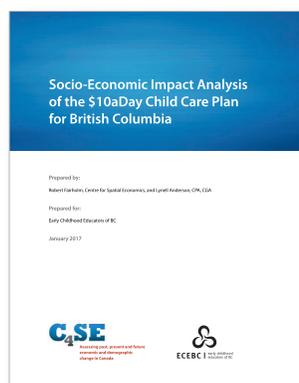


# EXECUTIVE SUMMARY



Download the full report at [www.c4se.com](http://www.c4se.com) and [www.ecebc.ca](http://www.ecebc.ca)

**PREPARED BY:**

Robert Fairholm, Centre for Spatial Economics, and Lynell Anderson, CPA, CGA

**PREPARED FOR:**

Early Childhood Educators of BC

**JANUARY 2017**

**THIS STUDY ESTIMATES** the short-term socio-economic impacts arising from the implementation and operation of the proposed \$10aDay Child Care Plan (the Plan)<sup>1</sup> for the province of British Columbia. The analysis considers several impacts on the provincial economy, including the economic effects from the construction and operation of the new system and the resulting increase in mothers' labour supply. The analysis also illustrates the impact on the government sector's revenues and expenditures.

The analysis considers several impacts on the provincial economy, including the economic effects from the construction and operation of the new system and the resulting increase in mothers' labour supply.

The study consists of three phases: costing review; benefits review; and impacts of the \$10aDay Plan.

The analysis projects that full implementation of the \$10aDay Plan will have a significant and positive impact on GDP and jobs, and will generate sufficient overall government sector revenues to pay for the additional government spending required to build and operate the system.

TOTAL IMPACT			
	2020	2025	2030
Total GDP (\$2015 millions)	3,616.4	5,787.4	5,767.5
% of BC GDP	1.3%	2.0%	1.8%
Total employment	42,700	69,100	68,900
% of BC employment	1.7%	2.8%	2.7%
Increase in government revenues	<b>\$2015 millions</b>		
	1,234.7	1,952.4	1,932.5
Increase in government expenditures	1,122.6	1,794.3	1,748.4
<b>Budget balance</b>	<b>112.1</b>	<b>158.1</b>	<b>184.1</b>

<sup>1</sup> For more information about the \$10aDay Child Care Plan, also known as the *Community Plan for a Public System of Integrated Early Care & Learning*, see [ecebc.ca/news/integrated\\_project.html](http://ecebc.ca/news/integrated_project.html) and [10aDay.ca](http://10aDay.ca).

## Phase 1: Costing Review

The child care costing model developed by Anderson and colleagues calculated the incremental annual government expenditures required to operate the \$10aDay Plan, on full implementation, at \$1.5 billion.<sup>2</sup> For the purpose of this study, Anderson updated the model to reflect recent and substantive changes to child care policy, such as the introduction of full school-day kindergarten, along with population projections through the implementation period and beyond. For the first time, the updated model incorporates estimates of the government expenditures (capital costs) required for construction of new, stand-alone child care spaces. Anderson estimates that government will need to directly fund the creation of 31,215 (net, FTE) new spaces<sup>3</sup> and that each space will cost on average \$10,000 in 2015 dollars (real or inflation adjusted dollars).<sup>4</sup> In the impact calculations, the \$312.2 million in real construction expenditures are evenly distributed throughout the implementation period.

To ensure that child care fees are reduced to \$10 per day, and sustained at that level, the provincial government will provide subsidies and transfers to all eligible regulated child care providers. Consequently, operational costs to the B.C. government from expanding the system will be significantly higher than the projected public spending without the Plan. On full implementation, Anderson estimates that the total real operating and administrative costs of the new system will be \$1.777 billion, net of parent fees (\$2.083-\$0.306). Anderson also estimates that the direct provincial subsidies currently provided to the child care sector are \$224.0 million, which brings the incremental annual public cost to \$1.553 billion (\$1.777-\$0.224) — similar to the original projection developed in 2009.

