

EDUCATION SPENDING in Public Schools in Canada

2019 Edition

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Executive summary

This study focuses on the change in education spending on public schools over the last decade (2006/07 to 2015/16). It has two main parts. The first part focuses on the change in spending on public schools over the last decade, and the second part expands the analysis to explain the types of spending observed provincially and nationally.

To accurately understand education spending, both enrolment changes and the effects of price changes must be considered. Total enrolment in public schools in Canada declined by 1.8 percent between 2006/07 and 2015/16, from 5.2 million to a little over 5.0 million students. Alberta had the largest increase in public school enrolment over the period at 13.7 percent. Saskatchewan (6.5 percent) and Manitoba (0.5 percent) also experienced increasing enrolment levels. All other provinces saw a decline in public school enrolment over the period.

For Canada as a whole, over the last decade (2006/07 to 2015/16), per-student spending in public schools increased 17.3 percent (once adjustments have been made for inflation). Specifically, per-student education spending in public schools, accounting for changes in prices, increased from \$10,901 to \$12,791 between 2006/07 and 2015/16.

Saskatchewan saw the largest increase in per-student spending in public schools (after adjusting for inflation). That province experienced a 36.4 percent increase—from \$11,224 in 2006/07 to \$15,314 in 2015/16. The smallest increase was in Alberta (8.1 percent). Per-student spending in public schools in all 10 provinces increased over this period.

Saskatchewan also had the highest level of per-student spending among the provinces in 2015/16 at \$15,314. Manitoba was second highest with per-student spending of \$14,986. Quebec has the lowest level of per-student spending at \$10,992.

In aggregate, Canada increased education spending in public schools by \$9.2 billion more between 2006/07 and 2015/16 than was necessary to account for enrolment and price changes. If per-student spending in public schools had remained constant over this period, the aggregate amount of education spending in public schools would have been 14.1 percent lower. Provincially, Saskatchewan had the largest percentage difference between

the actual spending on public schools, and what would have been required to simply account for changes in enrolment and price levels. Specifically, if per-student spending had been maintained at 2006/07 levels (adjusted only for increases in enrolment and inflation), spending on public schools in Saskatchewan would have been lower by \$690 million—a difference of 25.4 percent.

Compensation (salaries and wages, fringe benefits, and pensions) accounts for most of the increase in spending for Canada as a whole, growing from \$35.1 billion in 2006/07 to \$48.3 billion in 2015/16. Salaries and wages increased by 33.2 percent, from \$28.8 billion in 2006/07 to \$38.4 billion in 2015/16, and accounted for 72.4 percent of the overall compensation increase. As a share of total education spending in public schools, salaries and wages increased slightly from 59.0 percent in 2006/07 to 59.4 percent in 2015/16.

Fringe benefits increased 48.8 percent from \$3.7 billion to \$5.6 billion over the period. The increase in this spending category explains 13.8 percent of the overall increase in compensation spending. As a share of total education spending in public schools, fringe benefits have increased from 7.6 percent in 2006/07 to 8.6 percent in 2015/16.

Teacher pension costs for Canada as a whole increased 71.0 percent from \$2.6 billion in 2006/07 to \$4.4 billion in 2015/16. Pension costs increased as a share of total education spending on public schools from 5.3 percent in 2006/07 to 6.8 percent in 2015/16.

Capital spending also saw a substantial rise over the decade, increasing from \$3.8 billion in 2006/07 to \$5.0 billion in 2015/16—a 31.7 percent increase. However, as a share of total education spending in public schools, capital spending remained steady at 7.7 percent.

It is clear from the data presented in this study that spending in every province was greater than what would have been required to account for changes in enrolment and price changes, with the majority of this spending going towards compensation. This is contrary to the general perception that education spending in public schools has been cut.

Introduction

In an ongoing effort to provide Canadians with basic information regarding the state of primary and secondary education (hereafter referred to as K–12 education), this study focuses on the change in per-student education spending in public schools over the last decade (2006/07 to 2015/16). It is an update to previous studies by MacLeod and Emes (2017a, 2017b), and Clemens, Emes, and Van Pelt (2016).

This study has two main parts. The first part focuses on the change in spending on public schools over the last decade. The second part expands the analysis to explain the types of spending increases observed provincially and nationally. A brief conclusion follows.

Education spending and public student enrolment

This part is divided into five sections. The first explains the increase in total education spending on public schools by province over the last decade (2006/07 to 2015/16). The second shows enrolment numbers for each of the provinces for public schools over the same period. The third calculates per-student spending in public schools over time, which combines the data from the first two sections. Section four then adjusts the data from section three to account for inflation (i.e., price changes). Section five compares the actual increases in education spending on public schools by province with the amount predicated by enrolment changes in order to give a better context for the increases in spending in public schools across the country.

Total education spending on public schools

This section examines total spending in public schools over the last decade (2006/07 to 2015/16). It is important to recognize several aspects of this measure. First, it is limited to spending on public schools, as distinct from spending on public education. This means government spending on independent schools in Quebec and the four western provinces is excluded.

Second, Statistics Canada's currently available data includes some small categories of revenue and spending that could be considered non-governmental and are difficult to remove. Specifically, "Fees & Other Private Sources" is included in this bulletin's data series. The category includes rentals and leases, investment revenues, capital fund-sourced revenues, other fees, trust account revenues, interschool transfers, and adjustments. These items represent a comparatively small amount of revenues and spending relative to the entire envelope of spending on public schools. However, it is important to recognize that the measure relied on for this bulletin may include a small amount of private revenues and spending.

In addition, the dataset used includes several categories of spending on public schools that are often ignored or purposefully excluded. Specifically,

this dataset includes spending on capital (particularly new school construction and renovations to existing schools), as well as contributions to teacher pension plans. The inclusion of these spending categories is particularly important given their relative growth in recent years, as is explored later in this paper.

The specific definition used for this dataset is the following: “public elementary and secondary education expenditures” less “direct government expenditures on public education by the Department of National Defence,” “federal school expenditures,” and “special education expenditures on public education” (Statistics Canada, 2018a).

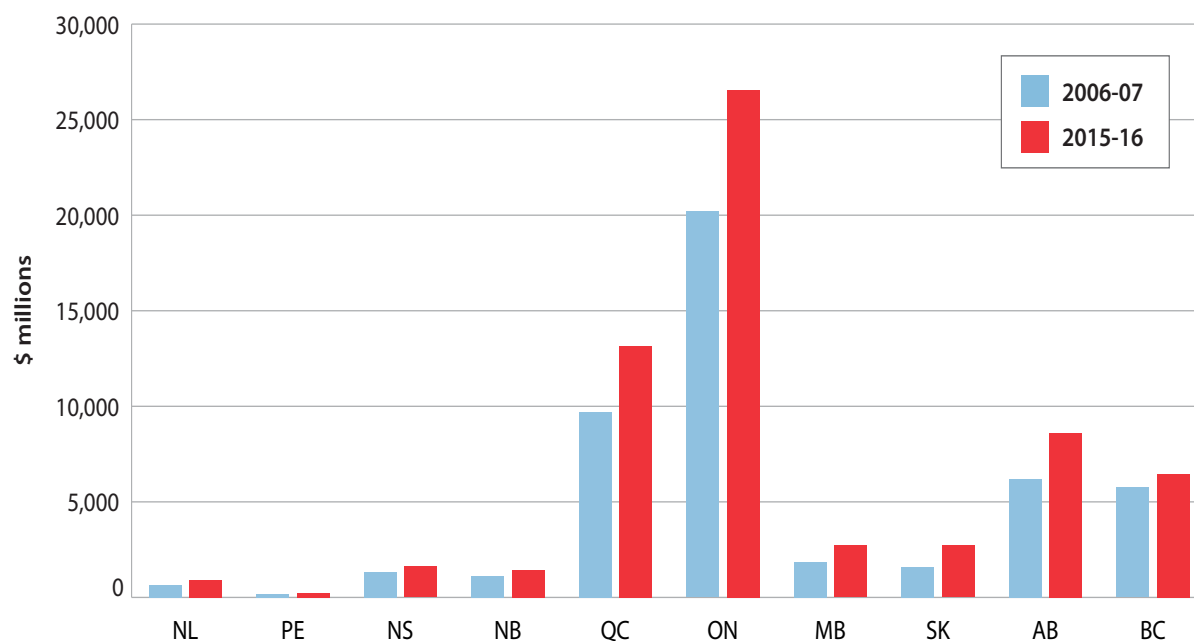
In aggregate, spending on public schools in 2015/16 amounted to \$64.8 billion, an increase of \$16.0 billion, or 32.6 percent from 2006/07 when spending on public schools was \$48.9 billion (**table 1; figure 1**).

