

RESEARCH BULLETIN NO. 2

**IS THERE AN ECONOMIC CASE
FOR PUBLIC INVESTMENT
IN HIGH SUBSIDY DAY CARE
AS AN ALTERNATIVE TO WELFARE?**

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1. The Recent Controversy

Recently, and partly as a result of announcements of Provincial restraints on spending on social services, Metropolitan Toronto politicians have outlined a case for cutting back on public investment in day care.¹ The principal arguments put forward have been:

- day care is too expensive, nearing \$4,000 per year per child;
- it would be cheaper to have a single mother with dependent children stay home on welfare than to pay for her day care (most high subsidy day care provided by Metro Toronto goes to this group, who would otherwise be eligible for Provincial Welfare).

Do these arguments make sense? Are they true? The following brief analysis was undertaken to cast some light on this issue.

Briefly, this research bulletin will: first, examine the cost of day care in Metro Toronto; second, look at the broad economic impact of subsidizing day care and several economic effects that are not usually considered in this debate; third, consider day care costs and savings (does day care really cost more than welfare?). In the conclusion of the analysis, there is reference to several other factors which are significant to the current cut-backs controversy.

1. Toronto Star, December 5, 1975; Globe and Mail, December 5, 1975; Barbara Greene, personal communications, December 12, 1975, and January 2, 1976.

2. The Current Cost of Day Care Subsidies in Metro Toronto

Some Metro politicians have claimed that day care provided by Metro, through its own centres and through agreements with private centres, cost the tax payer \$3,000 per year in 1975 and will cost \$4,000 per child in 1976.

To validate these figures, we examined total budget outlays for day care as reported by the Commissioner of Social Services on November 28, 1975.² These figures, as reported in Table 1, demonstrate that as of December 1975, Metro paid \$2,832 per child per year in Metro operated centres, \$2,079 per child for children in private centres, or \$2,344 on the average for each child in subsidized day care. The Commissioner's report showed projected 1976 annual costs of \$3,115 for children in Metro operated centres, \$2,287 for children in private centres, or \$2,578 on the average for all children in subsidized day care.

None of the 1976 estimates provided by the Commissioner add up to \$4,000 per child, or anything even remotely close to that amount. We conclude, therefore, that the \$4,000 figure obtained by those proposing day care budgetary cut-backs can only be the result of an arithmetic error and/or misinterpretation of the Commissioner's report. Day care in 1976 should, according to the Commissioner's estimates, cost about \$2,578 per child and no more.

2. Personal communication from Commissioner of Social Services to Controller Barbara Greene, November 28, 1975.

TABLE 1: Subsidized Day Care Costs in 1975 and 1976

	Annual Cost of Subsidized Day Care at December 1975 Cost Levels			Annual Cost of Subsidized Day Care Projected for 1976, assuming 10% Increase for Inflation		
	Existing Metro centres	Existing Private centres	Total	Existing Metro centres	Existing Private centres	Total
Total Budget	\$5,740,000*	\$7,770,000*	\$13,510,000	\$6,315,000*	\$8,545,000*	\$14,860,000
Number of chil- dren served	2,027*	3,737*	5,764	2,027*	3,737*	5,764
Average yearly cost per child	\$2,832	\$2,079	\$2,344	\$3,115	\$2,287	\$2,578

*Basic figures from the Commissioner's report. Other figures are derived from the basic figures.

3. The Broad Economic Impact of Subsidizing Day Care

If a day care subsidy is provided to a single mother so that she may work, several broad economic benefits result. These are as noted below:

- day care subsidies reinforce the work ethic -- an alternative is provided to going on welfare.
- the economic product of society is greater whenever a mother works and her economic product (the value of her wages) exceeds the cost of day care. This is especially apparent whenever the productivity of the woman who stays at home is examined. Today's mother who stays at home and raises one or two children cannot be as productive, for example, as her grandmother who, in staying home, may have raised three to five children and helped run a farm besides.

- single mothers with one or two children will usually be able to command higher incomes through working, even near the minimum wage, than they would on welfare. Day care subsidies will thus remove single parent families from marginal poverty more effectively than welfare.
- a mother is encouraged to maintain a work-world relationship while her children are young. (Many women on present welfare -- Family Benefits -- cannot return to the labour force even when their children are grown because of long years out of the labour force and resultant low skill levels.)
- helping women to work and be self-dependent probably helps break the inter-generational welfare cycle.
- welfare rolls are reduced with resultant public savings.

