



Report of the Auditor General of the Ville de Montréal to the City Council and to the Urban Agglomeration Council

For the Year Ended December 31, 2014



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of the Ville de Montréal**
to the City Council and
to the Urban Agglomeration Council

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Please note that this English report has been translated from the original French version. In case of doubt or difference of interpretation, the French version shall prevail over the English.

According to the *Charter of the French Language* and the *Office québécois de la langue française*, municipalities shall designate all official names, such as boroughs, departments, paramunicipal corporations as well as municipal and associated bodies by their French names alone, even in the English version.

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June 11, 2015

Mr. Denis Coderre
Mayor of the Ville de Montréal
275, rue Notre-Dame Est
Montréal, QC H2Y 1C6

**Subject: Auditor general of the Ville de Montréal's annual report for the year ended
December 31, 2014**

Dear Mr. Mayor,

Please find enclosed the *Report of the Auditor General of the Ville de Montréal to the City Council and to the Urban Agglomeration Council for the Year Ended December 31, 2014* as per Section 107.13 of the *Cities and Towns Act* (RSQ, chapter C-19), as well as the Highlights to be tabled at the next regular city council meeting on June 15, 2015 and the next urban agglomeration council meeting on June 18, 2015.

Yours truly,



Jacques Bergeron, CPA, CA, MBA, M. Sc.
Auditor general

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Report of the Auditor General of the Ville de Montréal to the City Council and to the Urban Agglomeration Council

For the Year Ended December 31, 2014

1

COMMENTS AND RECOMMENDATIONS FROM THE AUDITOR GENERAL



1. Comments and Recommendations from the Auditor General

As in past years, my introduction includes a few comments and recommendations for the City's administration. This year, I feel it is appropriate to address the following topics of interest:

- 1.1. Responses of the authorities to the auditor general's audit reports;
- 1.2. Rate of implementation of the recommendations issued by the Bureau du vérificateur général (BVG);
- 1.3. Maintaining the BVG's expertise;
- 1.4. Internal control deficiency observed during the audit of the consolidated financial statements of the Ville de Montréal for the year ended December 31, 2014;
- 1.5. Government transfers;
- 1.6. Audit of the financial statements of Technoparc Montréal.

1.1. Responses of the Authorities to the Auditor General's Audit Reports

One of the municipal administration's prerogatives is whether or not to implement the recommendations issued by the auditor general. Under the existing process, once the auditor general's annual report has been filed with the municipal council and the urban agglomeration council (the councils), the Commission permanente sur les finances et l'administration subjects the auditor general's annual report to public scrutiny and review. It then files a report on its recommendations with the councils. The councils take note of this report and forward it to the executive committee for the appropriate follow-up. The executive committee is required to provide the councils with a report responding to the recommendations made by the Commission permanente within a reasonable timeframe. The councils then take note once again of the executive committee's response.

In the past years, the Commission permanente has issued recommendations on specific topics addressed in the auditor general's annual report instead of on the audit reports as a whole. In turn, for the years where the executive committee issued a response to the recommendations of the Commission permanente, we note that it did not issue opinions on all of the audit reports contained in the auditor general's annual report. We also note that the councils acknowledge the recommendations made by the Commission permanente and the

response given to them by the executive committee, but that no authority actually issues an opinion on its intention to implement the auditor general's recommendations.

To reinforce the follow-up of the auditor general's recommendations and thus increase the rate of implementation of these recommendations, we believe that the Commission permanente sur les finances et l'administration should issue an opinion on each audit report contained in the auditor general's public annual report to enable the executive committee to do the same.

Recommendation

I recommend that the Direction générale take action with the authorities to have them issue an opinion on each audit report contained in the auditor general's annual report to reinforce the follow-up process and increase the rate of implementation of the recommendations.

1.2. Rate of Implementation of the Recommendations Issued by the Bureau du vérificateur général (BVG)

The BVG's policy is to follow up on the recommendations during the year that follows their publication in the annual report. For a given year, the cycle of following up on recommendations normally extends at most over a three-year horizon. Indeed, the BVG reasonably expects that 100% of the recommendations issued shall be implemented within this three-year horizon, except under very specific circumstances where certain recommendations are followed up during an additional year or two.

From 2001 until 2012, the rate of implementation of the recommendations issued by the BVG that were considered as "completed" or "underway" at the time the BVG had completed its follow-up work was measured against an annual objective set at 80% by the municipal administration. In 2013, the Direction générale de la Ville set new performance targets for implementing the BVG's recommendations. The business units were therefore to be evaluated in accordance with the following performance targets regarding the recommendations issued as of 2012:

- 70% of the recommendations issued must have been implemented by the end of the first year after they were issued;
- 90% of the recommendations issued must have been implemented by the end of the second year after they were issued.

In my 2013 Annual Report, I indicated that *the proportion of recommendations published in our 2012 annual report that were "completed," i.e., 43%, is well below the target of 70% set by the municipal administration.* Consequently, I recommended that the Direction générale take action "to raise awareness among the business units about the importance of implementing the recommendations issued by the Bureau du vérificateur général within a year's time, in most cases, and that this condition be taken into account in the action plans submitted."

Based on the 2013 Annual Report of the auditor general, the Commission permanente des finances et de l'administration issued recommendation R-1 stipulating:

[TRANSLATION] "that the City's administration see to following up on the auditor general's recommendations with the City departments and the boroughs so that they are implemented as quickly as possible and in accordance with the new performance targets set by the City's Direction générale in 2013:

- *70% of the recommendations made must have been implemented by the end of the first year after they were issued;*

- *90% of the recommendations issued must have been implemented by the end of the second year after they were issued.”*

At the December 15, 2014, municipal council meeting and the December 18, 2014, agglomeration council meeting, the executive committee filed the following response to this recommendation:

[TRANSLATION] The executive committee also believes that it is very important that the recommendations issued by the auditor general and retained by the municipal administration be implemented as quickly as possible. However, the executive committee questions the relevance of setting the performance targets described in R-1. Certain recommendations are more important from a strategic standpoint than others and must therefore be given priority. Some may be relatively easy to implement, whereas others will be easier to implement once the appropriate organizational changes have been made. The City must also maintain a certain level of administrative flexibility in order to be able to respond to other emergencies and priorities during the year and ensure its operations run smoothly.

Consequently, the executive committee asks that the Direction générale implement the relevant recommendations made by the auditor general by order of priority and at a pace that will optimize City management and continue to report yearly on the implementation of the recommendations.

During this municipal council meeting, the president of the executive committee declared that the goal was ultimately to respond to 100% of the issues raised by the auditor general and attempt to do so by order of priority. Furthermore, he indicated that he would submit a work plan (to be determined) in response to the priorities.

In this regard, we deem it appropriate to issue the following comments on the executive committee’s response and the clarifications provided by its president:

- Firstly, we are pleased by the willingness expressed by the president of the executive committee to implement 100% of our recommendations.
- With respect to “implementing the auditor general’s relevant recommendations by order of priority,” it is important to clarify that it is exceedingly rare that business units do not follow our recommendations. Also, priorities are already established when the business units prepare their action plans in response to our audit reports. Indeed, these action plans describe the actions proposed by the business units to address the deficiencies underlying our recommendations in accordance with a timeline that takes into consideration the scope of the required measures and the risks involved. Moreover, at

this stage, we make sure that the proposed actions meet the objectives underlying the recommendations issued in the audit report and that the timeline for implementing said actions is reasonable under the circumstances. If necessary, we ask the business units to provide us with revised action plans.

- I would emphasize that, in the vast majority of cases, the action plans submitted to us do not extend beyond one year.

Although we acknowledge that decisions regarding both the implementation of the recommendations and the terms of reporting to the councils on how the City follows up on the auditor general's recommendations remain the City's prerogatives, we nevertheless believe that these conditions should be based on objective criteria that enable the councils' members to obtain the information they need to fulfil all of their governance responsibilities.

Moreover, in light of the above, we maintain that the previously mentioned targets of 70% and 90% remain valid interim indicators for the purpose of globally assessing the extent to which the municipal administration is progressing towards the implementation of 100% of the recommendations within a three-year horizon. Indeed, a result that is significantly lower than the targets indicates that the business units are not fulfilling the commitment set out in the action plans they previously provided to us to ensure the implementation of our recommendations. Although we are aware that various other priorities may influence the order in which the business units fulfil their commitments, this situation nevertheless reveals a high risk that our recommendations will not be implemented during our three-year tracking cycle unless strict corrective measures are taken. In our opinion, it is important to develop indicators that enable the municipal administration to more easily identify cases of non-fulfilment in order to obtain explanations and ultimately determine the necessary corrective measures.

To this effect, we should point out that our follow-up work carried out for the purpose of this report reveals that the situation has not improved compared with the situation described in our 2013 Annual Report, in particular with respect to the recommendations we issued based on our resource and IT optimization audit. Indeed, the rate of implementation at the end of the first year of follow-up, as indicated in this annual report, is only 44% and was only 43% in last year's annual report, compared with the target set at 70%. Furthermore, the rate of implementation at the end of the second year of follow-up is only 65% for the recommendations made in 2012, compared with the target set at 90%.

In our opinion, this situation requires that corrective measures be taken as quickly as possible and that the Direction générale assert a certain leadership in this regard.

Recommendation

I recommend that the Direction générale take action as required under the circumstances to ensure that the business units' commitments as described in their action plans to ensure the implementation of the auditor general's recommendations are fulfilled.

Recommendation

I recommend that the Direction générale provide the councils, in response to the expressed needs, with accounts on the follow-up of the auditor general's recommendations to enable them to fulfil all of their governance responsibilities.

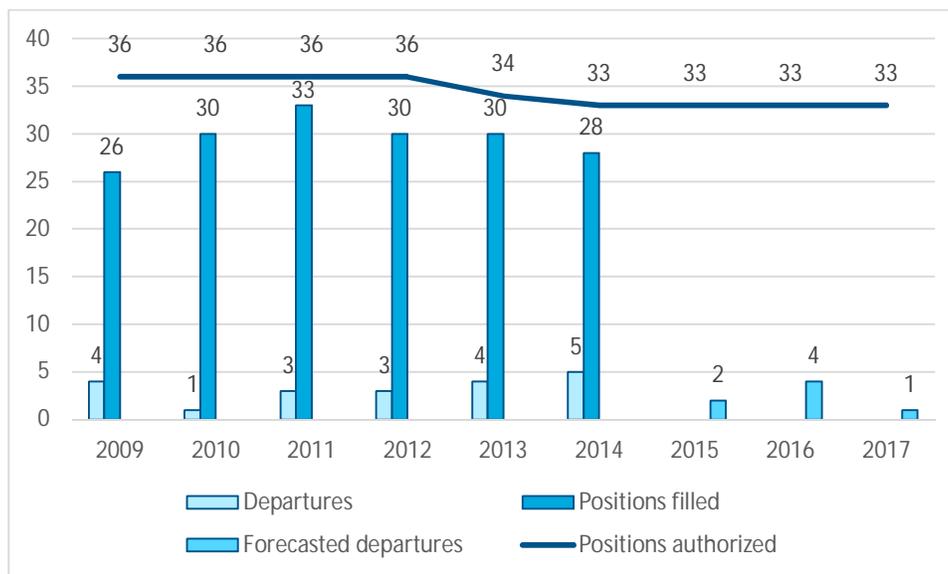
1.3. Maintaining the BVG’s Expertise

My office’s credibility and power of influence undoubtedly depend on the expertise demonstrated by its human resources. Given the scope of my mandate and the fact that my report is made public, my staff must have extensive knowledge of various fields in addition to their exceptional auditing skills.

To this effect, the BVG’s philosophy consists on the one hand of disposing internally, to the extent possible, of a core of experienced professionals who collectively possess expertise on the City’s different spheres of professional activity that are covered by my mandate: the financial audit, the resource optimization audit and regulatory compliance. On the other hand, the BVG’s philosophy consists of hiring external resources to meet its ad hoc needs in terms of highly specialized expertise or to even out the workload over the peak period during which we audit the financial statements of the City and its reporting entities.

As I mentioned repeatedly in my previous annual reports, attracting and retaining competent resources is an ongoing challenge for the BVG. Moreover, the evolution and forecasting of my office’s workforce from 2009 to 2017 (Figure 1) eloquently illustrate that maintaining our expertise on an ongoing basis is not an easy task.

Figure 1 – Evolution and Forecasting of BVG Workforce from 2009 to 2017



Indeed, we note that positions were vacant at the end of 2009, 2010, 2011, 2012, 2013 and 2014. Furthermore, there is reason for serious concern regarding the situation over the next three years given that:

- five positions were vacant on December 31, 2014;
- seven departures are planned, including three of the four members of the BVG's management team;
- the most recent hiring campaigns produced disappointing results—even disastrous in some cases.

Although I successfully obtained in 2009 the creation of senior professional positions, and my office examined different possibilities with the Service des ressources humaines to mitigate the risk of losing expertise, it has become obvious that these measures did not yield the expected results.

In fact, the qualified staff that my office requires is difficult to find and in high demand in the private sector and with other public entities. In this context, the fact that the overall remuneration that we are able to offer is not very competitive compared with what our reference market can offer represents a major obstacle.

This situation seriously threatens our ability to play our role as watchdog of the City's public finances on behalf of the elected officials and citizens of Montreal. Nevertheless, we must pursue our efforts in an attempt to hire employees who have the qualifications that meet our very high expectations.

I therefore intend to once again ask for the support of the Service des ressources humaines to help my office find solutions to the complex issue of maintaining the BVG's expertise. We intend to begin taking these steps in May 2015 to be able to quickly inform the municipal council of the results obtained.

1.4. Internal Control Deficiency Observed During the Audit of the Consolidated Financial Statements of the Ville de Montréal for the Year Ended December 31, 2014

During our review of the evidence obtained as part of the audit of the City's consolidated financial statements for the year ended December 31, 2014, we detected a significant misstatement involving the balances presented in the audited 2013 financial statements. The misstatement concerns a municipal property that does not comply with the *Fisheries Act* with respect to environmental protection. Considering the magnitude of the sums in question, the 2013 amounts presented for comparative purposes in the 2014 financial statements were adjusted by \$65 million to take into account the environmental liability and related expense (refer to Note 3 in the City's 2014 consolidated financial statements).

This adjustment emphasizes a deficiency of disclosure regarding the environmental liability that has been repeated in the City's financial statements since 2011. Indeed, in light of the developments in this regard, this non-compliance with the legislation (and, therefore, the creation of a contingent liability) should have been the subject of a note to the City's financial statements since 2011 to account for the liability in the City's 2013 financial statements.

It is clear from discussions with City officials that the documents disclosing the contingent liability had been available since 2011. However, they were only brought to the attention of the Service des finances in 2014. The documents required to account for the liability and the expense, on the other hand, had been available since 2013 and were only brought to the attention of the Service des finances in 2014.

Thus, the detected misstatement shed light on a flaw in the City's financial statement closing process. The channels that ensure the communication of all of the information required to prepare reliable consolidated financial statements were not effective and led to the consequences described.

This lack of internal control was the subject of a recommendation that I made to the Service des finances jointly with our co-auditor of the City's financial statements (Deloitte). In this recommendation, we asked the Service des finances to revise the financial statement closing process to obtain on a timely basis the appropriate and necessary information to ensure the reliability of the consolidated financial statements that it is responsible for preparing.

Allow me to provide a short reminder of the responsibilities of the City's management and those charged with its governance under the Canadian Auditing Standards (CASs) in the matters of preparing financial statements and of internal controls:

- *[...] management and, where appropriate, those charged with governance [...] are responsible for the preparation of the financial statements [...]; for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error; (CAS 200.A2 a and b);*
- *internal control is the process designed, implemented and maintained by those charged with governance, management and other personnel to provide reasonable assurance about the achievement of an entity's objectives with regard to the reliability of financial reporting, the effectiveness and efficiency of operations, and compliance with applicable laws and regulations. [...]* (CAS 315.4 c).

I consider that management and governance responsibilities must include all necessary measures to compensate for significant risks that could jeopardize the reliability of the financial information.

Although the City uses an accounting and communication structure to prepare the consolidated financial statements, this structure has proven itself insufficient to account for this significant item in a timely manner. The circumstances surrounding the situation that led to the required adjustment of the financial statements this year were specific to this case. The City's management and those charged with its governance must revise the financial statement closing process to allow for the timely identification of all significant items that must be included in the City's financial statements.

1.5. Government Transfers

Revised Section PS 3410 of the CPA Canada Public Sector Accounting Handbook, which deals with government transfers, came into force for fiscal periods beginning April 1, 2012. In the case of the Ville de Montréal, this section applies to the City's consolidated financial statements since December 31, 2013.

There are diverging interpretations within the accounting profession as to the application of this section, namely with respect to recording multiyear instalments received from the Quebec government. Indeed, as part of its activities, the Quebec government subsidizes public and municipal entities but does not immediately pay the full amounts of the subsidies granted under the agreements reached. Instead, it requires the subsidized entities to contract loans covering the amounts granted in subsidies and commits to reimbursing the annual payments made by the entities in capital and interest on these loans. The Ville de Montréal, along with all auditors general of Quebec municipalities and the auditor general of Quebec, considers that the agreement reached with the Quebec government on the latter's reimbursement of the cost of the debt contracted by the City for specific subsidy programs allows it to record an account receivable for the full amount of the subsidy granted. However, Deloitte, the firm that co-audits the City's financial statements, does not share this reasoning. It considers that government transfers should not be recorded until the sums have been approved by the National Assembly.

The consolidated financial statements of the Ville de Montréal for the fiscal period ended December 31, 2014, were audited jointly with Deloitte. Once the work was completed, I produced an independent auditor's report with an unqualified opinion whereas Deloitte added a qualification in its report dealing with this section of the handbook.

In the case of the audit of the consolidated financial statements of the Société de transport de Montréal (STM), the opposite occurred. The STM does not record multiyear instalments as receivables. Consequently, I included a qualification in my opinion accompanying the STM's financial statements whereas Deloitte issued an unqualified opinion.

The STM, which produces its financial statements annually, is one of the City's more significant entities, and its financial information must accordingly be incorporated in the City's consolidated financial statements. The City must adjust this information to include all multiyear instalments yet to be received, resulting in an increased workload.

The difference in how the Ville de Montréal and the STM record government transfers does not exist at the provincial level. Indeed, for the other eight municipalities of 100,000 or more inhabitants whose consolidated financial statements include the results of their mass transit companies, the same accounting position is applied for both the City and its mass transit company in 2013.

It is therefore my opinion that the STM should adopt the City's way of recording multiyear instalments to be received from the Quebec government.

Another important current fact must be pointed out. On April 14, 2015, CPA Quebec posted on its website a summary of a meeting held on April 8, 2015, between several representatives of the professional order's different working groups and Mr. Tim Beauchamp, CPA, CMA (Ontario), Director of the Public Sector Accounting Board (PSAB). During this meeting, Mr. Beauchamp mentioned that [TRANSLATION] [...] *the need for an appropriation or equivalent authority to issue a cheque is not the key consideration as to whether a liability (or a receivable for the recipient) should be recorded [...]*. Moreover, he stressed that the professional judgement is always paramount, namely in the case at hand. Discussions are still underway in this regard.

Recommendation

I recommend that the Direction générale take action along with the director of the Service des finances to have the STM adopt the City's way of recording government transfers.

1.6. Audit of the Financial Statements of Technoparc Montréal

I audited the non-consolidated financial statements of Technoparc Montréal for the year ended December 31, 2014. Following this work, I had planned to issue an independent auditor's report containing a qualification concerning the fact that Technoparc Montréal had not consolidated information concerning Fiducie du Technoparc Montréal in its financial statements. It is nevertheless required to do so under Section PS 2500 ("Basic Principles of Consolidation") of the CPA Canada Public Sector Accounting Handbook.

Since December 31, 2012, my opinion issued on the financial statements of Technoparc Montréal has also included a qualification on a debt in the amount of \$1,543,000. This qualification was deemed necessary because the Ville de Montréal had been recording this amount in its ledgers for several years as an amount receivable from Technoparc Montréal. The City had also recorded an estimated liability in the same amount.

During the finalization of the audit of the financial statements for the year ended December 31, 2014, the confirmation received from the City did not mention the existence of this debt. Despite that, with the aim of avoiding the qualification in the auditor general's opinion, the management of Technoparc Montréal decided to account for the debt in its financial statements. However, it was unable to provide sufficient and convincing evidence enabling me to reach a conclusion on the substance of the transaction to determine whether the recognition of a debt would be justified and to identify the other items that could be impacted in return. Several exchanges were needed between management and my office's representatives in this regard. In April 2015, management finally decided to reverse the entry of this debt.

The fact that management reversed its decision to record the debt confirms that Technoparc Montréal does not currently dispose of sufficient and necessary evidence to justify recording this debt in its financial statements. Consequently, I intend to remove the qualification on this debt from my independent auditor's report on the financial statements of Technoparc Montréal for the year ended December 31, 2014.

I recommended to the management of Technoparc Montréal that it take measures to ensure that its financial statement closing process is based on sufficient and appropriate evidence before entering a transaction in its ledgers, in accordance with the Canadian public sector accounting standards.



Report of the Auditor General of the Ville de Montréal to the City Council and to the Urban Agglomeration Council

For the Year Ended December 31, 2014

2

OVERVIEW OF THE BUREAU DU VÉRIFICATEUR GÉNÉRAL





Report of the Auditor General of the Ville de Montréal to the City Council and to the Urban Agglomeration Council

For the Year Ended December 31, 2014

2.1

WORKFORCE STATUS



2. Overview of the Bureau du vérificateur général

2.1. Workforce Status

At December 31, 2014, the Bureau du vérificateur général (the BVG) had a staff complement of 28 employees, compared to 30 the previous year. Again this year, recruiting difficulties, coupled with a high number of departures due to retirement, presented a challenge to our Bureau. Our recurring problem recruiting competent staff is the result of less than competitive salaries offered by the BVG compared with our reference market. This problem was amplified by the uncertainty created by Bill 3, the *Act to foster the financial health and sustainability of municipal defined benefit pension plans*. During 2015, candidates who had applied within the staffing process framework withdrew after the bill was announced. Because some positions could not be filled in the areas of certification of the financial statements of the City and other agencies (Certification) and the value-for-money and regulatory compliance (VMA) and quality assurance (QA) audit, we had no other choice but to conduct a new recruitment campaign in 2015 to attempt to fill these positions.

**Table 1 – Workforce Trends
as of December 31 for 2005–2014**

Year	Total employees ^[a]
2005	37
2006	35
2007	33
2008	28
2009	26
2010	30
2011	33
2012	30
2013	30
2014	28

^[a] The workforce excludes two professionals who were released full-time for union activities for the years 2008 to 2010 and one professional for 2011.

We should point out, nevertheless, the arrival this year of a new assistant auditor general – Certification of the financial statements of the City and other agencies, a position that had been vacant since fall 2013. Two senior auditors also joined our team. During the year, we

had to deal with the departure of five professionals. Four of these took retirement. The position of executive secretary also had to be filled due to the retirement of the person in that job.

At year-end, we had five vacant positions in the areas of Certification, VMA and QA. In addition to filling these positions, the Bureau anticipates that a quarter of its workforce will leave in the short to medium term through retirement and at the end of their mandate. This estimate includes, in particular, three of the four members of the Bureau's executive team.

To summarize, our workforce status in relation to authorized positions at December 31, 2014, was as follows.

**Table 2 – Workforce Status
at December 31, 2014**

Areas	Authorized positions	Filled positions	Positions to fill
Certification	11	9	2
VMA	11	9	2
IT	8	8	0
QA	3	2	1
Total	33	28	5



Report of the Auditor General of the Ville de Montréal to the City Council and to the Urban Agglomeration Council

For the Year Ended December 31, 2014

2.2

PERFORMANCE INDICATORS



2.2. Performance Indicators

During our audits, we often observe a lack of appropriate performance indicators to allow thorough administrative follow-up and suitable reporting.

We will continue to present the indicators that we consider to be the most relevant in helping the reader form an opinion about the performance of the Montreal Bureau du vérificateur général (the BVG).

These indicators are:

- Number of reports issued;
- Recommendation implementation rate;
- Use of time;
- Equal access to employment;
- Financial results.

Number of Reports Issued

Table 1 shows the number of reports produced in recent years for the financial audit as well as the value-for-money and information technology (IT) audit.

Table 1 – Number of Reports Issued from 2010 to 2014

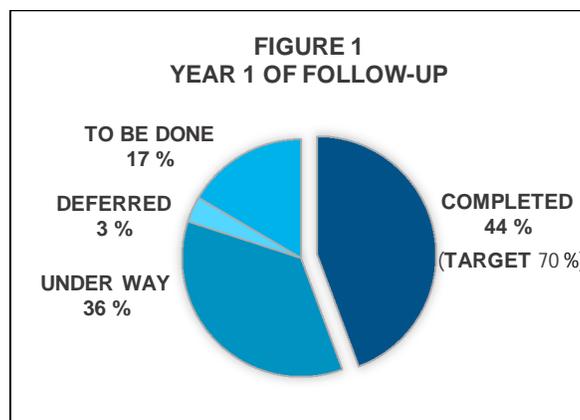
Annual report reference year	Financial statements audit			Value-for-money and IT audit
	Current financial year	Previous financial years	Total	
2010	13	3	16	9
2011	9	1	10	12
2012	21	15	36	13
2013	18	1	19	11
2014	16	4	20	12

The number of reports prepared in 2014 is very comparable to those produced in 2013.

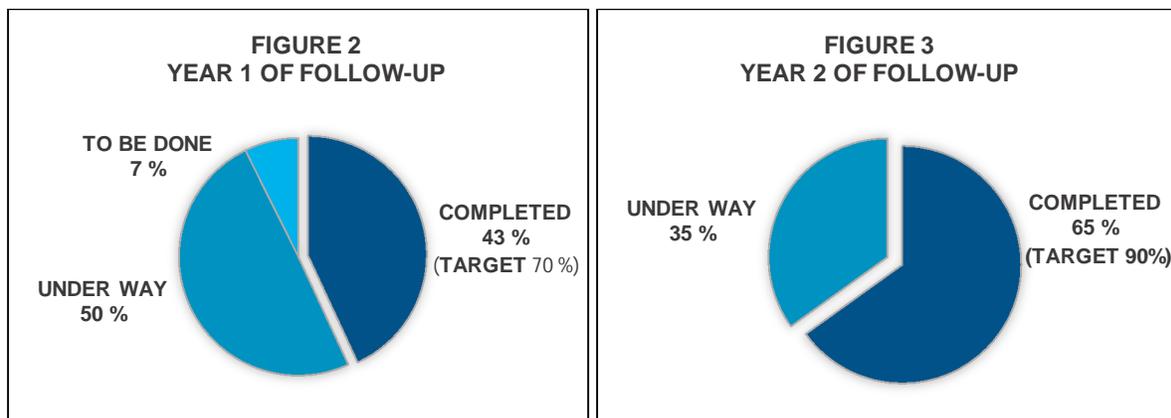
Recommendation Implementation Rate

This indicator is particularly important because it allows the reader to assess to what extent the municipal administration takes appropriate measures to resolve the problems that trigger our recommendations. It should be noted that the figures shown in Figures 1 to 4 illustrate, by the nature of the audit, the implementation rate for recommendations made at the end of our follow-up work in the first year and, if necessary, in the second year following their publication.

Figure 1 – 2013 Recommendation Implementation Rate for the Value-for-Money and IT Audit, by Status



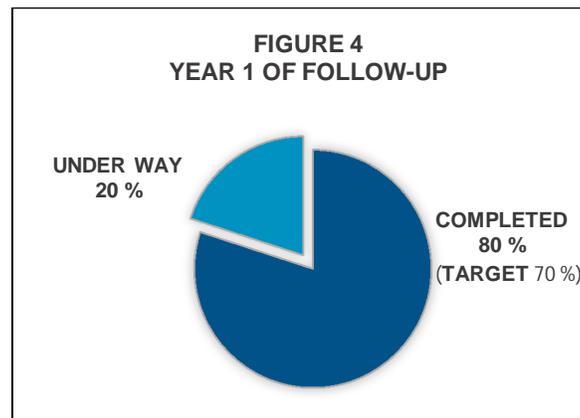
Figures 2 and 3 – 2012 Recommendation Implementation Rate for the Value-for-Money and IT Audit, by Status



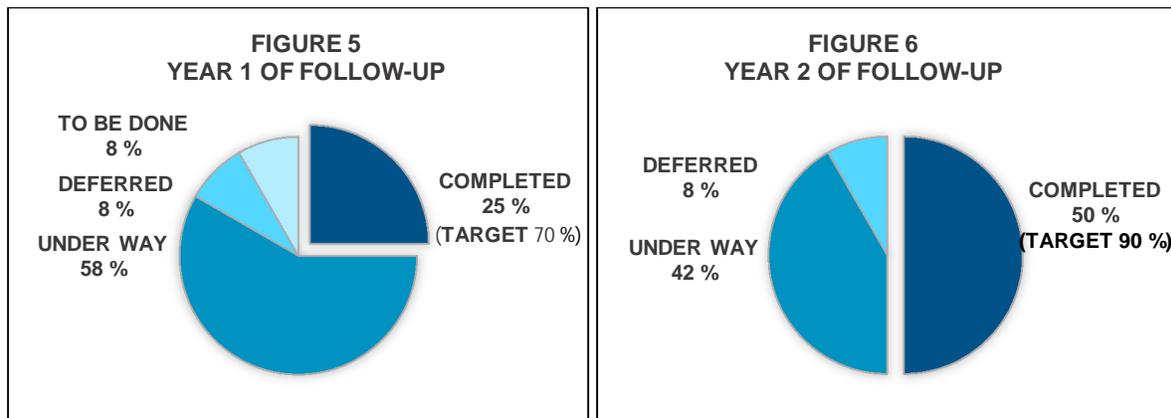
The indicator of the implementation rate for the 2013 and 2012 recommendations in the first year following their publication, 44% and 43% respectively, shows results well below the target of 70%. We also noted that the implementation rate for the 2012 recommendations in

the second year following their publication, or 65%, failed to even reach the 70% target for the first year following their publication.

Figure 4 – Recommendation Implementation Rate for the Financial Audit, by Status



Figures 5 and 6 – Recommendation Implementation Rate for the 2012 Financial Audit, by Status



This indicator shows the opposite situation to that of the implementation rate for the 2013 and 2012 recommendations. We noted that the implementation rate in the first year of follow-up exceeded the target of 70% for the 2013 recommendations, whereas the implementation rate was only 25% for the 2012 recommendations. We also found that the 50% implementation rate for the 2012 recommendations in the second year following their publication was far below the target of 90%.

With the exception of the implementation rate for the 2013 recommendations of the Financial Audit in the first year following their publication, this situation shows a lack of diligence on the

part of the business units in implementing our recommendations and complying with the commitments made at the time the action plans were drawn up.

Consequently, as mentioned in our report last year, we are of the opinion that the business units must be made aware again of the importance of implementing the BVG's recommendations more promptly and that City management must show leadership in this regard.

Use of Time

Figures 7 and 8 show a breakdown of total and chargeable hours for members of the BVG over the past five years.

Figure 7 – Breakdown of Total Hours

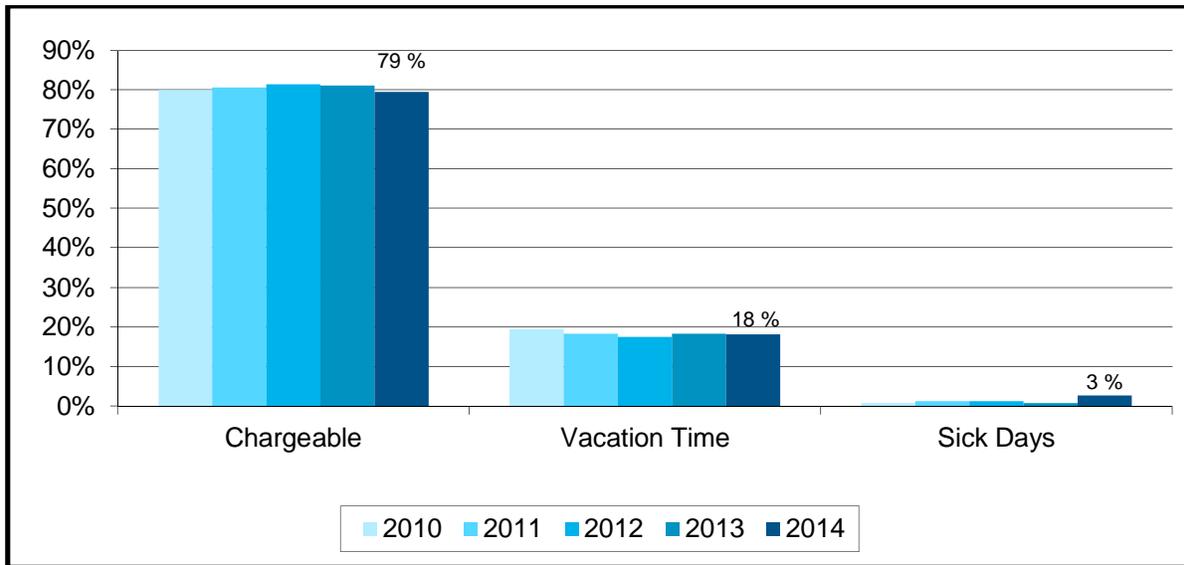
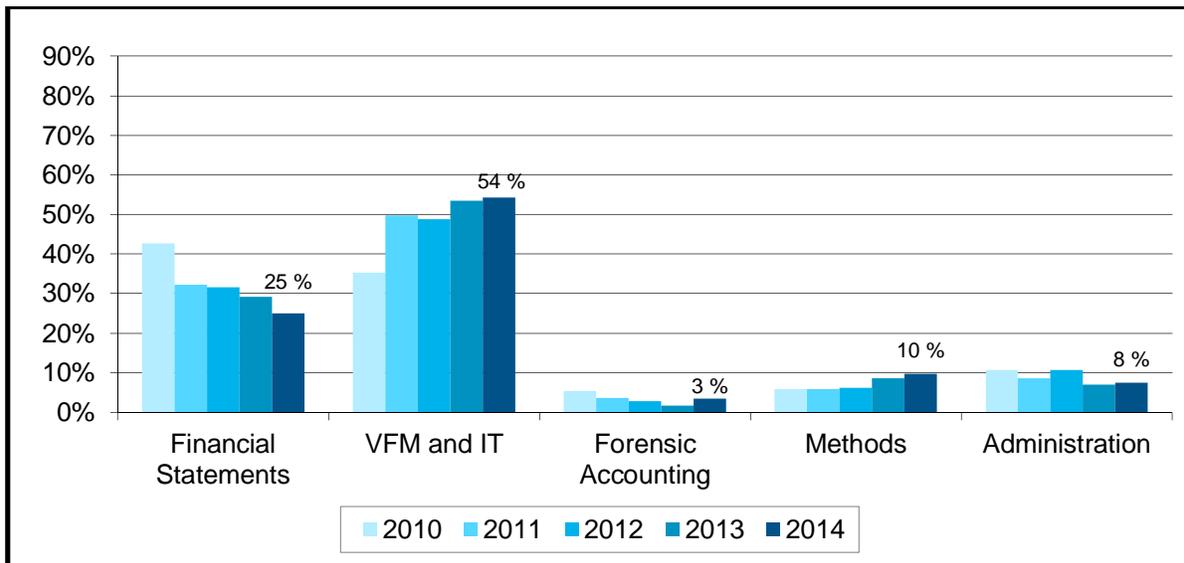


Figure 8 – Breakdown of Chargeable Hours, by Activity



VFM and IT: Value-for-Money and Information Technology audit.
 Methods: Includes accounting research, quality control and training.

