

# Budget

2017–2018

Opportunities for Growth



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Nova Scotia Budget 2017–2018  
Department of Finance and Treasury Board  
April 2017

ISBN: 978-1-55457-729-3

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# 1. Introduction

## Budget 2017–2018

### *Opportunities for Growth*

Budget 2017–2018 focuses on providing opportunities for all Nova Scotians no matter where they live.

Government is making strategic investments that fund creativity and fuel entrepreneurs to create a better economy, improve the health and well-being of our people, and reduce taxes for the middle class, small businesses, and those who need it most.

Our priorities in the 2017–2018 budget are:

- **Infrastructure**
- **Youth & Jobs**
- **New Ideas for a Better Economy**
- **Support for an Aging Population**
- **Healthy People & Communities**

The province's position of **fiscal sustainability** has been achieved through careful planning and diligence over the past four years, during a period of challenging global and national economic conditions. Nova Scotia is one of only three Canadian provinces to achieve fiscal balance in 2016-2017 and to budget fiscal balance in 2017-2018. We are now in a stronger position to **invest in new opportunities for growth**.

Budget 2017–2018 will invest to build and improve vital infrastructure across our province, including highways, healthcare facilities, schools, and community facilities.

Providing our young people with better opportunities to succeed here at home is the driving motivation behind our investments in education, skills and job training, and support for young families.

Some of the many investments in Budget 2017–2018 include:

- Lower taxes for the middle class and those who need it most
- Increased investment in programs for youth looking for work
- Continuation of the Queen Elizabeth II (QEII) Health Sciences Centre redevelopment
- Expanded funding for new collaborative healthcare teams across the province
- Increased investments in rural high speed Internet
- A seven-year plan for new highway twinning projects and interchange work
- Clean water/waste water projects for municipalities
- Increased funding for home-care and self-managed care services
- Tax relief for small businesses
- Expansion of publicly funded pre-primary programs for four-year-olds
- Innovation and development programs for small and rural businesses
- Additional funding to promote export, trade and tourism

We have done the hard work to get to this point. Now we will work even harder to ensure all Nova Scotians benefit.

## 2. Budget Overview

The Province of Nova Scotia is tabling a budget in fiscal year 2017–2018 with an estimated surplus of \$136.2 million, and a net position of \$25.9 million, after the Contribution to Fiscal Capacity for a Provincial Health Complex (Table 2.1).

The province is projecting a balanced budget four-year fiscal plan for 2017–2021.

**Table 2.1 Budget Summary – Statement of Operations**

(\$ thousands)

<b>General Revenue Fund</b>	<b>2016-2017 Estimate</b>	<b>2016-2017 Forecast</b>	<b>2017-2018 Estimate</b>
<b>Revenues</b>			
Ordinary Revenue	9,329,495	9,177,958	<b>9,498,602</b>
Ordinary Recoveries	552,529	606,029	<b>709,389</b>
Net Income from Government Business Enterprises	382,228	385,954	<b>378,754</b>
<b>Total Revenues</b>	<b>10,264,252</b>	<b>10,169,941</b>	<b>10,586,745</b>
<b>Expenses</b>			
Departmental Expenses	9,100,049	9,151,636	<b>9,486,472</b>
Refundable Tax Credits	137,602	133,495	<b>125,472</b>
Pension Valuation Adjustment	66,251	29,410	<b>54,115</b>
Debt Servicing Costs	841,712	830,441	<b>850,214</b>
<b>Total Expenses</b>	<b>10,145,614</b>	<b>10,144,982</b>	<b>10,516,273</b>
<b>Consolidation and Accounting Adjustments</b>			
General Revenue Fund Consolidated Adjustment	12,553	14,286	<b>59,695</b>
Special Purpose Funds	81	1,082	<b>(664)</b>
Other Organizations	(3,861)	483	<b>6,674</b>
	<b>8,773</b>	<b>15,851</b>	<b>65,705</b>
<b>Provincial Surplus (Deficit)</b>	<b>127,411</b>	<b>40,810</b>	<b>136,177</b>
Contribution to Fiscal Capacity for Provincial Health Complex	(110,300)	---	<b>(110,300)</b>
<b>Net Position</b>	<b>17,111</b>	<b>40,810</b>	<b>25,877</b>

Total revenues for 2017–2018 are projected to be \$10.6 billion, an increase of \$322.5 million or 3.1 per cent over 2016–2017. This revenue increase is attributable to a \$144.3 million or 2.2 per cent increase in provincial source revenues, a \$181.6 million

or 5.4 per cent increase in federal source revenues. These increases are partially offset by a slight decline of \$3.5 million or -0.9 per cent in Net Income from Government Business Enterprises.

Budget 2017–2018 total revenues reflect the Government of Canada and Halifax Regional Municipality's (HRM) capital contributions to the new Halifax Convention Centre. Because of project timing delays, these revenue contributions now need to be reflected in 2017–2018 as opposed to 2016–2017.

The capital cost of the project is being split between the three levels of government. The Public Sector Accounting Board (PSAB) Accounting Standard 3410 requires the recognition of the federal and municipal governments' capital commitments to the development of the Convention Centre at the date of substantial completion (planned by the developer for August 2017). At this date, there is no further performance obligation on the province to earn this revenue, and so it must be recognized as revenue then. This was included in and was subject to the Revenue Review conducted by the Office of the Auditor General (Section 4).

The Government of Canada and HRM's contributions total \$110.3 million and are reflected in the Tangible Capital Assets (TCA) revenue included in the 2017–2018 budget: \$58.9 million reflects HRM's contribution and \$51.4 million reflects the Government of Canada's contribution.

The province is not spending the \$110.3 million in 2017–2018. This will create additional fiscal capacity for future years, by keeping the net debt of the province lower than it otherwise would have been. This will provide increased fiscal capacity in future years for the continuation of the QEII Health Sciences Complex redevelopment. This avoids increasing program spending, based on one-time revenues, and creating future fiscal pressures. If the \$110.3 million in one-time funding was added to program spending, in future years without associated revenue, operating surpluses would be lower and deficits would be higher than they otherwise would have been.

Total expenses for fiscal year 2017–2018 before consolidation and accounting adjustments are budgeted at \$10.5 billion, up \$370.7 million from 2016–2017 estimates. Departmental Expenses are projected to increase by \$386.4 million or 4.2 per cent (Table 2.2). The \$386.4 million includes \$129.9 million of federal spending which is offset by revenue recoveries. The net increase in departmental spending is \$256.6 million or 2.8 per cent.

**Table 2.2 Budget Summary – Highlights**

(\$ thousands)	Estimate 2016-2017	Forecast 2016-2017	Estimate 2017-2018
Total Revenues	10,264,252	10,169,941	10,586,745
Total Expenses	10,145,614	10,144,982	10,516,273
Consolidation Adjustments	8,773	15,851	65,705
<b>Provincial Surplus (Deficit)</b>	<b>127,411</b>	<b>40,810</b>	<b>136,177</b>
Contribution to Fiscal Capacity for Provincial Health Complex	(110,300)	---	(110,300)
<b>Net Position</b>	<b>17,111</b>	<b>40,810</b>	<b>25,877</b>
<b>Provincial Revenue Sources</b>			
Personal Income Tax	2,671,599	2,643,729	2,738,392
Corporate Income Tax	466,644	512,957	505,975
Harmonized Sales Tax	1,814,007	1,757,439	1,804,227
Motive Fuel Tax	271,718	261,887	269,829
Tobacco Tax	227,252	228,722	227,774
Other Tax Revenue	158,745	162,789	162,456
Registry of Motor Vehicles	127,534	131,564	131,464
Royalties - Petroleum	10,508	10,252	12,439
Other Provincial Sources	146,136	153,307	150,275
TCA Cost Shared Revenue	59,900	2,135	60,316
Other Fees and Charges	61,978	61,762	61,710
Prior Years' Adjustments	---	(10,896)	---
Interest Revenues	77,901	76,623	78,997
Sinking Fund Earnings	91,660	93,645	99,074
Ordinary Recoveries	332,074	349,278	359,055
Net Income from Government Business Enterprises	382,228	385,954	378,754
<b>Total - Provincial Sources</b>	<b>6,899,884</b>	<b>6,821,147</b>	<b>7,040,737</b>
<b>Federal Revenue Sources</b>			
Equalization Payments	1,738,321	1,732,893	1,750,644
Canada Health Transfer	942,770	944,419	967,248
Canada Social Transfer	348,901	349,511	357,960
Offshore Accord	33,255	33,255	19,957
Crown Share	1,427	511	2,863
Other Federal Sources	6,115	5,644	24,014
TCA Cost Shared Revenue	73,124	24,566	72,988
Prior Years' Adjustments	---	1,244	---
Ordinary Recoveries	220,455	256,751	350,334
<b>Total - Federal Sources</b>	<b>3,364,368</b>	<b>3,348,794</b>	<b>3,546,008</b>
<b>Expenses</b>			
Agriculture	60,217	64,117	61,768
Business	137,450	137,675	191,451
Communities, Culture and Heritage	81,689	97,925	84,295
Community Services	929,957	933,002	949,621
Education and Early Childhood Development	1,279,532	1,274,305	1,316,715
Energy	29,597	36,997	29,004
Environment	36,800	36,575	37,239
Finance and Treasury Board	22,782	20,398	23,100
Fisheries and Aquaculture	12,464	12,294	12,660
Health and Wellness	4,132,209	4,105,447	4,207,969
Internal Services	185,447	186,058	189,091
Justice	330,388	328,946	340,355
Labour and Advanced Education	364,271	385,043	376,151
Assistance to Universities	380,605	437,926	408,803
Municipal Affairs	184,383	197,734	332,423
Natural Resources	76,487	79,287	77,178
Public Service	205,869	199,241	206,208
Seniors	1,598	1,586	2,301
Transportation and Infrastructure Renewal	460,766	520,429	465,774
Restructuring Costs	187,538	96,651	174,366
Refundable Tax Credits	137,602	133,495	125,472
Pension Valuation Adjustment	66,251	29,410	54,115
Debt Servicing Costs	841,712	830,441	850,214
<b>Total - Expenses</b>	<b>10,145,614</b>	<b>10,144,982</b>	<b>10,516,273</b>



Nova Scotia's economy grew by 1.0 per cent in real terms during 2015, the latest year for which actual results are available. Economic growth accelerated from 0.8 per cent in 2014, ending two years of decline in 2012 and 2013. Nominal Gross Domestic Product (GDP) grew by 2.4 per cent in 2015. For 2016, the economic outlook indicates that Nova Scotia's real GDP will grow by 1.0 per cent. This will be followed by growth of 1.1 per cent in 2017. Nominal GDP growth is expected to be 2.2 per cent in 2016 and 2.8 per cent in 2017. Stable real GDP growth is anticipated, with nominal growth projected to accelerate.

The Net Debt of the province is expected to be \$15.061 billion for the year ended 2016–2017 and \$15.161 billion for the year ended 2017–2018. This is \$128 million below the 2016–2017 Budget estimate for 2016–2017 and \$52 million below the 2016–2017 estimate for 2017–2018.

The Debt-to-GDP ratio for 2016–2017 is forecast to be 36.6 per cent instead of the 37.1 per cent projected in Budget 2016–2017, primarily because of better than expected year end results for 2015–2016 and 2016–2017 as well as the change in substantial completion date for the new Convention Centre. The ratio is expected to improve to 35.9 per cent for 2017–2018 (Table 2.3).

**Table 2.3 Budget Summary – Net Debt/Gross Domestic Product**

	<b>2016-2017 Estimate</b>	<b>2016-2017 Forecast</b>	<b>2017-2018 Estimate</b>
Net Debt (\$billions)	15.2	15.1	15.2
Nominal GDP (\$billions)	40.9	41.1	42.2
Net Debt to GDP (ratio)	37.1%	36.6%	35.9%

Budget 2017–2018 presents a balanced budget forecast for 2016–2017 and a balanced budget for 2017–2018, on-course with plans to achieve long-term fiscal sustainability. The province's improving fiscal health provides opportunities for strategic investments to be made. The province is, however, still vulnerable to economic events and other factors outside of its control.

## 3. Four Year Fiscal Plan 2016–2020

### Medium-Term Outlook

The Four-Year Fiscal Plan indicates that government will achieve a balanced fiscal plan for 2016–2017 as projected in Budget 2016–2017 (Table 3.1). With a projected balanced budget for 2017–2018, and continuing surpluses throughout the Four-Year Fiscal Plan, the province is delivering public services in a fiscally sustainable manner.

**Table 3.1 Four-Year Fiscal Plan: Projections 2017–2018 to 2020–2021**  
(\$ millions)

General Revenue Fund	2016-2017 Estimate	2016-2017 Forecast	2017-2018 Estimate	2018-2019 Estimate	2019-2020 Estimate	2020-2021 Estimate
<b>Revenue</b>						
Ordinary Revenue	9,329.5	9,178.0	9,498.6	9,632.6	9,799.1	10,114.6
Ordinary Recoveries	552.5	606.0	709.4	571.6	555.9	556.1
Net Income Government Business Enterprises	382.2	386.0	378.8	374.6	376.5	382.7
<b>Total Revenue</b>	<b>10,264.3</b>	<b>10,169.9</b>	<b>10,586.7</b>	<b>10,578.8</b>	<b>10,731.5</b>	<b>11,053.5</b>
<b>Expenses</b>						
Departmental Expenses	9,100.0	9,151.6	9,486.5	9,529.6	9,669.9	10,014.1
Refundable Tax Credits	137.6	133.5	125.5	126.7	132.4	133.0
Pension Valuation Adjustment	66.3	29.4	54.1	57.4	72.4	74.7
Debt Servicing Costs	841.7	830.4	850.2	872.6	845.1	786.2
<b>Total Expenses</b>	<b>10,145.6</b>	<b>10,145.0</b>	<b>10,516.3</b>	<b>10,586.4</b>	<b>10,719.8</b>	<b>11,008.0</b>
Consolidation and Accounting Adjustments	8.8	15.9	65.7	43.2	34.9	15.4
<b>Provincial Surplus (Deficit)</b>	<b>127.4</b>	<b>40.8</b>	<b>136.2</b>	<b>35.6</b>	<b>46.6</b>	<b>60.8</b>
Contribution to Fiscal Capacity for Provincial Health Complex	(110.3)	-	(110.3)	-	-	-
<b>Net Position (After Contribution)</b>	<b>17.1</b>	<b>40.8</b>	<b>25.9</b>	<b>35.6</b>	<b>46.6</b>	<b>60.8</b>
Net Debt	15,189	15,061	15,161	15,272	15,361	15,578
Nominal GDP	40,902	41,098	42,249	43,363	44,600	46,212
Debt to GDP Ratio	37.1%	36.6%	35.9%	35.2%	34.4%	33.7%

Budget 2017–2018 projects a surplus of \$136.2 million with a net position of \$25.9 million, after a \$110.3 million the Contribution to Fiscal Capacity for a Provincial Health Complex - the QEII Health Sciences redevelopment. Removing the funding from the operating budget and allocating it for future fiscal requirements ensures the one-time revenue is not built into ongoing annual spending. This contribution of \$110.3 million previously appeared in the 2016–2017 budget, but the changing timeframe for completion of the new Convention Centre now results in moving \$110.3 million in revenue to fiscal year 2017–2018.

The Government of Nova Scotia has improved its fiscal health since 2013–2014 and is currently projecting balanced budgets throughout its four-year planning horizon. The government is projecting modest surpluses over the next four years of its fiscal plan.

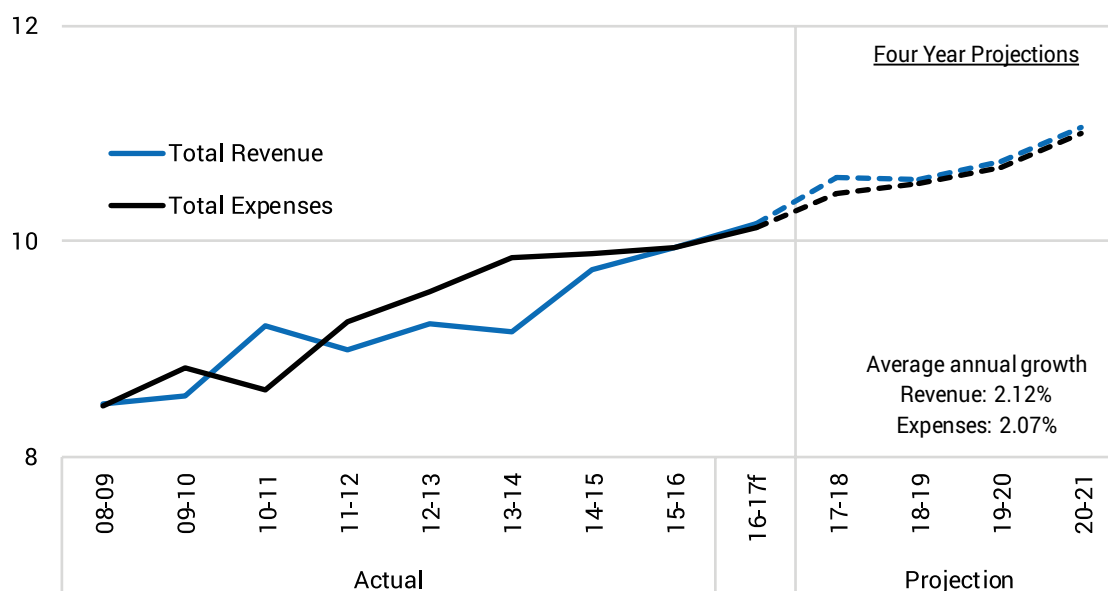
The projected surpluses throughout the Four-Year Fiscal Plan are indicative of a sustainable fiscal plan. The debt arising from operating deficits (Accumulated Deficits) is expected to reduce by \$279.2 million between 2017 and 2021. The Net Debt, which includes operating deficits and net capital spending, will increase by \$100.4 million in 2017–2018 and reach \$15.3 billion in 2018–2019. The net debt is expected to be \$15.6 billion by 2021.

## Revenue and Expense

For 2017–2018, total revenue is estimated to grow by 3.1 per cent compared to the 2016–2017 estimate (4.1 per cent from the final Forecast). Average annual growth in total revenue is projected to be 2.12 per cent over the four-year fiscal period (Chart 3.1).

**Chart 3.1 Projected Revenues and Expenses 2017–2018 to 2020–2021**

(\$ billions)



Total Expenses, including consolidation and accounting adjustments, are projected to increase by 3.1 per cent compared to the 2016–2017 estimate (3.2 per cent from the final Forecast). Average annual growth in total expenses is projected to be 2.07 per cent over the four-year fiscal period. It is these growth rates, revenue growing faster than spending, that allow the province to be in a surplus position from 2016–2017 to 2020–2021 as projected.

The growth of future revenue is projected at a slower rate over the next three years of the four-year plan, slowing to -0.1 per cent in 2018–2019, as one time revenue for the new Convention Centre and federal cost-shared programs does not carry over to the 2018–2019 estimates.

Prospects for revenue growth are primarily related to three sources – personal income tax, corporate income tax, and sales tax (HST). All three are heavily dependent upon an improving economy. Growth in federal transfer revenues will remain relatively flat for the foreseeable future, primarily because of the province’s declining share of the national population and lower revenues for the offshore accord and cumulative best-of guarantee payments.

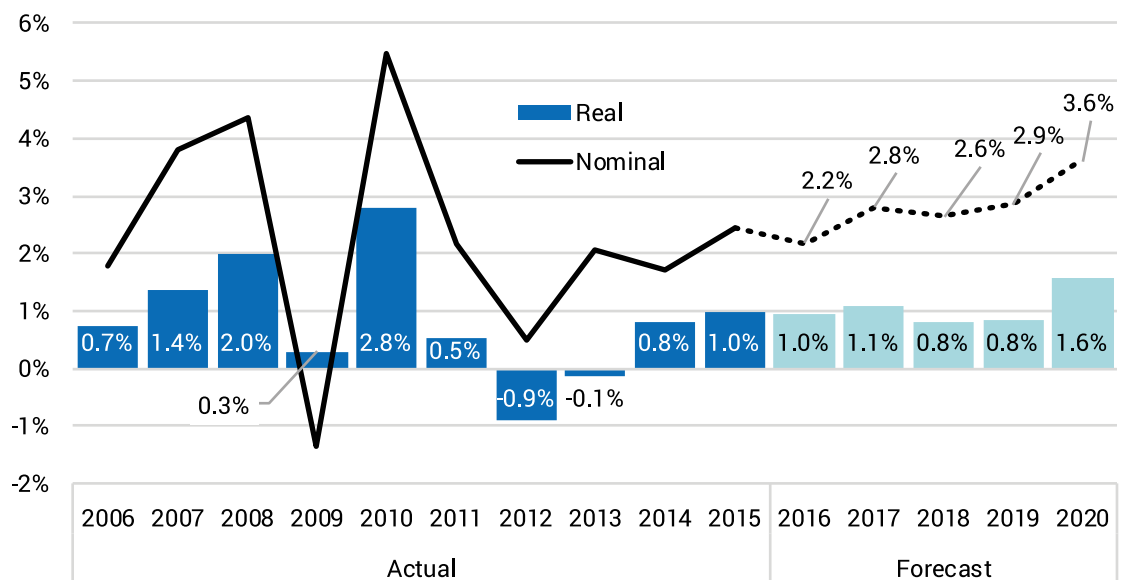
## Medium-Term Economic Outlook

The province's medium-term economic outlook forms the basis for revenue projections as well as the benchmark for assessing the relative size of government and debt. Any five-year economic projection is subject to forecast uncertainty, especially beyond the short term. After declining in 2012 and 2013, Nova Scotia's real GDP stabilized at 0.8 per cent growth in 2014 and 1.0 per cent growth in 2015 (Chart 3.2). This pace of growth is expected to continue in the coming years as demographic changes continue to impact the labour force and employment growth. The levelling of real GDP growth are trends seen globally and in Canada.

Much of Nova Scotia's real economic growth in recent years has come from rising exports, major project investments, and improved productivity. In the near term, ongoing work at major projects and coordinated federal-provincial infrastructure spending will elevate real growth, but once they wind down, economic growth will slow in the medium term. Faster growth at the end of the forecast horizon is associated with commencement of the second phase of combat vessel construction at the Halifax Shipyard, though assumptions about this project's timing and impacts on the economy are uncertain. Beyond construction of combat vessels, the medium-term economic outlook does not include prospective investment projects. Over the medium term, price inflation is expected to return to its historic pace, lifting nominal GDP growth above recent trends.

### Chart 3.2 Nova Scotia's Medium-Term Economic Outlook: GDP Growth

Growth rate, real is measured in 2007 (chained) dollars, nominal in current dollars



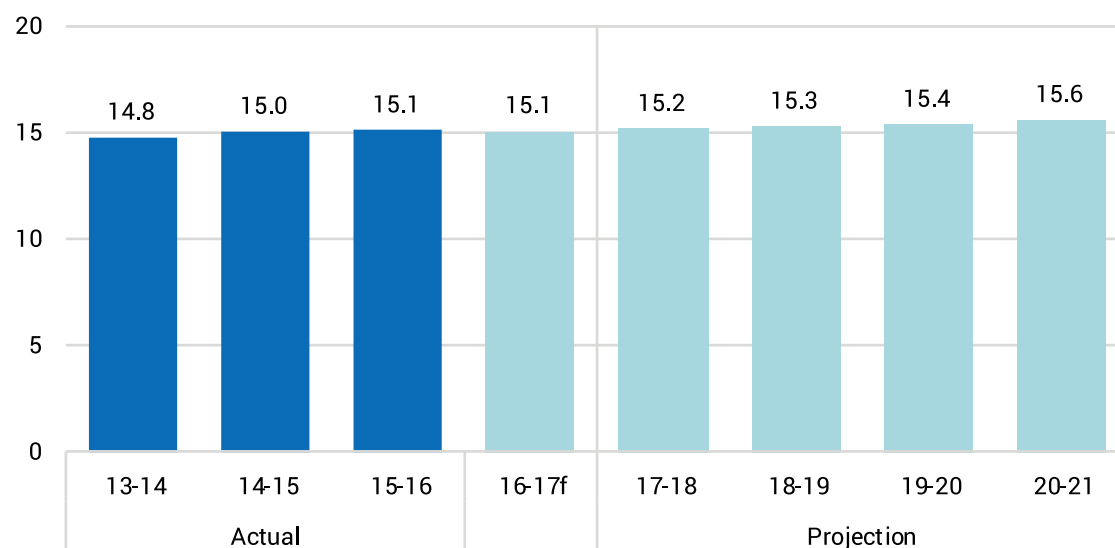
Source: Statistics Canada, CANSIM Table 384-0038; Nova Scotia Department of Finance and Treasury Board

## Debt

The Net Debt of the province is expected to be \$15.1 billion for the year end of 2016–2017 and \$15.2 billion for the year end of 2017–2018 (Chart 3.3). The total net debt is forecast to be below estimate for 2016–2017 by \$128 million and \$52 million below the 2016–2017 estimate for 2017–2018.

**Chart 3.3 Projected Net Debt**

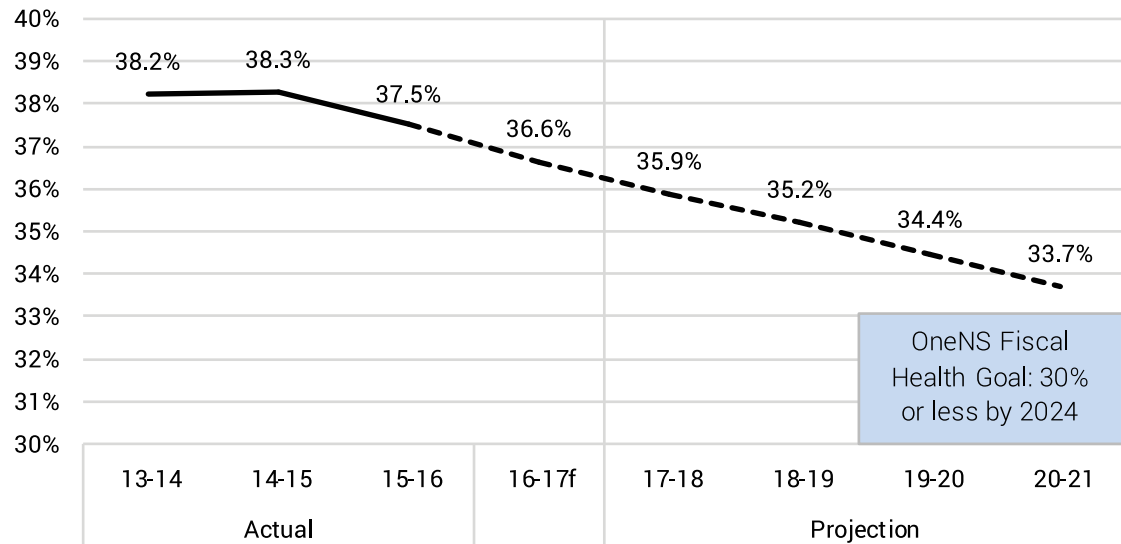
(\$ billions)



The Government of Nova Scotia continues to place emphasis on improving its debt position. Although debt is expected to increase through the fiscal plan period, the position relative to GDP is stable with a downward trend (Chart 3.4).

