

OFFICE OF
THE PARLIAMENTARY BUDGET OFFICER



BUREAU DU
DIRECTEUR PARLEMENTAIRE DU BUDGET

Fiscal Materiality of Sick Leave in 20 Departments of the Core Public Administration

Ottawa, Canada
July 16, 2014

www.pbo-dpb.gc.ca

The mandate of the Parliamentary Budget Officer (PBO) is to provide independent analysis to Parliament on the state of the nation's finances, the government's estimates, and trends in the national economy; and upon request from a committee or parliamentarian, to estimate the financial cost of any proposal for matters over which Parliament has jurisdiction.

In February 2014, PBO published a report estimating the fiscal impact of paid sick leave in the federal public service at \$871 million in 2011-12. PBO received a follow-up request from Mr. Paul Dewar, Member of Parliament for Ottawa Centre, to undertake an independent financial analysis of the variance in sick leave costs among departments.

Summary

Data obtained by the Treasury Board Secretariat (TBS) from individual core public administration (CPA) departments demonstrate a notable variance among organizations in the use of sick leave. This report provides a snapshot of the fiscal and budgetary materiality of paid sick leave based on 20 CPA departments. The analysis suggests that in 2011-12 the incremental cost of paid sick leave was not fiscally material and did not represent material costs for departments in the CPA.

Data quality and availability limit PBO's ability to provide Parliament with fiscal analysis of sick leave in the public service. Data provided to PBO by TBS are highly aggregated, while data obtained from departments suffer from significant inconsistencies that prevent reconciliation. Parliamentarians should keep these limitations in mind when drawing conclusions based on analysis derived from these data sets.

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The author wishes to thank Peter Weltman for his helpful comments. Any errors or omissions are the responsibility of the author. Please contact Peter Weltman (email: peter.weltman@parl.gc.ca) for further information.

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1 Introduction

The Parliamentary Budget Officer (PBO) may, upon request from a committee or parliamentarian, estimate the financial cost of any proposal over which Parliament has jurisdiction.¹

In February 2014, PBO published a report titled *Fiscal Analysis of Sick Leave in the Federal Public Service*.² It estimated that time lost due to illness³ amounted to the equivalent of \$871 million in regular wages in 2011-12. This analysis was based on an average of 11.52 sick days per employee.⁴

However, in the same fiscal year, the average paid sick leave among 20 of the largest departments in the core public administration (CPA) ranged from 7.7 days in the Department of Foreign Affairs and International Trade to 14.6 days in Correctional Service Canada.⁵ Accordingly, PBO received a request to undertake additional analysis of the sick leave data to assess the fiscal materiality of sick leave on individual departments in the CPA.

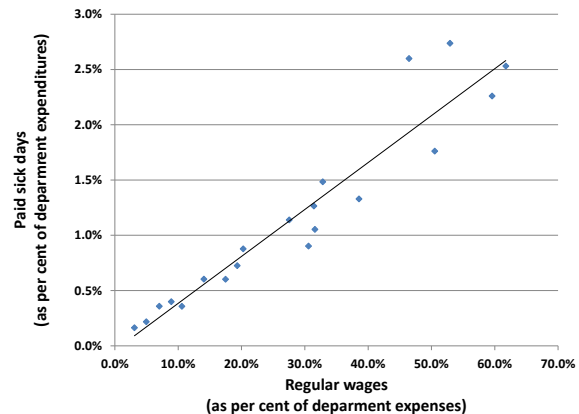
PBO found a significant variance in the share of *paid sick leave* to CPA departments, ranging from 0.16 per cent to 2.74 per cent of total departmental expenditures in 2011-12. In most cases, paid sick leave is proportional to departmental spending on regular wages (Figure 1).

