Short-term Gain, Long-term Pain

The Privatization of Hospital Laundry Services in Saskatchewan

By Hugh Grant, Manish Pandey and James Townsend
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About the Authors

The three authors are members of the Department of Economics, Faculty of Business and Economics at the University of Winnipeg. Hugh Grant (PhD., University of Toronto) specializing in economic history, labour and health economics. Manish Pandey (Ph.D., University of Western Ontario) is a macroeconomist who also works extensively in applied economics. James Townsend (PhD., University of British Columbia) is currently the Chair of the Department and his research focusses on immigration, labour economics and international trade. All three have published extensively in economic journals.

This research was commissioned by the Canadian Union of Public Employees (CUPE) – Saskatchewan. CUPE Saskatchewan requested the authors conduct an independent, economic analysis of the business case of 3sHealth which proposed the privatization of hospital laundry in Saskatchewan. The findings and conclusions of this report are the sole responsibility of the authors.

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Executive Summary

Reinvesting in Hospital Laundry Services in Saskatchewan

- Saskatchewan's publicly-owned hospital laundry and linen service is in a general state of disrepair because of the neglect of the province in investing and maintaining the existing facilities.
- After soliciting private proposals and considering various public options, 3sHealth recently announced its decision to close the remaining five publicly-owned and operated facilities in the province in favour of contracting out services to a private corporation, K-Bro Linen Systems Inc., which is to construct a single plant in Regina to serve the entire province.

3sHealth's Cost Comparisons

- 3sHealth compares the costs of public and private options and claims that privatization will yield savings in the order of $20 million over the next 10 years when compared to the best public (2-plant) option.
- Our economic evaluation, using the data available in 3sHealth's redacted Business Case, indicates that the expected short-term savings are lower, in the order of $13-17 million.

The Perils of Privatization

- There is no compelling evidence in the economics literature that private firms are intrinsically more efficient than public sector organizations.
- Three reasons are given why the promised savings and efficiency gains from privatization or out-sourcing may not be achieved: (a) *quality shading*, where privatization results in a lower quality of service; (b) *redistribution*, where privatization yields no efficiency gains but merely redistributes income from workers to the government and the private firm's shareholders; and (c) *hold-up costs*, where the private firm deliberately understates the initial costs and then seeks to ratchet up the price of the contract to the government once public production facilities have been closed.

There is *prima facie* evidence that each of these three concerns apply to the proposed privatization of hospital laundry services in Saskatchewan. Specifically, something is clearly amiss in the information provided with respect to the cost of the K-Bro contract and suggests the likelihood of "hold-up" costs. As Nobel Laureate Paul Krugman states the general case: "it's common for private contractor to bid low to get the business, then push up prices once the government work force has been disbanded. Projections of a 20% or 30% cost saving across the board are silly — and one suspects that the officials making those projections know that."[1]

The Costs and Benefits to 3sHealth

- Relative to the status quo, 3sHealth maintains that the K-Bro contract will save $97 million over ten-year life of the contract. Since the current situation is untenable, the relevant comparison is to the best public option. Even accepting 3sHealth's questionable cost comparisons, the expected savings are in the order of $13-17 million over ten years.

- The privatization decision entails a significant long-term risk to 3sHealth. While a 10-year contract ostensibly ensures that the costs will not rise dramatically over the next decade, the contract may be renegotiated if unforeseen contingencies arise. Furthermore, 3sHealth will subsequently find itself negotiating with a private monopoly over future contracts. When entering into such negotiations, 3sHealth will lack the industry knowledge to adequately assess the situation and will have left itself few or no alternatives, at least in the immediate term, to renewing the private contract.

The Costs and Benefits to the Residents of Saskatchewan

- The decision to privatize services is not in the best interest of the residents of Saskatchewan. Any short-term benefits accruing to 3sHealth must be weighed against the costs borne in the form of lower employment and income in the province.
- When considering the savings to taxpayers and the loss of provincial income, the privatization option will decrease income of the residents of Saskatchewan between $14 and $42 million over the next 10 years when compared to public options.
- Similar productive efficiency gains could be achieved through public ownership, while the privatization option will result in a significant loss of employment and incomes in the province. It results in a redistribution of income away from workers and other residents of the province in favour of a private corporation whose shareholders reside outside of the province.

The Impact on Regional Economic Development

- Because the privatization option entails concentrating production in a single plant in Regina and the closure of regional facilities, the decision runs contrary to the expressed goal of regional economic development. In Prince Albert, it is estimated that it will decrease employment by 74 full-time equivalent jobs annually and lower regional income by $3.7 million annually. This will have a significant impact on many vulnerable groups who have historically been disadvantaged in the labour market.

Conclusion

- As many economists have recently argued, because of historically low long-term interest rates there is no better time for governments to reinvest in public projects. Public ownership is the best guarantee to ensure that the cost of services will not increase dramatically in the long-term, to support the generation and retention of incomes in the province, and to provide the best means of supporting regional economic development.

Introduction: Reinvesting in Hospital Laundry Services in Saskatchewan

In May 2013, Health Shared Services Saskatchewan (3sHealth), the public authority charged with coordinating aspects of health care delivery in the province, announced its intention to close the five remaining publicly-owned hospital laundry facilities in the province and to contract out the provision of services to a single private firm. In December, 3sHealth confirmed that it had entered into a ten-year contract with a private firm, K-Bro Linen Services, which is to build a single plant in Regina to supply linen services to the province's twelve regional health authorities and the Saskatchewan Cancer Agency.

According to 3sHealth, this change will improve the quality of service, improve employee safety and save the public health care system — and by extension the taxpayers of the province — $97.7 million over the next 10 years.[2] In contrast, several trade unions representing workers in the plants to be closed argue that the decision favours the shareholders of an out-of-province corporation at the expense of the workers and residents of Saskatchewan. Not only will it lead to the loss of unionized jobs and the economic dislocation of affected workers, it will not achieve the service improvements, efficiency gains and cost savings promised.[3]

In light of these conflicting claims, this report undertakes a Multiple Account Benefit Cost Analysis (MA-BCA) in order to consider the net benefit of privatizing hospital laundry hospital services in Saskatchewan from three distinct perspectives. First, from the standpoint of the 3sHealth (and by extension the Government of Saskatchewan), is the decision a sound one in terms of the expected cost saving and efficiency gains relative to the other options available? Second, taking a broader view, is the decision a sound one for the residents of the province where both potential taxpayer savings and net employment and income effects are concerned? Third, is the decision consistent with the other policy objective of supporting economic activity in regions outside of the main urban centres of Regina and Saskatoon?