Nova Scotia’s debt-to-GDP ratio is still on track towards meeting the One Nova Scotia Coalition’s suggested goal of 30 per cent or less by 2024. Fiscal sustainability is the degree to which government can make expenditures and meet creditor requirements without increasing the debt burden on the economy. The debt-to-GDP ratio is the most widely recognized measure of government financial sustainability, and by this measure Nova Scotia’s financial sustainability is improving.

**Chart 3.4 Ratio of Net Debt to Gross Domestic Product**



Nova Scotia’s debt-to-GDP ratio is forecast to be 36.6 per cent for fiscal year 2016–2017, which is below the Estimate of 37.1 per cent. Budget 2017–2018 projects that the ratio will decline to 35.9 per cent in 2017–2018 and continue to decline to 33.7 per cent by 2021.

### Fiscal Capacity for Provincial Health Complex

Nova Scotia’s financial picture has improved through a disciplined approach to fiscal planning, which has held spending growth down. It is because of this fiscal discipline that the 2016–2017 fiscal year is projected to end in a surplus position and the Four-Year Fiscal Plan is projected to be balanced for each year of the plan.

The recognition of the federal and municipal contributions to the Halifax Convention Centre as one-time TCA revenue has moved from 2016–2017 to 2017–2018. This has occurred because of project timing, with the date of substantial completion projected to be August 2017, and now creates \$110.3 million in additional fiscal capacity in 2017–2018 as opposed to 2016–2017.

This additional capacity provides flexibility within the fiscal plan for future capital priorities that may not have been funded otherwise. As was indicated in last year’s Budget, when considering the \$136.2 million surplus projected in 2017–2018, it is important to recognize that \$110.3 million relates to the one-time funding and should not be considered as ongoing operating revenue. Budget 2017–2018 recognizes the \$110.3 million as one-time revenue. Rather than using it for ongoing spending, it will be used to create fiscal capacity for the future QEII Health Sciences redevelopment.

## 4. Report of the Auditor General on the Revenue Estimates

### Report to the House of Assembly

The following pages provide the Auditor General of Nova Scotia's Report, as required by the Auditor General Act.





5161 George Street  
Royal Centre, Suite 400  
Halifax, Nova Scotia  
B3J 1M7

## Auditor General of Nova Scotia

**Report of the Auditor General to the House of Assembly of Nova Scotia on the Revenue Estimates of Nova Scotia for the fiscal year ending March 31, 2018 used in the preparation of the April 27, 2017 Budget.**

### To the House of Assembly of Nova Scotia

Under Section 20 of the Auditor General Act, my office is mandated to conduct a review engagement and provide a report on the reasonableness of the Revenue Estimates of Nova Scotia used in the preparation of the annual budget address of the Minister of Finance and Treasury Board of Nova Scotia to the House of Assembly of Nova Scotia.

The Revenue Estimates of Nova Scotia for the fiscal year ending March 31, 2018 are the responsibility of the Nova Scotia Department of Finance and Treasury Board and have been prepared by departmental management using assumptions with an effective date of March 31, 2017 or earlier (including economic assumptions dated January 6, 2017). I have reviewed the support provided by departmental management for the assumptions and the preparation and presentation of the Revenue Estimates of Nova Scotia as described in the financial forecast of Revenues By Source (the 2017-18 Revenue Estimates as presented in Tables 4.1 and 4.2 of the Nova Scotia Budget 2017-18), and which consists of Revenue Estimates in the General Revenue Fund, and Revenue Estimates from third parties in certain government entities. My review was made in accordance with the applicable Assurance and Related Services Guideline set out in the CPA Canada Handbook Accounting and Assurance Standards. I have no responsibility to update this report for events and circumstances occurring after the date of my report.

Based on my review:

- as at the date of this report, the assumptions used by Nova Scotia Department of Finance and Treasury Board management are suitably supported and consistent with the plans of the government, and provide a reasonable basis for the 2017-18 Revenue Estimates of Nova Scotia;
- the 2017-18 Revenue Estimates of Nova Scotia as presented reflect such assumptions; and
- the 2017-18 Revenue Estimates of Nova Scotia comply with presentation and disclosure standards set out in the CPA Canada Handbook Accounting and Assurance Standards.

Since the 2017-18 Revenue Estimates of Nova Scotia are based on assumptions regarding future events, actual results will vary from the information presented and the variance may be material. Accordingly, I express no opinion as to whether the 2017-18 Revenue Estimates of Nova Scotia will be achieved. My review did not include, and my report does not cover, the budget speech and Government's overall estimated results including the 2017-18 expense estimates. My report also does not cover prior years' forecast or actual information provided for comparative purposes.

Michael A. Pickup, CPA, CA  
Auditor General of Nova Scotia

Halifax, Nova Scotia  
April 27, 2017

902 424 4046 tel  
902 424 4350 fax  
www.oag-ns.ca  
Michael.Pickup@novascotia.ca



**Table 4.1 Revenues By Source**

(\$ thousands)

	<b>2017-2018 Estimate</b>
<b>General Revenue Fund: Revenues</b>	
<b>Ordinary Revenue - Provincial Sources</b>	
Tax Revenue:	
Personal Income Tax	2,738,392
Corporate Income Tax	505,975
Harmonized Sales Tax	1,804,227
Motive Fuel Tax	269,829
Tobacco Tax	227,774
Other Tax Revenue	162,456
	<b>5,708,653</b>
Other Provincial Revenue:	
Registry of Motor Vehicles	131,464
Royalties - Petroleum	12,439
Other Provincial Sources	149,831
TCA Cost Shared Revenue - Provincial Sources	60,316
Other Fees and Charges	61,710
Gain on Disposal of Assets	444
	<b>416,204</b>
Investment Income:	
Interest Revenues	78,997
Sinking Fund Earnings	99,074
	<b>178,071</b>
<b>Total - Provincial Sources</b>	<b>6,302,928</b>
<b>Ordinary Revenue - Federal Sources</b>	
Equalization Payments	1,750,644
Canada Health Transfer	967,248
Canada Social Transfer	357,960
Offshore Accord Offset Payments	19,957
Crown Share	2,863
Other Federal Sources	24,014
TCA Cost Shared Revenue - Federal Sources	72,988
<b>Total - Federal Sources</b>	<b>3,195,674</b>
<b>Total - Revenues</b>	<b>9,498,602</b>
<b>Ordinary Recoveries</b>	
Provincial Sources	359,055
Federal Sources	350,334
<b>Total - Ordinary Recoveries</b>	<b>709,389</b>
<b>Net Income from Government Business Enterprises</b>	
Nova Scotia Liquor Corporation	236,185
Nova Scotia Provincial Lotteries and Casino Corporation	126,700
Halifax-Dartmouth Bridge Commission	7,349
Highway 104 Western Alignment Corporation	8,520
<b>Total - Net Income from GBEs</b>	<b>378,754</b>
<b>Total - Revenues of the General Revenue Fund</b>	<b>10,586,745</b> <sup>1</sup>
Governmental Unit Third Party Revenues (Table 4.2)	1,022,300
<b>Total - Revenue of the Province</b>	<b>11,609,045</b>

1: Total Revenue of the General Revenue Fund is the balance that is carried through the Estimates of the province. It is the budget of the General Revenue Fund that is the responsibility of the House of Assembly. The activities of the Governmental Units are effectively presented as off-sets against the expenses of their respective governmental units within the "Consolidation and Accounting Adjustments for Governmental Units." See Table 4.2 for further explanation of the Total Third Party Revenue of Governmental Units.

**Table 4.2 Governmental Unit Third Party Revenues**  
(\$ thousands)

<b>Governmental Unit Third Party Revenues</b>	<b>2017-2018 Estimate</b>
Regional School Boards and Nova Scotia	
Community College	398,484
Provincial Health Authorities	365,960
Housing Nova Scotia	141,181
Resource Recovery Fund Board	50,572
Trade Centre Limited	11,033
Nova Scotia E911	---
Waterfront Development Corporation	---
Nova Scotia Utility and Review Board	---
Governmental Units with third party revenue less than \$10 Million	55,070
<b>Total - Governmental Unit Third Party Revenues</b>	<b>1,022,300</b> <sup>2</sup>

2: The governmental unit third party revenues are presented in this table to enable the total revenues of the province to be presented on a basis consistent with the consolidated financial statements of the province. The budgets of these organizations are subject to the approval of their respective board of directors.

## 5. Budget 2017–2018

Budget 2017–2018's fiscal outlook provides the final forecast update for Budget 2016–2017 and the Budget Estimate for 2017–2018. The Province of Nova Scotia is forecasting a net surplus position of \$40.8 million in 2016–2017, an improvement of \$23.7 million compared with the 2016–2017 Budget Estimate net position of \$17.1 million.

The projected surplus for 2016–2017 was \$127.4 million before the Contribution to Fiscal Capacity for Provincial Health Complex of \$110.3 million related to the new Convention Centre. With the change in the expected substantial completion date to August 2017, the associated cost shared revenue totaling \$110.3 million is moved to fiscal year 2017–2018, and the Contribution to Fiscal Capacity of \$110.3 million is also moved to fiscal year 2017–2018. This leaves the 2016-2017 Budget Estimate net position of \$17.1 million.

Looking forward, the province is projecting a surplus of \$136.2 million for 2017–2018, with a net position of \$25.9 million, after contributing to fiscal capacity for a provincial health complex (Table 2.1). This section presents more detail on revenues by source, total expenses, and the estimated value of tax credits, rebates, and tax expenditures.

### 2016–2017 Budget Forecast Update

The Forecast Update provides updated information about the major components of revenue and expenses as set out in the 2016–2017 Budget Estimates.

The Province of Nova Scotia is forecasting a surplus of \$40.8 million for the year ended March 31, 2017, which is an improvement of \$23.7 million from the budgeted net position of \$17.1 million (Table 5.1).

The difference is the result of Total Revenue, after adjusting for the change in date for substantial completion of the new Convention Centre, being \$16.0 million higher than expected and Total Expenses being \$0.6 million lower than expected, and changes to Consolidation and Accounting Adjustments which improve the bottom line by \$7.1 million.

**Table 5.1 2016–2017 Budget Forecast Update**

General Revenue Fund (\$ thousands)

	<b>Budget</b>	<b>Current Forecast</b>	<b>Increase (Decrease) from Budget</b>
<b>Revenue</b>			
Ordinary Revenue	9,329,495	9,177,958	(151,537)
Ordinary Recoveries	552,529	606,029	53,500
Net Income from Government			
Business Enterprises	382,228	385,954	3,726
<b>Total Revenue</b>	<b>10,264,252</b>	<b>10,169,941</b>	<b>(94,311)</b>
<b>Expenses</b>			
Departmental Expenses	9,100,049	9,151,636	51,587
Refundable Tax Credits	137,602	133,495	(4,107)
Pension Valuation Adjustment	66,251	29,410	(36,841)
Debt Servicing Costs	841,712	830,441	(11,271)
<b>Total Expenses</b>	<b>10,145,614</b>	<b>10,144,982</b>	<b>(632)</b>
Consolidation and Accounting Adjustments	8,773	15,851	7,078
<b>Provincial Surplus (Deficit)</b>	<b>127,411</b>	<b>40,810</b>	<b>(86,601)</b>
Contribution to Fiscal Capacity for Provincial Health Complex	(110,300)	---	110,300
<b>Net Position</b>	<b>17,111</b>	<b>40,810</b>	<b>23,699</b>

**2016–2017 Revenues:** Total Revenue is forecasted to be \$10.170 billion.

Relative to the 2016–2017 Budget Estimates, tax revenue overall is forecasted to be lower by \$42.4 million as compared to the 2016–2017 Budget Estimates, as a \$27.9 million decline in Personal Income Tax and a \$56.6 million decline in HST is partially offset by improvements to Corporate Income Tax of \$46.3 million. Ordinary Recoveries are forecast to be \$53.5 million higher than Budget because of Federal Infrastructure programs flowing through the province to municipal and other projects. This increase in revenue is offset by corresponding increases to expenses.

Other Provincial Revenues are forecasted to decline by \$57.2 million primarily because of moving \$58.9 million in Tangible Capital Asset Cost Shared revenue from 2016–2017 to 2017–2018, because of the change in timing for the new Convention Centre, and a decrease of \$10.9 million prior-year adjustment for previous year tax revenues,

partially offset by improvements in Registry of Motor Vehicle and other Provincial Source revenues.

Net Income from Government Business Enterprises is forecasted to increase by \$3.7 million due to forecasted increases in net income at the Nova Scotia Liquor Corporation (\$2.5 million), the Halifax-Dartmouth Bridge Commission (\$1.6 million), and the Highway 104 Corporation (\$0.7 million), partially offset by declines at the Nova Scotia Provincial Lotteries & Casino Corporation (\$1.1 million).

**2016–2017 Expenses:** Total Expenses are forecasted to be \$10.145 billion.

Total Departmental Expenses are forecasted to increase by \$51.6 million, relative to the 2016–2017 Budget Estimates. This is due in large part to forecasted increases for the Department of Communities, Culture and Heritage (\$16.2 million), Energy (\$7.4 million), Labour and Advanced Education (\$20.8 million), Assistance to Universities (\$57.3 million), Municipal Affairs (\$13.4 million), and Transportation and Infrastructure Renewal (\$59.7 million), which are partially offset by forecasted decreases at the departments of Health and Wellness (\$26.8 million) and Restructuring Costs (\$90.9 million).

For Other Expenses, Refundable Tax Credits are forecasted to decline by \$4.1 million primarily because of prior-year adjustments. The Pension Valuation Adjustment is forecasted to decrease by \$36.8 million because of revised actuarial assumptions. Debt Servicing Costs are forecasted to decline by \$11.3 million because of interest rates not rising as anticipated.

**2016–2017 Consolidation and Accounting Adjustments:** Overall changes in Consolidation adjustments are forecasted to result in a \$7.1 million positive impact to the provincial surplus position relative to the 2016–2017 Budget Estimates.

## Budget 2017–2018: Revenue Outlook

In 2017–2018, Nova Scotia's total revenues in its General Revenue Fund are estimated to be \$10,586.7 million. This is an increase of \$322.5 million or 3.1 per cent from the 2016–2017 Budget Estimates and an increase of \$416.8 million or 4.1 per cent compared to the 2016–2017 forecast.

Total Revenue from all provincial sources, including Ordinary Recoveries and Net Income from Government Business Enterprises, contributes 66.5 per cent of all revenue in 2017–2018. Revenue from federal sources contributes 33.5 per cent of all revenue in 2017–2018.

Table 5.2 provides financial statistics of the Revenues by Source by amount, and Table 5.3 as a percentage of total revenues, and a breakdown of revenues by the four main sources. Chart 5.1 provides a visual breakdown of Revenues by Source.

Provincial Own-Source Ordinary Revenues in 2017–2018 are expected to be \$6,302.9 million. This is an increase of \$117.3 million or 1.9 per cent from the 2016–2017 Budget Estimates and an increase of \$217.0 million or 3.6 per cent from the 2016–2017 forecast.

Federal Source Ordinary Revenues are projected to be \$3,195.7 million in 2017–2018, an increase of \$51.8 million or 1.6 per cent from the 2016–2017 Budget Estimates; an increase of \$103.6 million or 3.4 per cent, from the 2016–2017 forecast.

Ordinary Recoveries from provincial sources are up \$27.0 million or 8.1 per cent from the 2016–2017 Budget Estimates; up \$9.8 million or 2.8 per cent compared to the 2016–2017 forecast. Ordinary Recoveries from federal sources are up \$129.9 million or 58.9 per cent from the 2016–2017 Budget Estimates; up \$93.6 million or 36.4 per cent from the 2016–2017 forecast.

Net Income from Government Business Enterprises is down \$3.5 million or 0.9 per cent from the 2016–2017 Budget Estimates; down \$7.2 million or 1.9 per cent from the 2016–2017 forecast.

**Table 5.2 2017-2018 Revenues by Source**

(\$ thousands)

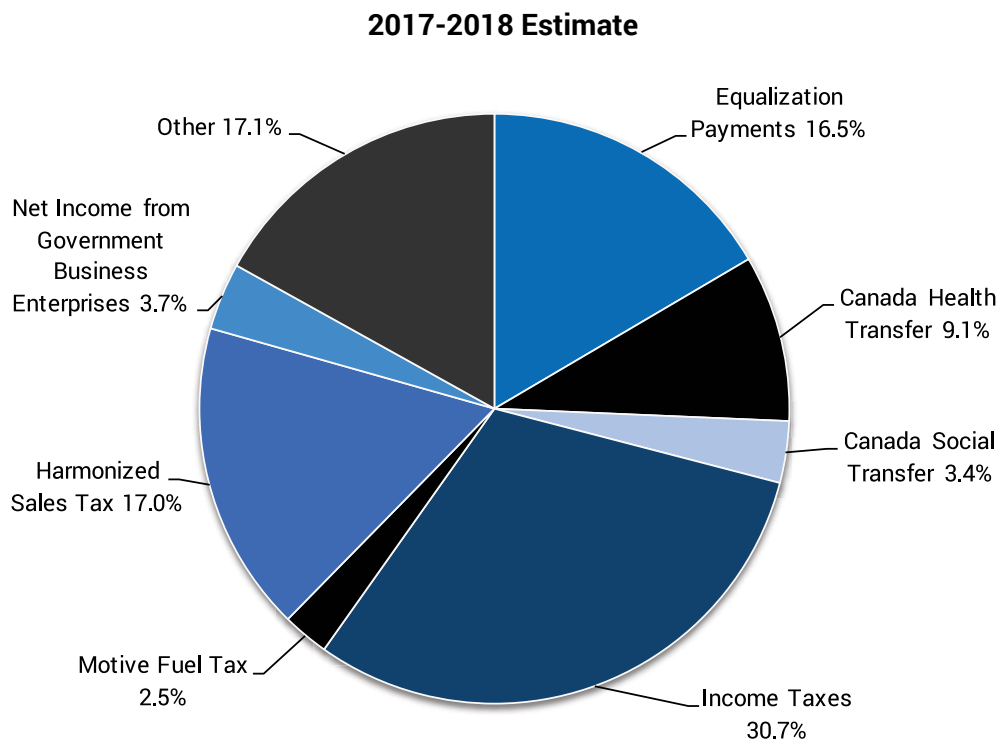
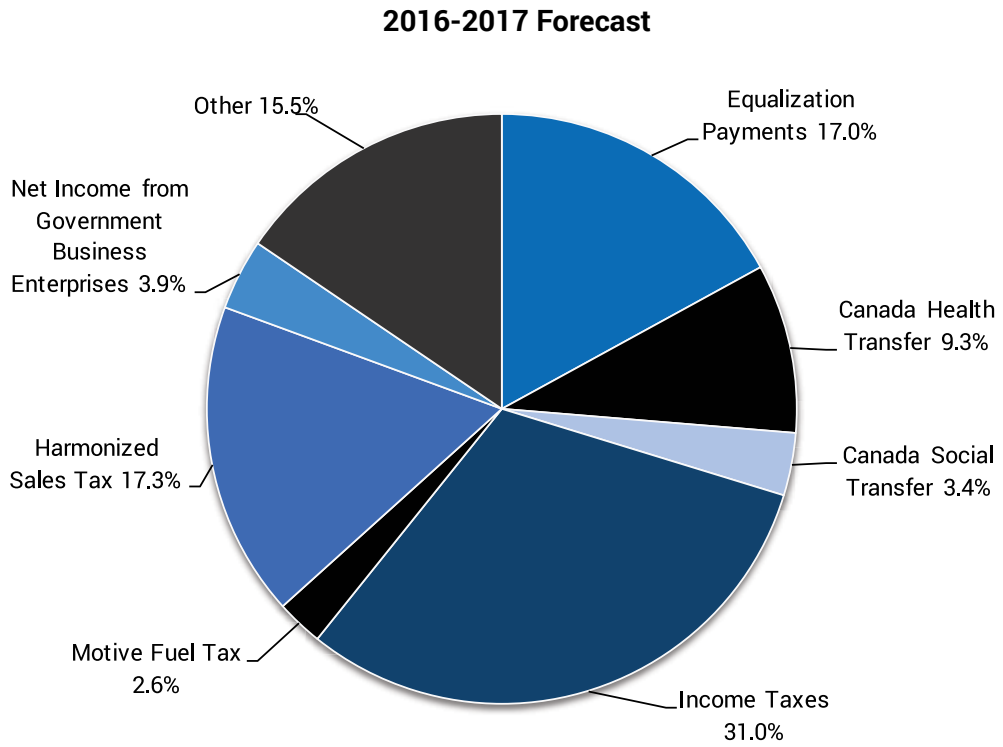
	2013-2014 Actual (as restated)	2014-2015 Actual	2015-2016 Actual	2016-2017 Forecast	2017-2018 Estimate
<b>General Revenue Fund: Revenues</b>					
<b>Ordinary Revenue - Provincial Sources</b>					
<b>Tax Revenue:</b>					
Personal Income Tax	2,192,826	2,349,724	2,562,544	2,643,729	2,738,392
Corporate Income Tax	425,894	474,031	461,661	512,957	505,975
Harmonized Sales Tax	1,660,056	1,702,427	1,760,221	1,757,439	1,804,227
Motive Fuel Tax	246,800	248,274	254,011	261,887	269,829
Tobacco Tax	217,229	206,255	217,009	228,722	227,774
Other Tax Revenue	161,581	155,087	164,250	162,789	162,456
	4,904,386	5,135,798	5,419,696	5,567,523	5,708,653
<b>Other Provincial Revenue:</b>					
Registry of Motor Vehicles	120,506	123,032	130,317	131,564	131,464
Royalties - Petroleum	20,732	30,019	14,068	10,252	12,439
Other Provincial Sources	139,347	130,498	144,615	149,913	149,831
Offshore Licenses Forfeitures	100	---	---	---	---
TCA Cost Shared Revenue - Provincial Sources	16,953	8,564	2,080	2,135	60,316
Other Fees and Charges	(258,483)	62,249	61,626	61,762	61,710
Prior Years' Adjustments - Provincial Sources	59,996	110,207	(68,403)	(10,896)	---
Gain on Disposal of Crown Assets	4,631	4,767	(273)	3,394	444
	103,782	469,336	284,030	348,124	416,204
<b>Investment Income:</b>					
Interest Revenues	77,093	83,660	89,549	76,623	78,997
Sinking Fund Earnings	111,470	103,892	95,982	93,645	99,074
	188,563	187,552	185,531	170,268	178,071
<b>Total - Provincial Sources</b>	<b>5,196,731</b>	<b>5,792,686</b>	<b>5,889,257</b>	<b>6,085,915</b>	<b>6,302,928</b>
<b>Ordinary Revenue - Federal Sources</b>					
Equalization Payments	1,718,183	1,750,653	1,777,759	1,732,893	1,750,644
Canada Health Transfer	829,861	852,161	895,694	944,419	967,248
Canada Social Transfer	327,379	334,007	341,134	349,511	357,960
Offshore Accord	89,461	64,481	36,779	33,255	19,957
Crown Share	4,577	14,058	(2,716)	511	2,863
Other Federal Sources	15,300	3,620	2,083	5,644	24,014
TCA Cost Shared Revenue - Federal Sources	22,485	21,950	32,410	24,566	72,988
Prior Years' Adjustments - Federal Sources	3,212	8,963	3,799	1,244	---
<b>Total - Federal Sources</b>	<b>3,010,458</b>	<b>3,049,893</b>	<b>3,086,942</b>	<b>3,092,043</b>	<b>3,195,674</b>
<b>Total - Ordinary Revenue</b>	<b>8,207,189</b>	<b>8,842,579</b>	<b>8,976,199</b>	<b>9,177,958</b>	<b>9,498,602</b>
<b>Ordinary Recoveries</b>					
Provincial Sources	347,606	340,653	354,699	349,278	359,055
Federal Sources	262,065	203,972	215,531	256,751	350,334
<b>Total - Ordinary Recoveries</b>	<b>609,671</b>	<b>544,625</b>	<b>570,230</b>	<b>606,029</b>	<b>709,389</b>
<b>Net Income from Government Business Enterprises (GBE)</b>					
Nova Scotia Liquor Corporation	228,246	227,986	241,257	236,544	236,185
Nova Scotia Provincial Lotteries and Casino Corporation	108,991	110,033	127,526	126,600	126,700
Halifax-Dartmouth Bridge Commission	12,285	9,033	14,560	13,673	7,349
Highway 104 Western Alignment Corporation	1,640	4,114	4,020	9,137	8,520
QEII Health Sciences	95	229	394	---	---
<b>Total - Net Income from GBEs</b>	<b>351,257</b>	<b>351,395</b>	<b>387,757</b>	<b>385,954</b>	<b>378,754</b>
<b>Total - Revenues</b>	<b>9,168,117</b>	<b>9,738,599</b>	<b>9,934,186</b>	<b>10,169,941</b>	<b>10,586,745</b>



**Table 5.3 2017-2018 Revenues by Source**  
(as a percentage of Total Revenue)

	2013-2014 Actual (as restated)	2014-2015 Actual	2015-2016 Actual	2016-2017 Forecast	2017-2018 Estimate
<b>General Revenue Fund: Revenues</b>					
<b>Ordinary Revenue - Provincial Sources</b>					
<b>Tax Revenue:</b>					
Personal Income Tax	23.9%	24.1%	25.8%	26.0%	25.9%
Corporate Income Tax	4.6%	4.9%	4.6%	5.0%	4.8%
Harmonized Sales Tax	18.1%	17.5%	17.7%	17.3%	17.0%
Motive Fuel Tax	2.7%	2.5%	2.6%	2.6%	2.5%
Tobacco Tax	2.4%	2.1%	2.3%	2.2%	2.2%
Other Tax Revenue	1.8%	1.6%	1.7%	1.6%	1.4%
	53.5%	52.7%	54.7%	54.7%	53.8%
<b>Other Provincial Revenue:</b>					
Registry of Motor Vehicles	1.3%	1.3%	1.3%	1.3%	1.2%
Royalties - Petroleum	0.2%	0.3%	0.1%	0.1%	0.1%
Other Provincial Sources	1.5%	1.3%	1.6%	1.5%	1.4%
Offshore Licenses Forfeitures	0.0%	0.0%	0.0%	0.0%	0.0%
TCA Cost Shared Revenue - Provincial Sources	0.2%	0.1%	0.0%	0.0%	0.6%
Other Fees and Charges	-2.8%	0.6%	0.6%	0.6%	0.6%
Prior Years' Adjustments - Provincial Sources	0.7%	1.1%	-0.7%	-0.1%	0.0%
Gain on Disposal of Crown Assets	0.1%	0.0%	0.0%	0.0%	0.0%
	1.1%	4.8%	2.9%	3.4%	3.9%
<b>Investment Income:</b>					
Interest Revenues	0.8%	0.9%	0.9%	0.8%	0.7%
Sinking Fund Earnings	1.2%	1.1%	1.0%	0.9%	0.9%
	2.0%	2.0%	1.9%	1.7%	1.7%
<b>Total - Provincial Sources</b>	<b>56.7%</b>	<b>59.5%</b>	<b>59.4%</b>	<b>59.8%</b>	<b>59.4%</b>
<b>Ordinary Revenue - Federal Sources</b>					
Equalization Payments	18.7%	18.0%	17.9%	17.0%	16.5%
Canada Health Transfer	9.1%	8.8%	8.9%	9.3%	9.1%
Canada Social Transfer	3.6%	3.4%	3.4%	3.4%	3.4%
Offshore Accord	1.0%	0.7%	0.4%	0.3%	0.2%
Crown Share	0.0%	0.1%	0.0%	0.0%	0.0%
Other Federal Sources	0.2%	0.0%	0.0%	0.1%	0.2%
TCA Cost Shared Revenue - Federal Sources	0.2%	0.2%	0.3%	0.2%	0.7%
Prior Years' Adjustments - Federal Sources	0.0%	0.1%	0.0%	0.0%	0.0%
<b>Total - Federal Sources</b>	<b>32.8%</b>	<b>31.3%</b>	<b>31.0%</b>	<b>30.3%</b>	<b>30.2%</b>
<b>Total - Ordinary Revenue</b>	<b>89.4%</b>	<b>90.8%</b>	<b>90.4%</b>	<b>90.1%</b>	<b>89.6%</b>
<b>Ordinary Recoveries -</b>					
Provincial Sources	3.8%	3.5%	3.6%	3.4%	3.4%
Federal Sources	2.9%	2.1%	2.2%	2.5%	3.3%
<b>Total - Ordinary Recoveries</b>	<b>6.7%</b>	<b>5.6%</b>	<b>5.8%</b>	<b>5.9%</b>	<b>6.7%</b>
<b>Net Income from Government</b>					
<b>Business Enterprises (GBE)</b>					
Nova Scotia Liquor Corporation	2.5%	2.3%	2.4%	2.4%	2.2%
Nova Scotia Provincial Lotteries and Casino Corporation	1.2%	1.1%	1.3%	1.3%	1.3%
Halifax-Dartmouth Bridge Commission	0.1%	0.1%	0.1%	0.1%	0.1%
Highway 104 Western Alignment Corporation	0.0%	0.1%	0.0%	0.1%	0.1%
QEII Health Sciences	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Total - Net Income from GBES</b>	<b>3.7%</b>	<b>3.6%</b>	<b>3.8%</b>	<b>3.9%</b>	<b>3.7%</b>
<b>Total - Revenues</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**Chart 5.1 Revenues By Source 2016–2017 Forecast and 2017–2018 Budget**



## Ordinary Revenue – Provincial Sources – Tax Revenue

### Personal Income Tax (PIT)

Nova Scotia's 2017–2018 estimate for personal income tax is \$2,738.4 million, up \$94.7 million or 3.6 per cent compared to the 2016–2017 forecast.

