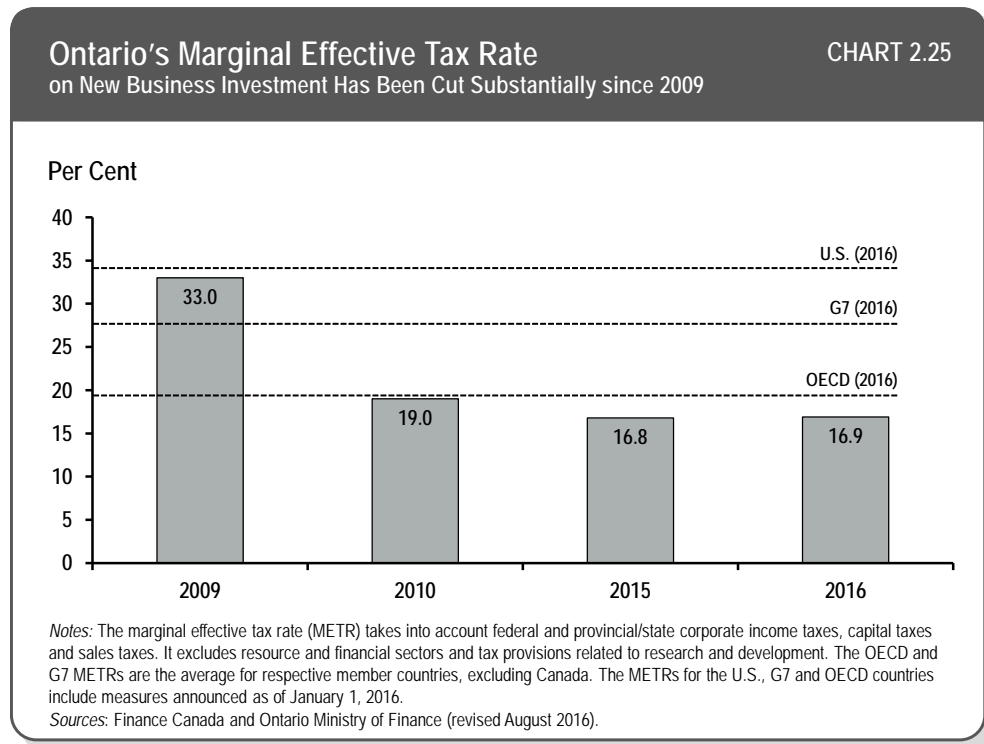
To assess the impact of business taxes on capital investment, it is also important to consider other elements of the tax system.

The marginal effective tax rate (METR) provides a comprehensive measure of the tax burden on new business investment. It takes into account federal and provincial/state CIT, capital taxes and sales taxes.

Ontario and federal CIT reductions to date, along with the move to the HST and elimination of the Capital Tax, have cut Ontario's METR on new business investment substantially since 2009.

Ontario's METR of 33.0 per cent in 2009 fell to 16.9 per cent in 2016 and will fall further as input tax credit restrictions are phased out. Ontario's METR is lower than the average U.S. METR of 34.0 per cent and is one of the lowest in the G7.

This significant improvement in Ontario's tax competitiveness for new business investment will encourage businesses to locate or expand operations in the province, leading to more jobs and higher incomes for Ontarians.



The government also supports Ontario businesses through various corporate tax credits related to training, R&D, manufacturing and processing, small businesses and cultural industries (such as film and television and interactive digital media).

Expanding International Exports

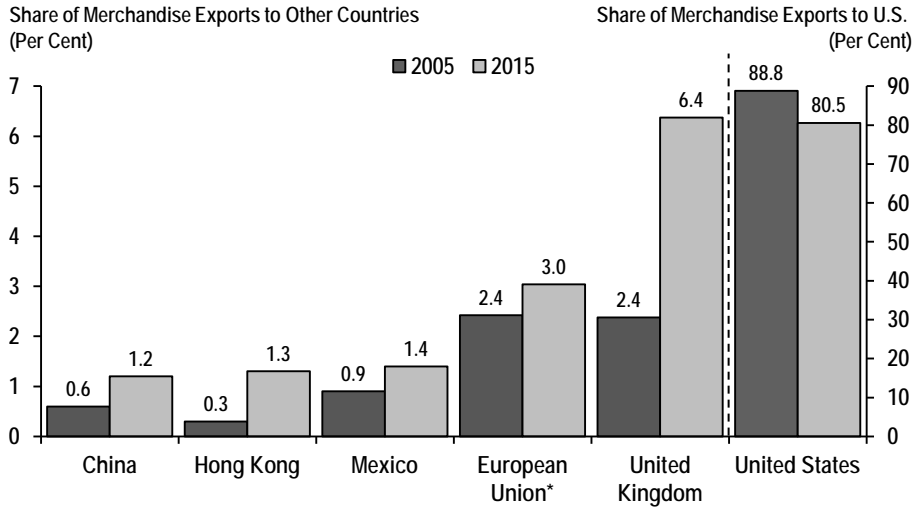
Ontario faces a dramatically changing global economic and political environment. The U.S economy is rebounding, there is a shifting geopolitical landscape, an increased level of uncertainty exists in Europe and the United States, and uneven performances are evident in emerging markets. Recognizing these challenges and potential new opportunities, the Ministry of International Trade was established in 2016 as a standalone ministry to help Ontario businesses increase and diversify exports. In addition, efforts will be made to coordinate linkages and explore opportunities to establish and enhance Ontario's position in global trade networks through increased trade missions and marketing activities.

The Province will also develop a Global Trade Strategy focused on helping Ontario businesses, including SMEs, to start or expand exporting and become more productive. It will achieve this by providing a range of advisory services and programs for new and existing exporters; delivering strategic international trade missions; connecting SMEs to potential buyers, partners and distributors; and collaborating with strategic stakeholders, including industry associations and the federal government.

The Province continues to work with the federal government to negotiate and implement important trade agreements to ensure that Ontario has a competitive edge and access to global markets. Expanding international trade supports Ontario's long-term prosperity by creating high-quality jobs and wages in exporting industries. The Province will continue to expand exports by tapping into emerging economic markets while maintaining the United States as its key export market.

Ontario Exports Expanding to New Markets

CHART 2.26



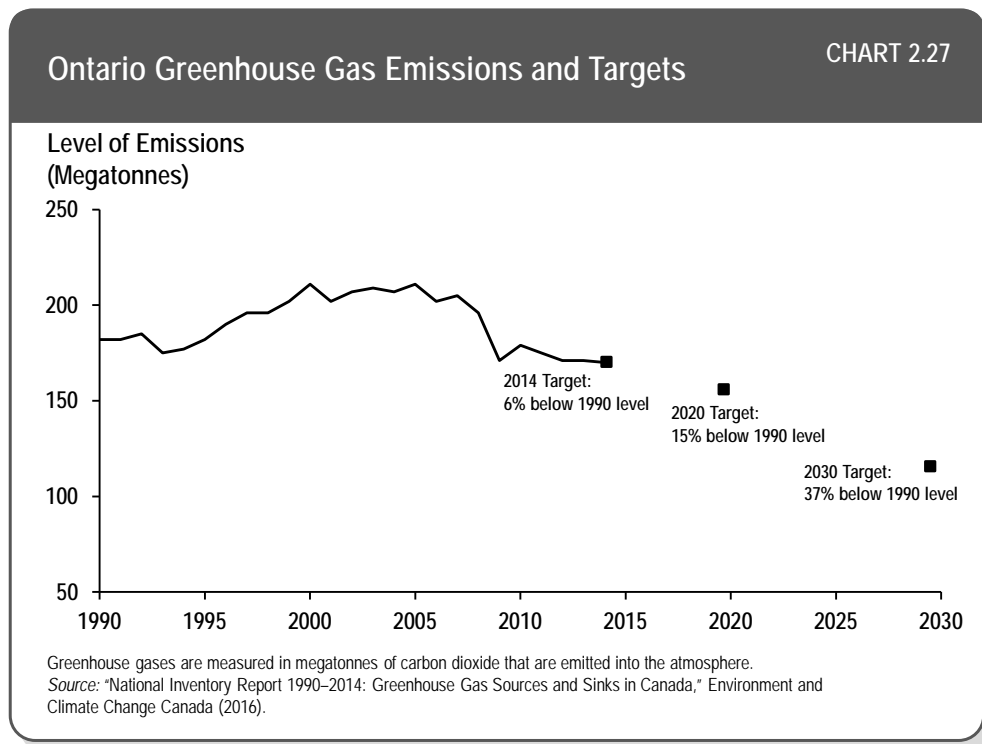
*European Union excludes the United Kingdom.

Notes: Over the past 10 years, Ontario has been diversifying its exports to markets beyond the U.S. For example, exports continued to expand to the European Union and doubled to the fast-growing Chinese market.

Source: Statistics Canada.

Low-Carbon Economy

The economy of the future will be characterized by the evolution and adoption of low-carbon ways of producing goods and services. Supported by proactive policies and innovative technologies, the shift towards a low-carbon economy will build on Ontario's current strengths in manufacturing and knowledge-based industries to ensure future economic prosperity and address the diverse challenges of climate change. Policy actions outlined under the Climate Change Action Plan put Ontario in a leading position to capitalize on the global shift towards a high-productivity, low-carbon economy. Achieving Ontario's long-term vision for advanced manufacturing and services, driven by the creation and use of low-carbon goods and services, will help ensure a sustainable and prosperous economic future for the province.



In May 2016, Ontario passed the *Climate Change Mitigation and Low-carbon Economy Act, 2016*, laying the foundation for its cap-and-trade program. This was followed by a new cap-and-trade regulation that took effect on July 1, 2016, which outlined detailed requirements for businesses participating in the program. In June 2016, the government released its Climate Change Action Plan, identifying the important actions the Province will take to combat climate change and cut GHG pollution, while contributing to economic growth and creating well-paying jobs.

With the first compliance period of Ontario's cap-and-trade program effective January 1, 2017, the Province will hold its first auction of emissions allowances for cap-and-trade program participants in March 2017. Continuing its collaborative approach to developing the cap-and-trade program, Ontario will consult with stakeholders as it shapes the design of the program beyond 2020.

By putting a price on carbon, Ontario has provided an incentive to invest in and adopt clean technologies and help Ontarians transition to an efficient and sustainable low-carbon economy. The Province's commitment to cost-effective emissions reduction will drive innovation by promoting the development and adoption of clean technologies. This also positions Ontario to boost its economy by taking advantage of the opportunities of a growing global clean technology industry (clean tech). Ontario has the highest concentration of environmental and clean tech companies in Canada. These companies are highly varied, from renewable energy to water technologies, and are spread out geographically.

Carbon Pricing: Cap and Trade

A market-based approach to carbon pricing, such as a cap-and-trade program, is the most cost-effective way to achieve meaningful greenhouse gas (GHG) emissions reductions and provide strong incentives for businesses and households to invest in and adopt innovative clean technologies.

Currently, about 40 national jurisdictions and more than 20 cities, states and regions have already implemented or are scheduled to begin carbon pricing. According to the World Bank, these jurisdictions, which include seven out of the world's 10 largest economies, are responsible for nearly 25 per cent of global GHG emissions.

In Canada, four provinces (Ontario, Alberta, British Columbia and Quebec), representing nearly 81 per cent of Canadian GHG emissions, have carbon pricing mechanisms in place. Under the federal government's pan-Canadian carbon price on GHG emissions announced in October 2016, all provinces will have carbon pricing in place by 2018.

The Paris Agreement, which came into force in November 2016, is a milestone in international efforts to address climate change. It represents the commitment of the vast majority of world leaders to take actions to restrict the increase in the global average temperature. With such momentum on tackling climate change, the number of carbon pricing initiatives across jurisdictions continues to grow.

Building on Ontario's Culture Strategy

Ontario launched its first Culture Strategy in 2016, setting out a vision, goals and more than 40 specific actions to fuel the creative economy and build on its economic impact in communities across the province. The Culture Strategy will also promote cultural engagement and inclusion, as well as strengthen culture across Ontario communities.

The Culture Strategy supports Ontario's long-term growth and prosperity by creating jobs and fostering a dynamic business environment. It focuses on maximizing the contribution of culture and creativity to a strong and competitive knowledge economy, building on the success of key growth sectors, fostering innovation, helping scale up companies in the arts and cultural industries, growing cultural tourism, and promoting the talents and skills of the cultural workforce. Ontario's culture sector adds more than \$25 billion to the province's economy, supporting approximately 280,000 jobs across key industries such as film and television production, interactive digital media, book and magazine publishing, music recording and performance, and the arts.

The government's first-ever Culture Strategy embraces Ontario's diversity and builds on cultural initiatives already taking place in the province. Cultural engagement is a catalyst for creative thinking and innovation, which are essential in the knowledge economy.

Table 2.6 Ontario Key Economic Variables (Base Case)

Average Growth (Per Cent)	History	Projection					
	1982–2015	2016–2020	2021–2025	2026–2030	2031–2035	2036–2040	2016–2040
Real Gross Domestic Product	2.6	2.2	2.0	2.0	2.0	2.0	2.1
Final Consumption Expenditure	2.6	2.0	1.9	1.9	1.9	1.9	1.9
Gross Fixed Capital Formation	3.2	2.8	2.3	2.4	2.1	2.1	2.4
Exports	3.4	2.4	2.2	2.1	2.0	2.2	2.2
Imports	4.0	2.2	2.2	2.0	1.8	2.0	2.1
Nominal Gross Domestic Product	5.3	3.9	4.0	4.0	4.0	4.0	4.0
Other Economic Indicators							
Housing Starts (000s)	66.0	70.3	72.7	72.2	72.2	69.3	71.3
Primary Household Income	5.0	4.1	4.2	3.8	3.7	3.8	3.9
Labour Market							
Participation Rate	67.3	64.8	64.0	63.0	62.3	61.7	63.2
Labour Force	1.4	1.0	0.8	0.8	0.8	0.8	0.8
Employment	1.4	1.2	0.8	0.8	0.8	0.8	0.9
Unemployment Rate	7.7	6.3	6.0	5.7	5.6	5.5	5.8
Productivity							
Real GDP per Hour	1.2	1.0	1.2	1.2	1.2	1.2	1.2
Prices							
Consumer Price Index	2.9	2.0	2.0	2.0	2.0	2.0	2.0

Table 2.7 Ontario Key Economic Assumptions (Base-Case Projections)

	Projection (Average)					
	2016-2020	2021-2025	2026-2030	2031-2035	2036-2040	2016-2040
Rest-of-Canada Real GDP (Per Cent Change)	1.7	2.0	2.0	2.0	2.0	1.9
Rest-of-Canada GDP Deflator (Per Cent Change)	2.0	2.0	2.0	2.0	2.0	2.0
U.S. Real GDP (Per Cent Change)	2.0	2.0	2.0	2.0	2.0	2.0
U.S. GDP Deflator (Per Cent Change)	1.9	2.0	2.0	2.0	2.0	2.0
Exchange Rate (Cents per US\$)	79.7	85.4	86.3	87.2	88.1	85.3
90-Day Treasury Bill Rate (%)	1.1	3.2	3.5	3.5	3.5	3.0
10-Year Government of Canada Bond Rate (%)	2.1	4.3	4.6	4.6	4.6	4.0
U.S. 90-Day Treasury Bill Rate (%)	1.5	3.3	3.4	3.4	3.4	3.0
10-Year U.S. Government Bond Rate (%)	2.6	4.4	4.5	4.5	4.5	4.1
U.S. WTI Oil Price (US\$ per Barrel)	57.2	73.9	87.7	104.2	123.7	89.4

Table 2.8 Ontario Key Economic Variables (High Productivity)

Average Growth (Per Cent)	History	Projection					
	1982–2015	2016–2020	2021–2025	2026–2030	2031–2035	2036–2040	2016–2040
Real Gross Domestic Product	2.6	2.3	2.4	2.7	2.6	2.7	2.6
Final Consumption Expenditure	2.6	2.0	2.1	2.3	2.1	2.2	2.1
Gross Fixed Capital Formation	3.2	3.4	2.9	3.6	2.9	3.1	3.2
Exports	3.4	2.5	2.7	2.8	2.7	2.9	2.7
Imports	4.0	2.4	2.4	2.4	2.0	2.3	2.3
Nominal Gross Domestic Product	5.3	4.1	4.6	4.7	4.6	4.7	4.5
Other Economic Indicators							
Housing Starts (000s)	66.0	70.5	77.2	78.8	80.3	78.8	77.1
Primary Household Income	5.0	4.3	4.7	4.5	4.1	4.4	4.4
Labour Market							
Participation Rate	67.3	64.8	64.0	63.2	62.6	62.2	63.4
Labour Force	1.4	1.0	0.9	0.9	1.0	0.9	1.0
Employment	1.4	1.2	0.8	1.1	0.9	1.0	1.0
Unemployment Rate	7.7	6.3	5.8	5.7	5.6	5.4	5.8
Productivity							
Real GDP per Hour	1.2	1.0	1.5	1.6	1.7	1.7	1.5
Prices							
Consumer Price Index	2.9	2.0	2.2	2.0	2.0	2.0	2.0

Table 2.9 Ontario Key Economic Variables (Low Productivity)

Average Growth (Per Cent)	History	Projection					
	1982–2015	2016–2020	2021–2025	2026–2030	2031–2035	2036–2040	2016–2040
Real Gross Domestic Product	2.6	2.0	1.6	1.4	1.5	1.5	1.6
Final Consumption Expenditure	2.6	1.9	1.7	1.5	1.7	1.6	1.7
Gross Fixed Capital Formation	3.2	2.4	1.7	1.5	1.5	1.4	1.7
Exports	3.4	2.3	1.8	1.5	1.4	1.6	1.7
Imports	4.0	2.1	2.1	1.7	1.7	1.8	1.9
Nominal Gross Domestic Product	5.3	3.7	3.4	3.5	3.6	3.5	3.5
Other Economic Indicators							
Housing Starts (000s)	66.0	70.2	68.6	65.9	64.3	60.3	65.9
Primary Household Income	5.0	3.9	3.8	3.2	3.3	3.3	3.5
Labour Market							
Participation Rate	67.3	64.8	63.9	62.8	62.0	61.4	63.0
Labour Force	1.4	1.0	0.6	0.6	0.7	0.6	0.7
Employment	1.4	1.1	0.8	0.5	0.7	0.7	0.8
Unemployment Rate	7.7	6.4	6.0	5.7	5.6	5.6	5.8
Productivity							
Real GDP per Hour	1.2	0.9	0.8	0.9	0.8	0.8	0.9
Prices							
Consumer Price Index	2.9	2.0	1.9	2.0	2.1	2.1	2.0

CHAPTER III: EMPLOYMENT TRENDS

INTRODUCTION

Economic pressures related to globalization and technological advances have led to changes in the labour market and the nature of employment. It is all but certain that technological progress will continue in the future; however, it is less certain whether globalization will have as much impact as it has had in the past. While there are challenges, it should also be recognized that the labour market continues to function well for most people. The Ontario economy produced 76,400 net new jobs in 2016, nearly three-quarters of which are standard full-time jobs. Steady employment gains since the 2008–09 global recession have led to continued improvements in Ontario’s unemployment rate, which was at an eight-year low at 6.5 per cent in 2016.