The largest provincial increase in spending on public schools over the last decade was in Saskatchewan, which experienced a 71.1 percent rise. The smallest increase was in British Columbia (12.2 percent). A total of seven provinces had a marked increase in spending on public schools—in excess of 30.0 percent.

Table 1: Spending in public schools

	2006/07	2015/16	2006/07–2015/16	
	<i>\$ millions</i>		<i>Nominal change (\$ millions)</i>	<i>% change</i>
Canada	48,882	64,834	15,952	32.6%
NL	656	912	256	39.1%
PE	181	247	66	36.3%
NS	1,346	1,616	270	20.1%
NB	1,111	1,414	304	27.4%
QC	9,698	13,153	3,455	35.6%
ON	20,194	26,555	6,361	31.5%
MB	1,844	2,713	869	47.1%
SK	1,586	2,714	1,128	71.1%
AB	6,190	8,607	2,417	39.0%
BC	5,751	6,450	699	12.2%

Source: Statistics Canada, 2018a.

Figure 1: Spending on public schools

Source: Statistics Canada, 2018a.

Enrolment in public schools

As explained in a previous essay in this series (Van Pelt and Emes, 2015), aggregate spending on public schools misses a critical component: enrolment. Any analysis of education spending that ignores enrolment risks materially misrepresenting the reality of education spending. An increase in aggregate education spending that is less than the increase in enrolment results in a per-student decrease in spending on education. Alternatively, a reduction in education spending that is less than a reduction in enrolment results in an increase in per-student spending. It is, therefore, critical to account for changes in enrolment when analyzing education spending.

Table 2 contains enrolment data for Canada as a whole and for the individual provinces between 2006/07 and 2015/16, the most recent data available. **Figures 2a to 2d** illustrate the provincial enrolment over the same period by region.

Total enrolment in public schools in Canada declined by 1.8 percent between 2006/07 and 2015/16, from 5.2 million to a little over 5.0 million students. Total Canadian enrolment was at its lowest point over the last decade in 2011/12, and has seen small increases in each of the following years. Alberta saw the most significant increase in public school enrolment at 13.7 percent over the entire period. Saskatchewan (6.5 percent) and Manitoba (0.5 percent) also experienced a positive change in enrolment.

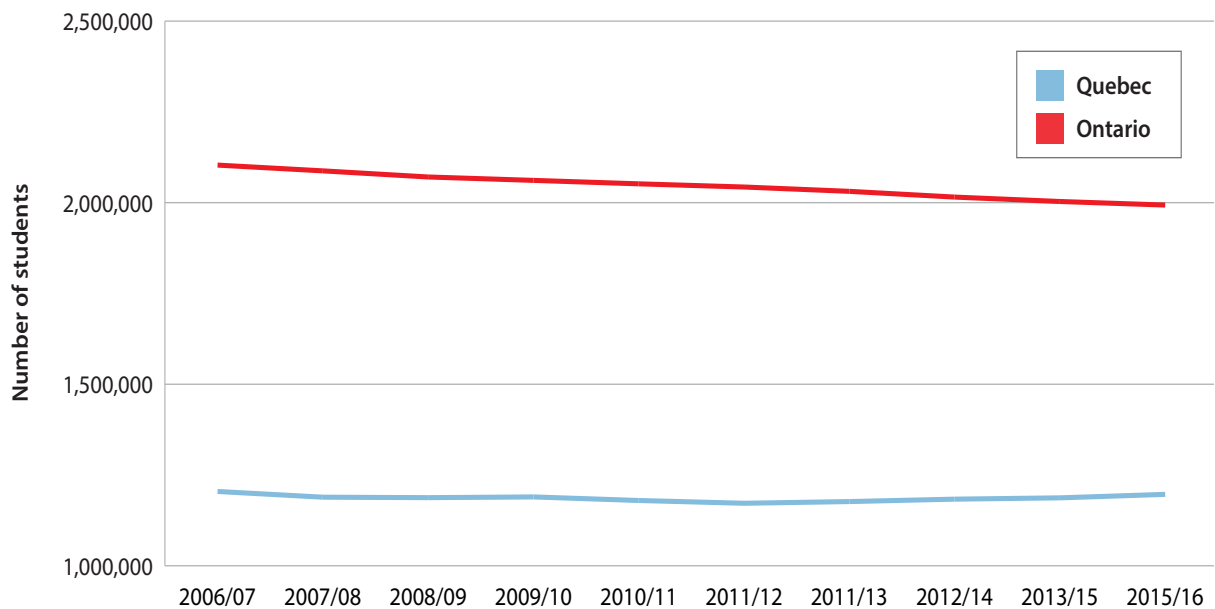
Table 2: Enrolment in public schools, 2006–07 to 2015–16 (number of students)

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	% change, 2006-07 to 2015-16
Canada	5,163,824	5,115,188	5,086,549	5,074,254	5,072,031	5,044,917	5,047,059	5,048,535	5,052,054	5,068,587	-1.8%
NL	74,343	72,111	70,641	69,666	68,655	67,830	67,476	67,293	67,167	66,654	-10.3%
PE	21,366	20,811	20,325	19,956	21,162	20,832	20,406	20,130	19,938	19,713	-7.7%
NS	138,661	135,303	133,134	130,548	128,133	125,538	122,643	121,029	119,382	118,152	-13.6%
NB	112,014	110,286	108,405	106,395	104,421	102,579	101,079	99,921	98,904	97,911	-12.6%
QC	1,204,622	1,188,903	1,187,612	1,189,632	1,179,801	1,172,145	1,176,846	1,183,494	1,187,100	1,196,667	-0.7%
ON	2,103,465	2,087,586	2,070,735	2,061,390	2,051,865	2,043,117	2,031,195	2,015,385	2,003,238	1,993,431	-5.2%
MB	180,042	179,322	177,960	177,498	177,681	178,917	179,292	179,109	179,736	181,023	0.5%
SK	166,498	167,181	164,763	166,002	165,573	166,863	169,725	171,987	174,744	177,246	6.5%
AB	560,562	559,119	564,051	567,810	573,102	574,908	591,399	608,166	625,668	640,869	13.7%
BC	578,626	571,267	565,875	562,740	579,111	569,733	564,531	558,981	552,786	553,377	-7.2%

Sources: Statistics Canada, 2017, 2018b.

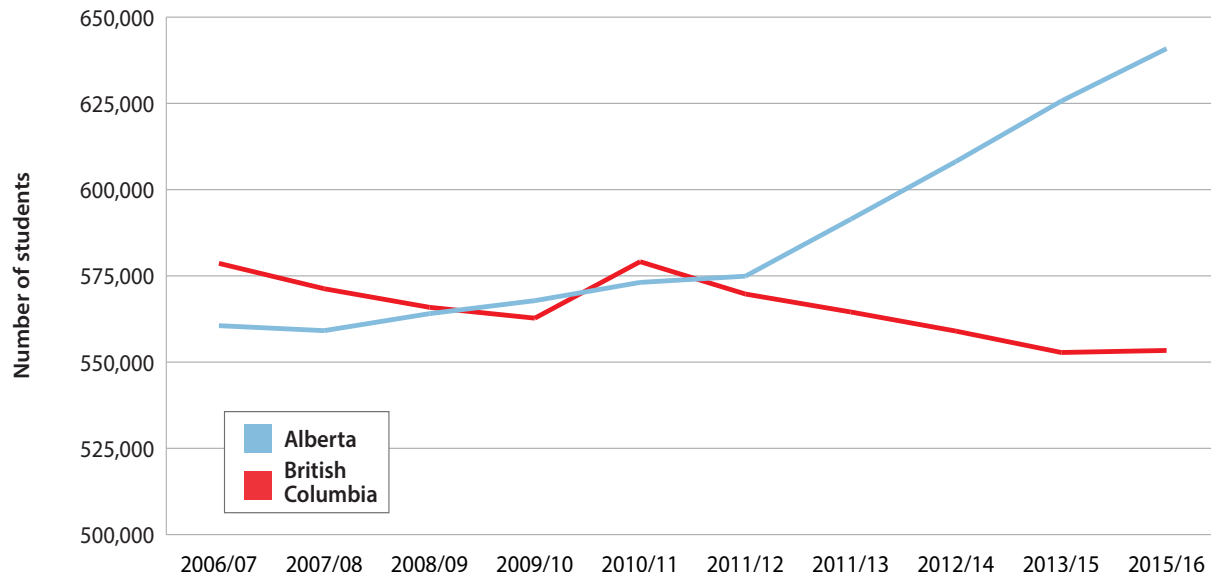
Notes: There are methodological or coverage changes in some provinces over this time period. Adjustments to percent change calculations have been made for the facts that:

- British Columbia includes students in “distributed learning” from 2010/11;
- Nova Scotia includes students in “vocational programs” from 2010/11;
- Alberta changed methodology in 2011/12.