Personal taxable income is projected to grow by \$793.7 million to \$30.2 billion in 2017 – an increase of 2.7 per cent; and grow to \$31.2 billion in 2018 – an increase of 3.0 per cent. This is primarily because of growth in household income in 2017 (+2.4 per cent) and in 2018 (+2.5 per cent) combined with yield growth in 2017.

Yield on personal taxable income is projected to be 9.11 per cent in 2017 but decline to 8.91 per cent in 2018 because of the enhancements to the Basic Personal Amount, Age Amount, Spousal Amount, and Amount for Eligible Dependant, which become effective on January 1, 2018. The cost of this measure in 2017–2018 is projected to be \$21.7 million and will rise to over \$85 million upon full implementation in 2018–2019.

Table 5.4 provides a summary of personal income tax revenue growth since 2013, broken down by taxable income and the yield rate. The yield rate is the effective or average tax rate on personal taxable income.

**Table 5.4 Source of PIT Revenue Growth**

	2013	2014	2015	2016 (E)	2017 (E)	2018 (E)
Personal Taxable Income (\$billions)	26.9	27.9	28.8	29.6	30.3	31.2
Yield Rate	8.23%	8.62%	8.85%	8.96%	9.11%	8.91%
Net PIT (\$millions)	2,171	2,386	2,525	2,617	2,731	2,768

## Corporate Income Tax (CIT)

Nova Scotia's 2017–2018 estimate for corporate income tax is \$506.0 million, down \$7.0 million or 1.4 per cent compared to the 2016–2017 forecast.

National corporate taxable income is projected to grow by \$1.5 billion or 0.5 per cent in 2017 to \$294.5 billion and by \$3.6 billion or 1.2 per cent to \$298.1 billion in 2018. Effective from the 2014–2015 Public Accounts, the province calculates its share of national corporate taxable income on a three-year moving average of actual share rates. For 2017–2018 the province's share is estimated to be 1.54 per cent. Nova Scotia's corporate taxable income in 2017 is estimated to be \$4.5 billion, growing to \$4.6 billion in 2018.

Growth in corporate taxable income is partially offset by an increase in the small business threshold from \$350,000 to \$500,000 effective January 1, 2017. The cost of this measure is projected to be \$13.9 million in 2017–2018.

The average effective tax rate (yield) on corporate taxable income for the province is 11.15 per cent. The small business share of taxable income is projected to be 37.3 per cent.

## Harmonized Sales Tax (HST)

Net Harmonized Sales Tax is estimated to total \$1,804.2 million in 2017-2018 up \$46.8 million or 2.7 per cent compared to the 2016-2017 forecast.

The increase in HST revenues is largely attributable to growth in the consumer expenditure tax base. The province's total tax base for taxable goods and services is projected to grow by \$482.5 million or 2.4 per cent to \$20.5 billion in 2017 and by \$572.1 million or 2.8 per cent to \$21.1 billion in 2018. Growth in the consumer expenditure base is forecasted to be 3.0 per cent in 2017 and 2.9 per cent in 2018. Consumer expenditures represent over 70 per cent of the HST tax base.

The pace of growth in taxable residential housing expenditures is expected to decline by 1.5 per cent in 2017 and increase by 2.6 per cent in 2018. The rebate on residential energy (Your Energy Rebate Program) is expected to total \$102.1 million in 2017-2018.

Public sector body rebates are projected to increase by \$3.0 million or 2.2 per cent in 2017-2018, while point-of-sale (POS) rebates for children's clothing, children's footwear, children's diapers and printed books will increase by \$0.7 million or 2.9 per cent.

## Tobacco Tax

Tobacco tax revenues are projected to total \$227.8 million in 2017–2018, down \$0.9 million or 0.4 per cent from the 2016–2017 forecast.

Cigarette consumption is projected to decline by 15 million cigarettes to 758.3 million – a decrease of 1.9 per cent. The consumption of fine cut tobacco is projected to decline by 2.8 million grams – a decrease of 5.9 per cent. Prices for tobacco products are expected to increase by 2.0 per cent in 2017–2018, accompanied by a continuing long-term decline in smoking.

## Motive Fuel Taxes

Motive fuel taxes are projected to total \$269.8 million in 2017–2018, an increase of \$7.9 million or 3.0 per cent compared to the 2016–2017 forecast.

Gasoline consumption is estimated to rise by 3.4 per cent to 1.33 billion litres in 2017–2018, while the consumption of diesel oil is estimated to increase by 1.9 per cent to 424 million litres in 2017–2018.

The extension of a motive fuel tax exemption to the mining and quarrying sector is estimated to cost \$1.6 million in 2017–2018. The average prices for gasoline and diesel oil are projected to be higher in 2017–2018 while labour income is expected to increase by 2.7 per cent over 2016–2017, increasing disposable income spending on fuel.

## Other Tax Revenue

Other Tax Revenue includes such items as Corporations Capital Tax, Casino Win Tax, Levy on Private Sale of Used Vehicles, Tax on Insurance Premiums, and Gypsum Tax. The total for these items is estimated to be \$162.5 million for 2017–2018, up \$3.7 million or 2.3 per cent from the 2016–2017 budget estimate; down \$0.3 million or 0.2 per cent from the 2016–2017 forecast.

## Ordinary Revenue – Provincial Sources – Other Provincial Revenue

### Registry of Motor Vehicles

Revenue generated by the Registry of Motor Vehicles is estimated to be \$131.5 million for 2017–2018, up \$3.9 million or 3.1 per cent from the 2016–2017 estimate; a decrease of \$0.1 million or 0.1 per cent from the 2016–2017 forecast.

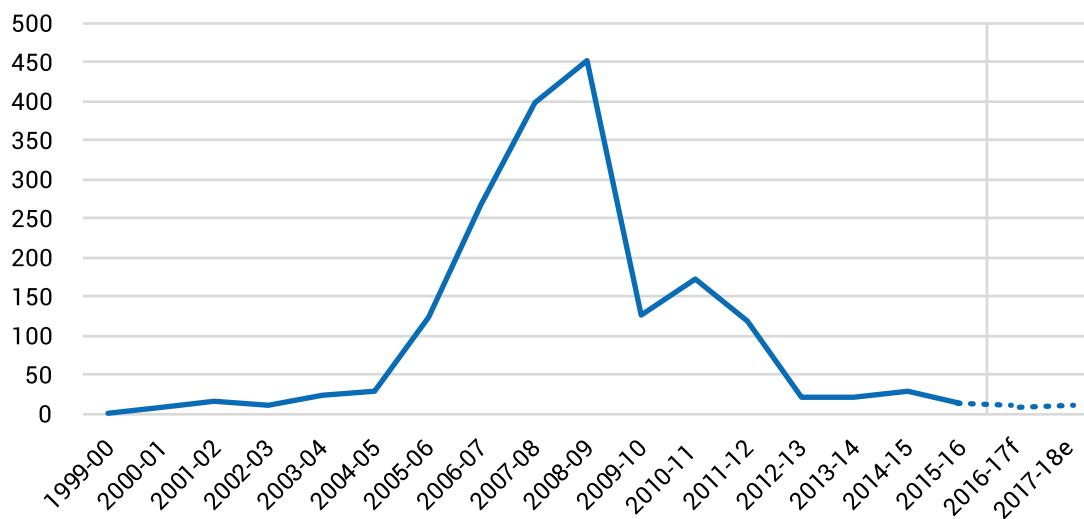
### Offshore Petroleum Royalties

Offshore Petroleum Royalties are estimated to be \$12.4 million in 2017–2018, an increase of \$2.2 million or 21.3 per cent from the 2016–2017 forecast.

Declines in the foreign exchange rate between the Canadian and US dollar have led to higher market prices; however, production volume for the Sable Offshore Energy Project (SOEP) continues to decline as the project nears its technical end date. The accrual of decommissioning costs estimated by SOEP interest holders continues to be a major factor contributing to lower revenues than experienced in recent fiscal years (Chart 5.2).

**Chart 5.2 Offshore Petroleum Royalties**

(\$ millions)



Source: Nova Scotia Department of Finance and Treasury Board

## Other Provincial Sources

Revenue from other provincial sources is estimated to be \$150.3 million for 2017–2018, up \$4.1 million or 2.8 per cent from the 2016–2017 Budget Estimates; down \$3.0 million or 2.0 per cent from the 2016–2017 forecast.

This revenue source includes such items as Pharmacare premiums; Nova Scotia Securities Commission; registration revenues for deeds, companies, and property; various other licenses and permits; and timber licenses and revenue. The primary reasons for the increase from last year's budget is higher Pharmacare revenue and improved Securities Commission revenue from filings.

## Tangible Capital Asset (TCA) Cost Shared Revenue – Provincial Sources

TCA Cost Shared Revenue from provincial sources is estimated to be \$60.3 million for 2017–2018, up \$0.4 million from the 2016–2017 Budget Estimates; up \$58.2 million from the 2016–2017 forecast.

The largest portion of this amount (\$58.9 million) reflects Halifax Regional Municipality's (HRM) share of the capital lease for the new Halifax Convention Centre. The principal component of the lease payment is capitalized and reflected as a one-time revenue at the time of substantial completion. The entire capital value of the Convention Center (\$169.2 million) is added to the provincial asset base and the HRM and federal contributions to the asset purchase are received by the province as TCA cost shared revenue – provincial and federal sources, and offset the resulting increase in provincial debt from the asset purchase. The federal contribution of \$51.4 million is reflected in TCA cost shared revenue – federal sources. These same revenues were projected in Budget 2016–2017, but were removed from the final 2016–2017 forecast because of the change in timing for substantial completion, announced during fiscal year 2016–2017, pushed the revenue recognition from 2016–2017 to 2017–2018.

## Other Fees and Charges

Revenue generated from other fees and charges is estimated to be \$61.7 million for 2017–2018, a decrease of \$0.3 million or 0.4 per cent from the 2016–2017 estimate, basically unchanged from the 2016–2017 forecast.

## Ordinary Revenue – Provincial Sources – Investment Income

### Interest Revenue

Interest revenue is estimated to be \$79.0 million for 2017–2018, up \$1.1 million or 1.4 per cent from the 2016–2017 estimate; up \$2.4 million or 3.1 per cent from the 2016–2017 forecast. This increase from estimate results mainly from the inclusion of the interest portion of the Halifax Regional Municipality lease payment for the new Convention Centre.

### Sinking Fund Earnings

Sinking Fund Earnings are projected to total \$99.1 million in 2017–2018, an increase of \$7.4 million or 8.1 per cent from the 2016–2017 budget estimate; up \$5.4 million or 5.8 per cent from the 2016–2017 forecast, primarily as a result of a higher forecast for interest rates and reinvestment of proceeds at higher yields.

## Ordinary Revenue – Federal Sources

### Equalization

Equalization revenues in 2017–2018 are estimated to be \$1,750.6 million, an increase of \$17.8 million or 1.0 per cent compared to the 2016–2017 forecast. The figure is composed of two separate fiscal equalization payments from the federal government.

Firstly, the Equalization estimate reflects the province's adoption of the Expert Panel formula for equalization payments, projected to be \$1,778.6 million in 2017–2018, an increase of \$56.3 million or 3.3 per cent compared to the 2016–2017 forecast. The year-over-year growth in the Equalization program was 2.1 per cent – the three-year average growth in national Nominal Gross Domestic Product.

Secondly, as part of a clarification reached with the Government of Canada on October 10, 2007, commencing with the 2008–2009 fiscal year, Nova Scotia is entitled to receive an additional payment from the federal government if the cumulative value of the equalization formula in effect at the time the Offshore Accord was signed (the



Interim approach) exceeds the cumulative value of the Expert Panel approach. This is known as the Cumulative Best-of Guarantee. The arrangement is in effect until the end of 2019–2020 to coincide with the term of the Offshore Accord.

The first estimate of the Cumulative Best-of Guarantee payment is -\$27.9 million, a decrease of \$38.5 million or 363.4 per cent compared to the 2016–2017 forecast. Although the cumulative value of the Interim approach exceeds the cumulative value of the Expert Panel by \$842.3 million, the difference between the two cumulative values has narrowed. The second estimate for the value of the 2017–2018 payment will be made in December 2017.

**Table 5.5 Cumulative Best-of Guarantee Payments (CBOG)**

(\$ thousands)

<b>Fiscal Year</b>	<b>Expert Panel</b>	<b>Interim Approach</b>	<b>Difference</b>	<b>Guarantee Payment</b>
2008-2009	1,464,935	1,329,227	(135,708)	0
2009-2010	2,855,682	2,593,180	(262,502)	0
2010-2011	4,216,405	4,016,069	(200,336)	0
2011-2012	5,574,664	5,657,342	82,678	82,678
2012-2013	7,002,235	7,382,230	379,995	297,317
2013-2014	8,549,622	9,189,874	640,252	260,257
2014-2015	10,233,572	11,005,008	771,436	131,184
2015-2016	11,959,924	12,819,546	859,622	88,186
2016-2017	13,715,474	14,591,122	875,648	10,598
2017-2018	15,513,992	16,356,294	842,302	(27,918)
<b>TOTAL</b>				<b>842,302</b>

### Offshore Accord Payments

Offshore Offset payments are estimated to be \$20.0 million in 2017–2018, a decrease of \$13.3 million or 40.0 per cent compared to the 2016–2017 forecast. The decrease reflects the declining offshore royalties included in the equalization formula. The equalization formula uses a two-year lag in data and a three-year weighted average. The province is eligible to receive offshore offset payments for the second phase of the 2005 Offshore Accord that runs from 2012–2013 until the end of 2019–2020, as long as it continues to be in receipt of equalization payments. By the end of 2017–2018, the province is expected to have received a total of \$1.3 billion from the 2005 Offshore Accord (Table 5.6).

**Table 5.6 2005 Offshore Accord Payments**

(\$ thousands)

<b>Fiscal Year</b>	<b>2005 Offshore Accord Payments (\$000s)</b>
2004-2005	30,500
2005-2006	26,600
2006-2007	57,421
2007-2008	68,238
2008-2009	105,884
2009-2010	180,072
2010-2011	227,225
2011-2012	167,755
2012-2013	146,059
2013-2014	89,461
2014-2015	64,481
2015-2016	36,779
2016-2017 (F)	33,255
2017-2018 (E)	19,957
<b>TOTAL</b>	<b>1,253,687</b>

### The Canada Health Transfer (CHT)

Effective with the 2014–2015 fiscal year, the federal government renewed the CHT to provide for equal per capita cash for all provinces and territories. The new formula is in place for a 10-year period. The 2017–2018 national CHT amount that is available for distribution is set at \$37.1 billion. The CHT was legislated to grow by 6 per cent each year until the end of the 2016–2017 fiscal year. Commencing in 2017–2018 the CHT is legislated to grow by the three-year average growth rate of national Nominal Gross Domestic Product with a floor of 3 per cent. The floor provision is in effect for 2017–2018 since the three-year average growth rate of Nominal Gross Domestic Product is 2.1 per cent.

The CHT cash entitlement for Nova Scotia is estimated to be \$967.2 million in 2017–2018, an increase of \$22.8 million or 2.4 per cent compared to the 2016–2017 forecast. The estimate reflects the federal government's estimate of the province's declining share of national population, currently standing at 2.60 per cent, compared to 2.62 per cent in 2016–2017. National population grew by 1.2 per cent while the province's population grew by 0.6 per cent.

The federal government's health care funding for targeted initiatives such as home care and mental health care will be delivered outside the CHT.

## The Canada Social Transfer (CST)

Nova Scotia's 2017–2018 cash entitlement for CST is estimated to be \$358.0 million, an increase of \$8.4 million or 2.4 per cent compared to the 2016–2017 forecast.

The provincial entitlement is based on an equal per capita cash provincial allocation of a fixed national entitlement which stands at \$13.7 billion for 2017–2018. Effective with the 2014–2015 fiscal year the CST was renewed for a further 10-year period with the national pool legislated to grow by 3 per cent a year through to the end of the 2023–2024 fiscal year.

The estimate reflects the federal government's estimate of the province's declining share of national population, currently standing at 2.60 per cent, compared to 2.62 per cent in 2016–2017. National population grew by 1.2 per cent while the province's population grew by 0.6 per cent.

## The Crown Share Adjustment Payment

The Crown Share Adjustment Payment is estimated to be \$2.9 million in 2017–2018, an increase of \$2.4 million or 460.3 per cent compared to the 2016–2017 forecast. The estimate reflects the underlying profitability of offshore oil and gas projects.

## Other Federal Sources

Other Federal Sources are estimated to be \$24.0 million in 2017–2018, an increase of \$17.9 million from the 2016–2017 Budget Estimates; up \$18.4 million from the 2016–2017 forecast.

Other Federal Sources comes from a statutory subsidy from the federal government, Infoway funding, and additional Health funding secured under the Canada Health Transfer renegotiation. The variance year over year results primarily from the inclusion of additional health funding, which is estimated to total \$16.3 million in 2017–2018.

In December 2016, the federal government offered to provide provinces and territories \$11 billion over a 10-year period to support home care and mental health initiatives and improve health outcomes.

To date, all provinces and territories (with the exception of Manitoba) have accepted the offer of targeted funding. Each province and territory will receive an equal per capita share of the targeted funding based upon its share of the national population in each year of the 10-year period, as well as additional funding that is proportional but focuses on the unique characteristics and priorities of each jurisdiction.

In 2017-2018 the province will receive \$16.3 million, of which \$5.2 million is for home and palliative care, \$2.6 million is for mental health, and \$8.5 million is for other health requirements.

Governments are working to develop agreements on performance indicators and mechanisms for annual reporting, as well as a detailed plan on how the funds will be spent.

### **Tangible Capital Asset (TCA) Cost Shared Revenue – Federal Sources**

The estimate of TCA cost shared federal revenue is \$73.0 million for 2017–2018. This represents a decrease of \$0.1 million compared to the 2016–2017 Budget Estimates; an increase of \$48.4 million from the 2016–2017 forecast, due to cash flow variances over the two fiscal years.

This line item includes one-time federal cost shared funding of \$51.4 million for the new Convention Centre. Because of the project timing for substantial completion moving from February 2016 to August 2017, the revenue recognition moves from fiscal year 2016–2017 to 2017–2018.

The \$51.4 million in federal funding for the project is received as revenue by the province and is used to offset the federal portion of the \$169.2 million cost of the entire project. The project is split between the three levels of government, with the Halifax Regional Municipality and provincial government each contributing \$58.9 million to the project. The asset value is received on the books of the province with the other government partner's shares being received as revenue, offsetting the capital costs associated with their shares. The HRM share (\$58.9 million) has been reflected in TCA Cost Shared Revenue – Provincial Sources.

The total TCA revenue received by the province for the new Convention Centre is \$110.3 million, which, according to accounting rules, must be brought into the fiscal plan when the project reaches substantial completion. This date is projected by the developer to be in August 2017.

## Ordinary Recoveries

Ordinary Recoveries are projected to total \$709.4 million in 2017–2018, an increase of \$156.9 million or 28.4 per cent from the 2016–2017 budget estimate; up \$103.4 million or 17.1 per cent from the 2016–2017 forecast of \$606.0 million.

Provincial source recoveries are up \$27.0 million or 8.1 per cent to \$359.1 million; an increase of \$9.8 million or 2.8 per cent from the 2016–2017 forecast; while federal sources are up \$129.9 million or 58.9 percent to \$350.3 million; an increase of \$93.6 million or 36.4 per cent from the 2016–2017 forecast. The increase in provincial source recoveries relates primarily to increased recoveries from physician reciprocal billings (\$5 million) and auto levies charged to insurance providers (\$6.5 million), Nova Scotia Apprenticeship Management System (\$3.6 million), Halifax Municipality cost recovery for Trade Centre operating costs (\$2.8 million) and Royal Canadian Mounted Police (RCMP) costs recovered from municipalities (\$2.5 million).

The increase in federal sources relates primarily to the Clean Water and Waste Water Initiative (\$79.9 million), Public Transit Infrastructure Fund (\$30.6 million), all of which are flowed to municipalities through the provincial government. As well as the Post-Secondary Strategic Investment Fund for Universities (\$22.1 million) and for the Centre for Ocean Ventures and Entrepreneurship (COVE) (\$3.6 million).

## Government Business Enterprises – Net Income

**Nova Scotia Liquor Corporation:** The Nova Scotia Liquor Corporation (NSLC) returns all of its income from operations (“income”) to the Government of Nova Scotia as the shareholder. The NSLC is budgeting net income of \$236.2 million in 2017–2018. This is an increase of 0.9 per cent compared to the 2016–2017 Budget Estimates of \$234.0 million. The increase results from net sales growth of 2.0 per cent, a 1.1 per cent increase in gross profit, a 2.2 per cent increase in store operating expenses and a 2.6 per cent increase in other expenses, offset by a 4.8 per cent decrease in depreciation expense.

**Nova Scotia Provincial Lotteries and Casino Corporation:** The Nova Scotia Provincial Lotteries and Casino Corporation’s (NSPLCC) net income is budgeted to be \$126.7 million in 2017–2018, which is \$1.0 million lower than the 2016–2017 estimate of \$127.7 million. NSPLCC expects sales revenue to decrease by \$9.1 million in 2017–2018 compared to the 2016–2017 estimate, primarily due to lower casino revenue resulting from the expected start of the Cogswell Interchange construction and maturing video lottery business lines.

**Halifax-Dartmouth Bridge Commission:** Halifax-Dartmouth Bridge Commission (operating as Halifax Harbour Bridges) is budgeting net income for the 2017–2018 fiscal year at \$7.3 million. This represents a decrease of \$4.7 million or 39.3 per cent from the 2016–2017 Budget. Total revenue is projected to increase by \$0.8 million from 2016–2017 as the replacement of the suspended span of the Macdonald Bridge comes to completion. Total expenses will increase by \$5.5 million, as debt servicing costs and depreciation begin to reflect the “big lift” project costs.

**Highway 104 Western Alignment Corporation:** Highway 104 Western Alignment Corporation’s budget estimate of net income for 2017–2018 is \$8.5 million, up \$0.1 million from the 2016–2017 estimate of \$8.4 million, mainly the result of a slight decline in interest expenses.

## Key Tax Measures – Personal Income Taxes

### Enhancement of the Basic Personal Amount, Age Amount, Spousal Amount, and Dependant Amount

The Basic Personal Amount (BPA) is a non refundable credit that can be claimed by all tax filers. The purpose of the basic personal amount is to provide full relief from provincial income tax to all tax filers with taxable income below the BPA. It also provides partial relief to tax filers with taxable income above the BPA.

A tax filer cohabitating with their spouse or common law partner can claim a Spousal Amount equal to the BPA. This amount is reduced by the income of the spouse or common law partner on a dollar-for-dollar basis. The purpose of this non refundable credit is to provide tax relief to families with secondary incomes at or below the BPA. If the Spousal Amount is claimed, the tax filer cannot use the Eligible Dependant Amount.

The Eligible Dependant Amount is a non refundable credit for individuals who do not have a spouse or common law partner and are caring for children who have not reached the age of 18 in the taxation year. The amount can only be claimed if the dependant resides in a home maintained by the tax filer through any part of the year. Claiming the Dependant Amount precludes the individual from claiming the Spousal Amount, and only one person can claim the child as a dependant. The purpose of this credit is to reduce taxes for individuals without a secondary source of income supporting the household and who are incurring expenses associated with raising children. The value of the Dependant Amount is equal to the BPA and is reduced for each dollar of the dependant’s net income.

The province will increase the Basic Personal Amount (BPA), the Spousal Amount, and the Amount for an Eligible Dependant by \$3,000 from \$8,481 to \$11,481 for the

2018 taxation year and subsequent taxation years. These credit amounts have been unchanged since 2011 and the increase represents a 35.4 per cent enhancement. The \$3,000 increase will be available to all tax filers who have taxable income of less than \$25,000. For tax filers who have taxable income between \$25,000 and \$75,000, the enhanced benefit will roll-off at the rate of 6 cents for every dollar of taxable income and will be fully phased out at \$75,000 of taxable income. Tax filers who have more than \$75,000 in taxable income will not receive any benefit from the enhanced BPA.

The value of the tax credit is determined by multiplying the amount of the credit by the lowest bracket rate. Currently, the maximum benefit a tax filer can receive under the credits is \$745.48 ( $\$8,481 \times 8.79$  per cent). The maximum benefit will rise to \$1,009.18 ( $\$11,481 \times 8.79$  per cent) – an increase of \$263.70.