---

2 See, for example, Kershaw et al. (2009). Unless otherwise noted, all figures used in the cost estimates are for children under age 6. As the \$10aDay Plan also includes services for elementary school age children, the full operating costs — and related benefits — will be higher.

3 Additional spaces will be repurposed and/or retrofitted from existing public spaces, and/or funded from other sources.

4 Unless otherwise noted, all dollar figures are in 2015 inflation adjusted or real dollars and all employment estimates are stated in the number of full-time equivalent (FTE) jobs, rounded to the nearest 100.

## Phase 2: Benefits Review

There is a vast literature that examines the socio-economic benefits to society from quality early childhood education and care. In the short-to-medium term there are four avenues that deliver benefits to society:

1. Economic gains via the short-term economic stimulus generated from expanding and operating the new child care system;
2. Benefits to households from lower child care fees and increased utilization that is manifest via mothers' labour supply effects;
3. Benefits to businesses from reduced staff turnover, absences, and increased productivity; and
4. Benefits to governments via higher revenues from increased economic activity and employment and lower spending in other areas.

Impact estimates are calculated versus a "No Change scenario" in which the number of spaces and child care utilization remain at 2016 levels. There are a number of different channels of spending and cost reduction that result from the implementation and operation of the \$10aDay Plan. Each channel has a different set of economic impacts. In order to calculate the impact on the economy, five input-output impact scenarios were utilized to estimate the direct, indirect, and induced effects on the B.C. economy from changes in spending related to expanding and operating the new child care system. In addition, the literature on the socio-economic effects was utilized in order to estimate other influences on the economy, including special education, grade retention, social assistance, employee turnover, absences, productivity, and mothers' labour supply effects.

The economic literature typically finds that child care programs have very large multipliers, ranking among the largest of any economic sector. A multiplier shows the rise in overall economic activity, or GDP, in the short-run per dollar increase in expenditure. Overall, and based on data from Statistics Canada, the child care sector in B.C. is estimated to boost GDP by \$1.63 per dollar of increased expenditure as compared with \$0.86 for the average industry and \$1.04 for other provincial government spending.

**Overall, and based on data from Statistics Canada, the child care sector in B.C. is estimated to boost GDP by \$1.63 per dollar of increased expenditure as compared with \$0.86 for the average industry and \$1.04 for other provincial government spending.**

### Phase 3: Impacts of the \$10aDay Plan

The estimates show that on full implementation net new (gross new spending less estimated spending in the No Change scenario) real government spending is \$1.794 billion, including construction costs as well as subsidies and transfers to providers. Shortly after, the annual cost falls to \$1.748 billion primarily because of the end of construction costs. These costs reflect the estimated reduction in government spending related to reduced education spending, primarily because of lower rates of special education and grade retention. On the revenue side of the ledger, the net increase for the overall government sector is \$1.952 billion on full implementation. The annual revenue projection drops to \$1.933 billion shortly afterwards, because of the reduction in economic activity associated with the end of construction costs and reduced education spending.

Thus, the net impact on the overall government sector's budget is positive, with revenues exceeding net expenses by \$158 million annually on full implementation, and \$184 million annually shortly afterwards.

In addition, construction of the new spaces required to implement the Plan will boost GDP by an estimated \$28.8 million and boost employment by around 300 FTE jobs each year throughout implementation. The net new spending associated with the operation of the Plan will boost GDP via direct, indirect, and induced economic effects by \$2.441 billion by full implementation and create 28,600 full-time equivalent (FTE) jobs.

One of the important impacts on the economy in the short-to-medium term occurs via the mothers' labour supply effect. More children participating in child care means that more parents, particularly mothers, are available to join the workforce. This topic has been the subject of considerable research and it is generally found that lower child care fees and greater access lead to a significant increase in the number of women working. Using very conservative estimates, the net increase in employment via the mother's labour supply effect is estimated at

24,800 by full implementation, resulting in an increase in GDP of \$1.959 billion. Notably, it is generally found that lone parents and those with lower incomes tend to benefit more from a child care price reduction than women with a partner. Therefore, the labour supply effect will have a direct positive impact on income inequality and poverty reduction.

