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The Economic Rationale for Investing in School Meal Programs for Canada: multi-sectoral impacts from comparable high-income countries

PREPARED BY RUETZ CONSULTING
AMBERLEY T. RUETZ, PHD, GABRIELLE EDWARDS, PHD,
& FLORA ZHANG, MPH

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https://amberleyruetz.ca/assets/uploads/ruetz-consulting_the-economic-rationale-for-investing-in-school-meal-programs-for-canada.pdf

I. EXECUTIVE SUMMARY

Families across the country are struggling. Canadians have the highest level of household debt in the G7 (Plowman, 2023), rent is unaffordable for the middle class (Hudes, 2023), and almost half of Canadians are living paycheque to paycheque (Ritchie, 2023). Inflation has made accessing nutritious food challenging for an increasing number of Canadians; 1 in 4 children are food insecure (PROOF, 2022), up from 1 in 5 in 2021 (Statistics Canada, 2023). This report details the multi-sectoral return on investing in school meal programs, with a focus on the range of benefits associated with universal free school meals drawing on evidence from comparable high-income countries.

Universal free school food meals¹ can help families immediately by taking pressure off household budgets, improving children's long-term physical and mental health, and improving student performance, as recognized by the House of Commons Standing Committee on Finance (1997) and in countless research studies. Based on evidence from comparable high-income countries, the projected multi-sectoral returns in health, education, social protection, and agriculture include:

- **Return on Investment:** Universal free school meals have been shown to provide a **2.5x - 7x return** in human health and economic benefits in high-income countries (Lundborg et al., 2022; The Rockefeller Foundation, 2021). When compared early child nutrition programs for low-income children aged 3–5 in the US (Duncan et al., 2010; Kline and Walters, 2016), Sweden's universal free school lunch program had a **higher benefit-to-cost-ratio at twice the rate** (Lundborg et al., 2022), see page 17;
- **Household Budgets:** Access to school food programs would provide immediate relief to families' household budgets and working parents. Specifically, universal free school meals (breakfast and lunch) could **save families between \$129 to \$189 per child per month on grocery bills**, and families with two children could save between \$2,580 to \$3,780 (19% to 28% of their grocery budget) per school year (10 months), see page 4 - 6;
- **Economic Development and Job Creation:** If \$1.6 billion per year was spent on food, and Canada followed a similar approach to Brazil where 30% of these funds are spent on local agriculture supporting family farms, then a national school food program **could contribute \$4.8 billion in domestic food purchases over 10 years** and **stimulate the development of as many as 207,700 new jobs** (Ruetz & Fraser, 2019), see page 6 - 8;
- **Women in the Workforce:** Parental access to universal free lunch increased mothers' labour market participation by 5% and permanent household incomes by 2.6% in Sweden (Lundborg et al., 2022). In China, the introduction of school lunches led to a 9%-14% increase in mothers' working hours per week, with the greatest increases among low-income mothers and mothers in rural communities (Liu, 2023), see pages 9 - 10;
- **Education and Lifetime Earnings:** Exposure to universal free school meals has been demonstrated to **increase students' lifetime earnings between 3% and 6%** due to

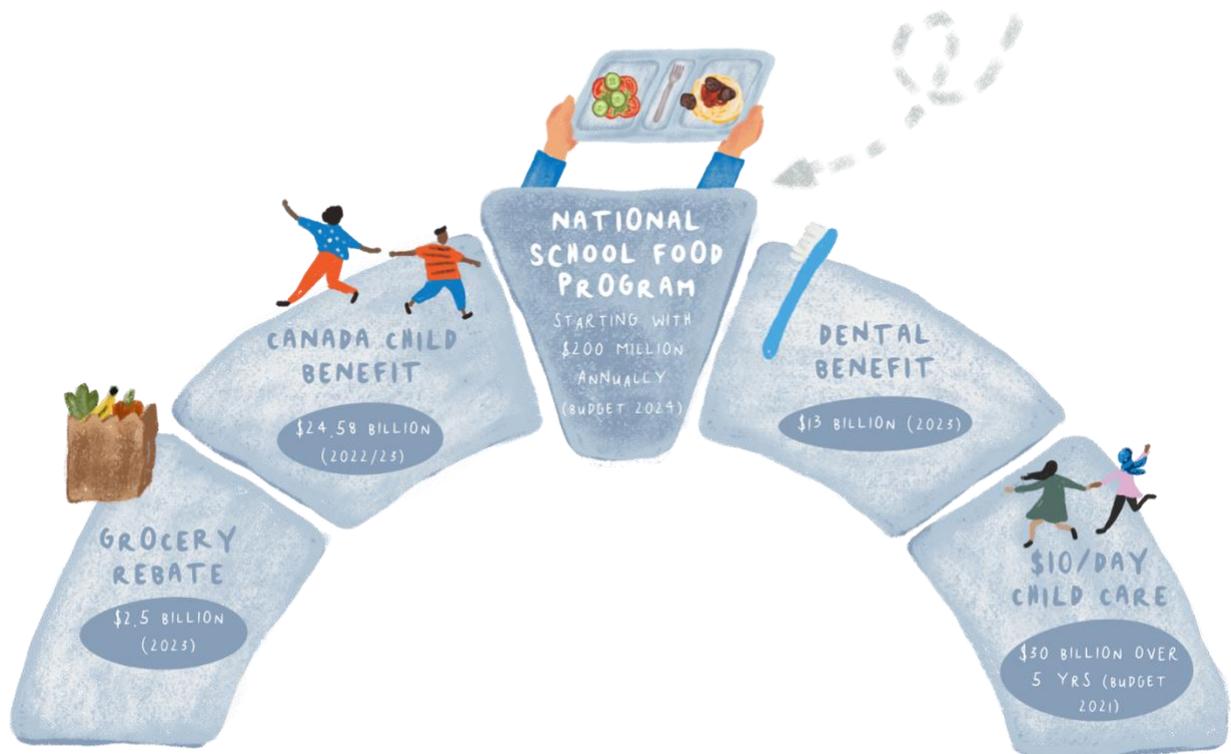
¹ The Robert Wood Johnston Foundation's Healthy Eating Research program (2021) defines universal free school meals as when "all enrolled children in a school [receive] ... a free breakfast or lunch, regardless of their family's income" (p. 1).

improved learning outcomes, and these increased earnings have been found to transfer to the next generation (Bütikofer et al., 2018; Lundborg et al., 2022). Access to universal free school lunches have been found to reduce social inequalities as students from families in the lowest income bracket experienced the most significant income increase, amounting to 6%, see page 10 - 12;

- **Health and Food Security:** Studies examining universal free school lunches have found positive associations with diet quality and food security (Cohen et al., 2021), which can help decrease diet-related diseases and their associated costs (Men et al., 2020) which has been estimated at \$26 CAD billion per year (Loewen et al., 2019), see page 12 - 15.