The Age Amount is a non refundable credit provided to individuals over the age of 65 in the taxation year. The Age Amount available to a tax filer is reduced for net income above \$30,828 at a rate of \$0.15 per \$1 over the income threshold. The maximum Age Amount is currently \$4,141 and it will be increased by 35.4 per cent to \$5,606 for 2018 and subsequent taxation years. The increase is proportional to the increase in the BPA. Similarly, the maximum benefit will be available for tax filers with taxable income of less than \$25,000 and will be phased out between taxable incomes of \$25,000 and \$75,000.

The enhancement of these non refundable tax credits will cost \$21.7 million in 2017–2018 and will increase to over \$85 million upon full implementation in 2018–2019. Approximately 223,000 tax filers do not pay any provincial income tax. These enhancements will add almost 63,000 tax filers to that number. In total, 501,648 tax filers will benefit from the enhancement. On average, Nova Scotia tax filers receiving the enhancement will save an additional \$159.22 in provincial income tax for the 2018 taxation year. The average varies by income range.

In some cases, tax filers will no longer have to use the Low Income Tax Reduction or Age Amount Tax Credit to reduce or eliminate their tax liability. In addition, some seniors who are in receipt of the federal Guaranteed Income Supplement (GIS) will see their tax liability reduced or eliminated. This will mean paying less in advance of receiving their refund of provincial income tax.

## Key Tax Measures – Business Taxes

### Small Business Threshold

Effective January 1, 2017, the province will increase the small business threshold from \$350,000 to \$500,000. This matches the threshold in effect at the federal level as well as all provinces except Manitoba (\$450,000). The threshold was reduced from \$400,000 to \$350,000 on January 1, 2014, to coincide with a small business rate decrease.

The small business corporate income tax rate is 3 per cent and will be applied to the first \$500,000 of active taxable income of Canadian Controlled Private Corporations (CCPCs) who have taxable capital of less than \$10 million. The benefit of the small business rate is phased out for CCPCs with taxable capital between \$10 million and \$15 million.

The cost of the increase to the threshold is projected to be \$13.9 million in 2017–2018. The increase in the threshold will benefit more than 1,800 CCPCs.

Almost 900 CCPCs who are currently paying the general corporate income tax rate of 16 per cent on taxable income over \$350,000 will now only pay the small business rate. In addition, more than 900 more businesses will see a partial benefit because of the threshold increase.

## Key Tax Measures – Consumption Taxes

### Motive Fuel Tax Exemption for Mining and Quarrying

Effective April 1, 2017, the province will provide an exemption from motive fuel tax for equipment used in the mining and quarrying sector. The measure is expected to cost \$1.6 million in 2017–2018.

Currently motive fuel exemptions are available for such purposes as fishing, farming, and logging operations; commercial vessels and ferries; provincial, municipal, school board, and public works vehicles; equipment used for firefighting; motive fuel purchased by status Indians on a reserve; and locomotives.

Most jurisdictions provide some form of motive fuel tax exemption for off-road equipment used by natural resource industries.



## Tax Credits, Rebates, and Tax Expenditures

Details of the estimated value of credits, rebates, and tax expenditures are presented in Table 5.7.

**Table 5.7 Estimated Value of Tax Credits, Rebates and Tax Expenditures**

(\$ thousands)

	2016-2017 Estimate	2016-2017 Forecast*	2017-2018 Estimate
<b>Personal Income Tax</b>			
Political Tax Credit	832	830	850
Volunteer Firefighter & Ground Search and Rescue	3,856	3,719	3,795
Labour Sponsored Venture Capital Corporation	19	(9)	(9)
Equity Tax Credit	8,982	8,946	9,269
Affordable Living Tax Credit	65,213	65,080	65,080
<b>Total</b>	<b>78,902</b>	<b>78,566</b>	<b>78,985</b>
<b>Corporate Income Tax</b>			
Political Tax Credit	41	39	39
Scientific Research & Experimental Development	12,213	19,585	15,899
New Small Business Tax Holiday	17	67	70
Digital Media Tax Credit	2,320	7,012	4,405
Film Industry Tax Credit	22,583	38,053	3,780
Digital Animation Tax Credit	45	46	1,141
Food Bank Tax Credit for Farmers	300	300	300
Capital Investment Tax Credit	31,372	---	31,372
Small Business Tax Rate	231,788	208,130	220,018
<b>Total</b>	<b>300,679</b>	<b>273,232</b>	<b>277,024</b>
<b>Harmonized Sales Tax</b>			
Public Sector Rebates	137,301	133,861	136,853
Printed Book Rebate	10,918	9,772	10,060
First-time Homebuyers Rebate	604	484	497
Disability Rebates	139	92	95
Fire Fighting Equipment Rebate	156	75	77
Your Energy Rebate (YERP)	110,393	102,082	102,082
Children's Clothing Rebate	7,927	8,517	8,768
Children's Footwear Rebate	1,637	2,040	2,100
Diapers and Feminine Hygiene Products Rebate	4,126	3,363	3,462
<b>Total</b>	<b>273,201</b>	<b>260,286</b>	<b>263,994</b>

\* 2016-2017 Forecast includes the following Prior Year Adjustments (PYA's):

Volunteer Firefighter & Ground Search and Rescue	(77)
Scientific Research & Experimental Development	4,217
Digital Media Tax Credit	2,607
Film Industry Tax Credit	12,777
Capital Investment Tax Credit	(31,372)
	<b>(11,848)</b>

## Revenue Sensitivity

Revenue estimates, which are in the form of a forecast, are based on several economic, financial, tax assessment, and statistical values and assumptions. All of these reflect the province's planned course of action for the forecast period and professional judgment as to the most probable set of economic conditions.

As these variables change and more information becomes available throughout the year, they may have an impact, either negative or positive, on the revenue forecasts. These impacts could be material. The province intends to update the forecast periodically throughout the forecast period. The above referenced variables can move independently and may have offsetting effects.

Table 5.8 lists the specific key economic assumptions and variables that directly affect the calculation of provincial revenue estimate and forecast figures, as included in this Revenue Outlook section, and reflect assumptions developed by the province as of March 31, 2017.

## Key Risks - Revenues

Provincial own-source revenues are strongly influenced by several key factors in the economic outlook. In addition, the revenue models use administrative data, external factors and historical relationships between factors to arrive at forecasted revenues. All factors are subject to change throughout the fiscal year and can contribute to significant variations in revenues. In addition, historical revisions to data by Statistics Canada often have revenue implications; and final personal and corporate income tax assessments for a taxation year are not received until approximately 18 months following the end of a taxation year, thereby creating prior year adjustments (PYAs).

Any slowdown in growth in the level of compensation of employees poses a downside risk to personal income tax revenues – the Province's largest source of revenue. Yield growth over the recent past has been strong, but will decline in 2018 due to new measures to enhance the Basic Personal Amount and other non refundable tax credits.

Harmonized Sales Tax (HST) revenues are highly dependent on growth in consumer expenditures, which accounts for more than 70 per cent of the HST tax base. Recent declines in the growth of residential housing investment have put downward pressure on HST revenues and this is expected to continue during 2018.

The forecast of corporate income tax revenues is highly dependent upon national corporate taxable income, especially given the fact that the province has adopted a three-year average share approach. As revenues are sensitive to fluctuations in share, there are substantial risks to corporate income tax revenues if the share does not stay as strong. In addition, changes to the small business taxable income threshold for

**Table 5.8 Key Economic Assumptions and Variables Affecting Revenue Estimates**

<b>Revenue Source</b>	<b>Key Variables</b>
<b>Personal Income Taxes</b>	<ul style="list-style-type: none"> <li>• personal taxable income levels</li> <li>• provincial taxable income yield</li> <li>• tax credits uptake</li> </ul>
<b>Corporate Income Taxes</b>	<ul style="list-style-type: none"> <li>• national corporate taxable income levels as provided by Finance Canada</li> <li>• Nova Scotia's share of national taxable income</li> <li>• tax credits uptake</li> <li>• national and provincial corporate profit levels</li> </ul>
<b>HST</b>	<ul style="list-style-type: none"> <li>• personal consumer expenditure levels</li> <li>• provincial gross domestic product</li> <li>• spending by exempt industries</li> <li>• rebate levels</li> <li>• residential housing investment</li> </ul>
<b>Tobacco, Gasoline and Diesel Taxes</b>	<ul style="list-style-type: none"> <li>• personal consumer expenditure levels</li> <li>• tobacco and fuel consumption patterns</li> <li>• tobacco and fuel prices</li> <li>• labour income, affecting disposable income spent on fuel</li> </ul>
<b>Petroleum Royalties</b>	<ul style="list-style-type: none"> <li>• foreign exchange rates</li> <li>• production levels</li> <li>• capital and operating costs of interest holders</li> <li>• world price of natural gas, subject to current market conditions</li> </ul>
<b>Equalization</b>	<ul style="list-style-type: none"> <li>• one-estimate one-payment approach</li> </ul>
<b>CHT/CST</b>	<ul style="list-style-type: none"> <li>• annual increases in the national base amount</li> <li>• changes in population</li> </ul>

2017 and subsequent taxation years is likely to increase the small business share of the province's corporate taxable income and place downward pressure on revenues.

Declining production volumes for offshore natural resources and increased decommissioning costs for the Sable Offshore Energy Project (SOEP) are key concerns for offshore royalties. Any further increase in the estimated decommissioning costs is likely to create additional negative Prior Year Adjustments.

Tobacco tax revenues continue to be influenced by cessation and reduced consumption. The province's ban on flavoured tobacco products and the potential substitution impact of electronic cigarettes contribute to declining consumption and growth in revenues.

Growth in federal source revenues remain flat. Year-over-year growth in the Canada Health Transfer (CHT) funding is declining as the result of a new legislated escalator that starts in 2017-2018. Agreements associated with the Equalization program (e.g. Offshore Accord and Cumulative Best-of Guarantee Payment) will end in 2019-2020 but are already showing significant decline from peak revenues achieved in the past. A narrowing of the cumulative gap between the Expert Panel approach for Equalization and the Interim approach for the purpose of calculating the Cumulative Best-of Guarantee payment has arisen in 2017-2018. Any further narrowing of this gap poses downside risks for revenues.

## Additional Information

In addition to the key economic and fiscal assumptions contained in the 2017-2018 revenue estimates, the following information should also be taken into account when interpreting the revenue estimates.

The revenue estimates for 2017-2018 are considered to have been prepared on a basis consistent with accounting policies currently used by the province to record and/or recognize revenue for purposes of its General Revenue Fund.

The Department of Finance and Treasury Board and other departments or agencies of the province have prepared specific revenue estimates for 2017-2018 using a combination of current internal and external models and other information available. Every effort has been made to ensure the integrity of the results of the models and other information. As actual or more current information becomes available, adjustments may be necessary to the projection of revenues.

The revenue projected from federal transfer payment programs pursuant to the Federal-Provincial Fiscal Arrangements Act incorporates official information released by the federal government as of December 9, 2016. In addition, transfer payment revenue estimates are based on Canadian national and provincial population estimates supplied by Statistics Canada.

Prior Years' Adjustments (PYA's) are normally made to federal transfers and to income tax revenues. All PYA's known to date have been included in the final revenues for 2016-2017.

## Budget 2017–2018: Expense Outlook

In 2017–2018, Nova Scotia's total expenses in its General Revenue Fund are estimated to be \$10,516.3 million (Table 2.1). This is an increase of \$370.7 million or 3.7 per cent from the 2016–2017 budget estimate and an increase of \$371.3 million or 3.7 per cent compared to the 2016–2017 forecast.

Tables 5.9 and 5.10 provide financial statistics of provincial Total Expenses amount and as a percentage of total expenses, and Chart 5.3 presents a breakdown of expenses by the four main sources.

**Departmental Expenses** in 2017–2018 are expected to be \$9,486.5 million. This is an increase of \$386.4 million or 4.2 per cent from the 2016–2017 Budget Estimates and an increase of \$334.8 million or 3.7 per cent from the 2016–2017 forecast.

**Refundable Tax Credits** are projected to be \$125.5 million in 2017–2018, a decrease of \$12.1 million or 8.8 per cent from the 2016–2017 Budget Estimates; a decrease of \$8.0 million or 6.0 per cent, from the 2016–2017 forecast.

**Pension Valuation Adjustment** is estimated to be \$54.1 million in 2017–2018, down \$12.1 million or 18.3 per cent from the 2016–2017 Budget Estimates; up \$24.7 million or 84.0 per cent compared to the 2016–2017 forecast.

**Debt Servicing Costs** are projected to be \$850.2 million for 2017–2018, up \$8.5 million or 1.0 per cent from the 2016–2017 Budget Estimates; up \$19.8 million or 2.4 per cent from the 2016–2017 forecast.

**Table 5.9 2017–2018 Total Expenses**

(\$ thousands)

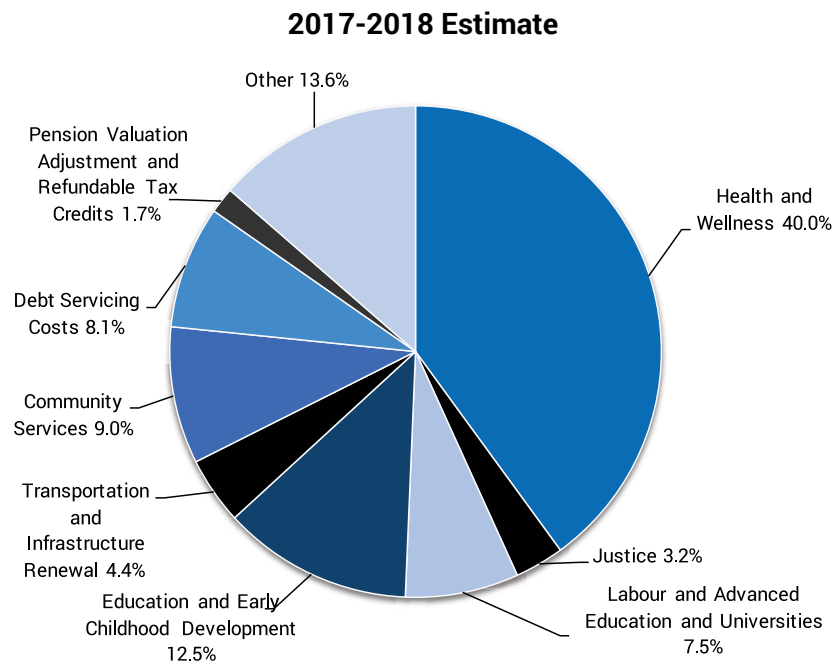
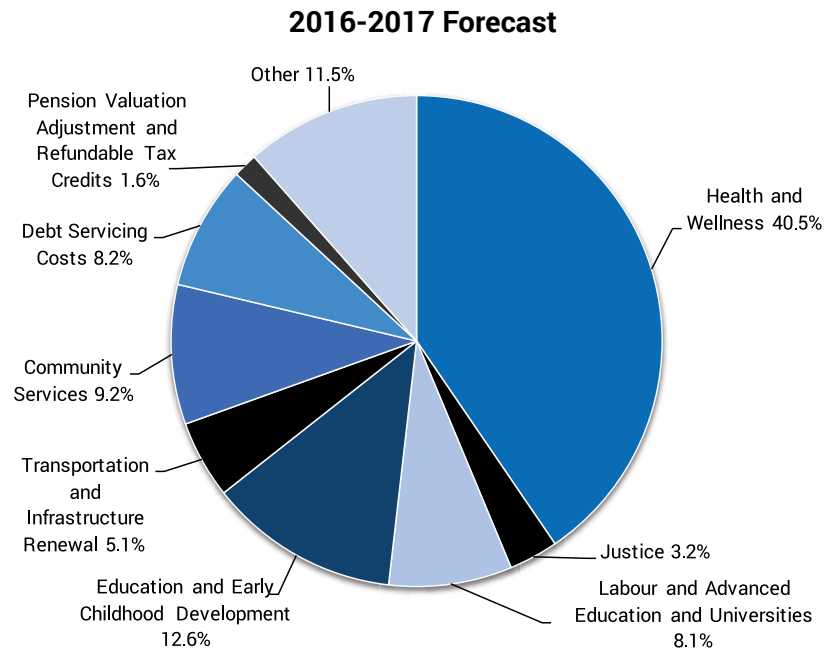
	2013-2014 Actual (as restated)	2014-2015 Actual	2015-2016 Actual	2016-2017 Forecast	2017-2018 Estimate
<b>General Revenue Fund: Expenses</b>					
<b>Departmental Expenses:</b>					
Agriculture	61,679	73,116	60,929	64,117	61,768
Business	---	---	113,731	137,675	191,451
Communities, Culture and Heritage	58,110	57,840	64,236	97,925	84,295
Community Services	889,692	919,978	922,341	933,002	949,621
Economic and Rural Development and Tourism	133,490	163,545	---	---	---
Education and Early Childhood Development	1,169,032	1,222,394	1,241,209	1,274,305	1,316,715
Energy	30,336	31,712	29,962	36,997	29,004
Environment	24,585	25,894	24,801	36,575	37,239
Finance and Treasury Board	12,996	12,656	12,586	20,398	23,100
Fisheries and Aquaculture	9,015	9,411	9,871	12,294	12,660
Health and Wellness	3,938,544	4,076,944	4,106,403	4,105,447	4,207,969
Internal Services	124,607	154,448	215,145	186,058	189,091
Justice	305,862	322,156	327,414	328,946	340,355
Labour and Advanced Education	359,465	346,724	358,158	385,043	376,151
Assistance to Universities	336,749	370,721	374,715	437,926	408,803
Municipal Affairs	180,729	150,523	158,800	197,734	332,423
Natural Resources	84,831	88,468	82,979	79,287	77,178
Public Service	224,416	226,887	191,878	199,241	206,208
Seniors	1,813	1,431	1,493	1,586	2,301
Transportation and Infrastructure Renewal	395,273	421,946	433,717	520,429	465,774
Restructuring Costs	148,721	138,683	98,639	96,651	174,366
<b>Total - Departmental Expenses</b>	<b>8,489,945</b>	<b>8,815,477</b>	<b>8,829,007</b>	<b>9,151,636</b>	<b>9,486,472</b>
<b>Other Expenses</b>					
Refundable Tax Credits	101,983	133,980	120,644	133,495	125,472
Pension Valuation Adjustment	388,160	78,370	137,274	29,410	54,115
Debt Servicing Costs	857,317	874,053	854,721	830,441	850,214
<b>Total Expenses</b>	<b>9,837,405</b>	<b>9,901,880</b>	<b>9,941,646</b>	<b>10,144,982</b>	<b>10,516,273</b>

**Table 5.10 2017–2018 Total Expenses**  
(as a percentage of Total Expenses)

	2013-2014 Actual (as restated)	2014-2015 Actual	2015-2016 Actual	2016-2017 Forecast	2017-2018 Estimate
<b>General Revenue Fund: Expenses</b>					
<b>Departmental Expenses:</b>					
Agriculture	0.6%	0.7%	0.6%	0.6%	0.6%
Business	0.0%	0.0%	1.1%	1.4%	1.8%
Communities, Culture and Heritage	0.6%	0.6%	0.6%	1.0%	0.8%
Community Services	9.0%	9.3%	9.3%	9.2%	9.0%
Economic and Rural Development and Tourism	1.4%	1.7%	0.0%	0.0%	0.0%
Education and Early Childhood Development	11.9%	12.3%	12.5%	12.6%	12.5%
Energy	0.3%	0.3%	0.3%	0.4%	0.3%
Environment	0.2%	0.3%	0.2%	0.4%	0.4%
Finance and Treasury Board	0.1%	0.1%	0.1%	0.2%	0.2%
Fisheries and Aquaculture	0.1%	0.1%	0.1%	0.1%	0.1%
Health and Wellness	40.0%	41.2%	41.3%	40.5%	40.0%
Internal Services	1.3%	1.6%	2.2%	1.8%	1.8%
Justice	3.1%	3.3%	3.3%	3.2%	3.2%
Labour and Advanced Education	3.7%	3.5%	3.6%	3.8%	3.6%
Assistance to Universities	3.4%	3.7%	3.8%	4.3%	3.9%
Municipal Affairs	1.8%	1.5%	1.6%	1.9%	3.2%
Natural Resources	0.9%	0.9%	0.8%	0.8%	0.7%
Public Service	2.3%	2.3%	1.9%	2.0%	2.0%
Seniors	0.0%	0.0%	0.0%	0.0%	0.0%
Transportation and Infrastructure Renewal	4.0%	4.3%	4.4%	5.1%	4.4%
Restructuring Costs	1.5%	1.4%	1.0%	1.0%	1.7%
<b>Total - Departmental Expenses</b>	<b>86.3%</b>	<b>89.0%</b>	<b>88.8%</b>	<b>90.2%</b>	<b>90.2%</b>
<b>Other Expenses</b>					
Refundable Tax Credits	1.0%	1.4%	1.2%	1.3%	1.2%
Pension Valuation Adjustment	3.9%	0.8%	1.4%	0.3%	0.5%
Debt Servicing Costs	8.7%	8.8%	8.6%	8.2%	8.1%
<b>Total Expenses</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>



Chart 5.3 Total Expenses 2016-2017 Forecast and 2017-2018 Budget



## 6. Borrowing and Debt Management

The Department of Finance and Treasury Board serves as the treasury function for most of the government entity, including managing daily banking functions (bank transfers, short-term investing and borrowing, and banking relationships) and short-term investments of special funds (sinking funds, and miscellaneous trust funds).

**Financial Market Debt:** The Department of Finance and Treasury Board is responsible for managing Nova Scotia's gross financial market debt portfolio, which is estimated to have stood at \$16.1 billion as of March 31, 2017. Against this gross financial market debt are financial assets held in mandatory sinking fund (\$1,837.4 million) and liquidity (\$878.2 million) sinking funds plus holdings of Nova Scotia Municipal Finance Corporation debt (\$789.3 million) plus advances to date to Halifax Bridges (\$125.1 million). These assets total \$3.6 billion and are subtracted from gross financial market debt to result in a net financial market debt of \$12.5 billion. The management of this net financial market debt position consists of executing the borrowing program, investing sinking funds and the Public Debt Management Fund (PDMF), and where cost-effective to do so, executing derivative transactions.

The government's budgetary policy sets the context for treasury management operations. The province's annual fiscal plan sets the context for debt management. This budget shows that the government intends to post a budgetary surplus of \$136.2 million in 2017–2018 followed by further surpluses throughout the fiscal plan years.

The management of the debt portfolio and borrowing program must consider the external financial and economic environment. Entering 2017–2018, global financial markets are expected to be challenging for the Province of Nova Scotia even though the province has a very small borrowing program for the upcoming year. While there appears to be a strengthening of the American and global economies, there remains the prospect of international trade protectionism, political uncertainty, and China's internal debt problems.

**Net Financial Market Debt:** The Budget Estimates and Public Accounts are presented on a full accrual basis. In contrast, Treasury Management is the cash side of government operations, and in this context, the borrowing requirements are a cash flow measure, representing actual cash transactions related to the current, past, and future budgetary transactions, as well as the cash flow implications of non-budgetary transactions, such as capital advances to governmental units, differences in cash versus accrual revenues in the Budget, and net acquisition of tangible capital assets.

In 2016–2017, the province had a \$280 million decrease in net financial market debt outstanding in financial markets due to the budgetary surplus, a net repayment of capital advances by Crown corporations, and many other non-cash items. The province estimates that net financial market debt in financial markets will increase by about \$35 million in 2017–2018.

Nova Scotia's ratio of net debt to nominal gross domestic product at market prices is estimated to have stood at 36.6 per cent at March 31, 2017, down from 37.5 per cent a year earlier.

## Nova Scotia Credit Ratings

Nova Scotia maintains a policy of full disclosure and transparency with financial market participants.

Nova Scotia actively communicates its economic and fiscal position both to investors and to bond-rating agencies. The improved fiscal outlook has been recognized by credit rating agencies. Nova Scotia has generally posted budgetary surpluses since the early 2000s, interrupted with modest budgetary deficits in 2009–2010 and the years 2011–2012 to 2015–2016. In 2016–2017 all three rating agencies confirmed the province's credit rating with a stable outlook. The following table shows current provincial credit ratings. Note that (neg) refers to a negative outlook, indicating the rating agency may change the respective province's credit rating downward over the next year or so. Similarly, (pos) refers to a positive outlook, indicating the rating agency may change the rating upwards over the next year or so.

**Table 6.1 Canadian Provincial Credit Ratings**

	<b>DBRS</b>	<b>S&amp;P</b>	<b>Moody's</b>
British Columbia	AA(high)	AAA	Aaa
Alberta	AA(high)	AA (neg)	Aa1(neg)
Saskatchewan	AA	AA+(neg)	Aaa
Manitoba	A(high)	AA-(neg)	Aa2
Ontario	AA(low)	A+	Aa2
Quebec	A(high)	A+(pos)	Aa2
New Brunswick	A(high)	A+	Aa2
<b>Nova Scotia</b>	A(high)	A+	Aa2
Prince Edward Island	A(low)	A	Aa2
Newfoundland & Labrador	A(low)	A(neg)	Aa3(neg)

Nova Scotia files a Form 18-K Annual Report and other required documents with the Securities and Exchange Commission, which provides information to investors and the general public on the economic, fiscal, and debt situation of the province. The most recent submission can be viewed on the Department of Finance and Treasury Board's website.

## Structure of the Debt Portfolio

The structure of the debt portfolio has been evolving over the past number of years with the intent of locking in historically low interest rates, protecting the province's fiscal situation from unanticipated increases in interest rates, and managing the province's refinancing requirements for the long term.

The following five profiles are provided to describe the overall structure and risk profile of the province's debt portfolio: (1) primary issuance market activities, (2) the debt maturity schedule, (3) foreign currency exposure, (4) interest rate mix, and (5) derivative counterparty exposure.

### 1. Primary Issuance Market Activities

The Province of Nova Scotia expects to post a budgetary surplus of \$136 million in 2017–2018. The Department of Finance and Treasury Board continues to borrow monies each year in capital markets primarily to refinance existing debt, but also to fund the acquisition of net tangible capital assets, for on-lending to Crown corporations, and for other non-budgetary purposes.

The management of the debt maturities and timing of new debt issuance are optimized using discretionary sinking fund reserves held by the province. As noted below, these discretionary funds represent an integral component of the Treasury Management strategy of the province as their drawdown or replenishment can significantly alter the timing of debt issuance year to year.

**Borrowing:** In the fiscal year 2016–2017, the province borrowed \$750 million compared to term debt borrowing requirements of \$810 million estimated in the Budget. The Department of Finance and Treasury Board issued \$650 million in a new 10-year public domestic issue with a coupon rate of 2.10%, maturing on June 1, 2027, and \$100 million in a three-year Canadian Overnight Repo Rate Average (CORRA) floating interest rate note. The province did not pre-borrow for the 2017–2018 fiscal year.

**Long-term Debt:** The Debt Management Committee, an advisory committee to the Minister of Finance and Treasury Board, has had a policy guideline over the past number of years to increase the portion of long-term debt in the gross debt portfolio. The ongoing goal is to structure the maturity profile to withstand adverse changes in economic and fiscal circumstances. At present, the province continues to have about 50 per cent of Net Financial Market Debt in issues longer than 15 years.

Certain Crown agencies of the Province of Nova Scotia invest monies with the provincial General Revenue Fund on a short- and long-term basis. This activity is an efficient use of funds that provides both security and market returns to Crown

agencies while providing the General Revenue Fund with funding at market cost of funds.