Since most departments do not call in replacements when an employee takes a sick day, there are no incremental costs. Exceptions to this practice include

certain departments with operational functions, where absences have a direct impact on service level, health and safety.⁶

Accordingly, PBO requested data pertaining to three employee groups where backfilling is routinely necessary: the Canadian Coast Guard⁷, Border Services officers⁸ and Corrections officers⁹. Of the two departments that provided a response, neither reported incremental costs that were material when compared to departmental budgets, nor to departmental wage envelopes.

Figure 1 - Share of departmental expenditures, 2011-12



Source: PBO analysis.

¹Parliament of Canada Act (2007).

²Available on the PBO website (<http://pbo-dpb.gc.ca/files/get/publications/279?path=%2Ffiles%2Ffiles%2FSick+Leave+EN.pdf>).

³Defined as salary dollars expended while employee on leave. This is not an incremental salary expense.

⁴Obtained via Information Request IR0126 (http://www.pbo-dpb.gc.ca/files/files/Response_IR0126_TBS_Mod_Sick_Leave_Benefits_EN.pdf).

⁵Refer to Appendix A for a table of sick leave data used in this report.

⁶ There are limited circumstances in which employees are replaced when taking a sick day. For example, Correctional Service Canada must maintain minimum staffing levels for the protection of the public, staff and inmates. These standards are contained in the *Commissioner's Directive 004 – Annex B* and may be found on Correctional Service Canada's website at: <http://www.csc-scc.gc.ca/text/plcy/cdshtm/004-cd-annexB-eng.shtm>.

⁷ Information Request IR0146 to the Department of Fisheries and Oceans (DFO) regarding the Canadian Coast Guard (http://www.pbo-dpb.gc.ca/files/files/Response_IR0146_DFO_coast_guard_officers_sick_leave_backfilling_EN.pdf).

⁸ Information Request IR0147 to Correctional Service Canada regarding correctional officers (http://www.pbo-dpb.gc.ca/files/files/Response_IR0147_CSC_corrections_officers_sick_leave_backfilling_EN.pdf).

⁹ Information Request IR0145 to the Canada Border Services Agency regarding border services officers (http://www.pbo-dpb.gc.ca/files/files/Response_IR0145_CBSA_border_guards_sick_leave_backfilling_EN.pdf).

What is “materiality”?

The handbook of the Canadian Institute of Chartered Accountants explains materiality as follows:

“Users are interested in information that may affect their decision making. Materiality is the term used to describe the significance of financial statement information to decision-makers. An item of information, or an aggregate of items, is material if it is probable that its omission or misstatement would influence or change a decision. Materiality is a matter of professional judgment in the particular circumstances.”¹⁰

PBO is concerned with two kinds of materiality: fiscal materiality and operational materiality.

Consistent with the Treasury Board Accounting Standard, PBO has adopted the definition of fiscal materiality to be an impact of greater than 0.5 per cent of direct program expenditures (approximately \$500 million).¹¹

PBO considers an impact to be of operational materiality if the incremental cost exceeds 10 per cent of a department’s gross authorities (i.e., spending).¹²

2 Methodology

The annual portion of regular salary paid while an employee is on sick leave for a given department may be calculated as a share of employee wages based on a 261-day work year¹³, or:

$$SickSalary_{Dept} = \sum_i^n \frac{days_i \times wage_i}{261}$$

Where the inputs are:

n : the number of full-time equivalent (FTE) positions in the department

$days_i$: the number of paid sick days taken by employee “ i ”

$wage_i$: the annual regular pay earned by employee “ i ”

PBO obtained sick leave data from the Treasury Board Secretariat (TBS) and salary data from the Receiver General.¹⁴ The data provided were for 20 departments in the CPA for which TBS published data.