This chapter describes the key economic forces and pressures that are affecting employment. It highlights the changes that are taking place and the opportunities and challenges that have arisen. A discussion of government initiatives that help to address some of the challenges is also provided.

The following key trends have been identified:

- A divergence between economic growth and measures of well-being;
- Shifting employment from goods-producing industries — in particular, manufacturing — to service-sector industries;
- Declining shares of middle-skill and middle-paying occupations, along with increasing shares of high-skill and high-paying occupations and lower-paying, non-routine manual occupations;
- Rising types of alternative employment — in particular, alternative forms of employment, many of them involuntary and non-standard; and
- Increasing diversity of the workforce.

Globalization of markets and technological advances have led to intense competitive pressures and have acted in interconnected ways to increase the competition for goods and services, as well as the risks and uncertainty faced by employers. In response, employers have restructured their operations and increased their use of outsourced and offshore employment.

Many employers have restructured the way they compensate and manage their employees. Some have shifted risk and uncertainty onto employees by scaling back employer benefits and pensions and by switching from standard work that was reasonably stable and secure to contingent jobs (based on need at the time) and other forms of alternative employment.

Some lead employers have restructured operations and now subcontract and outsource parts of the production of goods and services to competing groups of small employers in a process called fissuring.¹ The intense competition among the small employers reduces costs and likely results in lower wages and fewer benefits.

The government is working to create the conditions and supports to address the changing nature of employment, including examining how to modernize Ontario's labour and employment laws,² increasing access to affordable, quality child care, strengthening income security, encouraging the federal government to review Employment Insurance (EI), investing in support for workers during periods of employment transition and improving workplace safety.

¹ See Morley Gunderson, "Changing Pressures Affecting the Workplace and Implications for Employment Standards and Labour Relations Legislation," 2015, and the sources therein for more information.

² See Changing Workplaces Review Special Advisors Interim Report, Ministry of Labour, 2016. The report also describes the changing nature of work.

Competitive Economic Pressures

Globalization

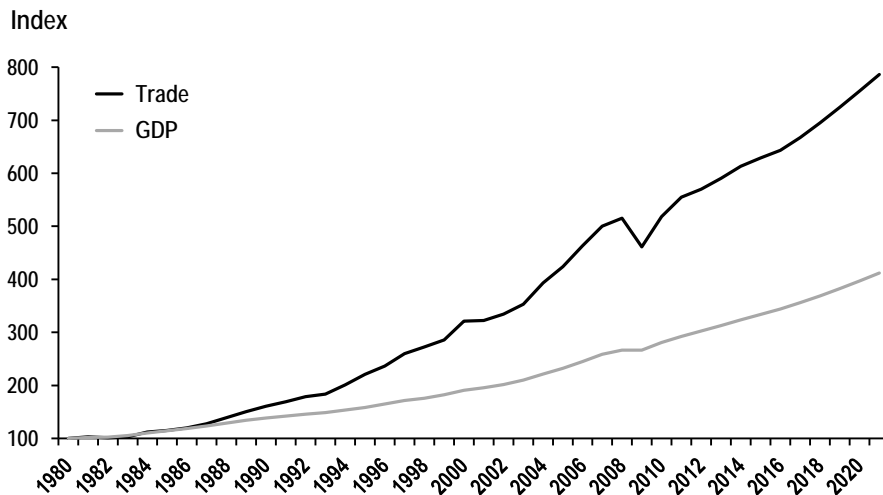
The globalization of product and labour markets has had a major impact on employment in Ontario. It was facilitated by freer trade deals, such as the Canada–U.S. Free Trade Agreement and the North American Free Trade Agreement, which reduced and eliminated tariffs and encouraged more trade. For Ontario, the increase in international trade, primarily with the United States, has been much more rapid than interprovincial trade. In this context, Ontario businesses must compete with businesses in the United States and other nations that operate in a different regulatory and cost environment, putting pressures on them to reduce costs.

In addition to freer trade deals, globalization was enabled by reductions in transportation costs from containerization and other advances in logistics, and by reductions in information and communications costs. One measure of globalization is how fast international trade has been growing relative to the size of the global economy. From 1980 to 2015, international trade has grown at about 5.4 per cent annually, while growth of world gross domestic product (GDP) has been about 3.5 per cent annually. As shown in Chart 3.1, the International Monetary Fund projects that growth in trade will slightly outpace world GDP growth over the next five years.

Other changes associated with globalization include more mobile capital, growth of supply chain production, increased mobility of highly skilled workers and an increased flow of technology and ideas across borders.

World Real GDP and Trade Volume of Goods and Services, Estimates and Projections (1980 = 100)

CHART 3.1



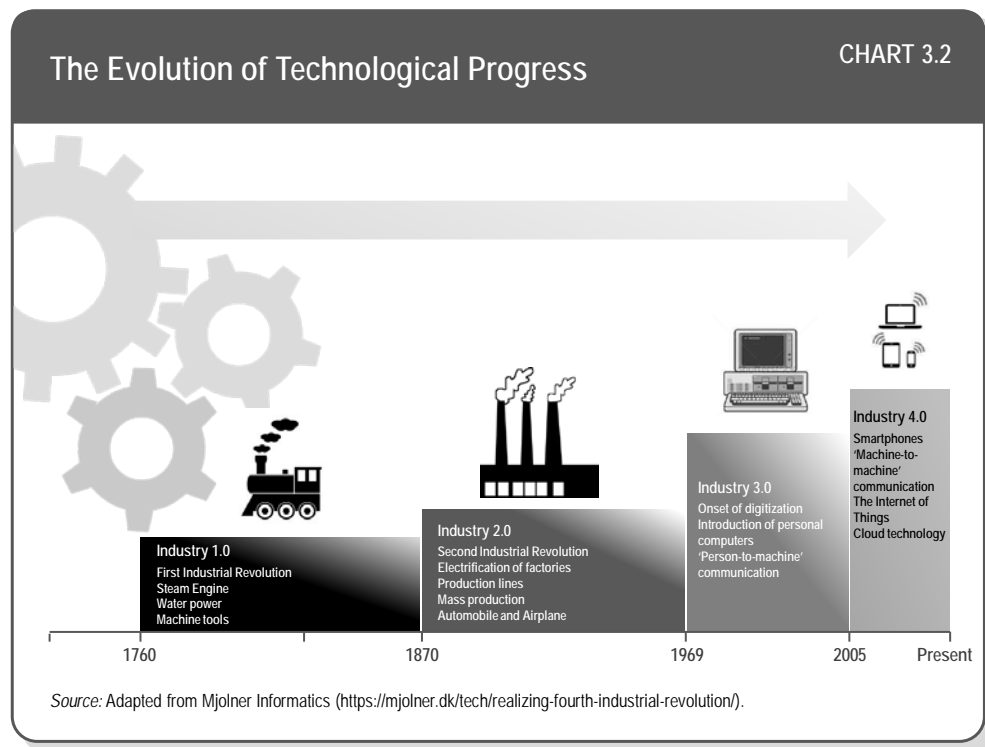
Source: International Monetary Fund, World Economic Outlook Database, October 2016.

Technological Advances

Technological progress is a key driver for increasing productivity and economic growth. As shown in Chart 3.2, since the first industrial revolution began more than 250 years ago, there have been two additional periods of major industrial change. Some believe that a fourth industrial revolution is underway and, like each past revolution, this one is expected to lead to major disruptions in employment and challenges to retrain and re-employ workers.³

³ For example, see www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond.

Technological advances over the past few decades have driven the globalization and integration of markets through the development and use of ever-more powerful computers and sophisticated software. Other advances include the internet, increased automation and digitization, machine-to-machine communication and developments in artificial intelligence. Technological change has also led to growth of the sharing economy, with the emergence of companies such as Airbnb and Uber.



These advances have displaced workers, primarily from jobs involving routine manual tasks. At the same time, technological progress has created new opportunities for highly skilled workers with abstract problem-solving abilities, as well as less highly skilled employees in positions that require significant human interaction. This has contributed to a polarization of jobs into higher-paying and lower-paying occupations in Canada, Ontario and most advanced economies.⁴

⁴ David A. Green and Benjamin M. Sand, "Has the Canadian Labour Market Polarized?" *Canadian Journal of Economics* 48, no. 2 (May 2015): 612–46.

There is much speculation on what the current trends in technological progress will mean for the future of work. A recent publication discusses the growth of virtual work⁵ and its possible ramifications.⁶ Others speculated on scenarios that include further automation and a quickening pace of disruption where routine, administrative and service-oriented jobs are most likely to be affected.⁷ The publications stress the threat these changes will have on the standard employer–employee relationship and the implications for social safety net programs.

While change is happening, as the publications note, no one knows the magnitude or the pace of the changes that are coming. The data currently available suggest that the changes have not yet had a noticeable impact on broad labour market statistics. For example, the rise of virtual work is predicted to lead to an increase in self-employment and the growth of the gig economy⁸ is predicted to lead to an increase in part-time employment. However, neither part-time employment nor self-employment has grown faster than total employment for the past two decades (see Chart 3.12).

It should also be noted that widespread negative effects of automation on jobs are not apparent in the unemployment rate or in productivity statistics. In fact, measured economic productivity has grown very slowly over the past decade, suggesting that the pace of change with respect to automation has not been as rapid as is supposed.⁹ Also, to the extent that labour force growth will slow due to population aging, automation and increased productivity will help with the adjustment.

⁵ Online work platforms allow workers to advertise their skills and find short-term jobs with employers across the world. This is called virtual work.

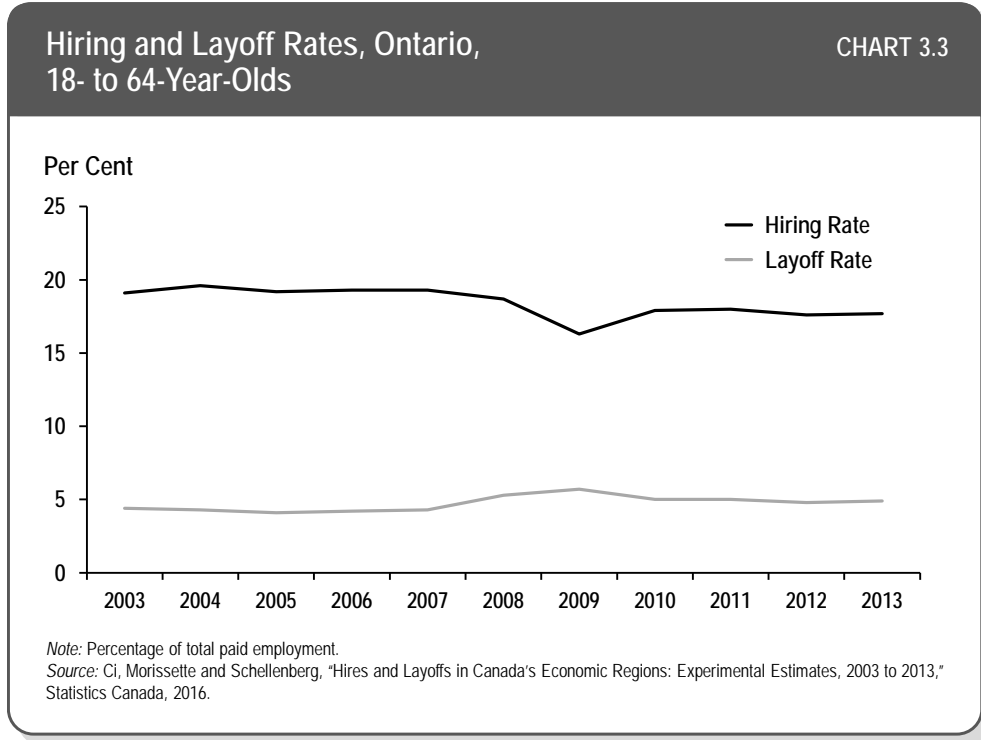
⁶ Policy Horizons Canada, “Canada and the Changing Nature of Work,” Government of Canada, 2016.

⁷ Sunil Johal and Jordan Thirgood, “Working without a Net: Rethinking Canada’s Social Policy in the New Age of Work,” Mowat Centre, November 2016; Creig Lamb, “The Talented Mr. Robot: The Impact of Automation on Canada’s Workforce,” Brookfield Institute for Innovation and Entrepreneurship, June 2016.

⁸ The gig economy is an environment in which independent operators work on short-term projects.

⁹ See also James Manyika et al., “Harnessing Automation for a Future that Works,” McKinsey Global Institute, January 2017.

There is widespread fear of automation and robots displacing workers and various studies provide estimates of the number of jobs at risk from these trends.¹⁰ It is difficult to know what to make of these estimates, as the labour market is continually evolving and there is constant turnover every year as people enter and leave employment, and new jobs are created and others eliminated. For example, in Ontario in 2016, about 600,000 people aged 25 to 64 started a new job, while about 320,000 lost their jobs.¹¹ About 100,000 people left employment because of illness or disability or for other endeavours such as education or retirement. Over the 2003 to 2013 period, the hiring rate of adults aged 18 to 64 in Ontario averaged 18.4 per cent, while the layoff rate averaged 4.7 per cent.¹² While the studies focus on the number of people at risk of losing employment, they have little to say about the large numbers who will find new opportunities.



¹⁰ See Carl Benedikt Frey and Michael A. Osborne, "The Future of Employment: How Susceptible Are Jobs to Computerization?" University of Oxford, 2013, and Brookfield, 2016.
¹¹ Calculations based on the 2016 Labour Force Survey.
¹² Wen Ci, René Morissette and Grant Schellenberg, "Hires and Layoffs in Canada's Economic Regions: Experimental Estimates, 2003 to 2013," Statistics Canada, 2016.

Instead of focusing on jobs that are at risk of elimination, the Organisation for Economic Co-operation and Development (OECD) concentrated on tasks that may be automated and occupations transformed by the changes. In doing so, the OECD found that only nine per cent of jobs in Canada are at risk due to automation.¹³

The Risk of Automation for Jobs in OECD Countries

A Comparative Analysis

In a 2013 study, the Organisation for Economic Co-operation and Development (OECD) examined the issue of jobs at risk due to automation and digitalization. Other studies had followed an occupation-based approach introduced by Frey and Osborne (2013),¹⁴ which assumed that whole occupations rather than specific job-tasks are automated by technology. The Frey and Osborne study found that 47 per cent of all occupations in the United States were at high risk of being lost due to automation over the next 10 to 20 years. A similar study for Canada found that 42 per cent of all occupations were at high risk.¹⁵

The OECD study argued that the Frey and Osborne methodology might lead to an overestimation because some occupations labelled as high risk still may contain many tasks that are hard to automate. The study used a task-based approach to estimate the number of jobs at risk of automation and applied it to 21 OECD countries. The study found that about nine per cent of jobs in Canada and nine per cent in the United States were at risk of being automated. It also argued that legal and ethical obstacles may slow the pace of substitution of labour and that workers may adjust by switching tasks.

¹³ Melanie Arntz, Terry Gregory and Ulrich Zierahn, "The Risk of Automation for Jobs in OECD Countries: A Comparative Analysis," *OECD Social, Employment and Migration Working Papers*, No. 189, OECD Publishing, Paris (2016). <http://dx.doi.org/10.1787/5jlz9h56dvq7-en>.

¹⁴ See Frey and Osborne, 2013, and Brookfield, 2016.

¹⁵ Brookfield Institute for Innovation and Entrepreneurship, 2016.

Economic Growth and Measures of Well-Being

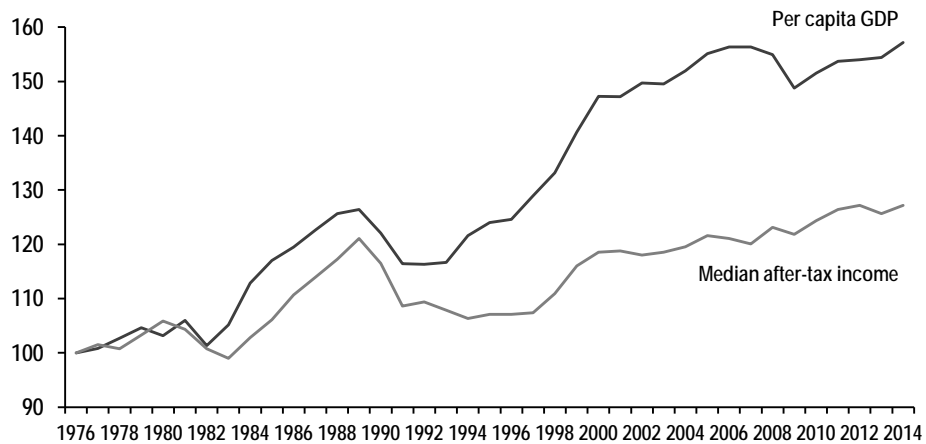
Economic growth has long been used as a proxy measure for well-being because of a historical link between per capita GDP and living standards as measured by real wages or middle incomes. The link appears to have weakened over the past three decades as economic growth has continued to trend upward but living standards appear to be lagging, as illustrated in Chart 3.4. Since 1976, real per capita GDP has grown by 57 per cent while real median adjusted after-tax income has grown by roughly half that amount.¹⁶ For Ontario and for median adjusted income, the divergence appears to have started in the early 1990s.

The divergence appears to be due in large part to globalization and technological advances that are reshaping society and the nature of employment. The technological changes are reducing the demand for employment that is automatable, while also increasing the labour supply by facilitating globalization. At the same time, the changes are increasing demand for high-skilled employment and creating more winner-takes-all types of markets. This has led to higher wages and labour incomes for top earners and flatter income growth or stagnation for middle and low earners. The result is that the link between economic growth and living standards is much weaker today than in the past.