The data on use of time show that the proportion of chargeable hours spent on the VMA and IT has remained stable. For their part, the chargeable hours spent on Certification decreased as a result of increased recourse to consultants to assist us in our work. Increases in the Methods and Administration categories is basically due to an increase in hours spent on implementing a new financial auditing software package and on training employees on this new software and updating our financial auditing program.

Other indicators pertaining to the use of time and staff turnover are presented in Table 2.

Table 2 – Other Indicators Pertaining to the Use of Time and Audit Staff Turnover

	Results	
	2014	2013
1. Audit staff turnover	17.9%	13.3%
2. Absenteeism	2.4%	1.1%
3. Average number of hours of training per employee	66	46
4. Ratio of training costs/payroll expenditures in accordance with the <i>Act to promote workforce skills development and recognition</i> . The objective for all City operations is 1%.	4.9%	4.0%

The increase in staff turnover is due to a higher number of departures in 2014 compared to 2013. Five professionals left in 2014, four of whom retired.

We also observed a marked increase in the average number of training hours per employee in 2014 and a corresponding increase in the cost-training ratio. This increase is primarily due to the training related to the new auditing software package and the updating of the financial auditing program, as well as specialized training in VMA and IT.

Equal Access to Employment

Like the City, the BVG pays particular attention to issues of equal access to employment.

The breakdown of the representation of groups targeted by the *Act respecting equal access to employment in public bodies* as of December 31 of the last five years is shown in Table 3.

Table 3 – Representation of Targeted Groups

Targeted group	2014	2013	2012	2011	2010
Men	51.8%	51.6%	53.3%	59.4%	58.1%
Women	48.2%	48.4%	46.7%	40.6%	41.9%

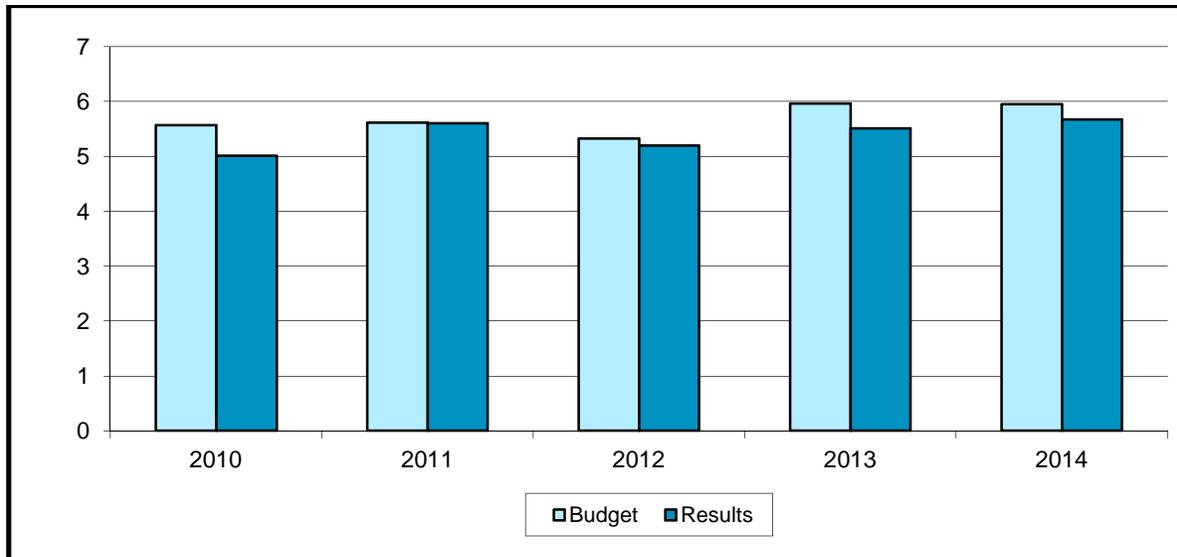
Targeted group	2014	2013	2012	2011	2010
Aboriginal persons	0.0%	0.0%	0.0%	0.0%	0.0%
Visible minorities	11.1%	9.7%	6.7%	6.3%	3.2%
Ethnic minorities	11.1%	3.3%	3.3%	3.1%	0.0%
Total	22.2%	13.0%	10.0%	9.4%	3.2%

We can see that the representation of women and visible and ethnic minorities within our workforce has improved significantly over this period.

Financial Results

The final indicator deals with the financial results for the BVG. Figure 9 shows these results for the past five years.

Figure 9 – Budget and Financial Results
(in millions of dollars)



As for the financial results for 2014, the positive variance in the 2014 budget is due to departures during the year and positions that remained vacant. For more information about previous years, please refer to the annual reports for those years.



Report of the Auditor General of the Ville de Montréal to the City Council and to the Urban Agglomeration Council

For the Year Ended December 31, 2014

3

FINANCIAL STATEMENT AUDITS





**Report of the Auditor General
of the Ville de Montréal**
to the City Council and to the
Urban Agglomeration Council

For the Year Ended December 31, 2014

3.1

**CONSOLIDATED
FINANCIAL STATEMENTS
OF VILLE DE MONTRÉAL**



3. Financial Statement Audits

3.1. Consolidated Financial Statements of Ville de Montréal

In accordance with the provisions of the *Cities and Towns Act* (CTA) in force on December 31, 2014, we are required to audit the City's financial statements.

The *Charter of Ville de Montréal* and the *Cities and Towns Act* (CTA) both require the City to submit its financial statements to the City clerk's office by March 31 following the close of the preceding year and to the Ministère des Affaires municipales et de l'Occupation du territoire (MAMOT), using the prescribed form, by April 30.

Consequently, for the fiscal year ended in 2014, we have produced a total of five audit reports regarding the City's financial statements. In March 2015, the independent auditor's reports of the auditor general of the Ville de Montréal expressing an unmodified opinion on the City's consolidated financial statements and on the breakdown of the City's mixed expenditures were issued. Both reports were included in the *Annual Financial Report* filed with the City clerk's office on April 22, 2015. Also, in April 2015, reports on the City's consolidated financial statements, on the breakdown of mixed expenditures and on the City's overall tax rate were produced. These three reports were recorded on the form required by the MAMROT.

The audit work on the City's consolidated financial statements was conducted together with a joint auditor who expressed a qualified opinion on the City's financial statements based on its different interpretation of the new accounting standards Section PS 3410 on accounting for government transfers.

In accordance with the provisions of the CTA, the form required by the MAMROT, along with the three abovementioned auditor general's reports and the joint auditor's report on the consolidated financial statements were filed with the City council and the urban agglomeration council before being sent to the MAMROT on April 30, 2015.



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For the Year Ended December 31, 2014

3.2

**FINANCIAL STATEMENTS
OF OTHER LEGAL
ENTITIES SUBJECT
TO THE *CITIES
AND TOWNS ACT***



3.2. Financial statements of other legal entities subject to the *Cities and Towns Act*

In accordance with the provisions of the *Cities and Towns Act* (CTA) in force on December 31, 2014, we are required to audit the financial statements of other legal entities subject to the CTA that meet any of the following conditions:

- It is part of the reporting entity defined in the municipality's financial statements;
- The municipality or its representative appoints more than 50% of the members of its board of directors;
- The municipality or its representative holds more than 50% of its outstanding voting shares or units.

Table 1 on the following page identifies the other legal entities that are subject to the CTA and for which we are required to produce an audit report on their financial statements. The table also indicates the periods during which the audit reports were issued for the fiscal years ending in 2013 and 2014.

**Table 1 – Other Legal Entities Subject to the CTA and Audit Reports
Produced on Their Financial Statements as of April 30, 2015**

Other legal entities subject to the <i>Cities and Towns Act</i> ¹	Fiscal year ended in	
	2014	2013
Anjou 80	●	●
Bixi Montréal		X
Bureau du taxi de Montréal		X
Conseil des arts de Montréal	●	●
Conseil interculturel de Montréal		●
Corporation d'habitation Jeanne-Mance	●	●
Fiducie du Technoparc Montréal	●	●
Office de consultation publique de Montréal		●
Office municipal d'habitation de Montréal		●
Société de gestion Marie-Victorin	●	●
Société de gestion du port de plaisance de Lachine		●
Société de jalonnement dynamique de Montréal		●
Société de transport de Montréal (2 rapports)	●	●
Société en commandite Stationnement de Montréal	●	●
Société d'habitation et de développement de Montréal	●	●
Société du parc Jean-Drapeau	●	●
Technoparc Montréal		●
Trangesco S.E.C.	●	●

Legend:

- Reports produced between May 1, 2014, and April 30, 2015.
- Reports produced before May 1, 2014.
- X No audit report required for 2013. This reporting entity was added to the City's list in 2014.

¹ For the year ended December 31, 2014, Société de vélo en libre-service ceased operating. Consequently, this entity as well as its affiliate Bixi Toronto Inc. are no longer included in the reporting entities of Ville de Montréal. Under Section 107.7 of the *Cities and Towns Act*, the Auditor General is therefore no longer required to audit the financial statements of Bixi Toronto Inc. and of Société de vélo en libre-service.



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4

VALUE-FOR-MONEY AND INFORMATION TECHNOLOGY AUDIT





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For the Year Ended December 31, 2014

4.1

FOLLOW-UPS TO RECOMMENDATIONS FROM PREVIOUS YEARS



4. Value-for-Money and Information Technology Audit

4.1. Follow-Ups to Recommendations from Previous Years

The percentage of recommendations made by the Bureau du vérificateur général (BVG) that were followed up with concrete corrective measures is a key indicator to ensure that departments and boroughs are implementing these recommendations promptly.

The policy of the BVG is to initiate a follow-up to the recommendations in the year following their appearance in the annual report. The follow-up to the recommendations issued in a given year generally extends over a maximum period of three years. Indeed, the BVG reasonably expects that 100% of the recommendations issued shall be implemented within this three-year horizon, except under very specific circumstances where certain recommendations are followed up during an additional year or two.

To evaluate the rate of implementation of the recommendations issued towards the target of 100% over a three-year period, the BVG has been using the following interim performance targets since 2013:

- **70%** of the recommendations made must be **completed** within the first year following their publication;
- **90%** of the recommendations made must be **completed** within the second year following their publication.

Thus, the recommendations made in 2012 and published in the Annual Report of the Auditor General for the year ended December 31, 2012—concerning the value-for-money and technology information audits—were the first to be measured against the 70% interim performance target. For the second year of follow-up, the rate of implementation of these recommendations made in 2012 was measured against the 90% interim performance target. The same process was applied to the recommendations made in 2013. The recommendations made following the audit of the financial statements were published in the report on internal control deficiencies filed with Ville de Montréal's audit committee for the year ended December 31, 2014, and previous years.

Results of the Follow-Ups to Recommendations Related to the Value-for-Money and Information Technology Audits

The results of the follow-ups to the recommendations made in the annual reports for years 2009 to 2013 are shown in Table 1.

Table 1 – Results of the Follow-Ups to Recommendations Related to the Value-for-Money and Information Technology Audits, by Status (April 2015)

Status of the recommendations	Number of recommendations per year					
	2009	2010	2011	2012	2013	Total
Completed	254	169	161	151	92	827
Under way	5	5	43	81	75	209
Deferred	2	1	–	–	2	5
Not completed	25	–	19	–	–	44
Other ¹	–	–	–	–	38	38
Total number of recommendations made	286	175	223	232	207	1,123

Regarding the 2012 recommendations more specifically, now at the end of their second year of follow-up since their publication, those whose status is considered “completed” account for 65% compared with the 90% interim performance target.

With respect to the recommendations made in 2013, those whose status is considered “completed” account for 44%, compared with the 70% interim performance target set for recommendations at the end of their first year of follow-up since their publication in the auditor general’s annual report.

Looking at all recommendations made since 2009 as part of the value-for-money and information technology audits, 827 of them are completed. On a cumulative basis (over the past five years), this represents a 74% completion rate, with 19% of the recommendations under way.

¹ The business units concerned did not follow up on these recommendations, which have yet to be implemented.

Accompanying Notes to the Results of the Follow-Ups to Recommendations

Our follow-up aimed to verify that the business units take measures to implement the action plans developed on the basis of the recommendations that concern them. In this context, it is expected that the business units apply stringent measures to meet the recommendations of the BVG and follow up on the implementation of the action plans developed on the basis of these recommendations.

In the case of a large number of recommendations, however, our follow-up indicates that the business units did not take adequate measures to implement the recommendations or that they were not able to provide evidence of their status. Indeed, we observed the following:

- At the end of the third year of follow-up, 19 (8.5%) of the recommendations made in 2011 were confirmed “Not completed,” the concerned business units having not taken adequate measures to meet the recommendations;
- The status of 44 (23%)² of the recommendations made in 2012 and 2013 that the business units considered completed in 2014 was reverted to “Under way” because our follow-up indicated that the measures implemented by the business units did not meet the recommendations or that the business units had not been able to provide evidence of the measures taken;
- 38 (18%) of the recommendations made in 2013 remain “To be done,” the business units concerned having not followed up on them.

Our follow-up leads us to conclude that some business units do not give the necessary attention to the recommendations issued to them by the BVG. This is not conducive to the implementation of these recommendations within the set target of three years following their publication.

Results of the Follow-Ups to Recommendations Related to the Financial Audit

Table 2 presents the results of the follow-ups to the recommendations made in the internal control deficiencies reports of 2010 to 2013.

² Among the 44 recommendations still under way, 17 (9%) were made in 2012 and 27 (14%) were made in 2013.

**Table 2 – Results of the Follow-Ups to Recommendations
Related to the Financial Audit, by Status (April 2015)**

Status of the recommendations	Number of recommendations per year				
	2010	2011	2012	2013	Total
Completed	20	15	6	8	49
Under way	–	1	5	2	8
Deferred	–	–	1	–	1
Not completed	2	1	–	–	3
Other ³	–	–	–	–	–
Total number of recommendations made	22	17	12	10	61

We observed that for the 2012 recommendations (now at the end of their second year of follow-up since their publication), those whose status is considered “completed” represent a proportion of 50%, compared with the interim performance target set at 90%.

With respect to the recommendations made in 2013, now at the end of their first year of follow-up, those whose status is considered “completed” represent a proportion of 80%, compared with the interim performance target set at 70%.

Looking at all recommendations made since 2010 as part of the financial audits, the results show that 49 of them are completed. On a cumulative basis (over the past four years), this represents an 80% completion rate, with 13% of the recommendations under way.

³ The business units concerned did not follow up on these recommendations, which have yet to be implemented.



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4.2

PENETRATION TESTS



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4.2. Penetration Tests

1. Background

Several business units of Ville de Montréal and some bodies controlled by the City have systems through which they transmit critical and confidential information. Most of these systems are housed on common or individual networks that can sometimes be accessed through the Internet.

In order to ensure effective safeguards are in place to adequately protect the information systems from cyberattacks, the industry strongly recommends that penetration tests be done to verify the strength of the controls applied to the various computer environments. According to the information security experts, testing the resistance of information systems to internal or external threats is of paramount importance.

The term “penetration testing” refers to simulating, in a controlled and secure manner, malicious actions carried out by computer hackers to penetrate systems and networks, either through the Internet or internally, in an effort to identify any potential vulnerabilities in the computer systems, networks or software and enhance the information security. In opposition to penetration attempts by computer hackers, penetration testing is ethical because it is done with the prior consent of the entities involved. Specialists generally use the same tools and techniques as computer hackers, except that they do not cause damage to the information systems, make them unavailable, alter the information processed by these systems, or steal confidential information. The integrity, confidentiality and availability of the systems being attacked are maintained during the penetration testing.

There are two main categories of penetration tests:

- **External penetration tests:** these tests make it possible to know whether a malicious individual could, using the Internet, breach the security of the information system in order to:
 - obtain confidential or privileged information;
 - change information processed by these systems;
 - make the systems unavailable.
- **Internal penetration tests:** these tests make it possible to determine whether an individual could, internally and using his usual access, compromise the security of the information system in order to carry out the same three actions mentioned under the

external tests. Internal tests also allow access to and testing of information systems that are invisible from the Internet.

2. Purpose and Scope of the Audit

In an effort to ensure a reasonable level of confidence in the quality of existing controls and to reduce to an acceptable level the risks of cyberattacks on the information systems of some of the City's business units and bodies controlled by the City, we continued during 2014 a program of penetration testing that we initiated in 2012.

The main objective of penetration testing is to test the security of computer environments that have been deemed critical and assess their resistance to a certain level of cyberattack originating externally and internally.

3. Results

For obvious security reasons, we are unable to disclose, in the current annual report, the results of the penetration tests carried out in 2014. Besides, it is important to stress out that the concerned business units have prepared appropriate action plans to address the deficiencies we have identified.



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4.3

**PARTICIPATION OF THE
SOCIÉTÉ DE TRANSPORT
DE MONTRÉAL IN THE
SOCIÉTÉ DE GESTION
ET D'ACQUISITION
DE VÉHICULES ET DE
SYSTÈMES DE TRANSPORT**



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List of Acronyms

APTA	<i>Act respecting public transit authorities</i>	MAMOT	Ministère des Affaires municipales et de l'Occupation du territoire
ATUQ	Association du transport urbain du Québec	MTQ	Ministère des Transports du Québec
BD	Board of Directors	STM	Société de transport de Montréal
CCQ	Civil Code of Québec		
GUAA	Gestion unifiée des acquisitions d'autobus		

4.3. Participation of the Société de Transport de Montréal in the Société de Gestion et d'Acquisition de Véhicules et de Systèmes de Transport

1. Introduction

The Société de transport de Montréal (STM) is part of the reporting entity of Ville de Montréal (the City) and therefore, in keeping with the *Cities and Towns Act*, falls within the scope of the Bureau du vérificateur général as a legal person that must be audited. The City controls the appointment of all members of the STM's Board of Directors (BD) and is responsible for losses generated by the STM in its operation.

Under section 107.8 of the *Cities and Towns Act*, we conducted a compliance and management audit of the STM's participation in the Société de gestion et d'acquisition de véhicules et de systèmes de transport S.E.N.C. (AVT).

Background

AVT was created on April 1, 2010 by Quebec's nine public transit corporations "the partners". They ratified both AVT's partnership agreement and a management mandate entrusting AVT with responsibility for various activities. The STM holds 20% of the voting rights for decisions made within AVT.

AVT's partnership agreement is in force for the period from April 1, 2010 to January 1, 2020, after which it will be renewed automatically for another 10-year term, and so on. The contract specifies that part of its mandate is to:

- develop and share expertise in public transportation with the partners, in particular by conducting any studies that will be of benefit to them, by managing bus purchase contracts and by developing the technical and contractual documentation necessary for awarding purchase contracts;
- acquire all services and goods associated with all modes of public transportation;
- carry out, for the benefit of its members, any commercial activity related to public transportation.

The current management mandate entrusted to AVT focuses mainly on the following three areas:

- **Contract management**, which in particular involves monitoring compliance with delivery schedules, the final inspection of buses before they are delivered to public transit

corporations and processing of non-compliances. AVT manages four bus purchase contracts that were ongoing when the mandate was signed. AVT also manages tendering contracts for the unified acquisition of urban buses for the 2012-2015 period;

- **Management of tendering activities leading to the acquisition of urban buses by the partners for the 2012-2015 period**, which in particular involves preparing the documents required for calls for tenders, conducting the analyses required for awarding contracts and testing pre-series buses;
- **Technology watch and technical studies**, which are aimed at sustaining the progress achieved by the partners and improving vehicle performance, reliability and safety for buses and other transportation vehicles.

This new general partnership offers partners the services that were previously offered by the STM through two administrative units, namely the Gestion unifiée des acquisitions d'autobus (GUAA) team and the Bureau de projets.

In the past, the STM created the GUAA team within its organization to represent the nine partners when dealing with bus manufacturers throughout the bus manufacturing process and the ensuing warranty period to ensure both the quality of the buses manufactured and compliance with bus manufacturers' obligations.

In addition, the STM set up a Bureau de projets mandated to prepare documentation for the purchase of articulated buses and to carry out a technology watch. The activities of the Bureau de projets ended on December 31, 2008.

Governance of AVT is assured by a BD consisting of five members elected every year by the general meeting of partners, which is attended by the nine partners' directors general or their designated representatives. The administrative power of AVT's BD is limited to simple administrative decisions. Partners are responsible for all full administrative decisions, such as disposal of assets and certain other decisions expressly referred to in the partnership agreement (the partners' BD or the general meeting of partners).

Each partner's BD:

- approves, prior to publication of a call for tenders, criteria for evaluating and weighting the call for tenders, duration and renewal options, the quantities of vehicles purchased by its corporation and the maximum authorized amount for the contract;
- mandates the BD of another partner to award the contract to a supplier in accordance with the contract awarding rules provided for in the call for tenders. AVT does not award contracts on behalf of partners;
- authorizes loan by-laws for its corporation.

The contributions made by the STM to AVT are accounted for in the STM's financial statements as investments in AVT under the item "Other receivables". These contributions, totaling \$719,000 per year, are authorized by a resolution of the STM's BD on the same budget basis for the years 2011 to 2015.

Any AVT surplus or shortfall is prorated and allocated to each partner based on each partner's contribution during the fiscal year in question. This division affects the cost of the investment in AVT presented in the STM's financial statements. As of December 31, 2013, the STM's investment was \$395,000.

Furthermore, the partnership agreement provides that contributions are adjusted periodically to take into account buses that were actually purchased. At the end of the five-year term ending on December 31, 2015, the adjusted contributions will be paid to or recovered from AVT.

The minutes of both AVT's BD meetings and its general meeting of partners for the years that we examined, namely 2012, 2013 and the first half of 2014, show that several discussions focused on the "mandate improvement" issue concerning the mandate granted by the partners to AVT. The purpose of the proposed amendments is to broaden AVT's mandate.

In this regard, according to information that we obtained on May 1, 2014:

- No amendment will be made to the mandate that the partners granted to AVT without the prior authorization of each partner's BD;
- On December 5, 2013, the directors general of the nine partners confirmed the amendments that they propose to make to the mandate;
- AVT wants the subcommittee on AVT's mission and responsibilities to hold an initial meeting before finalizing the mandate improvement process to ensure that no new issues will arise in connection with the mandate. Should any new issues arise, they must be the subject of new discussions within this committee.

Furthermore, before AVT's partnership agreement came into force, a request for an amendment to the *Act respecting public transit authorities*¹ (APTA) was sent to the Ministère des Transports du Québec (MTQ) on February 15, 2010 by the Association du transport urbain du Québec (ATUQ) on behalf of the nine partners. The purpose of the request was to specify and clarify the legislative provisions that expressly permit the nine partners to

¹ CQLR, chapter S-30.01.

constitute a legal person that can render services to third parties for remuneration, thereby facilitating a decrease in costs associated with services rendered to partners.

AVT's minutes highlight a potential impact on Transgesco Limited Partnership, which was incorporated by the STM, since the wording of the section of the act proposed by the Ministère des Transports du Québec and by the Ministère des Affaires municipales et de l'Occupation du territoire (MAMOT) could cover any entity incorporated by a public transit authority.

2. Purpose and Scope of the Audit

The purpose of this audit was twofold: first, to ensure that the processes associated with the STM's participation in AVT and in Transgesco Limited Partnership are consistent with the legal foundations established and, second, to ensure that an adequate governance and accountability reporting process was introduced and put in place at the STM with respect to its participation in AVT.

More specifically, our audit was aimed at evaluating the following criteria for the STM's participation in AVT:

- AVT's partnership agreement is legally compliant;
- The risks associated with AVT's management mandate are properly evaluated;
- The impact of the proposed amendment to the APTA has been evaluated;
- The STM has provided for an effective governance structure for its participation in AVT.

Our audit was conducted from July to November 2014 and focused chiefly on the years 2012, 2013 and the first half of 2014 but includes references to previous years as well.

Our audit focused on the STM, mainly its Direction générale and its Direction executive – Affaires juridiques. Some of the information on AVT was also obtained during the audit made of the STM's financial statements on December 31, 2013 to help confirm our understanding.

At the end of our audit, a draft report was submitted for discussion purposes to the acting Director General, the Secretary General and Executive Director – Legal Affairs and the representative designated by the STM to deal with AVT. A final report was subsequently submitted to both the acting Director General and the Secretary General and Executive Director – Legal Affairs to obtain an action plan and timeframes for its implementation for each of the recommendations addressed to them.

3. Summary of Findings

Our audit work revealed that improvements need to be made in the following areas:

- The legal compliance of AVT's partnership agreement (section 4.1):
 - The APTA does not expressly provide that public transit corporations are entitled to join forces to form a general partnership for contract management purposes;
 - AVT has ratified contracts with third parties even though questions remain about its legal capacity to contract on behalf of partners.

- AVT's management mandate (section 4.2):
 - The APTA does not expressly provide that the partners, including the STM, are authorized to award mandates to AVT without calls for tenders;
 - No presentation on any formal process for determining risks associated with the STM's participation in AVT, especially risks associated with the continuation of contracts already awarded to third parties by AVT, was given to the STM's BD or any of its committees;
 - AVT's partnership agreement allows it to carry out, for the benefit of its members, any commercial activity related to public transportation. At present, only four of the nine public transit corporations, including the STM, are permitted under the APTA to offer services for remuneration to third parties. Since there are certain requirements for a general partnership in its operating rules, one of which is that a partner does not have the right to compete with the corporation of which it is a member, the STM's participation in AVT prevents it from offering services for remuneration to third parties, which in turn prevents it from being allowed to increase its non-tariff revenues, until such time as the APTA authorizes the other five partners participating in AVT to exercise this power;
 - The interpretation of contractual clauses governing the lending of STM employees to AVT raises questions.

- Proposed amendment to the *Act respecting public transit authorities* (section 4.3):
 - Transgesco Limited Partnership does not apply in full the contract rules provided for in the APTA.

- Governance and accountability reporting (section 4.4):
 - No structured mechanism is in place for:
 - identifying and updating the background information on the STM's participation in AVT (main issues, accountability reporting to the STM's director general and to the STM's BD or one of its committees, STM resolutions, etc.),

- monitoring the STM's participation in AVT,
- maintaining and keeping up to date comprehensive documentation on the governance tools provided for in both AVT's partnership agreement and its management mandate.

4. Detailed Findings and Recommendations

4.1. Legal Compliance of the Partnership Agreement to Form AVT

4.1.A. Background and Findings

As stated in the partnership agreement, the nine partners formed AVT, a general partnership, in order to:

- develop and share expertise in public transportation;
- acquire services and goods associated with any mode of public transportation;
- carry out, for the benefit of its members, any commercial activity related to public transportation.

The law establishing these nine public transit corporations, namely the APTA, sets out the rules governing their engagement in all the activities that they may wish to consider. A general partnership such as AVT, without being a legal person within the meaning of the law, acts in its own name and owns property in its own right, which is separate and distinct from that of the corporations that constitute it.

Because of its legal form (general partnership), AVT's legal capacity has been challenged regularly since its creation by several stakeholders, as reflected in legal opinions dealing specifically with this issue, and by the fact that its Board of Directors set up a study committee on AVT's legal status and role.

In this regard, the minutes of the general meeting of AVT's partners, in connection with the meeting of February 21, 2013, state:

[TRANSLATION] [...] that it would be appropriate to embark on a reflection process to ensure that AVT, with its legal form and mandate, is able not only to fulfil its current role, but also can get to where the corporations want to see AVT in a few years.

We noted that the APTA does not expressly grant to public transit corporations the power to join forces to form a general partnership for contract management purposes.

In fact, according to a law firm we consulted, a literal, restrictive interpretation of section 89 of the APTA would make it possible to claim that the mandate entrusted to AVT by the nine partners would exceed the powers that are conferred on it by the law, because AVT is not a legal person established in the public interest within the meaning of this provision.

However, it could be argued that the general rules of civil law allow public transit corporations to constitute a general partnership. In fact, under section 300 of the Civil Code of Québec (CCQ), the APTA, as the incorporating law, governs the activities of public transit corporations; the CCQ provisions, if any, will be applicable as a supplement to the APTA provisions. Others might argue that AVT is only a grouping together or extension of the partners in their capacity as legal persons established in the public interest.

It should be recalled that section 89 of the APTA reads as follows:

A transit authority may give any other legal person established in the public interest the mandate to acquire property or any service on its behalf.

The transit authority may accept such a mandate from the legal person where it intends to acquire property or any service for itself.

The mandates given under this section shall be given by gratuitous title. The Minister may authorize the transit authority to make a purchase referred to in this section without any formal contract awarding procedure.

At present, some uncertainty remains that the interpretation of section 89 of the APTA might be prejudicial to the security of the STM's commitments arising directly or indirectly from AVT activities.

Consequently, it is our opinion that, because of AVT's legal form and the nature of its current management mandate, AVT should refrain from awarding any contracts as the partners' agent until its legal capacity is clarified with respect to its power to contract on behalf of partners.

Certain legal opinions expressed in 2010 and 2012 diverge as to AVT's legal status and as to whether it has the legal capacity to conclude contracts independently of its partners. In our opinion, the senior management of the STM, as a partner of AVT, must decide upon and agree upon the STM's position and vision concerning its participation in AVT. This lack of a clear position makes it difficult for the STM to determine risks arising from its participation in AVT and to establish procedures in an informed manner that will enable it to mitigate such

risks. The positioning would also help the partners set clear guidelines for AVT's senior management regarding the limits of its activities.

Moreover, a document entitled "Rôle et mission d'AVT" [TRANSLATION: "Role and Mission of AVT"], which AVT's director general submitted to the presidents of the transit corporations on February 13, 2014, specifies that [TRANSLATION: "all activities are always carried out jointly with the corporations"] and that services provided to third parties are among AVT's main activities. The document specifies the three conditions that must be present in order for AVT to be able to provide services to third parties:

- Must be approved by AVT's BD;
- Ancillary activity (priority given to partners);
- Minimum profit of 15%.

Moreover, AVT's 2013 annual management report states that:

[TRANSLATION] AVT's main clients are Quebec public transit corporations. However, AVT also offers its services to other public transit organizations and public bodies [...] As a result of our business development efforts, AVT has exceeded its objectives in the area of obtaining external contracts.

While the concentration of expertise in public transportation in AVT may well be a sound practice in terms of management and use of the STM's and the other eight partners' resources, the vehicle chosen to do this raises questions.

4.1.B. Recommendation

We recommend that the Direction générale of the Société de transport de Montréal:

- **decide upon the legal compliance of AVT and agree with both its senior management and the other eight partners upon the position and the vision of the Société de transport de Montréal concerning its participation in AVT;**
- **set clear guidelines for AVT regarding the limits of its activities, particularly in the area of services offered to third parties.**

Business unit's response:

[TRANSLATION] Compile various legal opinions about the incorporation of AVT. (Planned completion: June 2015)

Obtain from AVT's BD the revised mandate that will be entrusted to AVT to follow up on the legislative amendments under way. (Planned completion: following the coming into force of the legislative amendment)

Have this mandate approved by the STM's BD. (Planned completion: following the coming into force of the legislative amendment)

4.1.C. Recommendation

We recommend that the Direction générale of the Société de transport de Montréal ensure that AVT does not conclude contracts on behalf of partners until AVT's legal capacity to contract on behalf of partners is clarified.

Business unit's response:

[TRANSLATION] Obtain confirmation from AVT that no contracts were concluded on behalf of transit corporations. (Planned completion: June 2015)

4.2. AVT's Management Mandate

4.2.1. AVT Partners' Compliance with Rules for Awarding the Management Contract

4.2.1.A. Background and Findings

Sections 93 and 95 of the APTA provide that any contract for the supply of material or materials involving an expenditure of \$100,000 or more may be awarded only following a call for tenders issued through an advertisement published in a newspaper distributed on the territory of the corporation.

However, under paragraph 2 of section 101.1 of the APTA, a public transit authority is not required to follow the rules for awarding contracts provided for in sections 93 and following for contracts concluded with a public body within the meaning of the *Act respecting access to documents held by public bodies and the protection of personal information*.²

Monetary contributions other than seed capital are paid by the partners to AVT under mandates entrusted to AVT and are determined on the basis of the number of buses that each partner plans to purchase in the course of a year. These biannual contributions, provided for in AVT's partnership agreement as well as in the management mandate entrusted by the partners to AVT, serve to finance the duties provided for in the management mandate.

² CQLR, chapter A-2.1.

We observed that these contributions were made by partners to AVT without any form of tendering process, considering that AVT would qualify as a public body within the meaning of the *Act respecting access to documents held by public bodies and the protection of personal information*, given its legal nature.

According to some legal opinions, AVT is authorized to carry out mandates on behalf of partners without these mandates first being subjected to a tendering process.

However, a report produced by the Auditor General of the Ville de Lévis in March 2014 calls this conclusion into question.

While this observation concerns the Société de transport de Lévis, we believe that it also applies to the STM, as shown by this excerpt from the report:

[TRANSLATION] The argument advanced to explain this absorption is as follows: AVT, through its general partnership status, constitutes an outgrowth, in other words a prolongation or extension of the transit corporations that incorporated it. To summarize this argument, AVT does not constitute an entity separate from the corporations that created it.