Since the data were already aggregated, it was not possible to estimate the cost on an employee-by-employee basis. Instead, PBO approximated the annual fiscal impact of sick leave as follows:

$$SickSalary_{Dept} = \frac{\overline{days_{Dept}}}{261} \times \sum wages_{Dept}$$

Where the inputs are:

$\overline{days_{Dept}}$: the average number of paid sick leave days taken by employees of the department

$\sum wages_{Dept}$: sum of all regular pay for the department

2.1 Cost of backfilling

Few CPA departments require replacements when an employee takes a paid sick day; thus, no additional costs are incurred by the government. Exceptions to this rule can be found in “operational” departments where the absence of service-oriented employees would have negative impact on the public and/or health and safety.

¹⁰ Section 1000.17 of the CICA Handbook (Canadian Institute of Chartered Accountants, 2010).

¹¹ See <http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=12175§ion=HTML>.

¹² See <http://www.iasplus.com/en/standards/ifrs/ifrs8>.

¹³ Salary paid for overtime hours worked was not included in this calculation as sick leave can only be claimed for regular work hours.

¹⁴Supra note 5.

The method of estimating the incremental cost of backfilling is as follows:

$$Replacement_{Dept} = \sum_i^n \frac{days_i \times (wage_i + premium_i)}{261}$$

Where the inputs are:

n : the number of full-time equivalent (FTE) positions in the department

$days_i$: the number backfilled sick days taken by employee “ i ”

$wage_i$: the annual regular pay earned by the employee filling in for employee “ i ”

$premium_i$: the overtime or callback premium, if applicable

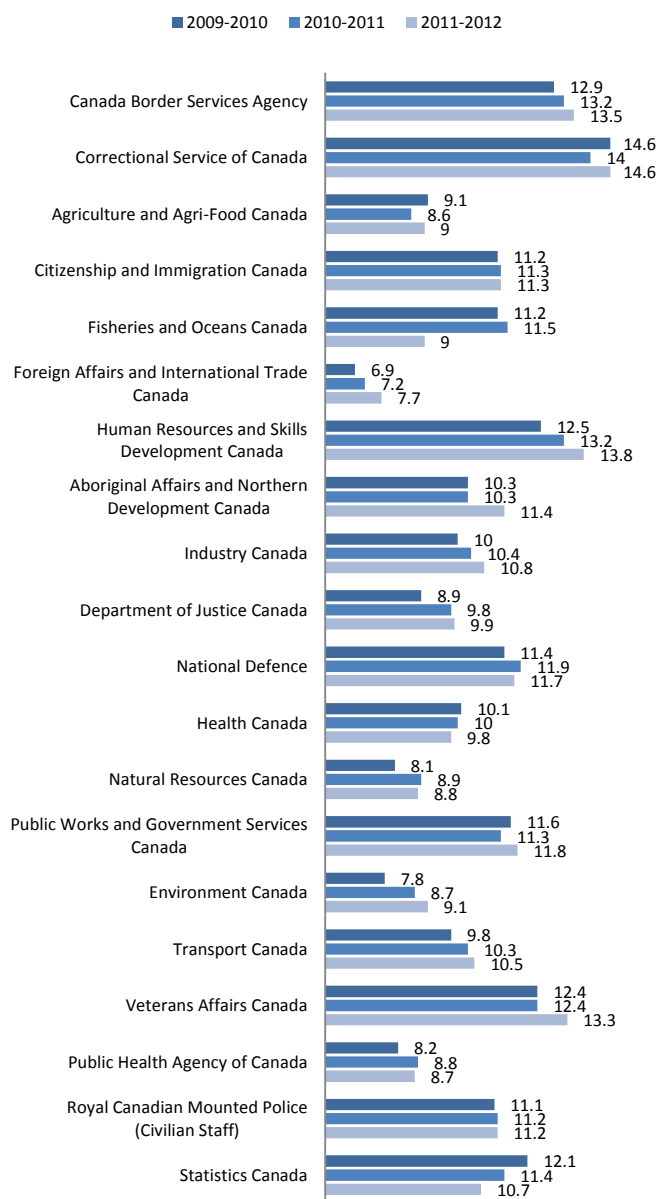
3 Analysis and Results

PBO previously estimated that the cost of wages paid while employees were on sick leave amounted to \$871 million in 2011-12.¹⁵ However, the average number of paid sick days used by public servants varies significantly by department, suggesting that the significance of the share of wages will also vary by department.