¹⁶ Median adjusted after-tax income is a more general measure of living standards than wages as it includes other market income (such as investment income) and government transfers. The “adult equivalent” income concept is used here, where each individual in Ontario (including children) is represented by their household incomes adjusted for household size.

Divergence Between Economic Growth and Median Income (1976 = 100)

CHART 3.4

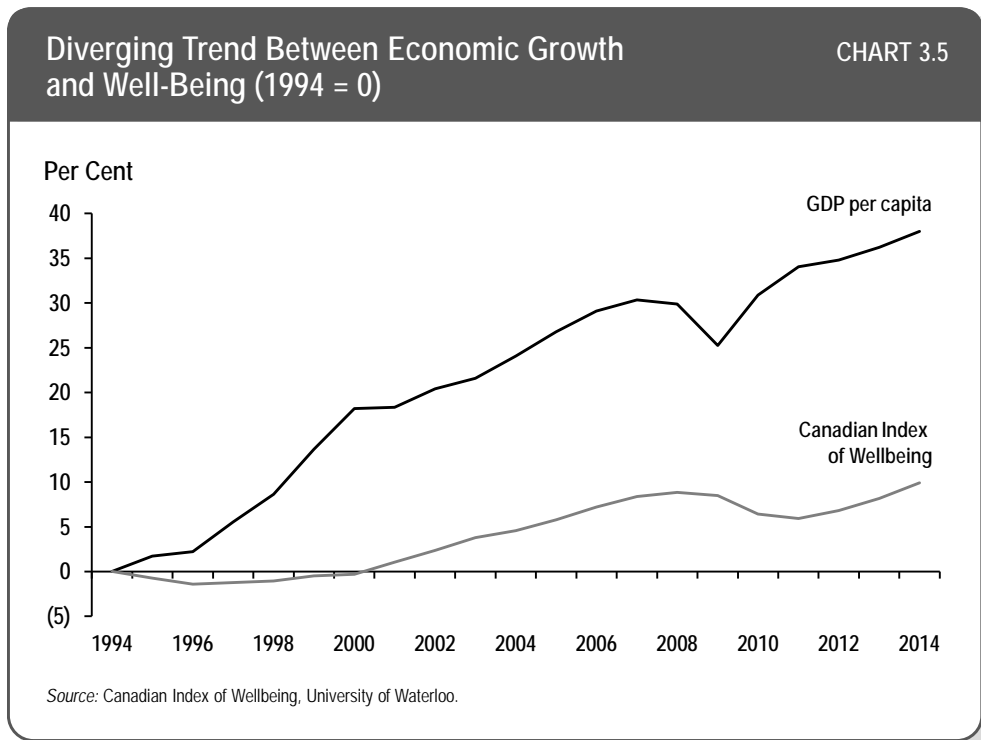


Note: "Adult equivalent" incomes are used here. That is, each individual in Ontario is represented by their household incomes adjusted for household size.

Sources: Statistics Canada and Ontario Ministry of Finance.

It has also become clear that society values many dimensions that are not well captured by economic growth, such as health, education, the environment and safety. A number of organizations have published measures of well-being that incorporate these and other important dimensions.

A recent study from the Canadian Index of Wellbeing is one example. It shows that the divergence between economic growth and living standards is happening for broad measures of well-being and that the divergence appears to be continuing today.¹⁷ From 1994 to 2014, per capita GDP in Canada rose by 38.0 per cent but the study's index of well-being measure only grew by 9.9 per cent over the period. According to the study, some of the reasons for this divergence are the rise of non-standard work and worries about rising costs, such as for affordable housing and tuition.



¹⁷ Canadian Index of Wellbeing, “How Are Canadians Really Doing?” The 2016 CIW National Report, Waterloo, ON: Canadian Index of Wellbeing and University of Waterloo; and Canadian Index of Wellbeing, “How Are Ontarians Really Doing? A Provincial Report on Ontario Wellbeing,” Waterloo, ON: Canadian Index of Wellbeing and University of Waterloo (2014). For Ontario, real per capita GDP increased by 24.1 per cent from 1994 to 2010, while the well-being index increased by 7.3 per cent over the period.

Another recent study, from the Institute for Competitiveness and Prosperity, compared Ontario to 10 peer jurisdictions around the world on 11 different dimensions of well-being.¹⁸ It found that Ontario excels in several areas, particularly health, safety and access to services, but lags peer jurisdictions in income growth and jobs. Overall, Ontario ranked fifth highest on the composite well-being measure, relatively stronger than its economic growth performance.

The importance of employment to an individual's quality of life is highlighted in the various measures of well-being. Work not only enters the measures directly as one of the dimensions, but also affects other dimensions such as income, housing, leisure time and community. Work has been changing due to various related pressures on product and labour markets and on employers, as noted in the previous section.

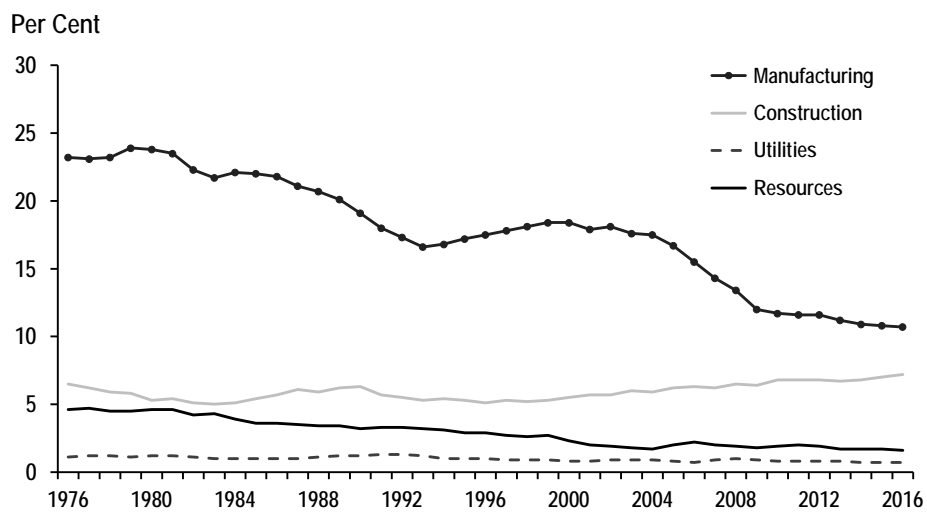
¹⁸ Institute for Competitiveness and Prosperity, "Looking Beyond GDP: Measuring Prosperity in Ontario," Working Paper 27, October 2016.

Shifting Industrial Composition

The industrial composition of Ontario and most other advanced economies has undergone major shifts over the past few decades. Industries that were structured for manual routine work, primarily in goods-producing sectors such as manufacturing, have declined. Industries that require non-routine work have expanded. These are mostly in service sectors and tend to be either high-skill jobs involving problem-solving abilities or lower-skilled, non-routine manual jobs. Goods-producing industries in Ontario represented 35.4 per cent of total employment in 1976, a figure that has fallen to 20.3 per cent in 2016. The share of manufacturing alone has decreased by more than half, falling from 23.2 per cent of total employment in 1980 to 10.7 per cent in 2016.

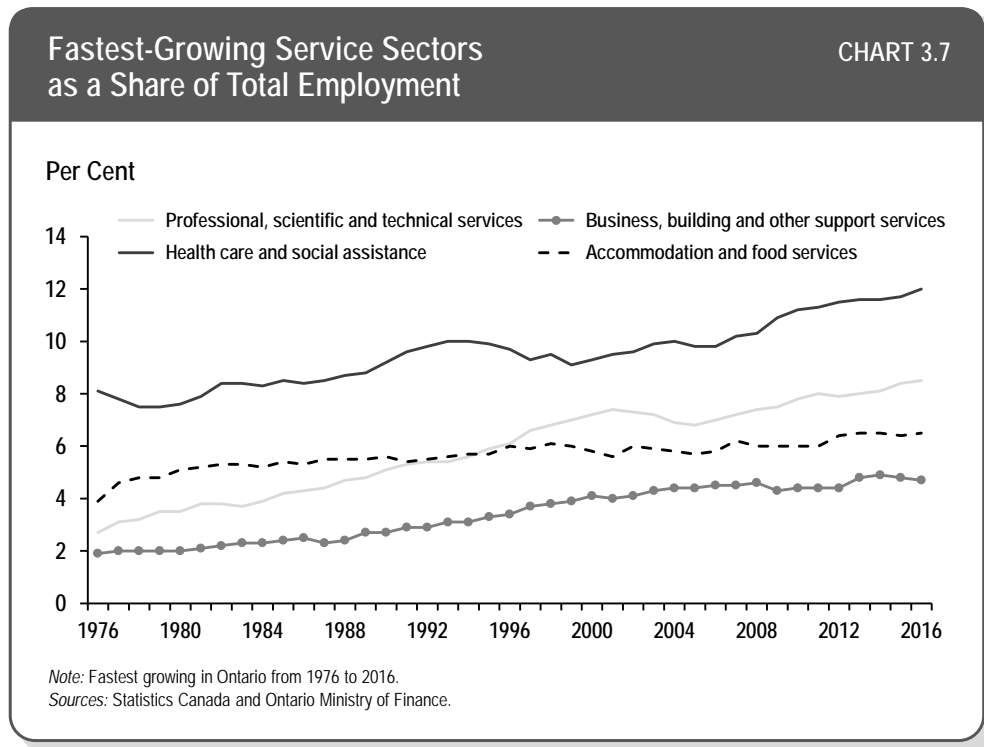
Goods-Producing Industries
as a Share of Total Employment

CHART 3.6



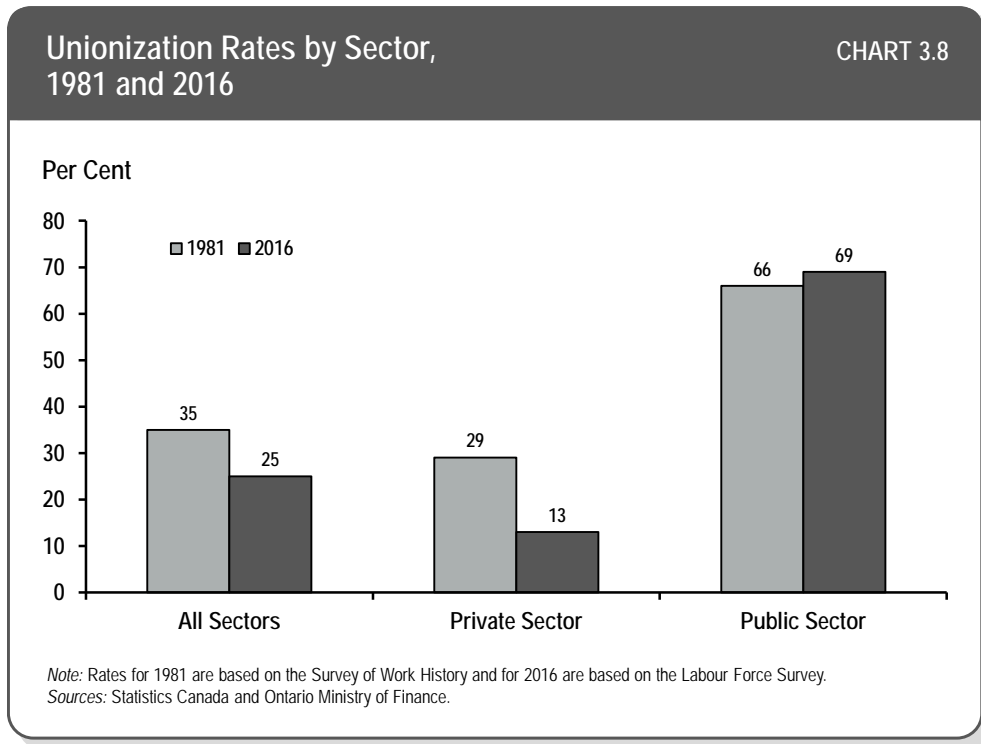
Sources: Statistics Canada and Ontario Ministry of Finance.

In contrast, the service sector has expanded from 64.6 per cent of total employment in 1976 to 79.7 per cent today. Service industries, such as professional, scientific and technical services, business, building and other support services, health care and social assistance services, and accommodation and food services, grew the most from 1976 to 2016.



Historically, goods-producing industries provided above-average pay and were more likely to be unionized and protected by tariffs. They were also more likely than service-sector jobs to provide other types of compensation such as health benefits and pension plans. These industries tended to employ people with high school education or less and trained them within the firm. Together with the above-average pay and benefits, they offered an attractive source of employment for less educated workers.

The decline of employment in goods-producing sectors and the growth in the service sector is a factor in a declining share of unionized employees. The unionization rate in Ontario declined from 35 per cent in 1981 to 25 per cent in 2016. The overall downward trend is due entirely to unionization declines in the private sector. The public-sector unionization rate increased from 66 per cent in 1981 to 69 per cent in 2016, whereas the private-sector unionization rate in Ontario declined from about 29 per cent in 1981 to 13 per cent in 2016.¹⁹ About 40 per cent of the decline is due to the shift from industries and occupations that were relatively highly unionized to ones that are not, such as from manufacturing to professional, scientific and technical services.



The growth in service sector employment has also resulted in a declining share of employees with non-wage compensation such as health benefits and pension plans.

¹⁹ Unionization rates are the number of union members over total paid employment. They are used here instead of union coverage rates so that a longer time series can be reported. Coverage rates are roughly one to three percentage points higher than unionization rates.

Changing Occupational Tasks and Skill Requirements

The competitive economic pressures on employers and the labour market have brought related changes to occupations and to the skill and task requirements of jobs. From 1987 to 2016, total employment in Ontario increased by 43 per cent, but there is substantial variation among occupations. Broad occupational groups that have grown significantly faster than the overall average over the period include natural and applied sciences and related occupations (120 per cent); health (122 per cent); education, law and social, community and government services (107 per cent); art, culture, recreation and sport (101 per cent); and sales and services occupations (59 per cent). Occupations that have grown significantly slower than average include trades, transport and equipment operators and related occupations (9 per cent); natural resources, agriculture and related production occupations (14 per cent); and occupations in manufacturing and utilities, which actually decreased by 20 per cent over the period.

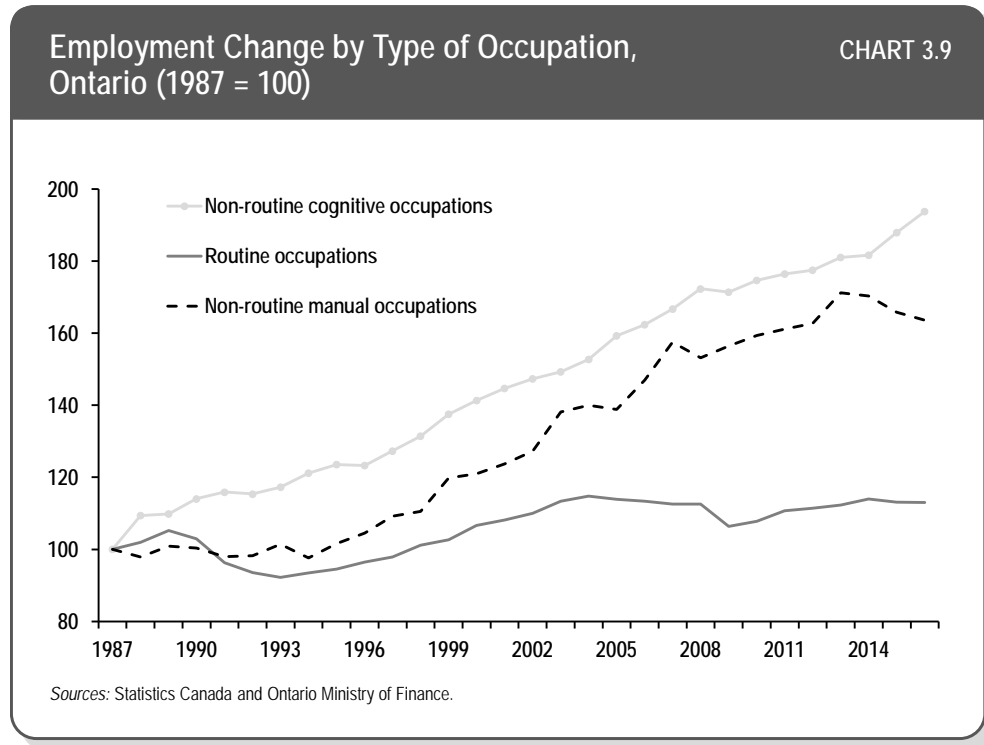
Occupations can be classified into routine tasks that are, in principle, automatable, and non-routine tasks that are not as easily automatable. They can also be separated into manual and cognitive tasks. The former mainly constitutes relatively lower-skilled, lower-paying occupations, whereas the latter comprises higher-skilled, higher-paying occupations.^{20,21}

The loss of employment in goods-producing industries, particularly in manufacturing, has meant the loss of many middle-skilled, routine occupations. The growth of service-sector employment has resulted in the creation of employment in high-skilled occupations requiring abstract thinking and problem-solving abilities and in lower-skilled occupations involving personal, face-to-face interaction.

²⁰ See David H. Autor, Frank Levy and Richard J. Murnane, "The Skill Content of Recent Technological Change: An Empirical Exploration," *Quarterly Journal of Economics* (November 2003); Anton Cheremukhin, "Middle-Skill Jobs Lost in US Labor Market Polarization," *Dallas Fed Economic Letter* 9, no. 5, May 2014.

²¹ This categorization is done at the two-digit occupational level. It should be noted that some occupational groups do not fit neatly into the categories, as they may involve both routine and non-routine tasks, or both cognitive and non-cognitive tasks. The findings are presented here to give a sense of the general trends.

The implications for the Ontario labour market can be seen in Chart 3.9. Since 1987, employment in non-routine cognitive occupations has increased by 94 per cent and employment in non-routine manual occupations has risen by 64 per cent. In contrast, employment in routine occupations has grown by only 13 per cent.



This development has shifted employment shares of each category in Ontario's workforce. Routine occupations constituted about 59 per cent of the labour force in 1987; by 2016, this share had declined to around 47 per cent. The employment share of non-routine cognitive jobs, in contrast, rose from 31 per cent in 1987 to 42 per cent in 2016. Non-routine manual jobs increased from 10 per cent in 1987 to a total of 11 per cent in 2016.