Table 1: Multiple Account Benefit Cost Analysis

Account	Purpose	Analysis
3sHealth	Benefits to 3sHealth/Saskatchewan Taxpayers	Net Present Value of Cost Saving over 10 years of various options Long-term risk
Residents of Saskatchewan	Distribution of Net Employment and Income Changes	Employment and Income Distribution associated with each option over 10 years
Regional Economy	Consistency with Regional Economic Development Initiatives	Economic Impact on Prince Albert due to plant closure

Our analysis is limited to the publicly-available information. Specifically, we examine the following documents:

- 3sHealth, "Submission to Board of Directors. Summary of Recommendation: Provincial Laundry and Linen Services," 15 November 2012;
- 3sHealth, "Evaluation of Options for the Delivery of Saskatchewan Health Care Laundry and Linen Processing Services," November 2012;
- 3sHealth, "Business Case for Public Delivery of Saskatchewan Health Care Laundry and Linen Processing Services," Fall 2012;
- K-Bro Linen Systems Inc. "Presentation to 3sHealth for RFSP #0001," September 19, 2012.

Options for Reinvestment

3sHealth considered various options for the future of hospital laundry services in the province. This involved an analysis of the costs of operating existing facilities, a range of publicly-owned and operated plant configurations, and private proposals.

Current Facilities

The bulk of hospital laundry service in Saskatchewan has been provided by five facilities operated by the health regions, located in Regina, Saskatoon, Yorkton, Weyburn, and Prince Albert, and a sixth plant in Moose Jaw operated by the Ministry of Social Services. Together these plants account for 72% of processed linens (22.6 million pounds per year). The remainder is processed in some 100 smaller facilities throughout the province.

The lack of maintenance and repair expenditures in these facilities has raised concerns about efficiency, worker safety, and infection prevention control. Specifically:

- the Saskatoon plant was forced to close in November 2011 when a large beam fell from a broken winch, requiring laundry be shipped to Calgary for cleaning and returned to the Saskatoon distribution centre;
- the aged Moose Jaw plant is scheduled to close in 2016;
- equipment in the Yorkton plant is at the end of its useful life and the plant design raises concern over infection prevention;
- the Regina facility is in need of renovation and the equipment is dated;
- the Weyburn plant is relatively new but is of limited capacity; and
- in contrast, the Prince Albert plant was recently upgraded and is in good condition.

Due to the general neglect and resulting deterioration in the capital stock, there is little question that some action is required to ensure the continuation of laundry service in a safe and efficient manner. It bears emphasis, however, that 3sHealth cites a “lack of available capital” in explaining why no investment in maintaining and upgrading existing facilities occurred (“Evaluation of Options,” p. 9). This makes little sense given long-term interest rates have been at historically low levels and credit has been widely available. 3sHealth failed to take advantage of the attractive conditions for borrowing on capital markets in order to ensure that the efficient operation of existing facilities was maintained.

Public Reinvestment Options

Faced with the deterioration in existing facilities, 3sHealth considered several public options for the future of hospital laundry services in the province (see Table 2 below).

The net benefit of each public option was considered subject to the following factors:

- capital costs borne by 3sHealth associated with building new plants or retrofitting existing plants;
- operating costs, including a “fully-burdened” (i.e. including all benefits, EI and CPP contributions) labour costs of between \$21.14 and \$23.06 per hour;
- transportation costs entailed in moving linen to and from laundry facilities to hospital and care facilities;
- costs of decommissioning existing plants and severance pay for displaced workers; and
- sale of existing equipment that would no longer be required.

These estimates are summarized in Table 3.

Several observations are forthcoming from Table 3:

- Economies of scale in laundry plants: larger plants have lower operating costs because of their more capital-intensive nature; in other words, the majority of the cost saving stems from a reduced labour force.
- Diseconomies of scale due to transportation costs: a smaller number of plants increases the cost of shipping laundry from plant to depot to care facility; moreover, a smaller number of plants reduces the quality of service due to less frequent deliveries and less flexibility in responding to local needs (*Business Case*, p. 13).
- On balance (considering the trade-off between lower labour and operating expenses on the one hand, and higher transportation costs on the other), the two-plant option has the lowest annual operating costs (\$15.6 million); the one-plant (\$16.3 million) and three-plant (\$16.2 million) options have nearly identical total annual operating costs; and cost increase for the four-plant (16.9 million) and five-plant (\$17.8 million) options (Figure 1).

Table 2: Public Investment Options

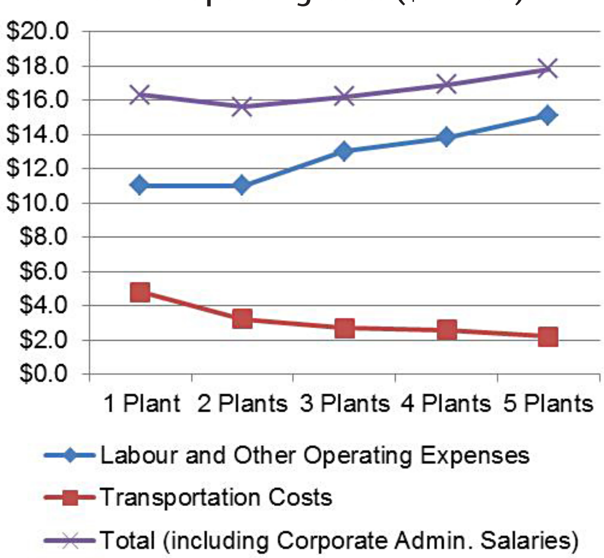
Configuration	Plants	Depots
One Plant	Regina (new)	Saskatoon, Prince Albert, Yorkton
Two Plants	Regina and Saskatoon (new)	Prince Albert, Yorkton
Three Plants	Regina and Saskatoon (new); Prince Albert (refurbished)	Yorkton
Five Plants	Saskatoon (new); Regina, Prince Albert, Weyburn and Yorkton (refurbished)	