A national school food program would join Canada's universal childcare and the Canada Child Benefit as a crucial social support, bringing immediate relief to families while also contributing to long-term economic, health, and social benefits. A \$200 million investment toward school food in Budget 2024 would be the first step towards fulfilling the Liberal Party's 2021 election promise of \$1 billion over five years. A \$200 million investment would be a fraction of the federal government's current expenditures of ~\$500 billion in 2023 and would provide immediate relief to families while building a legacy of improved public health and economic prosperity for generations to come. An investment in a national school food program today is an investment in a stronger Canada tomorrow. Our nation's children are only 20% of our population but 100% of our future.

THE MISSING PIECE IN EXISTING SOCIAL POLICIES: NATIONAL SCHOOL FOOD PROGRAM



II. RECOMMENDATION

To allocate at least \$200 million in Budget 2024 and collaborate with provinces, territories and Indigenous partners to support school food programs, keeping with the Liberal Party of Canada's 2021 Election Campaign promise to commit \$1 billion over 5 years to "work towards a national school nutritious meal program."

III. RATIONALE

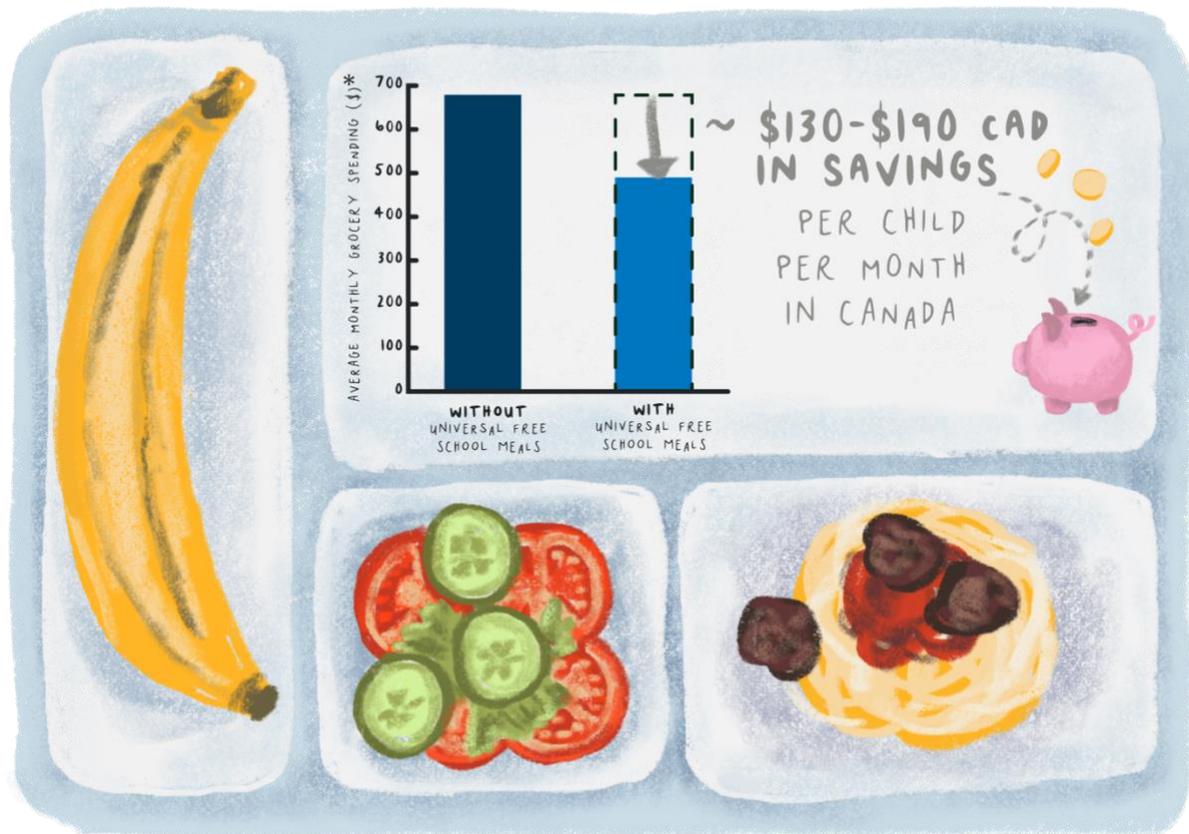
1. Immediate relief to household budgets and increasing families' food purchasing power

Universal free school meals (breakfast and lunch) could save families between \$129 to \$189 per child per month on grocery bills, and families with two children could save between \$2,580¹ to \$3,780¹ (19% to 28% of the average household food expenditure¹) per school year (10 months).

Research from the United States (U.S.) shows that universal free school meals can lead to increases in real household income through reduced food expenditures. A nationwide study in the U.S. found that if universal free school meals (breakfasts and lunches) were available to all students, monthly household grocery bills could decline by as much as 19% per month for families with two children (Marcus & Yuwell, 2022). According to Canada's Food Price Report for 2023 (Charlebois et al., 2023), a family of four (two children) spends an average of \$1,357 CAD per month on groceries. Therefore, a 19% reduction in food expenditure could save Canadian households with two children approximately \$258 CAD per month (\$2,580 over a 10-month school year), or \$129 CAD per child per month (\$1,290 over a 10-month school year). In New York City, the transition to universal free school meals (breakfast and lunch) was approximated to save families \$140 USD per child per month (Healthy School Meals for All, n.d.; Public Schools Unite Us, 2022), or \$189 CAD² per child per month (\$1,890 over a 10-month school year). For a family of four (two children) in Canada, this translates to over \$3,780 CAD in savings per school year. In other words, receiving free school meals (breakfast and lunch) would increase families' purchasing power by \$3,780 CAD per year.

² An average exchange rate of 1.35 was used to calculate USD to CAD, based on September 2023 exchange rates.

