A Costing and Accountability Model for a BC Child Care System

The Coalition of Child Care Advocates of BC (CCCABC) has demonstrated the rationale for building a child care system and has clearly laid out the principles this system must be built on. Now we present a costing and accountability model that shows how this system can be successfully implemented. The model indicates that building a quality, universal child care system in BC is both doable and affordable. It provides a foundation for provincial planning and resource allocation as well as a tool to support the detailed implementation of regional child care plans.

The net annual additional public investment required to make quality child care available and affordable to one to twelve year-olds in BC is $1.2 billion which, implemented incrementally over the next 5 years, could be funded through an extension of the projected surpluses in the BC Ministry of Finance’s current 3 year plan.

The Foundation: Principles and Key Assumptions Behind the Model

The public investment and accountability requirements for a child care system in BC are modeled using rigorous assumptions, clearly explained and open to scrutiny. Such a model necessarily uses estimates and averages that are broadly representative yet cannot describe the specific budget of every program in the province. Our framework integrates research on effective approaches in other jurisdictions with an understanding of the current child care context and community priorities in BC. Our approach supports Aboriginal control over the resources required to develop and deliver child care services for Aboriginal peoples. The framework is rooted in our advocacy efforts and, as such, models a child care system built on six key principles:

1. Publicly funded — Despite the unfounded faith that the provincial and federal governments still evidently place in it, the “free market” has continually failed to provide access to quality, affordable, inclusive child care services for families.

   The estimated system costs cover the public investment required to establish and operate a universal child care system for BC. As with other public programs, occasional capital costs are treated separately.

2. Non-profit — Child care is a public service, just like education and health care. It is in the public interest, must be accountable in its funding and governance, and community-based in its service delivery.

   The estimated system costs will not subsidize any profit margin. The model assumes expansion occurs in family child care as well as centre-based, non-profit services.¹

¹ There are a number of models for the inclusion of family child care in a community-based, non-profit child care system. This costing and accountability model does not differentiate between licensed family and centre-based, non-profit child care services except that only the latter receive capital funding because their assets will be publicly or community-owned.
providers have helped to develop and maintain child care in communities across BC and can use increased public investments to improve the quality, affordability and accessibility of their existing services.

3. High Quality — Research confirms that the quality of care that children receive during their early years affects them throughout their lives. Qualified, well-compensated staff are most likely to interact with children in ways that promote healthy development. High quality child care programs devote the majority of their budgets to staff compensation. Environments that provide children with developmentally appropriate opportunities to learn through play with a wide variety of materials and equipment are an integral component of quality programs.

The estimated system costs prioritize staff compensation, recognizing the importance of decent wages and working conditions for trained staff in both centre and family-based care, along with well-resourced day-to-day operations.

4. Affordable — Today, quality child care is unaffordable for the majority of BC families who need it. When quality child care is affordable, parents choose it.

The estimated system costs establish a goal that, on average, parent fees will cover 20% of the cost of each space, based on parent fee levels in other countries with more advanced child care systems.

5. Universally Accessible — All children, regardless of their abilities or their family’s income level, geographic location or employment status, are entitled to access quality, inclusive and culturally-appropriate child care services.

Consistent with the principle of universal entitlement, the estimated system costs provide an affordable part-time or full-time space for all children from 12 months of age onwards, who are not yet in the universally entitled public school system. Quality school-age care is made affordable and accessible to older children. Finally, the model includes additional funding for social and cultural inclusion, children with special needs, and parenting resources and supports.

6. Accountable — Only in a publicly funded, community-based child care system of the type modeled here do we have an accountability structure to ensure that child care policies and funding provide the quality, affordability and accessibility that BC families require.

The model assumes that a community planning approach is used to prioritize, develop and publicly fund new services. Furthermore, like other publicly funded services, child care programs receive direct funding tied to standards and benchmarks for quality, affordability and accessibility.