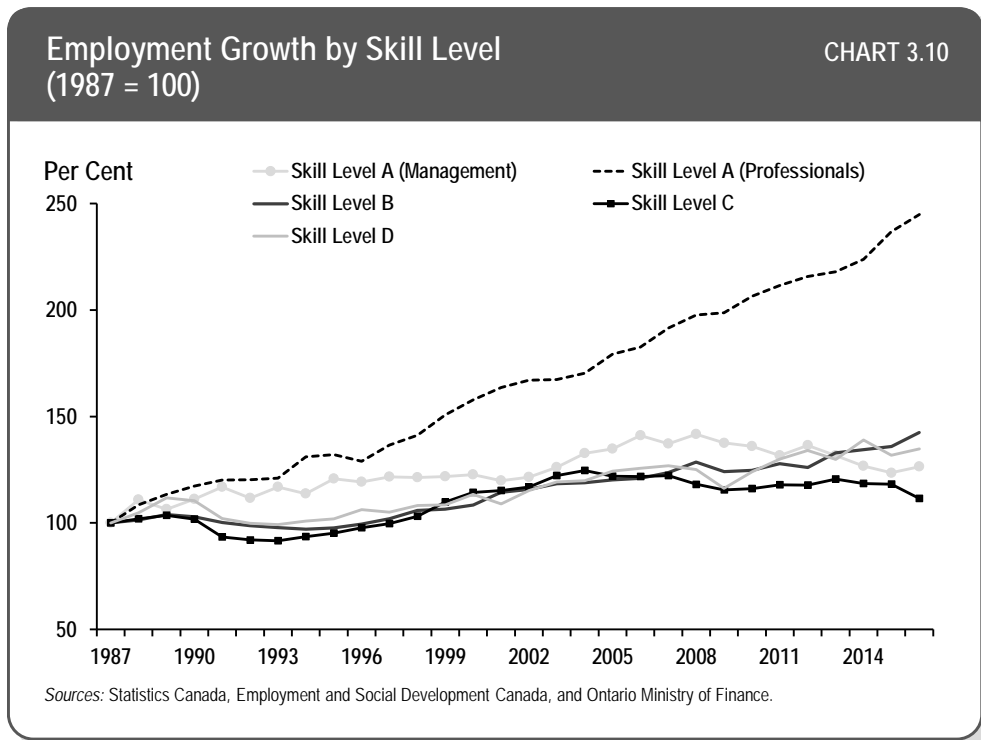
Employment by Skill Level

Another way to assess the changes to the labour market is to examine occupations by skill level. The federal department of Employment and Social Development Canada classifies all occupations into five skill levels:²²

- Skill level A (management) comprises management, which usually requires a university degree;
- Skill level A (professionals) comprises professionals, which usually requires a university degree;
- Skill level B is composed of people with a college diploma, apprenticeship or similar type of training;
- Skill level C includes high school graduates or people with specific on-the-job training; and
- Skill level D includes people with on-the-job training.

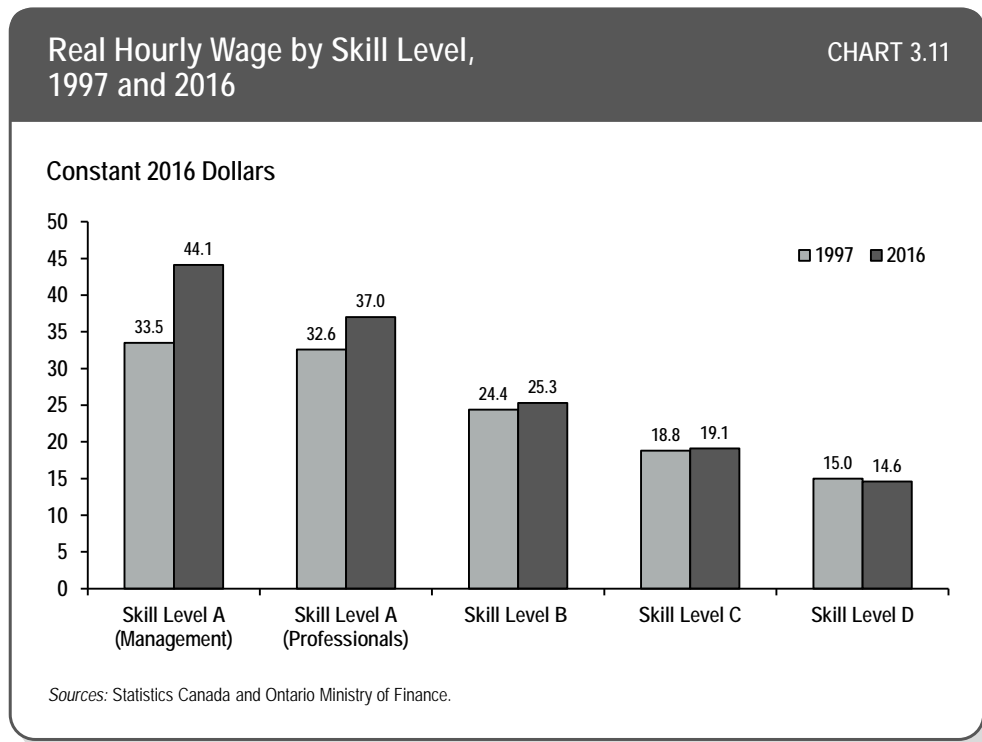
²² See the Employment and Social Development Canada website at <http://occupations.esdc.gc.ca/sppc-cops/libdetails.jsp?&lang=en>.

Chart 3.10 shows the breakdown of employment into the five skill categories. Since 1987, skill level A has had the highest employment growth — growing by 145 per cent. Skill level B was the next fastest, growing by 42 per cent. The lower-skilled occupations C and D grew by about 12 per cent and 35 per cent, respectively, over the same period. The skill level A (management) category grew by 26 per cent over this period. Skill level A (professionals) was the only category to increase its relative size, from 13 per cent of total employment in 1987 to 22 per cent in 2016.



Wages Rise with Skill Level

Wages rise with increasing skill level. In 2016, the highest average hourly wage was in skill level A (management), at \$44.10 per hour, followed by skill level A (professionals) at an average of \$37.00 per hour, while the lowest was in skill level D at \$14.60 per hour. Real wages grew fastest in the higher-skilled categories — particularly in skill level A (management) categories — and slowest in the lower-skilled categories. This has contributed to increasing wage inequality. It is also a sign that labour demand for high-skilled workers grew faster than supply despite the large increase in skilled workers over this period. Ongoing technological progress suggests that this trend will likely continue into the near future. Wages in the lowest-skilled categories (skill levels C and D) were flat or fell. Part of this is likely due to the decline of routine jobs in goods-producing industries, while part is due to the supply of workers at these skill levels growing faster than the demand for these workers.



Shift to Alternative Forms of Employment

Over the past four decades, there has been a shift from primarily full-time, permanent paid employment with a regular schedule — often called standard employment²³ — to alternative forms of employment including part-time jobs, temporary work, multiple jobs and self-employment. For many Ontarians, these forms of employment mean irregular hours of work and uncertain pay. There is concern that some of these jobs are of much lower quality than standard jobs.

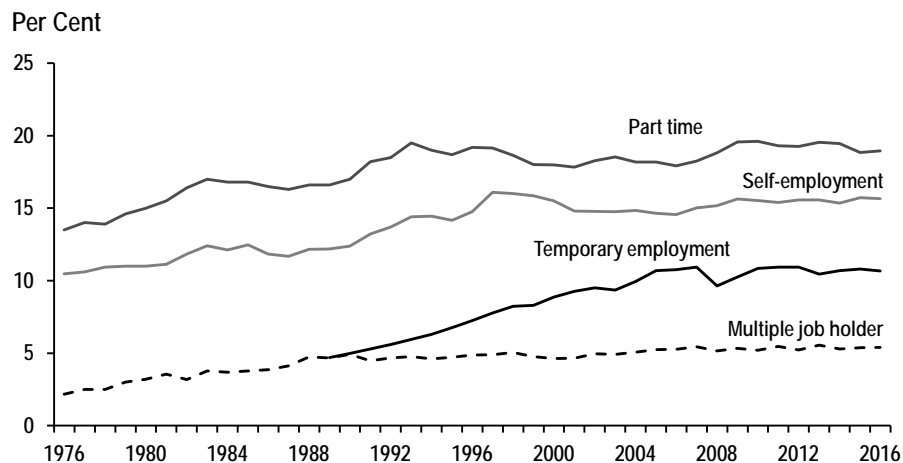
These changes can be seen in Chart 3.12. Part-time employment in Ontario increased from 13.5 per cent of total employment in 1976 to 19.0 per cent in 2016. Over the same period, self-employment grew from 10.5 to 15.7 per cent and the share of multiple job holders more than doubled from 2.2 to 5.4 per cent. Temporary employment increased from 4.7 per cent in 1989 to 10.7 per cent in 2016.²⁴

²³ Standard employment is generally characterized as employment where the worker has one employer, is employed for the full year and works full time on the employer's premises, has extensive statutory benefits and entitlements, and expects to be employed indefinitely. See Cynthia Cranford, Leah Vosko and Nancy Zukewich, "Precarious Employment in the Canadian Labour Market: A Statistical Portrait," *Just Labour* 3 (2003): 6-22.

²⁴ Temporary employment is only available from the Labour Force Survey starting in 1997. It is also available in the General Social Survey for select years.

Alternative Forms of Employment as a Share of Total Employment

CHART 3.12



Notes: Because of overlap among some of the series, the numbers cannot be added together to get the total size of the sector. All data are from the Labour Force Survey, with the exception of temporary employment for 1989 and 1994, which are from the General Social Surveys for those years. The years in between 1989 and 1994 are interpolated.
Sources: Statistics Canada and Ontario Ministry of Finance.

The increases in most of the components occurred before 2000, and their shares of total employment have since stabilized. An exception is temporary employment, which continued to increase in share until about 2005 but has remained flat since then. These alternative forms of employment currently comprise about 40 per cent of total employment in Ontario.²⁵

Some employees in alternative employment would undoubtedly prefer a more traditional standard relationship with their employer. However, there are also people who prefer alternative employment and benefit from the availability and choice of such employment. Unfortunately, no data are available on these preferences.

²⁵ It is possible for employment to have two or more of the characteristics, so the numbers cannot be added together to determine the size of the alternative employment sector. (For example, a person may have part-time temporary employment and multiple jobs.)

Rise of Non-Standard Employment

Some alternative employment does not have an ongoing full-time connection to the employer and may have irregular or uncertain hours with irregular or uncertain pay. This section presents estimates of the subset of alternative employment that are either considered undesirable by the employee or have elements of precariousness. Such employment is called non-standard in this document.²⁶

Non-standard employment is not easy to measure since existing surveys do not collect information on many of the potential dimensions. Given the constraints of current surveys, non-standard employment here is defined as temporary employment, which includes contract, seasonal, casual and other temporary jobs, involuntary part-time employment, self-employment without paid help and lower-wage, multiple job holders.²⁷

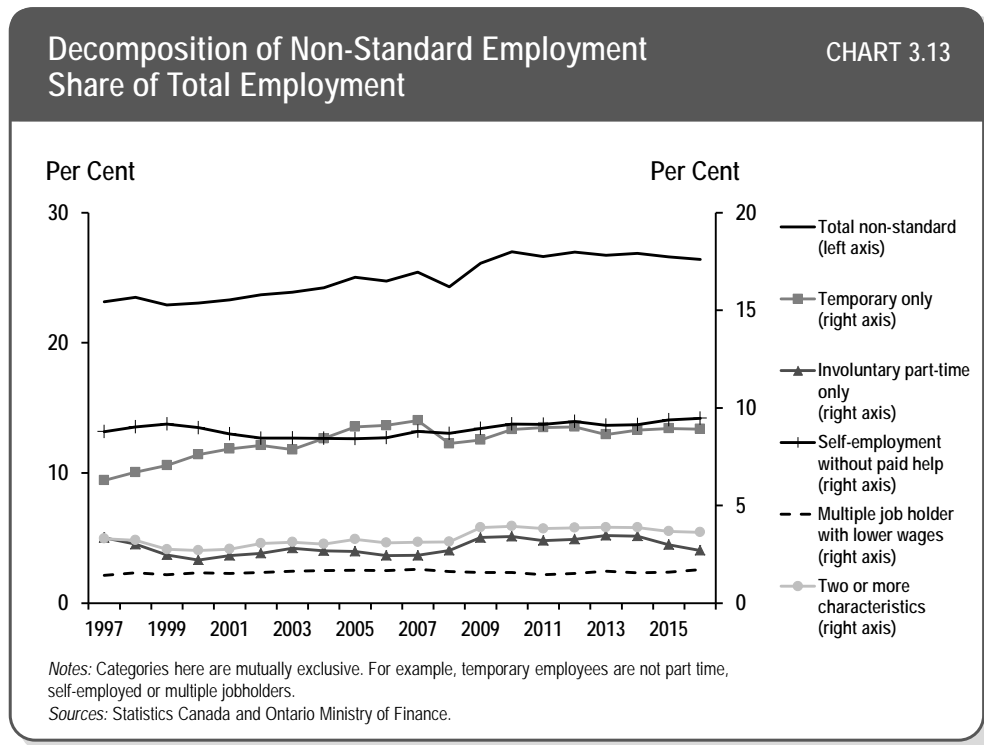
Voluntary part-time employment is excluded in defining non-standard employment for several reasons. Voluntary part-time workers may work part time because they are in school, are semi-retired, are a secondary earner in the family, or care for children or an elderly person. Women, in particular, are disproportionately in these situations. If the conditions were changed, for example, and if more affordable child care were available, then they may prefer to obtain full-time employment. By contrast, other people in part-time employment indicate that they want and are able to work more hours. These workers are included in non-standard employment, as they would prefer full-time employment that is not currently available to them.

The share of employees with multiple jobs has more than doubled over the past 25 years, from 2.2 per cent of total employment in 1976 to 5.4 per cent in 2016. The concern is that multiple job holders need to have two or more jobs to make ends meet. At the same time, there are more highly skilled professionals in demand who take on multiple jobs. As the concern is for the former group, multiple job holders are included in the definition of non-standard employment if their wage is below the median wage.

²⁶ Unfortunately, there is no standard terminology in use and other publications use the terms “alternative,” “non-standard” and “precarious” to describe similar concepts.

²⁷ See also Leah F. Vosko, Nancy Zukewich and Cynthia Cranford, “Non-Standard Jobs: A New Typology of Employment,” *Perspectives in Labour and Income*, Statistics Canada, 2003.

Applying this definition and using Statistics Canada’s Labour Force Survey, a consistent series on the trend in non-standard employment is presented for the 1997 to 2016 period (see Chart 3.13). Non-standard employment increased from 23.1 per cent of total employment in 1997 to 26.4 per cent in 2016, with most of the increase due to a rise in temporary employment.



Most of the rise in non-standard employment occurred before 2005 and the trend has been flat at about 26 to 27 per cent since 2009. This may mean the labour market has stabilized and reached equilibrium, where roughly one-quarter of all new jobs created are non-standard. Alternatively, there may be other forms of non-standard employment that are growing and are not currently being measured properly.

Increasingly Diverse Workforce

The Ontario workforce has become more diverse over the decades, a trend that will continue in the future. Population aging, the role of women, immigration and the employment of people with disabilities have transformed the workforce and will continue to do so.

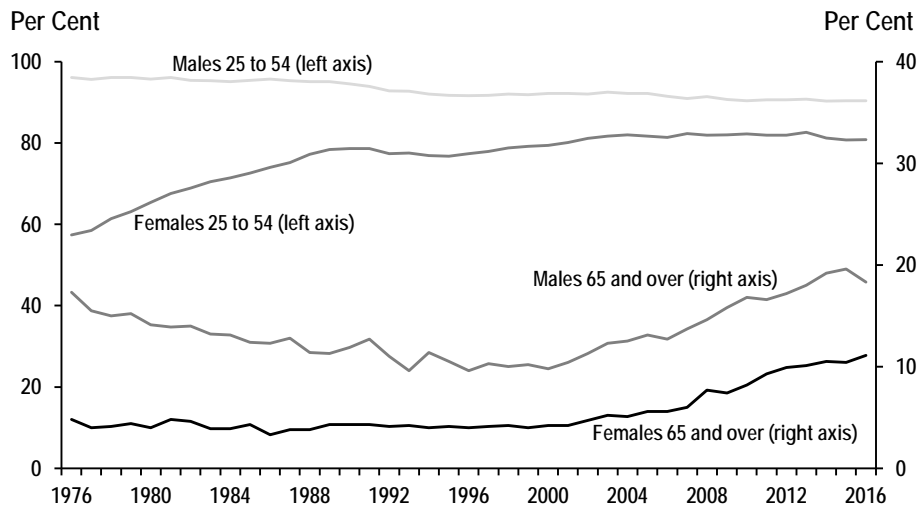
Older Workforce

Population aging is working its way through the labour force and is leading to a more mature, older workforce. There are signs that older workers are continuing to work longer than they did in the past. For example, the labour force participation rate of Ontario seniors has more than doubled, from 6.7 per cent in 2000 to 14.4 per cent in 2016. Both senior males and females increased their participation in the labour market, as seen in Chart 3.14. The median age of retirement in Ontario has increased from 61.1 years in 2000 to 64.8 years in 2015.

To the extent that seniors prefer more flexible hours and autonomy, it could mean growth in part-time work, self-employment and other alternative forms of employment. Retirement of the baby boom generation will mean more opportunities for labour market entrants.

Labour Force Participation Rates
By Sex and Age Group

CHART 3.14



Sources: Statistics Canada and Ontario Ministry of Finance.

Women and the Labour Force

The dramatic rise in women’s labour force participation over the past few decades — from 57.4 per cent of women aged 25 to 54 in 1976 to 80.8 per cent in 2016 — has boosted labour force growth and contributed to greater opportunities and financial autonomy for women. While this growth appears to have reached a plateau, women’s roles in the labour market continue to evolve. The percentage of women (25 years and over) with a university degree has converged to that of men, and more women (ages 15 to 24) are enrolled in university today (55 per cent) than men (45 per cent).²⁸ Though progress has been made, women continue to be paid less than men, on average, and women are greatly underrepresented in senior management ranks and at the board level.