Figure 2a: Enrolment in public schools, Ontario and Quebec

Sources: Statistics Canada, 2017, 2018b.

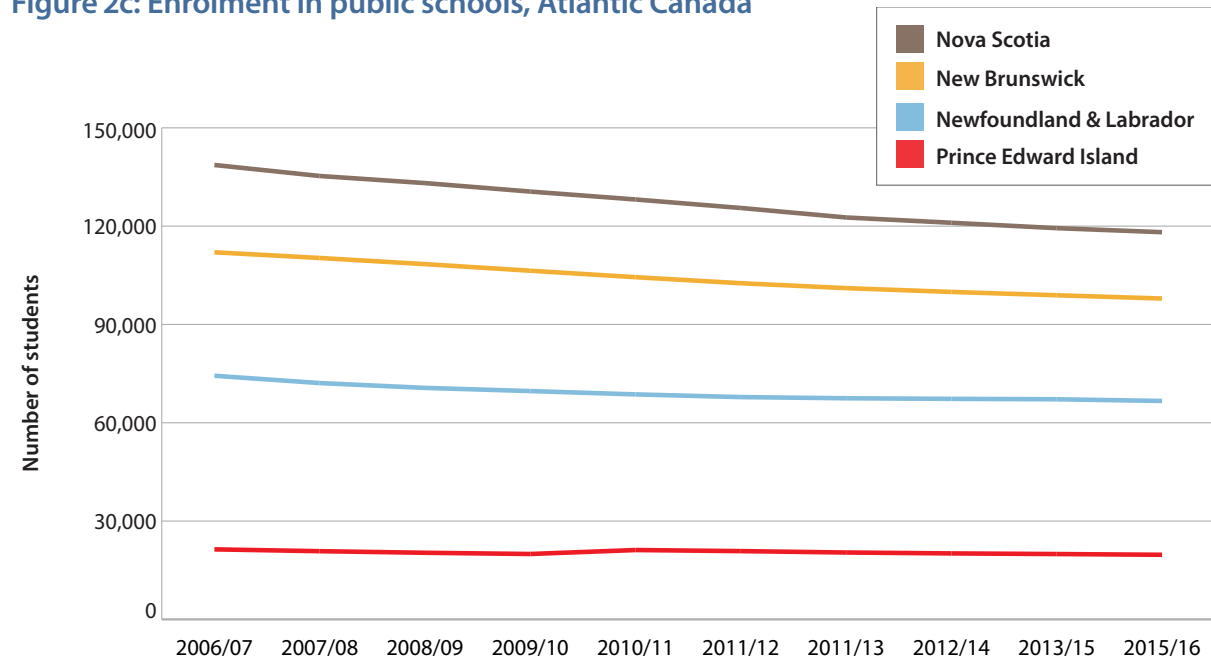
Figure 2b: Enrolment in public schools, Alberta and British Columbia



Sources: Statistics Canada, 2017, 2018b.

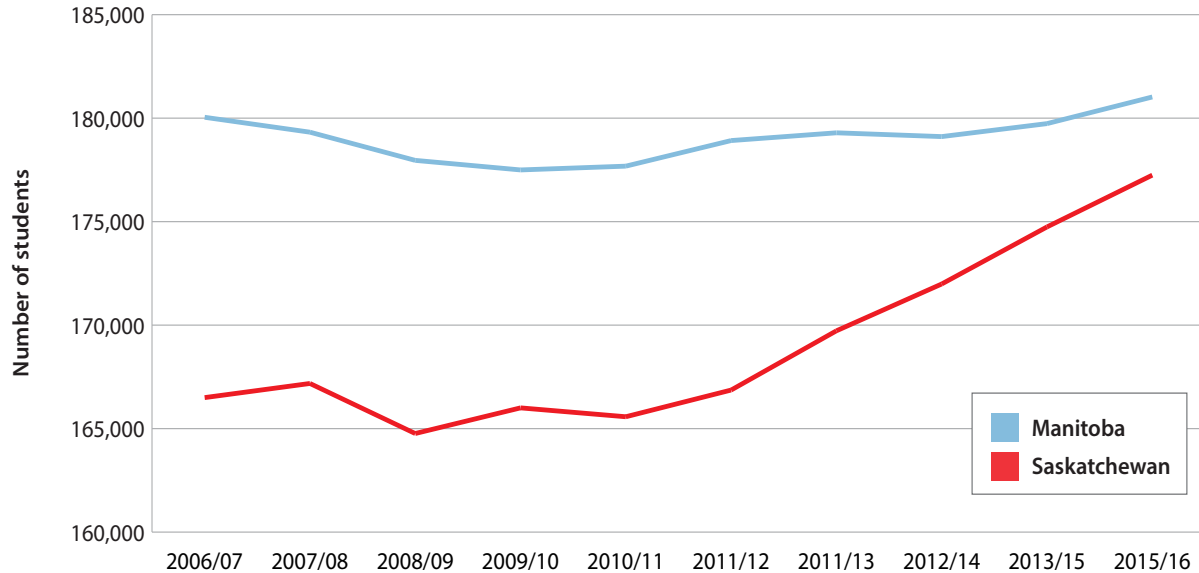
Notes: Alberta’s enrolment change is consistent with the rest of Canada when calculated as a share of population. Specifically, enrolments to population fell by 5.1% in Alberta and by 10.8% in Canada as a whole. From 2010/2011 onwards, the enrolment counts for British Columbia include students in “distributed learning”. Alberta changed methodology in 2011/12.

Figure 2c: Enrolment in public schools, Atlantic Canada



Sources: Statistics Canada, 2017, 2018b.

Note: Nova Scotia includes students in “vocational programs” from 2010/11

Figure 2d: Enrolment in public schools, Manitoba and Saskatchewan

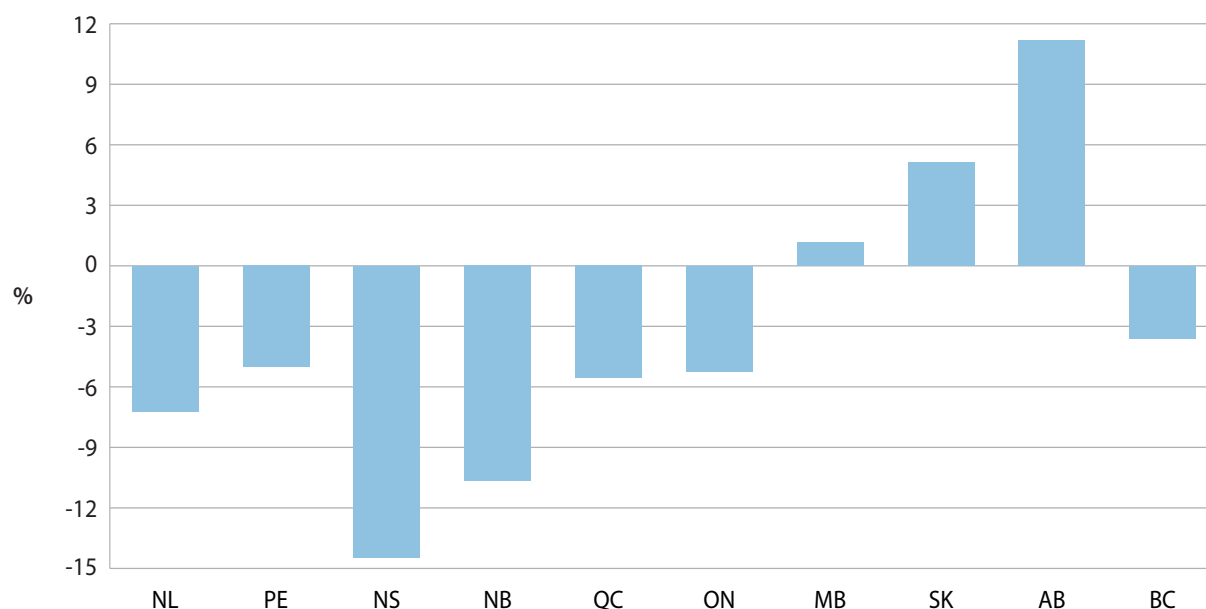
Sources: Statistics Canada, 2017, 2018b.

The other seven provinces all saw a drop in public school enrolment over the period. The largest declines were in Atlantic Canada, which ranged from a drop of 7.7 percent in Prince Edward Island to a drop of 13.6 percent in Nova Scotia. Outside of Atlantic Canada, British Columbia recorded the largest fall in public school enrolment at 7.2 percent.