For the period of interest, Correctional Service Canada (CSC), Human Resources and Skills Development Canada (HRSDC) and the Canada Border Services Agency (CBSA) consistently reported the highest average number of paid sick days per employee (Figure 2). It is interesting to note that all

these departments have staffing level requirements for operational staff.¹⁶

Figure 2 - Sick Days by Department



Source: Graphical representation of TBS data.

¹⁵ Notes:

- a) Supra note 2.
- b) 2011-12 is the most recent year for which sick leave data are available.

¹⁶ PBO sources.

Materiality

Since paid sick leave is not an incremental cost, it cannot be fiscally or operationally material. However, the costs of backfilling of employees while on sick leave could be deemed material if the cost exceeded \$500 million government-wide or 10 per cent of a department's budget. PBO did not find evidence that either of these conditions was met in the years for which data were available.

3.1 Share of Total Expenditures

The incremental cost of the sick leave program administered by government departments is not material. To be an incremental cost, a sick day would need to be of greater cost than a day present at work. This is only the case when employees are replaced when sick, which is explained in the following section (Section 3.2).

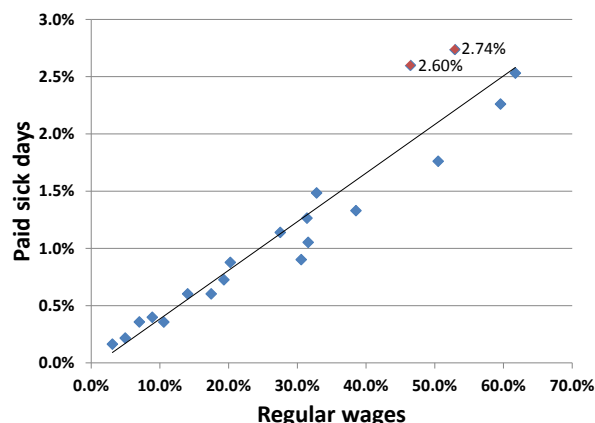
However, PBO undertook some analysis of sick leave as a share of departmental wages and total expenditures to identify the extent to which sick leave, as a share of total expenditures, varies among departments. The results are summarized in Appendix E.

Sick leave as a share of the wage bill is directly related to the average number of sick days taken by employees of a department. However, as illustrated in Figure 3, sick leave as a share of departmental expenditures is proportionate to the percentage of the departmental budget spent on wages. In other words, the more a department spends on wages, the more it spends on sick leave.

In general, the departments that fall above the line (in Figure 3) have a combination of a higher occurrence of sick leave and higher expenditure on wages when compared to those below the line. The two departments highlighted in Figure 3, CSC (2.60 per cent) and CBSA (2.74 per cent), may have higher occurrences of sick leave due to occupational risks not found in other departments (for example,

officers charged with guarding inmates in prisons as opposed to policy analysts working in offices).

Figure 3 - Share of total expenditures, 2011-12



Source: PBO analysis.

Although sick leave makes up a larger share of expenditures for CSC and CBSA than for other departments, the costs are not material when compared to overall departmental expenditures. For CBSA, the \$50 million in sick leave costs represented only 2.74 per cent of the \$1.8 billion spent by the department in 2011-12 (Figure 4). For percentages, see Annex E.

Figure 4 - Total expenditures, regular wage expenditure, sick leave expenditure, CBSA 2011-12



Source: PBO analysis of TBS and RG data.