Table 3: 3sHealth's Financial Analysis of Public Facilities ($ million)

	Options					
	1 Plant	2 Plants	3 Plants	4 Plants	5 Plants	Current
Capital Costs						
Building	$14.2	$14.8	$14.2	$13.1	$17.8	$18.4
Equipment	$16.9	$22.2	$20.4	$20.0	$16.4	$12.2
Land	$ 2.3	$ 2.1	$ 2.1	$ 2.0	$ 1.0	
Transition	$ 1.7	$ 1.0	$ 0.5	$ 0.4	$ 0.1	
Asset Sale Proceeds	-$ 7.8	-$ 7.8	-$ 7.0	-$ 7.0	-$ 2.7	
Total	$27.3	$32.4	$30.2	$29.5	$32.6	$30.6
Annual Operating Costs (Year 1)						
Labour	$ 4.3	$ 5.0	$ 5.9	$ 6.7	$ 7.8	$10.6
Other	$ 6.7	$ 6.0	$ 7.1	$ 7.1	$ 7.3	$ 9.6
Plant to Depot Transportation	$ 1.8	$ 0.8	$ 0.6	$ 0.5	$ 0.3	
Depot to Customer Transportation	$ 1.6	$ 1.6	$ 1.6	$ 1.6	$ 1.6	
Depot to Customer Transportation	$ 1.4	$ 0.8	$ 0.5	$ 0.5	$ 0.3	$ 1.6
Corporate Administrative Salaries	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	
Total	$16.3	$15.6	$16.2	$16.9	$17.8	$21.8
Annual Cost per pound ($)						
Capital	$0.097	$0.115	$0.107	$0.105	$0.110	$0.101
Operating	$0.700	$0.672	$0.698	$0.727	$0.768	$0.920
Total	$0.797	$0.787	$0.805	$0.832	$0.878	$1.021
Full-Time Equivalent Labour (exc. Drivers)	131.6	151.6	176.2	194.6	234.5	260.9

Source: 3sHealth, *Business Case For Public Delivery of Saskatchewan Health Care Laundry and Linen Services*, p.11.

Figure 1: Public Options Breakdown of Operating Costs ($ million)



- Net capital costs associated with building new plants or retrofitting existing ones range from $27.3 million for the one-plant option to $32.6 million for the 5-plant option.

Based on this analysis, the report concludes that the two-plant configuration is the most attractive among all public options: "The two site model was the most cost effective option, and provided high levels of service, and low levels of complexity. A two site model gives the province the ability to 'back up' the plants in the event of a strike, flood or fire simply by adding a shift. It also provides for some level of internal competition between each plant. This competition is necessary to ensure that each plant is working aggressively to be as customer focused, and efficient, as possible." (*Business Case*, p. 15)

Private versus Public Options

3sHealth also issued a "Request For Strategic Partner" (RFSP) from private suppliers in August 2012. Only two proposals were received, and the submission by K-Bro, Inc. was deemed as having the most technical merit and financially sound plan. K-Bro Linen Systems Inc. is the largest provider of laundry and linen services in Canada and has been expanding its operations significantly over the past number of years. It currently processes approximately 200 million pounds of laundry in seven cities. In K-Bro's 2013 first quarter financial statement, it reported that 70.4% of its total revenues come from public health institutions.

For the purpose of comparing the net benefits of each public option and the K-Bro privatization proposal, the net present value was calculated over a 10-year period with an assumed rate of discount of 6%. Further, where new capital expenditures are involved, the structure is expected to have a life expectancy of 40 years and the equipment of 20 years.

Based upon these assumptions, the following financial results were generated (see Table 4).

On this basis, 3sHealth argues that the one-plant privatization option is the most attractive.

Re-estimating the Costs of Private and Public Options

In an effort to replicate the analysis by 3sHealth — despite the redacted material — the analysis of the cost of public plant options appears quite robust in terms of the detailed attention paid to estimating the costs of constructing new facilities and retrofitting existing ones, the salvage value of decommissioned assets, and the transition costs associated primarily with the cost of displaced workers. The cost to 3sHealth of the K-Bro proposal also seems straight forward given that it involves the annual cost of the 10-year contract. Nonetheless, the comparison of the private and public options appears to overstate the relative net benefits to 3sHealth of the K-Bro proposal. This occurs for two reasons: a) the analysis apparently ignores the transition costs

Table 4: Cost Comparisons According to 3sHealth ($ million)

	K-Bro	Public	Public
Service Delivery Model	1 Plant	1 Plant	2 Plants
3sHealth Capital Cost	$ 0	$ 35.15	$ 39.66
Operating Cost per year	$ 16.09	$ 16.25	$ 16.39
Net Present Value of Total Costs (10 years)	$127.76	$151.96	$147.93
Difference	$ 0	$ 24.20	$ 20.17

Note: also considered was a "hybrid" (public-private) two-plant model.
Source: 3sHealth, *Evaluation*, p. 17.

borne by 3sHealth associated with the K-Bro proposal; and b) the rate of discount/borrowing costs used in the analysis is too high which tends to exaggerate the capital costs associated with public options.

Transition Costs

In assessing the relative costs of different public plant options, 3sHealth is careful to include the "transition costs" including "Human Resource/ Labour Relations support, change management support, project management capacity and costs associated with severance" (Business Case, p. 10). The cost of "people transitioning" — an unfortunate term — is redacted (Business Case, p. 25), but the overall transition costs are presented for each public option in Table 5 below.

No similar calculations of the transition costs borne by 3sHealth under the K-Bro proposal are provided. Given that the majority of such costs are associated with severance pay for 261 displaced workers, the amount would be substantial. We conservatively estimate the transition cost borne by 3sHealth associated with the K-Bro proposal at $2.2 million.

Discount Rate and Capital Costs

Selecting the appropriate discount rate with which to calculate the net present value of the stream of benefits and costs associated with an investment project is a hotly-debated issue. In general, the discount rate is used to reflect the time preference of money: income received today is deemed to have greater value than a similar amount of income received at some point in the future. This is closely associated with the rate of interest which reflects the rate at which one can borrow today in return for future repayment of the loan. 3sHealth uses a 6% discount rate in its analysis, but does not indicate if this is a real or nominal rate.