The declines in public school enrolment over this period are generally due to a combination of slow growing or even shrinking school-age population (depending on the province) and the transition of students to independent schools and homeschooling.¹

Figure 3 illustrates the percentage change in the number of people of school age (ages 5 to 17) by province between 2007 and 2016. In three provinces the number of residents that were school-aged increased: Alberta (11.2 percent), Saskatchewan (5.1 percent), and Manitoba (1.1 percent). In all of the remaining provinces, the absolute number of residents that were of school age fell over this period. The reduction in the school-aged population ranged from -3.6 percent in British Columbia to -14.4 percent in Nova Scotia.

1. For more information and a detailed discussion on changing enrolments in the public, independent, and home school sectors, see MacLeod and Hasan (2017).

Figure 3: Change in school-aged population by province, 2007–2016

Source: Statistics Canada, 2018e.

Per-student spending in public schools

The decline in public school enrolment in seven of the ten provinces means that the per-student increases in spending are larger than the simple aggregated spending increase presented earlier. **Table 3** and **figure 4** present data on per-student spending in public schools between 2006/07 and 2015/16.

Canada as a whole recorded a 35.1 percent increase in per-student spending in public schools between 2006/07 and 2015/16—from \$9,466 in 2006/07, to \$12,791 in 2015/16. This is higher than the noted increase in aggregate spending of 32.6 percent over the same period because of the influence of declining student enrolment.

All of the provinces recorded increases in per-student spending in public schools over the period of 2006/07 to 2015/16 (figure 4). Saskatchewan has seen the largest increase. Per-student spending in that province's public schools went from \$9,526 to \$15,314 over the period, an increase of 60.8 percent. Newfoundland and Labrador is not far behind with an increase of 55.1 percent, from \$8,821 in 2006/07 to \$13,686 in 2015/16.

British Columbia recorded the smallest increase at 20.2 percent, and Alberta had the second smallest increase at 21.6 percent. All other provinces experienced per-student spending increases of over 33.0 percent. Five provinces—Newfoundland and Labrador, Prince Edward Island, New Brunswick, Manitoba, and Saskatchewan – had increases over 45 percent. Simply put, all of the provinces introduced marked increases in per-student spending in public schools over this period.

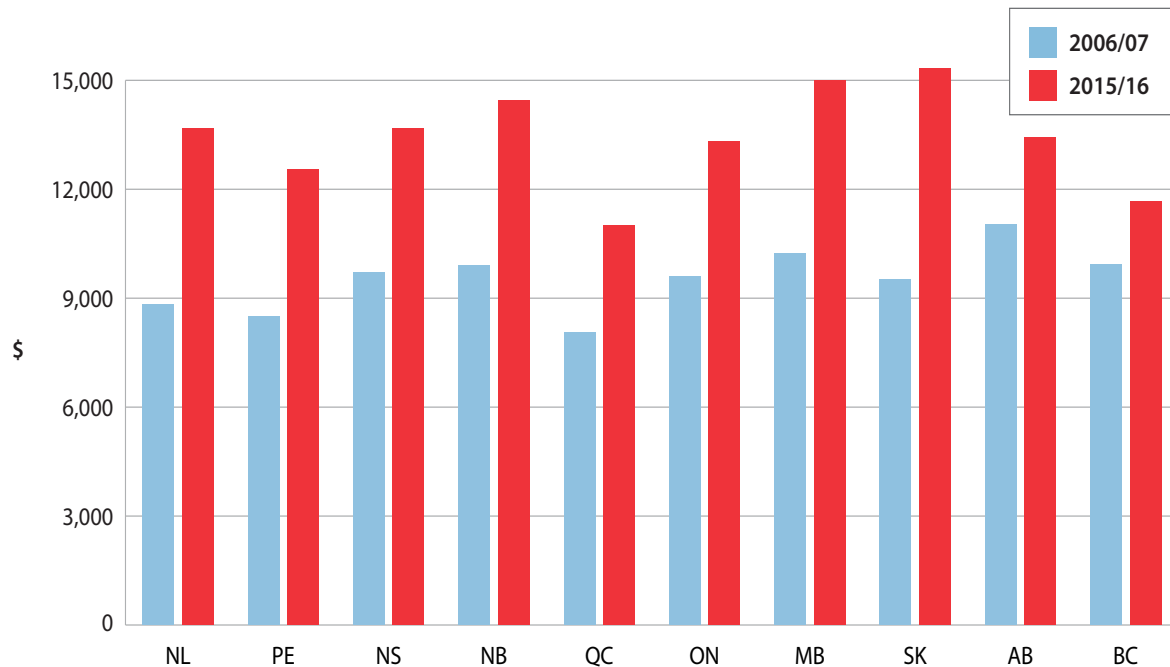
Table 3: Per-student spending in public schools, 2006–07 to 2015–16 (\$)

	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	% change, 2006-07 - 2015-16
Canada	9,466	9,986	10,628	11,154	11,554	11,812	12,027	12,392	12,656	12,791	35.1%
NL	8,821	10,105	10,953	12,611	12,491	12,754	12,866	13,190	13,174	13,686	55.1%
PE	8,484	8,971	10,102	12,013	11,373	11,317	11,899	12,411	12,610	12,531	47.7%
NS	9,706	10,216	10,867	11,510	11,955	12,031	12,191	12,382	13,179	13,677	33.0%
NB	9,914	10,339	11,396	11,951	13,053	13,181	13,538	13,271	13,856	14,446	45.7%
QC	8,051	8,892	9,191	9,448	9,882	10,200	10,412	10,905	11,049	10,992	36.5%
ON	9,600	10,010	10,651	11,316	11,946	12,117	12,299	12,753	13,276	13,321	38.8%
MB	10,241	10,672	11,188	11,571	11,894	12,150	12,950	13,887	14,498	14,986	46.3%
SK	9,526	9,821	10,545	11,643	11,926	13,223	14,331	14,681	15,040	15,314	60.8%
AB	11,043	11,034	12,367	13,235	13,537	13,564	13,302	13,460	13,197	13,430	21.6%
BC	9,939	10,679	11,204	11,035	10,672	11,038	11,382	11,388	11,216	11,656	20.2%

Sources: Statistics Canada, 2017, 2018a, 2018b.

Notes: There are methodological or coverage changes in some provinces over this time period. Adjustments to percent change calculations have been made for the facts that:

- British Columbia includes students in “distributed learning” from 2010/11;
- Nova Scotia includes students in “vocational programs” from 2010/11;
- Alberta changed methodology in 2011/12.

Figure 4: Per-student spending in public schools, by province (\$)

Sources: Statistics Canada, 2017, 2018a, 2018b.

Accounting for inflation

An important factor has been thus far left out of the analysis: the influence of changing prices. Inflation, or what is commonly referred to as increases in the price level, refers to changes in prices that affect the real or effective value of money. Simply put, governments could well be spending more in nominal dollars on education over time, but if these increases are less than inflation, the real or effective level of spending could be decreasing. The reason for this seemingly counterintuitive result is that inflation erodes the value of money by making the goods and services purchased more expensive. This section recalculates the increases in per-student spending in public schools in each of the provinces adjusting for inflation over the time period. **Table 4** and **figure 5** present the recalculated numbers.

For Canada as a whole, over the last decade (2006/07 to 2015/16), the increase in per-student spending in public schools once adjusted for inflation is 17.3 percent. In other words, accounting for changes in prices and enrolment, spending on public schools in Canada increased 17.3 percent between 2006/07 and 2015/16—from \$10,901 to \$12,791 per student (table 4).

After adjusting for inflation, the largest increase in per-student spending in public schools was in Saskatchewan, which experienced a 36.4 percent increase—from \$11,224 in 2006/07 to \$15,314 in 2015/16. The smallest increase was recorded in Alberta (8.1 percent).

The percentage increases in per-student spending in public schools in table 4 are all less than the increases calculated in table 3, which did not include the effect of inflation on spending. Note, however, that all ten provinces recorded inflation-adjusted increases in per-student spending in public schools over this period.