Another important impact on the economy is from the household budgetary effect. Lower child care fees will directly reduce the cost for all those who currently use child care. There would be some offset to the overall household budgetary position given that lower fees will encourage some parents to use regulated child care rather than relying on friends or family, for example, to provide child care at no cost. After taking account of all of the pluses and minuses to the overall household budgetary position, there is a net gain of \$259.0 million, which leads to more spending and GDP in the economy with the end result being a \$172.1 million increase in GDP and 1,700 more jobs.

There are also projected benefits to employers from productivity gains and cost reductions. The impact on the economy from the potential savings to businesses via reduced turnover, absenteeism and productivity enhancement is less certain than the above estimates because the ultimate impact depends on how the gains are achieved and how businesses use the increase in profits. Nonetheless, relatively conservative estimates suggest that business-related gains will result in a GDP increase of around \$1.2 billion, and full-time equivalent employment growth of approximately 14,000.

Input-output estimates do not include the potential effect on the economy from the change in business profits. While it is known that each round of stimulus that leads to higher GDP will also result in higher corporate profits, it is not known how or where these funds will be spent. While this effect could reach an increase of \$740 million to GDP by 2025, and 8,600 more jobs, this channel is not included in the main estimates in order to keep the overall impact estimates conservative.

Relatively conservative estimates suggest that business-related gains will result in a GDP increase of around \$1.2 billion, and full-time equivalent employment growth of approximately 14,000.

The study also compared the economic impacts of the \$10aDay Plan to a scenario that charges parent fees at \$20 per day. Both approaches are projected to realize positive government budget balances, although the \$10aDay Plan requires a higher level of direct government spending and contributes \$205 million less to the projected overall budget balance. However, the \$10aDay Plan results in a higher number of children utilizing child care, more mothers returning to work, and a larger increase in overall GDP and jobs.

Since the focus of this study is on the short-to medium-term impacts on the economy, long-term benefits are not included. Many of the benefits that society derives from the provision of quality early childhood education become evident later in the children's lives, particularly when today's child care participants enter the workforce. Therefore most of the benefits to children from the expansion of quality child care are not included.

It is important to keep in mind when reading this study that these long-term benefits will accrue to B.C. in the future and are in addition to the short-term benefits that are illustrated in this report. And these long-term gains are quite significant. Indeed, in the current economic

**Using the provincial government's long-term bond yield as the discount rate, the net present value of the benefits to children alone may exceed the net operating costs of the expanded quality child care system.**

environment, with the long-term bond yield substantially lower than the discount rate that was used in many past studies, the present value of these benefits is dramatically larger. Using the provincial government's long-term bond yield as the discount rate, the net present value of the benefits to children alone may exceed the net operating costs of the expanded quality child care system.

Finally, the analysis confirms that the projected benefits to government are shared between the B.C. and federal governments. The province is responsible for child care and the increased expenditures associated with the Plan, while the federal government receives a higher portion of the revenues because of its generally higher tax rates. Thus, it is reasonable to anticipate a cost-shared approach to financing the \$10aDay Plan, with the federal government contributing at a level that is commensurate with its expected gain in revenues. ■



**CENTRE FOR SPATIAL ECONOMICS (C<sub>4</sub>SE)**

is a consulting organisation created to improve the quality of spatial economic and demographic research in Canada.

[www.c4se.com](http://www.c4se.com)



**ECEBC** | early childhood educators of BC

**EARLY CHILDHOOD EDUCATORS OF BC** enhances early childhood educators' ability to be a strong voice for the profession. It influences society to value children and childhood and to respect the professionals who care for and educate children.

[www.ecebc.ca](http://www.ecebc.ca)