I disagree with this interpretation. First, aside from any legal argument, this concept is difficult to imagine [...], mainly for the following reasons:

- *the STL [and the STM] has practically no control over this corporation; as a partner, it has only two votes out of fifty for the STL and ten votes out of fifty for the STM;*
.....
- *each and every partner of AVT, namely the nine transit corporations governed by the APTA, the STL [and the STM] falls under a municipal auditor general's jurisdiction, is subject to accountability requirements and a public decision-making process and, finally, is administered mostly by elected officials of its City, which is manifestly not the case with AVT.*

Second, it is worth recalling that, in 1997, a similar case was the subject of a judgment involving the Montreal airport. Without going into details, what emerges from this judgment is that an organization may be declared "public" only on the condition that the law declares it public, or that this status is derived from the law by necessity in view of its intended purpose. In other words, it is not because public bodies have decided to acquire the status of a general partnership that they acquire this status de facto.³

In view of the uncertainty surrounding the public body status attributed to AVT, we think that there is a risk that a court may conclude that AVT does not have all the necessary characteristics to qualify as a public body. If the interpretation adopted by the STM and its

³ *Rapport occasionnel 2014 à la Société de transport de Lévis*, Auditor General of Lévis, p. 30-1.

partners is not likely to stand up in court, some contracts awarded by the partners to AVT might be terminated by a court of competent jurisdiction if they are contested.

4.2.1.B. Recommendation

We recommend that the Direction générale of the Société de transport de Montréal ensure that AVT qualifies and is recognized as a public body in order to reflect the spirit of sections 93, 95 and 101.1 2 of the *Act respecting public transit authorities*.

Business unit's response:

[TRANSLATION] Pending developments in the legislative amendment proposed by the MTQ. Obtain from AVT follow-up on the legislative amendments under way. (Planned completion: May 2015)

4.2.2. Risks Associated with the Participation of the Société de Transport de Montréal in AVT

4.2.2.1. Financial Risk

4.2.2.1.A. Background and Findings

AVT's partnership agreement concluded among the nine partners contains certain financial rights and obligations for AVT and the nine partners.

In particular, the agreement provides that each partner must make a cash contribution every year as payment of AVT's obligations; the amount paid is determined in proportion to the number of buses that each partner plans to purchase during the year. The amount payable is determined every year by AVT's BD.

The agreement also provides that AVT's profit or shortfall is prorated and allocated to each partner based on each partner's contribution during the fiscal year in question. Similarly, if AVT's financial situation requires it, its treasurer might request an additional special contribution from the partners.

Moreover, according to a law firm we consulted, non-compliance with the contract awarding rules that may be applicable, according to the legal status to be defined by AVT involves certain risks, which are explained in this excerpt from a legal opinion we received:

[TRANSLATION] When a non-profit corporation or a legal person is constituted by a public body for the purpose of entrusting it with some of its duties, this corporation

might be required to comply with contract awarding rules, which are public. In concrete terms, a supplier who is dissatisfied with the awarding of a contract by mutual agreement to a competitor could support the application of tendering rules by relying on the principle that no one is supposed to do indirectly what he or she does not have the right to do directly.

We did not track down any risk analysis prepared by the STM with respect to its participation in AVT. Consequently, it appears that no formal presentation on risks faced by the STM and steps taken to mitigate them, if any, was made to the STM's BD or one of its committees.

Furthermore, we noted that the minutes of AVT's BD produced following the meeting held on June 13, 2014 report the following:

[TRANSLATION] Based on the secretaries' committee's recommendations, the presidents remarked that AVT should not accept new external contracts until the Act respecting public transit authorities is amended [...] Nonetheless, the presidents accept nonetheless that the corporation [AVT] is continuing contracts that are already under way.

We were not able to find any evidence that members of the STM's BD or one of its committees are truly aware of the risks the STM would face if any irregularities arise in connection with ongoing contracts with third parties or in connection with all completed contracts that have been awarded to third parties by AVT and for which the STM might be a stakeholder.

In our opinion, a thorough knowledge of the issues and the associated past, present and future risks is essential in order for the members of the STM's BD to be able to make informed decisions about AVT.

It is our opinion that determination of the major risks and the steps taken to mitigate them would provide reassurance to the STM officers responsible for governance concerning its participation in AVT. These governance mechanisms will be discussed in greater detail in section 4.4 of this audit report.

4.2.2.1.B. Recommendation

We recommend that the Direction générale of the Société de transport de Montréal determine the main risks associated with its participation in AVT, including those associated with the continuation of contracts already awarded to third parties by AVT, and present, to its Board of Directors or one of its committees, the steps taken to mitigate these risks.

Business unit's response:

[TRANSLATION] Evaluate the advantages, disadvantages and risks of participating in the new entity that will be created. (Planned completion: following the coming into force of the legislative amendment)

Recommend that the STM's BD create a framework for the delegation of its representative's powers to AVT's BD (i.e., monetary limitation of commitments). (Planned completion: following the coming into force of the legislative amendment)

Presentation of this governance to AVT's BD by the STM representative. (Planned completion: following the coming into force of the legislative amendment)

4.2.2.2. Risks of Losing Business Opportunities for the Société de Transport de Montréal

4.2.2.2.A. Background and Findings

[TRANSLATION] The nine transit corporations formed a general partnership for the purpose of "carrying out, for the benefit of its members, any commercial activity related to public transportation".⁴

The minutes of the meeting held on June 13, 2014 by AVT's Board of Directors indicate the following:

[TRANSLATION] Based on the secretaries' committee's recommendations, the presidents remarked that AVT should not accept new external contracts until the Act respecting public transit authorities is amended to allow the nine corporations to render services to third parties for remuneration [...] The members discuss possible options available to help corporations avoid losing contract opportunities while ensuring that AVT does not go against the will expressed by presidents.

At present, the APTA permits only four public transit corporations, including the STM, to offer, as of December 31, 2001, certain goods and services associated with public transportation for remuneration.

In February 2010, the partners made a request for a legislative amendment so that the five other corporations that formed AVT can benefit from the same privilege of being allowed to offer their services for remuneration to third parties.

⁴ Section 1.03 of AVT's partnership agreement.

Since a general partnership contains certain requirements in its operating rules, one of which is that a partner does not have the right to compete with the corporation of which it is a member, the STM's participation in AVT prevents it from offering services for remuneration to third parties and from being able to increase its non-tariff revenues until the APTA grants this same privilege to the other five partners participating in AVT.

One way in which the STM could exercise the right that is conferred upon it under the APTA would be to request an amendment to this end to the law establishing AVT.

4.2.2.2.B. Recommendation

We recommend that the Direction générale of the Société de transport de Montréal, pending a favourable outcome of the request for a legislative amendment, explore other avenues for enabling the Société de transport de Montréal to offer its services for remuneration to third parties and thereby increasing its sources of non-tariff revenues.

Business unit's response:

[TRANSLATION] Verify the appropriateness of amending the agreement to form the general partnership to ensure that AVT has no exclusive rights in this area, in view of the future legislative amendment and given the fact that, for the moment, AVT may not sell its services to third parties. (Planned completion: June 2015)

4.2.3. The Lending of Employees by the Société de Transport de Montréal to AVT

4.2.3.A. Background and Findings

Our audit revealed that there were agreements both between the unions of the STM and AVT and between the STM and AVT concerning invoicing for the use of the STM's staff by AVT.

Section 2.03 of AVT's contract provides as follows:

[TRANSLATION] [...] The Partner that lends an employee to AVT shall continue to pay the employee their salary and assume any other expenses incurred by the contract of employment associated with the lending of the employee, such as costs associated with fringe benefit programs, which amounts, salaries and other costs, shall be reimbursed by AVT to the Partner. Throughout the period in which they perform duties for AVT, employees on loan shall maintain their employment relationship with the Partner as well as the working conditions they had with the Partner, and they may return to work at any time for the Partner [...]

We noted that the interpretation of contract clauses associated with the lending of the STM's employees to AVT raises certain questions concerning both AVT and the STM.

Correspondence exchanged between AVT managers and STM managers in March 2013 and September 2014, shed light on such questions as whether or not employees on loan to AVT from the STM are included in the authorized staff in STM budgets, and whether or not they maintain their employment relationship with the STM if they stop working for AVT.

The correspondence also shows that there is no clear dividing line between the STM and AVT concerning management of STM staff working for AVT.

Consequently, even though AVT was created on April 1, 2010, questions were still being asked in September 2014 about interpretations regarding the management and invoicing of employees on loan from the STM to AVT.

4.2.3.B. Recommendation

We recommend that the Direction générale of the Société de transport de Montréal establish a clear policy or guideline regarding management of the human resources covered by the agreement between the Société de transport de Montréal and AVT in order to provide a better management framework for the managers concerned.

Business unit's response:

[TRANSLATION] Check the existing management frameworks. (Planned completion: June 2015)

4.3. Proposed Amendment to the Act Respecting Public Transit Authorities

4.3.1.A. Background and Findings

In its preamble, AVT's partnership agreement states that its chief mission is to provide services to the partners that formed it.

Nonetheless, according to the information that we gathered, the partners expressed the intention to request that AVT be allowed to provide services for remuneration to third parties (namely, clients other than the partners that created it).

One of the arguments advanced is that AVT has cutting-edge expertise that could be of interest to other public transit corporations or public bodies, either inside or outside Quebec.

At the request of the nine partners, the ATUQ sent a letter to the MTQ on February 15, 2010, to request that the APTA be amended so that it specifies and clarifies the legislative provisions that would expressly permit the nine partners to constitute a legal person that can offer services and goods to third parties for remuneration.

The APTA provides that only four public transit corporations (RTC, RTL, STL⁵ and STM) have the power to constitute a legal person to provide their corporate expertise to third parties for remuneration.

The result is that the other five partners that make up AVT cannot use it to sell their expertise to third parties. In fact, this would amount to allowing them to do indirectly what the APTA prevents them from doing directly.

The minutes of the general meeting of AVT's partners, held on March 7, 2014 show that AVT's BD wants to ensure that the legal status and role currently conferred on AVT adequately meet the partners' needs.

The minutes of the meeting of AVT's BD, held on June 13, 2013, show that the MTQ agreed to the request for an amendment to the APTA, but on the condition that the APTA provide that any entity constituted by a public transit authority be subject to the same acquisition rules as public transit corporations and to the *Act respecting access to documents held by public bodies and the protection of personal information*.

Yet the minutes of AVT bring to light the fact that the amendment, such as it is proposed, might be restrictive for the activities of the STM's commercial subsidiary, Transgesco Limited Partnership, because it does not follow the same acquisition rules as corporations governed by the APTA; instead, it is subject to the rules set out in the Agreement on Internal Trade.

A document entitled *10 ans de développement commercial [TRANSLATION: 10 Years of Commercial Development]*, produced in 2013 for the tenth anniversary of Transgesco Limited Partnership, outlines the reasons why it was created:

⁵ RTC: Réseau de transport de la Capitale.
RTL: Réseau de transport de Longueuil.
STL: Société de transport de Laval.

[TRANSLATION] On May 30, 2003, in accordance with the Act respecting public transit authorities, which, since December 31, 2001, has authorized it to offer certain goods and services associated with public transportation for remuneration, the STM adopted a resolution ratifying the creation of Transgesco Limited Partnership that allows it to:

- *make use of a corporate vehicle that gives it flexibility for its business activities;*
- *be protected from contractual and commercial liability;*
- *participate in the orientations and management of subsidiaries;*
- *keep its tax status.*⁶

Its mission is defined in this document as follows: *[TRANSLATION: "To generate revenue, other than tariff revenue, from the commercial potential, assets and resources of the Société de transport de Montréal, while staying true to the STM's mission and improving its customers' transportation experience."⁷]*

The agreement to form Transgesco Limited Partnership defines its purpose as follows:

[TRANSLATION] The purpose of the Transgesco will be to pursue activities that involve managing, administering, operating and developing various partnerships with private sector stakeholders in order to practise all commercial activities related to the enterprise of public transportation pursued by the Société de transport de Montréal and in order to offer, for remuneration, all services and all goods required for the purposes of construction, layout and repair of infrastructures, equipment and rolling stock for all modes of public transportation. In addition, Transgesco will practise any other activity that is supplementary, ancillary or intrinsic to the pursuit of these activities.

Our understanding of section 160 of the APTA is that it explicitly allows the STM itself to provide the goods and services in question or requests the constitution by articles of a legal person in order to offer them. This section stipulates that:

The Société de transport de Montréal is authorized to furnish, for remuneration, all services and goods for the purposes of the construction, laying out or repairing of infrastructures, equipment and rolling stock relating to the subway network and to their management and administration.

It may also request the enterprise registrar to constitute, by articles, a legal person having as an object the providing, for remuneration, of the goods and services referred to in the first paragraph for any mode of shared transportation [...]

This power is conferred primarily on the STM. It can choose to exercise this power through a legal person for which it has requested constitution by articles.

⁶ Transgesco Limited Partnership, *10 ans de développement commercial* [TRANSLATION: *10 YEARS OF Commercial Development*], p. 1.

⁷ *Ibid.*

Consequently, it is our opinion that the services and goods that it is authorized to provide, as well as the issues related to sources of revenue other than tariffs, are an integral part of a transit corporation's operations and that Transgesco Limited Partnership was created in order to protect the STM from contractual and commercial liability.

Moreover, according to the principles established by the Civil Code of Québec, this separate legal personality means that a contract awarded by such a legal person should not be considered a contract awarded by a transit corporation. However, there are exceptions to this general statement. Under some circumstances, as a result of proximity between two organizations it may be concluded that one is in fact the *alter ego* of the other.

Indeed, in the STM's financial statements, Transgesco Limited Partnership is designated as an entity under the STM's control. Consequently, it would be inconsistent, to say the least, for the STM to maintain that:

- AVT, a general partnership, is an extension of the STM and, as such, it could be associated with part of a legal person established in the public interest;
- Transgesco Limited Partnership is a legal person separate from the STM to the extent that it must not be subject to the same tendering rules as the STM.

Therefore, when Transgesco Limited Partnership concludes a contract for the purpose of acquiring goods and services that otherwise should be acquired by the STM for the purpose of meeting its objectives, according to these principles, it may be subject to the obligations pertaining to calls for tenders applicable to public transit corporations provided for in the APTA.

Consequently, it is our opinion that the outcome of the proposed legislative amendment will perhaps not be what some stakeholders expect. The proposed legislative amendment would simply reflect what the current legal reality of Transgesco Limited Partnership appears to be.

We believe that reasonable doubt remains that the rules for awarding contracts followed by Transgesco, which are different from those followed by the STM, cannot be consistent with its legal reality.

Under section 94 of the APTA, any contract involving an expenditure of less than \$100,000, from among the contracts referred to in the second paragraph of section 93, may be awarded only following a call for tenders, by way of written invitation, to at least two insurers, contractors or suppliers, as the case may be.

In creating Transgesco Limited Partnership, the STM entrusted to it certain commercial activities associated in particular with advertising that the STM would itself be authorized to carry out under section 160 of the APTA. In our opinion, in this context, Transgesco Limited Partnership should be subject to the same rules for awarding contracts as the STM. Instead, Transgesco Limited Partnership follows the rules of the Agreement on Internal Trade, which are less demanding since, for expenditures of less than \$100,000, contracts may be awarded by mutual agreement.

For expenditures of less than \$100,000, the creation of Transgesco Limited Partnership would allow the STM to do indirectly what the law prohibits it from doing directly.

4.3.B. Recommendation

We recommend that the Direction générale of the Société de transport de Montréal re-evaluate the interpretation adopted on the contract rules applicable to Transgesco Limited Partnership.

Business unit's response:

[TRANSLATION] Compile legal opinions and management frameworks for the awarding of contracts by Transgesco. (Planned completion: June 2015)

4.4. Governance and Accountability Reporting

4.4.1. Governance Mechanisms at the Société de Transport de Montréal

4.4.1.A. Background and Findings

In this section, we took an interest in the existence and adequacy of governance mechanisms established by the STM to monitor the activities of AVT. It may be worth noting that half the members of the STM's BD, as presented in the 2013 annual financial report, came into office in 2013.

The minutes of AVT's general meeting held on December 5, 2013 report a proposal for a presentation on AVT and its mission to be given to the boards of directors of each of its partners.

According to the information we gathered from STM managers in September 2014, this proposal was not acted on. However, AVT's director general made a presentation to the presidents of the nine partners at a meeting organized by the ATUQ on February 13, 2014.

The annual activity report produced by AVT for the year 2013 is another source of information. The AVT website also contains information on certain indicators under the "espace client" tab reserved for the nine partners.

Notwithstanding the existence of these information tools and documents, we believe that the members of the STM's BD do not have sufficient documentation on the specific nature of the STM's participation in AVT and the monitoring of its activities.

We are of the opinion that it would be appropriate for members of the STM's BD to have a "personalized" presentation portfolio at their disposal. This document could describe more specifically the main issues faced by AVT, compile a history of the main resolutions voted on by the STM's BD concerning this partnership and draw up a history of accountability reporting by AVT to management and to the STM's BD.

This presentation portfolio could also prove very useful when a new designated representative of the STM is appointed to sit on AVT's BD as well as of its general meeting of partners.

4.4.1.B. Recommendation

We recommend that the Direction générale of the Société de transport de Montréal look into the possibility of preparing and keeping up to date an AVT presentation document for stakeholders within the Société de transport de Montréal involved in the monitoring the Société de transport de Montréal's participation in AVT so that they will have a thorough knowledge of the background of the participation of the Société de transport de Montréal in AVT and as a result be able to make a meaningful evaluation of the issues involved and fully exercise their role with respect to the decisions to be made.

Business unit's response:

[TRANSLATION] Prepare a collection of documents:

- *Agreement creating AVT;*
- *Mandate entrusted to AVT;*
- *STM resolution on these documents;*
- *STM resolution on contributions;*

- STM resolution on the STM representative's powers;
- Summary of the STM representative's powers;
- And any other relevant document issued by the STM. (**Planned completion: July 2015**)

4.4.2. Accountability Reporting to the Société de Transport de Montréal

In this section, we took an interest in the existence and quality of an accountability reporting process regarding the STM's participation in AVT.

4.4.2.1. Expectations Concerning Accountability Reporting

4.4.2.1.A. Background and Findings

We examined reporting between the STM's designated representative and its director general. We also reviewed the required reporting process between the STM's BD and the STM's director general in connection with the STM's participation in AVT and its activities.

One of the major principles of governance we were particularly interested in is transparency, which is reflected in the agent's accountability and accountability reporting resulting from delegation of power by the principal. We would like to point out that elected officials' decisions rely partly on the quality of the information relayed.

The following statements, which describe one of the responsibilities of a BD, are excerpts from a report entitled *Evaluation des pratiques de gouvernance de la STM* [TRANSLATION: *Evaluation of the STM's Governance Practices*], produced by the École nationale d'administration publique in response to a mandate that the STM had given to the BD:

[TRANSLATION] For this purpose, the Board of Directors has at its disposal monitoring instruments and all the information necessary to assess the organization's performance from time to time.

.....
The director general, in return for greater responsibility, must submit to the BD a statutory report on its decisions and important issues. It must bring to the BD's attention any situation that presents a problem or is of interest to the organization.⁸

⁸ École nationale d'administration publique, *Evaluation des pratiques de gouvernance de la STM* [TRANSLATION: *Evaluation of the STM's Governance Practices*], July 2012, pp. 16 and 20.

According to the information we compiled, reporting is done orally by the representative designated by the STM to AVT in order to inform the director general of issues considered important by the designated representative.

We were also informed that accountability reporting is done by the director general of the STM to the STM's operational committee (which in 2013 became the assets monitoring committee) or to the BD when the director general considers it necessary.

Nonetheless, it is necessary to go back to May 2011 to find the most recent accountability reporting documents submitted by the STM's director general to the STM's BD in connection with AVT. At that time, the BD was informed of changes in the AVT dossier on a monthly basis.

It should be stressed, however, that contributions paid periodically by the STM to AVT are still authorized by the STM's BD.

We understand that the assets monitoring committee is a technical committee that was set up by the STM's BD to contribute to the good governance of the STM and assist it in the exercise of its functions and responsibilities, including the STM's participation in AVT.

During our audit, we noted the existence of two major challenges related to AVT's mandate. One was to broaden the activities of the initial mandate, and the other was to amend the APTA so that the nine partners can constitute a legal person that can provide services to third parties for remuneration.

However, in order for AVT to be able to offer these new activities resulting from these improvement projects, the APTA must first be amended. Amendments must also be made to both AVT's partnership agreement and to the management mandate entrusted to it by the partners.

The report produced by the École nationale d'administration publique, quoted above, specifies: *[TRANSLATION: "The first responsibility of a BD is to ensure that the corporation's mission and objectives are pursued; for a public organization, these are set out in its incorporating law."⁹]*

⁹ École nationale d'administration publique, *Evaluation des pratiques de gouvernance de la STM [TRANSLATION: Evaluation of the STM's Governance Practices]*, July 2012, p. 15.

We were unable to determine whether these important issues were reported to the STM's BD or one of its committees in connection with the STM's participation in AVT.

As mentioned in section 4.2.2.1., it was only at the meeting of AVT's BD, held on June 13, 2014, that the decision was made to stop accepting new contracts until the APTA is amended. Previously, AVT executed contracts with third parties for remuneration even though the APTA did not allow this since five partners did not have this power.

Adequate accountability reporting to the STM's administration could have enabled it to prevent AVT from overstepping its powers, in view of legislative constraints.

According to Resolution CA-2010-060, adopted by the STM's BD for the purpose of creating AVT, one of the BD's resolutions was *[TRANSLATION: "to designate the director general and the secretary of the Société de transport de Montréal to sign the contract creating the general partnership, for which they can agree to any amendment that is not incompatible with this resolution."]*

It is our understanding that any major change made to AVT's partnership agreement or to its management mandate must ultimately be approved by the STM's BD. The discussions on proposed improvements to AVT's mandate began in 2010. However, we understand that the STM's BD was not fully informed of these projects.

Informing the STM's BD right from the outset of such discussions would have provided assurance that the BD agreed with these orientations and enabled it to avoid putting effort into a project that was ultimately unlikely to be ratified by the BD.

We noted that the process by which the STM's director general reports to the STM's BD or assets monitoring committee is not formally defined according to criteria specifying what is expected of it.

Moreover, a document produced by the Direction exécutive – Affaires juridiques of the STM, in May 2014, compiles the comments and recommendations of the partners' secretaries in response to the observations of the Auditor General of the Ville de Lévis in its March 2014 report addressed to the president of the Société de transport de Lévis.

One of these recommendations, which concerns the accountability reporting section, reads as follows: *[TRANSLATION: "It might be worthwhile to provide for annual accountability reporting by the Société's designated representative with AVT regarding the use of its contribution."]*

In our opinion, a committee designated by the STM's BD could play an important role in issues related to the STM's participation in AVT while ensuring that effective methods and tools are in place to enable the STM's management to provide the BD with a formal accounting process concerning how the STM's contribution is used at AVT as well as other important issues. A supporting document specifying the criteria for accountability reporting should support this process.

Moreover, according to the STM's 2013 activity report, one of the main topics discussed during the operational committee's meetings was the indicators and highlights for the STM concerning the metro, buses and adapted transportation. A similar topic could be considered with respect to the STM's participation in AVT.

Through one of its existing committees, the STM's BD would be able to monitor the emergence of new problems stemming from the STM's participation in AVT and be made aware of and prepare for any problems it might face.

We were unable to track down any directive describing guidelines providing the STM's BD with a clear framework for monitoring issues related to the STM's participation in AVT.

In brief, our audit revealed that no reporting is done by the STM's designated representative to the director general, and the reporting done by the director general to the STM's BD or one of its committees is not carried out:

- on the basis of formal criteria;
- regularly and as part of a structured framework.

4.4.2.1.B. Recommendation

We recommend that the Direction exécutive – Affaires juridiques of the Société de transport de Montréal, because of its role in supporting executive administrations in the development of various management frameworks, in collaboration with the Direction générale of the Société de transport de Montréal, determine, for purposes of accountability and accountability reporting:

- what it expects from the Board of Directors of the Société de transport de Montréal or one of its committees concerning the monitoring of activities resulting from the Société de transport de Montréal's participation in AVT, set forth in a formal manner;
- the accountability reporting mechanisms expected from the Société de transport de Montréal's designated representative when the Board of Directors or its delegate designates or appoints a representative to sit and vote on AVT's Board of Directors and at the general meeting of AVT's partners.

Business unit's response:

[TRANSLATION] Once a year, present a report on AVT's activities by the STM representative on the committee on governance, ethics and sustainable development of the STM. (Planned completion: June 2015)

Once a year, submit the report on AVT's activities to the STM's BD. (Planned completion: July 2015)

Appointment by the BD of the STM representative within the new entity, in which a resolution must be provided for, if necessary, concerning the accountability reports requested, and guidelines for the powers of the STM representative within AVT. (Planned completion: when the new entity is created to replace the existing general partnership in response to legislative amendments under way)

4.4.2.2. Information to be kept to Promote Accountability Reporting

4.4.2.2.A. Background and Findings

One of the basic principles of sound management is that an organization must have continuity of operation, and survive those who manage it. According to this principle, the agent has an obligation to ensure the handover of power and everything that makes it possible to exercise the power entrusted to it so that the entity can pursue its activities without interruption. This is reflected in particular by adequate record-keeping and documentation.

Both AVT's partnership agreement and the management mandate entrusted by the partners to AVT provide that several management documents must be produced by AVT, including management charts, strategic plans, financial statements, annual activity reports and minutes. These documents must be presented to and approved by the BD or the meeting of AVT's partners.

As part of our audit, we asked the STM's designated representative with AVT to provide us with some of these documents for 2013 and 2014. The email exchanges show that it was not easy for the representative to obtain them. It should be pointed out that three representatives have held this position in turns since the establishment of AVT on April 1, 2010.

Even though we did finally succeed in obtaining most of them, the facts show that, if the STM's representatives who come and go to sit and vote at AVT maintain and keep up to date a permanent record of the history of relevant, comprehensive information on the fulfilment of their role as persons exercising powers delegated to them by the STM's director general, this would help smooth the transition when there is a change in the STM's representative at AVT, and it would also help promote optimal accounting provided to the STM's governance bodies.

4.4.2.2.B. Recommendation

We recommend that the Direction générale of the Société de transport de Montréal ensure that comprehensive documentation on the governance tools provided for in both AVT's partnership agreement and its management mandate is maintained and kept up to date by the designated representative of the Société de transport de Montréal.

Business unit's response:

[TRANSLATION] The actions provided for in recommendations 4.4.1.B. and 4.4.2.1.B. enabled us to meet this recommendation. (Planned completion: July 2015)

5. General Conclusion

In our opinion, the audit we conducted has cast light on issues of sufficient importance to cast reasonable doubt on the compliance of AVT's activities with the *Act respecting public transit authorities* (APTA).

We note that, since the coming into force of AVT's partnership agreement on April 1, 2010 and of its management mandate on May 1, 2010, a reflection process was undertaken concerning AVT's role and mission, and it is still ongoing.

This reflection process led to the creation in 2013, by AVT's Board of Directors (BD), of a committee on AVT's legal status and role to ensure that the legal status and the role currently granted to AVT adequately meet the partners' needs, considering the steps taken to improve AVT's mandate and obtain an amendment to the APTA authorizing the nine partners, and consequently AVT, to provide services to third parties for remuneration.

From the time it was created, AVT has offered its services to third parties for remuneration. Several contracts were awarded by AVT to third parties in violation of provisions of the APTA, which allows only four public transit corporations out of the nine partners to offer, for remuneration, certain goods and services associated with public transportation.

The minutes of AVT's BD meetings show that in the course of 2014, based on the recommendations of the secretaries' committee of the Association du transport urbain du Québec, AVT ceased in its efforts to obtain new external contracts until the APTA is amended in this respect.

We noted a legal uncertainty concerning the power of the Société de transport de Montréal (STM) to award mandates to AVT without a call for tenders since, in light of the information compiled, it must be established unequivocally that AVT has all the characteristics necessary to qualify as a public body.

During our audit, we were unable to find evidence that any formal procedure is followed to determine risks related to the STM's participation in AVT or to evaluate risks associated with the continuation of contracts already awarded to third parties by AVT.

Our findings highlight issues concerning management and invoicing of employees on loan from the STM to AVT.

Our audit also calls into question the contract rules currently applied to contracts awarded by Transgesco Limited Partnership.

In addition, our findings highlighted the lack of documents on analyses that would help identify and update the main risks associated with the STM's participation in AVT and provide measures to manage them adequately for either the current or the proposed management mandate.

Our findings underscore the fact that, in the area of governance at the STM, no structured accountability reporting process is in place for the monitoring of activities performed by the STM's designated representative with AVT. The STM's BD is not informed of the decisions made by AVT. No structured mechanism is in place to maintain and keep up to date comprehensive documentation on governance tools provided for in both the AVT contract and its management mandate.

In brief, not only must the STM fulfil the mission set out in the APTA, namely to ensure mobility of people on its territory through modes of public transportation, it must do this within a financial and legal framework that is not limited strictly to this objective.

It is our opinion that the Direction générale and the Direction exécutive – Affaires juridiques of the STM must make short-term adjustments in order to:

- clarify, in collaboration with the other partners, AVT's legal capacity to contract on behalf of the partners and clarify the extent of AVT's obligations with respect to the request for an amendment to the APTA;
- strengthen the STM's governance function to ensure monitoring of the contribution provided by the STM to AVT and enable members of the STM's BD to be informed of the decisions made by AVT.

We cannot overstate the fact that the implementation of measures taken to follow up on recommendations of this audit report will help clarify AVT's legal capacity to contract on behalf of the partners, clarify whether it is possible for AVT and the partners to conclude contracts by mutual agreement, clarify the contractual status of Transgesco Limited Partnership as well as strengthen the STM's governance and accountability reporting in connection with its participation in AVT.

Over and over, members of the STM administration impressed upon us that the STM took all the deficiencies that our audit revealed very seriously. Moreover, in this regard, before our findings were even published, we learned that measures had already been implemented to resolve the issues arising from our audit, and that other measures were being studied for the purpose of optimizing management with respect to the STM's participation in AVT.



**Report of the Auditor General
of the Ville de Montréal**
to the City Council and to the
Urban Agglomeration Council

For the Year Ended December 31, 2014

4.4

**OUTSOURCING OF
TELECOMMUNICATIONS
SERVICES (AMENDED)**



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List of Acronyms

CET	Centre d'expertise en télécommunications	ICT	Information and communication technologies
CMDB	Configuration Management DataBase	SPVM	Service de police de la Ville de Montréal
CSTI	Comité sectoriel des technologies de l'information	STI	Service des technologies de l'information
		VDM	Ville de Montréal

Preamble

This amended audit follow-up report is in response to information that had not been brought to our attention at the time of our audit, nor during validation of the first version of our report with the Service des technologies de l'information (STI). This information relates essentially to the possibility that the data transmission contract will not be terminated by the initially planned end date of November 30, 2018. We therefore agreed to amend our report to reflect this possibility and we have also made certain modifications to clarify elements of the financial framework of the telecommunications services outsourcing project.

It should be stressed, however, that the STI still disagrees with our interpretation of the costs relating to the financial framework of this outsourcing project, which we discuss in Sections 3.2 and 4.2 of this version. In short, the STI maintains that:

- the costs related to the contracts for certain services in this project, which are not attributable to wireline telephony and data transmission contracts, should be excluded from the financial framework;
- the incurred and projected costs for the data transmission contract should not be presented until the planned end date for the contract, i.e., November 30, 2018, since it estimates that the credits authorized for said contract will be used up by October 2016 and that, consequently, the contract will be automatically terminated.

We cannot subscribe to this position given the principles of governance, accountability and transparency that govern the public administration. First, it should be noted that the representations made to the authorities, both during the authorization to go to tender and during the awarding of the contracts, essentially dealt with the following aspects:

- The project was initiated as part of the RASOP,¹ which dealt with, among other things, optimization of the use of the City's telecommunications networks;
- The only exclusions to the scope of this project were related to radiocommunication (mobile communications for public safety) as well as former suburban boroughs that could join these services in open membership mode;
- The project was expected to generate savings of \$142M in investments and \$50M in telecommunications services over a span of 10 years;
- The STI agreed to finalize the financing packages required for future years with the Service des finances in order to enlighten the authorities regarding the way to recoup the expected benefits, as well as the sharing of investment and operating costs.

¹ Revue des activités, des services, des opérations et des programmes [TRANSLATION: Review of activities, services, operations and programs].

The elected officials sitting on City council and the urban agglomeration council ratified this project based on this information and, consequently, awarded a financial framework of \$100M, which was expected to cover virtually the entire telecommunications services file over a period of ten years. We are therefore of the opinion that the financial framework should encompass all the cost factors resulting from the authorities' adoption of the decision-making summary related to the telecommunications services outsourcing project.

It is indisputable, in our opinion, that the authorities must be informed of the entire situation related to the telecommunications services outsourcing project, including its financial framework. This obligation to be accountable to the elected officials is all the more important given that, up to now, they have received only very fragmented information on the situation, and the reality of the project has considerably changed from what was presented at the time of its approval in 2008. Among other things, we observed during our 2009 audit that the savings of \$50 advanced at the time the contracts for this project were awarded was unfounded.

4.4. Outsourcing of Telecommunications Services (amended)

1. Introduction

In January 2008, the urban agglomeration council of the Ville de Montréal (the City) awarded TELUS Québec (TELUS) the contract for wireline telephony (\$31M before taxes and the contingency) and for data transmission (\$42.1M before taxes and the contingency), with respective end dates of October 31, 2015 and November 30, 2018. At the same time, Bell Mobility was awarded the cellular telephony contract (\$6.6M before taxes and the contingency) for a term of four years, which has now ended. Each of the contracts also included a 20% contingency, for a total of \$16M before taxes, with \$6.2M for wireline telephony and \$8.4M for data transmission. Following the awarding of the contracts, TELUS was to take over the wireline telephony service and data transmission service before the end of 2008.

The new contracts were supposed to ensure the availability and development of high-performance networks at the lowest cost for the City. The chosen strategy was part of an outsourcing strategy according to which the City would maintain a “planner-user” responsibility while transferring the responsibility for service operationalization to the successful bidder. These contracts were expected to generate savings of \$50M over a span of 10 years, specifically through the major transfer of wireline telephony to IP telephony² and through a reduction in the projected investments.