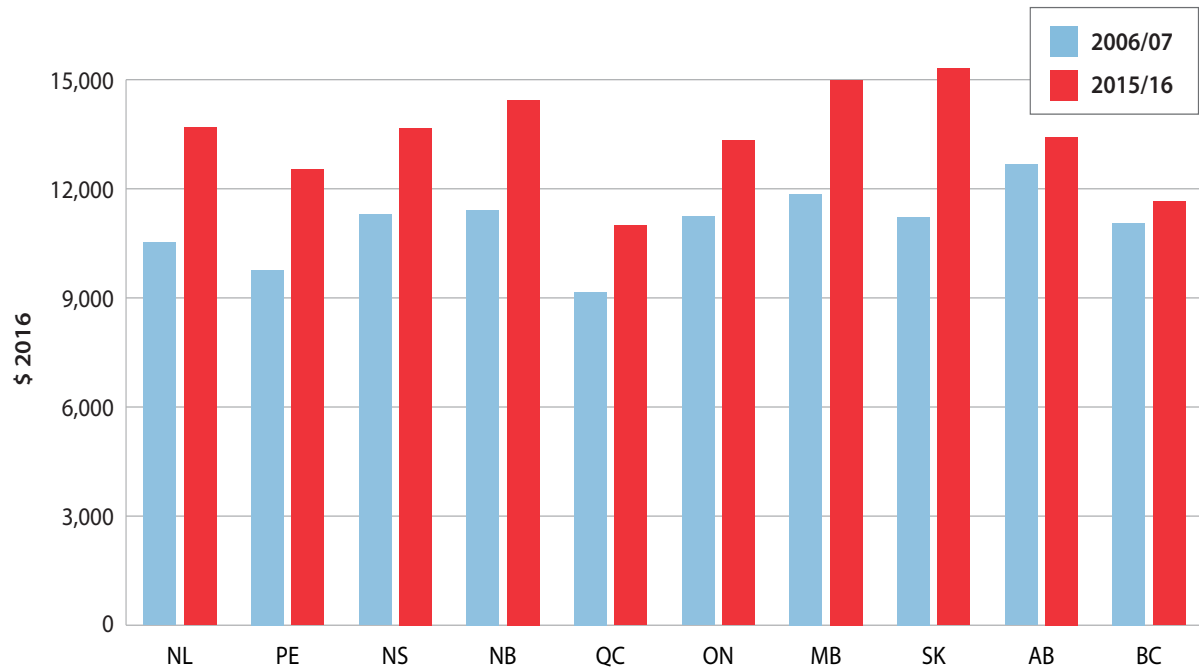
Table 4: Per-student spending in public schools, adjusted for price changes, 2006–07 to 2015–16 (\$ 2016)

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	% change, 2006-07 to 2015-16
Canada	10,901	11,237	11,928	12,293	12,373	12,462	12,575	12,709	12,836	12,791	17.3%
NL	10,520	11,715	12,664	14,234	13,633	13,640	13,530	13,611	13,531	13,686	30.1%
PE	9,769	9,986	11,264	13,149	12,094	11,795	12,159	12,478	12,756	12,531	28.3%
NS	11,294	11,538	12,295	12,747	12,754	12,589	12,605	12,584	13,343	13,677	20.1%
NB	11,420	11,709	12,872	13,220	13,945	13,851	14,111	13,633	14,165	14,446	26.5%
QC	9,159	9,910	10,179	10,337	10,491	10,605	10,746	11,100	11,128	10,992	20.0%
ON	11,238	11,459	12,150	12,598	12,901	12,903	12,969	13,138	13,516	13,321	18.5%
MB	11,857	12,084	12,590	12,919	12,898	12,968	13,518	14,231	14,681	14,986	26.4%
SK	11,224	11,202	11,905	12,967	12,923	14,109	15,073	15,080	15,201	15,314	36.4%
AB	12,663	12,268	13,762	14,583	14,561	14,429	13,952	13,765	13,345	13,430	8.1%
BC	11,059	11,639	12,211	11,869	11,213	11,469	11,836	11,724	11,421	11,656	11.3%

Sources: Statistics Canada, 2017, 2018a, 2018b, 2018c.

Notes: There are methodological or coverage changes in some provinces over this time period. Adjustments to percent change calculations have been made for the facts that:

- British Columbia includes students in “distributed learning” from 2010/11;
- Nova Scotia includes students in “vocational programs” from 2010/11;
- Alberta changed methodology in 2011/12.

Figure 5: Per-student spending in public schools, adjusted for price changes (\$ 2016)

Sources: Statistics Canada, 2017, 2018a, 2018b, 2018c.

The spending increases in context

Inflation-adjusted increases in per-student spending ranging from 8.1 percent to 36.4 percent appear fairly large (table 4). However, there is no context provided within which to gauge how large or small the increases actually are. The following section compares the actual spending increases against the predicted increases based on enrolment in the public schools of each province.

Put differently, this analysis is based on a counterfactual assumption wherein education spending is calculated for 2015/16 based on the per-student level observed in 2006/07 adjusted for changes in enrolment and inflation. In other words, this section compares actual aggregate spending on public schools in 2015/16 with what the spending would have been, in total, if the per-student spending levels on public schools remained constant (adjusted for inflation) based on their 2006/07 values. **Table 5** contains the calculations for both the actual spending and the counterfactual-based spending, as well as the difference. **Figure 6** illustrates the total spending on public schools based on two different scenarios relating to per-student spending. The first is the actual level of spending on public schools. The second scenario, referred to as “Adjusted Spending” illustrates what total education spending on public schools in each province would have been had the 2006/07 per-student spending levels (adjusted for inflation) been maintained through 2015/16.

In aggregate, Canada increased education spending in public schools by \$9.2 billion more between 2006/07 and 2015/16 than was necessary to account for enrolment and price changes (table 5). If per-student spending in public schools had remained constant over this period, the aggregate amount of education spending in public schools in 2015/16 would have been 14.1 percent lower.

On a provincial basis, Saskatchewan recorded the largest percentage difference between the actual spending on public schools and what would have been required to account for price and enrolment changes. Specifically, Saskatchewan had education spending on public schools in 2015/16 that was \$690 million more than necessary to account for inflation and enrolment changes over the period. Spending on public schools in Saskatchewan would have been 25.4 percent lower had the province simply increased education spending to account for inflation and enrolment changes over the last decade.

The second highest difference was found in Newfoundland and Labrador, with public school spending 24.1 percent, or \$220 million, higher than necessary to account for inflation and enrolment changes.

The smallest difference between actual spending on public schools and what was necessary to account for inflation and enrolment changes was recorded by Alberta (\$182 million, or 2.1 percent).

The differences between actual spending on public schools in 2015/16 versus what would have been the case if greater restraint were exhibited

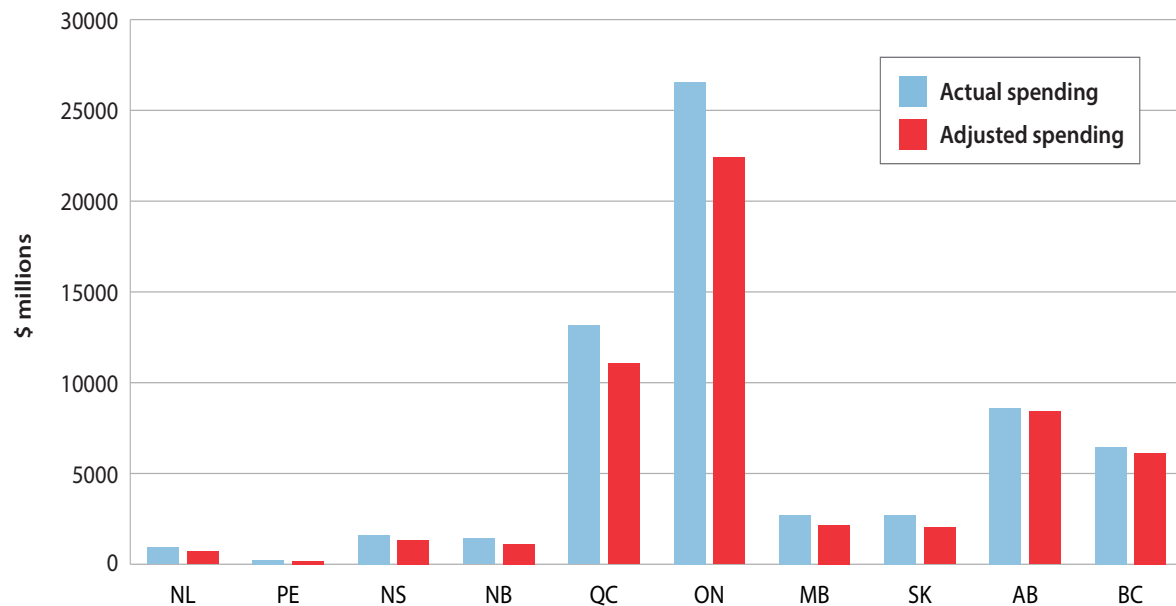
across the country to control spending increases illustrates the rather large increases in education spending in public schools implemented over the last decade (2006/07 to 2015/16).