At March 31, 2017, Nova Scotia Business Inc., Resource Recovery Fund Board, and Nova Scotia Crop and Livestock Insurance Commission invested a total of \$28.1 million with the General Revenue Fund, and the Halifax-Dartmouth Bridge Commission invested a total of \$34.9 million in Province of Nova Scotia promissory notes.

There were also entities that are not part of the Consolidated Entity that invested with the General Revenue Fund. Those entities are the Nova Scotia Research and Innovation Trust, Nova Scotia Nominee Program, and Nova Scotia Crown Land Legacy Trust, having invested a total of \$30.7 million.

**2016–2017 Annual Borrowing:** Projected term debt borrowing requirements for fiscal year 2017–2018 are expected to be \$620 million. The Department of Finance and Treasury Board does not anticipate drawing down discretionary sinking funds in 2017–2018, but draws attention to the fact that these funds total \$878.2 million.

Table 6.2 also shows the projected borrowing program for 2018–2019 to 2020–2021. The borrowing program starts with the provincial budgetary deficit that increases requirements or a surplus that reduces requirements. There are numerous cash versus accrual adjustments (non-budgetary items) that need to be made to determine the actual cash requirements of the General Revenue Fund. Each year there are requirements for the excess of capital expenditure over capital amortization, referred to as the net acquisition of tangible capital assets; those requirements in 2017–2018 are \$236.6 million. However, the cash requirements arising from the net acquisition of tangible capital assets is expected to be only \$118.7 million as the remainder is the value of capital lease for the Convention Centre. The remaining non-budgetary adjustments are primarily related to non-cash interest charges on unfunded pension liabilities and post-employment benefits, and the non-cash expense of the Pension Valuation Adjustment.

**Table 6.2 Projected Borrowing Requirements**  
(\$ millions)

	2016-2017 Estimate	2016-2017 Forecast	2017-2018 Estimate	2018-2019 Estimate	2019-2020 Estimate	2020-2021 Estimate
Budgetary (surplus)/deficit	(127.4)	(40.8)	(136.2)	(35.6)	(46.6)	(60.8)
Net Capital Advances	66.6	(10.2)	41.7	30.0	30.0	30.0
NS MFC Net Advances	(105.1)	(20.6)	(104.5)	(97.9)	(90.0)	(88.1)
HDBC Net Advances	87.0	56.5	34.9	-	-	-
Tangible Capital Assets: Net Cash	202.9	6.6	236.6	146.4	136.2	277.3
Other Non-Budgetary Transactions	(227.1)	(238.2)	(37.3)	91.1	74.0	(182.6)
<b>Cash Operating Requirements</b>	<b>(103.1)</b>	<b>(246.8)</b>	<b>35.3</b>	<b>134.0</b>	<b>103.5</b>	<b>(24.2)</b>
<b>Cash Debt Retirement</b>	<b>994.8</b>	<b>997.2</b>	<b>459.7</b>	<b>1,259.1</b>	<b>2,070.8</b>	<b>1,078.8</b>
Mandatory Sinking Fund Income	81.8	82.2	84.4	86.1	75.3	57.2
Mandatory Sinking Fund Contributions	26.3	26.3	26.3	24.0	17.9	17.9
Mandatory Sinking Fund Withdrawals	-	-	-	(198.0)	(855.4)	-
<b>Net Mandatory Sinking Fund Requirements</b>	<b>108.1</b>	<b>108.5</b>	<b>110.7</b>	<b>(87.9)</b>	<b>(762.2)</b>	<b>75.1</b>
Discretionary Fund Income	9.9	11.4	14.4	17.5	21.0	22.9
Discretionary Fund Contributions	-	-	-	-	-	-
Discretionary Fund Withdrawals	-	-	-	-	-	-
<b>Net Discretionary Fund Requirements</b>	<b>9.9</b>	<b>11.4</b>	<b>14.4</b>	<b>17.5</b>	<b>21.0</b>	<b>22.9</b>
Total Requirements:	1,009.6	870.4	620.1	1,322.7	1,433.1	1,152.6
Short-Term Borrowing (inc) / dec:	(200.0)	(120.4)	-	-	-	-
<b>Total Term Debt Requirements:</b>	<b>809.6</b>	<b>750.0</b>	<b>620.1</b>	<b>1,322.7</b>	<b>1,433.1</b>	<b>1,152.6</b>

**Borrowing Program:** The province, through its access to capital markets, can raise financing in an efficient and cost-effective manner; as such the province, through its annual borrowing program, secures wholesale funding on behalf of its Crown entities for their diverse on-lending requirements.

Historically, Crown entities have utilized approximately 10 per cent to 25 per cent of the province's annual borrowing program. Net capital advances to Crown entities for 2016–2017 are forecasted at negative \$10.2 million, down from the Budget estimate of \$67 million.

For fiscal year 2017–2018, net capital advances are estimated to be \$41.7 million. Some of the more notable Crown corporations that finance their on-going lending operations through the province's annual borrowing program are Nova Scotia Business Incorporated, Innovacorp, Invest Nova Scotia, Nova Scotia Farm Loan Board, Nova Scotia Fisheries and Aquaculture Loan Board, and the Nova Scotia Municipal Finance Corporation.

The Halifax-Dartmouth Bridge Commission, a provincial Crown corporation, received government authority to borrow up to \$200 million from the Department of Finance and Treasury Board for the re-decking of the Angus L. Macdonald Bridge, with work started in early 2015. In 2015–2016, the Department of Finance and Treasury Board raised funds by debenture issuance in Canadian capital markets to lock-in interest rates and provided a \$160 million loan to the Halifax-Dartmouth Bridge Commission. The Halifax-Dartmouth Bridge Commission has invested the excess funds from the loan with the General Revenue Fund, with the fund being drawn down by the Halifax-Dartmouth Bridge Commission as required to finance re-decking expenses as they come due. At March 31, 2017, the Halifax-Dartmouth Bridge Commission had \$34.9 million remaining to draw on this loan.

The province did access the domestic public markets for funding in fiscal year 2016–2017 to establish a new 10-year benchmark issue and roll-over of \$100 million in CORRA float rate notes (FRN). The province continues to maintain access to a diversity of borrowing sources, both domestically and in foreign markets. This access is a key factor in achieving lower financing costs and maintaining a broad demand for Nova Scotia debt issues.

The province maintains documentation with the Securities and Exchange Commission in the United States to provide access to the US and global bond markets. Although Nova Scotia maintains documentation to borrow in foreign markets, the domestic Canadian debt market is expected to be the primary source of funding for the province's borrowing program in 2017–2018. The province attempts to maintain a presence in the domestic public debt markets with liquid benchmark issues. The domestic Medium Term Note (MTN) program is maintained to add flexibility to the domestic borrowing programs.

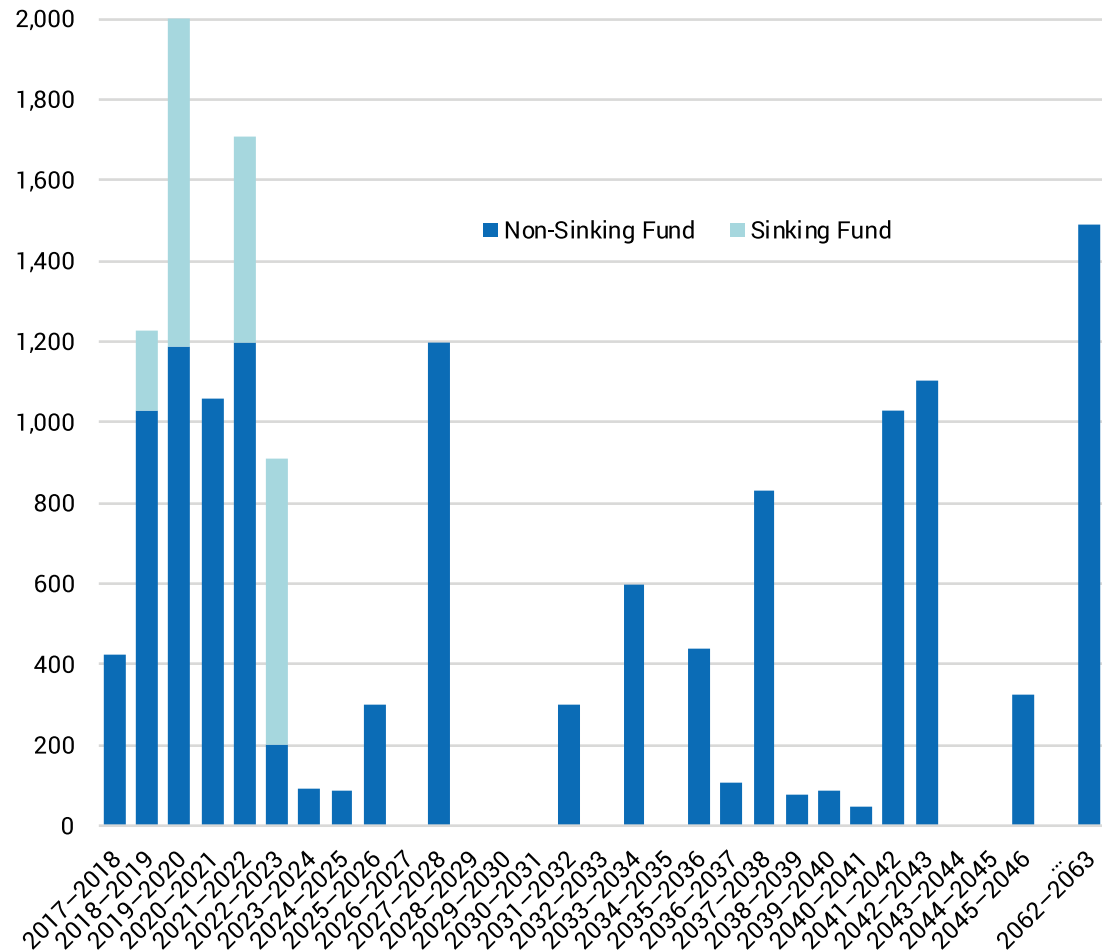
## 2. Debt Maturity Schedule

The Province of Nova Scotia's gross financial market debt at March 31, 2017, consisted of Canadian fixed-coupon marketable debentures, floating interest rate marketable debentures, foreign currency denominated fixed-coupon marketable debentures (all of these issues are hedged to Canadian dollars), Canada Pension Plan non-marketable debentures, capital leases (\$132.7 million) on public-private-partnership schools and a correctional facility, and short-term promissory notes. Chart 6.1, titled General Revenue Fund Debt Portfolio: Debenture Debt Maturity Schedule, displays the maturity profile of the province's debenture debt portfolio (\$15.5 billion). The province's debenture portfolio is shown for those debt issues that have no mandatory sinking fund provisions (\$13.2 billion), and the eight remaining debentures issues that have a mandatory sinking fund contribution by way of bond covenant (\$2.3 billion). The province has no debt issues outstanding with put options.



**Chart 6.1 General Revenue Fund Debt Portfolio**

Debenture Debt Maturity Schedule (\$ millions)



As of March 31, 2017, the average term to maturity of the gross debenture portfolio was 13.8 years, down from 14.2 one year ago. The average term to maturity has been falling in recent years after completion of the long-term debt issuance strategy and the passage of time.

The Province of Nova Scotia has accumulated and actively manages a large offsetting asset position in discretionary sinking funds. These funds, now totaling \$878.2 million, are available to smooth the maturity schedule by reducing the necessity to borrow in financial markets in any given year.

Debt maturities, including principal repayments on capital leases, over the next three years are \$1,259 million in the fiscal year 2018–2019, \$2,071 million in the fiscal year 2019–2020, and \$1,079 million in the fiscal year 2020–2021 (see Table 6.2). Offsetting these debt maturities are mandatory sinking funds of \$198 million in 2018–2019 and \$855 million in 2019–2020. In addition to the rollover of term debt, the borrowing program also includes the principal repayments under capital leases.

There are sizable maturities in US dollars in the fiscal years 2019 to 2023 that, by bond covenant, are fully funded with sinking funds at maturity. The province is required to contribute to the sinking fund of each such issue annually until the full principal value of the bonds is accumulated. As such, the refinancing of these issues is spread over the entire life of each bond, and it is not necessary for the province to refinance these issues in the year of maturity.

### 3. Foreign Currency Exposure

The Canadian dollar payable debt has represented 100 per cent of the debt portfolio since late 2007. By way of background, the province historically carried large foreign currency exposures, and peaked at over 70 per cent in the mid-1990s. While the province has no foreign currency exposure, Section 44 of the Finance Act continues to limit this exposure, stating: “Unless the foreign currency exposure of the public debt is less than twenty per cent, no further transactions that increase foreign currency exposure may be executed. No borrowing in a foreign currency may be executed that cause the foreign currency exposure of the public debt to exceed twenty per cent.”

### 4. Interest Rate Mix

The debt portfolio’s net exposure to floating interest rates increased marginally over the past year, and ended the year at 8.5 per cent on March 31, 2017. The province includes fixed interest rate term debt and fixed income assets maturing in less than one year in its measure of floating interest rate debt to more accurately reflect exposure to resetting interest rates. In the past the province has been able to exercise tight control of this variable in the portfolio by maintaining access to capital markets and through its extensive derivative capabilities.

The current level of floating interest rate debt is at the mid-point of the province’s floating interest rate exposure policy, and the Department of Finance and Treasury Board intends to maintain that level of floating interest rate debt in 2017–2018.

## 5. Derivative Counterparty Exposure

Derivative is a broadly used term for any financial contract where future cash flows (and thus its value) are derived from a specific underlying reference point or benchmark, for example, interest rate, foreign currency rate, financial asset, index, forward, future, or any other agreed upon reference point. Derivatives allow the Province of Nova Scotia to identify and synthetically isolate and manage the market risks in financial instruments for the purpose of hedging, risk transfer, arbitraging interest rate differences, and adjusting portfolio risks. Derivative transactions are used when it is viewed to be more effective and can be done at a lower cost than would be possible by a market transaction.

At March 31, 2017, the province's use of derivatives was for two purposes: (1) the hedging of foreign currency debt issues to Canadian dollars, and (2) asset-liability management purposes. The latter derivative transactions are designed to protect the provincial budgetary surplus from changes in interest rates associated with the Department of Finance and Treasury Board's on-lending program to Crown corporations. The province does not use derivatives for speculative purposes.

Currently, the province is party to approximately \$2.9 billion notional face value of derivative transactions with external swap counterparties, down significantly from the peak at March 31, 2011. The decline in swap counterparty exposure is due primarily to the maturity of five foreign currency debt issues and the maturity of other interest rate swaps. The province's current cross currency swap portfolio is approximately \$1.7 billion notional face value, and assuming no further foreign currency denominated debenture issuances, the cross-currency swap portfolio would wind down to zero by July 30, 2022.

The Department of Finance and Treasury Board credit policy states that it executes derivative transactions only with well-rated counterparties. The Liability Management and Treasury Services Division actively manage the credit risks of the derivative portfolio. The Debt Management Committee reviews all counterparty exposure and limits. When the counterparty has a split credit rating, the province considers the most conservative among the ratings.

## Structure of Debt Management and Sinking Funds

**Gross and Net Financial Market Debt:** The province makes sinking fund instalments on the remaining eight debentures that contain sinking fund bond covenants. The last of those debentures matures on July 30, 2022. On these sinking fund issues, annual sinking fund installments are required to be either the minimum of 0.75 per cent or 1 per cent of the par value of each original issue, or in the case where the existing sinking fund plus interest and reinvested interest to be earned thereon, together with the sinking fund contribution to be paid into the sinking fund and reinvested interest to be earned thereon, would be in excess of the principal amount of the debenture outstanding at maturity, the amount to be paid by the province on such payment date may be reduced by the amount of such excess.

The contribution rates on the remaining eight sinking fund debentures ranges from zero to 1.9 per cent of the par value, with these rates being based on actual cash flows on the existing sinking fund assets and the anticipated rates of return on expected future cash flows of sinking fund assets. These figures are recalculated annually based on actual and expected investment returns. Sinking fund payments relating to debentures payable in US dollars were adjusted each year to reflect exchange rate movements from the date of issuance of the debentures to the date of being hedged to Canadian dollars. Sinking funds required by bond covenant are treated as restricted assets and are used solely for the retirement of specific debt issues.

At March 31, 2017, the estimated book value of the sinking and liquidity funds was \$2,715.6 million, of which \$1,837.4 million were held in mandatory sinking funds established by way of bond covenant, and \$878.2 million in the discretionary liquidity funds that were held for policy purposes. The policy objectives of the discretionary funds are to manage interest rates, manage short-term liquidity, and assist in the refunding of maturing debt, while at the same time providing an appropriate level of investment return to the General Revenue Fund.

The assets of the sinking and liquidity funds are invested in high-quality investments. Those investment guidelines are subject to approval by the Debt Management Committee. All assets were invested either in federal or provincial debt obligations. Corporate bonds with a credit rating of at least "AA-" may be held in the sinking funds, but at March 31, 2017, there were no corporate bond holdings. The PDMF also holds \$15.55 million of debt of the Halifax-Dartmouth Bridge Commission. The PDMF is typically invested in Government of Canada and provincial bonds. At March 31, 2017, cash and equivalents in the sinking funds were negligible.

The Nova Scotia Municipal Finance Corporation (NSMFC), a provincial Crown corporation, acts as a central borrowing agency for municipalities and municipal enterprises in Nova Scotia. Under the incorporating legislation, municipalities and

municipal enterprises are required to raise their long-term capital requirements through the NSMFC except for borrowings from the federal government, the province, another municipality, or their agencies. The NSMFC issues serial debentures to fund these cash requirements; the NSMFC has the legislative authority and ability to issue such securities through capital markets with the assistance of a provincial guarantee. There has never been a default by the NSMFC on any of its obligations.

In recent years, the province, although having no obligation to do so, has purchased all NSMFC debenture issues in their entirety and at March 31, 2017, held a portfolio of \$789.3 million NSMFC debentures in the General Revenue Fund, down from \$810 million from a year earlier. The NSMFC asset portfolio held by the Province, along with sinking and liquidity funds, are netted against the gross financial market debt of the province to arrive at net financial market debt (Table 6.3). Much the same as the NSMFC asset portfolio, the financial market debt issued by the province under its own name to fund the re-decking of the Angus L. Macdonald Bridge would be netted against the loan provided to the Halifax-Dartmouth Bridge Commission.

**Table 6.3 Projected Gross and Net Financial Market Debt**

(\$ millions)

	2016-2017 Estimate	2016-2017 Forecast	2017-2018 Estimate	2018-2019 Estimate	2019-2020 Estimate	2020-2021 Estimate
<b>Gross Debt:</b>						
Opening Balance	16,240.7	16,212.7	16,088.3	16,179.0	16,144.8	15,417.0
Borrowing Program	809.6	750.0	620.1	1,322.7	1,433.1	1,152.6
Debt Retirement	(994.8)	(994.8)	(459.7)	(1,259.1)	(2,070.8)	(1,078.8)
Change in other unfunded debt	181.9	120.4	(69.6)	(97.9)	(90.0)	(88.1)
<b>Closing Balance</b>	<b>16,237.4</b>	<b>16,088.3</b>	<b>16,179.0</b>	<b>16,144.8</b>	<b>15,417.0</b>	<b>15,402.7</b>
<b>Mandatory Sinking Funds:</b>						
Opening Balance	1,730.2	1,728.9	1,837.4	1,948.1	1,860.2	1,098.0
Installments	26.3	26.3	26.3	24.0	17.9	17.9
Earnings	81.8	82.2	84.4	86.1	75.3	57.2
Sinking Fund withdrawals	-	-	-	(198.0)	(855.4)	-
<b>Closing Balance</b>	<b>1,838.3</b>	<b>1,837.4</b>	<b>1,948.1</b>	<b>1,860.2</b>	<b>1,098.0</b>	<b>1,173.1</b>
<b>Discretionary Funds:</b>						
Opening Balance	867.3	866.8	878.2	892.6	910.1	931.0
Installments	-	-	-	-	-	-
Earnings	9.9	11.4	14.4	17.5	21.0	22.9
Fund Withdrawals	-	-	-	-	-	-
<b>Closing Balance</b>	<b>877.2</b>	<b>878.2</b>	<b>892.6</b>	<b>910.1</b>	<b>931.0</b>	<b>953.9</b>
<b>NSMFC / HDHC Assets:</b>						
Opening Balance	878.7	878.7	914.5	844.9	747.1	657.0
Repayments	(105.1)	(105.1)	(104.5)	(97.9)	(90.0)	(88.1)
Advances to MFC	-	84.5	-	-	-	-
Advances to HDHC	87.0	56.5	34.9	-	-	-
<b>Closing Balance</b>	<b>860.5</b>	<b>914.5</b>	<b>844.9</b>	<b>747.1</b>	<b>657.0</b>	<b>569.0</b>
<b>Net Financial Market Debt</b>	<b>12,661.4</b>	<b>12,458.1</b>	<b>12,493.4</b>	<b>12,627.4</b>	<b>12,730.9</b>	<b>12,706.8</b>

**Net Debt:** Net debt is made up of Total Liabilities less Financial Assets and the actual year-end results are reported in the Consolidated Financial Statements of the province. Surpluses reduce the net debt of the province while deficits and net capital spending increase the net debt. Net debt is a key measure of the province’s financial position and the Net Debt to Gross domestic product ratio is the most widely recognized measure of government financial sustainability. Table 6.4 presents the projected net debt over the fiscal plan.

**Table 6.4 Projected Net Debt**  
(\$ millions)

	2016-2017 Estimate	2016-2017 Forecast	2017-2018 Estimate	2018-2019 Estimate	2019-2020 Estimate	2020-2021 Estimate
<b>Net Debt - Opening Balance</b>	15,113.7	15,094.9	15,060.7	15,161.1	15,271.9	15,361.4
Add (Deduct):						
Provincial Deficit (Surplus)	(127.4)	(40.8)	(136.2)	(35.6)	(46.6)	(60.8)
Increase in the Net Book Value of Tangible Capital Assets	203.0	6.6	236.6	146.4	136.2	277.3
<b>Change in Net Debt</b>	75.6	(34.2)	100.4	110.8	89.5	216.4
<b>Net Debt - Closing Balance</b>	15,189.3	15,060.7	15,161.1	15,271.9	15,361.4	15,577.9

## Debt-Servicing Costs

Gross debt-servicing costs comprise the following items: (1) interest on existing long-term debenture and capital lease debt and the estimated interest cost of incremental borrowing; (2) general interest that provides for bank charges, bond issue expense, amortization of debenture discounts/premiums, and short-term interest costs; and (3) the accrual of interest of the province’s unfunded pension and post-retirement benefit obligations.

In 2017–2018, the province will incur \$123.2 million in debt-servicing costs related to the accrual of interest on pension, retirement, and other obligations. The province accounts for its pension obligations and related expenses on an accrual basis in accordance with Public Sector Accounting Board (PSAB) Section 3250. In accordance with this section, the province uses a smoothed market value to value the plan assets of the pension plans and determine the expected return on plan assets.

Asset smoothing involves using market-related values instead of market values to calculate the expected return on pension plan assets. Using market-related values entails recognizing changes in the actual fair value of the plan assets in a rational and

systematic manner over a period of five years. This approach impacts the pension expense in terms of the net debt-servicing costs and the amortization of actuarial gains and losses of the plan. Given the long-term nature of pension and pension accounting, this is a more fiscally responsible approach and alleviates the effects of significant market fluctuations, both positive and negative, and helps maintain stability and predictably in the budget process.

As noted above, the province has established mandatory sinking funds on some debt issues and maintains liquidity funds for liability management purposes. The interest on those sinking funds is often netted against gross debt-servicing costs to arrive at net debt-servicing costs.

In addition, gross debt-servicing costs also supports the General Revenue Fund's on-lending activities to Crown corporation. That is, the General Revenue Fund incurs interest charges on long-term debt obligations that have been borrowed on behalf of Crown corporations such as the Nova Scotia Municipal Finance Corporation and Farm Loan Board. The General Revenue Fund earns interest on those monies lent to Crown corporations and other investments in amounts of \$76.6 million in the 2016–2017 forecast, and \$79.0 million in the 2017–2018 Budget Estimate. Unlike the earnings on sinking and liquidity fund assets, the income from the on-lending activity is not typically shown as netted against debt-servicing costs. To achieve a true picture of the actual interest cost on long-term indebtedness, these amounts should be subtracted from gross debt-servicing costs (Table 6.5).

**Table 6.5 Projected Debt Servicing Costs**

(\$ millions)

	2016-2017 Estimate	2016-2017 Forecast	2017-2018 Estimate	2018-2019 Estimate	2019-2020 Estimate	2020-2021 Estimate
Interest on Long-term Debt	707.8	695.0	714.0	735.1	705.1	644.4
General Interest	9.7	8.8	13.0	14.8	16.0	15.1
Interest on Pension, Retirement and other obligations	124.2	126.6	123.2	122.7	124.0	126.6
<b>Gross Debt Servicing Costs</b>	<b>841.7</b>	<b>830.4</b>	<b>850.2</b>	<b>872.6</b>	<b>845.1</b>	<b>786.2</b>
Less: Sinking Fund Earnings	(91.7)	(93.6)	(99.1)	(103.8)	(96.6)	(78.8)
<b>Net Debt Servicing Costs</b>	<b>750.1</b>	<b>736.8</b>	<b>751.1</b>	<b>768.8</b>	<b>748.5</b>	<b>707.4</b>

## Debt-Servicing Costs: Assumptions and Sensitivity Analysis

Actual debt-servicing costs will vary from estimated amounts due to the dependence of debt-servicing costs on certain financial market variables and changes in the amount borrowed.

With the elimination of the province's foreign currency exposure, the main factor in debt-servicing cost sensitivity is the overall level of Canadian short-term interest rates during the fiscal year. Sensitivity to this variable (how much debt-servicing costs would change if a variable changed from the assumed level for a full year) is \$15 million if Canada Treasury Bills were a full percentage point higher relative to the assumed level.

## Risk Management

The Debt Management Committee, an advisory committee to the Minister of Finance and Treasury Board, carries out the governance and oversight function for the debt management of the Province of Nova Scotia. The committee ensures that the province's treasury management is based on sound financial principles and is conducted in a prudent manner, balancing the costs and risks within acceptable control standards. The committee has responsibilities for the following key governance roles: strategic planning, risk management, internal control, and communications. These functions ensure that the governance and oversight roles of treasury management operations are independent of operational staff.