3.2 Cost of Backfilling

Most public servants are not backfilled, that is replaced, while on sick leave. However, employee groups such as Coast Guard crew, Border Services officers and Corrections officers, require replacements to ensure that operational, health and safety standards are met.¹⁷

PBO submitted a request to the departments overseeing each of these employee groups to obtain the cost of backfilling these groups during short-term sick leave.¹⁸ While Fisheries and Oceans Canada (on behalf of the Coast Guard) and CSC provided their own estimates, CBSA indicated that it does not maintain data related to this cost.

3.2.1 Coast Guard

The Coast Guard's MariTime system tracks sick leave for seagoing personnel, but does not enable the department to track *when* replacements were used to backfill these periods.

Consequently, the department provided an estimate of the salary spent during these periods, assuming that the cost of replacement would be approximately equivalent to the cost of sick leave, and noting the limitations of this assumption (Appendix C). This may be an overestimate of the cost of backfilling Coast Guard crew, as not all absences require backfilling.

However, since it does not appear to meet the threshold of materiality when compared with total

Coast Guard expenditures, PBO did not undertake an independent estimate of backfilling crew members.

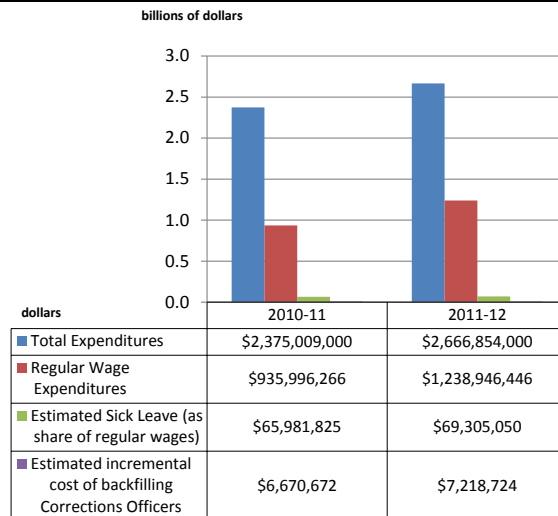
3.2.2 Correctional Service Canada

CSC used data from its scheduling and deployment system to estimate the cost of backfilling sick leave.¹⁹ The limitation of this estimate is that it is calculated using the average rates of pay for the Correctional officer group, which assumes that the use of sick days is consistent across levels.

PBO cannot validate this estimate. But it is satisfied that the methodology and assumptions documented by the department are appropriate given the data limitations.

Further, PBO did not undertake an independent estimate, as the department's estimate is not material (that is, it is less than 10 per cent or about \$260 million) when compared with departmental expenditures (Figure 5).

Figure 5 - Comparison of CSC Expenditures and incremental cost of backfilling Corrections officers



Source: PBO analysis of TBS, RG, and CSC data.

¹⁷ This is not intended to be an exhaustive list of operational employee groups where backfilling is required, but illustrative of the financial implications of this practice where they do exist.

¹⁸ Information requests and responses are available on the PBO website (<http://www.pbo-dpb.gc.ca/en/INFORMATION+REQUESTS>):

- Canada Border Services Agency IR0145
- Department of Fisheries and Oceans (Coast Guard) IR0146
- Correctional Service Canada IR0147.

¹⁹ See Appendix D.

4 Considerations for Parliamentarians

Since the cost of sick leave is not an incremental cost, it cannot be fiscally or operationally material. Thus, PBO requested data from three departments expected to incur incremental costs for sick leave due to operational requirements to backfill staff.

Parliamentarians should take note that data quality and availability continue to limit PBO's ability to

provide Parliament with a fulsome analysis of the fiscal impact of sick leave in the public service.

Data provided to PBO by TBS are highly aggregated, while data obtained from departments have other inconsistencies which prevent reconciliation. Parliamentarians should keep these limitations in mind when drawing conclusions based on analysis derived from these data sets.