Table 5: Comparing actual and adjusted spending in public schools, 2015/16 (\$ millions)

	Actual spending	Adjusted spending	Difference	Percent difference
Canada	64,834	55,677	-9,158	-14.1%
NL	912	693	-220	-24.1%
PE	247	194	-53	-21.6%
NS	1,616	1,343	-273	-16.9%
NB	1,414	1,115	-300	-21.2%
QC	13,153	11,052	-2,101	-16.0%
ON	26,555	22,410	-4,145	-15.6%
MB	2,713	2,163	-550	-20.3%
SK	2,714	2,024	-690	-25.4%
AB	8,607	8,426	-182	-2.1%
BC	6,450	6,115	-335	-5.2%

Sources: Statistics Canada, 2017, 2018a, 2018b, 2018c.

Figure 6: Comparing actual and adjusted spending in public schools, 2015–16 (\$ millions)



Sources: Statistics Canada, 2017, 2018a, 2018b, 2018c.

Understanding the increases in education spending

This part extends the analysis of education spending in Canada over the last decade to explain the types of spending increases observed nationally and provincially. The education spending analysis is based on data provided to Statistics Canada by provincial governments. While Statistics Canada’s data tables are an excellent resource for understanding education spending, there are weaknesses in the underlying provincially provided data.² One key challenge relates to the data definitions, which are established by the provinces themselves and not Statistics Canada. Definitional differences among provinces and changes over time to spending categories can affect the quality of the data.

As a result of this definitional limitation along with other concerns, the authors combine the detailed spending data presented in this section into three main categories: compensation, capital, and other. After consultation with Statistics Canada, we determined that this aggregation of education spending categories offered the most reasonable balance between the potential variation in definitions among provinces together with other issues, and our desire to analyze changes within education spending categories.

“Compensation” covers the wages, benefits, and pensions of all staff employed by public schools. “Pensions” consists of employer contributions to teachers’ superannuation plans. Employer pension contributions for non-teaching staff are included in “fringe benefits.”

“Capital” expenditures are used to acquire a fixed or permanent asset, or to significantly improve an asset so as to extend its original useful life. They include spending on the construction of new buildings, the extension of existing facilities, and renovations and improvements to current facilities.

These two spending categories—compensation and capital—accounted for 82.5 percent of education spending in public schools in 2015/16.

2. See <<http://www.statcan.gc.ca/edu/power-pouvoir/ch2/types/5214777-eng.htm>> for more information on the types of data collected by Statistics Canada and their relative strengths and weaknesses.

The third and final category, “other,” combines all of the other spending categories provided by Statistics Canada, such as supply and services, fees and contractual services, and direct provincial government spending on services for school boards and administration.

Table 6 provides the aggregated provincial data for Canada as a whole. In total, education spending in public schools increased 32.2 percent between 2006/07 and 2015/16, representing an increase of \$15.7 billion, from \$48.9 billion to \$64.6 billion. An overwhelming proportion of the increase was spent on compensation, the costs for which grew from \$35.1 billion in 2006/07 to \$48.4 billion in 2015/16, an increase of 37.7 percent. The more than \$13.2 billion increase in compensation costs represents 84.1 percent of the total \$15.7 billion increase in education spending in public schools between 2006/07 and 2015/16.

It is important to understand how each of the three categories contributed to the overall increase in compensation spending. Salaries and wages, which increased from \$28.8 billion in 2006/07 to \$38.4 billion in 2015/16 (a 33.2 percent rise) accounted for 72.4 percent of the overall compensation increase. As a share of total education spending in public schools, salaries and wages increased slightly—from 59.0 percent in 2006/07 to 59.4 percent in 2015/16.

“Fringe benefits” rose from \$3.7 billion in 2006/07 to \$5.6 billion in 2015/16, a 48.8 percent increase. The increase in fringe benefits explains 13.8 percent of the overall increase in compensation spending. The cost of fringe benefits as a share of total education spending in public schools increased, rising from 7.6 percent in 2006/07 to 8.6 percent in 2015/16.

Table 6: Education spending allocations, Canada

	2006/07		2015/16		2006/07 to 2015/16		
	\$ millions	Share of total (%)	\$ millions	Share of total (%)	Change, \$ millions	Share of change (%)	Growth (%)
Compensation	35,129	71.9	48,358	74.8	13,228	84.1	37.7
Salaries & wages	28,826	59.0	38,406	59.4	9,581	60.9	33.2
Fringe benefits	3,734	7.6	5,558	8.6	1,823	11.6	48.8
Pensions	2,569	5.3	4,393	6.8	1,824	11.6	71.0
Capital	3,763	7.7	4,956	7.7	1,193	7.6	31.7
Other	9,990	20.4	11,294	17.5	1,304	8.3	13.1
Total	48,882		64,608		15,726		32.2

Sources: Statistics Canada, 2018a, 2018d.

Finally, “pension” costs increased significantly over the period, rising from \$2.6 billion in 2006/07 to \$4.4 billion in 2015/16, a 71.0 percent increase. This increase explains 13.8 percent of the overall increase in compensation costs. Pension costs also increased as a share of total education spending on public schools, from 5.3 percent in 2006/07 to 6.8 percent in 2015/16.

“Capital” spending also saw a substantial rise over the decade, growing from \$3.8 billion in 2006/07 to \$5.0 billion in 2015/16, a 31.7 percent increase. Capital represented 7.6 percent (\$1.2 billion) of the overall increase in education spending in public schools. As a share of total education spending in public schools, capital spending remained steady at 7.7 percent.

“Other” spending recorded the smallest increase of any category of spending in public schools over this time period (a 13.1 percent increase). As a share of total education spending, it declined from 20.4 percent in 2006/07 to 17.5 percent in 2015/16.

Expenditures on pensions and fringe benefits stand out as the fastest growing components of government spending on public schools. Tables 7 through 12 provide more details about pension, benefits, and capital spending in aggregate, both for Canada as a whole and for individual provinces.

Pension spending

Table 7 provides the dollar value of teacher pension contributions made by each provincial government in Canada, as well as the total contribution that all provincial governments made over the last decade. Government contributions to teacher pensions increased by 71.0 percent between 2006/07 and 2015/16.³ Pension contributions are increasing at a faster rate than any other component of overall education spending in public schools.

Two provinces—Ontario and Saskatchewan—increased pension contributions in excess of 100 percent over this period. In fact, these two provinces account for over 54.0 percent of the \$1.8 billion increase in pension spending between 2006/07 and 2015/16. New Brunswick is alone in showing a decline in pension contribution spending.⁴

Table 8 shows the annual growth in government contributions to teacher pension plans by province. Canada-wide pension spending grew by 6.5 percent a year, on average, between 2006/07 and 2015/16. All provinces saw positive annual growth in this spending category, ranging from a low of 0.3 percent in New Brunswick to a high of 13.3 percent in Saskatchewan.

3. The spending in this analysis includes only the employer portion of the pension contributions, not contributions to pensions made by the employees themselves.

4. New Brunswick introduced a new teacher’s pension plan in 2014 that ended special payments which had averaged \$83 million over the previous decade.

Table 7: Teacher pension spending (\$ millions)

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	Change	Share of change (%)	Growth (%)
Canada	2,569	2,444	3,104	3,253	3,673	3,881	4,036	4,335	4,290	4,393	1,824		71.0
NL	34	36	39	41	43	45	46	45	45	52	18	1.0	51.9
PE	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
NS	54	54	58	58	60	61	60	61	64	73	18	1.0	33.3
NB	116	125	131	137	145	149	153	55	68	78	-38	-2.1	-32.6
QC	505	569	556	576	672	668	645	806	702	799	294	16.1	58.2
ON	797	809	1,073	1,246	1,318	1,346	1,396	1,466	1,531	1,601	804	44.1	100.9
MB	126	117	137	141	142	145	152	160	167	183	57	3.1	44.8
SK	155	77	107	115	156	215	279	274	302	337	182	10.0	117.2
AB	483	347	675	600	781	883	932	1,089	1,025	851	367	20.1	76.0
BC	297	311	327	339	355	369	372	378	386	421	123	6.7	41.4

Source: Statistics Canada, 2018a.

Note: New Brunswick introduced a new teacher's pension plan in 2014 that ended special payments which had averaged \$83 million over the previous decade.

Table 8: Growth in teacher pension spending (%)

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	Average annual growth (%)
Canada	n/a	-4.9	27.0	4.8	12.9	5.7	4.0	7.4	-1.0	2.4	6.5
NL	n/a	3.9	8.4	6.0	4.6	5.0	1.4	-1.3	0.3	15.3	4.9
PE	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
NS	n/a	-1.2	8.3	0.3	2.7	1.7	-1.8	1.3	4.9	13.9	3.3
NB	n/a	7.3	5.4	4.1	6.4	2.6	2.9	-63.8	22.1	15.4	0.3
QC	n/a	12.7	-2.3	3.5	16.7	-0.6	-3.4	25.0	-13.0	13.9	5.8
ON	n/a	1.5	32.6	16.1	5.8	2.1	3.7	5.1	4.4	4.6	8.4
MB	n/a	-7.3	17.6	2.5	1.0	1.9	4.9	5.1	4.3	9.4	4.4
SK	n/a	-50.4	38.7	8.2	35.2	37.9	29.9	-1.8	10.3	11.3	13.3
AB	n/a	-28.3	94.9	-11.1	30.1	13.1	5.6	16.8	-5.9	-17.0	10.9
BC	n/a	4.6	5.1	3.6	4.9	3.8	1.0	1.4	2.3	8.9	3.9

Source: Statistics Canada, 2018a.