The Cost: Estimating the Annual Incremental Public Investment Required to Operate a Quality, Affordable and Universally Accessible Child Care System

The cost of a child care space depends on the age of the child. We begin system-building with children aged three to five, for whom we estimate the average annual gross operating cost of a
typical full-day, full-time space at $10,500 (with a public investment of $8,400 as parent fees cover 20% of the gross cost). In addition to those noted in the previous section, this estimate is built on the following assumptions:

1. Staff salaries and benefits make up approximately 85% of the program budget.
2. To advance quality care, trained staff move to an estimated average of $20/hour plus comprehensive benefits package.
3. Minimal rental costs are incurred as public and community-owned facilities house centre-based programs, and family-based programs are in privately-funded homes.
4. The balance of the space costs are devoted to facility usage charges (utilities, cleaning and maintenance), program expenditures (supplies, food, etc.) and administration costs.

It is notable that the public investment required for each full-day, full-time space – $8,400 – is roughly equivalent to the $8,000 of funding provided to each pupil in the public school system, which has a shorter day and a 10-month year. This seems very reasonable given that education administrations in all provinces in Canada express adherence to the OECD concept of lifelong education, in which early childhood is considered to be the foundation stage.

Consistent with the principle of universal entitlement to lifelong learning, we project that all three and four year-olds will access some form of quality child care. However, the amount of care they require generally depends on the labour force attachment of their parents. Economic research consistently shows that improved access to quality, affordable child care leads to increased labour force attachment among parents – especially mothers – and we make our total cost projections based on these likely shifts.

There has been an average of 41,000 children born each year in BC over the past decade. As the table below illustrates, we project that 100% of three and four year-olds (82,000) will access at least some hours in quality child care, which, while not strictly likely, provides an upper boundary on cost estimates. From research and the experience of places like Quebec, we confidently project that with universally accessible quality child care, approximately 50% of mothers of young children will be working full-time. We assume that their children will access full-time care, with costs estimated as explained above.

Another 25 percent of children will have mothers working part-time and will access a part-time space. Even with accessible, affordable child care, 25 percent of children’s primary caregivers will remain out of employment, voluntarily or involuntarily. Given the current use of preschool

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programs among children whose families can afford it, we project that these children will still access a preschool type of program (generally, up to 15 hours per week).

Finally, 10 percent of spaces – half full-time and half part-time – are costed at double the typical space cost to provide additional funding for children with special needs and resources to support parenting, and to ensure the social and cultural inclusion of families.

### Three and Four year-olds – Projected total costs

<table>
<thead>
<tr>
<th>Estimated number of children accessing a quality child care space</th>
<th>Percent</th>
<th>Number</th>
<th>Cost per Child</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time space</td>
<td>100%</td>
<td>82,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part-time space (50% of f/t cost)</td>
<td>45%</td>
<td>36,900</td>
<td>$10,500</td>
<td>$387.5M</td>
</tr>
<tr>
<td>Preschool space (30% of f/t cost)</td>
<td>22.5%</td>
<td>18,450</td>
<td>$5,250</td>
<td>$96.9M</td>
</tr>
<tr>
<td>Inclusion, full-time space (2X)</td>
<td>5%</td>
<td>4,100</td>
<td>$21,000</td>
<td>$86.1M</td>
</tr>
<tr>
<td>Inclusion, part-time space (2X)</td>
<td>5%</td>
<td>4,100</td>
<td>$10,500</td>
<td>$43.1M</td>
</tr>
<tr>
<td>Total Cost</td>
<td></td>
<td></td>
<td></td>
<td>$671.6M</td>
</tr>
<tr>
<td>20% average parent contribution</td>
<td></td>
<td></td>
<td></td>
<td>$134.3M</td>
</tr>
<tr>
<td>Total Annual Public Investment in Operating Costs*</td>
<td></td>
<td></td>
<td></td>
<td>$537.3M</td>
</tr>
</tbody>
</table>

*The costing estimates are summarized from detailed spreadsheets, so minor rounding differences may occur.

Given these assumptions, the total gross annual operating cost of providing a quality space to all three and four year-olds is $672 million. If parents pay 20 percent of these costs, the total annual public investment required is $537 million.