SHORT-TERM BENEFITS OF UNIVERSAL SCHOOL FOOD PROGRAMS



*NOTE THAT THIS ESTIMATED MONTHLY SPENDING IS FOR ONE ADULT AND ONE CHILD

Minnesota's recent efforts to provide universal free lunch (excluding breakfast) saved families an estimated \$80 USD per student per month (Callaghan, 2022), or \$108 CAD per child per month (\$1,080 over a 10-month school year). This equals \$2,160 CAD in savings for a family with two children over the school year.

Another US study found that introducing universal free school meals led to grocery stores reducing their prices by 2.5% across all outlets. This demonstrates that the national school lunch program delivered a substantial indirect benefit to communities (Handbury & Moshary, 2021). Moreover, the expansion of free school meals led to a small drop in nearby food bank usage (Ozturk et al., 2021). This drop in food bank use persisted throughout the summer when students were not in school, implying that families are able to use additional resources accrued from the school year to balance children's food consumption year-round.

Investing \$200 million in a national school food program in Budget 2024 would cost the federal government much less than \$2.5 billion invested in the one-time grocery rebate in Budget 2023 and provide greater long-term benefits for Canadians. The Grocery Rebate was temporary and inadequate, amounting to less than \$20 a month for an adult, while a typical family was estimated

to spend roughly \$130 more a month on food purchased from stores in July 2023 compared with July 2021 (Affordability Action Council, 2023). While the grocery rebate provided Canadians with a one-time relief of \$200-\$500, a national school food program could save Canadian households with two children between \$2,160 and \$3,780 per school year (10 months).

As opposed to a single reimbursement, a national school food program can help offset the growing financial pressures within households by providing healthy meals on school days, encompassing more than half the calendar year (approximately 190 days). This enables families to redirect their finances towards essential needs such as rent, mortgage, utilities, and meals for household members. The urgency of this support is underscored by the 2024 Canada's Food Price Report, which anticipates a \$701 increase in food costs for families of four, reaching a total of around \$16,297 next year.

Also of considerable concern is that Canadians are spending LESS on food, despite rampant cost increases. This indicates cost-of-living pressures (housing, utilities, fuel) are forcing families to cut back on food – buying less quantity or quality – which is concerning for health and well-being. Parental access to free school meals would increase family's food purchase power at home.

2. Creating good jobs

A school food program could stimulate the development of as many as 207,700 new jobs across various sectors, making it a valuable investment into the economy (Ruetz & Fraser, 2019).

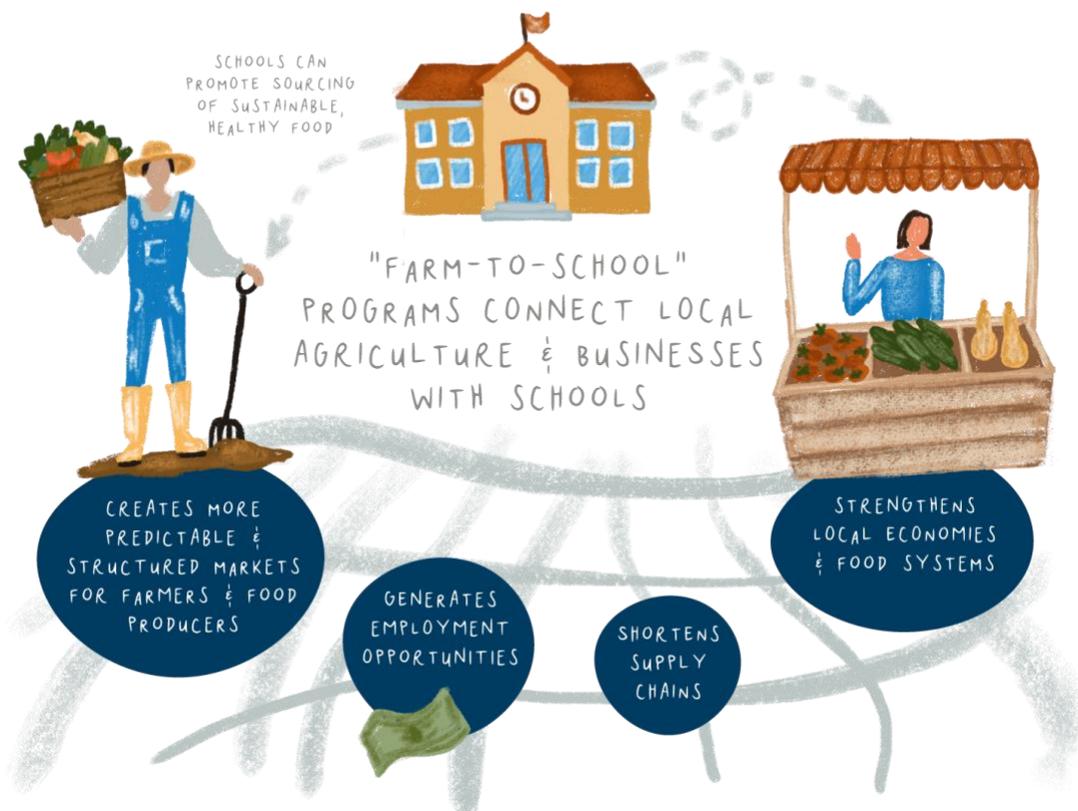
An investment in school food programs would stimulate job creation. A preliminary University of Guelph study found that a Canada-wide program that operates at the same staffing level as the American National School Food Programs - employing on average 4.3 food service workers per school - would equate to 62,000 jobs across Canada's 15,500 elementary and high schools (Ruetz & Fraser, 2019). As the majority of schools do not have paid school food service workers, these would largely be new jobs created across Canada.

The American National School Meal Programs have also spurred the creation of additional supporting jobs in the agri-food and nutrition sectors. American economic impact studies found that for every job created by a school district to support a school food program with local food procurement, an additional 0.67 – 2.35 jobs are created, including food suppliers, program administrators, dietitians, and evaluators. Assuming a similar impact in Canada, the 62,000 jobs required to run a school food program could stimulate the development of as many as 207,700 new jobs if local food procurement is integrated into the program (Ruetz & Fraser, 2019).

The 2021 Global Survey of School Meal Programs found that a third of school food programs reported a focus on creating jobs for women (Global Child Nutrition Foundation, n.d.). Although women dominate the cooking workforce globally and across all income levels, many go unpaid.