4. How Costly is Day Care as Opposed to Welfare?

To examine this question, some elementary projections were made to examine the cost to governments of paying for day care as opposed to welfare. Costs were defined as including both day care subsidies on the one hand, and welfare and income tax revenues (or their absence) on the other hand. Two analyses are presented. One is a short-run, one year analysis, in which we examine costs of day care versus welfare for typical single parent families in 1976. The second is a long-run, 17 year analysis in which we examine the costs and benefits of welfare versus day care for those women who would, in the absence of day care, become long term welfare recipients. In each analysis we consider two families: one is a young mother with one pre-schooler; another is a young mother with two pre-schoolers.

The One-Year Case: Day Care versus Welfare in 1976

The first year (1976) of the long run projections provides the one-year case (see Table 2). In the one-year model, assuming day care for

one pre-schooler, welfare is \$1,508 per year more costly than day care. Thus every single mother with one child who is provided day care rather than welfare, results in a public saving of \$1,508.

TABLE 2: Short Term, One-Year Analysis of the Cost of Day Care as Opposed to Welfare: estimates for 1976

	Day Care* Cost	(less) Welfare* payments saved	(less) Income* tax paid	(equals) Cost to Government or amount saved by virtue of choosing day care
Mother with one child	\$2,578	\$3,744	\$342	\$1,508 (saved)
Mother with two children	\$5,156	\$4,404	\$262	\$490 (additional cost)

*See assumptions of the long-term projections and Tables 3 & 4 for more detailed explanations of these statistics.

A mother with two children in day care requires more costly day care. Yet welfare is more costly also. For this reason, the average additional cost to the public of providing day care rather than welfare for this mother is small - \$490 more per year, or \$245 per child, a small price to pay for maintaining a family's independent work life.

We know that over seventy-five per cent of all mothers using Metro subsidized day care have only one child.³ Therefore we may calculate the average saving in providing day care as an alternative to welfare as follows: average costs or savings for each kind of family are weighted by the proportion they are of the total (one child families are weighted by .75, two child families by .25,⁴ as below.

3. Personal communication, Metro Social Services Department.

4. It is our understanding that very few, if any, three-children families are using day care.

6.

$$\begin{aligned} \text{Average savings per family} &= (.75 \times \$1,508 \text{ (savings)}) + (.25 \times (-\$490 \text{ cost})) \\ &= \$1,131 + (-\$122.50) \\ &= \$1,008.50 \end{aligned}$$

$$\begin{aligned} \text{Average savings per child in day care} &= \frac{(.75 \times \$1,508) + (.25 \times (-\$490))}{(.75 \text{ (1 child)}) + (.25 \text{ (2 children)})} \\ &= \frac{(\$1,131) + (-\$122.50)}{.75 + .5} \\ &= \frac{\$1,008.50}{1.25} \\ &= \$806.80 \end{aligned}$$

As can be seen from these calculations, provision of subsidized day care as an alternative to welfare care saves the public \$1,008 per year per family, \$807 per year per child or day care place. Cast into the broader framework, a total cost savings might be calculated by multiplying the per-place saving by the number of day care places provided. In this way we calculate that Metro's provision of subsidized day care as an alternative to welfare probably will save taxpayers up to \$4.6 million in 1976. (5764 children at \$807 saving per child per year = \$4.6 million.)

Such savings to the public, taken with the broader economic, social welfare and preventive benefits of day care make a strong case for continued growing public support to day care. As is shown below, however, savings to the public are far greater when the longer term is examined.

The Long Term Case: Day Care as a Block to Long-Term Welfare Dependency

The long term must be examined for the simple reason that day care is a short-term need of a family whereas welfare dependency can be and often

is a very long-term problem. Many single mothers who go on welfare stay on welfare until their children are grown. Many stay on welfare even after their children are grown.

Our long term analysis projects costs and savings when day care is provided instead of welfare, for single-parent mothers who would otherwise have long-term dependence on welfare. As before, two cases are examined -- a mother with one child and a mother with two children.

The following assumptions were used for the long-term analysis.