As is usually the case with public investments, capital costs are considered separately from operating costs and are not included in these assumptions. However, our model assumes that most additional spaces can be provided within existing publicly-owned facilities such as schools and community centres. When new capital expenditures are undertaken, public or community ownership must be maintained as this is key to long term public access and stability of services.

Also, the post-secondary education costs of training caregivers are not included in our model. While this approach is consistent with budgets of other public services, training is key to achieving quality in child care and therefore must be reflected in advanced education plans.

Operating cost estimates for other age groups use similar assumptions and are summarized in the table below. The required investment for one and two year-olds proceeds exactly as for three and four year-olds with an assumption of 100% takeup, but all figures are doubled because staff requirements are doubled. The model assumes that children under age one are not broadly accessing the child care system, primarily because of maternity and parental leave benefits.
While there will be exceptions (for example, young parent programs), they can be accommodated within the universal approach starting at age one.

For school-age children, the cost of a full-time equivalent space is modified to reflect out-of-school hours. Further, school age children already have the universal access to learning they are entitled to, so here we do not assume 100% takeup of additional child care. Instead, any additional care depends on parental labour force attachment. We project that 75% of five year-olds already in half-day kindergarten will spend the other half of the day or some additional hours in child care. Similarly 60% of children in full-day school will spend some additional hours in before and after school care.

Based on these assumptions, CCCABC estimates that a universal child care system for all children aged one to twelve in BC will require a gross annual additional public investment of $2 billion. The experience in Quebec indicates that the increased labour force attachment resulting from a universal child care system returns 40% of the investment in tax revenues the following year. Therefore, the net annual additional cost to government is $1.2 billion, as summarized in the following table:

### Projected annual gross costs of universal quality child care

<table>
<thead>
<tr>
<th></th>
<th>1-2 year-olds</th>
<th>3-4 year-olds</th>
<th>5 year-olds</th>
<th>6-12 year-olds</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Takeup</td>
<td>100%</td>
<td>100%</td>
<td>75%</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>Total Cost</td>
<td>$1,343 M</td>
<td>$672M</td>
<td>$113M</td>
<td>$861M</td>
<td>$2.99B</td>
</tr>
<tr>
<td>Parent Contribution (20%)</td>
<td>$269M</td>
<td>$134M</td>
<td>$23M</td>
<td>$172M</td>
<td>$598M</td>
</tr>
<tr>
<td>Total Public Investment</td>
<td>$1,075M</td>
<td>$538M</td>
<td>$90M</td>
<td>$689M</td>
<td>$2.4B</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current Public Spending</th>
<th>$400M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Additional Public Investment</td>
<td>$2B</td>
</tr>
<tr>
<td>Less: Minimum tax return increase in following year (40%)</td>
<td>$800M</td>
</tr>
<tr>
<td>Net Public Investment</td>
<td>$1.2B</td>
</tr>
</tbody>
</table>

Finally, it is important to note that if we adopt a focused public investment strategy, the cost of child care system-building will be contained and manageable for two reasons:

1. We know how many young children there are in British Columbia, and for how long they’re likely to need child care services.

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5 This figure includes the child care program budget as well as estimated expenditures for other early learning programs such as StrongStart, which would be integrated within a comprehensive child care system.
2. Child care services do not rely on expensive and rapidly changing technologies – once we establish fair and appropriate compensation levels for qualified caregivers, we’ve addressed the key cost factor.

**An Accountable Implementation Strategy: Ensuring Public Investment Achieves Quality, Accessibility and Affordability**

The current child care situation in British Columbia is represented by the ‘present day’ graph below. It shows the multiple public funding gaps that exist, namely the affordability gap between current fees and what most families can afford; the quality gap that exists because of poor compensation and staff retention; and the expansion gap between the amount of spaces currently available and the amount required to realize universal entitlement to a part-time or full-time space.