A national school food program could create good jobs for working women, particularly mothers. School food service positions present excellent employment opportunities for parents, as they typically align with the academic calendar. When parents' work hours are similar to their school-aged children, this lessens the demand for childcare, which is extremely costly and saturated.

BENEFITS OF UNIVERSAL SCHOOL FOOD PROGRAMS: ECONOMIC GROWTH & JOB CREATION



3. Supporting the Canadian Economy and Strengthening Local Food Systems

If \$1.6 billion per year was spent on food procurement for a national school food program, and Canada followed a similar approach to Brazil where 30% of these funds are spent on local agriculture supporting family farms, then the program could contribute \$4.8 billion in domestic food purchases over 10 years (Ruetz & Fraser, 2019).

School food programs contribute to the local economy by supporting regional food production and household and business incomes. A U.S. study reported that the 'farm-to-school' approach to school food procurement led to farmers receiving nearly five times the sales compared to a more traditional food supply chain—80 cents per dollar compared to a 17 cents (Bobronnikov et al., 2021). In addition, for every dollar spent by schools on local produce has been found to generate an additional \$1.30 to \$2.60 in local economic activity (Bobronnikov et al., 2021).

A preliminary analysis demonstrates that if \$1.6 billion per year was spent on food, and Canada followed a similar approach to Brazil where 30% of these funds are spent on local agriculture supporting family farms, then the program could contribute \$4.8 billion in domestic food purchases over 10 years (Ruetz & Fraser, 2019). 'Farm-to-school' approaches to school food procurement in Canada have increased in recent years, but their potential economic impact remains constrained due to the lack of food preparation infrastructure in schools (Haines & Ruetz, 2020), inadequate staff with procurement expertise (Ruetz, 2022), and a predominately volunteer-dependent operational model (Ruetz & McKenna, 2021). 'Farm-to-school approach' could rapidly expand with adequate investments in regional food procurement models, school food infrastructure and trained staff (Ruetz & Smithers, 2023).

The charity *Farm to Cafeteria Canada* has provided grants to schools to fund salad bar lunch programs since 2016 (Farm to Cafeteria Canada, 2015). The federal government could build on this program, creating a school food infrastructure fund akin to the Canadian Food Policy's Local Food Infrastructure Fund to build and strengthen school food systems in addition to local food systems and economies (Ruetz, 2022; Ruetz, 2023). The USA also offers other state-led models for local food procurement incentives that could be considered (see Appendix B).

4. Supporting Women in the Workforce

Parental access to universal free lunch increased mothers' labour market participation by 5% and permanent household incomes by 2.6% in Sweden (Lundborg et al., 2022). In China, the introduction of school lunches led to a 9%-14% increase in mothers' working hours per week, with the greatest increases among low-income mothers and mothers in rural communities (Liu, 2023).

Preparing nutritious school lunches is challenging when parents working long hours. Universal free school meals support parents, particularly mothers who typically spend more time making meals for school, by reducing financial stress, saving time, and ensuring kids eat well at school (Cohen et al., 2021). This enables working mothers to focus more effectively at work, reduce interruptions, and achieve a healthier work-life balance, leading to increased productivity and career advancement opportunities.

A Swedish study revealed a 5% surge in mothers' labor market participation when their children participated in the free school lunch program (Lundborg et al., 2022). Moreover, participation in universal free school lunches resulted in a 2.6% boost in permanent household income, attributed to mothers' increased participation in the workforce (Lundborg et al., 2022, pg. 902). Importantly, this rise in permanent household income was not a result of savings on food expenditures.



In China, the introduction of school lunch led to 9%-14% increase in mothers' working hours per week (Liu, 2023). Particularly noteworthy was the program's impact on mothers with children from disadvantaged backgrounds, who experienced the most substantial benefit in terms of increased workforce participation. Additionally, when investigating a rural subgroup, the study revealed a 12.5% surge in maternal working hours following the introduction of the school lunch program. Overall, the introduction of free school lunch in China was proven to be an effective means of reducing socioeconomic inequalities by particularly increasing workforce participation among mothers from the lowest income bracket and mothers from rural communities.

In summary, parental access to universal free school lunches has been found to increase household incomes and mothers' workforce participation, particularly mothers in rural communities and from the lowest income bracket, thereby supporting gender equality, individual economic prosperity, and economic growth.

5. Improving learning outcomes and increasing lifetime earnings

Exposure to free school meals have been demonstrated to increase students' lifetime earnings by up to 5.8% due to improved learning outcomes, and these increased earnings have been found to transfer to the next generation rate (Bütikofer et al., 2018; Lundborg et al., 2022).

In Canada, a study of a mid-morning meal program in Toronto uncovered significant benefits. Regular participants saw a minimum 10% improvement in skills like independent academic work, initiative, conflict resolution, class participation, and problem-solving. Students who consistently had breakfast were also more likely to stay on track for high school graduation compared to their peers who did not (Muthuswamy, 2012).

In Norway, a study investigating the long-term impact of introducing free breakfasts in primary schools in 26 cities during the 1920s and 1930s resulted in a significant increase in education and a shift in occupational status, boosting earnings by an average of 2–3% from 1967 to 1980 (Bütikofer et al., 2018). These effects were observed across genders and poverty levels, with men benefiting slightly more. Increased education in men resulted in higher occupational status, and these increased earnings were transferred to the next generation as fathers' access to the Oslo breakfast program resulted in higher earnings for their first-born children.