- the mother who goes on Provincial Welfare (FBA) stays on welfare until her children near the age of majority.⁵
- the mother who works, works steadily, but never at a rate significantly beyond the minimum wage.⁶
- starting with a projected average day care cost to Metro of \$2,578 in 1976, real day care costs increase by 2 per cent from 1976 to 1978.⁷
- high subsidy day care is assumed to continue after the child reaches school-age, with 3/4 day care fee paying for lunch and after school care.⁸ Cost/benefit is assessed for part-time care until age 10.

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5. This assumption may be generous to the day care case, since some FBA mothers may go off welfare without day care, but would be true of many mothers. More importantly, the mothers who leave FBA before their children reach age of majority are offset by many who will continue on FBA even after their children are adults, by virtue of inability to find employment.
 6. This seems a safe assumption since many such mothers will command somewhat higher wages.
 7. We have assumed that real day care costs must increase somewhat because of current low salary levels in many of the non-Metro centres.
 8. Examples are worked out for preschool day care only, as well as for preschool care with part-time (lunch and after-school) care from ages 6 to 10.

Projections cover the period until the children near the age of majority, as shown in Tables 3 and 4. A word might be said about the format of the projections. Each case is presented in a single table, Table 3 for the parent with one child, Table 4 for the parent with two children. Each row of the table represents the projections for that family for an additional year. Each column represents a distinct portion of the analysis, or background data in the family. In each year, the net cost or savings resulting from provision of day care is calculated as:

$$\begin{array}{rcl} \text{day care costs} - \text{welfare costs} - \text{income taxes} & = & \text{net cost or} \\ & & \text{paid by the} \quad \text{savings} \\ & & \text{mother} \end{array}$$

Totals are also provided at the bottom of the page. The reader should, of course, remember that each projection is for a prototypical family, for whom day care provides an alternative to long-term welfare. This family is then followed for 17 years.

Basically, the examples demonstrate that in the long run, even for mothers with two dependent children, the welfare option is always more costly to the public than day care. Mainly this is because the welfare cost is continuous, over a larger number of years, while day care costs are concentrated in a relatively few years.

Thus, for example, we note that in Table 3, for the mother with one child: (1) day care expenditure is always less than the sum of welfare and income tax paid; (2) real savings resulting from day care stay in the range of \$1,500 per year until the child is six; (3) real annual savings resulting from day care rise to the \$4,300 range when the child no longer requires day care; (4) real savings resulting from providing day care as an alternative to welfare total \$51,854 over 17 years.

Thus, for example, we note in Table 4, for the mother with two children: (1) day care expenditures exceed welfare and tax savings by an amount which is \$490 in 1976, but which for this family drops to a savings of \$32 in 1980; (2) in 1981 the day care option starts to produce savings in the \$700 range; (3) the public 'breaks even' in 1984, when the day care outlay has been fully recovered, after which savings resulting from early provision of day care rise to about \$5,000 per year.

Overall statistics appear in Table 5 (see page 12). These statistics show that in each case examined, the welfare option is always more expensive in the long run than the day care option. More importantly, from a cost-benefit perspective, the investment in day care seems to carry a very high rate of return. In the most expensive case noted, that of a mother requiring day care for two children to age 6, and lunch and after-school care from ages 6 to 10, the day care investment carries a real rate of return of 89 per cent over 17 years. In the least expensive case, the mother of one child, requiring day care until the child begins school, the real rate of return is 585 per cent over 17 years.

Discussion

Proponents of the welfare-is-cheaper-than-day-care argument might complain about this test in the following way: "Seventeen years is too long! Most mothers are off welfare in just a few years, so that a fairer comparison would be over a much shorter period."