## 7. Economic Outlook 2017 and 2018

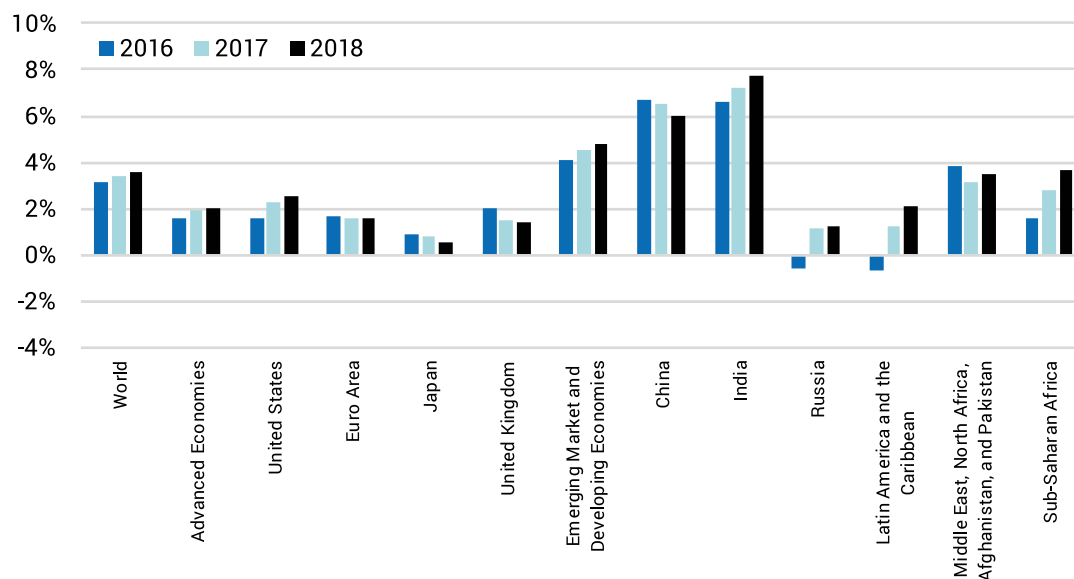
The province relies on economic forecasts and statistical relationships with historical administrative data to estimate tax revenues prior to receiving results of actual tax revenues collected. This forward-looking outlook and the economic assumptions used in the forecast are presented here.

### External Economic Environment

**Global Economy:** Global economic growth was modest in 2016, continuing a trend that started after the global financial crisis. Advanced economies generally slowed compared to 2015 with weakness in the first half of the year. The International Monetary Fund (IMF) expects that emerging market and developing economies growth will be at a similar pace in 2016 as in 2015. The IMF projects global output to move from 3.1 per cent in 2016 to 3.4 per cent in 2017 and 3.6 per cent in 2018 (Chart 7.1).

**Chart 7.1 IMF World Outlook: accelerating growth for US and emerging markets**

Real GDP growth



Source: International Monetary Fund, World Economic Outlook January 2017

The IMF estimates that the Euro Area (EA) economy slowed to 1.7 per cent growth in 2016; it expects this pace to continue for the next two years. European employment gains could support a turnaround, helping to lift consumption and confidence indicators. Financial conditions in the EA remain accommodative while inflation has climbed back towards 1.0 per cent as energy prices stabilize. Monetary policy was unchanged in 2016 as the output gap persisted amid soft underlying inflation.

The United Kingdom's vote to leave the European Union (EU) did not have an immediate impact on its growth in 2016, though uncertainty about Brexit clouds the coming years. The Bank of England cut its Bank Rate and expanded asset purchases following the referendum to leave the EU. A weaker pound is expected to raise inflation and be a drag on household disposable income. The nature of future trade arrangements with the EU will be key to the UK economic outlook.

Japan's economy continues to face structural and demographic issues that weigh on potential growth. Monetary policy was eased in 2016, including the movement to negative interest rates as the Bank of Japan continues to fight deflation. Japanese government spending is expected to continue to support growth but private consumption growth was flat for most of 2016. Faster growth among trading partners and a lower yen could help to lift exports going forward.

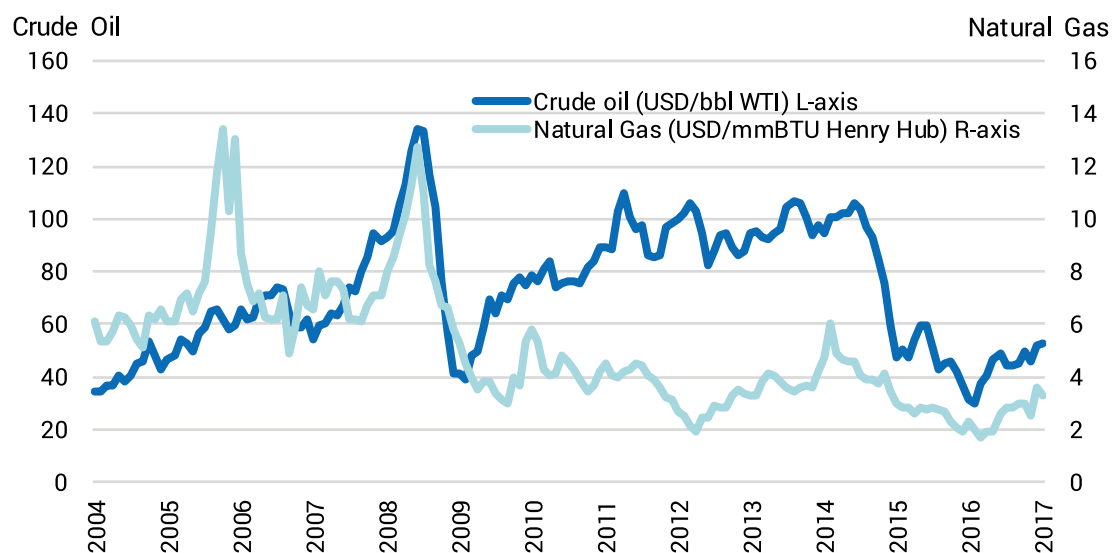
China's economic growth continues to be moderate. The IMF estimates Chinese real Gross Domestic Product (GDP) will grow by 6.7 per cent in 2016 before slowing to 6.5 per cent in 2017 and 6.0 per cent in 2018. The government's objective to shift growth towards domestic consumption and services and away from industrial expansion requires continued support from stimulus measures. Progress on structural reforms as well as reducing excess debt among corporations and state-owned enterprises will be important to Chinese economic growth in coming years. Emerging markets and developing economies outside China are expected to pick up growth in coming years. Russia and Brazil are expected to return to positive growth in 2017, and growth is expected to accelerate in India.

**Commodity Markets:** Oil prices have increased from the lows of early 2016, rising above US\$50 per barrel for West Texas Intermediate (WTI) in the first few months of 2017. The Organization of Petroleum Exporting Countries (OPEC) and other producers agreed to curb production to rebalance the market. The response from non-OPEC producers, particularly US shale, is likely to keep price gains modest in short term with prices projected at US\$53.86/bbl WTI in 2017 and US\$59.10/bbl in 2018.

Natural gas prices moved higher through 2016. Higher US demand over the summer and lower production curbed inventories to below the five-year average by the end of the year. Base metal prices have increased on expectations that a stronger global economy and US infrastructure spending will lift demand.

US homebuilding is expected to continue expanding in 2017 and 2018, strengthening lumber prices. Agriculture and livestock prices were down in 2016 with rising output, but conditions are expected to be more balanced going forward.

**Chart 7.2 Oil and natural gas prices rising, but remain low**



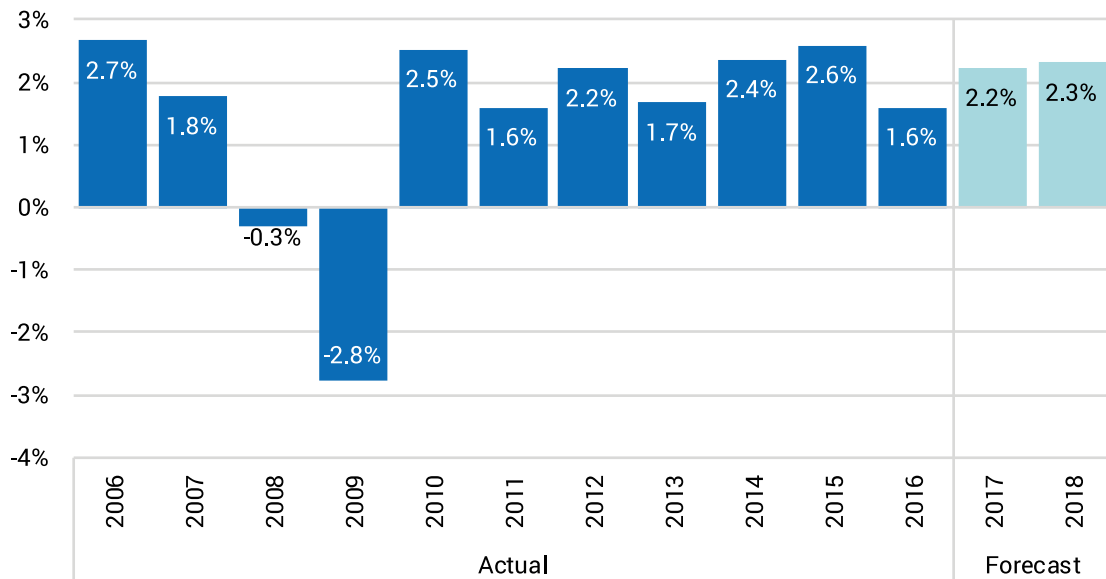
WTI= Crude oil price \$US per barrel, West Texas Intermediate  
 Natural gas price = \$US per million British Thermal Units, Henry Hub  
 Source: US Department of Energy – Energy Information Administration

**United States Economic Performance and Forecast Outlook:** The United States (US) is the largest market for Nova Scotia exports and over 70 per cent of goods are shipped to the US. American financial markets, monetary policy, and government policy have a significant impact on the global economy affecting capital flows, trade relationships, interest rates, and exchange rates.

The US economy slowed in 2016; real GDP grew by 1.6 per cent compared to growth of 2.6 per cent in 2015. Inventory adjustments and lower non-residential investments kept growth subdued for the year (Chart 7.3). Personal consumption expanded 2.7 per cent in real terms during 2016, with improvements in consumer confidence, household balance sheets, and labour markets. Residential investment was up 4.9 per cent as housing starts rose to 1,166 million, the highest level since 2007. The US dollar kept exports to a minimal expansion of 0.4 per cent while imports rose 1.1 per cent. Government consumption and investment were also up, particularly among state and local governments.

**Chart 7.3 US Real GDP growth slows in 2016, accelerates in near term**

Growth in US real GDP, chained \$2009



Source: US Bureau of Economic Analysis; NS Department of Finance and Treasury Board projections

Real GDP in the US is expected to grow by 2.2 per cent in 2017 and 2.3 per cent in 2018 with continued growth in household consumption and residential spending. US fiscal policy could become more expansionary if proposed new infrastructure spending materializes. Business investment is expected to rise on improving confidence and a rebound in the energy sector.

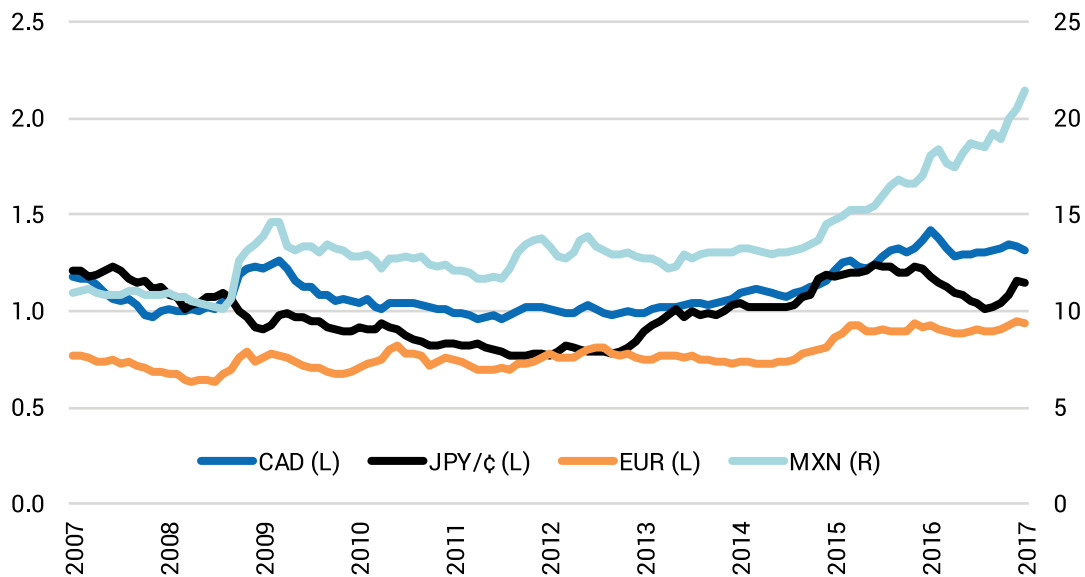
The US Federal Reserve held off moving policy interest rates for most of the year but increased the target range for the federal funds rate by 0.25 percentage points to a range of 0.50 to 0.75 per cent at its 2016 December meeting. The Federal Reserve continues to emphasize that it will take time to normalize rates. Inflation in the United States is approaching 2 per cent as previous energy prices declines are now absent and a stronger dollar limits the impact of import prices.

The US labour market continues to improve and is closer to full employment than it has been for several years. Despite continuing employment gains and a rising employment rate, the proportion of the population in work remains significantly below pre-recession levels. The tighter labour market could attract workers back into the market or help to raise wages.

The strong US dollar is expected to continue its drag on net trade. Although tax measures and amended trade relationships, being considered by the new US administration, may have significant impacts on the US dollar and exporting countries. The economic forecast assumes that the Canadian dollar will remain stable at around 74–75 US cents (Chart 7.4).

**Chart 7.4 US Dollar Appreciation Limits Net Export Growth**

USD per foreign currency



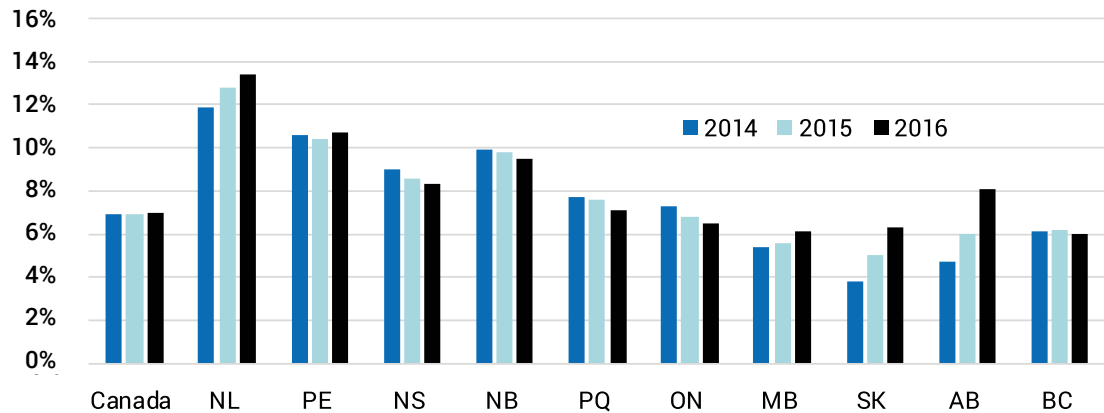
Source: US Federal Reserve. CAD=Canadian dollar, JPY=Japanese Yen, EUR=Euro, MXN =Mexican Peso

**Canadian Economic Performance and Forecast Outlook:** Canadian economic growth has struggled since the middle of 2014 when oil prices began to decline. Slower investment spending in oil and other resource projects caused several quarters of intermittent economic growth, punctuated by recessionary periods. The slowdown of the Canadian economy was concentrated in the oil-producing regions: Alberta, Saskatchewan, and Newfoundland and Labrador.

Through 2016, layoffs in oil-producing regions, improvements in employment in central Canada, and changing demographics in the Maritimes have led to a convergence of unemployment rates across the country (except for Newfoundland and Labrador), as seen in Chart 7.5.

### Chart 7.5 Provincial Unemployment Rates Converging

Annual average

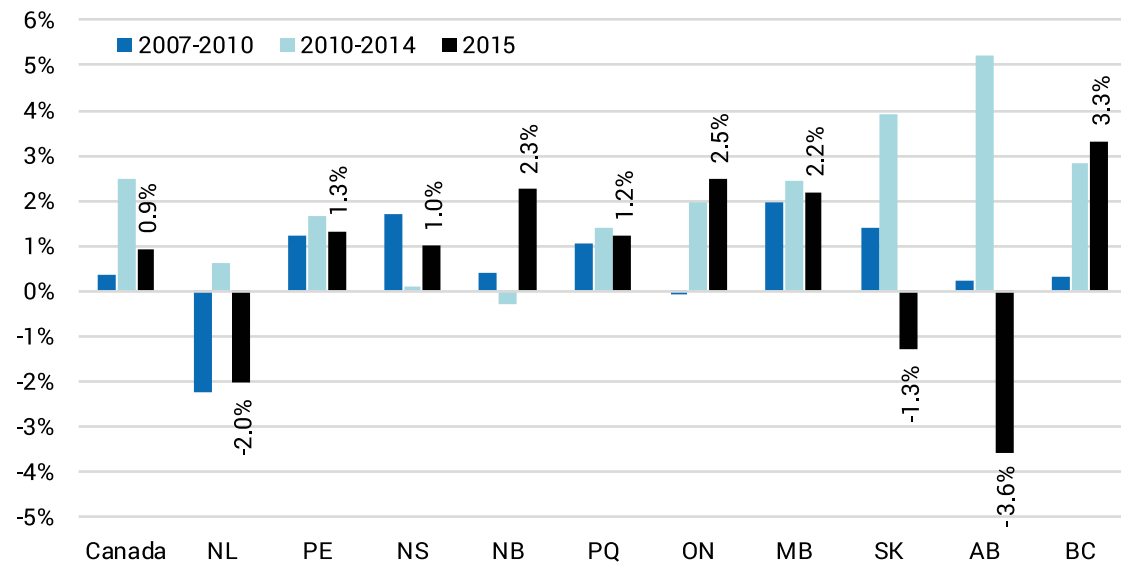


Source: Statistics Canada, CANSIM Table 282-0002

There has been a shift across the country as real GDP in resource-producing regions declined while growth improved in provinces with manufacturing and service-based economies (Chart 7.6). In recent quarters, Canada's economic growth has recovered, led by rising output in British Columbia and Ontario. Despite the favorable exchange rate, the recovery in manufacturing output and exports has not unfolded as quickly as hoped to offset oil investment declines. Economic growth in 2016 was further impaired by the effects of wildfires in the oil-producing regions of northern Alberta.

### Chart 7.6 Real GDP growth shifting away from energy producers

Annual average



Source: Statistics Canada, CANSIM Table 384-0038

Although there has been limited growth in exports (1.1 per cent in real terms in 2016) and outright declines in non-residential investment (-10.7 per cent), Canadian economic growth has benefitted from steady household spending, growing by 2.2 per cent in real terms through 2016. Residential investment grew by 2.9 per cent in 2016.

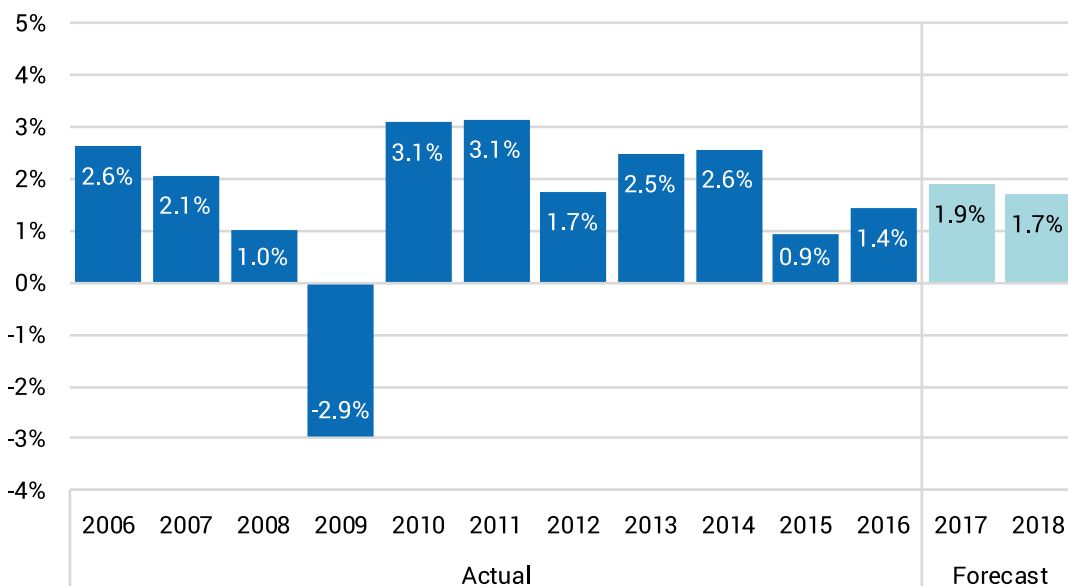
With declining machinery and equipment investment (-5.0 per cent), Canada's imports slid by 1.0 per cent in 2016. This suggests that Canadian firms are yet to take advantage of accelerating US growth and favorable exchange rates to expand manufacturing and service output. In previous periods of currency depreciation, firms have expanded capacity and increased real GDP through export growth. However, years of cost-cutting, rising competition from emerging markets, and a strong US dollar (in which capital goods are priced) may limit manufacturing's recovery. Longer-term structural factors (demographics, productivity) and a lack of confidence could also be limiting the pace of Canada's economic recovery.

The Bank of Canada and the federal government are pursuing accommodative policy, through lower interest rates, expansionary infrastructure investments, lower income tax rates for middle-income earners, and higher transfers for families with children. These factors are expected to continue supporting real GDP growth in 2017.

Canada's real GDP is forecasted to increase by 1.9 per cent in 2017 and by 1.7 per cent in 2018 (Chart 7.7). Alberta and Saskatchewan are expected to return to positive growth as the impact of the oil shock dissipates while Ontario and British Columbia continue to build momentum with a depreciated currency.

**Chart 7.7 Canada's Economic Growth Slows Under Low Oil Prices**

Growth in real GDP, \$2007 chained



Source: Statistics Canada, CANSIM Table 380-0064; NS Department of Finance and Treasury Board projections



## Budget Economic Assumptions

Key economic assumptions for the budget, shown in Table 7.1 below, are based on data and information available as of January 6, 2017.

**Table 7.1 External Economic Assumptions for Nova Scotia Budget Forecast**

	2017	2018
US Real GDP Growth (\$2009 chained)	2.2	2.3
Canada Real GDP Growth (\$2007 chained)	1.9	1.7
Canada Nominal GDP Growth (\$current)	3.5	3.7
.7USD/CAD exchange rate	.740	.747
Crude Oil (USD/bbl, WTI)	53.86	59.10
Canadian Prime Lending Rate	2.6	2.8
5 Year Conventional Mortgage Rate	5.1	5.3

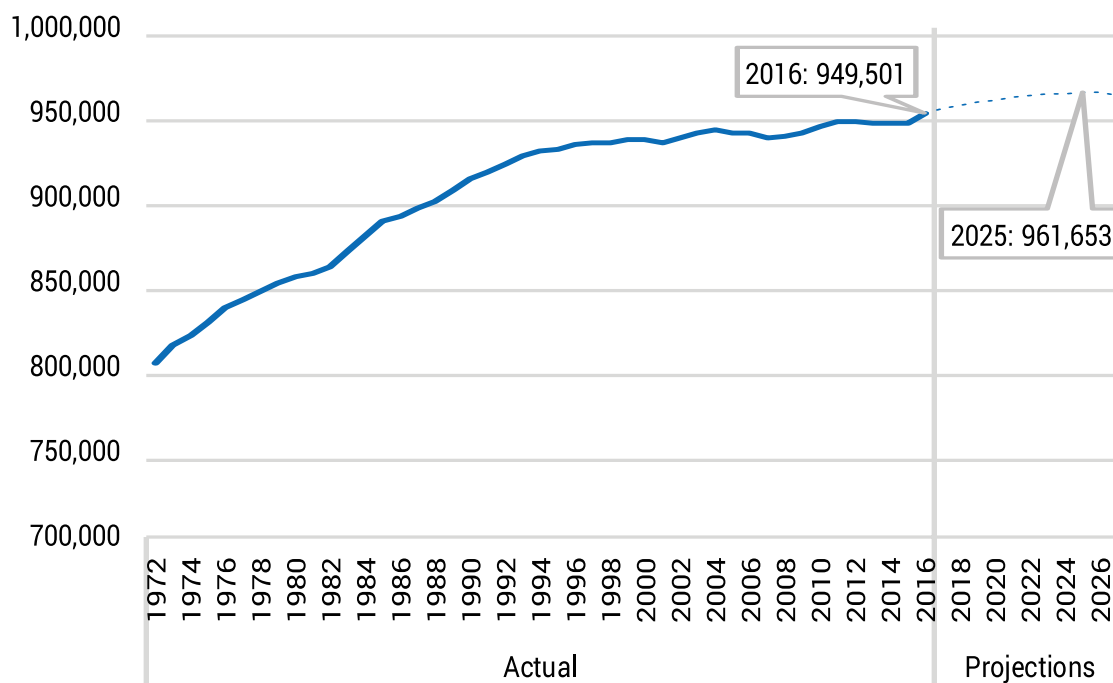
## Nova Scotia Economic Performance and Outlook

**Population and Demography:** Nova Scotia's population has been growing at its fastest pace in decades, reaching 949,501 as of July 1, 2016, and rising again to 952,333 as of October 1, 2016. Much of the increase is attributable to the rise in immigrants with the arrival of refugees from Syria. However, other classes of immigration have also increased. Immigration remains a strong positive contributor to the province's population and there are a rising number of net non-permanent residents in Nova Scotia. Net interprovincial out-migration from Nova Scotia has also slowed and even turned positive in some quarters. Natural population change continues to be a source of population decline as deaths outnumber births in recent quarters.

Over the coming decade, the Department of Finance and Treasury Board's population projections anticipate that there will be a slow rise in population, with a peak over 960,000 in the mid-2020s (Chart 7.8). This assumes that major project work such as the construction of combat vessels at the Halifax shipyard keep net interprovincial out-migration balanced through the early 2020s before returning to historic patterns later in the decade. This outlook also assumes that immigration continues to improve (though not as much as experienced in 2016).

**Chart 7.8 Nova Scotia’s population projected to peak**

Population, all ages, as of July 1



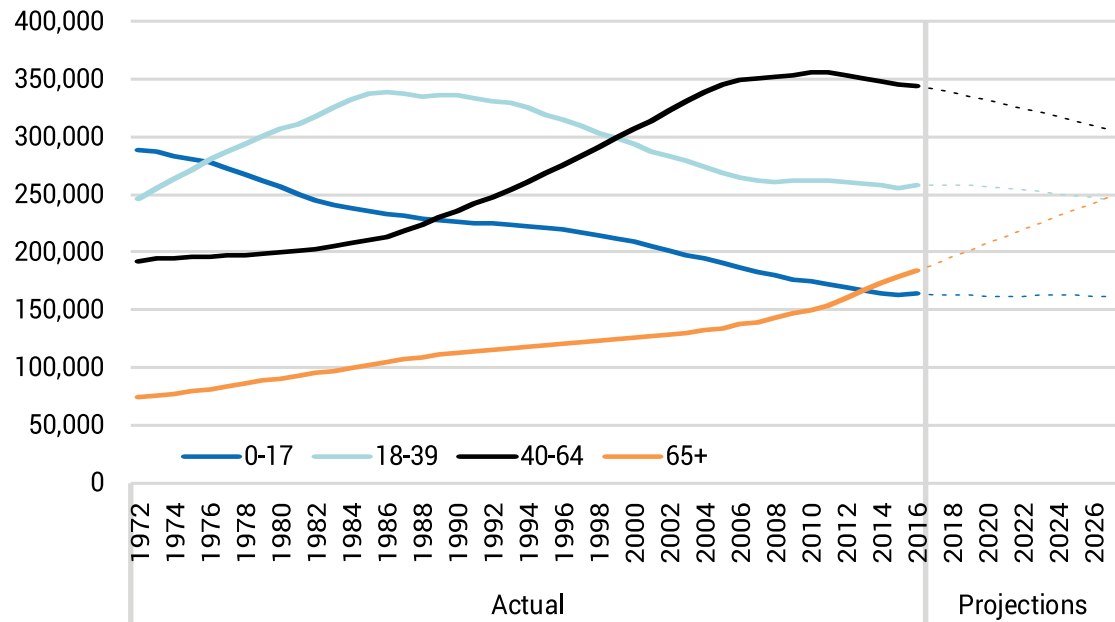
Source: Statistics Canada, CANSIM table 051-0001; NS Department of Finance and Treasury Board projections

Changes in the overall level of the population are less important to economic conditions than changes to the population’s age composition. With Nova Scotia’s baby boom cohort now aged between their early 50s and early 70s, there is expected to be a significant change as this group retires from the labour force.