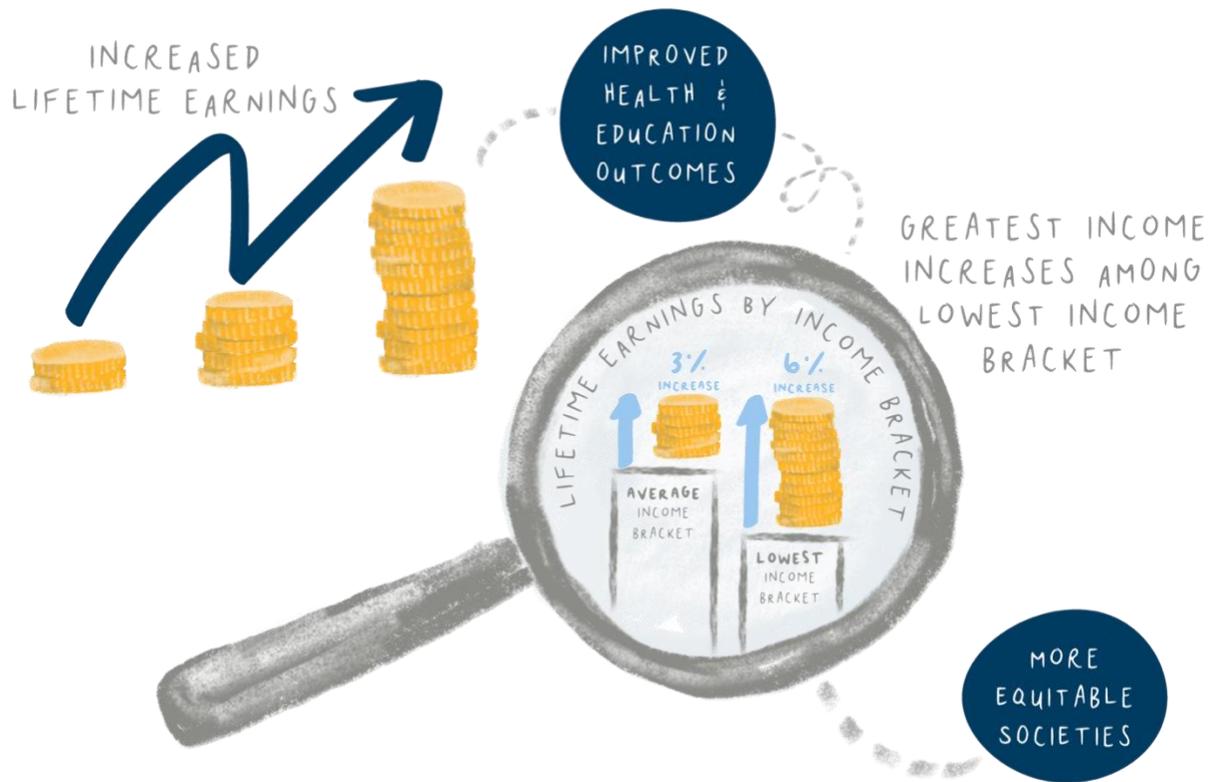
BENEFITS OF UNIVERSAL SCHOOL FOOD PROGRAMS: EDUCATION & ACADEMIC SUCCESS



In Sweden, nine years of universal free school lunch in the 1960s generated substantial long-term benefits, improving children's economic, educational, and health outcomes throughout life (Lundborg et al., 2022). The reform to universal free school meals improved the nutritional content of students' lunches through the substitution of less nutritious home-packed lunches for universal free school-provided meals. The study found that Swedish students exposed to the program throughout their entire primary school period had 3% higher lifetime earnings compared to unexposed students, with the effect being attributed to improved nutrition and increased schooling.

The program had the greatest positive impact on students from the lowest quartile of household income, implying the program reduced socioeconomic inequalities in adulthood. Among children from households in the lowest economic income bracket, access to free school lunches led to a 5.8% increase in lifetime earnings (Lundborg et al., 2022). Exposure to the universal free school lunch program also had substantial effects on educational attainment and health, in addition to these economic outcomes.

LONG-TERM BENEFITS OF UNIVERSAL SCHOOL FOOD PROGRAMS



In Sweden, a high-income country that ranked among the top five nations in GDP per capita at the time of the reform, the shift to universal free school lunches away from home-packed meals was not due to food insecurity but rather the lack of parental knowledge. As Lundburg et al. (2022) noted, some may argue that providing families the cash equivalent of a school lunch cost would enable parents to buy similar food and get the same benefits; however, due to limited nutrition knowledge, it is unlikely that parents could make lunches as nutritious as the school program.

In Canada, the combination of limited cooking skills, time constraints of working parents and a food environment heavily oriented towards ultra-processed foods makes packing healthy lunches challenging. Unlike Sweden, a prosperous nation where child food insecurity was not a motivating factor for introducing the lunch program, Canada could potentially derive greater benefits due to its high rate of child food insecurity.

6. Increasing Food Security

Studies examining universal free school lunches have found positive associations with diet quality and food security (Cohen et al., 2021), which can help decrease diet-related diseases and their associated costs (Men et al., 2020).

Food insecurity now affects 1 in 4 children in Canada (1.8 million), up from 1 in 5 in 2021 (Statistics Canada, 2023). In Canada, food affordability is the main barrier to achieving food security (Korzun & Barak, 2023). Food security has been linked with increased economic stability and growth (Torero, 2014). However, inflation and affordability pressures mean that accessing nutritious food is increasingly challenging for more and more Canadians, especially families. A Canadian study found that compared to food-secure counterparts, people facing food insecurity incurred more acute healthcare costs: up to \$565 CAD more per person per year (Men et al., 2020). People who are food-insecure are also less able to manage chronic conditions, making them more likely to be hospitalized and experience negative disease outcomes. Due to its detrimental short and long-term health effects, food insecurity places a substantial burden on the healthcare system. School meals have been found to help in reducing this burden, as they were noted to be healthier compared to home-packed meals in many countries including the United Kingdom, Denmark, the United States, and Canada, thereby increasing students' consumption of nutritious foods (Caruso & Cullen, 2015; Evans et al., 2012; Johnston et al., 2012; Sabinsky et al., 2019; Taylor et al., 2012).

While school food programs alone will not solve food insecurity in Canada, studies examining universal free school lunch programs have found positive associations with food security (Cohen et al., 2021). Two studies conducted in the U.S. found a modest but statistically significant improvement in household food security for those accessing participating in universal free school lunch and breakfast programs (Gross et al. 2019; Poblacion et al., 2017). Other Canadian studies focusing on low-income parents found that parents felt reduced anxiety about their child's food situation when that child had access to a school food program (Single Mothers' Alliance, 2022). Furthermore, mothers are more likely to skip meals so that others in the household have enough food, raising the women's likelihood of acute and chronic illness, stress, depression, and workplace absences (RTI International, 2014). While school food programs do not alleviate the hunger of parents or others in the household, they would free up spending otherwise spent on meals consumed at school and increase a family's food purchasing power at home (see page 4).