1.1. 2009–2010 Audit

In October 2009, close to one year after the takeover provided for in the contracts, we began an audit initially aimed at evaluating the management of these outsourcing contracts and the control procedures put in place. However, we realized that the project was significantly delayed, so we focused our work on identifying the causes of these delays and dealing with the issues related to the operational phase then slated for 2011. We did not include the cellular telephony contract in our mission.

This audit had revealed deficiencies in the needs definition process, inconsistencies in the outsourcing strategy, discrepancies in the understanding of specifications and a major

² Internet Protocol.

reorganization of the staff involved in the project, both at TELUS and at the City. This resulted in several issues related to the takeover and management of the contracts, financial commitments, and achieving the objectives of the outsourcing strategy.

Our report included a total of 19 recommendations. These were mainly aimed at strengthening project governance, promoting the resolution of differences of opinion between the parties, ensuring sound accountability reporting on the achievement of the strategic and financial objectives identified in the decision-making summary issued during the awarding of the contracts, and ensuring the continuity of critical services related to City responsibilities.

1.2. 2011 Follow-up

In February 2012, we produced a first follow-up report to the audit report described previously. During this follow-up, we examined the implementation of nine recommendations that were deemed to be major given their significant impact on the achievement of strategic objectives, on the authorized financial framework, and on the continuity of telecommunications operations. These recommendations involved:

- prioritization of outsourcing objectives;
- project governance;
- the financial framework of the project;
- the contract management framework;
- the continuity and evolution of the network;
- the disaster recovery plans;
- the emergency measures plan.

At the end of our follow-up, five of the nine recommendations were still being implemented. We therefore concluded that three major issues needed to be resolved to ensure the sound management of the telecommunications services outsourcing project.

First, with respect to governance, the failure to update and prioritize strategic objectives meant that there was still a significant risk that the optimization of the telecommunications services, both from a financial and operational standpoint, could not be ensured, particularly during the preparation of the specifications at the end of the current contracts.

Also regarding governance, the fact that the Direction générale had not implemented a framework that formalized accountability reporting to authorities, combined with the difficulties associated with development of the financial framework, meant that they could only be partially informed about the use of the authorized credits.

Lastly, since the successful bidder had not yet provided all the management tools and disaster recovery plans required in the specifications, we consider that not only was the City unable to ensure compliance with the outsourcing contracts, but it was also unable to ensure the optimization of the telecommunications services.

2. Purpose and Scope of the Audit

The purpose of this second follow-up is to determine whether the issues that were not resolved after our 2011 follow-up were rectified in order to ensure compliance with the outsourcing contracts and the optimization of the telecommunications services.

More specifically, we examined the following elements:

- project governance;
- the financial framework of the project;
- the contract management framework;
- the continuity and evolution of the network;
- the disaster recovery plans.

Our audit was conducted from November 2014 to February 2015.

In order to validate the evolution of measures put in place since our last follow-up, we conducted interviews with the individuals involved in the Service des technologies de l'information (STI) and obtained the pertinent information and documents.

The results of our audit are based on the state of affairs on February 27, 2015, with the exception of the information that was shared with us by the STI and the Service des affaires juridiques in April 2015 regarding the wireline telephony and data transmission contract end dates. This information is reflected in Sections 3.2 and 4.2 of this report dealing with the financial framework. Consequently, modifications and improvements that may have been made to the project subsequently are not reflected in this report.

The conclusions that we make are based on the same evaluation criteria as those used in our 2009 audit. This said, the work conducted and the resulting report do not constitute a new audit or a final follow-up. Moreover, even though we focused particularly on the preparation of the next call for tenders for wireline telephony, for which the contract will expire in October, this aspect was not audited for the purposes of this follow-up.

3. Summary of Findings

Following our audit, the implementation status of the five recommendations considered major that we examined as part of this second follow-up is as follows:

Table 1 – Implementation Status for Major Recommendations

Recommendations	Under way	Done
4.1 Project governance – Component under the responsibility of the Direction générale	√	
4.2 Financial framework of the project	√	
4.3 Contract management framework		√
4.4 Continuity and evolution of the network		√
4.5 Disaster recovery plans		√

3.1. Project Governance

In our initial audit, we made the following recommendation:

We recommend that the Direction générale establish a governance framework that will formalize the frequency and content of reports, especially with respect to financial structure, high priority issues and meeting the objectives sought by outsourcing telecommunications services.

After completing this follow-up, we found that, despite certain measures having been taken, the parameters for formal and systematic accountability reporting in the sense of our recommendation have not yet been implemented by the Direction générale. For this reason, we still maintain this recommendation.

3.2. Financial Framework of the Project

In our initial audit, we made the following recommendation:

We recommend that the Direction des systèmes d'information of Service des immeubles et des systèmes d'information [now the STI], in conjunction with the Service des finances, complete the financial [framework]. Upon completion, it should request the assistance of the Direction générale in presenting this [framework] to the municipal authorities for approval.

After completing this follow-up, we found that a financial framework had been produced, but it had yet to be approved by the Service des finances and it had not been submitted to the

authorities to inform them of the situation. For this reason, we also maintain this recommendation, especially since the most recent financial framework, dated November 30, 2014, presents a projected deficit at the term of the project of close to \$32M with respect to the authorized amounts and that the authorized funds for the data transmission contract will likely be exhausted by October 2016, two years before its expiry. After that, the City may have to grant a new contract since it appears, based on the information that was shared with us by the STI and the Service des affaires juridiques, that the contract would be terminated upon the first of two occurrences: the funds authorized by the authorities when it was awarded run out or the date set for the contract to expire is reached.

3.3. Contract Management Framework

In our initial audit, we made the following recommendation, with regard to the elements that had not yet been finalized during our first follow-up:

We recommend that the Direction des systèmes d'information of the Service des immeubles et des systèmes d'information [now the STI] immediately develop its management framework to manage outsourcing contracts in the operational phase. Specifically, it should:

- *identify and design the controls to be instituted to ensure compliance with the service levels, security requirements and billing rules for services provided to client units.*

After completing this follow-up, we found that the tools TELUS was supposed to provide pursuant to the specifications have now been delivered and are being used. It should also be noted that, since their delivery, a “clean-up” operation was performed to optimize the use of network sockets. This operation resulted in the closing of over 1,800 sockets.

We also found that calculations of penalties related to defaults on the service levels did not generate any significant penalties. This situation stems in particular from this type of penalty being abandoned for the period prior to the signature of a release concluded in 2012 that allowed for the delivery of tools to be obtained. We should also add that discrepancies in the length of defaults between the City's data and that of TELUS had to be reconciled, and that this required the suspending of the calculations after the first attempt to impose the penalties.

Given these circumstances, we consider that the recommendation has been applied, due to the fact that the tools have been delivered and a control process has been implemented. We suggest, however, that a clean-up operation be performed at least once a year and that the calculation of penalties be restored as soon as possible.

3.4. Continuity and Evolution of the Network

In our initial audit, we made the following recommendation:

We recommend that the Direction des systèmes d'information of the Service des immeubles et des systèmes d'information [now the STI] institute a process for watching and monitoring the evolution of the network and related equipment to ensure their survivability.

One of the prerequisites to applying this recommendation was the availability of the tools mentioned in the contract management framework. We also found that the Centre d'expertise en télécommunications (CET) is aware of the problem related to the transfer of equipment at the term of the contract. The elements that were submitted to us with regard to the tools and controls related to the transition upon expiry of the contracts lead us to consider the recommendation as applied.

3.5. Disaster Recovery Plans

In our initial audit, we made the following recommendation:

We recommend that the Direction des systèmes d'information of the Service des immeubles et des systèmes d'information [now the STI] obtain from TELUS Québec the required disaster recovery plan as per the specifications and a promise that this plan will be tested annually.

After completing this follow-up, we found that the City obtained the disaster recovery tests provided for in the contracts, thus providing sufficient assurance with regard to the continuity of telecommunications operations.

4. Follow-up on Recommendations

4.1. Project Governance

4.1.A. Background and Findings

Strategic Objectives

In our 2009 audit, we found that the lack of clear and approved strategic objectives did not facilitate the resolution of issues related to telecommunications outsourcing contracts, and

did not promote the internal consistency needed to implement sound governance. We therefore felt there was a pressing need to update them, prioritize them and incorporate them into the decision-making process.

In 2011, we found that the Direction générale still had not defined or endorsed these objectives. Since most of the issues between the City and the successful bidder had been resolved, we withdrew our recommendation in this respect, as we considered it less relevant given the circumstances. We also stressed that the STI, together with the Direction générale, had to update the City's vision with regard to telecommunications, and set specific goals before drafting specifications for future calls for tender.

Since the wireline telephony contract ends in October 2015, we followed up on this issue.

It appears that, over the course of the past few months, the authorities and management of the STI have undertaken a process and initiatives to develop a vision not only for telecommunications, but also for Information and communication technologies (ICT) as a whole. The authorities created a *Bureau de la ville intelligente et numérique* and presented its strategic directions to the executive committee in January of this year. These directions will have to be taken into account in the determination of City needs for the next call for tenders in telecommunications.

For its part, the STI tabled a close-out report for the telecommunications outsourcing contracts in November 2013 and a vision of the office of tomorrow presenting various scenarios that could have a major impact on the telephony and data networks in May 2014. These scenarios were presented to the executive committee. Lastly, in October 2014, it tabled, for discussion, the strategic and operational objectives that should be taken into account in the drafting of the next specifications for the wireline telephony contract. The purpose of these objectives is to respond to the difficulties identified in the close-out report for the current contracts and the scenarios created with regard to the office of tomorrow.

Accountability Reporting

In our 2009 report, we recommended that the Direction générale implement a governance framework that would formalize the frequency and content of accountability reporting, particularly with regard to the follow-up of the financial framework, issues, risks and objectives related to the outsourced telecommunications services.

In 2011, this recommendation had still not been implemented. The migrations were still under way and the authorities preferred to wait until they were finalized to update the financial

framework and report on it. Since our last follow-up, a first comprehensive version of the financial framework was produced in July 2012. The STI also submitted the aforementioned close-out report to the Comité sectoriel des technologies de l'information (CSTI), as set out in its project management framework. Also in regard to accountability reporting, the persons in charge at the STI told us that, since 2012, they had met with the head of information technology on the executive committee three times to discuss the telecommunications contracts and renewal of the wireline telephony contract. It is their understanding that the parameters for formal and systematic accountability reporting in the sense of our recommendation have not yet been ratified by the new Direction générale and will be defined upon renewal of the wireline telephony contract.

Conclusion

The review of the City's vision with regard to ICT is ongoing and is in line with our initial recommendation. We feel that these measures are relevant and should contribute to optimizing telecommunications. Moreover, we believe it is important for quantifiable and measurable objectives to be set for the awarding of the next wireline telephony contract and for the continuation of the data transmission contract.

In terms of our recommendation on accountability reporting, we feel it is still relevant and we maintain it. It should, in fact, be included as part of the current steps being taken to solidify the City's vision regarding ICT.

4.2. Financial Framework of the Project

4.2.A. Background and Findings

The recommendation that the STI, together with the Service des finances, finalize the financial framework, inform the Direction générale of it and present it to authorities for approval has only partially been completed since our previous follow-up report.

As briefly mentioned in the previous point, it was only in July 2012, close to four years after the contracts began, that a first comprehensive version of the financial framework was produced. It was updated for the first time in the project close-out report submitted to the CSTI in November 2013, and then a second time in November 2014.

Furthermore, in response to our recommendation, the STI director sent a copy of the project close-out report to the City manager upon his departure in April 2014 to inform him about the evolution of the financial framework.

It should be noted that, in our 2011 audit follow-up report, we reported that the Service des finances did not consider it appropriate to be actively involved in the production of the financial framework, and preferred to review it once it was finalized. It had, however, confirmed to us that the financial framework would be reported on to the authorities. Yet, close to three years after being finalized, the financial framework still has not been approved by the Service des finances and still has not been presented to the authorities.

Moreover, it should be noted that, as part of our work pertaining to that follow-up audit, it had been agreed, both with the STI management at the time as well as that of the Service des finances, that the scope of the financial framework would include all the project cost factors stemming from the authorities' adoption of the decision-making summary regarding the telecommunications services outsourcing project. We should also mention that the representations made to the authorities upon the adoption of said summary stated that the only exclusions to the scope of this project were in regard to radiocommunication (mobile communications for public safety) as well as the former suburban boroughs, which could join these services in open membership mode.

However, during the takeover and management of the wireline telephony and data transmission contracts awarded to TELUS, discrepancies were found between the scope of the telecommunications outsourcing project presented in the decision-making summary, approved by the authorities, and that stated in the contracts, as well as inconsistencies in the specifications related to said contracts, and differences with regard to the understanding of the specifications. Consequently, the City had no other choice but to entrust the provision of certain services to third-party providers.

Based on the version updated in November 2014, the financial framework up until the planned end dates of the wireline telephony contracts, i.e., October 31, 2015 and November 30, 2018, respectively was as follows:

Table 2 – Financial Framework of the Telecommunications Outsourcing Project³

Expense category	Amounts granted			Incurred and projected expenses	Difference
	Bid or budget ⁴	Contingency (20%) ⁵	Authorized funds		
Wireline telephony – Expenses attributable to the TELUS contract	\$31.0M	\$6.2M	\$37.2M	\$34.0M	\$3.2M
Wireline telephony – Expenses not attributable to the TELUS contract				\$4.1M	\$(4.1M)
Subtotal	\$31.0M	\$6.2M	\$37.2M	\$38.1M	\$(0.9M)
Data transmission – Expenses attributable to the TELUS contract	\$42.1M	\$8.4M	\$50.5M	\$62.6M	\$(12.1M)
Data transmission – Expenses not attributable to the TELUS contract				\$18.2M	\$(18.2M)
Subtotal	\$42.1M	\$8.4M	\$50.5M	\$80.8M	\$(30.3M)
CET ⁶	\$22.4M		\$22.4M	\$23.1M	\$(0.7M)
TOTAL	\$95.5M	\$14.6M	\$110.1M	\$142.0M	\$(31.9M)

We note a projected total overrun of close to \$32M in relation to the authorized financial framework by the end of the project's planned duration, i.e., November 30, 2018. Of this projected total overrun, we observe, as detailed in the following sections, that \$22.3M involves expenses that are not attributable to the TELUS contracts. As for the TELUS contracts, we note that the incurred and projected expenses, taking into account the 20% contingency, amount to \$34M for wireline telephony, which is \$3.2M less than the amount authorized by the authorities for this contract. However, we note that, for data transmission, the incurred and projected expenses, taking into account the 20% contingency, total \$62.6M, which is \$12.1M more than the amount authorized by the authorities for this contract.

Furthermore, we understand from information shared with us by the STI and the Service des affaires juridiques that, from a legal standpoint, it appears that these contracts would be terminated upon the first of two possible occurrences: the funds authorized by the authorities when the contract was awarded run out or the planned expiry date of the contract is reached. The STI estimates that the authorized funds for the data transmission contract will likely run out by October 2016, two years before the expiry date originally planned for the contract. Consequently, at that point, the City could assign a new contract following a call for tenders.

³ Excluding data related to the cellular telephony component since this aspect was not part of the scope of our initial audit.

⁴ The amounts of \$31.0M\$ and 42.1M correspond respectively to the TELUS bids (before taxes) for the wireline telephony and data transmission contracts.

⁵ A contingency of 20% of the amount of the bid (before taxes) is included in each of the contracts to cover the provision of additional goods and services requested by the City.

⁶ Centre d'expertise en télécommunications.

Moreover, it could, if it deems it appropriate, consider authorizing additional funds, subject to the provisions stated in the *Cities and Towns Act* regarding this matter and related case law, to continue the contract according to the initially planned end date.

Given the circumstances and considering the representations that were made to the authorities when said contracts were awarded, it is imperative, in our opinion, that they be brought up to speed as soon as possible on the state of the telecommunications outsourcing project, including its financial framework, as well as possible scenarios, in order to decide on the strategy to use to ensure the continuity of the wireline telephony and data transmission services at the best cost and in accordance with contractual commitments.

Since this is an audit follow-up, we did not verify the accuracy of the data, calculations or hypotheses related to projected consumption that were used to set future service consumption up until expiry of the contracts. We felt it appropriate, however, to briefly comment on the primary sources of these discrepancies based on the available information.

Wireline Telephony

On the one hand, we note in Table 2 that \$3M of the \$6.2M contingency must be used to cover the incurred and projected expenses of the TELUS contract. Various elements that were not originally planned for, including call centres, were added through contract change requests as additional services or through resolution of issues. These elements alone account for \$2.2M of the \$3M of the contingency used.

On the other hand, we note that \$4.1M of the contingency was allocated to the payment of expenses that are not attributable to the TELUS contract. This cost overrun results primarily from the fact that a certain number of phone lines had to be kept with the former provider, which was not planned for when the contract was awarded to TELUS. We noted this source of discrepancy during our last follow-up.

Data Transmission

Table 2 shows an overrun of \$30.3M for incurred and projected expenses in relation to the amount granted, even though it already included a contingency of \$8.4M. As shown, \$12.1M of this overrun involves the TELUS contract while \$18.2M is related to expenses not attributable to said contract.

Two main causes explain this \$12.1M overrun related to the TELUS contract despite the use of the \$8.4M contingency. First, the specifications provided for the use of 9,610 network

sockets. During our 2011 follow-up, it was already established that 15,000 sockets would be needed whereas now the needs estimated in the financial framework are closer to 17,000 sockets. Moreover, the socket-based model recommended in the specifications that was also supposed to be applied to the data transmission network of the Service de police de la Ville de Montréal (SPVM) could not be implemented. Operational and security constraints meant that only the card-based model met the needs of the SPVM, thereby resulting in a significant cost increase.

In terms of the \$18.2M overrun not attributable to the contract awarded to TELUS, this can essentially be explained by the fact the certain data transmission links will remain with other providers for the duration of the contract due to circumstances that were not taken into account during the contract awarding process.

Conclusion

We find that the financial framework has not yet been approved by the Service des finances and that it has not yet been submitted to the authorities to inform them of its deficit position.

Consequently, and considering the situation mentioned previously, we maintain our recommendation that the STI, together with the Service des finances, finalize the financial framework, inform the Direction générale of it, and present it to the authorities together with the Direction générale.

4.3. Contract Management Framework

4.3.A. Background and Findings

The failure to implement the tools provided for in the contract resulted in our maintaining part of our 2009 recommendation. This part dealt with the STI identifying and designing controls to be implemented specifically to ensure compliance with service levels and the billing rules for the provision of services to client units.

In August 2012, in order to come to a mutual agreement on items that were still pending in the contracts and, in particular, the delivery of tools, a settlement agreement and release was signed. This document provides the list of deliverables, the delivery schedule, and the approval mechanisms that both parties had to adhere to in exchange for the release of the amount withheld. This agreement even provided for penalties in case of delays with regard to the agreed deadlines.

According to the documents submitted to us, the tools were delivered within the agreed deadlines. We did not attempt to obtain more evidence regarding the delivery dates, but we were able to ascertain that these tools are now implemented and functional. In this respect, we made the following observations with regard to control over compliance with contractual obligations pertaining to services levels as well as the billing of telecommunications services to client units.

Reports on Service Levels

The reports, which allow for calculation of penalties related to service level defaults, were produced by TELUS as of late 2012. According to the release mentioned above, all penalties for defaults, particularly those concerning service levels, were abandoned for the period prior to the signature of the agreement.

Also, by mutual agreement between the parties, it was decided to remove certain elements from the specifications for which service level defaults were to be calculated due to the fact that they were difficult to measure or were not realistic.

TELUS must produce service level reports on the following five elements:

- availability;
- delivery of services;
- performance;
- service restoration;
- general services.

We were informed that the first official penalty calculation exercise was undertaken for the period of January to March 2013. According to our information, an amount of approximately \$5,000 related to this penalty was credited by TELUS in May of the same year. We were advised, however, that this calculation had to be redone in light of the analysis of time discrepancies between the TELUS data and those of the City.

According to the persons in charge at CET, in 2013 TELUS made two changes to tools that were used to produce its service level reports. These changes caused discrepancies between the City data and those of the provider that required reconciliation. We understand that these tools had a different way of interpreting the calculation methods already determined by the two parties for the purposes of applying the penalties. The calculation of penalties was thus ceased as of that time.

Upon completion of our work, no additional penalty had been calculated, given that all the reports had to be redone to make them compliant with the interpretations that had been agreed on. The CET informed us that it intended to resume application of the calculation of penalties very shortly. Given the impending expiry of the wireline telephony contract, this work will have to be finalized by the end of October.

Billing Tool

A member of the CET team verifies billing compliance monthly, since the STI is responsible for these accounts for the entire City, whether it is an administrative unit or the STI that pays the bill. This person also monitors the use of network sockets and, as needed, notifies the units of sockets that have not been used for a certain time.

In 2014, after obtaining information on network socket activity, this individual performed a “clean-up” operation and notified the unit managers that there were sockets in their units that had not been used for a certain time. For the entire City, there were 4,585 unused sockets. According to the report obtained, requests were produced by the units after this information was sent to cancel more than 1,800 sockets.

Due to the fee schedule in effect, the City had already paid at least \$0.6M in processing fees⁷ for these network sockets. Furthermore, the cancellation of these fees results in a recurring savings of over \$0.4M a year.

Apart from the usual change requests to open or close a socket that are primarily made during moves, no cancellation request of this magnitude had been made before.

It should be noted that all unit managers received training on the tool during its deployment; however, changes in the designated employee in the unit, a vague understanding of the various elements to validate, the desire to save on socket opening and closing costs following a departure or replacement, as well as a lack of motivation to follow-up on billing may be some of the reasons that explain the delays in cancelling the sockets.

While the City now has the tools allowing it to better manage the contracts, which it acquired in 2012, it turns out that the user-payer model implemented probably did not generate all the expected benefits, on the one hand because the specifications had not provided for everything related to the tools to be implemented, and on the other because all the units are not equally watchful when it comes to billing and the use of the network sockets.

⁷ A one-time processing fee is charged to the City for each of these sockets managed by TELUS. Initially, this fee was \$500. It was adjusted to \$350 on December 1, 2012, during settlement of the financial aspects.

Conclusion

Although the effects of using the tools were not felt immediately after their implementation, we find that they have been delivered and that they are used. Given these circumstances, we therefore consider that the recommendation has been carried out. That being said, we recommend that a clean-up operation, as previously described, be performed at least once a year and that the calculation of penalties be resumed as soon as possible.

4.4. Continuity and Evolution of the Network

4.4.A. Background and Findings

The main element that had motivated us to maintain our recommendation in this regard upon completion of our follow-up report is the fact that the Configuration Management DataBase (CMDB) that was provided for in the specification has still not been delivered.

In addition, this database was supposed to enable the monitoring of network sockets as well as the evolution of the installed or replaced equipment since, based on the contracts signed in 2008, the successful bidder was to become the project manager for the management and evolution of the network.

Given these circumstances, it was necessary for the City to possess the proper monitoring tools to keep its inventory of installed and replaced equipment up to date. Moreover, the drafting of a detailed transfer protocol upon expiry of the contracts was essential to ensuring proper continuity of operations.

CET managers were given access to the CMDB. In addition, as illustrated in the previous section on the billing tool, network socket monitoring is accessible and seems to be working sufficiently, given the queries developed by the CET staff.

Lastly, with regard to the implementation of control processes to ensure continuity, the CET is aware of the issue with regard to the transfer of equipment at the end of the contract and has begun discussions with TELUS on this matter.

Conclusion

Given the elements that were submitted to us regarding the tools and controls related to transition upon contract expiry, we consider that the recommendation has been carried out.

4.5. Disaster Recover Plans

4.5.A. Background and Findings

As stated in the tender documents for the telecommunications services outsourcing contracts: [TRANSLATION] *“Bidders must demonstrate that they possess the necessary equipment and disaster recovery plans to guarantee the proper functioning of the telecommunications services required by the City 24/7, without any major interruptions.”*

Up until 2012, however, the City had not been able to obtain the disaster recovery plans meeting the requirements of the specifications and no disaster recovery test could be performed.

Our examination revealed that, since that time, three network recovery tests have been performed, i.e., for the years 2012 to 2014.

The documents obtained state that some of the tests in question cover the TELUS network infrastructure and are not made available to outside sources. The CET managers confirmed to us, however, that they were able to consult them. The tests documented in the reports deal more specifically with the City infrastructure. These tests involve automatic recovery in the event of the failure of certain equipment.

The conclusion stated in the 2014 report is as follows:

[TRANSLATION] The recovery tests planned and executed in collaboration with the Ville de Montréal (VDM) team showed that the high-availability and/or redundancy solutions in place on the VDM network, under the management of TELUS, ensure the technical continuity of the VDM data transmission network in the event of a major outage of electronic equipment or a circuit outage affecting the major sites of the VDM.

We did not conduct a detailed audit of the quality of these tests, but they appear to us to be appropriate and to have been conducted according to rigorous standards.

Conclusion

We consider that this recommendation has been carried out now that the recovery tests are conducted regularly as stipulated in the contract.

5. General Conclusion

In our 2011 follow-up, we concluded that three major issues had to be resolved to ensure the sound management of the telecommunications services outsourcing project.

Our examination revealed that the issue with regard to the implementation of control and management tools has largely been resolved. It is now a question of making the best use of such tools to optimize the use and cost of telecommunications.

The two other issues related to project governance remain present.

Although a certain amount of accountability reporting has been done with the Direction générale and the executive committee, a formal and systematic process has yet to be defined and implemented. This problem is not limited to the telecommunications outsourcing project. Apart from systematic budget monitoring, elements related to the achievement of goals and monitoring of risks are essentially performed on an ad hoc basis and the authorities receive very little information in this regard.

In addition, we found that the project's financial framework has still not been presented to the authorities. This situation is of concern to us given that it has now been established and recognized by the Service des technologies de l'information (STI) that the expected costs by the end of the planned term of the telecommunications outsourcing project, i.e., November 2018, will surpass the authorized financial framework by close to \$32M. If the data transmission contract with TELUS will be brought to term, i.e., until November 30, 2018, additional funds will have to be authorized by authorities. It appears, however, that from a legal standpoint this contract would be terminated upon the first of two possible occurrences: the funds authorized by the authorities upon awarding the contract run out or the expiry date stated in the contract documents is reached. Given that the funds for this contract will likely run out two years before initially planned expiry date of November 30, 2018, the City may have to award a new data transmission contract in fall 2016. As for the wireline telephony contract, it should come to an end on the initially planned expiry date of October 31, 2015.

Thus, given the circumstances and considering the representations made to the authorities when said contracts were awarded, it is imperative, in our opinion, that they be brought up to speed as soon as possible on the state of the telecommunications outsourcing project, including its financial framework, as well as possible scenarios, in order to decide on the strategy to use to ensure the continuity of the wireline telephony and data transmission services at the best cost and in accordance with contractual commitments.

If it is decided to award a new data transmission contract when the funds run out, i.e., in fall 2016, a minimum of one year will have to be planned to complete the bidding process, beginning no later than next fall and including the adoption of guidelines regarding telecommunications, the development of a contracting strategy, the drafting of specifications, the production of a draft contract, the launch of a call for tenders, a reasonable timeframe for the bidders to submit their offer, as well as the time required to analyze the offers received, to present the recommendation and have it approved by the authorities, all the way to the urban agglomeration council, and to ensure a smooth transition between the two contracts.

6. Comments from the Business Units Involved

6.1. Service des technologies de l'information

The Service des technologies de l'information will perform accountability reporting to City authorities by June 30, 2015, to present the current financial framework and propose a new strategic approach to telecommunications services at the City, including a project governance framework. This proposed new vision would be aimed at meeting the City's objectives with regard to telecommunications, following the expiry of the telephony contract in 2015 and expiry of the data transmission contract in 2016.

6.2. Service des finances

Scope of the Financial Framework

The auditor general defines the scope of the financial framework by considering all the cost elements linked to the telecommunications services activity:

- expenses directly attributable to the TELUS contract (and its contingencies) as presented in the decision-making summary approved by the authorities in 2008;
- expenses not attributable to the TELUS contract;
- operating expenses of the Centre d'expertise en télécommunications.

This definition of the financial framework encompasses all the costs inherent in this large-scale activity that was previously managed by the Service des technologies de l'information (IT) and funded collectively by the STI and all the City business units.

Updated Financial Framework According to the Auditor General

The state of the project's budgetary position, as established by the auditor general, is as follows:

<i>Elements of the project's financial framework deficit</i>	<i>(\$M)</i>
1. <i>Expenses attributable to the TELUS contract (and its contingencies)</i>	<i>(8.9)</i>
2. <i>Expenses not attributable to the TELUS contract</i>	<i>(22.3)</i>
3. <i>STI-CTE (management and control of service outsourcing)</i>	<i>(0.7)</i>
	<i>(31.9)</i>
<i>Deficit by element</i>	
1. <i>Wireline telephony</i>	<i>(0.9)</i>
2. <i>Data transmission</i>	<i>(30.3)</i>
3. <i>STI-CTE (management and control of service outsourcing)</i>	<i>(0.7)</i>
	<i>(31.9)</i>

In order to come to a conclusion on the reliability of the projected deficit of \$31.9M, certain premises are needed to validate it and, if applicable, establish the additional budget needs that may be required in the financial framework of the project (and of the City) for future fiscal years:

- Ensure the accuracy and completeness of the reference budget that the auditor general uses to establish the project deficit. This premise calls for particular attention on our part since past financial results seem to show that this activity related to data transmission was entirely financed from the existing budgets of all the City's units, both from the operating budget as well as the investment budget. In this regard, over the years, no unit has made any request for additional funds specifically for this activity.
- Divide this projected potential benefit between the operating and investment budgets (PTI), identifying the recurring and non-recurring elements for the operating budget.
- For the expenses directly attributable to the TELUS contract, separate the past deficit portion (prior to November 30, 2014, the end date of the auditor general's audit) and the estimated deficit for future fiscal years, up until the contract expiry in 2018.

This involves additional work to corroborate the evidence that the STI and the auditor general have with regard to the telecommunications services outsourcing project and the overall management of this important support activity for City operations.

The Service des finances has ensured its collaboration in validating the financial framework produced by the STI.

7. Comments of the Auditor General

We feel that the content of certain comments made by the Service des finances gives the impression that the financial framework of the telecommunications services outsourcing project was updated by us, or that we are the authors of the “*state of the project’s budgetary position.*” We therefore feel it is important to reiterate that, as stated in our audit follow-up report, the financial framework we are referring to was produced and updated by the Service des technologies de l’information. Since it was an audit follow-up and as reflected in our report, we did not validate the completeness of the data, the accuracy of the calculations or the hypotheses in support of the determination of incurred and projected costs.



Report of the Auditor General of the Ville de Montréal to the City Council and to the Urban Agglomeration Council

For the Year Ended December 31, 2014

4.5

INFORMATION TECHNOLOGY GOVERNANCE



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List of Acronyms

DSI	Direction des systèmes d'information	ITGI	IT Governance Institute
IT	information technology	STI	Service des technologies de l'information

4.5. Information Technology Governance

1. Introduction

The authorities of the Ville de Montréal (the City) indicated their desire to head in a new direction, towards “Montréal, Smart and Digital City,” by increasing the use of technology to better serve and inform Montreal’s citizens.

This will involve significant investments in technology infrastructure and a change in culture for those responsible for both information technology (IT) and various services to citizens, at a time when the authorities have also expressed their intent to tighten budgetary control.

In this environment, it is imperative that the City be in a position to benefit from an optimal IT management structure in order to reduce its risks and contain its development and operating costs while ensuring the quality, sustainability and security of services to citizens.

In recent years, we conducted several IT audits looking into, among other things, the development and implementation of major software packages, the security and confidentiality of data, the follow-up of outsourced contracts and the management of projects and of software licences. These reports gave rise to several recommendations often tied to the IT governance framework, for example linkage problems between client units and the service provider in managing projects, shortcomings in determining and monitoring technology and business risks and budgets for large-scale projects, major delays in implementation, dispersed accountability and insufficient reporting to enable the authorities to fulfill their responsibilities effectively.

We thought it timely, therefore, to examine the IT governance framework as a whole to assess how closely it followed best practices and, where appropriate, to recommend any necessary improvements.

2. Purpose and Scope of the Audit

The purpose of our audit was to assess IT governance at the City, more specifically to determine whether the organizational structure and management processes in place ensured that IT efficiently and effectively supported the City’s mission, strategies and objectives.

Our audit dealt primarily with the period from 2004 to 2014. We looked at various diagnostics requested by the municipal administration on different aspects of IT governance during this period. We analyzed the methodologies used and compared them with the results of our most recent audits to assess the accuracy of the diagnostic results. Finally, we updated their findings through interviews with the Service des technologies de l'information (STI) and an analysis of relevant documents.

Our audit was conducted between February and November 2014.

3. Detailed Findings and Recommendations

3.1. Scope of Information Technology Governance

3.1.A. Background and Findings

During the past decade, several professional and standards setting bodies have looked at the factors that promote optimal IT use within organizations. The IT Governance Institute (ITGI) defines "IT governance" as *"the processes that ensure the effective and efficient use of IT in enabling an organization to achieve its goals"*.

Various models have been developed by these organizations, setting out the essential conditions for sound IT governance. We summarized them into eight criteria that we used as benchmarks for our audit and conclusions:

- IT planning must be carried out regularly and integrated into the City's strategic planning;
- IT services must be aligned with the City's business processes;
- The risks associated with IT must be assessed and monitored on a regular and systematic basis. This practice should be integrated into the City's overall business risks;
- The City's organizational structure must promote clear accountability for IT planning, development, use, operations and control;
- An IT business structure must be adopted that promotes the sustainability and optimal use of infrastructure and applications;
- The IT project portfolio must be subject to integrated management in order to prioritize projects that have the greatest added value and to monitor work progress, compliance with approved budgets and achievement of objectives;
- The City must be able to rely on forward-looking management of IT competencies based on the strategic guidelines that have been adopted;

- The follow-up and reporting process should enable the authorities to assess IT's contribution to achieving the City's business objectives, controlling approved budgets and reacting to identified residual risks.

3.2. Progress Report

3.2.A. Background and Findings

Based on our interviews and the documents examined, we found that three major external studies had been commissioned by the municipal administration over the past 10 years. The purpose of these studies overall was to assess the ability of IT to achieve the City's business objectives efficiently and effectively and to determine the issues, strategies and operational measures to be put in place or improved.