²⁸ Council of Ontario Universities, enrolment data, cou.on.ca/numbers/multi-year-data/enrolment.

The increased participation of women in the labour market has resulted in more dual-earner couples, where both partners spend time in paid employment and unpaid work such as caregiving. This change in the division of paid and unpaid labour has highlighted the challenge of juggling work and family responsibilities, particularly for families with young children where the time and cost of providing care can be high.

Immigrants

Ontario has one of the most diverse populations in the world because of the high numbers of immigrants and temporary residents that the province has historically attracted, and this trend is likely to continue. The origin of the majority of immigrants has shifted over time from Europe and the United States to Asia. In 2015, the top four source countries for Ontario immigrants were India (19 per cent), the Philippines (17 per cent), China (7 per cent) and Pakistan (7 per cent).

The increased diversity in the workforce is a source of strength connecting Ontario with the world but it also poses challenges in terms of information requirements and understanding rights and responsibilities.²⁹ This is a particular concern given that many recent immigrants find themselves in non-standard jobs.

Recent immigrants have also had trouble integrating into the labour market and tend to have higher low-income rates. The 2016 unemployment rate of immigrants (arriving in the past five years) was 11.4 per cent, nearly double the rate of those born in Canada (6.3 per cent). The 2014 low-income rate³⁰ for recent immigrants was 34.7 per cent, about three times higher than the overall rate of 13.2 per cent.

For more information on the ways that the Ontario government helps qualified immigrants move into the labour market, see Chapter I: *Demographic Trends and Projections*.

²⁹ Gunderson, 2015.

³⁰ Based on Statistics Canada's low-income measure (LIM). The LIM is one-half of median household income, adjusted for household size, to take needs into account.

Youth

Some youth have been delaying entry into the labour market. For many, this is due to acquiring more education and training. This is a positive trend, as the labour market is generating high-skilled jobs. However, some youth are not in employment, education or training (called NEET). In Ontario, the youth NEET rate for 15- to 29-year-olds was on a general downward trend, decreasing from 16.2 per cent in 1976 to a low of 9.9 per cent in 1999. The rate increased again to 11.1 per cent in 2016, likely due in large part to the recent recession. The disappearance of many routine jobs has made it more difficult for youth and other labour market entrants such as recent immigrants to find employment.

Impacts on Working Ontarians

For many Ontarians, a more globalized economy has created new opportunities for highly skilled workers and those who benefit from the growing availability of alternative work arrangements. For many others, however, these labour market changes have led to lower and less predictable earnings, reduced access to employer-provided benefits and increased strain on workers and their families.

Changing Schedules and Pay Practices

Intense competition in the product markets for new and improved goods and services is putting pressure on employers to speed up delivery and respond more quickly to changes in demand. To meet fluctuations in demand, employers have created more flexible workforces with a core group of permanent employees and peripheral group of contingent workers, independent contractors and part-time workers. For example, part-time work alone increased from 13.5 per cent in 1976 to 19.0 per cent in 2016.

There has also been a change in pay practices over the decades as employers have made greater use of arrangements such as stock options, bonuses, pay for performance and other forms of compensation.³¹ This has contributed to widening inequality and is likely one of the drivers of the wedge between per capita GDP growth and wages, incomes and other well-being measures.

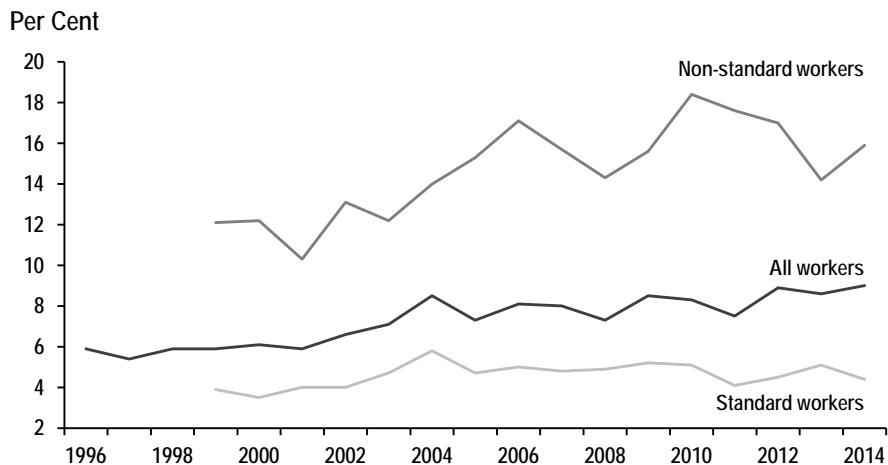
³¹ See Gunderson, 2015.

Increase in Low-Income Workers

Since the 1990s, the number of working Ontarians with incomes below the low-income measure (LIM) has increased. In 2014, 644,000, or 9.0 per cent, of employed Ontarians were in households with incomes below the LIM; this was up from 5.9 per cent in 1996. There is a large difference by type of worker. The low-income rates of non-standard workers are three to four times those of standard workers. Though volatile, it appears that the low-income rate series is trending upward for non-standard workers, while the trend is flatter for standard workers. For the working poor, low pay rates or insufficient hours, or both, make it difficult to earn adequate income from employment and manage work-related costs such as child care.

Prevalence of Working Persons Below the After-Tax Low-Income Measure

CHART 3.15



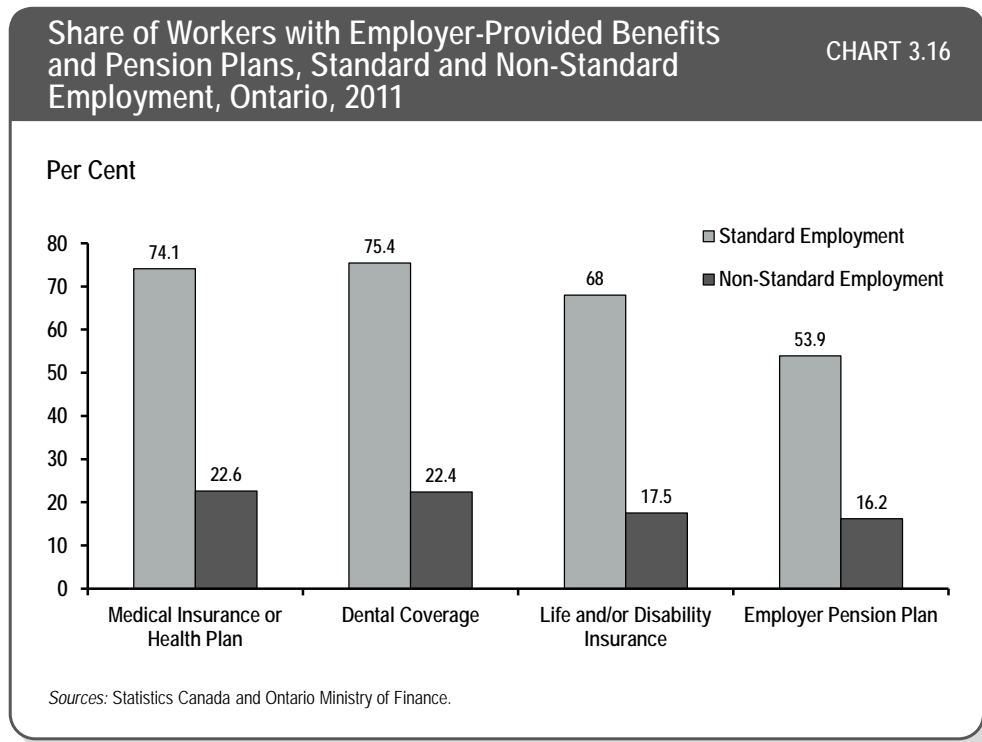
Notes: Working persons are aged 18 to 64 year olds and have positive or negative earnings in the year. Questions to determine non-standard work started with the 1999 survey.

Source: Ontario Ministry of Finance based on Statistics Canada's Survey of Labour and Income Dynamics (1996 to 2011) and Canadian Income Survey (2012 to 2014).

Decline in Access to Employer-Provided Health Benefits and Pension Plans

The changes in the labour market over the last two decades noted above have been accompanied by a decrease in access to employer-provided health benefits and workplace pension plans.

Access to employer-provided health benefits varies substantially according to employment characteristics — large firm size, higher wages, full-time status and unionization are all correlated with a greater likelihood of coverage. As Chart 3.16 shows, workers in non-standard employment are considerably less likely to have access to employer-provided benefits. For example, in 2011, only 23 per cent of non-standard workers had employer-provided medical insurance or health plans, compared to 74 per cent of standard workers.



Workplace pension plan coverage has also declined in Ontario, from 42 per cent of workers in the early 1990s to 34 per cent today, mainly due to reduced pension coverage in the private sector. As with health benefits, non-standard workers are less likely than workers in standard employment to have pension coverage. In 2011, among Ontario workers without workplace pension plans, about one-quarter held multiple jobs and about one-quarter were employed part time. By comparison, among Ontario workers with workplace pension plans, only about one-tenth held multiple jobs and about one-tenth were employed part time.³²

There has also been a move away from defined benefit to defined contribution pension plans, particularly in the private sector. Between 1976 and 2015, the share of all workers in Ontario with defined benefit plans fell from 39 to 23 per cent. At the same time, the share of those with defined contribution plans increased from three to six per cent. A change from defined benefit to defined contribution plans shifts investment risk and other risks to employees, which can have significant implications for the security of workers' future retirement incomes.

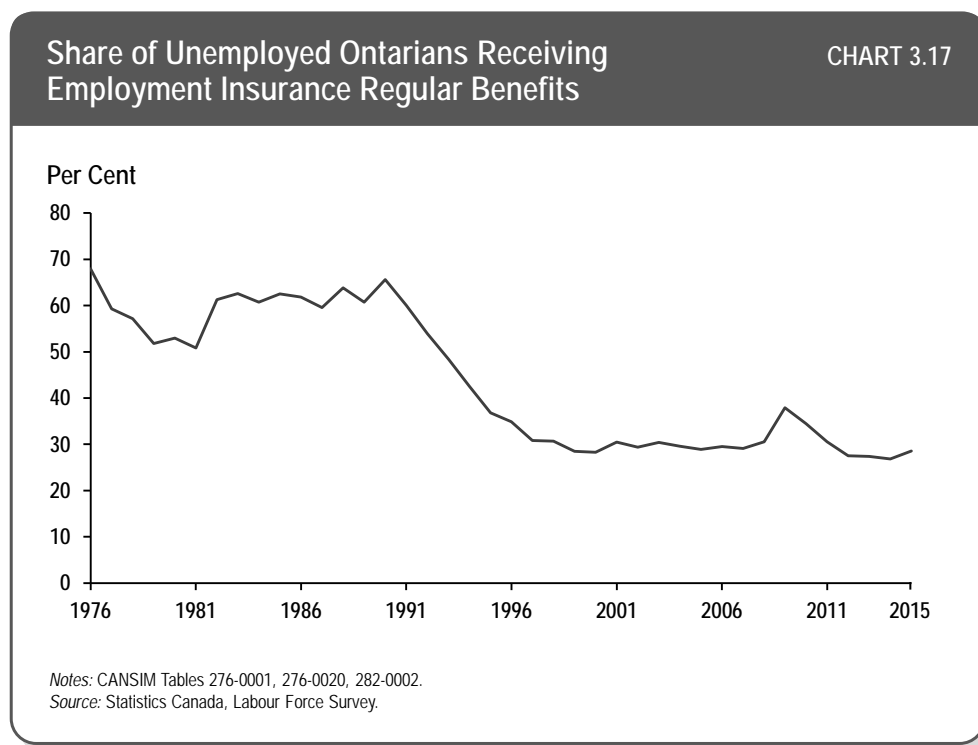
These factors have made saving for retirement more challenging. Recent analysis conducted jointly by the federal, provincial and territorial governments found that, without further action, about one-quarter of Canadian families will not have sufficient savings to maintain their standard of living in retirement. The same study found that about half of middle-income Canadian families without workplace pension plan assets are at risk of undersaving for retirement.

³² Workers were aged 18 to 64 and excluded the self-employed and those who earned less than \$3,500 annually.

Access to Supports for Those Who Lose Their Job

A number of studies have noted that Canada's long-standing social safety net programs, such as Employment Insurance (EI), are not well aligned with the changes in the labour market.³³ Employment Insurance was established in the 1940s to provide income support and training opportunities for Canadians who experienced periods of unemployment. However, the program currently fails to provide support to most unemployed Ontarians. Non-standard workers, such as those who work part time, hold multiple jobs or work contract to contract, often do not qualify for EI regular benefits. Overall, only about 29 per cent of Ontario's unemployed are able to access EI regular benefits, compared to an average of 44 per cent in other provinces (see Chart 3.17).

Lack of access to EI regular benefits also means less access to EI-funded training programs as most of these are available only to active or former EI recipients.



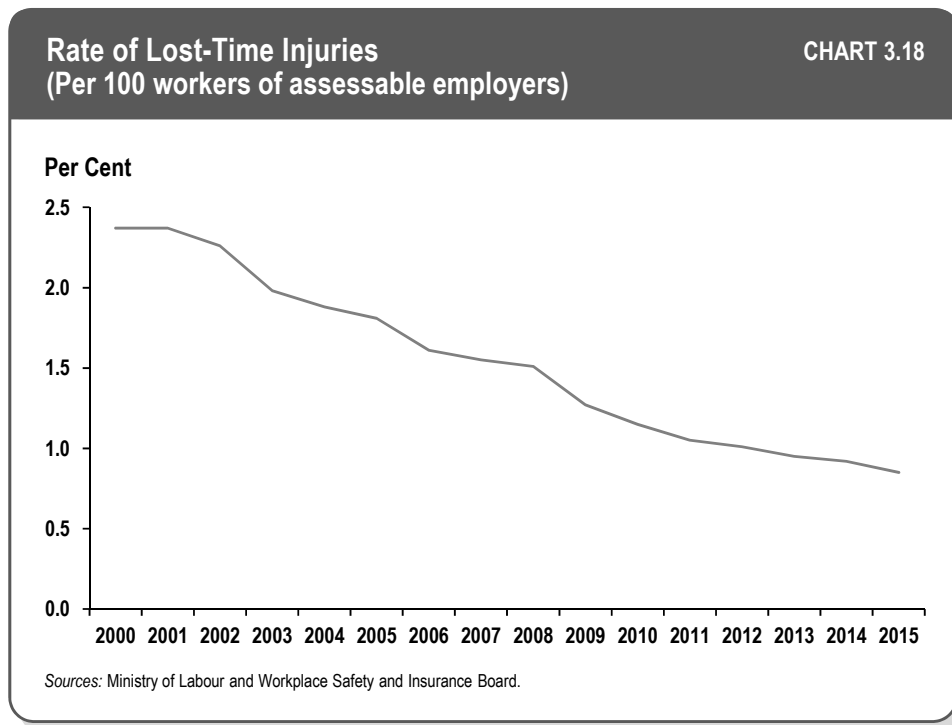
³³ "Making It Work: Final Recommendations of the Mowat Centre Employment Insurance Task Force," Mowat Centre, 2011.

Workplace Safety

The major employment trends identified above, including the growth of alternative forms of employment, have led to changes in the employer–employee relationship. They have also led to growth in the number of independent contractors and other forms of self-employment, and it is important that all workplace parties are aware of their rights and responsibilities under provincial occupational health and safety legislation. The workplace health and safety system must also be responsive to the changes that are occurring to the nature of work.

Despite the challenges created by the changing workplaces in the province, progress in workplace safety is ongoing and continued improvement remains a priority. As a result, Ontario is seeing fewer workplace injuries. The reported injury frequency rate per 100 workers of assessable employers has decreased from 2.37 per cent in 2000 to 0.85 per cent in 2015.

Ontario also has the lowest reported injury frequency per 100 workers of assessable employers compared to all other provinces and territories.³⁴



³⁴ Ontario Ministry of Labour, “Occupational Health and Safety in Ontario, 2014–2015 Annual Report,” November 2015.

Strategies to Respond to the Changing Nature of Employment

Faced with wide-ranging changes in the labour market, programs and services are adjusting to ensure that individuals have continued opportunities to participate in the economy and achieve their full potential. The government is working to create the conditions and supports that workers and businesses need to compete in the global economy, while providing a strong social safety net for all Ontarians, no matter their stage in life.

Changing Workplaces Review

The significant changes in the workplace that have occurred over the past several decades have highlighted the need to better protect workers while supporting business. Ontario established the Changing Workplaces Review and appointed two special advisors to engage with Ontarians on how best to modernize the Province's labour and employment laws in today's changing economy. A final report with recommendations is expected in 2017.

Access to Affordable Child Care

Access to affordable, quality child care is key to supporting workers' ability to fully participate in employment. The lack of affordable child care may be leading some parents to withdraw from the labour market or work part time when they would otherwise prefer to work full time. Since women are more likely to reduce their hours of work to care for a child, lack of access to affordable child care is also a factor contributing to the gender wage gap.

Ontario is already taking steps to build a high-quality, accessible and affordable early years and child care system that supports choice and flexibility for parents and promotes healthy development for children. Full-day kindergarten has been available to every four- and five-year-old in Ontario since September 2014. Ontario is also putting in place a renewed and coordinated system of Ontario Early Years Child and Family Centres and is working with the federal, provincial and territorial governments on a national early learning and child care framework.

Ontario Creating 100,000 New Licensed Child Care Spaces

In September 2016, the government announced that it would create 100,000 new licensed child care spaces within the next five years to help more families find quality, affordable child care.

Minimum Wage

An important tool to help low-income workers is the minimum wage. The government has helped low-wage workers and families by raising the minimum wage by 66 per cent since 2003. Annual adjustments to the minimum wage are now tied to inflation. This gives businesses time to plan for any increases.

Income Security Reform and Innovation

Structural changes in the labour market are reducing the ability of some workers to earn adequate incomes from employment and are leading to a greater share of workers in unstable employment with less secure incomes. One approach to address this challenge could be to enhance in-work supports for lower-income workers. In-work supports have the potential to provide greater income stability for those with inadequate and fluctuating employment income.

Canada and Ontario have already taken steps to provide supports to low- to middle-income families through the federal Canada Child Benefit and the Ontario Child Benefit. These benefits help supplement the incomes of eligible families with children, including those families who are working.

Another approach, proposed by many experts and the government of Ontario, would be for the federal government to significantly enhance the Working Income Tax Benefit (WITB). The WITB provides support to low-income working Ontarians, and is particularly important for workers without children who are not eligible for children's benefits.