There is compelling evidence that increased income has the most important bearing on reducing household food insecurity across populations (McIntyre et al., 2016; Men et al., 2021; Tarasuk et al., 2019). However, we do not yet have the data in Canada to determine the impacts of school food programs on individual child food security, and the social and psychological aspects of food security at the individual/child level (Ruetz et al., 2023). Canadian national surveys, such as the Household Food Security Survey Module within the Canadian Community Health Survey and the

Canadian Income Survey, measure income-related household food insecurity with most questions focusing on food quantity and quality, while only one question asks about psychological aspects of food insecurity, and no questions capture social aspects related to food insecurity. Without a national universal school food program, it is difficult to be certain of the impacts on household food insecurity, but as mentioned above there are studies from the US with compelling evidence (Gross et al. 2019; Poblacion et al., 2017) to believe that such a program would make a difference.

A 2017 study by Gundersen et al. explored the potential impacts of implementing a U.S.-style national school lunch program in Canada. The study estimated a reduction of food security by at least 11% reduction in food insecurity among households with children aged of 6–17 (Gundersen et al., 2017). The authors emphasized that this modest reduction was modelled under the assumption that no other family supports decreased due to investments in school food programs. Some limitations of this analysis and the rationale for a hypothetical increase in the impact of a National School Meal Program for Canada include: 1) increase school meal participation due to the transition to universal free meals without stigma (Logan et al., 2014; Pokorney et al, 2019; Tan et al., 2020); 2) exposure to more than one meal, i.e., if breakfast and lunch are both considered (Poblacion et al., 2017); and 3) complementary meal programs (e.g. schools making extra meals to send home with students when school is closed (professional development days, weekends, and dinners for after school); and 4) families' food purchasing power is increased when their children participate in school meal programs (see page 4 - 6).

An updated evaluation of the potential impacts of introducing a U.S.-style national school lunch and breakfast program in Canada should be modeled. Furthermore, for a comprehensive assessment of the benefits of school meals beyond food security (e.g., health outcomes, mental health and well-being, etc.), a thorough cost-benefit analysis should be conducted in Canada, mirroring the multi-sectoral approach taken in Sweden (Lundborg et al., 2022). Such an examination would offer a more nuanced understanding of the broader societal advantages associated with school meal programs.

BENEFITS OF UNIVERSAL SCHOOL FOOD PROGRAMS: MENTAL HEALTH & WELLBEING



7. Decreasing Healthcare Spending

School food programs that prioritize students' consumption of nutritious foods can help decrease the annual economic burden of diet-related diseases estimated at \$26 CAD billion (Loewen et al., 2019).

The quality of student diets across all socioeconomic backgrounds is alarmingly poor (Tugault-Lafleur et al., 2017). In 2017, UNICEF ranked Canada 37 out of the 41 wealthiest nations when it came to providing healthy food for kids (UNICEF, 2017). Low diet quality is one of the most significant modifiable risk factors for disease. The treatment and management of chronic diseases has been estimated to consume 67% of all direct healthcare costs in Canada (Elmslie, 2012). Failing to meet Canada's healthy eating recommendations in 2018 had an economic burden of disease cost of \$26 billion annually (direct and indirect costs) (Loewen et al., 2019).

A study from the University of Essex found that in four London boroughs where free school meals were offered, obesity rates among children decreased by 7% to 11% (Holford & Rabe, 2024a). Specifically, kids in year six, who had been getting free school meals since starting primary school, saw a 5-8% decrease in obesity rates (Holford & Rabe, 2024b). The study also showed that when free school meals were made available to everyone, there was an 8% increase in uptake among those who were already eligible. Researchers believe this change might have occurred because it changed how schools viewed and talked about the meals, reducing any associated stigma. As a result, approximately one in three children began having school lunch for the first time.

Food behaviors instilled in childhood tend to persist into adulthood. Eating habits adopted by children who engage with school food programs can carry through adulthood, helping to reduce the incidence and prevalence of chronic disease (Malachowska & Jezewska-Zychowicz, 2021). In closing, school meal programs can not only decrease childhood obesity rates but also potentially improve long-term health outcomes by promoting healthier eating habits and reducing the economic burden of chronic diseases in adulthood.

BENEFITS OF UNIVERSAL SCHOOL FOOD PROGRAMS: HEALTH



8. Strengthening Indigenous Communities

School meal programs are important mechanisms for ensuring adequate nutrient intake among Indigenous children and improving health and well-being (Gates et al., 2013, 2016; Skinner et al., 2012; Browne et al., 2020).

Breakfast and lunch programs are considered essential for ensuring student well-being in First Nations, Métis, and Inuit communities. Researchers have found that school meals reduce food and income stress for Indigenous households with children by increasing the number of meals available to families each day (Naylor et al., 2023). Student participation in school food programs is also well documented to improve academic achievement, attendance, and drop-out rates (Anderson et al., 2017; Turner & Chaloupka, 2015).

Inuit in Canada experience the highest documented prevalence of food insecurity of any Indigenous people in an industrialized country, yet there is no coordinated, national approach to addressing Inuit food insecurity (ITK, 2023). Inuit Tapiriit Kanatami (ITK) – which represents 51 communities across Canada – co-developed a report with Inuit partners and the federal government found that Inuit students would benefit from a coordinated school food program. Their report makes a case for the delivery of a cost-effective, accessible, and Inuit-specific meal program to be implemented in the 75 schools in Inuit Nunangat, the Inuit homeland encompassing 51 communities across the Inuvialuit Settlement Region (Northwest Territories), Nunavut, Nunavik (Northern Québec), and Nunatsiavut (Northern Labrador). Accordingly, ITK is seeking \$1.79 billion to implement and sustain school food programs across Inuit Nunangat over the next 15 years, covering the costs of food, labor and training, operations and maintenance, and infrastructure (ITK, 2023).

9. Overall Return on Investment

School food programs have been shown to provide a 2.5x - 7x return in human health and economic benefits in high-income countries (Lundborg et al., 2022; The Rockefeller Foundation, 2021). When compared early child nutrition programs for low-income children aged 3–5 (Duncan et al., 2010; Kline and Walters, 2016), Sweden’s universal free school lunch program had a higher benefit-to-cost-ratio at twice the rate (Lundborg et al., 2022).