The first study, conducted in 2004, noted in particular that IT management was too burdened by operational problems to assume the required strategic and tactical planning. This study also mentioned that the levels of service provided to clients were unmanaged and several functions and processes essential to sound governance were deficient, if not absent.

The second study, conducted in 2006, reiterated these shortcomings, underscoring the fact that the IT function was difficult to manage because of the City's organizational and cultural complexity, the portfolio of aging applications, the multitude of platforms, data processing in silos and the technology infrastructure's vulnerability.

Following these diagnostics, the Direction des systèmes d'information (DSI)¹ presented an IT master plan to the authorities, which was never ratified. In 2008, the departure of the manager responsible for information systems and all contract staff, following allegations of overbilling and collusion, created a state of crisis that lasted several months. Most of the recommendations that were formulated in the wake of these diagnostics had therefore still not been implemented at the start of the 2010s.

¹ The name of the Direction des systèmes d'information was changed to Service des technologies de l'information (STI).

Finally, a last study conducted in 2012 at the request of City management indicated that certain initiatives had been taken by the STI in recent years, especially in the area of project management. Consultations with the STI and the business units it serves brought up the following recurring problems:

- Clients do not feel that the STI is knowledgeable about their area of business;
- The process for delivering projects is seen as cumbersome, long and costly;
- Several projects fail to meet deadlines, scope and budgets;
- IT management is more tactical than strategic;
- Business files are not standardized and lack thoroughness;
- There is little follow-up of IT project benefits and responsibilities for this are unclear;
- IT investment programs focus mainly on administrative processes to the detriment of processes related to the delivery of services to citizens;
- Investment in IT assets is essentially through projects. There is no strategy for IT foundations;
- Although preliminary documents exist, the STI had no strategic plan or integrated and documented enterprise architecture;
- There are few performance indicators.

On the basis of the remarks gathered and the analysis of IT organization and processes, this third study concluded that the City's IT maturity level was 1.5 on a scale of 1 to 5. This level of maturity is characterized by a more reactive than strategic direction, organizational silos, more or less formal processes, embryonic management of competencies and a non-integrated heterogeneous enterprise architecture.

STI management agreed with most of these conclusions, which were tabled at the start of 2013. Since the conclusions dovetailed with several findings and recommendations that we had made in our audit reports of recent years and appeared to have gained fairly general consensus, we limited our meetings to various STI managers and specialists to gauge their views and assess the efforts currently under way. In our opinion, this diagnostic and the interviews we conducted confirm that the organizational structure and management processes in place do not ensure a sufficiently effective and efficient IT contribution to the City's mission, strategies and objectives.

At a time when authorities are looking to tighten the City's fiscal framework while enhancing IT's strategic contribution, we consider that shortcomings in the governance framework carry major risks that:

- the available resources will not be allocated to the projects that make the greatest contribution to the City's strategic directions;

- IT operating and maintenance expenses will strain resources that could be allocated to more productive and proactive activities;
- IT infrastructure and applications will quickly become outdated and require major investments;
- the City will not sufficiently benefit from technology innovations that could more efficiently and effectively improve services to citizens;
- effective service levels will not meet the needs of the business units, thus impeding their ability to achieve their own business objectives;
- IT competencies will not match future needs, which could create increased dependency on outside firms;
- the authorities will not be sufficiently informed of the IT risks to which the City is exposed and which may result in crisis situations.

The managers and specialists that we met recognized most of these risks and shared with us the directions on development and the steps under way to improve the situation. These are addressed in the following section.

3.3. Recent Initiatives and Actions Being Developed

3.3.A. Background and Findings

In recent months, the STI and City management have proposed and introduced certain mechanisms to improve IT governance and raise the level of IT maturity. Examples include:

- the implementation of more structured and tighter project management;
- the creation of the Smart and Digital City office;
- the development and presentation by STI of strategic directions for telecommunications and office automation;
- the proposed hiring of a senior enterprise architect who should, among other things, set up a modern enterprise architecture practice within an environment of organizational reform and help develop the STI's master plan;
- the development of a five-year 2014-2018 staffing plan.

We believe that these steps are headed towards better IT governance, but either they are not sufficiently detailed or it is too early for us to assess their effectiveness.

We also believe that consolidating all these initiatives will result in a formal and detailed implementation strategy.

Since IT governance is not the sole prerogative of the STI, this work should be guided by City management and involve all the City's business units. Strategic directions that meet both the authorities' objectives and the business units' needs in terms of achieving these objectives should be formally approved and communicated. These strategic directions should be reflected in an IT master plan, the development and adoption of an enterprise architecture and the formalization of relations between the STI and the business units specifying the levels of service required by the units. Finally, measures aimed at clarifying the respective responsibilities and accountability of the business units and the STI should be adopted for both budgetary control and the achievement of performance targets.

3.3.B. Recommendation

We recommend that, following consultation with the Service des technologies de l'information, City management ratify a scheduled plan specifying the timelines and responsibilities for adopting the following governance elements:

- the strategic directions for information technologies;
- the master plan of the Service des technologies de l'information;
- the information technologies enterprise architecture;
- the frameworks and structure governing relations between the Service des technologies de l'information and the business units, including the establishment of levels of service and mechanisms of accountability and budgetary control;
- the nature and frequency of reporting to the authorities, including setting and following up on performance targets and monitoring risks related to information technologies.

Business unit's response:

[TRANSLATION] Given the repeated diagnostics of the Service des TI, the first action was to appoint a new manager.

*The second priority is to adopt a new service structure and to fill the newly created positions. The new IT structure was announced on March 25, 2015, and will be deployed starting in June with a six-month transition period. Management positions have been created and posted. Other positions will be created and posted in the fall of 2015. **(Planned completion: December 2015)***

*The third priority is to adopt an enterprise architecture. The position of chief architect was created, and filled on March 30, 2015. **(Planned completion: March 2015)***

*Following the filling of key positions in the new IT structure in 2015, an action plan for IT governance will be tabled on January 31, 2016. **(Planned completion: January 2016)***

4. General Conclusion

City authorities indicated their desire to head in a new direction, towards “Montréal, Smart and Digital City,” by increasing the use of technology to better serve and inform Montreal’s citizens. In this context, it is imperative that the City be in a position to benefit from an optimal information technology (IT) management structure in order to reduce its risks and contain its development and operating costs while ensuring the quality, sustainability and security of services it provides to citizens.

We thought it timely, therefore, to examine the IT governance framework as a whole to assess how closely it followed best practices and, where appropriate, to recommend any necessary improvements.

Based on our interviews and the documents examined, we found that three major external studies had been commissioned by the municipal administration over the past 10 years. The purpose of these studies overall was to assess the ability of IT to achieve the City’s business objectives efficiently and effectively and to determine the issues, strategies and operational measures to be put in place or improved.

A last study conducted in 2012 at the request of City management underscored the fact that the City’s IT maturity level was 1.5 on a scale of 1 to 5. This level of maturity is characterized by a direction that is more reactive than strategic, organizational silos, more or less formal processes, embryonic management of competencies and a non-integrated heterogeneous enterprise architecture.

In our opinion, this analysis and the interviews we conducted confirm that the organizational structure and management processes in place do not ensure a sufficiently effective and efficient IT contribution to the City’s mission, strategies and objectives.

At a time when the authorities are looking to tighten the City’s budget framework while enhancing IT’s strategic contribution, we consider that shortcomings in the governance framework carry major risks that:

- the available resources will not be allocated to the projects that make the greatest contribution to the City’s strategic directions;
- IT operating and maintenance expenses will strain resources that could be allocated to more productive and proactive activities;
- IT infrastructure and applications will quickly become outdated and require major investments;

- the City will not sufficiently benefit from technology innovations that could more efficiently and effectively improve services to citizens;
- effective service levels will not meet the needs of the business units, thus impeding their ability to achieve their own business objectives;
- IT competencies will not match future needs, which could create increased dependency on outside firms;
- the authorities will not be sufficiently informed of the IT risks to which the City is exposed and which may result in crisis situations.

In recent months, the Service des technologies de l'information (STI) and City management have proposed and introduced certain mechanisms to improve IT governance and raise the level of IT maturity. These steps are headed towards better IT governance, but either they are not sufficiently detailed or it is too early for us to assess their effectiveness.

We believe that consolidating all these initiatives should result in a formal and detailed implementation strategy. Since IT governance is not the sole prerogative of the STI, this work should be guided by City management and involve all the City's business units. Strategic directions that meet both the authorities objectives' and the business units' needs in terms of achieving those objectives should be formally approved and communicated. These strategic directions should be reflected in an IT master plan, the development and adoption of an enterprise architecture and the formalization of relations between the STI and the business units specifying the levels of service required by the units. Finally, measures aimed at clarifying the respective responsibilities and accountability of the business units and the STI should be adopted for both budgetary control and the achievement of performance targets.

Accordingly, we have made a comprehensive recommendation for the adoption of a scheduled plan specifying the timelines and responsibilities for adopting the following governance elements:

- strategic IT directions;
- the master plan for the STI;
- IT enterprise architecture;
- management frameworks and structure governing relations between the STI and the business units, including setting the levels of service and the accountability and budgetary control mechanisms;
- the nature and frequency of reporting to the authorities, including setting and monitoring performance targets and assessing risks related to IT.

Following receipt of City management's action plan, we will schedule various audits to assess the effectiveness of the measures under way and the ability of IT to efficiently and effectively meet the City's strategic directions.



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4.6

MANAGEMENT OF PURCHASE AGREEMENTS



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List of Acronyms

SÉAO Système électronique d'appel
 d'offres

4.6. Management of Purchase Agreements

1. Introduction

The Ville de Montréal (the City) is a major stakeholder in matters of procurement, considering the diversity of the goods and services required for the daily management of its activities and its numerous business units (the boroughs and the central departments). Considering the fact that the City commits approximately \$1.7 billion each year to acquire goods and services, it is important that procurement activities take place within the scope of a structured market solicitation process that encourages an economic use of public funds.

For several years now, the City has encouraged the boroughs and the central departments to achieve economies of scale by pooling their needs and consolidating their purchase volumes. In fact, after issuing public calls for tenders, the Service de l'approvisionnement¹ signs various purchase agreements with suppliers setting out the clauses and conditions (e.g., pre-established pricing, delivery terms) that apply to the goods and services to be ordered. These agreements, negotiated for all of the City's business units, are generally for terms ranging from one to five years. They cover goods or services (general or professional) that may be required on an ongoing basis by several or all of the City's business units (e.g., office and stationery supplies, de-icing salt, fuel and chemical products, services for the transportation of valuables). As of September 30, 2014, the Service de l'approvisionnement had a total of 759 purchase agreements in effect, including 518 covering the acquisition of goods representing a potential purchase power of \$554 million over the terms of the purchase agreements in question.

In 2010, the executive committee instructed the Direction générale to restructure the procurement function, among other things. A diagnosis of the situation, intended to define corrective measures to be taken, highlighted certain possibilities for improvement, specifically:

- The business units do not all systematically use the negotiated purchase agreements for their purchases, and acquisitions made under these agreements represent only 50% of the value of the agreements estimated by the City. Therefore, the City was not fully benefitting from the savings inherent in the leverage effect of pooling purchases and was not maximizing the volume discounts that this should have provided;

¹ Formerly known as the *Direction de l'approvisionnement* reporting to the *Service de la concertation des arrondissements et des ressources matérielles*. This department now reports to the Direction générale adjointe aux services institutionnels.

- Responsibility for the tasks involved in the purchaser function was shared by too many stakeholders scattered among the City's various business units. This situation diluted the specific responsibilities and competencies of an informed purchaser with respect to market knowledge and the ability of purchasers to understand the needs of users and respond to the organization's requirements. Not to mention problems with the transmission of information, training and the provision of adequate support to all of the stakeholders;
- The computer application used (SIMON²) was not used for processing information in an optimal manner so as to ultimately provide adequate support for procurement management and decision-making.

This initiative revealed a need to implement common governance among the City's business units in order to develop strategies and processes that will ensure a consistent and economic management of acquisitions. A new business model³ for the procurement function and a revised Procurement Policy were proposed and both were adopted by City council and the urban agglomeration council on October 24 and October 27, 2011, respectively.

The City specifies the guidelines for the new business model for sharing roles and responsibilities in its revised Procurement Policy, which applies to all boroughs and central departments. It specifically states that:

- The Service de l'approvisionnement is responsible for ensuring the application of the new guidelines and providing "leadership" with respect to market solicitation. In addition to developing and implementing strategies for acquiring the common goods and services required for the operations of the City's business units, the Service de l'approvisionnement is also responsible for signing contracts and purchase agreements and implementing the mechanisms to ensure that they are honoured. The City views the use of purchase agreements as a preferred tool that will enable each business unit to make the most of grouped savings and to act consistently in its business relations with the market;
- The City's business units continue to be responsible for managing their construction or work contracts. Nevertheless, with respect to the procurement of goods and services, [TRANSLATION] "the business units have an obligation⁴ to use the purchase agreements, to ensure equity to the parties with whom the agreements have been signed, to monitor cost increases for future tenders, and to ensure the City's credibility with

² SIMON is the integrated management system used by the City to manage all processes, which integrates several functions, including procurement, finances and human resources.

³ This business model was initially adopted for a period of two years and later extended for an additional period of five years as of January 1, 2014.

⁴ Our underlining.

respect to the markets.”⁵ In this way, the business units benefit from purchase accessibility when required and the power of associating with a major purchasing community.

The Service de l’approvisionnement has taken steps to promote the increased use of purchase agreements. Specifically, in order to facilitate communication and cooperation between the business units, it implemented consumer and expert committees composed of representatives of the business units; their role is to identify new grouping possibilities, with a view to making the most of the City’s purchasing power. Moreover, it defined a certain number of projects, including a project entitled “Harmonisation et automatisation du processus d’achat.” Among other things, this project will result in the upgrading, in stages, of the procurement component integrated in the SIMON application (Advanced procurement); the first phase, concerning the purchase of goods and services, was deployed from September to December 2014.

2. Purpose and Scope of the Audit

The purpose of the audit was to evaluate the effectiveness of measures intended to ensure compliance with the Procurement Policy in terms of the obligation of the City’s business unit’s to use purchase agreements. We also wanted to evaluate the extent to which steps taken in 2014 as part of the “Harmonisation et automatisation du processus d’achat” project had served to achieve the policy’s objectives.

Although our audit, which started in October 2014, principally concerned the purchase agreements in effect in 2013 and 2014 with respect to the procurement of goods, it also took into account information we received up until January 2015. For certain aspects, data obtained prior to these years were also taken into consideration.

Our audit concentrated on the Division de l’acquisition de biens et services and the Division des pratiques d’affaires, which both report to the Service de l’approvisionnement. For certain aspects, we also questioned various administrative units within the Mercier–Hochelaga-Maisonneuve, Rosemont–La Petite-Patrie and Saint-Laurent boroughs.

⁵ Extract from the City’s Procurement Policy, October 27, 2011, pages 4 and 5.

3. Summary of Findings

Our audit allowed us to identify sectors where improvements should be made. The following sections of this audit highlight shortcomings with respect to:

- Follow-up on the use of purchase agreements and accountability (Section 4.1):
 - The Service de l’approvisionnement is not able, based on the management reports currently in its possession, to ensure the purchase agreements in effect are used and to periodically report on performance indicators;
 - The designated purchasers do not always use the purchase agreements negotiated by the Service d’approvisionnement when purchasing the goods needed for the operations of their business unit, as required by the City’s Procurement Policy.

- Mechanisms for disseminating information about purchase agreements in effect (Section 4.2):
 - The mechanisms for disseminating information about the purchase agreements do not always ensure that the various procurement stakeholders within the City’s business units are systematically informed about the existence of a purchase agreement for the goods or services to be ordered.

- The “Harmonisation et automatisation du processus d’achat” project (Section 4.3):
 - The measures implemented as part of the Advanced procurement project do not ensure that the purchase agreements are strictly honoured by all of the City’s business units;
 - The Advanced procurement project has not been the subject of official accountability intended to report on the progress of the measures deployed and to evaluate the extent to which the objectives have been achieved.

4. Detailed Findings and Recommendations

The Service de l’approvisionnement is responsible for tasks pertaining to the pooling of needs for purchases of goods and services required by the City’s business units to provide services to the citizens. By signing purchase agreements for all of the business units, the City is aiming at consistency and ease of procurement, as well as on obtaining the best prices and, ultimately, economies of scale.

The Division de l’acquisition de biens et services, which reports to the Service de l’approvisionnement, is the administrative unit that has been designated to implement procurement and market solicitation strategies and to sign purchase agreements with

suppliers. Each of the purchasing agents working for the Division de l'acquisition de biens et services is responsible for managing a certain number of purchase agreements. Their responsibilities include:

- making all of the information concerning purchase agreements in effect available to the business units and updating that information;
- making sure that the purchase agreements are honoured by the suppliers retained, specifically with respect to the prices invoiced and the appropriateness and quality of the products offered;
- making sure that the purchase agreements are honoured by the business units and identifying new group purchase opportunities that could be beneficial for the City;
- implementing the renewal process, in a timely manner, for purchase agreements that are expiring.

Employees who perform the functions of purchasing agents⁶ (hereinafter called “purchasers”) within most of the City’s boroughs and central departments are responsible for purchasing the goods and services needed for the operations of their business unit. When the goods and services required are covered by a purchase agreement with a supplier, these purchasers are required to use that agreement to make their purchases, in accordance with the City’s Procurement Policy.

The Division des pratiques d'affaires, which also reports to the Service de l'approvisionnement, provides procurement support. Specifically, it:

- makes sure that the tools available to the employees assigned to make purchases and the processes they are required to follow facilitate the acquisition of the goods and services required;
- is responsible for managing the databases contained in the SIMON application;
- monitors the information to be published in the Système électronique d'appel d'offres (SÉAO) when a public call for tenders is issued for a contract.

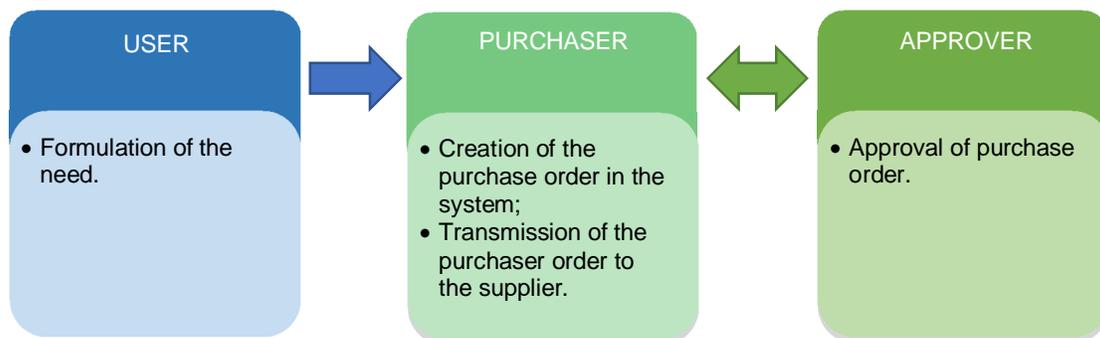
In terms of operations, in order to obtain access rights to the procurement component of the SIMON application, each of the City’s purchasers must have a license. In June 2014, the information obtained indicated that 667 City employees had a purchase license, including 88 who report to the Division de l'acquisition de biens et services of the Service de l'approvisionnement.

⁶ These employees primarily comprise secretaries, office clerks, administrative support clerks and a few procurement agents.

From the outset, we believe that it is appropriate to provide a brief description of the procurement process in effect within the City’s business units at the time of our audit, at which time the deployment of the first phase of the “Harmonisation et automatisé du processus d’achat” project, mentioned earlier, had not been completed. The first phase of this project introduced an additional step compared with the procurement process described below and changes have been made to the procurement module of the SIMON application. The impact of this project will be covered in greater detail in Section 4.3 of this report.

First, the management of the procurement process, from the requisition (creation of a purchase request) to the reception of the merchandise, is handled within each of the City’s business units using the procurement component integrated in the SIMON application. The purchasers in each of the business units are responsible for purchasing the goods and services required and creating the appropriate purchase orders in the SIMON application. The purchasing process that was in effect at the time of our audit is described in Figure 1.

Figure 1 – Procurement Process in Effect in September 2014



This purchasing process may vary from one business unit to another and even from one division to another but, generally, as shown in Diagram 1, it starts with the formulation of a need by a business unit stakeholder (the “user”), using an internal form. This purchase request, for which the expense must first have been approved by a supervisor, is received by the designated purchaser. Prior to issuing a purchase order, the purchaser must determine whether a purchase agreement exists for the product in question before searching on the market for another supplier able to provide the desired product. The purchaser then creates a purchase order by entering all of the information about the purchase in the SIMON application: product description, item code, price, desired quantity, name of the supplier and the number of the corresponding purchase agreement, if applicable. A person designated in keeping with the rules for delegating authority then approves the purchase order, after having

verified certain elements (e.g., the prior approval of the expense, the budgetary item). Finally, the purchaser sends the purchase order to the chosen supplier.

Note that it is important to enter the number of the purchase agreement, if any, corresponding to the good or service to be ordered, in the field reserved for this purpose, when creating the purchase order. Indeed, based on the link created in this manner between the purchase order and the purchase agreement, it may be possible, at a later date, to generate management reports, from the databases contained in the SIMON application, that could be used to monitor the actual quantities consumed through the negotiated purchase agreements.

In this audit report, we will first examine the extent to which the tools made available to the Service de l'approvisionnement allow it to monitor and provide an account of the use of the purchase agreements by the City's business units. Following that, we will examine the mechanisms used to disseminate information about purchase agreements in effect to the purchasers. Finally, we will evaluate the extent to which certain aspects of the "Harmonisation et automatisation du processus d'achat" project may be able to contribute to promoting the use of the purchase agreements in keeping with the Procurement Policy.

4.1. Follow-up on the Use of Purchase Agreements and Accountability

4.1.A. Background and Findings

Although the responsibilities concerning the use of purchase agreements are shared by the Service de l'approvisionnement and the City's business units, the City's Procurement Policy acknowledges that the Service de l'approvisionnement is responsible for soliciting markets and signing purchase agreements with suppliers in order to meet the community's needs. The boroughs and the central departments are required to procure the goods and services needed for their operations through the negotiated purchase agreements.

The above responsibilities assigned to the Service de l'approvisionnement require the implementation of follow-up and monitoring mechanisms and tools, and even the establishment of performance indicators for periodically determining whether the procurement strategies implemented are effective and identifying potential sources for improvements, specifically with respect to the use of purchase agreements in effect.

Ultimately, accountability mechanisms must be implemented with respect to the results obtained in order to be able to compare them to the objectives established and provide support for making informed decisions.

That said, our audit initially focused on an examination of the tools used by the Service de l’approvisionnement to evaluate the extent to which purchase agreements were effectively used by the business units. We also wanted to assess the scope of the related accountability mechanisms.

In a more targeted manner, we then sought to evaluate the extent to which certain boroughs used purchase agreements in effect for managing their operations. To do that, we selected the three following boroughs: Mercier–Hochelaga-Maisonneuve, Rosemont–La Petite-Patrie and Saint-Laurent. Moreover, we also selected a sample of three categories of goods likely to be used by most of the City’s business units, namely: “asphalt blends” used for road work, “chlorine” used to disinfect the water in public swimming pools, and “office supplies and stationery” required on a routine basis. For these three types of goods, we were able to identify 11 purchase agreements that were in effect in 2013 and 10 in 2014 (see Table 1).

Table 1 – Number of Purchase Agreements in Effect in 2013 and 2014 for the Goods Sampled

	2013	2014 ^[a]
Asphalt blends	4	3
Chlorine	5	5
Office supplies and stationery	2	2
Total	11	10

^[a] The purchase agreements for office supplies and stationery were the same in 2013 and 2014. For the other goods in our selection, however, the purchase agreements for 2014 were new agreements, compared with those for 2013.

First, we were informed that the Service de l’approvisionnement has management reports for analyzing the goods and services consumed by the City’s business units through purchase agreements. Some of these reports are standardized and can be generated in real time from the SIMON application whereas other specific reports can be generated upon request from the “Bureau d’affaires”⁷ database.

In order to evaluate the extent to which the purchase agreements targeted by our audit were used by the three boroughs selected, we initially wanted to examine the information provided in the standardized management reports generated by the SIMON application. However, staff at the Division de l’acquisition de biens et services warned us that these reports were of little use to them since they do not provide a faithful and complete portrait of the actual amounts consumed by the business units through purchase agreements. In the opinion of the people

⁷ The *Bureau d’affaires* is a computerized warehouse database that contains the data from the SIMON application. This database produces tailor-made management and operation reports based on the user’s specific needs. (Source: Service de l’approvisionnement intranet site)

we met, the incomplete nature of the portrait provided by these reports is the result of a lack of thoroughness with respect to entering the data in the SIMON application, namely when the business unit purchasers enter the purchase orders. Indeed, it appears that, when a purchase order is entered, the field reserved for entering the purchase agreement number is not mandatory and might therefore be left blank by the user. As a result, since the goods or services to be ordered are not systematically linked to the corresponding purchase agreements, it becomes very difficult to identify all of the purchases made by means of negotiated purchase agreements, thereby reducing the usefulness of the management reports generated. In this respect, we noticed that the standardized reports produced by the SIMON application, which can be accessed on the Service de l'approvisionnement intranet site, clearly state: [TRANSLATION] "The completeness of the information provided in this report depends on the correct use of SIMON in terms of linking the purchase orders to the purchase agreements."

Not only are the purchase orders not systematically linked to a purchase agreement, we were also informed that, in other cases, they are linked incorrectly to agreements to which they do not correspond, which also affects the reliability of the reports produced.

We then tried to obtain, from the Division des pratiques d'affaires, a more reliable data extraction illustrating the purchases made in 2013 and 2014 using the selected purchase agreements. However, the representatives we met were able to confirm only that, given the problem concerning the recording of the purchase orders, it would be impossible to obtain an exhaustive and reliable portrait of purchases made using purchase agreements.

Moreover, the representatives we met from that same division informed us that data extractions generated from the database with respect to the use of purchase agreements include data fields which they are unable to precisely define and which are therefore open to interpretation. For example, there are fields which are apparently the result of calculations programmed in the system, with which the representatives of the Division des pratiques d'affaires are not familiar. As a result, it is at the very least difficult to produce management reports that respond perfectly to the users' needs.

Given the lack of reliable management tools, it is very difficult for the Service de l'approvisionnement to monitor the purchases made by the business units, whether made through purchase agreements or otherwise. The shortcomings identified above inevitably affect the reliability of the reports produced and most certainly have an impact on the analyses and decisions that may result. This is an even greater concern since the Division des pratiques d'affaires has stated that it regularly produces reports at the request of managers.

A division manager we met from the Service de l'approvisionnement informed us that, under the circumstances, when he has to respond to specific requests from senior management, he has no choice but to complete the portrait by making a manual search and compilation of the purchase transactions concerning a particular good. Although it is very labour intensive and is not necessarily exhaustive, this search through the thousands of transactions entered in the SIMON application is, in many cases, the only means of allowing stakeholders to prepare a consumer portrait that is more representative of reality. Nevertheless, one of the limits of the reliability of the portrait established in this way is the fact that the search is based primarily on the description of the goods entered when the purchase order was created, and that description is not always sufficiently clear or detailed and is occasionally inadequate.

Considering the lack of reliability of the management reports that can be generated by the SIMON application, in order to be able to monitor the purchase agreements for which they are responsible, certain procurement agents with the Division de l'acquisition de biens et services have said that they prefer to use consumer reports provided by suppliers. In certain respects, these consumer reports certainly are an accessory means that can be used to globally monitor the evolution of the purchases made through a specific purchase agreement, or even to determine the nature of the goods most frequently purchased by the business units through such an agreement. Using this means alone, however, leaves the number of purchases made outside of the agreements by the business units unknown. In our opinion, it is imperative for the Service de l'approvisionnement to have this information in order to be able to search for the reasons for such purchases and take appropriate action (e.g., the products covered by the purchase agreement do not meet the users' needs, poor knowledge of existing purchase agreements, lack of a purchase agreement for a recurrent need on the part of the business units).

Based on these findings and in order to determine whether the three boroughs targeted by our audit use the purchase agreements covering the three goods selected (asphalt blends, chlorine and office supplies and stationery), we extracted the data from the SIMON application. The extraction was intended to identify, for 2013 and 2014, all of the purchases entered in the City's books with respect to the accounting expenditure items (expenditure items and sub-items) corresponding specifically to the three types of goods in our sample. The objective was to determine the proportion in which the purchases recorded as expenditures for these goods had been made from suppliers other than those with which the City had signed a purchase agreement.

First, this procedure revealed certain shortcomings concerning the transactions recorded in the books. Specifically, we noted that the expenditure related to the purchases made was not

always attributed to the appropriate accounting expenditure item, in keeping with the City's accounting plan. For example, we noted that:

- expenditures pertaining to the purchase of furniture were recorded under "office supplies and stationery";
- the purchase of chlorine was recorded under "maintenance products" instead of being recorded under "chemical products – chlorine", provided specifically for that purpose.

Moreover, we noted not only that the accounting entries were not consistent from one business unit to another for the same type of purchase but also that certain business units use general accounts to record expenditures of various natures. Under these circumstances, it would have been too labour intensive to isolate the transactions for purchases concerning the goods targeted by our audit since, as we indicated earlier, the transactions recorded do not always provide sufficient details for us to be able to accurately establish what was purchased. That said, the results of the data extraction we performed were not conclusive.

Nevertheless, the Service de l'approvisionnement representatives we met stated that they are aware of various situations that have occurred, enabling them to identify deviations on the part of certain business units. The business units, on the other hand, offer the following justifications for occasionally making their purchases outside the agreements:

- The agreements signed do not always meet their needs and they legitimately purchase their goods from a supplier with which the City has not signed an agreement;
- The shipping times are too lengthy in situations that require emergency purchases.

All in all, given the inherent shortcomings in the entry of the data in the SIMON application, we cannot but notice that the Service de l'approvisionnement was unable to provide an exhaustive and reliable portrait illustrating the extent to which the City's business units use the negotiated purchase agreements to make their purchases. Moreover, with respect to the use of the negotiated purchase agreements, we noted that no performance indicator had been provided and that no accountability mechanism is regularly used to evaluate, as should be done, the effectiveness of the procurement strategies implemented. Based on the information obtained from the individuals we met, it appears that accounting is performed in a more informal manner or in response to specific requests.

Under the circumstances, we believe that, on the one hand, it might be appropriate to evaluate the possibility of making the necessary modifications to the SIMON application so as to make it mandatory, when recording a purchase order, to enter information in the field provided for the number of the corresponding purchase agreement (no optional field). For example, in the event that no purchase agreement has been negotiated for the good to be ordered, the system could include a requirement to enter a code or note indicating that fact.

This would at the very least limit the occurrence of situations in which an empty field is attributable to an oversight on the part of the purchaser. In this manner, when data are extracted from the system, it would be easier for the Service de l’approvisionnement to isolate the cases in which the business units entered information indicating a purchase made outside of the agreements and undertake an examination to identify the reasons justifying the result obtained (e.g., the existing agreement does not meet a need, willing deviation on the part of the purchaser).

On the other hand, we are also of the opinion that the Service de l’approvisionnement and each of the business units must take the necessary measures to remind the procurement agents of their obligation, under the City’s Procurement Policy to use the negotiated purchase agreements and to be more vigilant in terms of recording the expenditure under the appropriate item, in keeping with the City’s accounting plan.

4.1.B. Recommendation

We recommend that the Service de l’approvisionnement take the necessary measures to provide exhaustive and reliable management reports so that it can ensure its ability to monitor whether purchase agreements in effect are honoured and periodically report on performance indicators it has established. Specifically, it should:

- **assess the possibility of making modifications to the SIMON application in order to make it mandatory to enter information in the field provided for the number of the purchase agreement concerned when a purchase order is created;**
- **clarify the meaning of the data fields provided in the SIMON application database so as to avoid an incorrect interpretation of the information provided in the management reports produced and to be able to generate reports that adequately respond to the needs of the managers.**

Business unit’s response:

[TRANSLATION] A change request is being studied to evaluate the possibility of making changes to the SIMON application in order to make it mandatory to enter information in the field provided for the number of the corresponding purchase agreement when creating a purchase order.

*This change request will make it possible to enter the agreement number, if it is available, or to indicate one of two other options: there is no agreement or the unit requesting the goods or services does not feel that the purchase agreement is suitable for their occasional needs. **(Planned completion: June 2016)***

A review of the “Bureau d’affaires” database reports was initiated at the end of 2014. The Division des pratiques d’affaires started to review certain priority reports

pertaining to goods consumed under the purchase agreements, including the clarification of certain fields. Moreover, the quality of the information depends on the accuracy of the information entered in the system. A major training effort was made in 2014 and is continuing in 2015. Furthermore, structural changes are planned for 2015 to reinforce the training provided to users. When they are more familiar with the system, users will be better prepared to enter the appropriate information in the system. **(Planned completion: June 2016)**

4.1.C. Recommendation

We recommend that the Service de l'approvisionnement and the Mercier–Hochelaga-Maisonneuve, Rosemont–La Petite-Patrie and Saint-Laurent boroughs take the necessary measures to remind all of the employees about the importance of:

- purchasing goods and services through purchase agreements in effect and taking care to systematically link the purchase orders to the corresponding purchase agreements, so that the City can make use of the benefits inherent in using purchase agreements, in keeping with the Procurement Policy adopted;
- allocating the purchase to the appropriate expenditure item, in keeping with the City's accounting plan, so as to ensure a faithful representation of the financial results, to be able to analyze the actual amounts consumed by type of good and cost increases.

Business units' responses:

SERVICE DE L'APPROVISIONNEMENT

[TRANSLATION] Prepare, in collaboration with Mercier–Hochelaga-Maisonneuve, Rosemont–La Petite-Patrie and Saint-Laurent boroughs, a communication plan to reinforce:

- the appropriate use of the business procedures for purchasing goods or services through purchase agreements in effect, if any are available, and for making sure that purchase orders are systematically linked to the corresponding purchase agreements.

This initiative must include reinforcing the correct use of the purchase categories so that actual consumption can be analyzed according to the type of good.