Ontario is also moving forward with a Basic Income Pilot, announced in the *2016 Budget*, that will test whether a basic income would provide more consistent and predictable income support in the context of today's labour market. The pilot will help inform a multi-year plan for social assistance reform in the context of the broader income security system.

Innovative strategies may also be needed to ensure that families can access drug or other health benefits when these benefits are not available through their employer. Studies have shown the challenges that some low-income working families face in paying out of pocket the costs for prescription medications.³⁵ To address these concerns, several observers have called on the federal government to work with provinces to establish a national prescription drug plan.

The Province has implemented the Healthy Smiles Ontario program, which provides dental benefits to children and youth aged 17 and under in low-income families.

When workers lose their jobs, it is important that they can access income supports and training programs to help them get back on their feet quickly. That is why Ontario provides a number of employment and training services through Employment Ontario and the social assistance system. However, as discussed earlier in this chapter, many unemployed workers in Ontario are unable to access federal EI benefits and EI-supported training, including some programs offered by Employment Ontario.

³⁵ D. Locker, J. Maggias and C. Quiñonez, "Income, Dental Insurance Coverage, and Financial Barriers to Dental Care among Canadian Adults," *Journal of Public Health Dentistry* 71, no. 4 (2011), 327–34; Claudia Sanmartin, Deirdre Hennessy, Yuqian Lu and Michael Robert Law, "Trends in Out-of-Pocket Health Care Expenditures in Canada, by Household Income, 1997 to 2009," Statistics Canada, 2014.

The federal government has recently made improvements to EI that will make it easier for new entrants to the labour market, including youth and recent immigrants in Ontario, to be eligible for EI benefits if they become unemployed. However, a comprehensive review of the EI program is still needed to consider further reforms that would better align it with the changing labour market. This review should consider program innovations, including the potential to pilot a wage insurance plan, expand existing provisions to better support multiple job holders, and test new forms of assistance for individuals in non-standard employment who typically are ineligible for EI regular benefits if they become unemployed.

Inclusive and Effective Training

Ontario is continuing to invest in employment transition supports to help Ontario workers find jobs in the rapidly evolving economy. The government recognizes that there are concerns among Ontarians about their place in the new economy and the challenges they face. The Province is working on measures to address these concerns, now and in the future.

The Province invests more than \$1 billion each year in employment, training and labour market programs and services through Employment Ontario, which serves more than one million Ontarians, including youth, people with disabilities and seniors.

Additional investments are also made in the social assistance system to provide a range of services that help people who may face greater barriers to employment and need more life stabilization supports and pre-employment services as part of their employability journey.

In recognition of Ontario's youth employment challenges, the Province maintains its focus on providing employment supports for youth. In 2013, Ontario introduced the Youth Jobs Strategy and renewed it in 2015, with an additional investment of \$250 million over two years, to help more young people find jobs and ensure employers can hire the skilled workers they need to thrive in the evolving economy.

In 2016, Ontario announced the transformation of the Ontario Student Assistance Program and the introduction of the Ontario Student Grant (OSG). In addition to making funding more predictable, the OSG will make average college and university tuition free for students from families with incomes under \$50,000.

Ontario also provides specialized employment supports for people with disabilities. For instance, Ontario Disability Support Program Employment Supports provide training, employment search, job coaching and other employment supports for people with disabilities. In 2016, Ontario committed to developing a provincial employment strategy for people with disabilities that will help ensure Ontarians have access to a continuum of employment and training services.

The Province is also continuing to modernize, transform and integrate employment and training programs and services across government to make it easier for Ontarians to find the employment support program they need. As part of the transformation, the government launched SkillsAdvance Ontario in fall 2016, a sector-focused pilot matching qualified job seekers with employers in relevant sectors. This program will help skilled Ontarians better navigate the current economy, where the nature of work is changing.

Improving Workplace Health and Safety

Workplace health and safety programs address the well-being of employees as they perform their jobs.

The *Occupational Health and Safety Act* provides the legal framework and the tools to achieve healthy and safe workplaces. It sets out the rights and duties of all parties in the workplace. It also establishes procedures for dealing with workplace hazards and provides for enforcement of the law where compliance has not been achieved voluntarily by workplace parties. The government's workplace health and safety efforts also focus on prevention through the Chief Prevention Officer.

The Ontario government continues to make advances in workplace health and safety. In addition to a number of regulatory amendments, nearly all of the high-priority recommendations of the 2010 Expert Advisory Panel on Occupational Health and Safety have been implemented, including mandatory awareness training that focuses on the health and safety rights and responsibilities of workers, supervisors and employers, and through the implementation of training requirements for working at heights. Enforcement of the *Occupational Health and Safety Act* continues to focus on the most vulnerable workers by, for example, targeted workplace inspections for new and young workers.

The government has also implemented a prevention-focused strategy to address Post-Traumatic Stress Disorder (PTSD) for first responders such as police, firefighters and paramedics. This strategy is focused on increasing awareness about PTSD among first responders, ensuring that employers have access to resources to improve mental health supports for first responders, promoting research that supports the prevention of PTSD and holding an annual leadership summit.

To respond to PTSD in the workplace, the government passed the *Supporting Ontario's First Responders Act (Posttraumatic Stress Disorder), 2016*, which amended the *Workplace Safety and Insurance Act, 1997*, and the *Ministry of Labour Act*. The amendments provide a presumption that PTSD diagnosed in first responders, as identified in the legislation, is work-related. This allows for faster access to Workplace Safety and Insurance Board benefits, resources and timely treatment.

Strengthening Retirement Security for Today's Workers

As noted earlier in this chapter, the decline in participation in workplace pension plans, along with increasing longevity, will make it more difficult for today's workers to save enough for a comfortable retirement. These changes also mean that most workers are required to manage their own savings, which involves making complex investment decisions and understanding longevity risk.

Addressing this challenge requires a multi-faceted strategy that includes enhancing financial literacy and strengthening consumer protections to ensure that individual savers can obtain sound, unbiased investment advice and get clear information on fees associated with different investments. The strategy also includes expanding access to retirement savings vehicles, particularly for workers in non-standard employment, and strengthening and modernizing existing workplace pension plans.

Ontario has already made significant progress on this multi-faceted strategy to improve retirement security. This progress includes achieving a historic agreement among federal, provincial and territorial governments to enhance the Canada Pension Plan. The enhancement will provide all workers, including those in non-standard employment, with a meaningful increase in future retirement income that will be predictable, paid for life and fully indexed to inflation.

To expand opportunities for retirement savings, Ontario has introduced pooled registered pension plans, an innovative savings tool intended to be low cost, professionally managed, and portable from one workplace to another.

For individual savers and investors, Ontario is working to enhance consumer protections by reviewing the regulatory framework for financial planning and advisory services. This includes examining ways to support workers with defined contribution plans to help them manage their investments and plan for their retirement.

Ontario will continue to take steps to modernize the regulatory framework for existing workplace pension plans, including reviewing the solvency funding rules for defined benefit pension plans, developing a framework for target benefit multi-employer pension plans and strengthening oversight.

CHAPTER IV: LONG-TERM FISCAL PROSPECTS

INTRODUCTION

Chapter IV outlines the potential fiscal implications of long-term projections of Ontario’s demographic and economic trends. The chapter first discusses the importance of fiscal sustainability as a long-term objective for governments. It examines the implications of demographic trends on the Province’s fiscal outlook, and presents steps that the government is taking to support long-term fiscal sustainability. The final part of the chapter describes the relative fiscal sustainability outlook between the federal and provincial–territorial governments in Canada and argues that improved federal–provincial fiscal arrangements could help ensure that Ontario has the resources necessary to provide its residents with quality public services, now and over the long term.

The following key trends have been identified:

- Demographic and economic trends are projected to increase pressure on the government’s fiscal position. The Province is taking a long-term approach to fiscal sustainability by transforming the way it delivers public services.
- An aging population will increase demand for health care, which will put added pressure on health care expenditures. The Province’s “Patients First: Action Plan for Health Care” promotes the long-term sustainability of the health care system and focuses on achieving the best possible health outcomes.
- A slower pace of labour force growth will increase pressure to invest in education and training to build up the productive capacity of the province’s highly skilled workforce. The government is investing in people’s talents and skills by transforming student financial assistance and working to ensure the long-term financial sustainability of Ontario’s universities and colleges.

- Under current policy, provinces and territories will face increasing fiscal challenges over the long term, while the federal government’s fiscal position is projected to be more sustainable and to improve over the same period. Ontario continues to take a collaborative approach with its federal, provincial and territorial partners to find forward-looking solutions to meet the challenges collectively faced by Canadians.

Importance of Fiscal Sustainability

According to the Organisation for Economic Co-operation and Development (OECD):

Fiscal sustainability is the ability of a government to maintain public finances at a credible and serviceable position over the long term. Ensuring long-term fiscal sustainability requires that governments engage in continual strategic forecasting of future revenues and liabilities, environmental factors and socio-economic trends to adapt financial planning accordingly.¹

A long-term approach to fiscal management ensures that governments will have the resources available to provide public services that residents can rely on both now and in the future, the flexibility to manage unexpected changes that may arise, and the capacity to limit the debt burden on future generations.

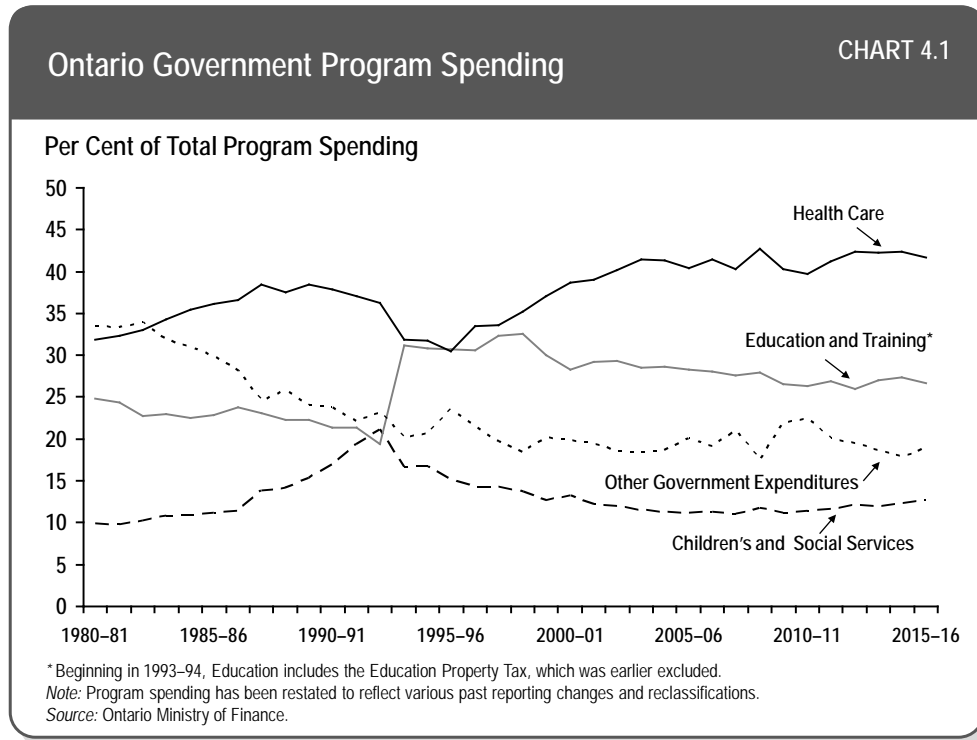
Overall, the government’s ability to generate revenues is largely determined by the state of Ontario’s economy. Policies that encourage long-term economic growth contribute to a sustainable revenue base — to fund the delivery of public services while ensuring the Province remains on a sustainable fiscal path.

¹ OECD (2013). Government at a Glance 2013, OECD Publishing. www.oecd-ilibrary.org/governance/government-at-a-glance-2013_gov_glance-2013-en.

While there are risks to Ontario’s long-term fiscal sustainability arising from demographic and economic trends, the government’s approach to managing expenses helps protect the programs and services that people rely on. This includes a continuing commitment to making strategic investments to help spur economic growth, transform and modernize public services, and ensure the integrity of Ontario’s revenue base. To keep debt at a manageable level and, in turn, protect against the impact of rising interest rates that would otherwise crowd out investments in public services, the Province is also committed to ensuring its net debt-to-GDP ratio is on a declining trajectory.

The next section discusses specific long-term demographic and economic trends in key sectors that could put increased pressure on government programs and services or place downward pressure on revenue. Following that, transformative actions that the government is taking to ensure the fiscal sustainability of programs and services are highlighted. Finally, Ontario’s fiscal sustainability is assessed in the context of fiscal federalism in Canada.

Fiscal Implications of Demographic and Economic Projections



Demand for Health Care

A number of key drivers affect the demand for, and cost of, health care services. These include demographics (population growth and aging), population health status, patients' expectations, inflation, technology and medical practice.

With a projected population increase of 3.8 million by 2040 and a near-doubling in the number of seniors in the province, the government's capacity for delivering the appropriate services and programs will come under increased pressure.

Health care costs make up 42 per cent of the Province's total program expense. Other provinces are experiencing similar challenges, which are likely to continue in the future.

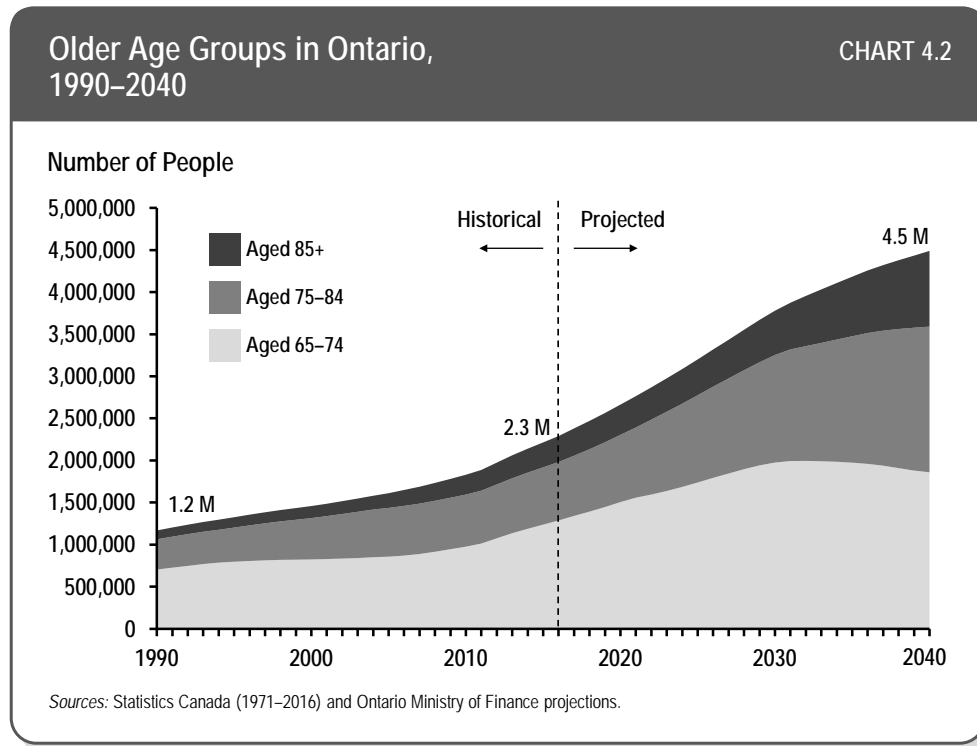
Table 4.1 Per-Capita Provincial Government Health Spending, by Age Group, Ontario, 2014, Current Dollars

Age Group	Spending Per Person (\$) ¹	Share of Population, 2014 Actual (Per Cent)	Share of Population, 2040 Projection (Per Cent)
<1	10,717	1.0	0.9
1-4	1,477	4.2	3.8
5-14	1,231	10.8	10.2
15-44	1,958	40.2	35.5
45-64	3,328	28.2	24.3
65+	11,343	15.6	25.2
65-74	7,274	8.7	10.4
75-84	12,944	4.9	9.7
85+	24,587	2.1	5.1
Total	3,802	100.0	100.0

¹ Weighted average.

Sources: Canadian Institute for Health Information, Statistics Canada and Ontario Ministry of Finance population projections (Spring 2016).

In 2016, seniors accounted for 16.4 per cent of the province’s overall population, with approximately 2.3 million of Ontarians aged 65 or older. As noted in Chapter I: *Demographic Trends and Projections*, the number of seniors living in Ontario is projected to nearly double to 4.5 million by 2040, with the share of seniors in Ontario’s population projected to be 25.2 per cent, up notably from today.



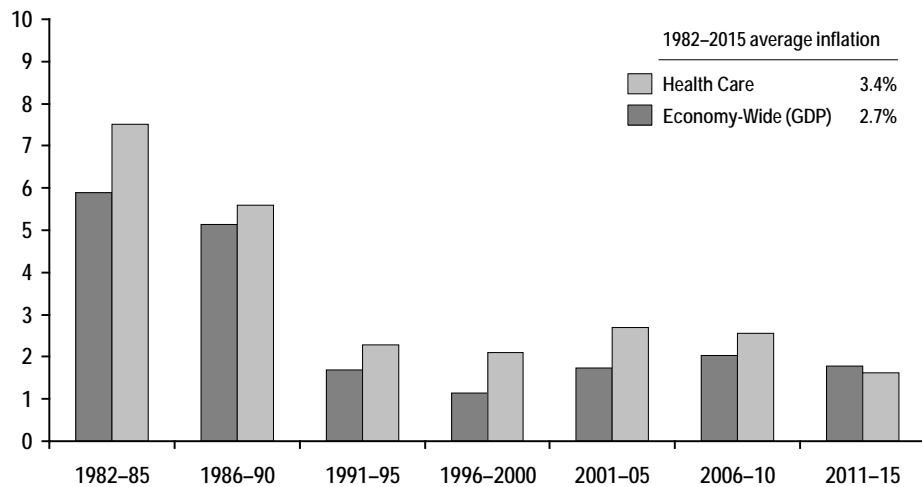
Public expectations and societal influences are other factors affecting demand for health care. For example, knee or hip replacements that support more active lives may drive up system costs, while reduced social acceptability of smoking may lower costs.