Selection of the discount rate is germane to the analysis of hospital laundry facilities because, to 3sHealth, the public options entail a large capital expenditure while the K-Bro proposal does not. A high discount rate places greater weight on the net present value of capital costs, while a low discount rate places a lower weight on capital costs.

The most relevant consideration for public agencies today is the interest rate at which the province can borrow on long-term debt. Currently, the yield on the Government of Saskatchewan long-term bonds is in the range of 3.5% on 20-year and 30-year issues. This would imply a nominal borrowing cost of 3.5% and a real rate of 1.5% assuming a rate of inflation of 2%. This makes the assumption of a 6% discount rate — whether real or nominal — too high.[4]

Re-estimating the Relative Cost of Private and Public Options

The simplest means of comparing the net present value of various options is an economic evaluation of the annual expenditure flows. Capital outlays are assumed to incur at the beginning of the income stream ("Year 0") and then added to the annual operating costs in order to derive the total cost of the project over

Table 5: Transition Costs

		Public Options				
	K-Bro	1 Plant	2 Plants	3 Plants	4 Plants	5 Plants
Displaced FTE Workers	261	129	109	85	66	16
Total Transition Costs ($1,000)	N/A	1,726	1,039	486	389	113

Source: *Business Case*, p. 11.

a 10-year period. It is also necessary, however, to consider the "residual value" of the capital stock at the end of time period: 3sHealth would own the plants at the depreciated value of the equipment, buildings and land. These capital assets are assumed in the Business Case to have a life of 20 years from equipment and 40 years for buildings.[5] The discount rate is then applied to the annual flow of expenditures in order to derive the net present value.

In Table 6, we present estimates based on the following considerations:

a) gross capital costs provided by 3sHealth;

b) the annual operating costs in year 1 as stated by 3sHealth;

c) a 2% rate of inflation in annual operating costs;[6] and

d) a straight-line depreciation rate of 5% on the initial cost of equipment, 2.5% on buildings and 0% on land to reflect the assumptions of 3sHealth of a 20 year life on equipment and 40 years on buildings.

Table 6: Estimated Net Present Value of Various Options to 3sHealth ($1,000)

		Public Options				
	K-Bro	1 Plant	2 Plants	3 Plants	4 Plants	5 Plants
A. Discount Rate = 4%						
Gross Capital Outlay	0	33,419	39,134	36,714	36,122	35,122
Transition Costs	2,200	1,726	1,039	486	389	113
Asset Sales	-7,821	-7,821	-7,821	-7,041	-7,021	-2,670
Operating	144,827	146,276	140,317	145,925	152,010	160,507
Residual Value of Plant	0	-17,630	-20,035	-18,898	-18,618	-18,529
Total	139,206	155,970	152,634	157,186	162,882	174,543
Difference		**16,764**	**13,429**	**17,980**	**23,676**	**35,337**
B. Discount Rate = 5%						
Gross Capital Outlay	0	33,419	39,134	36,714	36,122	35,122
Transition Costs	2,200	1,726	1,039	486	389	113
Asset Sales	-7,821	-7,821	-7,821	-7,041	-7,021	-2,670
Operating	134,965	136,315	130,762	135,988	141,658	149,577
Residual Value of Plant	0	-16,021	-18,207	-17,174	-16,919	-16,838
Total	129,344	147,618	144,908	148,973	154,229	165,304
Difference		**18,274**	**15,564**	**19,630**	**24,886**	**35,960**
C. Discount Rate = 6%						
Gross Capital Outlay	0	33,419	39,134	36,714	36,122	35,122
Transition Costs	2,200	1,726	1,039	486	389	113
Asset Sales	-7,821	-7,821	-7,821	-7,041	-7,021	-2,670
Operating	128,446	129,732	124,447	129,420	134,817	142,353
Residual Value of Plant	0	-14,572	-16,560	-15,621	-15,389	-15,315
Total	122,825	142,484	140,239	143,959	148,918	159,603
Difference		**19,658**	**17,413**	**21,133**	**26,093**	**36,777**

In order to reflect the sensitivity of the estimated net present value to the rate of discount selected, we present the results using nominal discount rates of 4%, 5% and 6%.

Further, since the existing six-plant consideration is not deemed viable, we express the difference in the cost of various public options relative to the K-Bro proposal.

Comparing our re-estimated cost comparisons (Table 6) to that of 3sHealth (Table 3) suggests that 3sHealth overstates the benefits of the privatization option. Where 3sHealth estimates the cost of the best public option (2 plants) to be $20.7 million higher than the K-Bro option, our analysis suggests a difference of between $13.4 and $17.4 million depending upon the rate of discount used.

The Perils of Privatization

Privatization is often expected to lower a government's cost of providing services because of increased competition in the private sector and the incentives for efficiency gains created by the profit motive; however, there is no compelling evidence in the economics literature that private firms are intrinsically more efficient than public sector organizations.[7] Three reasons are given why the promised savings and efficiency gains from privatization or out-sourcing may not be achieved:

- *Redistribution:* any cost saving achieved is not through efficiency gains (output per worker) but merely through lower wages, deterioration in working conditions, or greater work intensity (often leading to a greater frequency in industrial accidents). The lost income of workers is transferred to the government (in lower private contract costs) and the private owners (in higher profits).
- *"Hold-up" costs:* any initial cost savings to the government do not persist. The contract between the government and the private firm are invariably "incomplete" in the sense that it cannot anticipate all of the possible contingencies that may arise. Even where the private firm contractually bears the risk of unanticipated costs, the government is held hostage to the extent that, having ceased its own production, it must cede to pressure to renegotiate the contract on more favourable terms to the private firm. As Nobel Laureate Paul Krugman states the case: "it's common for private contractor to bid low to get the business, then push up prices once the government work force has been disbanded. Projections of a 20% or 30% cost saving across the board are silly — and one suspects that the officials making those projections know that."[8] O.E. Williamson, another Nobel Laureate in Economics, describes the behaviour of private firms in this respect as "self-interest seeking with guile."[9]
- *Quality shading:* the cost saving is achieved through lower quality of service which are,

in many instances, difficult to detect through monitoring of contract compliance.