- In collaboration with the Service des finances and the Direction de la comptabilité et des informations financières, reinforce the allocation of purchases to the appropriate expense items, in keeping with the City's accounting plan, so as to ensure the most reliable representation possible of the financial results and an analysis of cost increases. **(Planned completion: December 2015)**

MERCIER–HOCHELAGA-MAISONNEUVE BOROUGH

[TRANSLATION] A note will be sent, by the end of April, to all borough employees concerned, to ensure that:

- they purchase goods or services through the purchase agreements in effect and to make sure they systematically link the purchase orders to the corresponding purchase agreements so that the City can derive the greatest benefit from using purchase agreements, in keeping with the procurement policy adopted;
- they allocate the purchase to the appropriate expense item, in keeping with the City's accounting plan, so as to provide a faithful representation of the financial results, provide for an analysis of actual consumption by type of good and provide for an analysis of cost increases.

Follow-up will be ensured. **(Planned completion: May 2015)**

ROSEMONT–LA PETITE-PATRIE BOROUGH

[TRANSLATION] Drafting and distribution of an internal memo to all of the employees concerned by the problem (buyers, foremen and first-line managers). **(Planned completion: April 2015)**

Organization of an awareness-raising meeting with the administrative support staff and the section manager for general support. **(Planned completion: May 2015)**

Random monitoring on a quarterly basis using the list of recently approved purchase orders to identify issues and ensure adequate support and training for employees assigned to purchases. **(Planned completion: May 2015)**

SAINT-LAURENT BOROUGH

[TRANSLATION] We will identify the individuals asked to make purchases, we will transmit a message from the Division des ressources financières et matérielles, we will post a message on the Intranet and we will raise the awareness of the teams.

The manager of the Services administratifs will inform the managers at the management table. They will meet with their division managers, who will, in turn, meet with their respective teams. **(Planned completion: May 2015)**

On a different note, these shortcomings noticed with respect to the failure to link a purchase order with the corresponding purchase agreement and to errors in the attribution of the expenditure to the appropriate accounting item also led us to question the repercussions they might have with respect to the regulatory obligations of the Service de l'approvisionnement to disclose all of the information concerning the contract awarded to the supplier of the purchase agreement to the SÉAO.

In fact, as of April 1, 2011, new provisions were included in the *Cities and Towns Act*⁸ with respect to the City's obligation to publish a list of all contracts entailing an expense of \$25,000 or more on the SÉAO site approved by the Government of Quebec. Moreover, with respect to the information concerning, among other things, the purpose and the price of the contract, the name of the party receiving the contract and the expected amount of the expense, the City has an obligation to publish, with the SÉAO, the total amount of the actual expense, once the contract has been fulfilled.

As previously mentioned, the Division des pratiques d'affaires of the Service de l'approvisionnement is the administrative unit responsible for publishing the information required with the SÉAO. In order to validate the conformity and completeness of the information to be published, we targeted, in our sample, the purchase agreements signed after April 2011 that expired before December 31, 2014. We thus identified four purchase agreements concerning "asphalt blends" and five purchase agreements for "chlorine," for a total of nine purchase agreements.

Our examination of the SÉAO revealed that the information concerning the calls for tenders for each of the nine contracts underlying the purchase agreements signed were in fact published with the SÉAO, but that the actual expenses for the "chlorine" contracts were not disclosed. In our opinion, the Service de l'approvisionnement must take the necessary measures to comply with its legislative requirements.

4.1.D. Recommendation

We recommend that, in order to comply with its legislative obligations, the Service de l'approvisionnement take the required measures to be able to publish in the Système électronique d'appel d'offres the amount of the actual expenditures incurred at the end of the underlying contracts for the purchase agreements.

Business unit's response:

[TRANSLATION] All of the business units that make purchases through the purchase agreements must compile statistics on their consumption so as to be able to consolidate this information (at present, it is not possible to compile this information directly from the integrated system). A document will be prepared and distributed to the business units so that they know exactly what information to compile and to whom it should be sent. The Service de l'approvisionnement will then consolidate the information and publish it in the SÉAO. (Planned completion: January 2016)

⁸ RLRQ, Chapter C-19, Section 477.5.

The individual responsible for the purchase agreement will follow up with the business units that use the agreement in order to obtain consumer information from each business unit. (Planned completion: January 2016)

An annual verification will be made by the Division des pratiques d'affaires in order to determine the contracts whose final expense is not compiled (once the purchase agreement has expired). This information will be given to the Division des acquisitions so that it can ensure adequate follow-up. (Planned completion: January 2016)

4.2. Mechanism for Disseminating Information About Purchase Agreements in Effect

In order to promote the achievement of the City's Procurement Policy objectives, specifically with respect to making the most of the savings generated by the consolidation of purchases, it is understood that the Service de l'approvisionnement must implement all of the necessary measures so that the stakeholders concerned within the various business units are systematically informed of the existence of the purchase agreements in effect.

Within the Service de l'approvisionnement, the procurement agents who report to the Division de l'acquisition de biens et services are responsible for disseminating information about purchase agreements. They currently use two means to do this: the distribution of information newsletters, called "Info-achats" and a computerized search engine that can be used to identify purchase agreements in effect, available on the Service de l'approvisionnement intranet site.

As part of our audit, we sought to evaluate the extent to which the designated purchasers within the selected boroughs were adequately informed of the existence of purchase agreements. First, we examined the "Info-achats" newsletters distributed; following that, we examined the extent to which the search engine enables the business units to determine whether there is a purchase agreement that covers the goods or services to be ordered.

4.2.1. "Info-achats" Newsletters

4.2.1.A. Background and Findings

According to the representative we met from the Service de l'approvisionnement, all of the stakeholders involved in the purchasing process are expected to be systematically informed, through the distribution of "Info-achats" newsletters, when a new purchase agreement goes into effect. To do this, the Division de l'acquisition de biens et services procurement agents must complete a distribution request form for each new purchase agreement and submit it to the person responsible for the email broadcast of "Info-achats" newsletters.

In the case of the purchase agreements in effect in 2014 for the goods included in our selection, our audit entailed determining whether an “Info-achats” newsletter had been distributed. Our audit revealed that “Info-achats” newsletters were distributed for all of the purchase agreements covering “asphalt blends” and “office supplies and stationery.” Of the five purchase agreements in effect in 2014 for “chlorine,” however, we were able to track down the distribution of an “Info-achats” newsletter for only one. In response to this, the procurement agent responsible for these agreements stated that the distribution of the newsletter is not systematically requested for each new purchase agreement signed. In our opinion, it is imperative for all of the stakeholders concerned in the City’s business units to be systematically informed of the new agreements signed in order to attenuate the risk of purchases being made outside the agreements. A purchaser we met from the Mercier–Hochelaga-Maisonneuve borough confirmed that this risk is real: in 2013, a portion of the “chlorine” supplies was apparently purchased outside the agreements because he did not know that a new purchase agreement had been negotiated.

Considering this finding, we extended our analysis to all of the 92 purchase agreements for goods and services that went into effect in 2014. We found that information was provided for only 31 of those purchase agreements by means of 18 “Info-achats” newsletters that were broadcast throughout the year. We can only conclude that, despite the fact that the Service de l’approvisionnement expects its procurement agents to ensure that information about the new purchase agreements signed is broadcast by means of the “Info-achats” newsletters, this is not done systematically. In our opinion, measures must be taken to correct this, particularly when these findings are considered alongside others that highlight weaknesses in the dissemination of information about purchase agreements to users in the City’s various business units.

Indeed, as part of our audit, we looked for assurances that, when the “Info-achats” newsletters are broadcast they are received by all of the stakeholders concerned. In this respect, the people we met from the Service de l’approvisionnement informed us that the 25 existing distribution lists (lists of email addresses), including the one used for broadcasting the “Info-achats” newsletters, were partially out-dated or incomplete. Also, although this situation is known, it appears that no corrective measures had been taken at the time of our audit to update these distribution lists.

Moreover, we were informed that, in order to be included on the distribution list and receive the “Info-achats” newsletters, users in question had to voluntarily subscribe and provide their email address by means of the Service de l’approvisionnement intranet site. In the event that someone refuses to subscribe or in the case of a new employee who is unfamiliar with the procedure, this approach inevitably creates a risk that the key people within the business

units are not informed of the existence of the purchase agreements in effect. In this respect, we also noted that two purchasers for the Mercier–Hochelaga-Maisonneuve borough did not receive the “Info-achats” newsletters because they were not included in the distribution list. They told us that they were not aware of such a procedure for subscribing to “Info-achats” newsletters. Also, a stakeholder from the Saint-Laurent borough confirmed that, although he knew about the broadcast of the “Info-achats” newsletters, he did not see the need to subscribe.

Other comments received also highlight the fact that certain purchasers within the business units do not necessarily read the “Info-achats” newsletters, either because they do not think they are important or because they do not think the content concerns them. For example, it is legitimate to think that a purchaser within a sports and leisure business unit does not feel affected by a purchase agreement that covers the purchase of “asphalt blends.” For this reason, one of the procurement agents we met from the Division de l’acquisition de biens et services mentioned that he communicates directly by email with those in charge of the business units affected to make sure that they are aware of the new purchase agreements signed. The manager of the Division de l’acquisition de biens et services, on the other hand, maintains that such a “voluntary” practice cannot be expected on the part of all the procurement agents since it is not easy to maintain an up-to-date distribution list as a result of personnel turnover in the business units and the large number of types of goods covered by purchase agreements. For this reason a generalized distribution to all stakeholders concerned within the City is preferred.

Nevertheless, all of these findings raise questions about the effectiveness of the distribution mechanisms currently implemented by the Service de l’approvisionnement to promote the acquisition of the goods and services needed for the operations of the business units by means of the purchase agreements, in keeping with the City’s Procurement Policy.

Under the circumstances, we are of the opinion that the Service de l’approvisionnement should re-evaluate its approach. Specifically, we believe that the targeted distribution of the “Info-achats” newsletters to the people directly concerned (e.g., those who hold a purchase license for the SIMON application to acquire goods and services covered by a purchase agreement) should be an option that should be reconsidered, particularly for the purchase agreements covering specific products (e.g., “chlorine”) and those for which consumption is not generalized (e.g., “office supplies and stationery”). This would help, at least partially, to attenuate the risk that the stakeholders concerned within the various business units lose interest in the “Info-achats” newsletters broadcast as they already receive a vast amount of information by email.

4.2.1.B. Recommendation

We recommend that the Service de l'approvisionnement make the necessary corrections to the process for broadcasting "Info-achats" newsletters, specifically by:

- re-evaluating its approach so that the broadcast of the "Info-achats" newsletters is more targeted and focused on the stakeholders within the business units that are directly concerned by the signing of a new purchase agreement;
- issuing a directive to ensure that each of its purchasing agents systematically distributes an "Info-achats" newsletter after a new purchase agreement is signed, as required;
- periodically making sure that the distribution lists for the "Info-achats" newsletter are complete and up-to-date;
- reminding the people responsible for purchases within the various business units about the importance of signing up for the "Info-achats" newsletter distribution lists;

in order to make sure to reach all of the stakeholders concerned, at the appropriate time, when a new purchase agreement is signed.

Business unit's response:

[TRANSLATION] Design and deploy business procedures to achieve maturity in the management of purchase agreements, particularly with respect to communication with clients throughout the term of a purchase agreement. (Planned completion: June 2016)

A directive may be issued to reinforce the use of the procedures, if management of the Service de l'approvisionnement considers this pertinent. (Planned completion: June 2016)

Reinforce the communication activities with a communications manager who will identify and monitor the distribution lists with the target audience concerned (stakeholders within the business units directly concerned by any new purchase agreement). (Planned completion: June 2016)

Insist, to those who are responsible for purchases within the various business units, on the importance of signing up for the "Info-achats" newsletter distribution lists. (Planned completion: June 2016)

4.2.1.C. Recommendation

We recommend that the Mercier–Hochelaga-Maisonneuve, Rosemont–La Petite-Patrie and Saint-Laurent boroughs make sure that all of the stakeholders concerned within their business unit:

- are signed up for the “Info-achats” newsletter distribution lists;
- read all of the “Info-achats” newsletters sent to them by the Service de l’approvisionnement;

in order to promote the use of the purchase agreements in effect, in keeping with the City’s Procurement Policy.

Business units’ responses:

MERCIER–HOCHELAGA-MAISONNEUVE BOROUGH

[TRANSLATION] A memo will be distributed by the end of April to all borough employees concerned to ensure that they:

- *are signed up for the “Info-achats” newsletter distribution lists;*
- *read all of the “Info-achats” newsletters that are sent to them by the Service de l’approvisionnement;*

in order to promote the acquisition of goods and services through the purchase agreements in effect, in keeping with the requirements of the City’s Procurement policy.

Follow-up will be ensured. (Planned completion: May 2015)

ROSEMONT–LA PETITE-PATRIE BOROUGH

[TRANSLATION] Systematic registration of all stakeholders concerned (buyers, foremen and first-line managers) for the “Info-achats” newsletter distribution list. This will be done by the Direction des relations avec les citoyens, des Services administratifs et du greffe for all of the borough’s business units. (Planned completion: April 2015)

Distribution of an internal memo to the stakeholders concerned to stress the importance of taking note of developments concerning purchase agreements. (Planned completion: April 2015)

SAINT-LAURENT BOROUGH

[TRANSLATION] We will identify the stakeholders, we will transmit a message from the Division des ressources financières et matérielles, we will post the message on the Intranet, we will raise awareness among the teams. The manager of the Services administratifs will inform the managers at the management table. They will meet the division managers, who will, in turn, meet with their respective teams. (Planned completion: May 2015)

4.2.2. Search Engine

4.2.2.A. Background and Findings

As another means for informing users about the existence of the purchase agreements in effect, the Service de l’approvisionnement makes a search engine that can be accessed from its intranet site available to the City’s business units. All of the stakeholders in the boroughs and the central departments have access to it.

This tool can be used to search:

- by key word (e.g., Chlorine, Asphalt blends or Office supplies and stationery);
- by product category (e.g., Energy and chemical products, Public works and outdoor work, Office supplies or Stationery and printing);
- by entering the number of the purchase agreement.

The search produces a list of the purchase agreements in effect for the goods and services to be ordered.

In order to evaluate the extent to which this search engine allows stakeholders to find the purchase agreements in effect that correspond to their needs, we used keywords to search for purchase agreements concerning the goods covered by our audit, namely: “chlorine,” “asphalt blends” and “office supplies and stationery.” We expected the searches made to produce a list of the 10 agreements in effect in 2014 which we knew about. As shown in Table 2, the search engine indicated that there was no agreement.

Table 2 – Key Word Identification in the Search Engine of Purchase Agreements in Effect in 2014 for the Goods Sampled

	Asphalt blends	Chlorine	Office suppliers and stationery
Actual number of purchase agreements in effect in 2014 ^[a]	3	5	2
Search engine result	0	0	0

^[a] Information from an inventory provided by the Service de l’approvisionnement.

The people we met from the Service de l’approvisionnement informed us that the search engine is not very user friendly and that it is even sometimes difficult to find a purchase agreement using this tool if the search is launched using a keyword that is not in the title of the agreement. In fact, the titles of the purchase agreements, as created by the Division de l’acquisition de biens et services procurement agents, determine the ease with which the agreement can be subsequently located by the search engine. For example, the title of one

of the purchase agreements for chlorine is as follows: [TRANSLATION] “Bulk supply and delivery of 12% sodium hydrochloride.” Thus, for a search using the word “chlorine,” the search engine indicates that no agreement has been found. Under the circumstances, we can only conclude that an unsuccessful search by the search engine could clearly lead the purchaser to conclude that there is no purchase agreement for the good or service in question, when that is not the case.

Given the considerable variety of goods and services that may be required during the normal course of daily activities, the search engine is an essential tool for the business units for quickly determining whether there is an agreement. This search tool must be user friendly and provide accurate information in order to promote the use of the purchase agreements negotiated for the acquisition of goods and services, as recommended by the City in its Procurement Policy.

4.2.2.B. Recommendation

We recommend that the Service de l’approvisionnement take the necessary measures to ensure that the search engine made available to the City’s business units can be used to easily identify the purchase agreements in effect, so as to promote greater use of the agreements by all of the business units and enable the City to benefit from the expected savings.

Business unit’s response:

[TRANSLATION] Since the technology used for the “Purchase agreement search engine” is coming to the end of its life (out-of-date), we will evaluate the increased use of the SIMON application’s iProcurement module search engine to identify products covered by purchase agreements and, if possible, direct the requestors from all the business units to the contractual agreements based on the purchase categories of the agreements. (Planned completion: June 2016)

4.3. The “Harmonisation et automatisé du processus d’achat” Project

4.3.A. Background and Findings

As part of the initiatives for achieving the objectives of the City’s Procurement Policy, the Service de l’approvisionnement undertook the implementation of a large-scale project, the “Harmonisation et automatisé du processus d’achat” (hereinafter the “project”). The project specifically aims to harmonize procurement business practices within the City through

the implementation in the SIMON application of various modules included in the Advanced procurement, including the iProcurement module.

The findings that informed the implementation of this project are as follows:

- The purchase licenses held by those who issue purchase orders in the system were under-used compared with the targeted use threshold;⁹
- A significant number of purchase licenses were granted to people who did not have the right profile in terms of training, effectiveness and skills for making purchases;
- For the “procurement” function, the SIMON application was not used to process the information in an optimal manner to adequately support management and decision-making.

In order to resolve these problems, following planning and preparation undertaken in 2012, the initial phase was deployed progressively between September and December 2014 in all of the City’s business units. This initial phase entailed the simultaneous implementation of the following measures:

- reducing the number of purchase licenses;
- harmonizing the procurement processes;
- implementing the iProcurement module.¹⁰

First, the Service de l’approvisionnement decided that the number of licenses should be reduced because the licenses were under-used and the City was in a default situation, the license user fees¹¹ having never been paid to the system suppliers. It therefore planned to reduce the 830 licences that had been counted in 2010 to 200 by the end of 2014. This elimination of 630 purchase licenses should save \$12.6 million in user fees and \$2.8 million in annual fees for maintaining the under-used purchase licenses. Table 3 shows the inventory of the purchase licences for the boroughs covered by our audit and for all of the City’s business units.

⁹ A minimum target threshold of 650 purchase orders processed annually by those holding a purchasing license in the SIMON application, compared with an average of 187 purchase orders processed annually by each of the individuals holding a purchase license based on the statistics compiled for 2011 and 2012.

¹⁰ The iProcurement module is used to create and manage purchase requests and receive purchases.

¹¹ Each of the purchase licences entailed a cost of \$20,000 as well as \$4,400 in annual service fees.

Table 3 – Inventory of the Purchase Licenses Before and After the Reduction Measures Taken

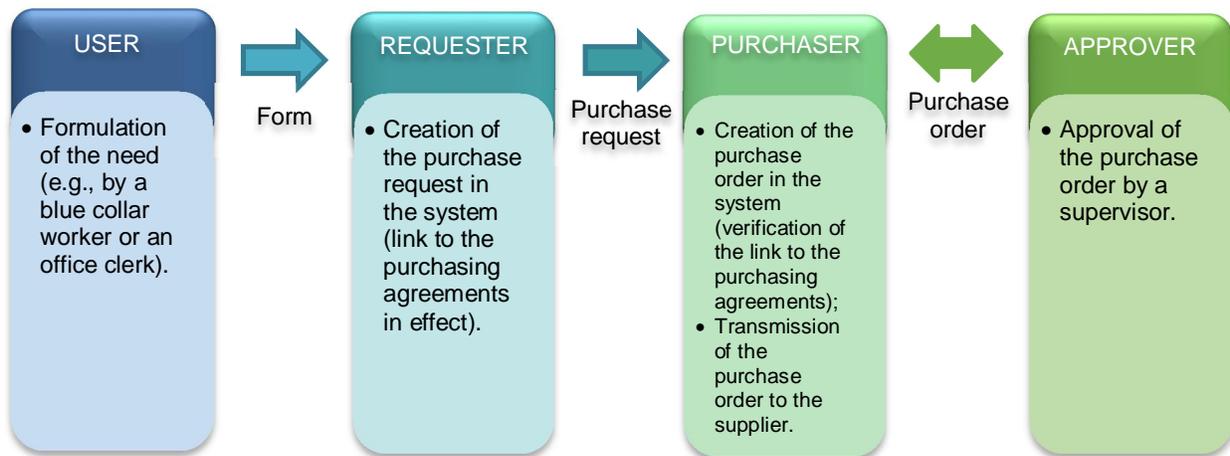
Business units	2010 inventory	Inventory as of June 2, 2014	Inventory in December 2014
Mercier–Hochelaga-Maisonneuve	n/r	27	3
Rosemont–La Petite-Patrie	n/r	17	3
Saint-Laurent	n/r	2	2
All of the City's business units	830	667	200

n/r: Information not requested.

At the end of December 2014, the purchase license reduction goal had been reached. In the opinion of the Service de l'approvisionnement managers we met, this license reduction concentrates the purchasing expertise in a more limited pool of purchasers, which will serve to ensure better development of skills and, consequently, promote the consumption of goods and services through the purchase agreements in effect.

Second, it was necessary to harmonize the purchasing processes used by all of the City's business units in order to optimize the use of the purchase licenses and implement better practices along with the implementation of the new iProcurement module. Thus, when compared with the procedure in use before the project was implemented (see Figure 1, presented earlier), the review of the procurement process introduced an additional step, namely the intervention in the system of a person acting as a "requester" in addition to those already acting as the "purchaser" and the "approver" (see Figure 2 below). A purchase request must now be created by a requester before it is converted into a purchase order by a purchaser. In an effort to improve business practices, the new purchase process is intended to separate the tasks of the requesters and the purchasers.

Figure 2 – Revised Purchasing Process



Thus, based on the needs for goods or services reported by a user, the requester must create the purchase request in the system. The requester must specifically:

- determine whether there is a purchase agreement that has been negotiated by the Service de l’approvisionnement for the good or service required;
- enter the information concerning the specifics of the good or service to be acquired (e.g., the specifications of the good or service, the price, the quantity, the number of the corresponding purchase agreement);
- enter the appropriate accounting item according to the category of goods or services to be acquired, in keeping with the City’s accounting plan;
- have the expenditure approved and allocate the necessary budget.

The purchaser is responsible for managing the pool of purchase requests created by the business unit’s requesters. Before converting purchase requests into purchase orders, he must, among other things, make sure that the information entered by the requester is accurate (e.g., accounting item, number of the purchase agreement in question).

As part of this new process, we note, therefore, that the responsibility for making sure that purchases are made using purchase agreements in effect is shared by the requester and the purchaser. The former must search for a purchase agreement and use it when creating the purchase request whereas the latter must, before creating the purchase order, confirm that the purchase agreement corresponding to the goods and services to be acquired, if any, was used.

Finally, in order to support this procurement process, the Service de l’approvisionnement implemented the iProcurement module, which is similar to the Internet purchase model (e.g.,

Amazon). The iProcurement module integrates a catalogue including a series of items covered by purchase agreements in effect into the system. For each of these items, the catalogue presents the features and prices, per category of goods. Thus, whereas, in the past, the designated purchasers had to enter a description of the product manually, they can now do a search by keyword or category of goods and services to select a product code from the catalogue. Once the good or service to be ordered is selected, the system automatically creates the link between the purchase order and the corresponding purchase agreement.

In short, while the managers we met from the Service de l'approvisionnement stated that the measures deployed as part of the implementation of the project were not solely intended to resolve the problem pertaining to the use of purchase agreements, the expected outcomes are nevertheless as follows:

- Maximization of the goods and services consumed by means of purchase agreements resulting in economies of scale for the City;
- Improvement of the quality of the purchasing data entered in the SIMON application serving ultimately to produce more reliable management reports that can be used to make informed decisions.

That said, we would like to point out that our audit was conducted principally from September to December 2014, while the first phase of the project was being deployed, and that the deployment ended in December 2014. As a result, we were not able to fully evaluate the expected outcomes with respect to the use of the purchase agreements. Moreover, we are aware that the recently deployed measures will require a certain adaptation period before all the benefits are fully apparent. Nevertheless, considering the shortcomings we reported in Section 4.1 of this report, we did make an effort to evaluate the extent to which the actions taken would promote an increased use of the negotiated purchase agreements, in keeping with the Procurement Policy.

From this perspective, the project managers initially insisted on the fact that, even if the new procurement process involves a shared responsibility (requesters and purchasers), the purchaser, upon creation of the purchase order in the system, is still ultimately responsible for making sure that the goods or services are acquired through the purchase agreements in effect.

Nevertheless, based on the information we received from stakeholders¹² we met from the boroughs audited, we noticed a certain amount of confusion with respect to this sharing of roles and responsibilities. In fact, some of the purchasers we met stated that they were not

¹² Employees acting as requesters or purchasers.

responsible for making sure that goods or services are acquired through agreements in effect. Instead, they are of the opinion that the requesters are responsible for this since they are in a better position to determine whether the goods and services covered by the negotiated purchase agreements precisely meet the needs, given their knowledge and expertise in their sphere of activity (e.g., sports and leisure, electricity, plumbing, computers, roads). In this sense, some of the purchasers we met asserted that it is difficult for them to make such a judgement considering the diversity of the goods and services that may be needed for the operations of their business unit.

Given the differences of opinion noted, we made an effort to determine whether the roles and responsibilities of stakeholders in the procurement process had been clearly defined when the project was deployed within the City's business units. However, although the stakeholders within the Service de l'approvisionnement stated that they had transmitted the information verbally during information sessions, we found that the documentation supporting the launch of the project in 2014 was not very explicit with respect to who, the requester or the purchaser, should make sure that the purchases are actually made in keeping with the purchase agreements in effect. We are of the opinion that the roles and responsibilities concerning the use of the purchase agreements should have been more clearly defined and communicated from the outset, so as to avoid any potential confusion. This is all the more important since the City's *Procurement Policy* counts on generating economies of scale through this means of procurement. In fact, we found that it was only in January 2015, after the new measures deployed throughout the City had gone into effect, that the Service de l'approvisionnement produced a document concerning requester and purchaser roles and responsibilities. According to the information obtained, this document was transmitted by email to all of the users of the new procurement module in the SIMON application. When reading the information in the document, we noted that it specifically stated that: *[TRANSLATION] "before creating a purchase order, the purchaser must make sure that the information contained in the purchase request is adequate, specifically with respect to purchase categories and the link to existing contracts."* Nevertheless, considering the fact that this document was produced quite late in the process, we were unable to evaluate its effect on the stakeholders concerned within the audited business units. Consequently, we are of the opinion that the Service de l'approvisionnement should follow up to ensure that the principal stakeholders in the process understand their roles and responsibilities.

As for the new iProcurement module, although the Service de l'approvisionnement expected that the product catalogue integrated in the module would facilitate acquisitions through existing purchase agreements, it appears that it does not guarantee that the purchase agreements will be strictly used by all of the City's business units.

In fact, the managers we met from the Service de l'approvisionnement stated, on the one hand, that the business units can continue to make their purchases outside the agreements if they wish to do so, since there is no way at present to limit that possibility. Compliance with the Procurement Policy in this respect is ensured solely by the good will of requesters and purchasers. In this respect, as we noted earlier in Section 4.1 of this report (see Recommendation 4.1.B), we believe that it would be a good idea for the Service d'approvisionnement to evaluate the possibility of making it mandatory, when a purchase order is recorded in the system, to enter information in a field provided for the number of the agreement covering the goods or services to be ordered.

On the other hand, we were also informed that the product catalogue integrated in the system does not include all of the goods covered by the purchase agreements in effect. In fact, only the so-called permanent¹³ purchase agreements are currently included. This type of purchase agreement represents 31% of the 518 purchase agreements inventoried as of September 30, 2014, and concerns solely the acquisition of goods for a potential purchase of approximately \$58 million (11%), out of a total of \$554 million for all of the purchase agreements for goods in effect. The remaining 69% includes so-called contractual purchase agreements,¹⁴ and the goods they cover are not currently integrated in the system. As a result, for the so-called contractual purchase agreements, the purchaser will continue to manually enter the information concerning the goods they cover (e.g., supplier's name, description of the good, product code, agreement number) in the system, instead of this being automated.

Since the product catalogue promotes consumption through the use of the purchase agreements, we are of the opinion that it would be pertinent to consider integrating the products covered by the so-called contractual agreements in it, whenever possible, so as to reduce the occurrence of situations in which purchases are made outside the agreements.

All in all, we noted that the measures taken as part of the deployment of the Advanced procurement project tend to promote the acquisition of goods and services through purchase agreements. Nevertheless, these measures do not guarantee that the City's business units will make its acquisitions strictly by means of these agreements. In fact, the observations reported earlier raise questions as to the persistent, non-negligible risk that purchases will be made outside of the existing agreements. Under the circumstances, in order to take full

¹³ Permanent agreement: purchase agreement for which the products are identified using the City's standardized code, the price is determined, the duration of the agreement has been determined (start and end date) and the limit amount for the agreement has been determined.

¹⁴ Contractual agreement: purchase agreement for which the products are not identified using the City's standardized codes, but rather by the manufacturer's or distributor's codes; the prices may vary during the period covered by the agreement or may be subject to different discount rates.

advantage of the measures deployed, we are of the opinion that additional risk mitigation measures must be taken, specifically to:

- make sure that the key stakeholders involved in the procurement process adequately understand and fulfil their roles and responsibilities;
- enhance the investment already made with respect to the deployment of the iProcurement module by integrating all of the purchase agreements (permanent and contractual) in the system's product catalogue, whenever possible.

4.3.B. Recommendation

We recommend that the Service de l'approvisionnement take the measures it deems appropriate to ensure that the stakeholders involved in the purchasing process adequately understand and fulfil their roles and responsibilities, in order to provide the required monitoring with respect to the use of purchase agreements within their business units.

Business unit's response:

[TRANSLATION] See that the corrective actions of Recommendation 4.1.C. are applied more fully throughout all of the business units by reinforcing communication activities so that those who take part in the purchase process understand and fulfil their roles and responsibilities in order to provide the necessary monitoring with respect to the use of purchase agreements within their business unit. (Planned completion: June 2016)

4.3.C. Recommendation

We recommend that the Service de l'approvisionnement take the necessary measures to ensure that the product catalogue for the iProcurement module includes, inasmuch as possible, all of the permanent and contractual purchase agreements in effect so as to promote greater use of the agreements, thereby allowing the City to benefit from the savings expected from this mode of procurement.

Business unit's response:

[TRANSLATION] Analyze the permanent and contractual purchase agreements in effect, giving priority to the agreements that significantly reduce total costs or have a potential for savings, in order to integrate their items in the iProcurement module catalogue.

Determine the purchase agreements for which information is available by item code and price so that we can enhance the SIMON application's iProcurement module catalogue.

Analyze purchase agreement information, where available, in order to confirm whether it is adequate and can be included in the SIMON application's iProcurement module catalogue.

Integrate this undertaking within the project that will handle the optimization of the SIMON application. (Planned completion: June 2016)

With respect to a different matter, as part of the deployment of the new measures inherent in this project, we also wanted to investigate the mechanisms implemented by the Service de l'approvisionnement to ensure follow-up with respect to the use of the purchase agreements. In our opinion, it is imperative that the new procurement module be able to easily generate management reports that meet users' needs. In this respect, the project managers we met told us that there is a desire to improve the management reports and that, to this end, a working committee made up of users had a mandate to gather information about user needs. At the time of our audit, the review of the management reports had not been started. For this purpose, we refer the reader to Recommendation 4.1.B. already formulated in this respect in Section 4.1, "Follow-up on the Use of Purchase Agreements and Accountability" of this audit report.

Also, given the scope of the project's deployment and its effect on procurement throughout the City, it is essential for measures to be implemented to evaluate both the achievement of the goals set and the accountability mechanisms, in order to ensure:

- on the one hand, that the required authority can undertake the necessary follow-up and evaluate the extent to which the modifications made to the procurement process specifically contribute to promoting the achievement of the objectives set in the City's Procurement Policy; and
- on the other hand, that it can react quickly to implement the necessary corrective measures.

Consequently, following the deployment of the first phase of the Advanced procurement project, we examined the evaluation and accountability mechanisms implemented.

The representatives we met from the Service de l'approvisionnement informed us that the change management team for this project provided support to each of the business units, in terms of both the system and the business needs, throughout the re-organization of the purchase process and the deployment of the iProcurement module. Moreover, it appears that, during the deployment of the first phase of the project, the project team held meetings to inform the project steering committee about the progress of the project and to make the necessary decisions to ensure coordination and make sure that the project proceeds smoothly.

We read a project progress report, covering the situation as of November 30, 2014, which was submitted to the project steering committee in December 2014. It should be noted that this 12-member steering committee includes the Service de l’approvisionnement manager as well as representatives from the Service des technologies de l’information, the Service des finances, the Service de la police de Montréal, the Service de la performance organisationnelle and three boroughs.

According to the information obtained from the people we met, following that meeting, it was specifically decided that the project team would continue to provide support to the business units until March 2015. A member of the project team stated that an administrative report will be submitted to the steering committee in March 2015, at the time of the “official project closing” phase.

In our opinion, the Service de l’approvisionnement should make the necessary arrangements to be able to present an official report to senior management illustrating the results obtained from the measures deployed throughout all of the City’s business units.

4.3.D. Recommendation

We recommend that the Service de l’approvisionnement prepare a report on the results obtained following the measures implemented within all of the business units and submit it to the City’s senior management so that the latter can evaluate the extent to which the efforts deployed contributed to achieving the objectives set out in the Procurement Policy and make any required decisions.

Business unit’s response:

[TRANSLATION] Prepare a report on the activities and the results obtained following the deployment of the “Harmonisation et automatisation du processus d’achat” project.

Present the report on the activities and the results obtained to the project steering committee, which includes the managers of the central departments (Service de l’approvisionnement, Service des technologies de l’information, Service des finances and Service de police de la Ville de Montréal) as well as the borough managers (Mercier–Hochelaga–Maisonneuve, Rosemont–La Petite-Patrie and Saint-Laurent).

Present the report of the activities and results obtained to the Direction générale adjointe – Services institutionnels. (Planned completion: June 2015)

5. General Conclusion

Managing procurement within an entity the size of the City is a major issue when it comes to maximizing the value of every dollar spent to acquire the goods and services needed to ensure smooth operation and provision of services to citizens.

In this respect, the City encourages economies of scale through the pooling of needs and the consolidation of purchase volumes for the boroughs and the central departments. To do this, the Service de l'approvisionnement signs purchase agreements which all of the City's business units are required to use to purchase goods and services in keeping with the City's Procurement Policy.