Inflation is a key driver of health care expenditures. Inflationary pressure tends to be higher in health care than in the rest of the economy because health care services are generally labour intensive and can be affected by the high costs associated with the introduction of new medical technology and drugs.

Price Increases in Health Care — Ontario

CHART 4.3

Per Cent Change (Annual Average)

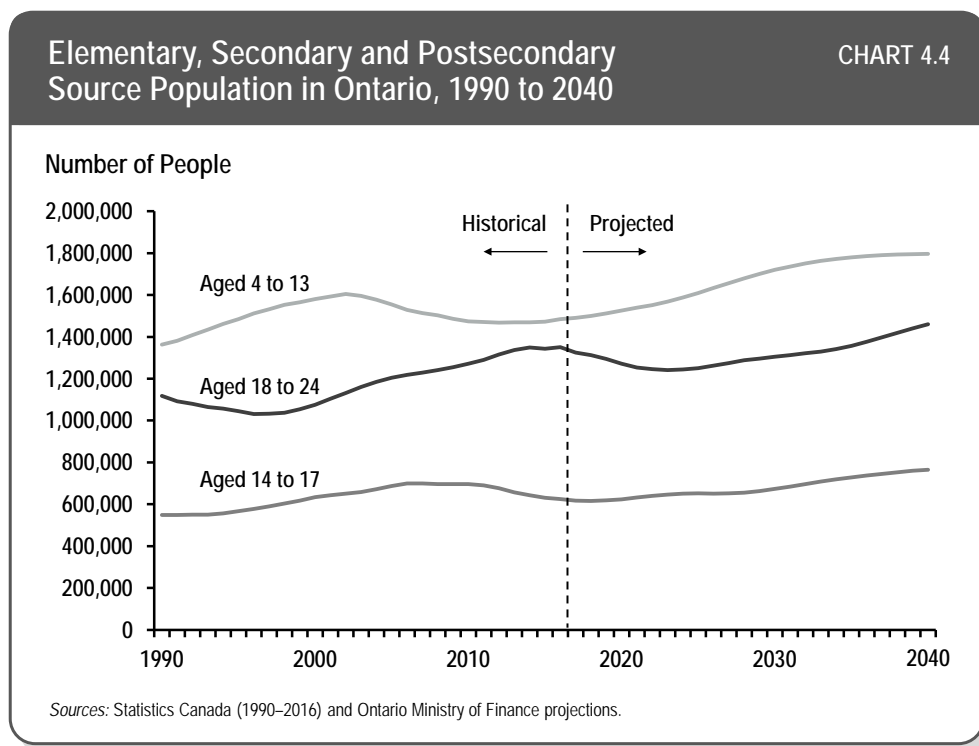


Sources: Statistics Canada and Canadian Institute for Health Information.

Price increases will likely continue in the future but the impact could be offset by increased efficiencies. Medical progress, which can enhance people's life span and quality of life through investments in research and development towards new medical treatments, may also offer the potential for long-term savings in the health care system. For example, advances in genetics may help alleviate health care costs by identifying patients who would benefit from pharmaceutical interventions rather than treating larger undifferentiated groups of patients. Furthermore, the dissemination of evidence-based best practices in health care can reduce unnecessary treatments and testing and increase the effectiveness of services for patients. Ultimately, these factors can work towards generating efficiencies that lead to lower costs and a more sustainable health care system.

Demand for Education and Training

Enrolment in elementary and secondary schools is determined primarily by the number of children aged 4 to 17. The number of children in this age group has been declining recently in Ontario as the large cohorts of the baby boom echo move out of this age group. From 2016 to 2040, however, the number of elementary school-age children is projected to rise by about 0.8 per cent annually on average. The 4–13 age group is projected to grow by 21 per cent from 1.48 million in 2016 to 1.80 million in 2040 — significantly greater than the 1.8 per cent decline seen over the past 20 years. Due to regional variations in the growth of the children’s population, school enrolment will rise in some regions and fall in others.



The secondary school-age group (ages 14–17) is projected to decline by about 1.4 per cent over the next two years before resuming growth to reach 765,000 by 2040 — 22.5 per cent higher than today’s level of 625,000.

In the postsecondary sector, demographics play a somewhat smaller role in determining enrolment because attendance is not universal. While enrolment growth is expected to slow over the short to medium term, especially beyond the Greater Golden Horseshoe, postsecondary enrolment will continue to be highly influenced by a combination of demographics and demand, reflecting both economic conditions and the skills needed for employment.

Demand for Children’s and Social Services

Children’s and social services sector programs support people with disabilities, low-income families, and children and youth. Expenditures in the sector are driven primarily by economic conditions, and social and demographic factors.

Economic realities, in particular, labour market conditions, are drivers of the Ontario Works program, which supports vulnerable Ontarians in financial need, and the Ontario Child Benefit (OCB). For example, the OCB is an income-tested benefit provided to low- to moderate-income families. The overall number of recipients is largely determined by the number of children in Ontario families, as well as the strength of the labour market. Likewise, demand for Ontario Works increases during economic downturns as people who become unemployed require financial supports and other services.

The Ontario Disability Support Program (ODSP) provides income and employment supports to eligible Ontario residents who have disabilities. The ODSP caseload has been growing steadily since the program’s introduction in 1998. Growth is driven by a number of factors, including an increase in the diagnosis of mental illness. Between 2006–07 and 2012–13, the ODSP caseload grew by about five per cent per year, on average. Since 2013–14, the ODSP caseload growth has slowed to about three per cent per year, on average. In 2015–16, there were an average of 335,933 ODSP cases per month.

About 42,000 adults with developmental disabilities access a range of targeted services and supports (such as residential supports, direct funding, and specialized and clinical supports). Demand for developmental services is driven by a number of factors, including general population growth; increasing complexity of support needs; medical advances that enable individuals with developmental disabilities to live longer; and caregivers, predominantly aging parents, who are no longer able to care for their adult children with developmental disabilities at home.

Additionally, there has been an increasing demand for early intervention and special needs services for children and youth. The reported prevalence of certain specific disorders, such as Autism Spectrum Disorder (ASD), has increased over time. For example, there are an estimated 40,000 children and youth with ASD in Ontario, and prevalence estimates have grown from 1 in 150 to 1 in 68 within the last decade.

Demand for Other Government Expenditures

The Province invests in economic development, justice and other government programs to encourage growth and productivity, keep communities safe, support environmental stewardship and sustainable development, and ensure that government services are delivered efficiently and responsively.

Some sector programs are demand-driven, while others are mandated by statutory or regulatory requirements. For example, Ministry of Labour enforcement staff protect workers by enforcing the *Occupational Health and Safety Act* and *Employment Standards Act, 2000*. Over the long term, demographic changes such as population growth, as well as the performance of the Ontario economy, are expected to continue being key drivers of demand for government programs.

Future Cost of Infrastructure Investment

Investment in public infrastructure provides economic benefits over the short, medium and long term by supporting jobs, enhancing productivity, and increasing Ontario's competitiveness. These investments also impact the government's finances by adding to its borrowing needs with the potential to increase provincial debt over time. When infrastructure projects are completed, they affect the Province's fiscal position for decades through interest on debt, amortization and ongoing maintenance costs associated with the investments.

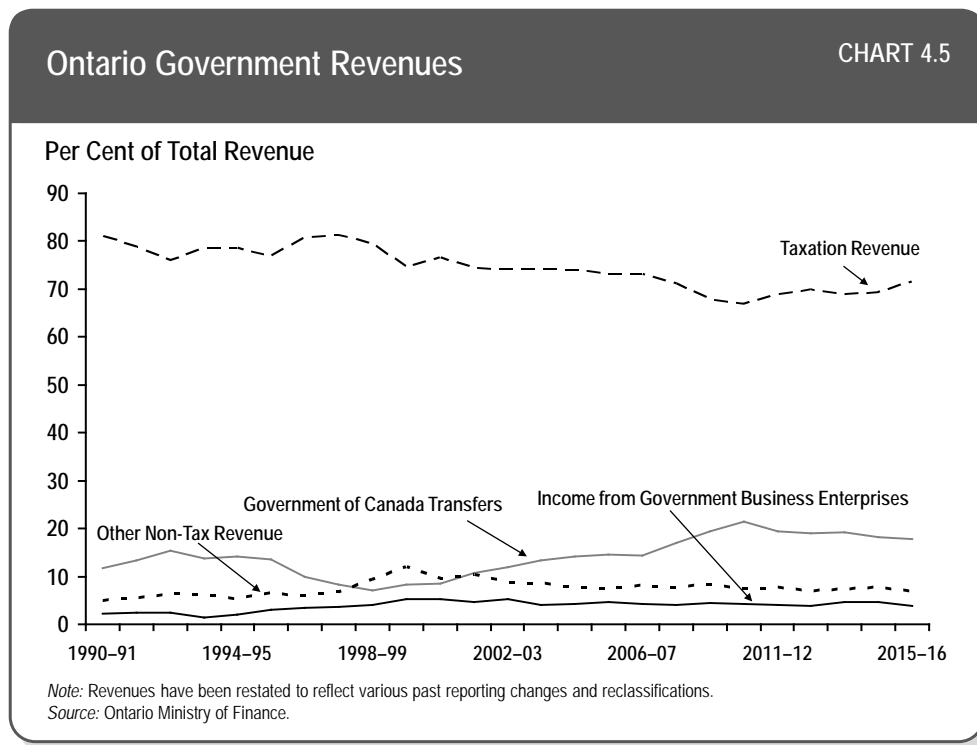
Amortization expense refers to the consumption of a capital asset over its estimated service life. Once a capital asset is ready for use, amortization expense begins and remains as a non-discretionary expense on the Province's books over the asset's projected service life. The Province's amortization expense is forecasted to grow steadily as infrastructure projects from the government's 12-year, \$160 billion capital plan come into service.

"...we believe that the infrastructure investment plan provides support to the strategy to boost Ontario economic activity in the medium term..."

*David Dodge and Richard Dion
Infrastructure Investment for Longer Term Growth in Ontario*

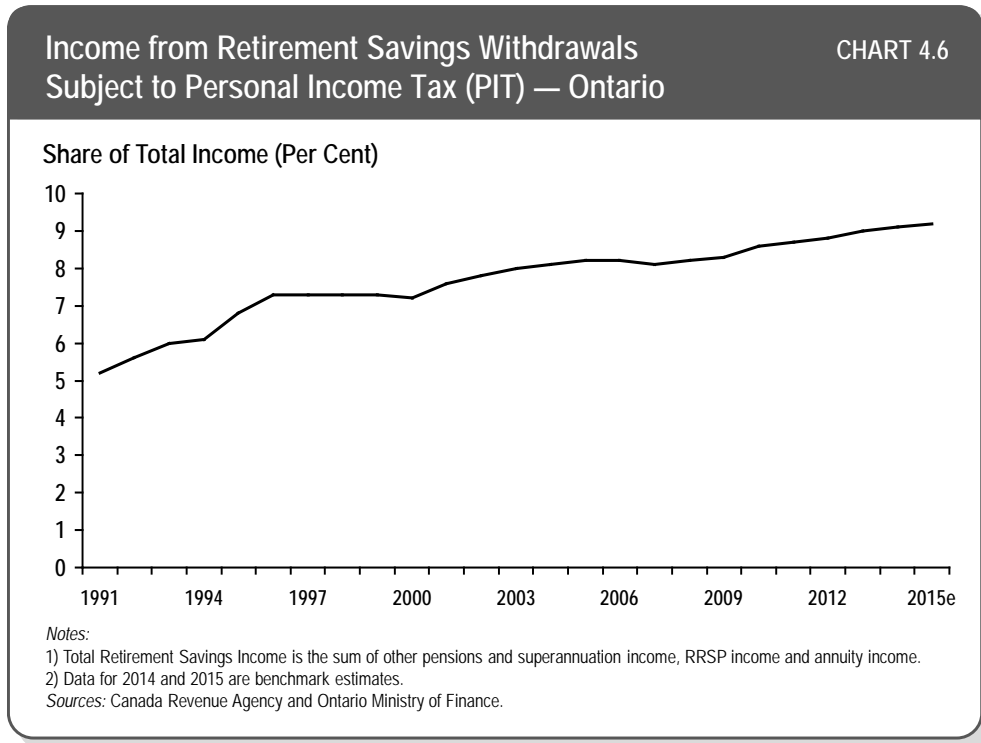
Necessary expenditures for maintenance and repairs, to maintain the level of services provided by infrastructure, will also have important fiscal implications over the long term. According to the Centre for Spatial Economics' forthcoming analysis of the economic benefits of Ontario's infrastructure plan, the assets funded by the plan remain productive and promote long-term economic growth through ongoing spending on repairs and replacement. (Chapter II: *Economic Trends and Projections* provides additional information on the study by the Centre for Spatial Economics.) This ensures that the boost to competitiveness for businesses in the province from the initial investment in infrastructure does not diminish over time.

Ontario Government Revenues



Taxation revenues represented about 72 per cent of Ontario government revenues in 2015–16. The impact of the aging population on economic growth is expected to contribute to slower taxation revenue growth than in the past, reflecting tax provisions for seniors and generally lower tax rates on retirement incomes. However, increasing withdrawals from tax-advantaged retirement savings vehicles by seniors over time will lead to an increasing taxable income base that is not reflected in measured gross domestic product (GDP). Income from these savings withdrawals increased at an average annual pace of 8.0 per cent over the past 25 years, double the pace of overall income growth of about 4.0 per cent — increasing from 5.2 per cent of total income in 1991 to 9.2 per cent in 2015.

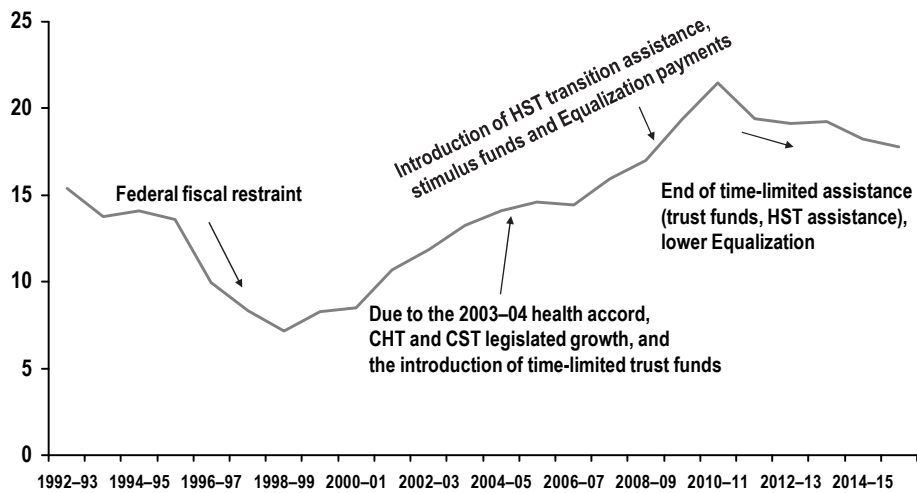
This trend is likely to be more pronounced in the long term as a larger share of seniors in the population draws on their retirement savings. While this income tends to be taxed at relatively lower effective tax rates due to provisions of the personal taxation system,² it will still boost revenues above what would be expected based purely on GDP projections.



Federal transfers to Ontario accounted for about 18 per cent of total Ontario revenue in 2015–16 and this share is projected to remain the same in the near term. Federal transfers include major ongoing Government of Canada transfers, such as the Canada Health Transfer and the Canada Social Transfer, as well as funding for infrastructure projects and labour market programs. While the long-term trend in federal transfers is uncertain, future agreements should be responsive to the anticipated demographic change and growth in demand for services, as well as the expected provincial expenditure pressures.

² In Ontario, there are non-refundable tax credits (for 2016) for the first \$1,384 of pension income and up to \$4,888 of income for people aged 65 and over who have low to middle incomes. Seniors also have the option of transferring pension income to their spouse for tax purposes.

Per Cent of Total Revenue



Note: Revenues have been restated to reflect various past reporting changes and reclassifications.
Source: Ontario Ministry of Finance.

Net income from Government Business Enterprises (GBEs) accounted for four per cent of total Provincial revenues in 2015–16 and is projected to remain roughly the same in the near future. Many of these businesses, such as the Ontario Lottery and Gaming Corporation, Liquor Control Board of Ontario and Ontario Power Generation, are mature businesses and, over the long term, growth in their net income would be driven by economic growth.

Other non-tax revenues comprised about seven per cent of total Provincial revenues in 2015–16 and over the medium term. This category has a variety of revenue sources including vehicle and driver registration fees, proceeds from the auctioning of cap-and-trade allowances, the projected net impact of the Province's planned asset optimization strategy and electricity sector-related revenues such as power supply contract recoveries, which are fiscally neutral as the recovery amounts are set to fully offset power supply contract expenses, and the debt retirement charge (DRC), which was removed from residential electricity bills as of January 1, 2016.

Other non-tax revenues can be expected to decline slightly in the near term, reflecting government policy decisions such as the legislated end of the DRC for remaining electricity bills as of April 1, 2018, and lower projected revenues from power supply contract recoveries as the contracts expire. Over the longer term, most non-tax revenues can be expected to grow in line with total population growth and inflation. Future growth in proceeds from cap-and-trade allowance auctions, which is estimated to account for 18 per cent of other non-tax revenue in 2017–18, is more uncertain.

Other Jurisdictions' Perspectives

Recently released long-term economic and fiscal projections for Canada by the federal government suggest that population aging and resulting slower labour supply growth are expected to slow Canada's economic growth, hence contributing to a lower growth rate of government revenues.³ These factors would constrain the capacity of governments to continue to maintain the growth rates of public expenditures at levels as high as in the past. Meanwhile, population aging is also expected to increase pressure on public expenditures, particularly for age-related programs such as elderly benefits. The budgetary balance for the federal government is expected to turn positive only at the end of the projection period. However, the federal debt-to-GDP ratio is projected to be maintained at roughly current levels over the near to medium term, but is expected to decline over the long term.

The U.S. Congressional Budget Office (CBO) estimates that total spending on major health care programs (Medicare, Medicaid and the Children's Health Insurance Program) will increase from 5.5 per cent of GDP in 2016 to 8.9 per cent of GDP in 2046.⁴ The CBO expects that health care costs per beneficiary will rise in part because of the effects of new medical technologies and rising personal income.

³ Canada Department of Finance, "Update of Long-Term Economic and Fiscal Projections," 2016.

⁴ United States Congressional Budget Office, "The 2016 Long-Term Budget Outlook."