Each of these three considerations appears relevant in the case of Saskatchewan's hospital laundry service. Comparing the private versus public one-plant options, each entails the operation of a newly-constructed facility that incorporates the same up-to-date technology. As such, there should be no "productive" efficiency differences in the sense that the same physical quantities of capital, labour and other inputs are used to deliver the same quantity of outputs.

Accepting 3sHealth's analysis, however, the annual cost of the contract with K-Bro (S16.09 million) is less than the operating cost of a public agency with significant experience in the industry (3sHealth, $16.2 million). Moreover, since the annual cost of the K-Bro contract includes the private costs of capital (annual depreciation and carrying costs of debt), as well as a return on invested capital, passed on to the client (3sHealth), one would expect the annual cost of the K-Bro contract to 3sHealth to be higher, not lower, than the annual operating cost of a public plant. Why, then, does the privatization option appear superior?

Redistribution

A large difference in private and public operating costs stems from the expected wage rate to be paid. The wage rate assumed in the K-Bro contract is not publicly disclosed; however, it appears that K-Bro anticipates paying an hourly wage as low as $10.75 an hour and a "fully-burdened" rate in the range of $12-$13.[10] In contrast, publicly-operated facilities are assumed in the 3sHealth analysis to pay an hourly wage of $18-$20 and a "fully-burdened" rate of $21-$23.

In this regard, the privatization of hospital laundry services may not achieve any productivity gains relative to a newly- built public facility; instead, it entails a significant redistribution of incomes with the benefits shared by 3sHealth (lower costs) and the shareholders of K-Bro (profit), with the costs borne by workers (lower wages).

Hold-Up Costs

Even accounting for the wage difference, something is clearly amiss in the 3sHealth analysis. If its evaluation of the cost of operating one public plant is accurate, then 131.6 workers are required to operate a newly-constructed, state-of-the-art facility. The K-Bro proposal entails a total wage bill of $2.2 million, such that the implied wage is $8.35/hour," fully-burdened," a nonsensical result since it well below the minimum wage rate in the province.[11] Alternatively, assuming a $13/hour, fully-burdened, wage rate in the K-Bro proposal, it implies employing only 84.6 people in the K-Bro plant, well below the 131.6 that the 3sHealth analysis determines is warranted. In the absence of complete public disclosure, one can only question why a private one-plant facility can operate with roughly two-thirds the workforce deemed necessary to operate a similar public plant.

While the K-Bro contract has a price escalator clause (wherein the price charged to 3sHealth increases by one-third of any increase in the wage rate and two-thirds of the change in the consumer price index (CPI) for Saskatchewan, this begs the question of the initial wage rate to be paid. 3sHealth notes that the "potential financial risk from K-Bro not achieving the labour rates forecast in their proposal is an increase in the cost per pound of $0.01 for each 10% labour increase. Each $0.01 increase will result in an operating cost increase of $220,000 annually" (3sHealth, *Evaluation*, p. 28). 3sHealth notes that "effective contract negotiation" is necessary to mitigate the "risk" that the low wage rate cannot be achieved. It does not indicate, if this risk is borne by K-Bro (with the cost of the contract fixed) or by 3sHealth (by adjusting the annual cost of the contract in the event of higher labour costs).

This suggests the possibility of hold-up costs. Since not all contingencies can be anticipated *ex ante*, private firms have an incentive to understate their costs in order to secure the contract. Once the public facility has been closed, the private firm may then seek to reopen the contract on the grounds that it cannot operate profitably under the existing terms. The public agency has little option but to submit to the contract reopener.

Quality Shading

A third reason that the K-Bro proposal involves lower operating costs is that it involves a lower quality of service. The K-Bro proposal assumes the construction of two depots to facilitate transportation while the public one-plant option assumes three depots, with the third being built in Yorkton. The K-Bro proposal, therefore, involves less frequent deliveries.

The annual cost of operating a depot at Regina or Saskatoon, handling 6.5 million pounds a year, is estimated to be between $0.54 and $0.75 million and add to operating costs in the order of $0.08 per pound (*Business Case*, Appendix 6). Based on these estimates and assuming constant returns to scale, a smaller depot located at Yorkton, handling one-fourth the volume, would cost in the order of $0.15 million to operate and raise annual operating costs per pound by $0.02.

Summary

For several reasons, one should be skeptical about the robustness of 3sHealth's cost comparisons between private and public options:

- Redistribution: comparing the public and private one-plant models, a newly-built plant should have the same productive efficiency whether privately or publicly operated. The significant difference in the cost of the private versus public options arises out of the difference in the wage rate expected to be paid, representing a transfer of income from workers to 3sHealth and K-Bro.
- Hold-up Costs: after adjusting for the difference in wage rates expected to be paid, the estimated operating costs in the public plant are much higher. This calls into question either (a) the analysis undertaken in estimating the cost of public options; or b) the viability of the K-Bro proposal. It suggests that the cost of the contract is unwarrantedly low and may precipitate efforts to renegotiate the price upwards in the future.
- The K-Bro proposal entails a lower quality of service that is not considered in the private-public cost comparisons.

The Costs and Benefits to 3sHealth

From the perspective of 3sHealth, the costs and benefits of different reinvestment proposals is limited to the impact on its own budget, both in the short-term (10 years) and long-term.

Short-Term Cost Savings

Ignoring the lower quality of service entailed in the K-Bro proposal and accepting the veracity of the information provided by 3sHealth, the privatization option yields the greatest cost saving to 3sHealth over the next ten years. While 3sHealth emphasizes the savings relative to the current plant configuration ($93.22 million over 10 years), the more relevant comparison is to the public reinvestment options. Depending on the relevant discount rate, privatization is expected to save 3sHealth between $13.4 to $17.4 million over the next 10 years relative to the public two-plant option (Table 7).

Long-Term Risk

These short-term cost savings must be placed in the perspective of the long-term risk entailed in the privatization option.