Our audit highlighted the fact that the Service de l'approvisionnement is not currently able to evaluate and give an account of the extent to which the purchase agreements are used by the City's business units. Indeed, as a result of various shortcomings in the current process, it is very difficult for the Service de l'approvisionnement to inventory all of the data needed to prepare reliable management reports. Specifically, we noted that the integrity of the data system concerning the purchases made is compromised by the inappropriate use of the SIMON application; as a result, on the one hand, purchase orders are not linked to purchase agreements and, on the other, the wrong accounting codes are attributed within the business units. This lack of rigour affects the reliability of the management reports that can be generated to follow up on operations and to help with decision making.

Moreover, we noted that the mechanisms for disseminating information about new purchase agreements to the business units, as well as the search engine made available to them to help them identify purchase agreements in effect, are deficient. These shortcomings increase the risk that the business units will make their purchases outside the agreements.

We are of the opinion, however, that the efforts made by the Service d'approvisionnement as part of the deployment of the Advanced procurement module, which is included in the "Harmonisation et automatisation des processus" project will certainly contribute to promoting acquisitions of goods and services through the purchase agreements. The efforts should nevertheless continue in order to further consolidate the corrective actions taken, specifically through clarification of the roles and responsibilities of key stakeholders in the procurement process and improvement of the product catalogue that is part of the iProcurement module, as well as to provide reliable management reports that meet user needs.

In conclusion, these findings require that corrective measures continue to be implemented so that the City can take full advantage of the economies of scale to be generated by pooling

purchases through the signing of purchase agreements for the benefit of the community. Ultimately, it would be a good idea for the Service d'approvisionnement to provide for the production of a report illustrating the results obtained from the implementation of the project to be submitted to senior management, so that it can evaluate the extent to which the measures deployed have contributed to achieving the objectives of the City's Procurement Policy and make any necessary decisions.



Report of the Auditor General of the Ville de Montréal to the City Council and to the Urban Agglomeration Council

For the Year Ended December 31, 2014

4.7

COMPLIANCE WITH LAWS AND BY-LAWS



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List of Acronyms

CDN-NDG Côte-des-Neiges–Notre-Dame-de-Grâce

DAUSE Direction de l'aménagement urbain et des services aux entreprises

4.7. Compliance with Laws and By-laws

1. Introduction

Because of the powers conferred on boroughs, particularly by the *Charter of Ville de Montréal*¹ and by City council powers delegated to them, they conduct several activities and make a wide range of services available to the citizens in their respective territories. In providing these activities and services, boroughs must enforce and comply with a large number of laws and by-laws. Laws and by-laws may concern, for example, the issuing of permits for occupancy of the public domain, as well as the conducting of building inspections to ensure the presence of certain equipment.

The boroughs face a plethora of legal and regulatory requirements, each with its share of complexity and distinctive characteristics, which increases the risk of non-compliance. Situations of non-compliance can have serious consequences that can translate into poor management decisions, financial losses for the Ville de Montréal (the City), claims and lawsuits, a dissatisfied citizenry, public criticism of government authorities and a negative image of the City or borough, for example. Apart from these risks that may result from non-compliance with laws and by-laws, the failure to apply certain aspects of the regulations adopted by City council or by a borough council also raises several issues.

The implementation of measures designed to ensure compliance with laws and by-laws is now an integral part of good management practices meant to mitigate these non-compliance risks. All these laws and by-laws can prove quite complex at times, which means that officials in charge of activities must develop and maintain knowledge and implement control mechanisms to ensure compliance.

2. Purpose and Scope of the Audit

The purpose of our audit was to examine the mechanisms put in place by the boroughs to ensure compliance with certain laws and by-laws governing their activities and the services they must provide to citizens.

To ensure the application of and compliance with regulations, we focused more specifically on the control mechanisms put in place to detect situations of non-compliance, the presence of measures providing for corrective action in the event of non-compliance, means of

¹ CQLR, chapter C-11.4.

informing and training employees assigned to targeted activities on the regulations and, lastly, the accountability mechanisms established.

Our examination mainly dealt with the regulatory provisions related to the temporary occupancy of the public domain, including regulatory provisions on the charges associated with such occupancy. Our examination also dealt with provisions surrounding the protection of buildings against sewer backups. Our audit work was conducted in the Ville-Marie and Côte-des-Neiges–Notre-Dame-de-Grâce (CDN-NDG) boroughs and covered the following by-laws:

- For the Ville-Marie borough: the *By-law concerning the occupancy of the public domain*² (R.B.C.M., c. O-0.1 of the former Ville de Montréal), regarding the territory of the Ville-Marie borough; and the *By-law concerning fees–fiscal 2014*³ (by-law No CA-24-206);
- for the CDN-NDG borough: the *By-law concerning the occupancy of the public domain*⁴ (R.B.C.M., c. O-0.1 of the former Ville de Montréal), regarding the territory of the CDN-NDG borough; and the *By-law concerning fees* (by-law No. RCA14 17222)⁵ as well as the *By-law concerning fees* (by-law No. RCA12 17199);⁶
- For the two boroughs, the *By-law concerning the protection of buildings against sewer back-up*⁷ (by-law No. 11-010) and the *By-law concerning the delegation of City council powers to borough councils* (No. 02-002).⁸

For the two selected boroughs, our work was more specifically focused on the Direction de l'aménagement urbain et des services aux entreprises (DAUSE) and the Direction des travaux publics. Our audit also covered the following periods for the two selected boroughs:

- The *By-law concerning the occupancy of the public domain*: the first eight months of 2014 (up until August 31, 2014);
- The *By-law concerning the protection of buildings against sewer back-up*: 2013 and the first eight months of 2014 (up until August 31, 2014).

For some elements, we also took into account information prior to those years. It should also be noted that our audit took into account information that was transmitted and communicated to us up until February 2015.

² Borough council, R.B.C.M., c. O-0.1 of the former Ville de Montréal, October 17, 2001.

³ Borough council, by-law No.CA-24-206, December 10, 2013.

⁴ Borough council, R.B.C.M., c. O-0.1 of the former Ville de Montréal, October 17, 2001.

⁵ Borough council, by-law No.RCA14 17222, February 10, 2014.

⁶ Borough council, by-law No.RCA12 17199, February 6, 2012.

⁷ City council of the Ville de Montréal, by-law No.11-010, June 20, 2011.

⁸ City council of the Ville de Montréal, by-law No.02-002, December 18, 2001.

3. Summary of Findings

Our audit revealed sectors where improvements should be made with regard to compliance with by-laws. For the two by-laws examined, the following points provide an overall summary of our findings for the two boroughs.

- *By-law concerning the temporary occupancy of the public domain* (Section 4.1):
 - Several permit files show a non-compliant fee calculation;
 - The control mechanisms in place do not make it possible to ensure that the temporary occupancy is consistent with the permit issued;
 - The mechanisms in place do not make it possible to identify all situations of temporary occupancy of the public domain without a permit;
 - The control mechanisms in place do not always make it possible to ensure the accuracy of the fees;
 - The control mechanisms in place do not make it possible to comply with the regulations concerning the safety measures for persons involved;
 - The application of the fees for a road obstruction refers to an appendix that is out of date;
 - Training needs are not specifically determined.

- *By-law concerning the protection of buildings against sewer back-up* (Section 4.2):
 - The by-law is not applied in the case of new buildings and buildings in which work to change a plumbing system is conducted;
 - The number of inspections performed is low compared to the number of buildings in which a sewer back-up occurred;
 - Non-compliances have been observed, but there is no evidence that notices have been sent to require that corrective measures be taken;
 - A follow-up subsequent to the inspection or the notice of non-compliance is not always conducted systematically or promptly;
 - Training needs have not specifically been determined.

- *Accountability mechanisms* (Section 4.3):
 - An accountability report related to compliance with the by-laws targeted by this audit is incomplete.

4. Detailed Findings and Recommendations

In carrying out the activities and providing the services related to the occupancy of the public domain and the protection of buildings against sewer back-ups, boroughs must comply with the by-laws governing them. To correctly apply these by-laws, mechanisms must be put in place to enable the concerned staff members to enforce them properly.

Compliance with laws and by-laws requires that each business unit manager take the necessary measures to reduce the risks of non-compliance by implementing effective controls. This also requires making sure that the staff is properly informed and trained on the application of the by-laws that affect them in the performance of their activities. Lastly, accountability mechanisms must be introduced to inform the municipal administration regarding compliance with these by-laws.

4.1. Regulations on the Temporary Occupancy of the Public Domain

4.1.A. Background and Findings

The public domain mainly refers to streets, alleys, sidewalks, off-street bicycle paths and parks. The main purpose of regulations concerning the occupancy of the public domain is to manage this public space, on the one hand by authorizing its use through the issuing of a permit, and on the other by requiring the implementation of security measures related in particular to signage, circulation, and protected access for pedestrians and vehicles. Lastly, effective management of the occupancy of the public domain prevents two applicants from arguing over the use of the public domain.

Application of these regulations falls under the jurisdiction of the boroughs, pursuant to the *Charter of Ville de Montréal*.⁹

Under these regulations, occupancy of the public domain is forbidden without an authorization being given in compliance with the by-law, namely without a permit.¹⁰ Regulations on the occupancy of the public domain include three types of occupancy. Continuous occupancy for more than a year is qualified as permanent. When occupancy spans no longer than seven months and is required every year, it is considered periodic. Lastly, when occupancy is continuous, but for a period of less than one year, it is deemed temporary.

⁹ Article 67.1.

¹⁰ Article 2 of the *By-law concerning the occupancy of the public domain* (for the two boroughs).

This audit deals specifically with temporary occupancy of the public domain, which, according to the by-laws, mainly covers:

- the depositing of material or merchandise;
- the installation of devices, containers, scaffolding, pedestrian barriers, stages, stands or other structures or equipment.

Furthermore, the permit fees for the temporary occupancy of the public domain can be found in the *By-law concerning fees*,¹¹ which also falls under the jurisdiction of the borough councils.¹² The by-laws on the fees for the two selected boroughs are essentially the same when it comes to the fee setting parameters. The main difference is in the fee amounts. Fees are generally reviewed every year.

In order to show the scope of permits issued for temporary occupancy of the public domain by the two selected boroughs, Tables 1 and 2 below present the number of permits and revenue recorded for the period of January 1, 2012 to August 31, 2014:

**Table 1 – Number of Permits and Revenue
Ville-Marie Borough
January 1, 2012 to August 31, 2014**

Period	Number of permits ^[b]	Revenue ^[a]
2012 (12 months)	23,921	\$5,863,505.08
2013 (12 months)	26,513	\$9,188,659.87
2014 (8 months)	19,094	\$5,416,516.33

^[a] Data source: City accounting system (SIMON) for the temporary occupancy of the public domain.

^[b] Data source: Ville-Marie borough.

**Table 2–Number of Permits and Revenue
Côte-des-Neiges–Notre-Dame-de-Grâce Borough
January 1, 2012 to August 31, 2014**

Year	Number of permits ^[b]	Revenue ^[a]
2012 (12 months)	1,469	\$768,438.35
2013 (12 months)	1,576	\$1,327,333.77
2014 (8 months)	898	\$612,246.38

^[a] Data source: City accounting system (SIMON) for the temporary occupancy of the public domain.

^[b] Data source: CDN-NDG borough.

¹¹ For the Ville-Marie borough: borough council, by-law No.CA-24-206, December 10, 2013; for the CDN-NDG borough: borough council, by-law No.RCA14 17222, February 10, 2014 and borough council by-law No.RCA12 17199, February 6, 2012.

¹² *Charter of Ville de Montréal, article 145.*

If the trend continues, we can expect an increase in the number of permits since 2012 in the Ville-Marie borough, compared to a decline in the CDN-NDG borough. To properly interpret these results, we feel it is necessary to first evaluate the extent to which the regulations are applied by each of the boroughs.

To do so, we looked at whether control mechanisms had been put in place to ensure compliance with the regulations concerning the temporary occupancy of the public domain, including regulations on the fees related to this type of permit. We also looked at whether measures had been taken to detect situations of non-compliance with the regulations. Lastly, we looked at whether the employees in the business unit involved had been informed and trained on these regulations.

4.1.1. Implementation of Control Mechanisms Aimed at Ensuring Compliance and Measures to Detect Non-Compliances

4.1.1.A. Background and Findings

In order to ensure compliance with laws and by-laws, it is important that control mechanisms be put in place. These mechanisms enable staff members to verify compliance with regulatory requirements before an action is completed or a final decision is made. Risks associated with non-compliance are thus reduced by using these control mechanisms. Such mechanisms can take many forms; for example, computer applications, control grids to be filled out by employees and reports to be produced.

Generally speaking, for the two selected boroughs, the procedure for issuing a permit is essentially the same. Before occupying the public domain, an applicant must submit a permit request to the borough. This request can be made in various ways, including by fax, by email, or in person. This request includes all the parameters set out in the *By-law concerning fees*, including the location of the occupancy, the number of days and the dimensions of the occupancy that the applicant intends to use. The person in charge of processing permit requests must be sure to have all the information required to issue the permit. To do so, that employee must record all the information in the Détour computer application, which is used as a registry of public domain occupancies. This application automatically calculates the permit amount based on the parameters and fees set out in the by-laws incorporated into it and produces the permit in question. It is based on this data recorded in the Détour computer application that the invoicing for permits for temporary occupancy of the public domain is performed monthly by the Service des finances.

It should be noted that the *By-law concerning the occupancy of the public domain* stipulates that the permit amount must be adjusted when the actual occupancy observed does not correspond to the occupancy stated in the permit request, namely when it does not comply with the permit issued. The by-law also provides for fines in the event of non-compliance with the regulations.

In terms of the temporary occupancy of the public domain, situations of non-compliance with by-laws can occur when:

- parameters or fees used to determine the permit amount are applied incorrectly;
- the actual occupancy differs from that initially authorized by the borough;
- a temporary occupancy of the public domain is not authorized;
- an occupancy of the public domain does not follow the safety rules.

To reduce the risks of such situations occurring, control mechanisms must be put in place. In the sections that follow, we will discuss fee setting for temporary occupancy, control of temporary occupancy of the public domain and management of the safety rules.

4.1.1.1. Applying the Fees for Temporary Occupancy

4.1.1.1.A. Background and Findings

When a permit request for temporary occupancy of the public domain is made, one of the important aspects to consider is the evaluation of the permit's value. This value¹³ depends on several parameters primarily found in the borough's by-law concerning fees. Among other things, the by-law concerning fees includes certain exemptions, namely for certain organizations and certain activities, that result in the permit fee being free or at a minimal cost. When no fee exemption¹⁴ applies, the following parameters, which are stipulated in the by-law, must be taken into account in the calculation of the value of the permit for temporary occupancy of the public domain:

- the basic fee for issuing the permit;
- the surface area occupied (in square metres);
- an amount for the obstruction based on the width occupied (by three-metre sections and according to the street type, whether it is a street listed in Appendix A of the *By-law concerning traffic and parking*¹⁵);

¹³ The cost of the permit may range from a hundred dollars to thousands of dollars.

¹⁴ For example: organizations that benefit from an exemption.

¹⁵ For the Ville-Marie borough: *By-law concerning traffic and parking* of the former Ville de Montréal regarding the territory of the Ville-Marie borough, R.B.C.M., chapter C-4.1. For CDN-NDG: *By-law concerning traffic and parking* of the former Ville de Montréal regarding the territory of the CDN-NDG borough, R.B.C.M., chapter C-4.1.

- an additional amount if the occupancy affects a parking space controlled by a parking metre or terminal;
- an additional amount if the occupancy obstructs parking metres, requiring them to be removed or covered;
- whether the occupancy involves an alleyway;
- the number of days that the occupancy will last.

At this stage of our audit, we examined six permit files for temporary occupancy of the public domain for each of the boroughs to determine whether the permit cost calculation had been performed in accordance with the regulations. This sample consisted of permits issued between January 1 and August 31, 2014.

4.1.1.1.1. Ville-Marie Borough

4.1.1.1.1.A. Background and Findings

Enforcement of the *By-law concerning the occupancy of the public domain*, including the *By-law concerning fees* portion relating to the temporary occupancy of the public domain, is the responsibility of the Division de la circulation et de l'inspection du domaine public, which falls under the borough's Direction des travaux publics. According to the information we obtained from the individuals we met with, these regulations are enforced by various categories of employees involved in one way or another at the various steps in the processing of a permit file. The technical agents receive and handle permit requests and are ultimately in charge of issuing the permits, while inspectors are responsible for following up on the permits. We will discuss the aspect of control following the issuing of permits in Section 4.1.1.2.

For the six files sampled, we found that the main parameters that are subject to a fee are stipulated in the *By-law concerning fees* and involve: 1) the basic fee for issuing the permit; 2) the fee for width of occupancy according to the type of street; and 3) the fee for the surface area occupied. For two of the files examined (Nos. 2 and 6), these involve parking spaces affected by the occupancy, including fees for covering parking meters. For File No. 4, a fee was charged for street closing. Lastly, for four of the files (Nos. 3, 4, 5 and 6), the fees were calculated based on an occupancy lasting several days.

For three of the six files (see Appendix 6.1, Table A, Column a, Nos. 2, 4 and 6), our audit revealed that the fees were applied in accordance with the regulations in effect; however, we question certain aspects related to the fees for width of occupancy based on whether it is a street listed in Appendix A of the *By-law concerning traffic and parking* referred to in the *By-*

law concerning fees. This questioning will be discussed in greater detail in Section 4.1.1.4 of this report.

For the three other files (see Appendix 6.1, Table A, Column a, Nos. 1, 3 and 5), we found no evidence that the setting of fees for temporary occupancy of the public domain was done according to the regulations. Our audit revealed that exemption decisions were not supported by a regulatory reference, the processing of files was not consistent and files were incomplete.

File Nos. 1 and 3 were subject to fee exemptions that raised questions in our minds since in both cases the files did not make any reference to a regulatory provision. As regards permit file No. 1 (see Appendix 6.1, Table A, Columns a and b), only a portion of the fees was subject to an exemption, and temporary occupancy of the public domain was required as part of repair work involving sewers. We observed that, when the permit cost was calculated, an exemption was applied on the surface area occupancy (the surface area occupied in square metres). According to the information obtained from an individual we met with in the Division de la circulation et de l'inspection du domaine public, such an exemption only applies to permits involving work to connect a sewer line or water main. We therefore question this exemption, since we were not able to find any evidence to this effect in the regulations, and all the more so since the fee for surface area occupancy was charged in permit file No. 4, which also involved work related to sewers (connection work). In our opinion, it is important that the regulations be applied in a way that is compliant and consistent for all the permit files. Also, we believe that the staff involved should ensure that all exemptions are indicated in the by-law. Moreover, we feel that the permit file should include a reference to the regulatory provision that authorizes the exemption to ease the review of the files and avoid any confusion in the application of the fees.

For file No. 3, while the cost of this permit totalled over \$3,000, the permit indicated "no charge." The applicant was a business in the telecommunications or cable television sector. According to the information obtained from an individual we met with in the Division de la circulation et de l'inspection du domaine public, this applicant benefits from an agreement with the City regarding the fees for occupancy of the public domain. Our research did reveal an agreement regarding occupancy of the public domain with this applicant, but it ended in December 2003 and a new agreement had not been concluded. In our opinion, it is important that the fees be applied in accordance with the regulations in effect. Our audit revealed that the borough's by-law concerning fees includes a provision stating that the company benefits from an exemption for occupancy of a parking space controlled by a parking meter, but not one for all parameters, and, consequently, all fees. Where an agreement may be concluded with an applicant to apply a different fee structure than that indicated in the regulations regarding occupancy of the public domain, this agreement must be adopted by the

responsible authority and maintained up to date. It should be noted that, according to the documents obtained, more than 600 permits for temporary occupancy were issued to this same company between January 1 and August 31, 2014. In light of the regulations in effect during this period, we consider this to be a situation of non-compliance that represents a substantial loss of revenue.

With regard to permit file No. 5 (see Appendix 6.1, Table A, Columns a and b), we found that the permit request submitted by the applicant was incomplete with regard to the occupied surface area parameter. The request indicated an occupied area greater than 100 square metres but did not specify a figure. Since, according to the by-law, the fee is calculated based on the number of metres occupied for an occupancy of 100 square metres or more, we feel that the request should have included a specific number. What's more, a number was recorded in the calculation of the permit fees but we were unable to find any evidence that this number represented the occupied surface. In our opinion, it is important that a permit request include all of the information on the parameters of the temporary occupancy of the public domain before the permit is issued. The absence of this important fee information in the permit request poses a threat in terms of financial loss.

According to the information obtained from the manager in charge at the Division de la circulation et de l'inspection du domaine public, a spot check is conducted on the various elements of the permit files but is not systematically documented. Also, a brief check of the files is performed before permits are sent to the central City's Service des finances for billing. In our opinion, control mechanisms should be put in place whereby a permit file check is conducted and documented in order to facilitate detection of non-compliances so that the necessary corrective measures can be taken.

4.1.1.1.1.B. Recommendation

We recommend that the Direction des travaux publics of the Ville-Marie borough put in place control mechanisms aimed at ensuring that:

- **all exemptions granted to applicants comply with the regulations in effect or agreements adopted by the competent authority, as the case may be, in order to detect situations of non-compliance in a timely manner;**
- **the regulatory provision authorizing the fee exemption granted to an applicant be included as a reference in the permit file in order to facilitate review of the file;**
- **a permit request contains the information on all the parameters relating to the temporary occupancy before the permit is issued so as to be able to apply the fee that corresponds to the actual occupancy.**

Business unit's response:

[TRANSLATION] The exemption categories, in accordance with the by-law in effect as well as existing agreements, are programmed in the system and are selected each time there is an exemption to be made. There is an "Other" category for new cases, which is systematically accompanied by a comment. (Completed)

An IT request has been made for detailed additions to categories. (Planned completion: December 2015)

Reminder of the directive that all the information must appear on the permit requests before issuance. (Completed)

Auditor General's Comments:

In light of our findings that, in 3 out of 6 cases, the permit files were either lacking references to the by-law, were incomplete or were handled in an inconsistent manner, we feel that a reminder is an insufficient control to ensure that this situation is rectified.

4.1.1.1.C. Recommendation

We recommend that the Direction des travaux publics of the Ville-Marie borough put in place mechanisms to verify the fees applied to permits for temporary occupancy of the public domain, and that these permits be documented to demonstrate compliance with the regulation.

Business unit's response:

[TRANSLATION] A documented verification sampling is now performed on a monthly basis for the permits issued. This information is recorded in an Excel file. (Completed)

Auditor General's Comments:

It should be noted that it is important for actions to be implemented not only after but also before permits are issued. The verification mechanisms to be put in place should therefore also include preventive actions.

4.1.1.1.2. Côte-des-Neiges–Notre-Dame-de-Grâce Borough**4.1.1.1.2.A. Background and Findings**

Enforcement of the *By-law concerning the occupancy of the public domain*, including the portion of the regulations on the fees related to temporary occupancy, falls under the Division du bureau technique of the borough's Direction des travaux publics. According to the

information we obtained from the individuals we met with, these regulations are applied by technical agents and by traffic and parking inspectors. The technical agents receive and handle permit requests and are ultimately in charge of issuing the permits, while inspectors are responsible for following up on the permits. We will discuss the aspect of control following the issuing of the permits in Section 4.1.1.2.

For the six files sampled, we found that the main elements that were subject to a fee are stipulated in the borough's *By-law concerning fees* and involve: 1) the basic fee for issuing the permit; 2) the fee for width of occupancy according to the type of street; and 3) the fee for the surface area occupied. For two of the files, they also involve a fee for parking spaces affected by the temporary occupancy (see Appendix 6.1, Table A, Nos. 8 and 9). Lastly, for four of the files (see Appendix 6.1, Table A, Nos. 8, 10, 11 and 12), the fee was calculated based on an occupancy that extended over several days.

For the six files examined, we found that the only the fee for one file (see Appendix 6.1, Table A, Column a, No. 9) was compliant with the by-law. This was a file in which temporary occupancy of the public domain was required for the filming of a movie. This file was subject to a fee exemption and the permit file indicated "no charge" without making any reference to the applicable regulatory provision. While this exemption was applied in accordance with the by-law, we feel that the permit file should include a reference to the regulatory provision authorizing the exemption granted. Such a practice facilitates subsequent review of the file and avoids any confusion in the application of the fee.

For the five other files that were subject to a fee (see Appendix 6.1, Table A, Column a, Nos. 7, 8, 10, 11, 12), we found that the fee was not consistent with the regulations. Examination of the files revealed that the GST and QST were added to the fees appearing on the permits. Article 1 of the *By-law concerning fees* stipulates, however, that the fees stated in it include these taxes, unless otherwise indicated. Consequently, these taxes should not have been added to the total amount of the permit since it already includes them. It should be noted that the individual we met with at the Division du bureau technique told us that this non-compliance was corrected in the Détour computer application for the temporary permits issued subsequent to our audit. In our opinion, control mechanisms should be put in place so that a permit file check is conducted and documented to facilitate detection of non-compliances and ensure that the necessary corrective measures are taken.

In addition, for two of the six files that were subject to fees (see Appendix 6.1, Table A, Column a, Nos. 11 and 12), we question certain aspects related to the fees for width of occupancy based on whether it is a street listed in Appendix A of the *By-law concerning traffic*

and parking referred to in the *By-law concerning fees*. This questioning will be discussed in greater detail in Section 4.1.1.4 of this report.

4.1.1.1.2.B. Recommendation

We recommend that the Direction des travaux publics of the Côte-des-Neiges–Notre-Dame-de-Grâce borough put in place a control mechanism aimed at ensuring that the regulatory provision authorizing the fee exemption granted to an applicant is included as a reference in the permit file in order to facilitate review of the file.

Business unit's response:

[TRANSLATION] A verification will be performed to ensure that the “no charge” or “chargeable” box is ticked in the Détour computer application. This validation will be included in the control list that will be produced. (Planned completion: August 2015)

4.1.1.1.2.C. Recommendation

We recommend that the Direction des travaux publics of the Côte-des-Neiges–Notre-Dame-de-Grâce borough put in place a mechanism to verify the fees applied to permits for temporary occupancy of the public domain, and that these permits be documented to demonstrate compliance with the regulation.

Business unit's response:

[TRANSLATION] Subsequent to the Division du greffe sending the updated version of the By-law concerning fees to all the borough staff by email, the following procedure will be applied systematically:

- *updating of the fee schedule by the senior technical officer;*
- *validation of the fee schedule by the section manager–Section soutien général of the Division des ressources financières et matérielles;*
- *entry of fee data in the Détour computer application by the senior technical officer accompanied by the section manager–Section soutien général of the Division des ressources financières et matérielles;*
- *validation using a few fictitious permits covering all the fees possible (issuing, width, roadblock, surface area, presence of hydrants, removal and covering of hydrants, alleyway, back sidewalk, no charge) by the senior technical officer;*
- *verification of taxation data by the section manager–Section soutien général of the Division des ressources financières et matérielles;*
- *presentation of a report to the division manager–Division des études techniques showing the fictitious permits used for validation. (Planned completion: December 2015—during the next review of the by-law concerning fees)*

4.1.1.2. Control over Temporary Occupancy of the Public Domain

4.1.1.2.A. Background and Findings

In the management of the public domain, one of the most important steps involves putting in place control mechanisms to ensure not only that the actual occupancy complies with the permit issued, but also that all temporary occupancies are subject to a permit. Control mechanisms must therefore enable the detection of situations of non-compliance. Such detection must allow for the necessary corrective measures to be taken to ensure that regulations are applied.

To control the temporary occupancy of the public domain and be able to detect situations of non-compliance, inspections must be continuously conducted throughout the territory since, once the temporary occupancy is over, it is no longer possible to detect it in the event a permit was obtained for it or it is not compliant with the permit issued by the borough. The failure to detect these situations poses risks that can have significant consequences for the borough and the City. These may include financial losses involving relatively high amounts, considering that occupancies can extend over several days and those based on width or area can be quite expansive.

It is therefore important that the individuals assigned to the inspection of temporary occupancies of the public domain be equipped with the tools and means to allow them to apply the regulations in such a way as to reduce the risks of non-detection. For example, the two boroughs' by-laws concerning occupancy of the public domain require that a work completion notice indicating the end of the occupancy of the public domain be given to the competent authority. Such a notice therefore enables the borough to ensure that the conditions regarding the duration of use of the public domain are met. It is a kind of means of exercising control over the occupancy of the public domain.

Over the course of our audit, we sought to evaluate whether the boroughs had put in place control mechanisms to ensure that the temporary occupancy of the public domain complied with the regulations. We also examined the control tools used to demonstrate this compliance with regulations.

To do so, we used the six permit files selected for each of the two boroughs to examine the control mechanisms put in place following the issuing of the permits. Moreover, to evaluate the detection of "unauthorized" temporary occupancies of the public domain, namely those without a permit, we visited several streets in the two selected boroughs on October 3, 2014. We found temporary occupancies of the public domain for that day related to various work

and construction sites and taking several different forms, including occupancies on the road, on the sidewalk and in an alleyway. The results of our audit of the two boroughs are as follows.

4.1.1.2.1. Ville-Marie Borough

4.1.1.2.1.A. Background and Findings

For the Ville-Marie borough, the control mechanisms put in place are applied by the inspectors of the Division de la circulation et de l'inspection du domaine public. They work on various shifts: days, evenings or weekends. Each inspector is assigned to a given territory to carry out follow-ups on permits. They use a laptop computer to access the Détour computer application, in which the permits for temporary occupancy of the public domain are recorded. According to the information obtained, while on patrol, inspectors verify the compliance of the permits that were issued based on the parameters recorded in the Détour computer application. For example, inspectors check the dimensions of the occupancy in relation to the permit issued. When inspectors observe an actual occupancy that is not compliant with the permit issued, they communicate the information to the technical agents in their division so that a modification can be made in the Détour computer application and the value can be adjusted accordingly. Furthermore, when they witness an occupancy without a permit, they make sure the offender submits a permit request as soon as possible in order to comply with the regulations. Inspectors can also hand out notices of violation.

As part of our audit, we first evaluated the control mechanisms put in place after the permits are issued using the six selected samples. For five of the files (see Appendix 6.1, Table A, Column c, Nos. 1, 2, 3, 4 and 5), while the process was described to us, we found no evidence that an inspection had been conducted after the permit was issued in order to ensure compliance with all the parameters indicated in the permits. In one case, however, (see Appendix 6.1, Table A, Column c, No. 6), we did find evidence of an inspection. Photos had been taken of the occupancy of the public domain to prove that the visits had been conducted and to document the file. We feel that an inspection report listing the visits conducted and demonstrating compliance with the permit issued should be produced. Furthermore, for the six permit files examined (see Appendix 6.1, Table A, Column d), we also did not find a work completion notice, as provided for in the by-law. We believe that the work completion notice is a means of controlling the occupancy of the public domain and allows for the planning of inspections to be carried out.

Second, to assess the extent to which temporary occupancies without a permit had been detected by the inspectors, we visited several streets in the borough on October 3, 2014, and found nine temporary occupancies of the public domain (see Appendix 6.1, Table B,

Column a). We confirmed with an individual from the Division de la circulation et de l'inspection du domaine public in charge of handling requests and issuing permits that each of the situations detected required a permit for temporary occupancy of the public domain.

Our audit revealed that most of the cases we uncovered were not detected by the inspectors and, therefore, were not subject to a valid permit. Thus, out of the nine situations detected (see Appendix 6.1, Table B, Column a), five situations of temporary occupancy had not been subject to the issuing of a permit (see Appendix 6.1, Table B, Column b, Nos. 1, 3, 6, 7, 9). Our audit revealed that none of these situations involved subjects benefitting from a fee exemption. If these situations had been detected, permits with a charge would have been issued. Among these five cases, two situations (see Appendix 6.1, Table B, Nos. 1 and 9) are of particular concern since they involve more substantial work requiring several days to complete. Occupancy situation No. 1 involves very large scaffolding that blocks an entire alleyway. It is being used to perform work on a building. Occupancy situation No. 9 is related to work on a multiple-storey building under construction. We therefore question why such situations had not been detected.

In regard to the four other situations, namely those for which a permit was obtained (see Appendix 6.1, Table B, Column b, Nos. 2, 4, 5, 8), we observed that two of them involved permits with no charge, because they either consisted of work carried out for the City or work performed by an organization benefitting from a fee exemption pursuant to the by-law. We also observed that temporary occupancy No. 2 did not comply with the instructions indicated on the permit issued (see Appendix 6.1, Table B, Column b, No. 2) and that this non-compliance had not been detected by an inspector.

The fact that we found no evidence of inspections being conducted systematically for all the permit files subsequent to their issuing and that most cases we uncovered had not been detected during the inspections carried out by the borough raises a lot of questions for us about the results of such inspections. According to the manager we met with, a compilation of the situations subject to a registered notice of violation is performed. The tables produced involve occupancies of the public domain for which a valid permit had not been obtained and situations that do not comply with the permits issued. According to the documents submitted to us, 40 registered notices of violation had been produced for the first eight months of 2014; however, according to the information obtained, these tables do not include all the situations detected by inspectors since situations of non-compliance do not always entail a notice of violation. In certain cases, the offender has rectified the situation.

The Division de la circulation et de l'inspection du domaine public also compiles other tables that include the cases of temporary occupancy of the public domain for which offenders who

did not request a permit have rectified their situation by obtaining one. For the year 2014, following visits conducted by inspectors, 445 offenders rectified their occupancy by requesting a permit for temporary occupancy of the public domain, for a total amount of \$650,406. This shows the importance of detecting non-compliant occupancies of the public domain.

In order to provide a more accurate portrait of the number of non-compliances detected and the monetary scope that they represent, we believe that all situations of temporary occupancy of the public domain for which a valid permit had not been obtained should also be recorded along with the value of the permit.

In conclusion, the results of our audit did not show that the control mechanisms in place make it possible to ensure that the temporary occupancy of the public domain is compliant with the regulations in effect. While the individuals we met with have told us that they make efforts to detect occupancy situations that are not compliant with the permits issued as well as situations of occupancy without a permit, we feel that additional measures must be taken to detect situations that do not comply with the regulations. As previously mentioned, for the five situations we observed in which a permit had not been obtained, the absence of authorization to occupy the public domain consequently leads to risks that can be quite significant. In this case, it consists of a financial loss for the borough, which was unable to obtain the fee amount set out in the by-law for these five situations. Assuming that cases of non-compliance go undetected day after day, the financial losses could be even greater.