School food programs provide a significant return on investment. In 2021, the Rockefeller Foundation reported that U.S. school food programs provided double their cost in multi-sectoral returns. The study found an annual \$39.5 billion USD return in human health and economic equity through decreases in diet-related diseases, poverty, and food insecurity, in exchange for a \$18.7 billion USD investment. Moreover, the study found that the transition to universal free school food policies could lead to an additional \$7.5 billion USD annual return on investment (The Rockefeller Foundation, 2021), for 2.5x in multi-sectoral returns.

In Sweden, universal free school lunches yielded a 4x to 7x return on investment (Lundborg et al., 2022: p. 903). Accounting for meal production costs,³ the benefit-to-cost ratio was a 4x return on investment and increased substantially to 7x the investment for children from the poorest families. In other words, Sweden’s transition to universal free school meals led to long-term economic benefits for all Swedish students, but students from the poorest families benefited the most. Accordingly, the paper concluded that access to universal free school lunches reduced social inequality in Sweden. Furthermore, these calculations only account for the income benefits of the school lunch program and other important health-related benefits are not accounted for, therefore the benefit-to-cost ratio could be even greater. In contrast to early-life programs, school-based policies can reach a larger share of children with a higher benefit-to-cost ratio. When compared to the *Head Start* program in the U.S., an early child nutrition program that reached a large group of low-income children aged 3–5 (Duncan et al., 2010; Kline and Walters, 2016), Sweden’s universal free school lunch program had a higher benefit-to-cost-ratio at twice the rate (Lundborg et al., 2022: p. 903).

While Sweden introduced its universal free school lunch program during the 1950s and 1960s, these findings hold relevance for Canada today. The program was initially implemented in Sweden, a high-income country that was already among the top five nations in terms of GDP per capita, where school attendance and food insecurity was not a primary concern for children, but where parents grappled with limited knowledge about healthy eating habits. Canada stands to benefit to a greater degree due to the prevalent high rate of child food insecurity and suboptimal eating habits observed across the socio-economic spectrum.

³ Costs included expenses for food, facilities, and equipment.

IV. CONSIDERATIONS

1. Canada lags the rest of the world

Canada is an outlier. According to the United Nations World Food Programme, over 388 million children in at least 161 countries—80% of all countries globally—receive free or subsidized school meals at school. Canada remains the only member of the G7, and one of the few 38 nation-state members of the Organization for Economic Cooperation and Development (OECD), that does not have a national school food program.

2. Strong Canada-wide Interest

A Maru Public Opinion poll, which surveyed a random sample of 1,517 Canadians, revealed that an overwhelming majority (84%) believe the Liberal government should urgently fulfill its promise of a \$1 billion investment over five years to implement a national school food program. Overall, the majority (77%) of Canadians are disappointed in the government's inaction and approximately one quarter (23%) believe the total amount promised is not enough (Breakfast Club of Canada, 2023).

A survey conducted by Employment and Social Development Canada (2023) regarding the development of a national school food policy found that 96% of respondents agreed that school food programs are beneficial, and that “expanding access to healthy and nutritious food could benefit all Canadian children.”

3. Provincial and Territorial Readiness

In 2022-23, provinces and territories have made significant investments to expand school food programs. British Columbia invested \$214 million over three years (BC Government, 2023); Manitoba committed \$30 million to establish universally accessible school nutrition programming across the province for the 2024-25 school year (Manitoba Government, 2024); Quebec increased funding by \$5.3 million, bringing its total to more than \$53 million (Radio-Canada, 2022); and Newfoundland and Labrador announced \$10 million towards a province-wide program expected to start September 2024 (CBC, 2023).

Every province and territory funds school food programs, supporting at least 35% of elementary and high schools to provide free breakfasts, snacks, and/or lunches to at least 21% of students across Canada (Ruetz & McKenna, 2021). Provinces and territories depend on staff and volunteers from non-governmental organizations to operate their programs, program demands often exceed supply, and program oversight is inconsistent. Funding from the federal government is essential to supplement the existing support and contributions from provinces and territories across Canada.

4. International approaches

Leading countries with robust nationally supported school food programs include the United States (U.S.), Finland, Sweden, Japan, France, Brazil, and India. Several of these programs emphasize wide access and may also leverage their basic meal offerings to integrate other related aspects of food policy, sourcing, and quality. For example, Brazil's law stipulates that 30% of all foods provided in its program be purchased from small family farms. The U.S. also supports local food procurement at the federal and state level has made a series of investments over the years (see Appendix A and B for more details).

Regarding program reach, Finland, Sweden, and Estonia offer universal free school meals for all age groups. Latvia and Lithuania provide free meals to some grade levels. One full meal per day is given for first to fourth grade students, and in some municipalities, for older students.

V. APPENDICES

Appendix A: United States Department of Agriculture Federal School Food Investments

The United States Department of Agriculture (USDA) works with States to support school breakfast and lunch programs. Since January 2021, the USDA has made remarkable financial contributions to support the ongoing delivery of school meals until 2024 (USDA, 2023). In addition to the annual investment of \$18.7 billion towards the National School Lunch Program and the School Breakfast program, the USDA provided:

- \$200 million towards the Local Food for Schools Cooperative Agreement Program for States to purchase local foods for school meal programs. This program aims to strengthen the food system for schools by helping to build a fair, competitive, and resilient local food chain, and expand local and regional markets with an emphasis on purchasing from historically underserved producers and processors.
- \$140 million towards the National School Lunch Program Equipment Assistance Fund to support schools in buying safe and appropriate kitchen equipment;
- \$84 million towards the Farm to School Grant Program to provide kids with nutritious, local foods and nutrition education through expanded Farm to School engagement;
- \$20 million towards the School Breakfast Expansion Grant for States; and
- \$18 million towards the Team Nutrition Training Program to support nutrition education and training for schools.

Appendix B: U.S. State Local Food Procurement Incentives for Schools

This appendix provides an overview of the range of local food procurement or ‘farm-to-school’ (F2S) incentives and supports implemented by states in the United States. During the 2018-19 school year, school food authorities (SFAs) in the U.S. purchased \$1.26 billion of local food. Research has demonstrated that the economic impacts⁴ of the F2S farm sector (small and mid-scale farms) are greater than the large-scale, commodity-oriented fruit and vegetable sector, indicating that F2S suppliers purchase more inputs from the local economy per unit of output, which results in positive local economic impacts (Christensen et al., 2018). To support the expansion of F2S procurement, U.S. states have established several purchasing incentives.