Several risk factors are cited by 3sHealth:

- A single plant serving an entire province has never been attempted before; it cannot provide emergency back-up and would necessitate laundry being shipped to and from K-Bro's facilities in Alberta.
- A single supplier places 3sHealth in the unenviable position of having to negotiate renewal of the contract with a private monopolist; indeed, in the Request for Proposals by 3sHealth, only one other private offer was received and it was deemed to be significantly inferior to the K-Bro tender. Moreover, 3sHealth will have to renegotiate the contract without the benefit of ongoing operating expertise in the industry. Furthermore, contracts rarely outline all possible contingencies and may have to be renegotiated prior to the conclusion of the initial contract, which may present K-Bro with opportunities to extract more favourable terms form the province.
- 3sHealth may be able to either repatriate the services or retender them at the conclusion of the contract, the absence of alternative providers makes the latter unlikely. The ability to repatriate services without incurring significant costs will depend on the terms of repatriation in the contract, if any, and the costs of acquiring the necessary expertise to manage operations.

Table 7: Estimated Savings to 3sHealth/Taxpayers, K-Bro versus Public Options Net Present Value ($1,000)

		Public Options				
	K-Bro	1 Plant	2 Plants	3 Plants	4 Plants	5 Plants
Discount Rate = 4%		16,764	13,429	17,980	23,676	35,337
Discount Rate = 5%		18,274	15,564	19,630	24,886	35,960
Discount Rate = 6%		19,658	17,413	21,133	26,093	36,777

The Costs and Benefits to Saskatchewan

Notwithstanding the expected benefits and costs of laundry privatization to 3sHealth in the short-term, the more relevant question concerns the net benefits to the residents of Saskatchewan.

The Impact on Employment and Wages

Offsetting the short-term costs savings that may accrue to 3sHealth are the much larger costs imposed by privatization through lost employment and incomes in the province.

Direct jobs and income lost due to plant closures will also have induced effects related to lower consumer expenditures stemming from lower household incomes generated in the laundry industry. The magnitude of the induced effects is measured using Statistics Canada's within province input-output multipliers for the "dry cleaning and laundry services" industry in 2009.[12] For every 10 direct jobs lost, an additional job is lost due to induced effects; and for every $100 lost in employment income, an additional $15 is lost due to induced effects.

Table 8 summarizes the expected employment and income losses associated with each plant configuration relative to the current (six plant) configuration based upon a employment of 261 full-time equivalent workers and an annual wage bill of $9.91 million.

Net Benefits

Taking these two factors together — the promised savings to 3sHealth and provincial taxpayers on the one hand, and the loss of employment and incomes in the province on the other hand — the privatization option is the least attractive alternative. Using a discount rate of 5%, we can estimate the net benefits to the residents of Saskatchewan by summing for each proposal (1) the savings accruing to 3sHealth and (2) the impact on provincial income.

Table 9, compares the various public options to the K-Bro proposal. Where each public option yields fewer savings to 3sHealth (and by extension, Saskatchewan taxpayers), they provide comparatively greater benefits in terms of provincial income saved. Evaluated in this context, any public option is superior to the privatization option from the perspective of provincial residents. The issue then becomes one of striking the appropriate balance between cost savings within the hospital laundry industry and employment and income benefits accruing throughout the provincial economy in general.

Table 8: Net Loss of Employment and Income of Various Proposals

	K-Bro	Public				
	1 Plant	1 Plant	2 Plants	3 Plants	4 Plants	5 Plants
Annual FTE Employment	86.1	131.6	151.6	176.2	194.6	234.5
Average Hourly Wage Rate, year 1	$13	$19	$19	$19	$19	$19
Annual Wage Bill, Year 1 ($million)	$2.20	$5.00	$5.76	$6.70	$7.79	$8.91
Annual Employment Lost (FTE)						
Direct	174.80	129.30	109.30	84.70	66.3	26.40
Induced**	21.50	15.90	13.44	10.42	8.15	3.25
Total	196.30	145.20	122.74	95.12	74.45	29.65
Annual Income Lost, Year 1 ($ million)						
Direct	$ 7.71	$ 4.91	$ 4.15	$ 3.22	$ 2.12	$ 1.00
Induced***	$ 2.93	$ 1.87	$ 1.58	$ 1.22	$ 0.81	$ 0.38
Total	$10.65	$ 6.78	$ 5.73	$ 4.44	$ 2.93	$ 1.38
Net Present Value Over 10-Years** ($ million)**						
Direct	$64.71	$41.21	$34.84	$27.00	$17.82	$ 8.41
Induced	$24.59	$15.66	$13.24	$10.26	$ 6.77	$ 3.20
Total	$89.30	$56.88	$48.08	$37.26	$24.59	$11.61
Income Saved Relative to K-Bro (Net Present Value, $ million, Over 10-Years***						
Direct		$23.49	$29.87	$37.71	$46.89	$56.29
Indirect		$ 8.93	$11.35	$14.33	$17.82	$21.39
Total		$32.42	$41.22	$52.04	$64.71	$77.68

Notes:
* Assumes an annual wage increase of 2% and a discount rate of 5%
** Assuming a $13/hour fully-burdened wage rate and a total wage bill = $2.2 million.
*** Within Province Employment Multiplier = 1.10
**** Within Province Income Multiplier = 1.15

Table 9: Net Benefits to the Residents of Saskatchewan
Public Options Relative to K-Bro Proposal, Net Present Value, $ million, Over 10 Years

	1 Plant	2 Plants	3 Plants	4 Plants	5 Plants
Savings to Tax Payers	-$18.27	-$15.56	-$19.63	-$24.89	-$35.96
Income Saved	$32.42	$41.22	$52.04	$64.71	$77.68
Net Benefit	$14.15	$25.65	$32.41	$39.82	$41.72

Regional Economic Policy: The Case of Prince Albert

Regional development is a longstanding objective of Saskatchewan's economic policy: recognizing the unique challenges facing rural communities in light of changing international economic conditions, promoting job creation and economic growth in regional areas has played a major role in the province's economic development strategy. This has been given concrete expression in the creation of Regional Economic Development Authorities under the auspices of the Department of Regional Economic and Co-operative Development.[13] In this context, the decision to concentrate hospital laundry services in Regina at the expense of operations in Prince Albert, Yorkton, Moose Jaw and Weyburn will place a significant burden on smaller regional centres.

The expected economic impact on Prince Albert is a case in point. Located roughly 140 kilometres north of Saskatoon, Prince Albert is characterized by Stabler and Olfert as an important secondary retail/trade centre servicing a population of some 70,000.[14] This status is important in two respects. First, it is part of a functional economic region because of its distance from major urban centres. This is manifest in shopping patterns that support the location of wholesale and retail establishments, and commuting and mobility behaviour that create a distinctive labour market. Second, as a centre it plays a significant role in provision of infrastructure the yields external economies of scale in support of the efficient delivery of retail and wholesale services, as well as health and other public services.