This argument is weak. We have little hard data on the length of time mothers stay on provincial welfare but an informed assessment in the

TABLE 3: A Comparison of the Cost of Welfare as Opposed to Day Care for a Mother of One Pre-Schooler Age 2 in 1976. All Figures are in 1975 Constant Dollars, Projected for 17 Years into the Future

Year	Gross day care cost ¹	(Less) Gross annual cost of welfare ²	(Less) Income taxes paid by working mother	(Equals) NET ANNUAL COST OR SAVINGS TO GOVT. OF THE DAY CARE OPTION	Mother's earned income ³	Ages of family members	
						m.	child
1976	\$2578	\$3744	\$342	\$1508	\$5882	25	2
1977	2629	3744	357	1472	5941	26	3
1978	2682	3744	373	1435	6000	27	4
1979	2682	3744	389	1451	6060	28	5
1980	2011	3744	404	2137	6120	29	6
1981	2011	3744	420	2153	6181	30	7
1982	2011	3744	436	2169	6243	31	8
1983	2011	3744	444	2177	6305	32	9
1984	2011	3804	470	2263	6368	33	10
1985		3804	485	4289	6432	34	11
1986		3804	504	4308	6496	35	12
1987		3804	519	4323	6561	36	13
1988		3804	538	4342	6626	37	14
1989		3804	553	4357	6693	38	15
1990		3900	571	4471	6759	39	16
1991		3900	590	4490	6827	40	17
1992		3900	609	4509	6896	41	18
TOTALS	\$10,571 (age 1-5) \$20,626 (age 1-10)	\$64,476	\$8,004	\$51,854	\$108,390		

1. Pre-school care, ages 1-5; lunch and after school care, ages 6-10; day care costs are assumed to increase at a real rate of 2 per cent until 1978, when they level out. Lunch and after-school care for the school-age child is assumed to cost 75 per cent of full day care.
2. Assumes FBA rates effective in 1975. All estimates in 1975 dollars. Excludes cost of administration and special needs. Costs increase as children grow older.
3. Assumes a wage near minimum wage, at about \$2.80 per hour.

TABLE 4: A Comparison of the Cost of Welfare as Opposed to Day Care for a Mother of Two Pre-Schoolers Ages 1 and 2 in 1976. All Figures are 1975 Constant Dollars, Projected for 17 Years into the Future

Year	Gross day care cost ¹	(Less) Gross annual cost of welfare ²	(Less) Income taxes paid by working mother	(Equals) NET ANNUAL COST OR SAVINGS TO GOVT. OF THE DAY CARE OPTION	Mother's earned income ³	Ages of family members		
						m.	children	
1976	\$5156	\$4404	\$262	s \$490	\$5882	25	1	2
1977	5259	4404	277	G p e 578	5941	26	2	3
1978	5364	4404	291	v n 669	6000	27	3	4
1979	5364	4404	307	t. d s 653	6060	28	4	5
1980	4693	4404	321	32	6120	29	5	6
1981	4022	4404	337	G 719	6181	30	6	7
1982	4022	4404	352	o 734	6243	31	7	8
1983	4022	4404	371	v 753	6305	32	8	9
1984	4022	4464	381	t. 823	6368	33	9	10
1985	2011	4524	402	2915	6432	34	10	11
1986		4524	420	4944	6496	35	11	12
1987		4524	436	s 4960	6561	36	12	13
1988		4524	454	a 4978	6626	37	13	14
1989		4524	470	v 4994	6693	38	14	15
1990		4620	488	e 5108	6759	39	15	16
1991		4716	506	s 5222	6827	40	16	17
1992		4716	525	5241	6896	41	17	18
TOTALS	\$23,825 (age 1-5) \$43,935 (age 1-10)	\$76,368	\$6,600	\$39,033	\$108,390			

1. Pre-school care, ages 1-5; lunch and after school care, ages 6-10; day care costs are assumed to increase at a real rate of 2 per cent until 1978, when they level out. Lunch and after-school care for the school-age child is assumed to cost 75 per cent of full day care.
2. Assumes FBA rates effective in 1975. All estimates in 1975 dollars. Excludes cost of administration and special needs. Costs increase as the family members grow older.
3. Assumes a wage near minimum wage, at about \$2.80 per hour.

TABLE 5: Cost of Welfare versus the Day Care Option over a 17 Year Period. All Figures in 1975 Dollars.