I. Local Food Procurement Incentives

Local food procurement incentives for schools in the United States fall under one of several main funding mechanisms via the state government:

1. A matching reimbursement—up to a defined amount per ingredient—for schools that win competitive grants (Alabama)
2. Reimbursement per meal when schools reach a threshold percent of local purchases (New York)
3. Lump-sum reimbursement upon application (New Mexico)

II. Examples

a. Matching reimbursement: Alabama

- In 2022, the Alabama’s Farm-to-School Program Incentive Program reimbursed schools at \$0.20 per meal component sourced from the state. For example, if a school serves a meal that includes Alabama satsumas and sweet potatoes produced within the state, the school receives \$0.40 per meal.
- School Food Authorities (SFAs) submit a completed “Incentive Form”, their monthly point of service meal counts, and invoice(s) matching what they are claiming at the end of each month (Minimum of \$500 reimbursement required; maximum of \$20,000).

b. Threshold reimbursement: New York State (NYS)

- The NYS 30% Initiative reimburses schools at 25 cents per meal for any SFA that purchases at least 30% of ingredients from farms within the state. SFAs that have reached the 30% threshold can apply for reimbursement from New York State’s Department of Agriculture and Markets.
- SFAs that purchase food items and prepare their own school lunches, or SFAs that contract with a Food Service Management Company to purchase food items and prepare

⁴ A specific type of economic activity analysis conducted using an input-output model. The software often used in economic impact analyses is IMPLAN. The IMPLAN software relies on an input-output (I-O) table that reflects the flow of economic linkages, namely the monetary exchanges associated with the trade of goods and services, within a specific geographic area at a moment in time.

school lunches are eligible to participate in the 30% NYS Initiative. SFAs that procure school lunches from a vendor⁵ are not eligible to participate.

- SFAs must apply annually to receive this additional reimbursement.
- Application forms, calculation tools, and other resources are available on the NYS Department of Agriculture and Market's website.

c. Lump-sum reimbursement: New Mexico

- New Mexico Grown is a local food incentive grant program designed to minimize paperwork for school districts by providing a lump-sum reimbursement for local produce purchasing, rather than a per-meal incentive.
- Any SFA in New Mexico operating a National School Lunch Program or School Breakfast Program is eligible to apply for reimbursement.
- Each year, New Mexico Public Education Department (NMPED) issues a request for proposals. To receive reimbursement, SFAs apply for a specific amount of funding. NMPED's competitive grant process prioritizes funding for schools based on the school's (1) intention to regularly use local produce; (2) need for funding due to scarcity of fresh produce or the school's remote location; (3) plan for purchasing and using the produce, and maintaining or increasing local purchases in the future; (4) percentage of students eligible to receive free or reduced price lunch; and (5) wellness policy including information on the benefits of healthy eating.

III. Key Supports

- a. A State-wide Farm-to-School Specialist, as hired in most States.
- b. Regional Procurement Hubs that support producers and school food authorities to increase local food purchases (e.g., Oregon's Regional Procurement Hubs).
- c. An 'opt-in' process for schools as opposed to competitive grants. Allowing schools to opt-in has been found to increase school participation, local food purchases, and opportunities for producers. In 2015, Oregon's legislature shifted the procurement funding for the state's F2S grant program from a competitive grant to an opt-in process. The subsequent program evaluation revealed that reimbursing eligible purchases for all school districts, rather than selecting a few through competition, more low-income districts participated. Additionally, this approach provided producers with increased opportunities to access a wider range of school markets. Increased participation, however, meant that the implementing agencies had to offer technical assistance to a larger audience.

⁵ A vendor is defined as a company (commercial enterprise, non-profit organization, or public entity) that prepares, cooks, and packages unitized/bulk form meals, off-site at their own facilities and delivers them. Vendors provide meals only and do not manage any aspect of the school food service.

Appendix C: School Lunch and Breakfast Production Costs in United States

The USDA's Food and Nutrition Service (FNS) periodically studies the costs of producing a reimbursable meal. In the 2014-2015 school year, the School Nutrition and Meal Cost Study found that the average cost was \$2.72 USD per breakfast and \$3.81 USD per lunch (reported costs were defined as those charged to the school food service account, i.e., food, foodservice labor, equipment purchases, and utilities, among others).

When additional unreported costs⁶ were included (costs to school districts outside of the food service account such as administrative support associated with processing applications to determine eligibility for free or reduced cost meals), the cost of producing the average meal increased to \$4.19 USD per breakfast (+54%) and \$6.02 USD per lunch (+58%) (Congressional Research Service, 2020: p. 18; Toossi et al., 2023: p. 11). Using an American inflation calculator and applying a 1.35 exchange rate, the average total meal cost across the U.S. equates to **\$7.34 CAD per breakfast⁷** and **\$10.54 CAD per lunch⁸**. While the additional expensive to school districts to process applications to determine eligibility for free or reduced-price meals accounts for only part of these additional unreported costs, they are significant, which is why the U.S. introduced the Community Eligibility Provision.

The Community Eligibility Provision (CEP) is a federal program that allows eligible schools to provide universal free meals (UFMs) to all students, regardless of individual family income, based on the percentage of students automatically eligible for free meals through other means, such as participation in certain assistance programs. The aim is to streamline the meal service process and reduce administrative burdens on schools while ensuring that students have access to nutritious meals. Among other key findings related to increase student participation among low-income students in CEP schools, one study found that **universal free school meals reduced per student-meals costs due to economies of scale and a lower administrative burden, while maintaining nutritional quality** (Long et al. 2021). Per student-meal costs were marginally lower in UFMs schools for lunch and significantly lower for breakfast in medium and large schools (over 500 students). For CEP-participating small schools, at least in the first year of the CEP national implementation, the economy of scale was not achieved.

⁶ Unreported costs vary across SFAs but may include such items as administrative or support functions performed by school district personnel, (such as accounting, data processing, payroll, purchasing, storage, and transportation) and use of school facilities, equipment, and services (such as energy, communications, and transportation) provided or purchased by the school district.

⁷ Breakfast: \$4.19 USD in 2015 = \$5.44 USD in 2023 + 1.35 exchange rate = \$7.34 CAD

⁸ Lunch: \$6.02 USD in 2015 = \$7.81 USD in 2023 + 1.35 exchange rate = \$10.54 CAD

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