![Child Care System Implementation Model](image)

Significant public investment is required to close these critical gaps. However, new funding alone will not produce the desired outcomes. Instead we must have clear timelines, targets and benchmarks, and accountability mechanisms to ensure they are achieved.
The second graph below, titled ‘full implementation’, illustrates how the system can be built in phases. As a first benchmark, a quality affordable space could be made available to all three to five year-olds. In order to achieve this goal, reliance on parent fees and subsidies must be reduced. Instead, a focused public investment strategy will provide direct public funding to:

1. Existing services that will be accountable for advancing the key system indicators of quality (higher wages and benefits for trained staff) and affordability (lower fees).
2. The creation of new, non-profit, inclusive, community-owned services that will meet progressive targets for quality and affordability as the system unfolds.

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**Notes:**
Full Implementation of the model means that a quality, affordable child care space is available for all those who need or want it on a part-time, full-time or drop-in basis in a regulated family home or centre.

**Source:**
Lorrell Anderson, B.Com., CGA and YWCA Canada

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6 We thank YWCA Canada and the Child Care Advocacy Association of Canada for sharing this Child Care System Implementation Model, and we acknowledge the work of economic consultant Daniel Rosen, M.Sc. Pl., in applying the model to BC.
Subsequent phases will expand the system to include all children aged one to twelve. As public investment expands, the **quality gap is closed** through the provision of enhanced compensation for qualified caregivers. Additional funding through the phases of the model **closes the affordability gap** as average parent fees are reduced to the 20% level seen in other countries. Finally, the **expansion gap is closed** as a quality, affordable space in a regulated family home or centre is created and sustained for all who need or want it.

**Conclusion – A BC Child Care System is Doable and Affordable**

The implementation strategy depicted above is well within our reach. British Columbia has the fiscal ability – and indeed, given what we know about the outcomes, the responsibility – to build a quality, affordable child care system for our children. While actual system implementation may evolve over a longer time frame, here's how it could be achieved in as little as five years:

**Possible 5 Year Implementation of Full System for Children Ages One to Twelve ($Millions)**

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>5 Year Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incremental Cost (new $)</td>
<td>400</td>
<td>800</td>
<td>1,200</td>
<td>1,600</td>
<td>2,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Less: Minimum tax return increase in following year (40%)</td>
<td>0</td>
<td>160</td>
<td>320</td>
<td>480</td>
<td>640</td>
<td>1,600</td>
</tr>
<tr>
<td>Net Incremental Cost</td>
<td>400</td>
<td>640</td>
<td>880</td>
<td>1,120</td>
<td>1,360</td>
<td>4,400</td>
</tr>
<tr>
<td>BC Ministry of Finance Projected Surplus</td>
<td>1,600</td>
<td>750</td>
<td>830</td>
<td>1,060*</td>
<td>1,060*</td>
<td>5,300</td>
</tr>
<tr>
<td>Remaining Surplus (or draw down of forecast allowance)</td>
<td>1,200</td>
<td>110</td>
<td>-50</td>
<td>-60</td>
<td>-300</td>
<td>900</td>
</tr>
</tbody>
</table>

*Based on average projected surplus in years 1-3.

Full implementation can be phased in over the next five years, starting with a focus on the first benchmark of providing a quality affordable space for all three to five year-olds, and, as shown in the summary table above, can be funded entirely through an extension of the surpluses forecast in the BC Ministry of Finance’s current three year plan. Even in year five, the total system investment can be accommodated within the projected surplus and BC’s typical forecast allowance, or contingency, of over $500 million.

The table above does not include the tremendous benefits to parents, children and communities – clearly demonstrated by overwhelming research and economic analysis – that will be leveraged and returned to our economy by investing a portion of the surplus this way. In fact, repeated studies have shown that these benefits outweigh the costs involved by a factor of at least 2:1, if funding enhances quality, affordability and accessibility, guaranteed by public accountability.

Though this is a costing model, “costs” should be viewed as investment. The Coalition of Child Care Advocates of British Columbia is confident that there is no better way for BC to **invest** in its present and its future.