Appendix A Average Paid Sick Leave Days by Department as Reported by Treasury Board Secretariat²⁰

Department	2009-2010	2010-2011	2011-2012
Canada Border Services Agency	12.9	13.2	13.5
Correctional Service of Canada	14.6	14	14.6
Agriculture and Agri-Food Canada	9.1	8.6	9
Citizenship and Immigration Canada	11.2	11.3	11.3
Fisheries and Oceans Canada	11.2	11.5	9
Foreign Affairs and International Trade Canada	6.9	7.2	7.7
Human Resources and Skills Development Canada	12.5	13.2	13.8
Aboriginal Affairs and Northern Development Canada	10.3	10.3	11.4
Industry Canada	10	10.4	10.8
Department of Justice Canada	8.9	9.8	9.9
National Defence	11.4	11.9	11.7
Health Canada	10.1	10	9.8
Natural Resources Canada	8.1	8.9	8.8
Public Works and Government Services Canada	11.6	11.3	11.8
Environment Canada	7.8	8.7	9.1
Transport Canada	9.8	10.3	10.5
Veterans Affairs Canada	12.4	12.4	13.3
Public Health Agency of Canada	8.2	8.8	8.7
Royal Canadian Mounted Police (Civilian Staff)	11.1	11.2	11.2
Statistics Canada	12.1	11.4	10.7

²⁰ Data was retrieved from the Treasury Board Secretariat's government internet site (<http://www.tbs-sct.gc.ca/res/stats/slu-ucm-eng.asp>) on January 8, 2014.

Appendix B CBSA Response to IR0145



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Président
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Mr. Jean-Denis Fréchette
Parliamentary Budget Officer
Library of Parliament
Parliament Buildings
Ottawa, Ontario
K1A 0A9

APR 11 2014

Dear Mr. Fréchette:

Thank you for your correspondence of March 26, 2014, Information Request: IR0145, which sought "the salary dollars for the last five years to call in replacements for Border Services Officers who called in sick."

The Canada Border Services Agency does not maintain data on the costs related to replacements for Border Services Officer (BSO) when these individuals are absent due to sick leave. As such, we are unable to provide a response to your request.

Please do not hesitate to contact me if you or your staff have any questions or concerns.

Yours sincerely,

cc: Yves Giroux, Acting Assistant Secretary to the Cabinet, Liaison Secretariat for Macroeconomic Policy, Privy Council Office

Canada

Appendix C Coast Guard Response to IR0146



Fisheries and Oceans
Canada

Pêches et Océans
Canada

Deputy Minister

Sous-ministre

APR 10 2014

Mr. Jean-Denis Fréchette
Parliamentary Budget Officer
Library of Parliament
Parliament Buildings
Ottawa, ON
K1A 0A9



Dear Mr. Fréchette:

Your letter dated March 26, 2014, regarding Information Request IR0146, seeks information on the salary dollars for the last five fiscal years to call in replacements for Coast Guard officers who have called in sick.

As clarified with your office, your request for information applies to all seagoing personnel and is not limited to officers. In this regard, the salary dollars reported in Table 1 of Annex A represent the total salary dollars paid to seagoing personnel while they were on sick leave.

The Canadian Coast Guard tracks sick leave for seagoing personnel using an internal database known as the MariTime system. Whereas the system is functional for managing the crewing of CCG's vessels, its reporting capabilities are limited.

When CCG seagoing personnel take sick leave, a determination is made on whether to backfill the position with replacement personnel based on the criticality of the position. In some cases, the position is not backfilled. Unfortunately, the MariTime system is unable to match, on a "one-to-one" basis, the number of instances in which seagoing personnel on sick leave were backfilled with relief personnel. As a result, it is not possible to isolate the salary dollars paid to replacement personnel for crew members on sick leave.

The Department has noted the need to modernize our human resources databases and information systems to improve their search, filter, and data integration capabilities.

Should you or a member of your team require clarification on the attached submission, please feel free to contact Mr. E. Wade Spurrell, Director General, Operations at 613-990-9172.