Locating public services in regional centres has, therefore, not only led to efficiency gains by overcoming high transportation costs, but been an important means of supporting regional economies. Generating economic development in areas like Prince Albert is particularly challenging given the particularly weak private sector: after retail trades (15.9%), employment is heavily concentrated in public administration (15.1%) and health care services (15.1%). The closure of the laundry facility will have a profound impact on the region.

The Impact of the Laundry Plant Closure

The direct impact of closure of the Prince Albert plant can be measured using the operating cost information from 2011. The relatively modern facility handles 5.3 million pounds of laundry per year, nearly one-fourth of the total volume of the five plants in the province, with operating costs of $5.4 million. Of the roughly $3.4 million in non-labour expenditures each year, many — such as linen replacement and chemicals and supplies — are not purchased locally; however, others are, including non-labour maintenance costs, building costs, utilities and contracted-out transportation services (Table 8). Since it is difficult to estimate the percentage of non-labour expenditures within the region, our analysis of the direct impact is limited to the employment and labour income effects. The plant accounts for 104,792 person-hours of employment and roughly $2 million in labour income. Assuming a 35-hour work week and 50 weeks of employment per year, this is equivalent to the loss of 60 full-time jobs paying over $33,000 per year.

Table 10: Prince Albert Laundry Facility Operating Costs (fiscal year ending March 31, 2011)

Operating Costs			
Direct Labour Costs			$1,613,141
Utilities			$ 350,129
Total Maintenance			$ 218,799
Linen Replacement			$ 579,331
Chemicals and Supplies			$ 198,396
Building Costs			$ 44,866
Transportation (Internal and Contracted)			$ 739,183
Administrative and Overhead			$1,626,966
			$5,370,811
Salaries and Wages	Paid Hours	Average Wage	
Maintenance	4,686	$15.69	$ 73,546
Administrative and Overhead	28,780	$20.91	$ 601,684
Operators	70,978	$18.51	$1,313,639
Internal Transportation and Delivery	348	$13.51	$ 4,703
	104,792	$19.02	$1,993,572

Source: derived from 3sHealth, Business Case, p. 11

The direct jobs and labour income lost in the plant will also have indirect and induced employment, labour income and regional income effects. Indirect effects measure the losses suffered in industries providing inputs into the laundry industry. Induced effects measure the losses in response to lower consumer expenditures throughout the regional economy: removing over $2 million in purchasing power from the region indirectly affects other local businesses be it through less spending on groceries or other retail services. The multiplier effect is thus the ratio between direct and indirect/induced jobs and income.

Stabler and Olfert estimate a region employment multiplier effect in the range of 1.43; that is, every one direct job in the region supports 0.43 indirect/induced jobs. Statistics Canada, however, provides much lower "within province" multipliers. We apply the Statistics Canada within province multipliers specific to the "dry cleaning and laundry services" under the assumption that two-thirds of indirect/induced effects are captured within the region.[15]

Accordingly, we estimate that the laundry plant closure will result in 74 jobs lost in the region, a decline in labour income of $2.5 million in the region, and a decline in regional GDP of $3.7 million.

Table 11: Regional Impact of Prince Albert Plant Closure

	Annual Employment	Annual Labour Income	Annual Regional GDP
Direct	63.5	$2,000,000	$2,600,000
Indirect	5.9	$ 301,500	$ 603,000
Induced	4.4	$ 201,000	$ 502,500
Total	73.7	$2,502,500	$3,705,500

Assumes multipliers of 1.16 for employment, 1.25 for labour income, and 1.43 for GDP

Impact on the Regional Labour Market

The loss of 74 jobs per year can be placed in perspective by considering the size of the labour force in Prince Albert. Despite a strong labour force attachment in the city (where the participation rate in the paid labour force is 69.1%), the relative lack of employment opportunities has resulted in high unemployment rate (10.2% versus 5.9% in the province). Not surprisingly, then, median after-tax income in Prince Albert is roughly 10-15% below that in the province; there is a greater dependence on government transfer payments (14.2% of total income versus 11.5%); and a higher incidence of low-income households (19.1% versus 14.0%).

It is also important to note that the population of Prince Albert includes many individuals who are economically vulnerable and, as such, less able to compete for employment elsewhere. Specifically, the work force in Prince Albert has a relatively low educational attainment (only 53.2% of the potential labour force has some post-secondary education compared with 59.6% throughout the province), while in the population generally, 40.6% self-identify as being Aboriginal.

The laundry plant closure, therefore, will aggravate the economic conditions faced by disadvantaged individuals in the region. In 2010, there were 16,540 employed individuals in the city of Prince Albert. The loss of 74 jobs would reduce employment by 0.4% and, if these individuals remained in the labour force, the unemployment rate in Prince Albert will rise to 10.6%.

Table 12: Demographic and Economic Characteristics, Prince Albert (City) versus Saskatchewan, May 2011[16]

	Prince Albert	Sask.
Demographic Characteristics		
Aboriginal Identity	40.6%	15.6%
Population under 25 years old	37.3%	33.5%
Some Post-Secondary Education	53.2%	59.6%
Labour Force Status		
Total Population aged 15+	26,670	812,500
In the labour force	18,420	562,305
Employed	16,540	529,100
Unemployed	1,880	33,210
Not in the labour force	8,255	250,195
Participation rate	69.1%	69.2%
Employment rate	62.0%	65.1%
Unemployment rate	10.2%	5.9%
Income Characteristics		
Median After-Tax Income		
All Economic Families	$62,374	$68,046
Unattached Individuals	$22,875	$26,652
Government Transfers/Total income	14.2%	11.5%
Low-Income Status	19.1%	14.0%
Employment by Leading Industries		
Retail Trade	15.9%	11.0%
Public Administration	15.1%	7.7%
Health Care Services	15.1%	11.9%

Source: Statistics Canada, National Household Survey Focus on Georgraphy Series – Prince Albert

Summary and Conclusions

Following years of neglect, the publicly-owned hospital linen service in Saskatchewan needs to be revitalized. In its public news releases, 3sHealth continues to assert that the privatization of laundry services is the best option and that the contract with K-Bro will save the Province $97 million over the next 10 years relative to the cost of current operations. Since current facilities are dated and in a state of disrepair, the more appropriate comparison is with the alternative of publicly-built and operated facilities. On this basis — and using 3sHealth's questionable financial analysis — the K-Bro contract may save 3sHealth in the order of $17 million over the cheapest public option. This saving to taxpayers arises only through a lower quality of service and the wages saved through contracting out work.