The population of traditional working age (18–64) is projected to decline from over 600,000 in 2016 to about 551,000 by 2027 (Chart 7.9). As labour supply is withdrawn, continued production and economic growth is expected to increasingly depend on capital intensification, a more skilled work force, more international trade, and higher productivity.

**Chart 7.9 Declining population in working ages**

Population by age cohort, as of July 1



Source: Statistics Canada, CANSIM Table 051-0001; NS Department of Finance and Treasury Board projections

**Gross Domestic Product:** Nova Scotia's real GDP grew by 1.0 per cent in 2015, the latest year for which actual results are available. Economic growth accelerated from 0.8 per cent in 2014, ending two years of decline in 2012 and 2013.

Nova Scotia's economic growth in 2015 was driven by real consumer spending (though slow in nominal terms) as well as by residential construction, especially in the apartment construction sector in Halifax. Increasing government spending on services as well as investment goods also supported growth. Rising exports made a positive contribution to growth in 2015, but this was offset by rising imports. With limited price inflation as oil prices dropped, nominal GDP growth was 2.4 per cent.

Among sectors, Nova Scotia's economic growth during 2015 was strongest in the primary resource sectors: agriculture, forestry, and fishing (Table 7.2). Manufacturing also enjoyed stronger growth with the commencement of construction of the Arctic Offshore Patrol Ships under the National Shipbuilding Procurement Strategy. Natural gas output declined as the Deep Panuke field moved past its peak production in 2014, while the Sable field continued its declining trend.

**Table 7.2 Nova Scotia's Real GDP by Industry**

Sector	Real GDP Growth			Share of GDP
	2007-10	2010-14	2015	2015
Agriculture	3.1%	-0.6%	5.9%	2.86%
Support to agriculture	-3.2%	4.3%	16.7%	
Forestry	-2.6%	-7.5%	4.3%	
Support to forestry	25.9%	-11.5%	13.6%	
Fishing	6.4%	4.7%	7.4%	
Mining, oil, gas	-7.3%	-5.4%	-20.9%	1.28%
Utilities	-2.6%	-2.7%	-1.7%	2.12%
Construction	9.3%	-6.2%	0.4%	5.30%
Manufacturing	0.6%	-2.2%	3.7%	7.91%
Wholesale	0.1%	1.2%	1.8%	3.76%
Retail	1.4%	0.5%	0.3%	6.52%
Transportation	-0.6%	-0.3%	3.1%	3.38%
Information, culture	-0.4%	-0.4%	-1.1%	3.50%
Finance, insurance	-0.5%	0.8%	2.5%	5.85%
Real estate	3.5%	2.8%	1.9%	15.75%
Rental, leasing	0.3%	-3.2%	0.3%	
Professional, technical	1.9%	1.6%	1.7%	4.21%
Company management	0.7%	1.5%	-3.5%	0.42%
Administration, support	-2.5%	-0.6%	-2.2%	2.15%
Arts, entertainment	-0.9%	-1.5%	6.4%	0.60%
Accommodation, food	1.0%	0.8%	1.7%	2.52%
Other private services	-0.3%	0.9%	-0.5%	2.03%
Education	2.1%	0.4%	0.5%	6.54%
Health care	2.2%	1.3%	1.5%	10.64%
Defence	1.0%	-2.2%	-0.6%	12.67%
Federal gov't	1.4%	-1.6%	-0.4%	
Provincial gov't	3.4%	1.2%	-0.1%	
Local, aboriginal gov't	5.0%	1.8%	4.9%	

Source: Statistics Canada, CANSIM Tables 379-0028, 379-0030

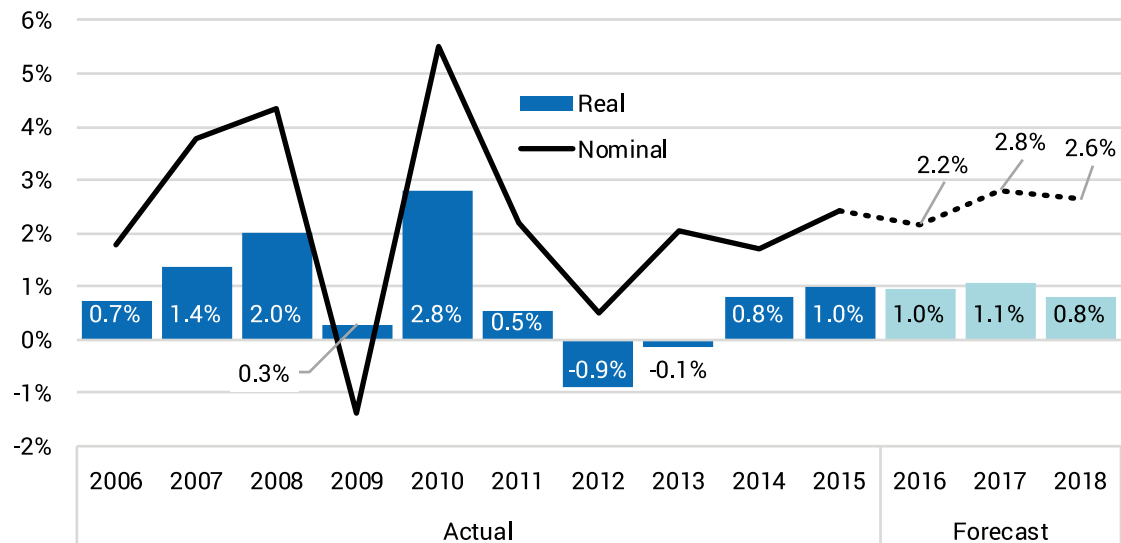
Note: Real estate includes imputed value of rent for owner-occupied dwellings.

Real GDP in private service sectors was up, particularly in wholesale trade, transportation, professional/technical services, arts/entertainment, finance/insurance, accommodation/food, and real estate (which includes the value of imputed rent for owner-occupied dwellings). Output fell in information/culture sectors, management of companies, and administrative/support industries (which includes call centres). Among public services, declining output in defence and federal government services reduced real GDP growth for the fourth consecutive year. Growth in health care and education continued at a similar pace to recent trends.

In nominal terms (including increases in the value of output attributable to price growth), Nova Scotia's economy grew by 2.4 per cent in 2015. Employee compensation grew by 2.3 per cent while household income increased by 3.2 per cent due to rising government transfers and pension income. Net income of unincorporated businesses reported stronger growth at 4.1 per cent in 2015 while net operating surplus of corporations was down 1.9 per cent (the fifth consecutive year of decline).

### Chart 7.10 Stable real GDP growth with inflation normalizing

Growth rate, real is measured in 2007 (chained) dollars, nominal in current dollars



Source: Statistics Canada, CANSIM Table 384-0038; NS Department of Finance and Treasury Board projections

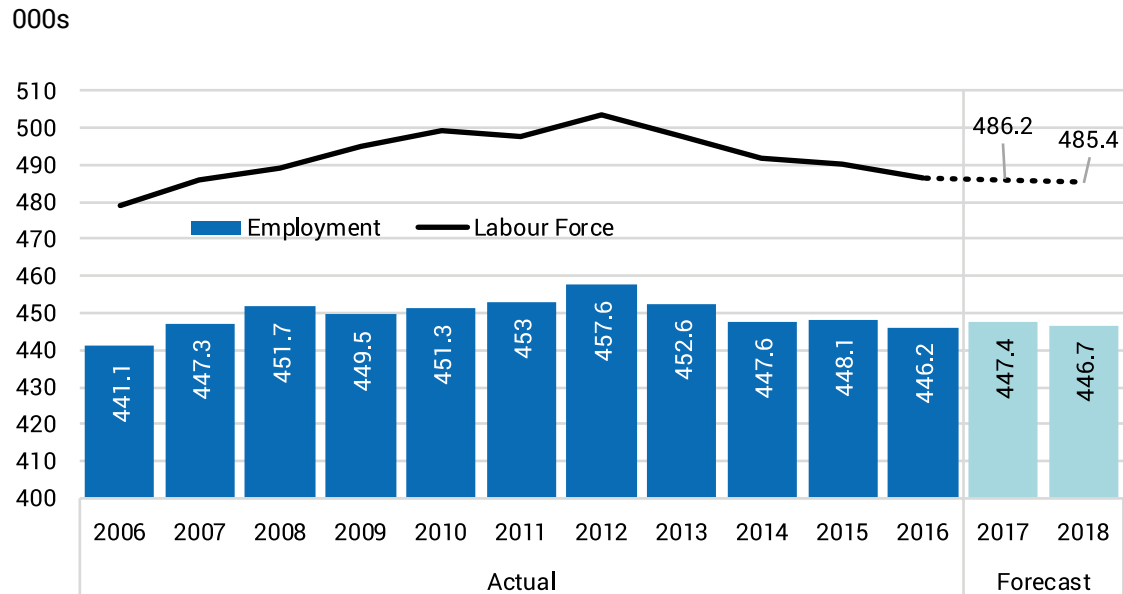
For 2016, the Department of Finance and Treasury Board estimates that real GDP maintained growth at a pace of 1.0 per cent (Chart 7.10), with tourism indicators being positive, consumer spending rebounding in nominal terms, and higher transfers to families improving household income. Major projects such as the Nova Centre, shipbuilding, re-decking of the Macdonald Bridge, and construction of the Maritime Link also contributed to growth. These offset declines in international goods exports, weaker residential construction investment, and the continued drag on employment from a retiring labour force. Continuing effects of lower price inflation are projected to limit nominal GDP growth to 2.2 per cent in 2016.

In 2017, the Nova Scotia economy is expected to continue at a stable pace with growth of 1.1 per cent in real terms. As inflation returns to a more normal pace, nominal GDP growth is projected to accelerate to 2.8 per cent. Previously initiated major project investments are assumed to be mature or winding down and therefore contributing less to growth. However, increased funding for infrastructure projects are expected to boost government capital spending in the coming year. Rising US GDP growth is expected to continue supporting Nova Scotia's exports. Despite growing infrastructure investment and exports, Nova Scotia's demographics are expected to limit household income and consumer spending growth as well as residential construction.

Federal infrastructure projects are assumed to carry on through 2018, continuing the stimulus effects started in 2017. However, at the same time, some of Nova Scotia's other major projects will reach their conclusion and their impact on economic growth will wind down. For 2018, Nova Scotia's real GDP growth is projected at 0.8 per cent, with nominal growth of 2.6 per cent.

**Labour Market:** Labour markets offer the most direct perspective on how changing demographics will affect the provincial economy. Nova Scotia's labour markets experienced their fourth consecutive year of labour force decline as the baby boom cohort shifts into retirement. The size of the labour force was down 0.7 per cent in 2016 to 486,600 (Chart 7.11). Employment also declined, but at a slower pace (-0.4 per cent), resulting in the third consecutive year of lower unemployment rates (8.3 per cent). Since 2000, Nova Scotia's unemployment rate has averaged 8.8 per cent.

During 2016, youth unemployment rates declined to 14.9 per cent, the fourth consecutive year of improving labour market conditions for young Nova Scotians aged 15–24. The improvement is particularly concentrated among those aged 20–24, whose unemployment rate was 11.2 per cent in 2016, the result of stable employment among a declining population and labour force. Outside of the youth cohort, the unemployment rate increased to 7.4 per cent among those aged 25–44 and decreased to 7.2 per cent for those aged 45–64.

**Chart 7.11 Slow labour force decline, stable employment**

Source: Statistics Canada, CANSIM Table 282-0002; NS Department of Finance and Treasury Board projections

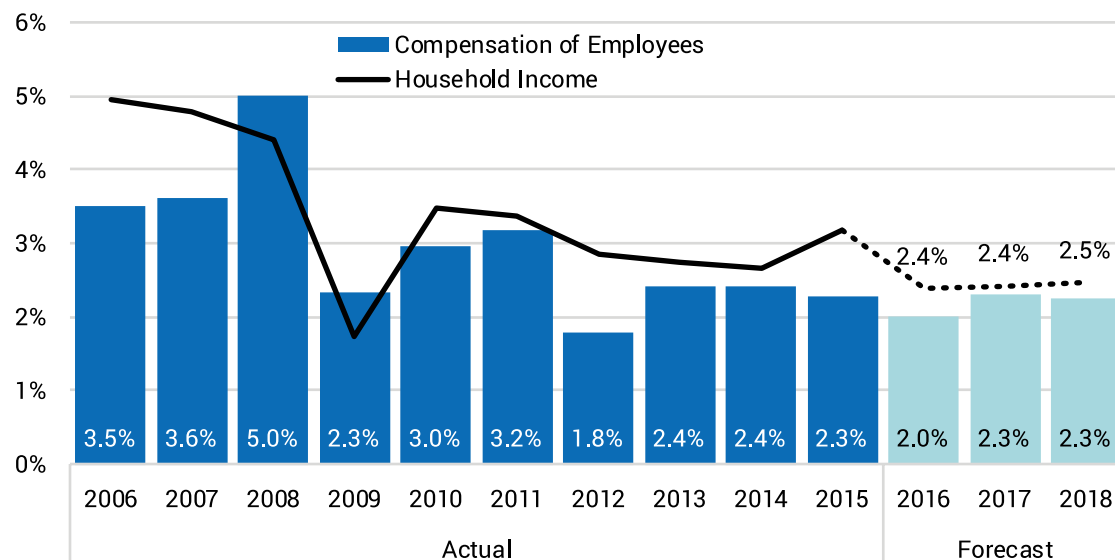
Throughout the past two years, Nova Scotia's labour market has experienced periods of slack and tightness. Although the provincial job vacancy rate tightened and converged with the national average during the summer, slack has emerged towards the end of the year (though this could be a seasonal phenomenon). Employment insurance usage, which had been declining in the early part of the year, started to pick up again through the second half of 2016.

In 2017, the slow decline in the labour force is projected to continue. Employment growth associated with new infrastructure investment is expected to bring the unemployment rate down again to 8.0 per cent. For 2018 and beyond, the economic outlook assumes that labour force and employment will decline at approximately the same pace, resulting in a stable unemployment rate at around 8 per cent.

**Household Income:** During 2016, Nova Scotia experienced relatively strong growth in average weekly wages at 1.5 per cent – outpacing all provinces except for New Brunswick and Prince Edward Island and employee compensation growth is estimated at 2.0 per cent. With little change in employment, variations in employee compensation depend on changes in wage and benefit rates (Chart 7.12).

**Chart 7.12 Household income growth outpaces employee compensation**

Growth rate in current dollars



Source: Statistics Canada, CANSIM Tables 384-0037, 384-0042; NS Department of Finance and Treasury Board projections

In 2017 and 2018, employee compensation is expected to grow by 2.3 per cent in each year as infrastructure projects and emerging inflation support wage growth. Additional federal transfers for families and lower personal income taxes for certain income ranges have been incorporated into estimates and are expected to boost disposable income.

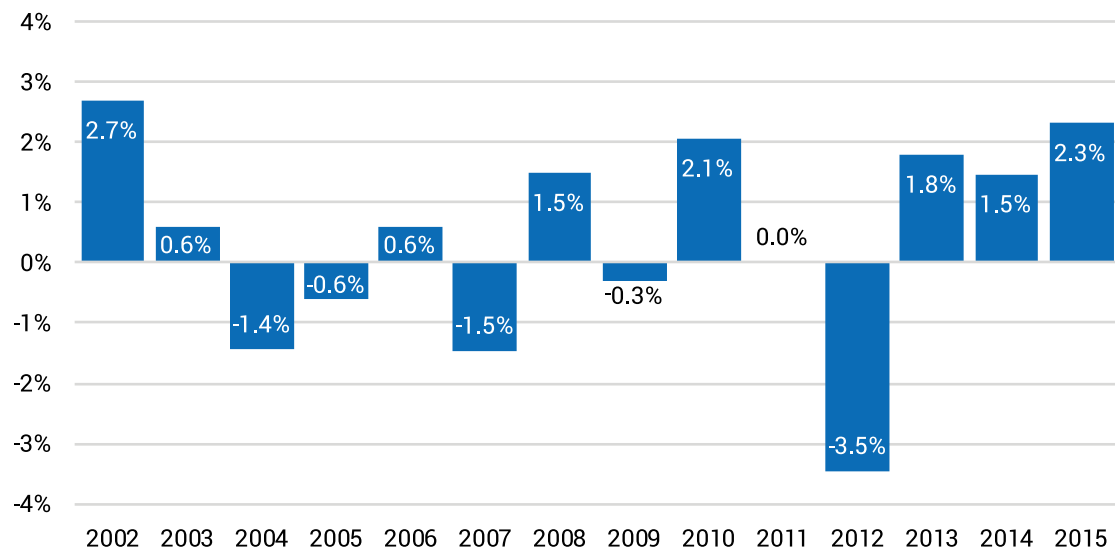
Household income growth was 3.2 per cent in 2015, with significant gains coming from transfers, pensions, and income generated by unincorporated businesses. In the economic outlook, household income growth is expected to return to a steady pace – increasing by 2.4 per cent in 2017 and by 2.5 per cent in 2018.



**Productivity:** Despite declining labour supply in the last two years, Nova Scotia's economy has grown. Much of this growth is attributable to rising productivity as the limited labour supply is redirected into activities that generate greater output (real GDP) per hour worked (Chart 7.13). Since 2012, Nova Scotia's economy has adapted to reduced labour supply with productivity gains of 1.8 per cent in 2013 and 1.5 per cent in 2014, accelerating to 2.3 per cent in 2015. The economic outlook assumes modest productivity gains will support some wage growth and rising real output despite continuing labour force declines.

### Chart 7.13 Productivity gains keep economy growing

Business sector labour productivity growth, real GDP in 2007 chained dollars per hour worked

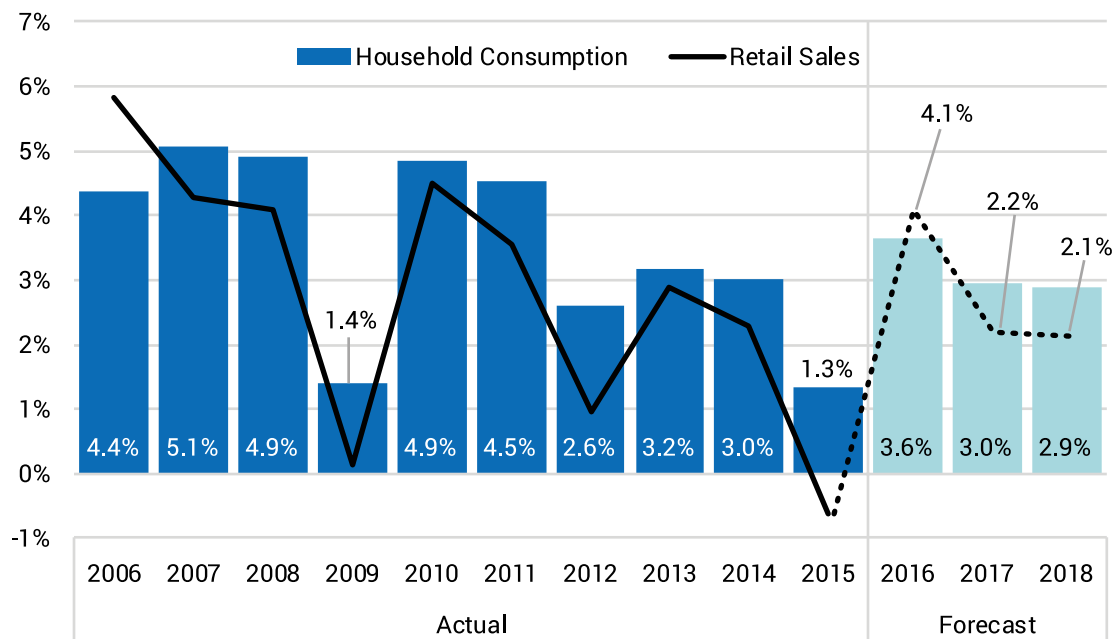


Source: Statistics Canada, CANSIM Table 383-0033

**Consumption:** Household consumer expenditures are generally assumed to follow a similar pattern to household income and employee compensation, except when there are unusually large price variations. During 2015, there was very little price growth for consumer expenditures, resulting in an unusually low growth of 1.3 per cent in nominal terms even as consumer spending grew by 1.2 per cent in real terms.

Chart 7.14 Consumption growth returns to trend

Growth rate in current dollars



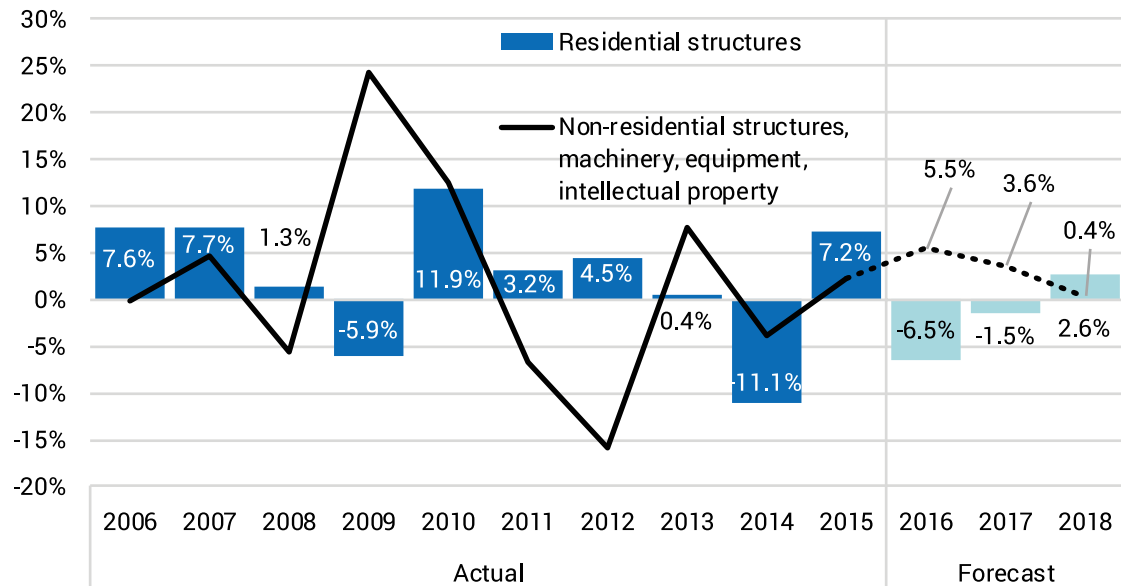
Source: Statistics Canada; CANSIM Tables 384-0038, 080-0020; NS Department of Finance and Treasury Board projections

Through 2016, retail sales growth of 4.1 per cent indicates a recovery in nominal consumer expenditures (Chart 7.14). In 2017 and 2018 consumer spending and retail sales are expected to return to recent trend rates as inflation normalizes.

**Construction and Major Projects:** Nova Scotia’s economic growth is sensitive to the pace of major construction projects as well as residential investment activities. In 2016, there was a decline in the pace of housing starts after a peak of apartment construction in the Halifax market during 2015. Rising investment in single dwelling units largely offset this decline. Preliminary indicators also indicate that renovation activity (the largest part of residential construction investment), slowed in 2016 – a deviation from its usual trend of steady growth. Thus, the Department of Finance and Treasury Board currently estimates that residential construction investment declined 6.5 per cent in 2016 (Chart 7.15). The outlook further assumes that residential investment will decline in 2017 as large apartment projects reach conclusion. With limited long run demographic impetus for housing investment, Nova Scotia is expected to post only modest increases in residential construction in 2018.

**Chart 7.15 Residential construction decline offset by non-residential**

Growth rate in current dollars



Source: Statistics Canada, CANSIM Table 384-0038; NS Department of Finance and Treasury Board projections

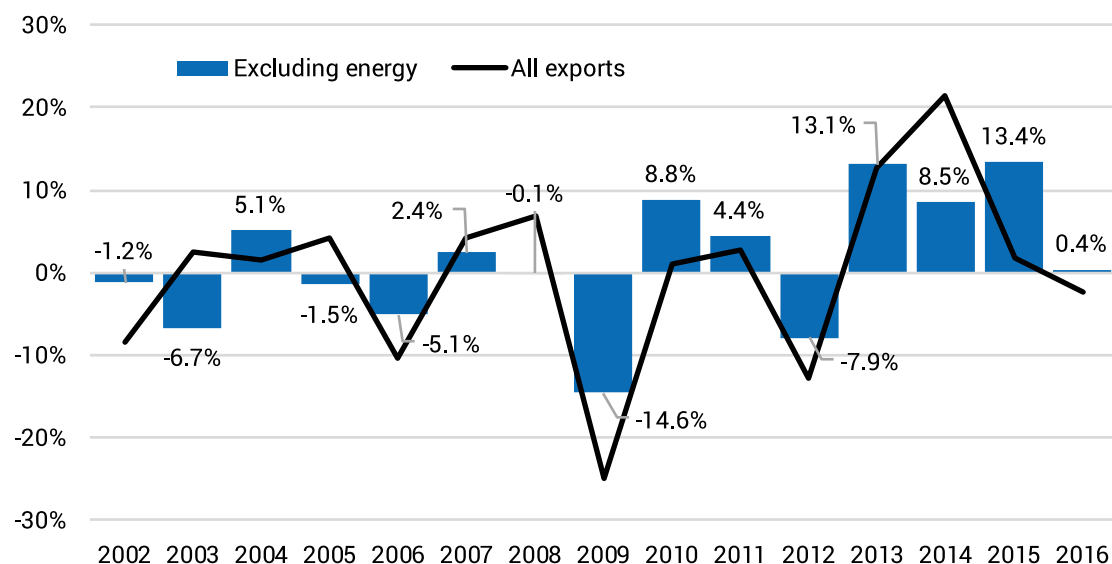
Note: non-residential structures, machinery, equipment, intellectual property includes government and non-profit sector investments as well as business sector

Major project investments have been a significant contributor to economic growth in recent years. The projects incorporated in this outlook include combat vessel construction, offshore exploration, Maritime Link, Ikea, Macdonald Bridge, new jetty at HMC Dockyard, and the Nova Centre. There are also separate provisions for government capital spending increases as outlined in the federal government's infrastructure stimulus plans. These projects are assumed to raise investment, employment, and income beyond the trends that would normally unfold in the Nova Scotia economy. The outlook does not include several major projects in Nova Scotia for which there were insufficient details, including production from new coal and gold mines, liquefied natural gas terminals, and the decommissioning phase of the Sable Offshore Energy Project.