	Total cost of welfare 1976-1992	Total gross cost of the day care options	Total income tax if mother works	Gross government savings if day care allows the mother to work ²	Net government savings after day care costs are deducted	Percentage return on day care investment
<u>Example 1:</u> Only pre-school day care provided						
Mother, age 25, child age 2 in 1976	\$64,476	\$10,571	\$8,004	\$72,480	\$61,909	585%
Mother, age 25, children aged 1 and 2 in 1976	\$76,368	\$23,825	\$6,600	\$82,968	\$59,143	248%
<u>Example 2:</u> Pre-school age day care provided <u>plus</u> lunch and after-school care ages 6 - 10.						
Mother, age 25, child age 2 in 1976	\$64,476	\$20,626	\$8,004	\$72,480	\$51,854	251%
Mother, age 25, children aged 1 and 2 in 1976	\$76,368	\$43,935	\$6,600	\$82,968	\$39,033	89%

1. Assumes FBA rates effective in 1975 -- all estimates in 1975 dollars. Excludes administration costs and special needs.

2. Calculated as the sum of welfare savings and income tax revenues gained.

literature is that many mothers stay on welfare a long time.⁹ We suspect, moreover, that movement to a "lifetime" model would strengthen the above assessment further, since many mothers stay on welfare after their children are grown up, and since mothers who work throughout their adult lives until retirement will make smaller retirement income demands on the public treasury. More significantly, however, we have demonstrated that on the average, even in the short term, the public always saves by choosing day care over welfare. Long-run savings such as the very considerable savings noted in the examples above are simply a bonus which further strengthens the economic case for day care.

5. Conclusions: Day Care is Less Costly than Welfare. Day Care is a High Return Investment

The above examples demonstrate unequivocally that high subsidy day care is much less costly than recent reports have suggested. It is also shown to be far less costly for the public than welfare. This makes good sense. Having people work, even if they need expensive supports will, in most cases, benefit the public more than paying welfare. A novel suggestion is that over the long run high subsidy day care may also carry a very high rate of return as an investment.

What does all of this mean for the current Metro Toronto day care cut-backs controversy? It probably means one of two things: First, those who are proposing cut-backs may be ignorant as to both the short and long-term economics of day care. If this is true, the above examples should give

9. In looking at employment of FBA mothers, an Ontario government study concludes

"Most mothers believe they will continue to be recipients of Family Benefits primarily because of their dependent children. They consider employment a possibility later on but few have specific plans."

(See: Family Benefits Mothers in Metropolitan Toronto, Ontario Ministry of Community and Social Services, Research and Planning Branch, March, 1973, p.118)

them cause. Second, the issues may not really be economic at all, but rather an ideological or value debate centred around the issue of women remaining at home. If this is the case, then political leaders should speak to this issue, rather than putting forward faulty arguments about cost savings. Political leaders may wish to make a case for a more expensive outlay for welfare, for the provision of welfare rather than opportunities for work, for long term reliance on welfare.

It seems likely, however, that taxpayers would favor a program that reduces dependency, that makes work more attractive than welfare, and that would cost less. Therefore, taxpayers should favor continued expansion of high subsidy day care in Metro Toronto.

An emphasis on day care as a good investment for the public makes sense. Accordingly it should not be surprising that other views reflect a similar overall assessment. In his remarks at an income security seminar held by the Social Planning Council and Metro Agencies Action Committee on December 8, Marc Lalonde, Minister of National Health and Welfare, particularly emphasised the importance of day care. The recent Report of the Special Program Review (The Henderson Report) released in November, 1975 recommends no cut-backs in day care although, as many know, the review committee recommended generally extreme cut-backs in expenditures on human services. Rather, the committee recommended a shift of public expenditures to day care from educational budgets, a recommendation that the current Provincial stand seems to ignore.¹⁰ Similarly, the Economic Council of Canada, in its just recently released report underlined the importance of increased female labour force participation (which is facilitated by expanding day care) to economic recovery.

10. Report of the Special Program Review, Toronto, November 1975, p.294.

It seems reasonable to conclude that the moves to cut back day care represent another side of governmental planning madness: when governmental programmes have rapidly expanded in the past, they have often done so in a relatively unplanned and inefficient manner. Now, in contracting public expenditures, will governments, with similar inefficiency and lack of planning, be prone to cutting high priority, high return programs such as day care, while less productive programmes are ignored?

A compelling case can be made for day care in terms of its preventive impact and support to children and families. Day care is thought to have many long term social welfare effects. Day care reinforces the community value placed on the work ethic. These factors alone could serve to validate the community's need for high subsidy day care. But when, on top of this, a clear case can be made that such day care saves the public vast sums of money -- one is left to conclude that the case against day care is weak indeed.