Yours sincerely,

Matthew King
Deputy Minister
Attachment (1): Annex "A"

ANNEX "A"

It is important to note the following limitations within the response:

Coast Guard is unable to quickly identify periods of sick leave that did not require relief personnel. A great deal of historical research would need to be carried out to accurately reflect the actual sick leave "replacement" salary costs.

The data in Table 1, under the column labelled "Paid Sick Leave Base Salary Costs" represents salary dollars associated with any on-duty sick time taken by seagoing personnel. Using an assumption that all sick leave utilized required relief personnel, the values in this column subsequently represent the salary costs for sick leave replacements.

TABLE 1

Fiscal Year	Total Base Salary Seagoing Personnel	Paid Sick Leave Base Salary Costs	Paid Sick Leave as a Percentage of Total Base Salary
2008 / 2009	\$128,006,330	\$6,790,334	5.3%
2009 / 2010	\$129,257,306	\$7,633,096	5.9%
2010 / 2011	\$131,033,904	\$7,856,582	6.0%
2011 / 2012	\$133,281,035	\$8,363,825	6.3%
2012 / 2013	\$134,912,332	\$8,457,642	6.3%
2013 / Feb 2014 *	\$135,536,715	\$6,679,646	4.9%

* Note that all 2013 / Feb 2014 fiscal year values will increase once outstanding timesheets for the fiscal year have been entered into the MariTime System.

Appendix D Correctional Services Response to IR0147



APR 11 2014

Your file Votre référence

Our file Notre référence

Jean-Denis Fréchette
Parliamentary Budget Officer
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Dear Mr. Fréchette:

Thank you for your letter of March 26, 2014, in which you requested information pertaining to the salary dollars paid by the Correctional Service of Canada (CSC) for the last five fiscal years to call in replacements for correctional officers (CX) who have called in sick.

With the implementation of its Scheduling & Deployment System in 2009, CSC is able to estimate the costs to call in replacements for correctional officers who have called in sick as follows for the last 5 years:

2009-10:	\$3,022,422 *
2010-11:	\$6,670,672
2011-12:	\$7,218,724
2012-13:	\$6,404,005
2013-14:	\$6,523,065

Please note that these amounts are estimations based on the average rates of pay for the CX group for the years in question and based on the appropriate identification of call-in replacements for vacancies resulting of sick leave with pay usage within the System. Also, the amount for 2009-10 only accounts for 6 months of data as the Scheduling & Deployment System was implemented mid-year.

I trust that this information responds to your question.

Anne Kelly, A/Commissioner CSC

cc.: Yves Giroux, Acting Assistant Secretary to the Cabinet, Liaison Secretariat for Macroeconomic Policy, Privy Council Office

Canada

Appendix E Summary of Results (2011-12)

Organization	Paid Sick Days	as % of Regular Wage Bill	as % of Total Expenditures
Canada Border Services Agency	13.5	5.2%	2.7%
Correctional Service	14.6	5.6%	2.6%
Agriculture and Agri-Food	9	3.4%	0.6%
Citizenship and Immigration	11.3	4.3%	0.9%
Fisheries and Oceans	9	3.4%	1.3%
Foreign Affairs, Trade and Development	7.7	3.0%	0.9%
Human Resources and Skills Development	13.8	5.3%	0.2%
Indian Affairs and Northern Development	11.4	4.4%	0.2%
Industry	10.8	4.1%	1.1%
Justice	9.9	3.8%	2.3%
National Defence	11.7	4.5%	0.4%
Health	9.8	3.8%	0.7%
Natural Resources	8.8	3.4%	0.4%
Public Works and Government Services	11.8	4.5%	1.5%
Environment	9.1	3.5%	1.8%
Transport	10.5	4.0%	1.3%
Veterans Affairs	13.3	5.1%	0.4%
Public Health Agency of Canada	8.7	3.3%	1.1%
Royal Canadian Mounted Police	11.2	4.3%	0.6%
Statistics Canada	10.7	4.1%	2.5%