**Production and Trade:** Nova Scotia's exports have grown in each of the last three years, recovering from closures in forestry and refining as well as declining output from maturing natural gas fields (Chart 7.16).

**Chart 7.16 Non-Energy Export Growth Paused in 2016**

Growth international goods exports, customs basis



Source: Statistics Canada, CANSIM Table 228-0060

Manufacturing output has grown substantially since the closure of paper mills and the Dartmouth refinery. Shipments were up by 5.2 per cent in 2015 and by 4.1 per cent in 2016. Higher output of wood and food products have assisted manufacturing shipments growth, but the main contribution has been from durable construction (including ships). Natural gas output enjoyed a brief revival in 2014 as output from the Deep Panuke field peaked. However, natural gas output has resumed a downward trajectory in 2015 (-39.9 per cent) and 2016 (-11.5 per cent). This is expected of fields after they reach production peaks early in their lifecycle.

From 2012 to 2015, Nova Scotia’s exports (measured in nominal terms on a balance of payments basis) increased from \$15.2 billion to \$15.9 billion. There was particularly strong growth shown in the non-energy categories of international merchandise exports (measured on a customs basis), which increased by \$1.4 billion or 40 per cent between 2012 and 2016. In 2016, international merchandise export growth was slowed by declining natural gas output as well as by reductions in paper and fruit shipments.

Goods exports to international destinations are estimated to have declined by 2.0 per cent in 2016, but are projected to grow by 2.6 per cent in 2017 and 2018. Beyond merchandise shipments, stronger tourism indicators suggest that service exports will post stronger growth in 2016 and 2017 before decelerating in 2018 (Chart 7.17).

**Chart 7.17 Slow and stable outlook for exports**

Growth rate in current dollars, balance of payments basis



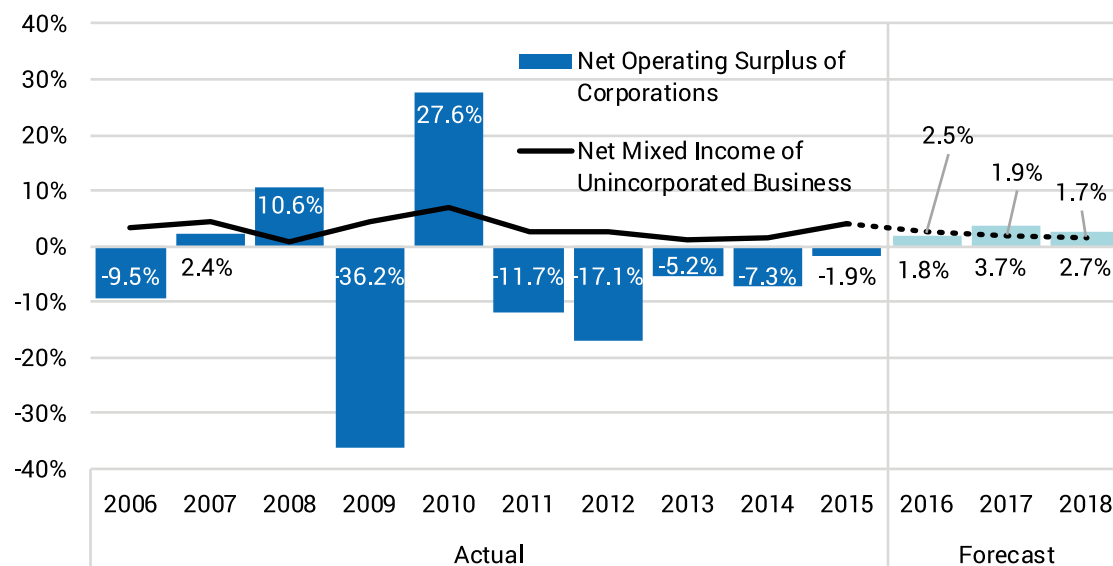
Source: Statistics Canada; CANSIM Table 384-0038; NS Department of Finance and Treasury Board projections

Through 2016, imports are also estimated to have rebounded from the slow growth observed in 2014 and 2015. Rising consumer spending and major project investments are assumed to have substantial import content. As foreign exchange rates are projected to remain relatively stable compared to the large swings in 2014 and 2015, import and export growth are assumed to return to trend growth by 2018.

**Business Income:** After 5 years of declines, net operating surplus of corporations is projected to increase modestly in 2016, 2017, and 2018. Net mixed income of unincorporated businesses enjoyed strong growth of 4.1 per cent in 2015, but is expected to return to trend growth rates through 2017 and 2018 (Chart 7.18).

**Chart 7.18 Business income positive in 2017 and 2018**

Growth rate in current dollars

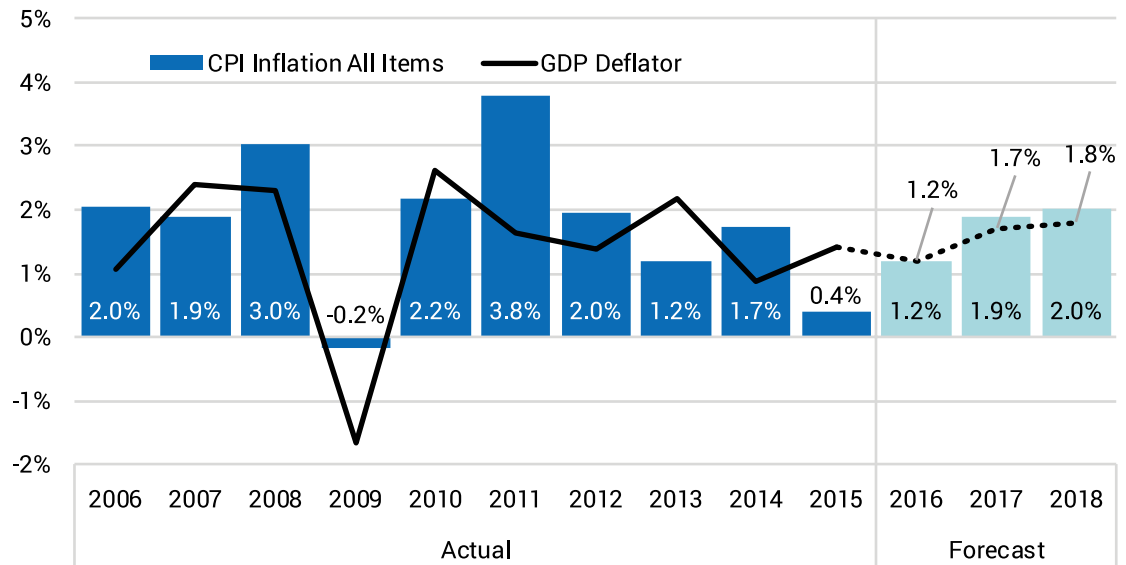


Source: Statistics Canada, CANSIM Table 384-0037, NS Department of Finance and Treasury Board projections

**Inflation:** Price growth has been muted in Nova Scotia since the large decline in oil prices during 2014 and 2015. Consumer price index inflation has remained below its long-run average of 2 per cent since 2013. In fact, slow inflation has been widespread across most advanced economies in the last three years. The broader GDP price deflator index grew more quickly than CPI in 2015 (Chart 7.19). Over the next two years, both CPI and GDP price indices are projected to return to their natural rate of 2 per cent growth.

**Chart 7.19 Inflation returning to normal from period of slow growth**

Growth in index



Source: Statistics Canada, CANSIM Tables 326-0021, 384-0039; NS Department of Finance and Treasury Board projections

## Nova Scotia Economic Forecast Summary

Table 7.3 presents a summary of the Nova Scotia economic outlook. This outlook is used in preparing the revenue estimates.

**Table 7.3 Summary Nova Scotia Budget Economic Forecast**

(Per cent change at current prices, except where noted)	2016	2017	2018
Real GDP (\$2007 chained)	1.0%	1.1%	0.8%
Nominal GDP	2.2%	2.8%	2.6%
Compensation of Employees	2.0%	2.3%	2.3%
Household Income	2.4%	2.4%	2.5%
Household Final Consumption	3.6%	3.0%	2.9%
Retail Sales	4.1%	2.2%	2.1%
Consumer Price Index	1.2%	1.9%	2.0%
Investment in Residential Structures	-6.5%	-1.5%	2.6%
Non-Residential, Machinery, Intellectual Property	5.5%	3.6%	0.4%
Net Operating Surplus: Corporations	1.8%	3.7%	2.7%
Net Mixed Income: Unincorporated	2.5%	1.9%	1.7%
Exports of Goods and Services	3.0%	4.6%	3.2%
Exports of Goods to Other Countries	-2.0%	2.6%	2.6%
Imports of Goods and Services	3.8%	3.4%	2.6%
Population at July 1 (thousands)	949.5a	952.2	954.2
Employment (thousands)	446.2a	447.4	446.7
Unemployment Rate, Annual Average	8.3a	8.0	8.0

The Nova Scotia economic forecast contains data and information up to and including January 6, 2017.

a ~ actual (forecast growth rates apply to actuals as known by January 6, 2017).

Note: non-residential structures, machinery, equipment, intellectual property includes government and non-profit sector investments as well as business sector investment.



## Comparison with Private Sector Forecasters' Outlook

Table 7.4 presents an average of forecasts for Nova Scotia prepared by economists at banks and think tanks (as of January 6, 2017). In 2017 and 2018 the Department of Finance and Treasury Board's forecasts for economic growth are similar to those of the private sector forecasters who make projections about the provincial economy.

Private sector forecasters have been consistently optimistic in their outlook for the Nova Scotia economy when compared against Statistics Canada's latest results for the province. The current consensus among private sector forecasters reflects much less variation than has observed in previous economic outlooks.

**Table 7.4 Private Sector Forecasters' Outlook for Nova Scotia**

	2016	2017	2018
Real GDP (\$2007 chained)	1.2%	1.2%	1.2%
<i>Minimum of private sector forecasters</i>	1.0%	1.0%	0.9%
<i>Maximum of private sector forecasters</i>	1.5%	1.5%	1.5%
Nominal GDP*	2.6%	3.0%	3.1%
Retail Sales*		2.9%	2.5%
Consumer Price Index		1.9%	2.0%
Employment		0.2%	0.4%
Unemployment Rate		8.2%	8.0%

Average of forecasts as published by January 6, 2017

\*Only a limited number of forecasters publish an outlook for nominal GDP and for retail sales

## Risks to the Economic Forecast

The Nova Scotia Budget economic assumptions constitute a forward-looking assessment of economic conditions and prospects for the province, based on external data and information up to January 6, 2017. As new data and information is revealed after January 6, 2017, the results of the forecast are subject to change. Any new information and deviations from Nova Scotia Budget economic assumptions will be incorporated into subsequent forecasts and published in future updates.

Nova Scotia's economic outlook is subject to domestic risks within the provincial economy, external risks from economic events elsewhere in the world, and technical risks due to issues with data and modelling. In the short-run economic forecast, most of Nova Scotia's domestic economic risks are persistent – risks that have caused uncertainty in the economic outlook for several years. These include downside risks from natural gas production and household debt as well as upside risks from major projects and low oil prices.

**Major Projects:** The economic outlook presented in this Budget makes assumptions about the timing and value of major project investments. Changes in the timing and value of these major projects can alter the pace of economic growth, particularly in investment, export, employment, and income variables. The Department of Finance and Treasury Board typically only includes imminent projects of large scale that are beyond the development stage and for which the economic impacts are clear. This approach often leaves out the impacts of upcoming major projects that are in discussion or in development or whose impacts are not well-understood at the time of preparing the forecast. Thus, major projects are an upside risk to the economic outlook.

**Interest Rates:** The current interest rate environment has offered favorable conditions for Canadians to accumulate debt for mortgage, investment, or consumption purchases. Canada's federal government and the Bank of Canada have articulated concerns about over-heating housing markets and the extent of household debt. This could threaten both financial institution stability and real economic output if there is a disorderly deleveraging of household balance sheets. Although indicators for housing affordability and household debt in Nova Scotia are not as worrying as some indicators at the national level, it is possible that national policy responses to conditions in other provinces could have a negative impact on the provincial economy.

**Oil Prices:** The dramatic declines in oil prices from 2014 and 2015 have largely passed and oil prices have recovered somewhat as OPEC producers reduce output. With this there has also emerged a stable foreign exchange rate around the mid-70 cent (US) range. Thus, there is less uncertainty around global oil prices and their effects on the national and provincial economies.

**Demography:** The demographic changes underway in Nova Scotia are known, with the retirement of the baby boom cohort unfolding as expected. The long-run risk lies with how the provincial economy will respond to these changes. It is possible that businesses in Nova Scotia can re-orient their production methods to make greater use of capital, technology, skills, trade, and innovation. Alternatively, there could be changes in the patterns of interprovincial migration that have persisted for decades. Without such productivity-enhancing changes or reversal of demographic trends, it is possible that long-run output could fall as businesses are unable to continue production in Nova Scotia using older labour-intensive techniques.

**Natural Gas:** Although declining natural gas output has been a known drag on the provincial economy for several years, unforeseen changes to production and prices have had material impacts on the economy. However, with natural gas output diminishing, the scale of this risk is also abating.

**Canadian economic outlook:** As Canada adjusted to lower oil prices, output and factors of production shifted away from resource sectors and into manufacturing and services. This has benefited non-resource provinces such as Ontario and British Columbia, while resource producing regions of Alberta, Saskatchewan, and Newfoundland and Labrador have suffered declining investment and real output. The Bank of Canada has expressed concern that this adjustment is taking time and leaving the country with an output gap. Policy responses such as further monetary easing or federal stimulus investments could influence the Nova Scotia economy.

**Policy change among major trading partners:** The new administration in the US has signaled that it wishes to revisit fundamental economic policies including trade agreements, infrastructure spending, and taxes. Changes to US policy could have uncertain impacts on the Canadian and Nova Scotian economies. Chinese authorities are attempting to shift the engine of economic growth away from investment and export and into domestic consumer spending and services. As these changes unfold, there may be opportunities for Nova Scotia to expand its exports of finished food and consumer goods to China. However, there are concerns that this shift could be destabilizing and require policy corrections in the financial system. The impacts of the UK's decision to exit the European Union have not materialized through any slowdown in economic activity. However, the effects of this decision are still uncertain and could impair confidence in coming months.

**Global Economy:** For the past 6 years, there has been serial disappointment among economists at the pace of global economic recovery. Some have suggested that persistent imbalances between savings and investment demand, between exporting and importing nations, and between earners of capital and labour income are contributing to a secular stagnation that will impair economic growth and productivity improvements.

## Economic Forecasting Process

Section 56(3)(b) of the Finance Act requires the Minister of Finance and Treasury Board to present the major economic assumptions made in preparing the fiscal plan. The Nova Scotia Department of Finance and Treasury Board prepares economic forecasts as part of the fiscal planning process.

Economic forecasts help inform the Minister of Finance and Treasury Board of the potential size of tax bases. The economic forecast also provides the Minister of Finance and Treasury Board with context on the size of government expenditures relative to the entire value of production in the province. Nominal GDP growth is the broadest indicator of the size of the tax base and of the dollar value of production in the province. However, it is generally the sub-components of nominal GDP that are directly incorporated into the Nova Scotia Budget revenue forecast.

The Department of Finance and Treasury Board uses a proprietary econometric forecasting model to project the key indicators of Nova Scotia's economy. The model builds future projections on historical trends as well as several external assumptions about global conditions that affect the performance of Nova Scotia's economy. The demographic and economic outlooks presented in this document are based on data and information available up to January 6, 2017. The economic forecast was finalized and approved for use in fiscal planning as of February 28, 2017.

In the process of generating an economic forecast, staff identify conditions that are expected to deviate from historical trends and make appropriate adjustments to reflect these events. This exercise of professional judgment is documented and disclosed to decision-makers prior to releasing the economic forecast.

**Review Process:** The Department of Finance and Treasury Board conducts challenge and review sessions to validate the economic forecast. Before using economic assumptions and forecasts for budget planning, the Department of Finance and Treasury Board presents them to members of the academic community and leading private-sector forecasters. These experts evaluate whether the exogenous assumptions and resulting economic forecasts form a reasonable and internally coherent basis for fiscal planning.

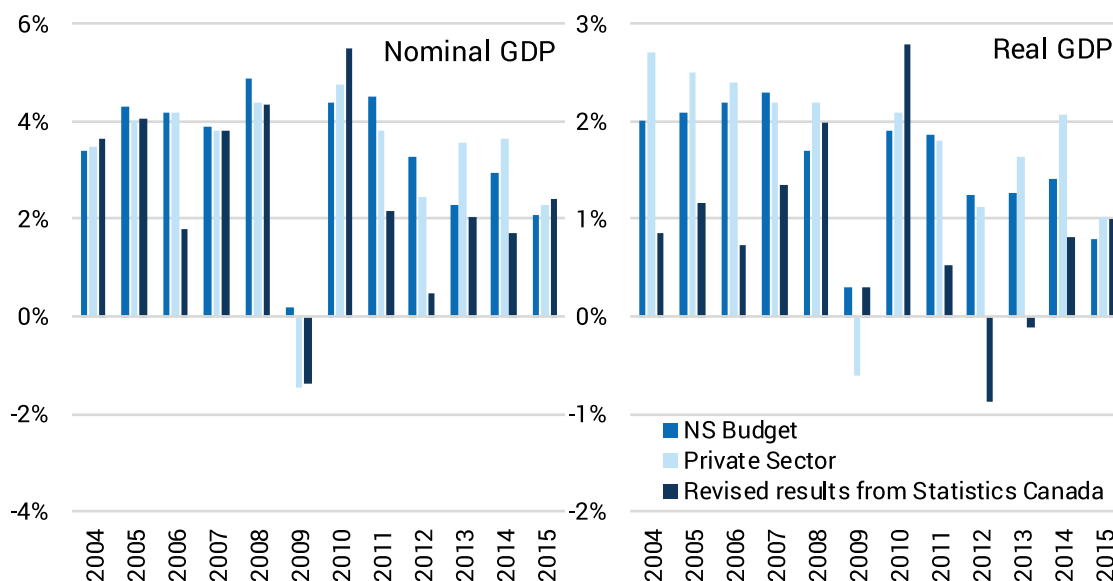
Department staff note any challenges to the economic forecast and determine whether further adjustments are necessary. Senior management of the Department of Finance and Treasury Board participate in challenge sessions, so that they can hear credible, objective advice on whether the economic forecast is a reasonable basis for fiscal planning. Staff from the Office of the Auditor General (OAG) also observe the challenge and review session.

The Department of Finance and Treasury Board provides its economic outlook

as part of the OAG's review of revenue estimates. In addition to scrutinizing the reasonableness of the forecast itself, the OAG ensures that the economic forecast reflects consistent process, full disclosure of assumptions, professional judgment, and appropriate approvals. The OAG's review of economic forecasts is a unique procedure in Canada, providing an additional layer of transparency in the budget process.

**Forecast Accuracy:** Despite these efforts to minimize changes to the economic forecast, unforeseen and unforeseeable events will undermine the accuracy of any forward-looking statement (Chart 7.20). The provincial economic forecast is intended to provide a reasonable basis for fiscal planning, but it is often different from the final economic results that drive revenue growth. These variances are typically caused by major events and shocks to the provincial economy. In recent years, these have included closure of major industrial facilities, unanticipated slowdowns in natural gas production, and federal government austerity.

**Chart 7.20 Forecast Accuracy**



Source: Statistics Canada, CANSIM Table 384-0038, private sector forecasters, Nova Scotia Department of Finance and Treasury Board

Forecasting provincial GDP and its components depends on estimation of key relationships and trends in Nova Scotia's economy. However, the variables used to estimate these relationships and trends are subject to historical data revisions by Statistics Canada.

## Economic Performance and Outlook – Key Indicators

The following Tables provide details of key indicators for Nova Scotia's economic performance.

**Table 7.5 Nova Scotia Economic Performance, Key Indicators**

	<b>ACTUAL</b>				
	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Gross domestic product at market prices (\$millions current)	37,652	37,835	38,614	39,271	40,225
(% change)	2.2%	0.5%	2.1%	1.7%	2.4%
Gross domestic product at market prices (\$2007, chained millions)	35,884	35,567	35,524	35,812	36,168
(% change)	0.5%	-0.9%	-0.1%	0.8%	1.0%
Compensation of employees (\$millions current)	19,986	20,346	20,838	21,342	21,829
(% change)	3.2%	1.8%	2.4%	2.4%	2.3%
Household income (\$millions current)	35,668	36,687	37,690	38,695	39,924
(% change)	3.4%	2.9%	2.7%	2.7%	3.2%
Household final consumption expenditure (\$millions current)	26,223	26,909	27,762	28,595	28,977
(% change)	4.5%	2.6%	3.2%	3.0%	1.3%
Retail sales (\$millions current)	13,098	13,223	13,605	13,915	13,827
(% change)	3.5%	1.0%	2.9%	2.3%	-0.6%
Consumer Price Index (all-items, Index 2002=100)	122.7	125.1	126.6	128.8	129.3
(% change)	3.8%	2.0%	1.2%	1.7%	0.4%
Business gross fixed capital formation: residential (\$millions current)	2,595	2,711	2,723	2,420	2,595
(% change)	3.2%	4.5%	0.4%	-11.1%	7.2%
Gross fixed capital formation: non-res., M&E, gov't, IP (\$millions current)	5,672	4,773	5,144	4,941	5,053
(% change)	-6.6%	-15.8%	7.8%	-3.9%	2.3%
Net operating surplus: corporations (\$millions current)	2,755	2,284	2,165	2,007	1,969
(% change)	-11.7%	-17.1%	-5.2%	-7.3%	-1.9%
Net mixed income: unincorporated (\$millions current)	3,897	4,005	4,049	4,114	4,281
(% change)	2.7%	2.8%	1.1%	1.6%	4.1%
Exports of goods and services (\$millions current)	15,389	15,197	15,226	15,538	15,940
(% change)	6.2%	-1.2%	0.2%	2.0%	2.6%
Exports of goods to other countries (\$millions current)	5,868	5,727	5,250	5,580	5,776
(% change)	6.3%	-2.4%	-8.3%	6.3%	3.5%
Imports of goods and services (\$millions current)	25,985	25,618	26,444	26,550	27,200
(% change)	8.3%	-1.4%	3.2%	0.4%	2.4%
Population (all ages, 000s July 1)	944.5	944.9	943.5	943.3	943.4
(% change)	0.3%	0.1%	-0.1%	0.0%	0.0%
Population (ages 18-64, 000s July 1)	618.9	615.1	609.8	605.7	601.3
(% change)	0.1%	-0.6%	-0.9%	-0.7%	-0.7%
Labour Force (000s)	497.9	503.5	497.7	491.6	490.2
(% change)	-0.2%	1.1%	-1.2%	-1.2%	-0.3%
Participation rate (%)	63.9%	64.4%	63.7%	62.8%	62.4%
(change)	-0.4%	0.5%	-0.7%	-0.9%	-0.4%
Employment (000s)	453.0	457.6	452.6	447.6	448.1
(% change)	0.4%	1.0%	-1.1%	-1.1%	0.1%
Employment Rate (%)	58.1%	58.5%	57.9%	57.2%	57.0%
(change)	-0.1%	0.4%	-0.6%	-0.7%	-0.2%
Unemployment Rate (%)	9.0%	9.1%	9.1%	9.0%	8.6%
(change)	-0.6%	0.1%	0.0%	-0.1%	-0.4%

## ECONOMIC OUTLOOK 2017 AND 2018

	FORECAST			Avg.	Avg.
	2016	2017	2018	2011-15	2016-18
Gross domestic product at market prices (\$millions current)	41,098	42,249	43,363		
(% change)	2.2%	2.8%	2.6%	1.7%	2.7%
Gross domestic product at market prices (\$2007, chained millions)	36,514	36,910	37,214		
(% change)	1.0%	1.1%	0.8%	0.2%	1.0%
Compensation of employees (\$millions current)	22,264	22,776	23,291		
(% change)	2.0%	2.3%	2.3%	2.2%	2.3%
Household income (\$millions current)	40,874	41,865	42,896		
(% change)	2.4%	2.4%	2.5%	2.9%	2.4%
Household final consumption expenditure (\$millions current)	30,033	30,922	31,817		
(% change)	3.6%	3.0%	2.9%	2.5%	2.9%
Retail sales (\$millions current)	14,394	14,708	15,020		
(% change)	4.1%	2.2%	2.1%	1.4%	2.2%
Consumer Price Index (all-items, Index 2002=100)	130.9	133.3	136.0		
(% change)	1.2%	1.9%	2.0%	1.3%	1.9%
Business gross fixed capital formation: residential (\$millions current)	2,426	2,390	2,452		
(% change)	-6.5%	-1.5%	2.6%	0.0%	0.5%
Gross fixed capital formation: non-res., M&E, gov't, IP (\$millions current)	5,330	5,524	5,544		
(% change)	5.5%	3.6%	0.4%	-2.8%	2.0%
Net operating surplus: corporations (\$millions current)	2,005	2,079	2,136		
(% change)	1.8%	3.7%	2.7%	-8.1%	3.2%
Net mixed income: unincorporated (\$millions current)	4,389	4,475	4,549		
(% change)	2.5%	1.9%	1.7%	2.4%	1.8%
Exports of goods and services (\$millions current)	16,411	17,161	17,714		
(% change)	3.0%	4.6%	3.2%	0.9%	3.9%
Exports of goods to other countries (\$millions current)	5,658	5,807	5,957		
(% change)	-2.0%	2.6%	2.6%	-0.4%	2.6%
Imports of goods and services (\$millions current)	28,239	29,210	29,969		
(% change)	3.8%	3.4%	2.6%	1.1%	3.0%
Population (all ages, 000s July 1)	949.5	952.2	954.2		
(% change)	0.6%	0.3%	0.2%	0.0%	0.2%
Population (ages 18-64, 000s July 1)	601.3	599.1	596.4		
(% change)	0.0%	-0.4%	-0.5%	-0.7%	-0.4%
Labour Force (000s)	486.6	486.2	485.4		
(% change)	-0.7%	-0.1%	-0.2%	-0.4%	-0.1%
Participation rate (%)	61.7%	61.5%	61.2%	63.4%‡	61.5%‡
(change)	-0.7%	-0.2%	-0.2%		
Employment (000s)	446.2	447.4	446.7		
(% change)	-0.4%	0.3%	-0.2%	-0.3%	0.1%
Employment Rate (%)	56.6%	56.6%	56.4%	57.8%‡	56.5%‡
(change)	-0.5%	0.0%	-0.2%		
Unemployment Rate (%)	8.3%	8.0%	8.0%	9.0%‡	8.1%‡
(change)	-0.3%	-0.3%	0.0%		

‡Average level over period, not average change

Note: non-residential structures, machinery, equipment, intellectual property includes government and non-profit sector investments as well as business sector investments

Highlighted material are forecast estimates