Looking at pension spending on a year by year basis, 2015/16 saw a relatively modest increase of 2.4 percent in overall pension spending in Canada. However, this was driven primarily by reduced pension contribution spending in Alberta (a 17.0 percent reduction between 2014/15 and 2015/16).⁵ All other provinces had an increase in year over year spending, with five provinces (Newfoundland and Labrador, Nova Scotia, New Brunswick, Quebec, and Saskatchewan) experiencing an increase in excess of 11 percent.

Fringe benefit spending

Within the compensation category, fringe benefit spending also had a higher average growth rate than the aggregate education spending growth rate. Fringe benefit spending increased from \$3.7 billion in 2006/07 to \$5.6 billion in 2015/16, a rise of 48.8 percent (**table 9**).

Other than a decline in 2011/12, fringe benefit spending in Canada has grown steadily over the last decade, averaging 4.6 percent growth per year, with annual growth ranging from a low of 0.5 percent in 2012/13 to a high of 18.5 percent in 2013/14 (**table 10**). The 2013/14 value is driven by changes in Ontario, which saw decreases in the two previous years followed by a large increase in 2013/14. The next largest annual increase at the national level is 5.7 percent in 2014/15.

The largest increases in nominal dollars over the period were in Alberta and Ontario, with increases of \$629 and \$628 million, respectively. These two provinces accounted for 69.0 percent of the total increase in fringe benefit spending in public schools in all of Canada between 2006/07 and 2015/16.

In terms of percentage increase, Alberta had the highest average annual growth rate over the period of 10.8 percent, followed by Prince Edward Island (5.9 percent) and Saskatchewan (4.9 percent). Newfoundland and Labrador had the lowest average annual growth rate of 1.9 percent.

5. Alberta made a \$1.2 billion contribution towards the pre-1992 unfunded pension obligation in the Teachers' Pension Plan in 2009/10. It is not entirely clear how this and other lump-sum payments were reported to Statistics Canada but in addition to several large increases in the pension category, Alberta's figures show "direct government expenditures on services to public school boards" increasing from \$143 million in 2005/06 to an average of \$721 million between 2006/07 and 2011/12.

Table 9: Fringe benefit spending (\$ millions)

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	Change	Share of change (%)	Growth (%)
Canada	3,734	3,920	4,090	4,251	4,420	4,333	4,355	5,159	5,455	5,558	1,823		48.8
NL	36	37	38	40	39	40	42	44	44	43	7	0.4	18.6
PE	20	21	23	24	25	28	30	33	33	34	13	0.7	66.6
NS	74	78	80	79	82	86	89	91	98	109	35	1.9	46.7
NB	45	47	50	49	51	53	58	61	63	63	19	1.0	42.0
QC	654	684	698	729	757	802	844	871	901	900	247	13.5	37.8
ON	1,868	1,951	2,033	2,113	2,209	1,904	1,594	2,297	2,434	2,496	628	34.5	33.6
MB	92	96	102	108	111	116	124	128	132	139	47	2.6	51.4
SK	86	84	90	98	104	111	119	124	129	131	46	2.5	53.3
AB	444	472	500	523	542	675	911	967	1,030	1,073	629	34.5	141.9
BC	388	419	443	454	464	477	495	493	541	521	133	7.3	34.4

Source: Statistics Canada, 2018d.

Table 10: Growth in fringe benefit spending (%)

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	Average annual growth (%)
Canada	n/a	5.0	4.3	3.9	4.0	-2.0	0.5	18.5	5.7	1.9	4.6
NL	n/a	1.6	4.4	4.0	-1.6	2.0	4.2	4.8	-0.3	-1.8	1.9
PE	n/a	5.6	6.2	7.0	4.6	9.4	9.0	8.4	1.1	1.4	5.9
NS	n/a	4.5	3.2	-1.4	4.3	4.6	3.0	2.3	7.6	11.3	4.4
NB	n/a	4.4	7.4	-1.2	3.8	4.2	8.7	5.5	2.4	1.0	4.0
QC	n/a	4.7	2.0	4.5	3.8	5.9	5.3	3.2	3.5	-0.1	3.6
ON	n/a	4.5	4.2	4.0	4.5	-13.8	-16.3	44.2	6.0	2.5	4.4
MB	n/a	5.4	5.7	5.8	3.0	4.4	7.0	2.9	3.4	4.9	4.7
SK	n/a	-2.4	7.7	8.6	6.4	6.9	7.4	3.9	4.2	1.5	4.9
AB	n/a	6.4	5.9	4.6	3.7	24.5	35.1	6.1	6.5	4.2	10.8
BC	n/a	7.9	5.9	2.4	2.2	2.9	3.7	-0.4	9.7	-3.6	3.4

Source: Statistics Canada, 2018d.

Capital spending

Capital spending is another public schools spending category that experienced substantial growth. Capital spending increased from \$3.8 billion in 2006/07 to \$5.0 billion in 2015/16, a rise of 31.7 percent (**table 11**).

Capital spending on public schools in Canada has grown by an average of 3.2 percent per year (**table 12**). There were two years that saw an annual decline (2010/11 and 2015/16), with annual growth in the other eight years ranging from 1.0 percent in 2011/12 to a high of 27.3 percent in 2006/07.

The largest increase in nominal dollars over the period was in Quebec, with a total rise of \$775 million between 2006/07 and 2015/16. This province alone accounted for 65.0 percent of the total increase in capital spending in public schools in all of Canada. The second largest increase in nominal dollars was in Alberta, with a rise of \$164 million between 2006/07 and 2015/16.

Ontario was the only province with a decrease, in nominal dollars, over the period, falling from \$2.3 billion in 2006/07 to \$2.2 billion in 2015/16. The smallest nominal dollar increase over the period was in Newfoundland and Labrador, with an increase of \$51 million.

However, in terms of percentage increase, Newfoundland and Labrador has the highest average annual growth rate over the period of 15.3 percent, followed by Alberta (14.9 percent) and Saskatchewan (12.3 percent). Ontario had the lowest average annual growth rate of -0.5 percent.

There is a high degree of variability in the annual growth rates both between the provinces, and within the provinces over time. Every province (with full data series) has experienced a year-over-year decline in capital spending in public schools at least once, but significant increases were also recorded. Alberta has seen the greatest variability, with an annual growth of 146.8 percent in 2008/09, and a reduction of 39.9 percent in 2011/12.

Table 11: Capital spending (\$ millions)

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	Change	Share of change (%)	Growth (%)
Canada	3,763	4,091	4,514	4,772	4,580	4,628	4,771	4,919	5,097	4,956	1,193		31.7
NL	27	30	34	56	77	56	54	74	82	79	51	4.3	186.2
QC	556	949	1,136	1,181	1,205	1,210	1,193	1,244	1,348	1,331	775	65.0	139.3
ON	2,337	2,254	2,140	2,269	2,291	2,389	2,368	2,322	2,336	2,229	-108	-9.0	-4.6
MB	132	96	92	91	93	97	131	207	250	240	108	9.1	82.0
SK	106	109	92	103	86	138	244	262	258	221	115	9.6	108.5
AB	230	229	565	604	397	239	240	269	317	395	164	13.8	71.3
BC	351	404	438	450	417	487	532	526	475	423	72	6.1	20.7

Source: Statistics Canada, 2018d.

Note: Prince Edward Island, Nova Scotia, and New Brunswick not reported because the underlying values are too small and/or they drop to zero over the period of analysis.

Table 12: Growth in capital spending (%)

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	Average annual growth (%)
Canada	27.3	8.7	10.3	5.7	-4.0	1.0	3.1	3.1	3.6	-2.8	3.2
NL	13.4	7.5	16.0	64.9	36.5	-27.1	-4.7	37.2	11.4	-4.0	15.3
QC	0.1	70.6	19.7	3.9	2.1	0.4	-1.4	4.3	8.3	-1.2	11.9
ON	40.4	-3.5	-5.0	6.0	1.0	4.3	-0.9	-1.9	0.6	-4.6	-0.5
MB	1.1	-27.5	-3.8	-0.9	2.4	3.7	34.9	58.7	20.4	-3.7	9.3
SK	7.7	3.4	-16.0	11.5	-15.9	60.5	76.1	7.7	-1.7	-14.4	12.3
AB	-0.9	-0.7	146.8	6.9	-34.3	-39.9	0.5	12.3	17.9	24.3	14.9
BC	53.3	15.2	8.5	2.5	-7.2	16.8	9.1	-1.1	-9.7	-10.9	2.6

Source: Statistics Canada, 2018d.