The United Kingdom's 2015 fiscal sustainability report recognizes that an aging population will put upward pressure on public spending, mainly driven by increased health spending, state pension costs and long-term social care costs.⁵ Health spending is projected to rise from 6.2 per cent of GDP in 2019–20 to 8.0 per cent of GDP in 2064–65, increasing as the population ages.

New Zealand's 2016 long-term report notes that population aging is projected to apply fiscal pressures through slower revenue growth (resulting from less labour force participation) and increased expenses (primarily through the New Zealand Superannuation Fund and health care).⁶ Additionally, government spending on health care is projected to increase from 6.2 per cent of GDP in 2015 to 9.7 per cent of GDP in 2060.

Australia's 2015 long-term report identifies population growth and aging as important challenges facing public finances.⁷ Under the favourable "proposed policy" scenario where all announced and outstanding policy measures are implemented, Australian government health expenditure is projected to increase from 4.2 per cent of GDP in 2014–15 to 5.5 per cent of GDP in 2054–55. As well, in 2014–15 dollars, health spending per person is projected to more than double from around \$2,800 in 2014–15 to around \$6,500 in 2054–55.

⁵ United Kingdom Office for Budget Responsibility, "Fiscal Sustainability Report," June 2015.

⁶ New Zealand Treasury, "2016 Statement on the Long-Term Fiscal Position."

⁷ Treasurer of the Commonwealth of Australia, "2015 Intergenerational Report: Australia in 2055."

Addressing Fiscal Sustainability

The Shifting Gears progress report by the Mowat Centre and the University of Toronto examines how well governments in Canada and across the OECD are doing in terms of returning to fiscally sustainable positions, and prescribes short- and long-term solutions to achieve fiscal sustainability.⁸ The report emphasizes that Canadian governments should aim to promote fiscal sustainability beyond simply eliminating deficits. Instead, focus should be placed on transforming how governments deliver public services through accountability, transparency and measurement grounded in evidence, to maintain sustainable budgets over the long term.

Productivity growth is a critical driver of economic prosperity. Slower growth constrains a government's ability to generate revenues and jeopardizes its long-term fiscal sustainability. Chapter II: *Economic Trends and Projections* addresses economic growth and productivity in depth and provides examples of how to improve the productivity and growth potential of Ontario's economy. However, focusing on promoting economic growth and productivity to ease potential impacts on Ontario's revenues is only part of the Province's efforts. The government is also promoting long-term fiscal sustainability by supporting initiatives that promote the efficient and effective delivery of public services, as well as ensuring revenue integrity and addressing the underground economy.

Transforming and Modernizing Public Service Delivery

Areas of provincial jurisdiction, which represent the largest proportion of provincial program spending, will have significant impacts on the long-term sustainability of Ontario's fiscal position. As discussed earlier in this chapter, an aging population will put increased pressure on Ontario's health care expenditures. Also, slower labour force growth will increase pressure to invest in building the skills of Ontario's workforce and supporting workers' ability to fully participate in employment.

In light of these challenges, the government has taken a coordinated approach to ensuring that Ontarians receive services in a modern and efficient manner by transforming services and managing costs to promote long-term fiscal sustainability.

⁸ Jennifer Gold, Josh Hjartarson, Matthew Mendelsohn and Reuven Schlozberg, "Fiscal Sustainability and the Future of Public Services: A Shifting Gears Progress Report," Mowat Centre and the University of Toronto, School of Public Policy and Governance.

Transforming Government and Managing Costs

A cornerstone of Ontario's approach to transforming the delivery of public services is Program Review, Renewal and Transformation (PRRT) — Ontario's fiscal planning and expenditure management approach that also provides a continuous review of programs. By collaborating across ministries, the government is taking a coordinated approach to ensuring that programs are relevant, effective, efficient, sustainable and meeting the needs of Ontarians. Program Review, Renewal and Transformation is helping the government achieve better outcomes and free up resources to reinvest in key priorities, such as health care and education.

To improve programs, PRRT focuses on evidence-based decision-making, gathering and analyzing the best available information to improve how planned outcomes are identified and achieved across government. This includes redesigning policies to support greater efficiency and cooperation within government, modernizing program delivery, and changing or ending programs that are no longer meeting people's needs.

The government has established a new Centre of Excellence for Evidence-Based Decision-Making to build capacity to assess how programs are performing, using evidence to inform choices and lead change in critical public services. In addition, the government has established the Behavioural Insights Unit (BIU) to collaboratively assess policies, programs and services and offer low-cost ways to improve them, in alignment with PRRT goals. Behavioural science adopts a multidisciplinary approach, drawing on concepts and methodologies from social and cognitive psychology, economics, neuroscience and sociology, to understand and design for human behaviour. Applying a behavioural science lens to the design of policies, programs and services has been shown to promote more efficient processes, deliver more human-centric services and improve outcomes.

Consistent with the principles of PRRT, the government is also developing a Digital Government Action Plan to promote more efficient delivery of public services, connect with Ontarians and shift government culture to deliver the best possible customer experience. While government investments in information technology remain stable, operational changes have resulted in managing increased demand for more services over the past decade. This was done through initiatives that lower information technology costs and improve how technology supports the delivery of government programs and services.

To enhance access to public services, the government is embarking on transformation and modernization initiatives, one of which is the modernization of transfer payment administration. This initiative seeks to alleviate the burden on transfer payment recipients by modernizing the processes and rules for administering payments. As a result, delivery partners can spend more time and effort on planning, coordinating and achieving the project or program outcomes they have committed to deliver for Ontarians. As a first step, the government is implementing a “one-window” common registration system that will help transfer payment recipients to easily submit and update information online.

The government is also working to modernize ServiceOntario by making it easier and more convenient to access services through multiple channels including in person and online. ServiceOntario will continue to use its expertise and robust infrastructure to transform government service delivery. This includes working with its ministry partners to streamline processes, reducing the effort required by customers, maintaining the integrity of customer information, and improving the customer experience on all services.

In addition, the government is transforming the way benefit programs are delivered. By shifting from a program-by-program to a client-focused approach, beneficiaries will have easier access to income-based benefits, while ensuring programs are administered efficiently and sustainably.

Transforming Health Care

Beyond these overarching transformative changes, the Province is also focused on transforming health care delivery by creating a flexible health care system that can accommodate future demands. Ontario’s “Patients First: Action Plan for Health Care” focuses on improving the health care experience of patients and their families and achieving the best possible health outcomes. The plan promotes sustainability of the health care system by helping Ontarians get faster access to patient-centred care throughout the province; offering better-coordinated care at or closer to home; providing information to help people make the best decisions about their health; and protecting Ontario’s publicly funded health care system for the future through evidence-based care and funding.

With increasingly complex drug regimens and advances in pharmaceuticals, drug prices have been rising steadily, placing increased pressure on provincial health care costs. To improve long-term sustainability, Ontario continues to pursue affordable drug access for patients, in partnership with federal, provincial and territorial governments, including a coordinated process for approving new and expensive drugs for people who need life-saving medications.

Ontario's participation in the pan-Canadian Pharmaceutical Alliance and leadership in hosting the office offers opportunity for more cost-effective treatment for those in need.

Transforming Postsecondary Education

The government is transforming student financial assistance to ensure that financial support is transparent, timely and better targeted. As announced in the *2016 Ontario Budget*, the Province is discontinuing tuition and education tax credits, beginning in fall 2017. Revenue from the elimination of these tax credits will be reinvested to support the new Ontario Student Grant or other postsecondary, education, training and youth jobs programs. Grants are more effective than tax credits at targeting financial support to students with the greatest needs and providing support upfront.

The Province is working closely with its postsecondary partners to design new formulas to fund colleges and universities that will ensure continued student success and improve sustainability.

Ensuring Revenue Integrity and Addressing the Underground Economy

The underground economy refers to any activity that is unreported or underreported for taxation purposes. When individuals and businesses deliberately ignore their tax and other legal obligations, they put the safety of workers and consumers at risk. Participating in the underground economy also creates an unfair competitive advantage for illegitimate operators over businesses that follow the rules. The result is lost revenue to fund public services that Ontarians rely on.

According to Statistics Canada, the country's underground economy is estimated to be 2.4 per cent of annual GDP. In Ontario, about \$16.7 billion in annual economic activity can be attributed to the underground economy, particularly in the residential construction, retail trade, and accommodation and food services industries, which account for more than half of the total value of the underground economy.⁹

As announced in the *2016 Ontario Budget* and *2016 Ontario Economic Outlook and Fiscal Review*, the government is taking the following measures to combat the underground economy:

- Extending the residential roofing pilot project to help ensure compliance with health and safety obligations;
- Strengthening the Province's ability to identify and address the underground economy through enhanced information-sharing;
- Partnering with natural gas utilities to help homeowners work with certified energy auditors and reputable contractors;
- Launching a pilot project in the retail and hospitality sectors to test security software that will identify the use of electronic sales suppression technology; and
- Addressing contraband tobacco through a balanced approach of partnerships and compliance activities including enhancing the oversight of raw leaf tobacco.

The government will continue to find ways to educate the public and raise awareness among businesses and workers about the risks and potential liabilities associated with participation in the underground economy, and will continue to take concrete actions to level the playing field with businesses that follow the rules.

⁹ Statistics Canada, "The Underground Economy in Canada, 2013," 2016, www.statcan.gc.ca/daily-quotidien/160620/dq160620b-eng.pdf.

Federal–Provincial Fiscal Sustainability

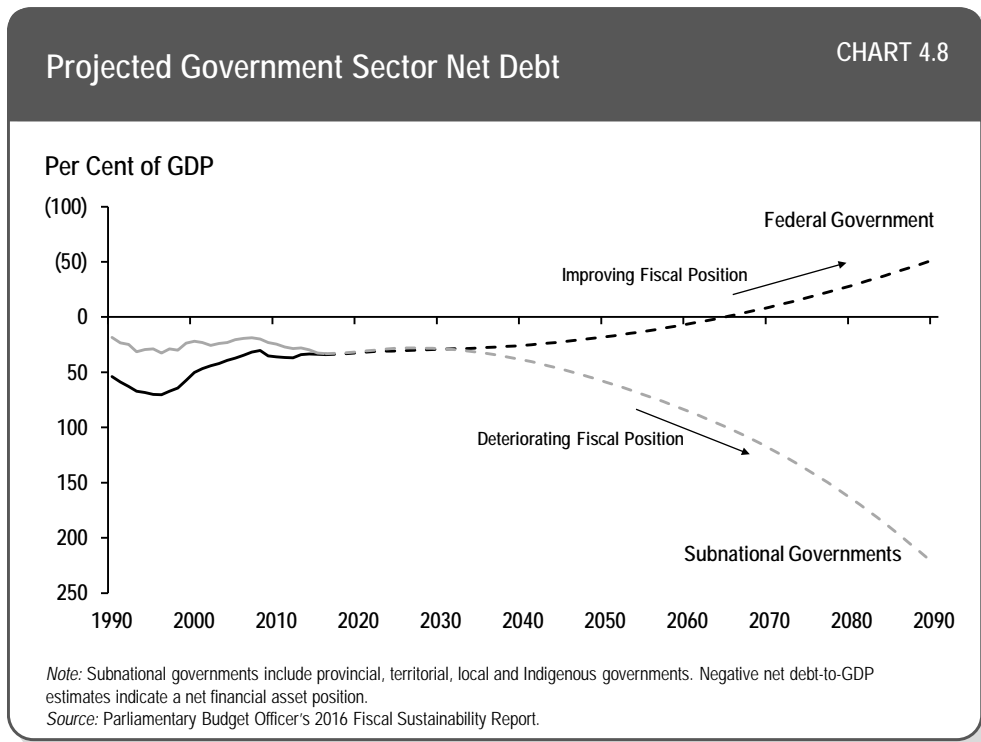
Ontario’s long-term fiscal sustainability, in the face of demographic, economic and social challenges, should not be looked at in isolation of the broader fiscal federalism context. In fact, the contribution of current federal–provincial fiscal arrangements in Canada has an important impact on the fiscal state of provinces such as Ontario — these fiscal arrangements can provide opportunities to address these challenges.

The vertical fiscal imbalance refers to the relative capacity of each order of government to raise its own revenues to fund its own expenditures. Provincial and territorial governments lack the revenue resources required to meet their constitutional expenditure responsibilities — including vital public services such as health care, education and social services, which are sensitive to demographic factors. In contrast, the federal government collects more revenue than is needed for its responsibilities. This structural fiscal imbalance between orders of government in Canada is expected to persist over the longer term if left unaddressed, particularly as changing demographics increase the demand for the services that provinces and territories provide, which will have significant impacts on their sustainability over the long term.

For the federal Parliamentary Budget Officer’s (PBO) analysis, fiscal sustainability means that government debt does not grow continuously as a share of the economy. In its most recent Fiscal Sustainability report, released in June 2016, the PBO reiterated its long-standing findings that under current policy, subnational governments are not in a fiscally sustainable position over the long term, due, in particular, to challenges associated with population aging.¹⁰ The PBO found that subnational governments will have an unsustainable and increasing net debt-to-GDP ratio over their entire projection period. The federal government, on the other hand, is not only fiscally sustainable, but also would be in a position to eliminate its net debt entirely in 50 years.

¹⁰ Subnational governments include provincial, territorial, local and Indigenous governments.

The recent federal 2016 “Update of Long-Term Economic and Fiscal Projections” is also consistent with the findings of the PBO. The federal update shows that while the federal government, in the absence of any further policy changes, would incur deficits over much of the forecast horizon, the baseline scenario estimates that the federal debt-to-GDP ratio is projected to remain constant after 2018–19 and will decline beginning in the early 2030s.¹¹ These projections reinforce the PBO’s conclusion that the federal government is in a fiscally sustainable position, as government debt does not grow continuously as a share of the economy.



The projected decline of the federal net debt-to-GDP ratio indicates that the federal government has fiscal room to reduce taxes or increase spending. The PBO estimates that the federal government could reduce taxes or increase spending by an amount equal to 0.9 per cent of GDP each year, while maintaining, over the long term, its net debt-to-GDP ratio at its current level, which would keep it fiscally sustainable.

¹¹ Federal debt represents accumulated deficits, i.e., it consists of net debt less non-financial assets.

According to the PBO, for subnational governments, achieving fiscal sustainability over the long term would have to be done by raising revenues, receiving higher transfers from the federal government, reducing program spending or some combination of these three.

The implications of the vertical fiscal imbalance, combined with a projected increasingly unsustainable position over the longer term, will limit the ability of provinces and territories to make the necessary investments to strengthen their economies and maintain the public services that Canadians expect and deserve.

Addressing Federal–Provincial Fiscal Sustainability

Federal–provincial fiscal arrangements have played a key role within provinces and territories in the past, providing the necessary stable and flexible support for them to invest and innovate in key areas such as health care and education. These past arrangements and a collaborative partnership between orders of government have helped produce and ensure the continued sustainability of the quality public services that Canadians enjoy today.

Fiscal arrangements between the federal and provincial and territorial governments have the potential to play a major role in the fiscal sustainability of provinces and territories over the long term — to the benefit of all Canadians. Going forward, arrangements should reflect a principled approach, where transfers are flexible and predictable, allowing provinces and territories to allocate funds towards priorities without imposing unexpected fiscal costs. It is also important that arrangements be allocated in an equitable manner and be adequate to address the needs and demands of Canadians, to share the risks and opportunities facing the federation over the long term, and protect the sustainability of public services for the future.

As they stand now, fiscal arrangements may not be fully adequate to support provinces and territories in maintaining the quality and accessibility of public services. For instance, recent changes to the Canada Health Transfer — limiting growth in federal funding to the rate of economic growth — will put enormous pressure on provincial and territorial health care systems over the long term. An article published in July 2016 by the Institute of Fiscal Studies and Democracy (IFSD) at the University of Ottawa, led by Canada’s former Parliamentary Budget Officer, Kevin Page, stated that the federal cash share of health funding is down considerably from when the *Canada Health Act* was passed. Furthermore, it was noted that “federal spending in this sector is projected to fall steadily over the long term, given the current program structure and weaker growth rate formula.”¹²

Provinces and territories are facing increasing cost pressures to meet the health care needs of Canadians, which include changing demographics and an aging population, inflation in the health sector, and adaptation to new and expensive technologies, practices and drugs. There is general consensus among experts that health care costs will only grow as a share of provincial/territorial budgets, and as a share of the economy as a whole. The Conference Board of Canada projects that future health costs will grow at an average rate of 5.2 per cent. This conclusion is supported by findings from other experts, including the PBO and the Fraser Institute.

The implications of the recent change to the Canada Health Transfer growth rate — from six per cent to a floor of three per cent in 2017–18 — mean that federal health funding to the provinces and territories is estimated to grow at a lower rate, over the medium to longer term, than the projected growth in health care costs. This discrepancy will put additional pressure on provincial/territorial budgets, while insulating the federal government’s fiscal plan from health care pressures. According to the IFSD, “the [federal government is] in a fiscally sustainable position today thanks in large part to the change in the health care [growth rate]... This point is key because health care is the number one budget line item of Canadian provinces and territories, and aging populations will only push this expense further.”¹³

¹² Kevin Page, Sahir Khan and Helaina Gaspard, “We Need Health Care and Innovation, Tied Together by Sustainable Finances,” *The Globe and Mail*, July 19, 2016.

¹³ Randell Bartlett and Kevin Page, “Our Leaders Need to Offer Canadians a New Vision for Health Care,” *The Globe and Mail*, December 20, 2016.

Over the last several years, provincial, territorial and municipal governments have led the way with infrastructure investments that are laying the foundation for Canada's economic growth and for strong, prosperous communities. The federal government has recently committed to new investments in this area, which will help to support provincial and territorial plans. New infrastructure commitments by the federal government are a step in the right direction towards a more committed federal partner; however, more needs to be done to support the existing plans and the work currently underway by provinces and territories. This includes ensuring that federal funding agreements provide provincial and territorial governments with greater flexibility to direct federal funding towards existing priorities and do not impose unexpected fiscal costs on provinces and territories.

The challenges associated with an aging population and slower economic growth are expected to present significant fiscal challenges, particularly for provinces and territories. A strong, collaborative federal–provincial partnership founded on predictable, flexible and adequate fiscal arrangements, which share the risks and opportunities facing the federation over the long term, is critical to ensuring that all Canadians have access to quality public services now and in the future.



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