From the perspective of the residents of Saskatchewan, any savings to taxpayers are outstripped by the loss of employment and income in the province. Taking these two factors together, privatization will cost the residents of the Province of Saskatchewan $31.5 million over the next 10 years compared to the best public option.

When the goal of regional economic development is considered, the plant closure in Prince Albert will cause a 4% increase in the local unemployment rate, a $2.5 million dollar reduction in labour incomes, and a $3.7 million reduction in local GDP.

Consider for the moment a one-plant operation servicing the entire province's hospital laundry needs. There is no reason why there would be a difference in the cost of a private or public operator: a newly-built plant, incorporated up-to-date technology, would provide the same efficiency gains (over the current operations) whether privately or publicly undertaken. The difference in this case is the distribution of incomes flowing from a private versus public operation. In the case of a private owner, the profits generated by paying labour a lower wage are repatriated to shareholders who reside outside of the province. In the public case, the net benefits would either accrue to taxpayers or to workers in the province in the form of higher wage rates.

Another way of stating the same issues is that the province faces two ways of financing the reinvestment in hospital laundry services. The public option is to borrow the money to build and operate the plant, and servicing the debt would entail annual interest payments to bond holders. The private option is to contract out the construction and operation of the plant, in which case the annualized capital costs equal the private firm's cost of borrowing plus the firm's return on investment. The latter is a more expensive form of borrowing.[17]

As Lawrence Summers has recently argued, there is no better time for governments to invest in infrastructure and other investment projects. Historically low interest rates on long-term borrowing make public investment an extremely attractive means of undertaking projects that will reduce future spending on privately purchased goods and services. "There is, of course, still the question of whether more borrowing will increase anxiety about a government's creditworthiness. It should not, as long as the proceeds of borrowing are used either to reduce future spending or raise future incomes."[18]

If public investment is a more attractive alternative, the question remains as to what plant configuration best meets the objectives of the residents of the province. This entails a trade off between the efficiency of laundry production and the costs borne by 3sHealth, the stimulus to employment and incomes in the province, and the importance placed on regional development objectives. With all three considerations in mind, a multi-plant option promises the greatest net benefits to the residents of Saskatchewan.

Endnotes

1 Paul Krugman, "Victors and Spoils," *New York Times* (19 November 2002), p. A31.

2 3sHealth, "Plans finalized for the new provincial health care linen service," *News Release*, 13 December 2013.

3 Saskatchewan Federation of Labour, "Saskatchewan Working People Raise Questions about Alberta Corp's Actions," *Press Release*, 13 June 2013.

4 For a recent analysis of Saskatchewan's financial position, see Marc Joffe, *Provincial Solvency and Federal Obligations* (Ottawa: Macdonald-Laurier Institute, 2012).

5 The 3sHealth Business Case uses a financial analysis which calculates the estimated cash flow associated with carrying costs (borrowing costs) of financing the investment. In other words, rather than treating the gross capital costs in year 0, the annual costs of financing the investment are calculated. Our recalculations using this method yields substantially similar results.

6 The K-Bro contract includes an escalator cost wherein the price charged to 3sHealth increases by one-third of any increase in the wage rate and two-thirds of the change in the consumer price index (CPI) for Saskatchewan.

7 Paul H. Jensen and Robin E. Stonecash, "Incentives and the Efficiency of Public Sector-Outsourcing Contracts," *Journal of Economic Surveys* 19(5) (2005): 767-87.

8 Paul Krugman, "Victors and Spoils," *New York Times* (19 November 2002), p. A31.

9 O.E. Williamson, *The Economic Institutions of Capitalism* (New York: Free Press, 1985), p.47.

10 Vanessa Brown, "Linen company shopping low-wage collective bargaining agreement before being awarded contract, Sask. Federation of Labour says," *Regina Leader Post*, 14 June 2013.

11 Based on a 40-hour work week and 50 weeks of work per year.

12 Statistics Canada, *Provincial Input-Output Multipliers, 2009* (Catalogue no. 15F0046XDB), (Ottawa). Industry code BS812300.

13 Neville Fernandes, "Saskatchewan's Regional Economic Development Authorities: A Background Document," CUISR Monograph (Saskatoon, 2003); P.W.B. Phillips, "Whither Saskatchewan? A Look at Economic Policies 1975–2000," *Canadian Business Economics* (1998) 6: 36-49.

14 J.C. Stabler and M.R. Olfert, *Saskatchewan's Communities in the 21st Century: From Places to Regions* (Regina: Canadian Plains Research Center, 2002).

15 Statistics Canada, *Provincial Input-Output Multipliers, 2009* (Catalogue no. 15F0046XDB), (Ottawa). Industry code BS812300.

16 The voluntary National Household Survey (NHS) provides information about the demographic, social and economic characteristics of people living in Canada and specific provinces and cities. Since 2011, the NHS collects information previously collected by the mandatory long-form census questionnaire. NHS data was used in this report to compare demographic, labour force and income characteristics of the population in the City of Prince Albert to the overall population in Saskatchewan. The Labour Force Survey (LFS) provides more current labour force statistics but covers Prince Albert and northern Saskatchewan as a region and not specific labour force statistics for the City of Prince Albert. The unemployment rate for the region of Prince Albert and northern Saskatchewan has averaged 5.1% so far this year; accordingly if the same ratios hold, we can estimate that the rate for the City of Prince Albert is approximately 42% higher, or 7.2%, almost double the provincial rate.

17 Indeed, borrowing costs alone are usually much higher in the private versus the public sector.

18 Lawrence Summers, "Look beyond interest rates to get out of the gloom," *Financial Times*, 3 June 2012 *http://www.ft.com/cms/s/2/7ad17ac2-ab42-11e1-b675-00144feabdc0.html#axzz1wqbGbuFU*