Note: Prince Edward Island, Nova Scotia, and New Brunswick not reported because the underlying values are too small and/or they drop to zero over the period of analysis.

Conclusion

It is clear from the data presented that every province in Canada over the 2006/07 to 2015/16 period increased education spending beyond what was required to account for enrolment changes and inflation. This means real increases in per-student education spending in public schools across the country, which is contrary to the general perception that education spending in public schools has been cut.

Our results indicate that while compensation remains the largest and most costly aspect of education spending, it has also increased as a share of total education spending on public schools over the last decade. Fringe benefits and pension costs, which are sub-categories of compensation, increased as a share of both compensation and total education spending. Governments are spending more dollars and a greater share of total education spending on compensation, with an increasing share towards fringe benefits and pensions.

Appendix: Education spending allocations in public schools, by province

Sources: Statistics Canada, 2018a, 2018d.

Table A1: Education spending allocations, Newfoundland and Labrador, 2006/07 to 2015/16

	2006/07		2015/16		2006/07 to 2015/16		
	\$ millions	Share of total (%)	\$ millions	Share of total (%)	Change, \$ millions	Share of change (%)	Growth (%)
Compensation	491	77.1	670	75.2	179	70.5	36.4
Salaries & wages	421	66.0	575	64.5	154	60.8	36.7
Fringe benefits	36	5.7	43	4.8	7	2.7	18.6
Pensions	34	5.4	52	5.8	18	7.0	51.9
Capital	27	4.3	79	8.8	51	20.1	186.2
Other	119	18.6	143	16.0	24	9.4	20.1
Total	637		891		254		39.8

Table A2: Education spending allocations, Prince Edward Island, 2006/07 to 2015/16

	2006/07		2015/16		2006/07 to 2015/16		
	\$ millions	Share of total (%)	\$ millions	Share of total (%)	Change, \$ millions	Share of change (%)	Growth (%)
Compensation	138	77.3	195	79.9	58	87.0	42.0
Salaries & wages	117	66.0	162	66.2	44	66.8	37.8
Fringe benefits	20	11.3	34	13.7	13	20.2	66.6
Pensions	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Capital	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Other	40	22.5	49	20.1	9	13.7	22.8
Total	178		245		67		37.3

Table A3: Education spending allocations, Nova Scotia, 2006/07 to 2015/16

	2006/07		2015/16		2006/07 to 2015/16		
	\$ millions	Share of total (%)	\$ millions	Share of total (%)	Change, \$ millions	Share of change (%)	Growth (%)
Compensation	873	66.4	1,130	71.8	257	99.2	29.4
Salaries & wages	745	56.6	949	60.3	204	78.8	27.4
Fringe benefits	74	5.7	109	6.9	35	13.4	46.7
Pensions	54	4.1	73	4.6	18	7.0	33.3
Capital	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Other	441	33.5	443	28.2	2	0.9	0.5
Total	1,314		1,574		259		19.7

Table A4: Education spending allocations, New Brunswick, 2006/07 to 2015/16

	2006/07		2015/16		2006/07 to 2015/16		
	\$ millions	Share of total (%)	\$ millions	Share of total (%)	Change, \$ millions	Share of change (%)	Growth (%)
Compensation	749	67.5	924	65.3	174	57.4	23.3
Salaries & wages	589	53.0	782	55.3	194	63.7	32.9
Fringe benefits	45	4.0	63	4.5	19	6.2	42.0
Pensions	116	10.4	78	5.5	-38	-12.5	-32.6
Capital	13	1.1	7	0.5	-5	-1.8	-42.0
Other	348	31.4	483	34.2	135	44.3	38.7
Total	1,111		1,414		304		27.4

Table A5: Education spending allocations, Quebec, 2006/07 to 2015/16

	2006/07		2015/16		2006/07 to 2015/16		
	\$ millions	Share of total (%)	\$ millions	Share of total (%)	Change, \$ millions	Share of change (%)	Growth (%)
Compensation	7,114	73.4	9,383	71.3	2,269	65.7	31.9
Salaries & wages	5,955	61.4	7,684	58.4	1,729	50.0	29.0
Fringe benefits	654	6.7	900	6.8	247	7.1	37.8
Pensions	505	5.2	799	6.1	294	8.5	58.2
Capital	556	5.7	1,331	10.1	775	22.4	139.3
Other	2,027	20.9	2,438	18.5	411	11.9	20.3
Total	9,698		13,153		3,455		35.6

Table A6: Education spending allocations, Ontario, 2006/07 to 2015/16

	2006/07		2015/16		2006/07 to 2015/16		
	\$ millions	Share of total (%)	\$ millions	Share of total (%)	Change, \$ millions	Share of change (%)	Growth (%)
Compensation	14,986	74.2	20,791	78.3	5,805	91.3	38.7
Salaries & wages	12,322	61.0	16,694	62.9	4,373	68.7	35.5
Fringe benefits	1,868	9.2	2,496	9.4	628	9.9	33.6
Pensions	797	3.9	1,601	6.0	804	12.6	100.9
Capital	2,337	11.6	2,229	8.4	-108	-1.7	-4.6
Other	2,871	14.2	3,535	13.3	664	10.4	23.1
Total	20,194		26,555		6,361		31.5

Table A7: Education spending allocations, Manitoba, 2006/07 to 2015/16

	2006/07		2015/16		2006/07 to 2015/16		
	\$ millions	Share of total (%)	\$ millions	Share of total (%)	Change, \$ millions	Share of change (%)	Growth (%)
Compensation	1,388	75.3	1,981	73.0	593	68.3	42.7
Salaries & wages	1,170	63.5	1,660	61.2	490	56.3	41.8
Fringe benefits	92	5.0	139	5.1	47	5.4	51.4
Pensions	126	6.8	183	6.7	57	6.5	44.8
Capital	132	7.2	240	8.9	108	12.5	82.0
Other	324	17.6	492	18.1	167	19.3	51.7
Total	1,844		2,713		869		47.1

Table A8: Education spending allocations, Saskatchewan, 2006/07 to 2015/16

	2006/07		2015/16		2006/07 to 2015/16		
	\$ millions	Share of total (%)	\$ millions	Share of total (%)	Change, \$ millions	Share of change (%)	Growth (%)
Compensation	1,187	74.8	1,909	70.3	722	64.0	60.8
Salaries & wages	946	59.7	1,441	53.1	495	43.8	52.3
Fringe benefits	86	5.4	131	4.8	46	4.0	53.3
Pensions	155	9.8	337	12.4	182	16.1	117.2
Capital	106	6.7	221	8.1	115	10.2	108.5
Other	293	18.5	585	21.5	292	25.8	99.4
Total	1,586		2,714		1,128		71.1

Table A9: Education spending allocations, Alberta, 2006/07 to 2015/16

	2006/07		2015/16		2006/07 to 2015/16		
	\$ millions	Share of total (%)	\$ millions	Share of total (%)	Change, \$ millions	Share of change (%)	Growth (%)
Compensation	4,002	64.6	6,445	76.9	2,443	111.5	61.0
Salaries & wages	3,075	49.7	4,521	53.9	1,446	66.0	47.0
Fringe benefits	444	7.2	1,073	12.8	629	28.7	141.9
Pensions	483	7.8	851	10.2	367	16.8	76.0
Capital	230	3.7	395	4.7	164	7.5	71.3
Other	1,958	31.6	1,541	18.4	-417	-19.0	-21.3
Total	6,190		8,381		2,191		35.4

Table A10: Education spending allocations, British Columbia, 2006/07 to 2015/16

	2006/07		2015/16		2006/07 to 2015/16		
	\$ millions	Share of total (%)	\$ millions	Share of total (%)	Change, \$ millions	Share of change (%)	Growth (%)
Compensation	3,940	68.5	4,571	70.9	631	90.3	16.0
Salaries & wages	3,255	56.6	3,630	56.3	375	53.6	11.5
Fringe benefits	388	6.7	521	8.1	133	19.1	34.4
Pensions	297	5.2	421	6.5	123	17.6	41.4
Capital	351	6.1	423	6.6	72	10.4	20.7
Other	1,460	25.4	1,456	22.6	-4	-0.6	-0.3
Total	5,751		6,450		699		12.2

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