4.1.1.2.1.B. Recommendation

We recommend that the Direction des travaux publics of the Ville-Marie borough review the control mechanisms put in place, specifically by:

- **using an inspection report to demonstrate that the actual occupancy of the public domain is compliant with the permit issued or that a permit has not been obtained for it;**
- **systematically requiring that an applicant submit a work completion notice to be informed of the end of the occupancy of the public domain and to establish better inspection planning practices;**
- **planning daily activities over the entire territory aimed at detecting temporary occupancies that are not compliant with the by-law;**

in order to fulfil its obligation to ensure compliance with the *By-law concerning the occupancy of the public domain*.

Business unit's response:

[TRANSLATION] We will use the existing inspection report to record site inspection operations, particularly to indicate whether it is compliant or not. (Completed)

We will plan inspections based on the expected end dates specified in the permits for each sector. An evaluation of the needs with regard to work completion notices will be performed, taking into account existing information. A follow-up will be conducted subsequent to this evaluation regarding application of article 34 of the By-law concerning occupancy of the public domain. (Planned completion: November 2015)

Activities to detect non-compliant occupancies are already included in the daily tasks related to the inspection of the public domain. (Completed)

Auditor General's Comments:

While the action plan indicates that non-compliant occupancy detection activities are already included in the daily public domain inspection tasks, our audit revealed that this is not sufficient. During our visit on October 3, 2014, we identified 5 sites out of 9 for which no permit had been issued. Given these circumstances, we reiterate our recommendation to improve the detection activities related to the temporary occupancy of the public domain.

4.1.1.2.1.C. Recommendation

We recommend that the Direction des travaux publics of the Ville-Marie borough make sure to compile all situations of occupancy of the public domain for which a permit was not obtained in order to be able to report on the scope of detected non-compliances.

Business unit's response:

[TRANSLATION] Our actions to regulate non-compliant occupancies are already compiled. A reminder of the directive has been made to the entire inspection team so as to consolidate all of our actions. (Completed)

Auditor General's Comments:

In the interest of transparency, we maintain our position with regard to the importance of making sure that all situations of occupancy of the public domain without a permit are compiled. The inspectors do not systematically report all cases identified.

4.1.1.2.2. Côte-des-Neiges–Notre-Dame-de-Grâce Borough

4.1.1.2.2.A. Background and Findings

For the CDN-NDG borough, the control mechanisms put in place are applied by inspectors of the Division du bureau technique within the Direction des travaux publics. The inspector is responsible for looking into situations where a permit was not obtained and the compliance of the permits that have been issued. In this borough, inspectors only work days. According to the information we obtained from the individuals we met with, each inspector is assigned a given territory in which to patrol and follow-up on permits. The inspectors use a list of permits produced each morning to allow them to verify the permits issued for the day. When they come across a situation where a permit was not obtained, they make sure that the offender submits a permit request as soon as possible to comply with the regulations. No notice of violation is given; the borough prefers to have the offender obtain a permit.

As part of our audit, we first evaluated the control mechanisms put in place after permits are issued using the six selected samples. This examination of the six permit files did not reveal any evidence of the inspections conducted after the permit is issued to ensure that all the requirements stated on the permits have been met. We feel that an inspection report listing the visits conducted and demonstrating compliance with the permit issued should be produced. Moreover, for five of the six permit files examined (see Appendix 6.1, Table A, Column d), a work completion notice, as provided for in the by-law, had not been received. We believe that a work completion notice is a means of controlling the occupancy of the public domain and allows for the planning of inspections to be carried out.

Second, to assess the extent to which temporary occupancies without a permit had been detected by the inspectors, we also visited several streets in the borough on October 3, 2014, and found nine temporary occupancies of the public domain that required a permit (see Appendix 6.1, Table B, Column a). To this end, we confirmed with an individual from the Division du bureau technique in charge of handling requests and issuing permits that each of the situations detected required a permit for temporary occupancy of the public domain.

Our audit revealed that most of the cases we uncovered were not detected by the inspectors and, therefore, were not subject to a valid permit. Thus, out of the nine situations detected, seven situations of temporary occupancy had not been subject to the issuing of a permit (see Appendix 6.1, Table B, Column b). Our audit revealed that none of these seven situations involved subjects benefitting from a fee exemption. If these situations had been detected, permits with a charge would have been issued. Generally speaking, these situations involved work requiring occupancy of the public domain, specifically through materials, equipment and machinery. The road and sidewalk are being used for the occupancies. We therefore question

the fact that a high number of situations of temporary occupancy had not been detected and were not subject to a valid permit. Moreover, we question the fact that some of these situations were not detected despite the fact that the occupancy of the public domain was likely to extend over more than one day. For example, one occupancy situation (see Appendix 6.1, Table B, No. 18) involved the complete closure of the sidewalk using a metal pedestrian barrier. While the public domain was occupied by this barrier and by various objects, at the time of our visit we observed no activity at this site.

According to the manager we met with, situations of occupancy without a permit detected by inspectors while on patrol were compiled for the period from June 2013 to July 2014. This was done to obtain an estimate of the amounts that are not billed due to the lack of an occupancy permit. These tables only include occupancies of the public domain for which a valid permit had not been obtained. However, according to the information obtained from the division, such a detection measure was not applied during evenings and weekends. These tables do not indicate non-compliances with permits already issued or aspects related to safety or signage that must be established at the time of occupancy of the public domain.

The fact that we found no evidence of inspections being conducted subsequent to the issuing of permits and that most cases we uncovered had not been detected during the inspections carried out by the borough raises questions for us about the results of such inspections.

In order to provide a more accurate portrait of the number of detected non-compliances and the monetary scope that they represent, we believe that all situations of temporary occupancy of the public domain for which a valid permit had not been obtained should also be recorded.

In conclusion, the results of our audit did not show that the control mechanisms in place make it possible to ensure that the temporary occupancy of the public domain is compliant with the regulations in effect. While the individuals we met with told us that they make efforts to detect occupancy situations that are not compliant with the permits issued as well as situations of occupancy without a permit, we feel that additional measures must be taken to detect situations that do not comply with the regulations. As previously mentioned, for the seven situations that we observed, the failure to comply with the regulations entails significant risks. In this case, there is a financial loss for the borough since it was unable to obtain the fee required pursuant to by-law. Assuming that cases of non-compliance go undetected day after day, the financial losses could be even greater.

4.1.1.2.2.B. Recommendation

We recommend that the Direction des travaux publics of the Côte-des-Neiges–Notre-Dame-de-Grâce borough review the control mechanisms put in place, specifically by:

- using an inspection report to demonstrate that the actual occupancy of the public domain is compliant with the permit issued or that a valid permit has not been obtained for it;
- systematically requiring that an applicant submit a work completion notice to be advised of the end of the occupancy of the public domain and to establish better inspection planning practices;
- planning daily activities over the entire territory aimed at detecting temporary occupancies that are not compliant with the by-law;

in order to fulfil its obligation to ensure compliance with the *By-law concerning the occupancy of the public domain*.

Business unit's response:

[TRANSLATION] Production of a daily inspection report (one report per event) to document the compliance of temporary occupancies of the public domain. Based on the resources currently available, it is not possible to conduct a detailed, systematic inspection of all the infringements. Consequently, our inspections documented by a report will be focused on major infringements. This report must allow for the verification of the following elements or each infringement:

- *address, nature of the work;*
- *period covered;*
- *validation of the signage (standard board of the Ministère des Transports du Québec (MTQ) or special board);*
- *occupancy parameters (width, surface area, roadblock, paid parking);*
- *meeting general conditions of the permit;*
- *meeting special requirements stated under "Conditions" (presence of flaggers when required on the permit, pedestrian access and detours, access for emergency vehicles). (Planned completion: January 2016)*

We are currently assessing the pertinence of keeping or removing the requirement to obtain a work completion notice in the by-law concerning occupancy. Meeting this requirement would require a considerable amount of work relative to the benefit that the borough gains from it. (Planned completion: September 2015)

At the start of every work shift, each borough inspector must:

- *establish the list of new permits issued in their sector;*
- *establish their patrol itinerary in order to cover their territory to the maximum. (Planned completion: February 2016)*

4.1.1.2.2.C. Recommendation

We recommend that the Direction des travaux publics of the Côte-des-Neiges–Notre-Dame-de-Grâce borough make sure to compile all situations of occupancy of the public domain for which a permit was not obtained in order to be able to report on the scope of detected non-compliances.

Business unit's response:

[TRANSLATION] Production of a table that is accessible to all borough inspectors for them to document the number of offenders who did not request a permit and the amounts recovered. In the months of April, June and September, conduct one-day blitzes covering the entire territory in order to identify all the offenders and get a complete picture of the situation. (Planned completion: February 2016)

4.1.1.3. Safety Management as Part of Temporary Occupancy of the Public Domain

4.1.1.3.A. Background and Findings

While collecting fees is an important element of the regulations concerning occupancy of the public domain, the management of safety related to occupancy is just as important. In fact, the by-laws on occupancy of the public domain for both boroughs require that the permit include the measures that must be taken to ensure people's safety.¹⁶ Moreover, the by-laws also stipulate that the permit holder must adhere to the conditions and terms established therein.¹⁷ The absence of related measures, specifically those related to signage or proper protection of the site of occupancy of the public domain, poses risks not only for people's safety, but also for the boroughs and the City. These include risks of legal actions, financial losses, citizen dissatisfaction due to improper management and government criticism.

With regard to occupancy of the public domain, specifically occupancy of a street and the sidewalk, the safety of individuals is governed by various laws and by-laws. The *Highway Safety Code*¹⁸ states that “any person carrying out work requiring occupation of a public highway, duly authorized by the person responsible for the maintenance of the highway, or any person conducting a road check operation must erect traffic signs or signals in compliance with the standards determined by the Minister of Transport for the duration of the work or operation.”¹⁹ For its part, the *Safety Code for the construction industry* requires “that any construction site or part of a construction site situated on or near a public highway or a

¹⁶ *By-law concerning the occupancy of the public domain* (article 33) (for each of the boroughs).

¹⁷ *By-law concerning the occupancy of the public domain* (article 4) (for each of the boroughs).

¹⁸ *Highway Safety Code* (CQLR, c. C-24.2).

¹⁹ *Highway Safety Code*, section 303.

private road open to public vehicular traffic has traffic signs that comply with the standards of Chapters 1, 4 and 6 of Volume V of the manual entitled 'Traffic Control Devices,' determined and set out by the Minister of Transport under the second paragraph of section 289 of the Highway Safety Code.²⁰

The application of the *By-law concerning the occupancy of the public domain* therefore requires that the borough indicate the safety measures on the permits, including those for which a fee exemption has been applied. Moreover, the borough must ensure that the applicant complies with them. The control of safety measures is therefore an important element in the management of occupancy of the public domain.

Using the samples we selected for our audit, we examined whether such measures aimed at ensuring the safety of individuals were indicated on the occupancy permit as required in the by-law. We also looked at whether control mechanisms had been put in place to ensure compliance with the regulations.

4.1.1.3.1. Ville-Marie Borough

4.1.1.3.1.A. Background and Findings

When an applicant submits a permit request, the form used for this purpose includes the general conditions related to the issuing of a permit for temporary occupancy of the public domain, eight of which concern the safety of individuals as well as signage, including a reference to the standards of volume V— road signs. Before issuing a permit, the technical agent must ensure that the applicant has planned safety measures for the temporary occupancy, as applicable, to comply with the general conditions that apply. These specific safety measures should be indicated on the permits since the by-law requires it and they must be verified by inspectors following the issuing of the permit. Furthermore, the general conditions regarding the issuing of the permit should be systematically given to applicants so as to inform them of their obligations.

First, for the six permit files, we found that four general conditions regarding safety and signage were indicated on the permits. These conditions state that the signage must comply with the standards set out in the *Highway Safety Code*, that the installation of signs is the responsibility of the permit holder, and that a pedestrian walkway and access for emergency vehicles must be present at all times. Our audit revealed that, for most of the six permit files selected, the safety measures required at the time the permit request was made did appear on the permits for temporary occupancy of the public domain. For four of the files (see

²⁰ *Safety Code for the construction industry* (CQLR, c. S-2.1, r. 6), section 10.3.1.

Appendix 6.1, Table A, Column e, Nos. 1, 4, 5, 6) we found that the safety measures aimed at ensuring the safety of individuals, which are required by the borough at the time of issuing the permit, were also indicated on the permit.

In the case of the two other files (see Appendix 6.1, Table A, Column e, Nos. 2 and 3), even if the safety measures to be taken had been determined by the applicants when the permit was requested, we found that they were not indicated on the permits issued. For file No. 2, while the permit request indicated that a sign would be erected to signal the closure of the sidewalk, the permit did not make any reference to this safety measure. Lastly, in file No. 3, when making the permit request, the applicant must have adhered to one of the general conditions requiring that a signage board be produced. A signage board is like a plan illustrating the way in which pedestrian and car traffic will be organized in the case of the obstruction or closure of a street. An examination of the file revealed that a signage board had been submitted by the applicant; however, the permit made no mention of this safety measure to be followed by the applicant. In our opinion, for these two cases, the permit should have mentioned the safety measures required to comply with the regulations. We feel that such situations do not facilitate the verification of adherence to these safety measures during inspections.

Moreover, an examination of the six permit files selected (see Appendix 6.1, Table A, Column g) did not reveal any evidence that the general conditions had been given to the applicant at the time the permit was issued. According to the information obtained from the individual we met with in the Division du bureau technique, the general conditions are not systematically remitted with the permit. In our opinion, it is important to ensure that applicants have obtained or been made aware of all the conditions attached to the permit for temporary occupancy of the public domain, since these are obligations that they must adhere to.

With regard to the control mechanisms put in place by the borough to ensure adherence to the safety measures required at the time the permit is issued, we did not find evidence in any of the six selected files that these safety measures had been verified after the permit was issued (see Appendix 6.1, Table A, Column f). We feel it is important that a verification of the safety measure be conducted subsequent to the permit being issued to ensure compliance with regulations.

With regard to the nine situations of temporary occupancy of the public domain that we witnessed during our visit to the borough on October 3, 2014, our audit revealed that eight of these were partially or fully non-compliant with regard to the safety of individuals, specifically due to missing or faulty signage (see Appendix 6.1, Table B, Column c), despite the fact that three of these situations had been subject to an occupancy permit (see Appendix 6.1, Table

B, Column b, Nos. 2, 4 and 5). These results demonstrate the importance of detecting non-compliant situations so that offenders can obtain the necessary permits and be obligated to follow the safety measures required when a permit is issued.

Lastly, over the course of our audit, we found that the staff in charge of issuing permits or performing inspections did not have a checklist detailing all the situations and the procedure for requiring a signage board. The general conditions of the permit require a signage board for an obstruction of a major street for a width of more than three metres as well as for the blocking of a major street. The general conditions also indicate that such a board can be required for the obstruction of a secondary street when the width of occupancy is six metres or more. Lastly, according to the information obtained from the individual we met with at the Division de la circulation et de l'inspection du domaine public, a signage board could also be required in situations other than those we just mentioned. We feel that such a checklist would facilitate the work of the employees involved by allowing for a more prompt analysis of situations presenting a greater risk and requiring a signage board.

4.1.1.3.1.B. Recommendation

We recommend that the Direction des travaux publics of the Ville-Marie borough put in place control mechanisms aimed at ensuring that:

- **all of the safety measures required at the time the permit request is made appear on the permit issued in order to facilitate the performance of inspections and compliance with regulations;**
- **the general conditions for issuing a permit for temporary occupancy of the public domain are given to applicants to inform them of their obligations;**
- **a verification of safety measures be performed subsequent to the issuing of permits to ensure compliance with the permit.**

Business unit's response:

*[TRANSLATION] It has already been established that safety requirements must be indicated on the permit document. A reminder to this effect was sent to the team. **(Completed)***

*The general conditions of permit issuance always accompany permit requests (2nd page) and must be accepted by ticking the box provided on the form. A reminder was sent to this effect. Also, we made sure that the 2nd page (general conditions) of the permit is sent every time. **(Completed)***

*The permit conditions are verified as part of the inspectors' daily tasks. This is now stated on the inspection report for inspected sites. **(Completed)***

The verification sampling of permit conditions and inspection reports issued will be done on a monthly basis. This information will be recorded in an Excel spreadsheet. (Planned completion: October 2015)

Auditor General's Comments:

Given that our audit revealed that, in 2 out of 6 cases, the safety measures set out in the permit request were not indicated on the permits while, in 6 out of 6 cases, we found no evidence that the general conditions had been sent to the applicants or that they were aware of them and that, in 6 out of 6 cases, we found no evidence that the required safety measures had been verified after these permits were issued, we feel that the proposed actions are insufficient to correct the observed shortcomings.

4.1.1.3.1.C. Recommendation

We recommend that the Direction des travaux publics of the Ville-Marie borough create a checklist to determine, when a request is made for a permit for temporary occupancy of the public domain, whether or not a signage board should be required from the applicant, in order to facilitate the work of the staff involved in analyzing the files.

Business unit's response:

[TRANSLATION] A grid has already been produced in accordance with VOLUME V (Norme de signalisation routière du Québec [TRANSLATION: Québec traffic control standards]), for application of the requirement for signage boards, if applicable. A reminder has been sent to this effect. (Completed)

4.1.1.3.2. Côte-des-Neiges–Notre-Dame-de-Grâce Borough

4.1.1.3.2.A. Background and Findings

When an applicant makes a permit request, the form intended for this purpose includes the general conditions for the issuing of a permit for temporary occupancy of the public domain, three of which are related to the safety of individuals and signage. Before issuing a permit, the technical agent must ensure that the applicant has planned safety measures for the temporary occupancy in order to comply with the applicable general conditions. These specific safety measures must appear on the permits when they are required and should be verified by inspectors following the issuing of the permit. Moreover, the general conditions for issuing the permit must be systematically remitted to applicants to inform them of their obligations.

Our audit revealed that, for half of the six permit files selected, specific safety measures required when the permit was requested did appear on the permits for temporary occupancy of the public domain. It should first be noted that, for the six selected files, the permits included general conditions regarding safety and signage. For three permit files, measures aimed at ensuring the safety of individuals were indicated in the permit along with the general conditions (see Appendix 6.1, Table A, Column e, Nos. 8, 11 and 12).

For the three other files (see Appendix 6.1, Table A, Column e, Nos. 7, 9 and 10), no specific safety measure was mentioned, apart from the general conditions that we mentioned previously. We have questions regarding file No. 10, however. The width of occupancy is nine metres wide and involves a major street. According to the general conditions of the permit, a signage board is required for an obstruction of three or more metres on a major street. We feel that it would be important to indicate the measures related to the safety of individuals on the permit to comply with the regulations. The absence of such an indication does not facilitate verification of compliance with these safety measures during inspections.

Moreover, in five of the six cases (see Appendix 6.1, Table A, Column g, Nos. 7, 8, 9, 10 and 11), our audit did not reveal evidence that the general conditions for issuing a permit for temporary occupancy of the public domain had been given to the permit holders or that they were made aware of them. According to the information obtained, these general conditions are not systematically remitted upon issuing the permit. In our opinion, it is important to ensure that permit holders have obtained or been made aware of the general conditions for issuing a permit since these are obligations that they must adhere to.

With regard to the control mechanisms put in place by the borough to ensure adherence to the safety measures required when the permit is issued, we did not find any evidence among the six selected files that the safety measures had been verified subsequent to the permit being issued to ensure compliance with the regulations (see Appendix 6.1, Table A, Column f).

With regard to the nine situations of temporary occupancy of the public domain that we witnessed during our visit to the borough on October 3, 2014, our audit revealed that eight of them were partially or fully non-compliant with regard to the safety of individuals, specifically due to missing or faulty signage (see Appendix 6.1, Table B, Column c), despite the fact that one of these sites had been subject to an occupancy permit (see Appendix 6.1, Table B, Column c, No. 15). These results demonstrate the importance of detecting non-compliant situations so that offenders obtain the required permits and are obligated to follow the required safety measures.

Lastly, over the course of our audit, we found that the staff in charge of issuing permits or conducting inspections did not have a checklist illustrating all the situations and the procedure for requiring a signage board, even though, in practice, a signage board is required for an obstruction of a major street for a width of more than three metres as well as for the blocking of a major street. We believe that such a checklist would facilitate the work of the employees involved by allowing for a more prompt analysis of situations presenting a greater risk and requiring a signage board.

4.1.1.3.2.B. Recommendation

We recommend that the Direction des travaux publics of the Côte-des-Neiges–Notre-Dame-de-Grâce borough put in place control mechanisms aimed at ensuring that:

- all safety measures required at the time the permit request is made appear on the permit issued in order to facilitate the performance of inspections and compliance with regulations;
- the general conditions for issuing a permit for temporary occupancy of the public domain are given to applicants to inform them of their obligations;
- a verification of safety measures be performed subsequent to the issuing of permits to ensure compliance with the permit.

Business unit's response:

[TRANSLATION] A checklist will be produced to ensure that all parameters allowing for a permit to be issued are reviewed:

- *applicant, nature of the work, location, period;*
- *fee parameters;*
- *sending of general conditions;*
- *additional safety measures in the "Conditions" section. (Planned completion: August 2015)*

The completed checklist will be included in the file along with the general conditions of permit issuance. (Planned completion: August 2015)

Based on the available resources, verification of the compliance of the work and the safety measures on site will be conducted by an inspector who will complete a daily report. A copy of this daily report will be included in the file. (Planned completion: February 2016)

4.1.1.3.2.C. Recommendation

We recommend that the Direction des travaux publics of the Côte-des-Neiges–Notre-Dame-de-Grâce borough create a checklist to determine, when a request is made for a permit for temporary occupancy of the public domain, whether or not a signage board should be required from the applicant, in order to facilitate the work of the staff involved in analyzing the files.

Business unit's response:

[TRANSLATION] A checklist will be produced to ensure that all parameters allowing for a permit to be issued are reviewed, including the requirements for additional safety measures. On the back of the list, the necessary criteria for the requirements of the following additional safety measures will be explained:

- *need to require a signed and sealed signage board;*
- *presence of flaggers;*
- *presence of police officers;*
- *modifications to traffic lights.*

All additional safety measures not stated in the general conditions will appear in the "Conditions" section. (Planned completion: August 2015)

4.1.1.4. Updating the Regulations

4.1.1.4.A. Background and Findings

As we mentioned in Section 4.1.1.1, the by-laws on applicable fees in the two selected boroughs include fees established based on the width of the temporary occupancy on a street. These fees are set by blocks of three occupied metres and for road closures. They are also determined distinctly for two categories of streets:

- The first is defined in paragraph 3 of the by-laws: *[TRANSLATION] "on a street listed on the map in Appendix A of the By-law concerning traffic and parking, a street with a bicycle path on a bus route of the Société de transport de Montréal [...]¹"*,
- The second is defined in paragraph 4 of the by-laws: *[TRANSLATION] "on a street other than those mentioned in paragraph 3 [...]²"*.

The distinction between these streets is based on various characteristics related specifically to regulations concerning the road system, namely major streets and local streets. The streets in the first category are mainly streets where specific services or infrastructures are

²¹ For the Ville-Marie borough: *By-law concerning fees*, No. CA-24-206, article 34.

For the CDN-NDG borough: *By-law concerning fees*, No. RCA-14 17222, article 88.

²² For the Ville-Marie borough: *By-law concerning fees*, No. CA-24-206, article 34.

For the CDN-NDG borough: *By-law concerning fees*, No. RCA-14 17222, article 88.

located, thereby resulting in greater constraints on citizens during occupancy of the public domain. For example, temporary occupancy of a street that has a bicycle path on it or is part of a bus route affects a large number of people. As another example, temporary occupancy of a major street affects a significant number of drivers and individuals compared to a local street. Accordingly, the fees are higher for this category than for “other streets” since the consequences of a temporary occupancy are not the same (e.g., when a major street is closed to traffic as opposed to a local street). It should also be noted that the required safety measures during temporary occupancy of the public domain will be different based on whether the street is a major thoroughfare (main and secondary) or local.

To establish this distinction between streets and be able to apply the appropriate fees, the regulations on fees must refer to maps or schedules on which these streets are indicated. The by-laws on fees refer to a street map that is actually Appendix A of the *By-law concerning traffic and parking*. This map includes several streets, both major and local, for which higher fees apply with regard to width of occupancy. Conversely, lower fees are applied for all the streets that do not appear on this map, namely the “other streets.” Note that the *By-law concerning traffic and parking* is under the jurisdiction of the boroughs pursuant to the *Charter of the Ville de Montréal* and the delegation of powers from City council to the borough councils.²³

Furthermore, throughout the years, certain streets have had additional constraints added to them, specifically bicycle lanes and bus routes. For other streets, authorities have adopted changes in designation, for example, local streets have become major streets. It is therefore important that the maps referred to in the by-laws concerning fees be kept up to date so as to easily be able to determine a street’s category for purposes of fee setting.

Consequently, a street that is not classified under the right category may present several risks for the City and boroughs, including the risk of financial losses, risks involving the safety of individuals, risks of lawsuits and risks of citizen dissatisfaction regarding management.

At this stage in our audit, we first examined the date of creation or adoption of the maps included in Appendix A of the by-laws concerning traffic and parking referred to in the by-laws concerning fees for the two boroughs. Our audit revealed that Appendix A, referred to in the two boroughs’ by-laws on fees, was produced on November 22, 1991, and reviewed in February 1997. Appendix A of these by-laws has therefore not been modified since this last date. According to the information obtained, the streets listed in Appendix A were entered

²³ *Charter of the Ville de Montréal*, article 142 and *Règlement du conseil de la Ville sur la délégation de certains pouvoirs relatifs au réseau de voirie artérielle aux conseils d’arrondissement*, City council of the Ville de Montréal, by-law No.08-055, December 15, 2008.

in the Détour computer application to be able to automatically identify the streets in the first category and calculate the fee accordingly.

Subsequently, using the permit files selected for each of the boroughs, we examined whether the streets in question were listed on the map found in Appendix A of the *By-law concerning traffic and parking* referred to in the *By-law concerning fees*, and whether they included constraints such as a bicycle path or bus route. We also looked at which fees had been applied for width of occupancy.

The results of our audit revealed confusion in the application of the regulations for the two boroughs.

For the Ville-Marie borough, the affected streets for three permit files (see Appendix 6.1, Table A, Column h, Nos. 1, 5 and 6) were not listed in Appendix A of the *By-law concerning traffic and parking*. The fees applied were therefore those for “other streets” (see Appendix 6.1, Table A, Column i, Nos. 1, 5 and 6). However, according to the 2014 public transit network maps of the Société de transport de Montréal,²⁴ the streets on which the permits for temporary occupancy of the public domain Nos. 1 and 6 (see Appendix 6.1, Table A, Column j) were authorized include bus routes. In addition, for the affected street in file No. 5, the borough map²⁵ for 2013 indicated the existence of a bicycle lane at the location where the temporary occupancy was subject to a permit.

Moreover, for file No. 2 (see Appendix 6.1, Table A, Column i), the temporary occupancy involved two streets, one of them listed in Appendix A and the other not. These two streets were not considered major and did not include a bicycle path or bus route. When the permit was issued, the fee applied was that of the first street category, namely the higher one. We question why such a fee would be set for streets that are not arterial and do not include a bicycle path or bus route, when the fee applied to streets with a bus route was that for “other streets,” namely the lower one (see Appendix 6.1, Table A, Column i, Nos. 5 and 6). We feel that such a situation creates confusion for the staff responsible for applying the fees.

With regard to file Nos. 3 and 4 (see Appendix 6.1, Table A, Column i), there was no possibility of confusion since the streets appeared on the map included in Appendix A of the *By-law concerning traffic and parking*, and the streets included constraints such as a bicycle path or bus route. In these cases, the fees applied were those for streets in the first category.

²⁴ 2014 STM Downtown system map:
www.stm.info/fr/infos/reseaux/plans-des-reseaux

²⁵ Ville-Marie borough map:
http://ville.montreal.qc.ca/portal/page?_pageid=7317,84222189&_dad=portal&_schema=PORTAL

For the CDN-NDG borough, we found that two files also caused confusion in terms of the interpretation of the regulations. These are the affected streets in permit file Nos. 11 and 12. Since they do not appear on the map in Appendix A of the *By-law concerning traffic and parking*, the fee is that for streets of the second category. However, according to the 2014 public transit network maps of the Société de transport de Montréal²⁶ and according to a borough map for 2013²⁷ available on the borough's website, these two streets include bus routes and bicycle lanes at the location where the temporary occupancy was authorized.

With regard to the four other permit files used in our sample, we did not find any confusion in the application of the fees since they involved streets in the first category. File Nos. 7 and 8 (see Appendix 6.1, Table A, Column h), involved local streets that did not appear on the map in Appendix A of the *By-law concerning traffic and parking* and did not include bus routes or bicycle paths. The two other files (Nos. 9 and 10) involved streets that appeared in Appendix A of the *By-law concerning traffic and parking* for which there was a bus route and, for one of the streets, a bicycle lane as well.

In our opinion, the situation which we just described creates a certain amount of confusion in the application of regulations regarding the occupancy of the public domain and poses certain risks that could have an impact on compliance with laws and by-laws. For streets that present similar characteristics in terms of constraints and risks related to the temporary occupancy of the public domain, similar rules should apply. We feel that efforts should be invested to update the regulations in order to determine the streets that belong to one or the other of the categories that we described above. Consequently, efforts should also be invested in updating the Détour computer application, which establishes the fees for these street categories.

4.1.1.4.B. Recommendation

We recommend that the Direction des travaux publics of the Ville-Marie and Côte-des-Neiges–Notre-Dame-de-Grâce boroughs:

- **update the regulations in order to determine which streets should be included in which fee categories;**
- **modify the classification of streets entered in the Détour computer application after the regulations are updated to establish the applicable fees with regard to width of occupancy of the public domain;**

in order to establish a uniform fee structure.

²⁶ 2014 STM system map:
www.stm.info/fr/infos/reseaux/plans-des-reseaux

²⁷ CDN-NDG borough map:
http://ville.montreal.qc.ca/portal/page?_pageid=7497,84237570&_dad=portal&_schema=PORTAL

Business units' responses:**VILLE-MARIE BOROUGH**

[TRANSLATION] An analysis of needs has been initiated in anticipation of a regulatory review. (Planned completion: October 2015)

Following this review, the IT department will be asked to make updates to the street classification. (Planned completion: December 2015)

CÔTE-DES-NEIGES–NOTRE-DAME-DE-GRÂCE BOROUGH

[TRANSLATION] Validation with the department involved regarding the possibility of making the required changes to the Détour computer application to modify the streets programmed. (Planned completion: June 2015)

4.1.2. Staff Information and Training Mechanism**4.1.2.A. Background and Findings**

Informing and training the staff responsible for applying the regulations are key elements in ensuring compliance with laws and by-laws. It is important that the employees that apply them possess sufficient expertise and knowledge of them, otherwise several risks of non-compliance can arise, in particular risks of financial losses, lawsuits and citizen dissatisfaction with regard to management. It is therefore important that employees possess and receive adequate training, including being informed about new regulatory provisions that are directly related to the activities to be carried out. Moreover, it is essential that the staff have access to training on the application of these regulations.

At this stage, our audit consisted in examining whether mechanisms had been put in place to ensure that the staff responsible for the application of the regulations related to the temporary occupancy of the public domain had access to, among other things, up-to-date versions of the regulations, training, tools and information that enabled them to apply such regulations with confidence.

First, in terms of the versions of the by-laws that are used by the staff, our audit revealed the following:

- For the *By-law concerning fees*, the staff in the two selected boroughs had a current version of this by-law. A fee grid regarding the temporary occupancy of the public domain is used, and it is valid. The version being used was dated January 1, 2014;
- For the *By-law concerning the occupancy of the public domain*:
 - For the Ville-Marie borough, we found that the version of the by-law used was not up to date. We obtained a version of the by-law in the form of an office consolidation,

dated September 10, 2007. It should be noted that an office consolidation essentially includes the by-law and all modifications. However, after doing some research on the borough website, we found that the by-law had been modified several times since 2007 and that the latest version of the office consolidation was dated March 15, 2014;

- As regards the CDN-NDG borough, we found that the version of by-law that we were shown was not up to date. After doing some research on the borough website, we obtained a version of an office consolidation dated March 22, 2006.

In our opinion, a control mechanism should be introduced to ensure that the employees responsible for applying the regulations dealing with the temporary occupancy of the public domain, including managers, always have an updated version of the by-laws in effect, given the risks involved in applying provisions that are no longer in effect.

Second, with regard to training, we also examined for each of the business units the mechanisms in place surrounding the training of staff assigned to the application of these regulations. For both business units, the staff assigned to processing permit requests and those assigned to inspection received training, specifically on signage. However, according to the information obtained from the individuals we met with, there is no formal framework mechanism for training; some training is done at the employee's initiative and some at the request of the manager. We feel that training needs must be determined and that a follow-up must be performed with regard to staff training.

Third, with regard to tools, we evaluated whether the business units had guides and procedures available to enable the application of regulations on the temporary occupancy of the public domain. For the Ville-Marie borough, two procedures guides related to the application of regulations on the temporary occupancy of the public domain were produced for the staff in 2013. In our opinion, this is a good management practice. As for the CDN-NDG borough, no procedures guide intended for the staff on regulations concerning the temporary occupancy of the public domain was found, except for a guide on the Détour computer application. We feel that such a guide should be produced and made available to all the staff involved to aid in the application of these regulations. We also feel that relying mainly on the knowledge and expertise of the employees to apply these regulations leaves the business unit more susceptible to non-compliance with laws and by-laws. For example, when experienced employees leave, applying these regulations could pose greater risks with regard to non-compliance.

Lastly, according to the information obtained from the individuals we met with in the two business units, other means are used to inform the staff about regulations on the temporary occupancy of the public domain, including:

- access to the current by-laws on the borough website for the staff involved;
- relaying of information during meetings with employees;
- emails to inform employees of regulations;
- internal and external training sessions;
- distribution of the inventory of laws and by-laws to the staff involved, including legislative and regulatory modifications, produced by the Service des affaires juridiques as part of the legislative oversight for the boroughs.

We feel these are relevant means that constitute sound management practices and promote compliance with laws and by-laws.

While efforts have been invested in informing and training the staff responsible for applying the regulations, we feel that managers in the Direction des travaux publics of the Ville-Marie and CDN-NDG boroughs should determine training needs with regard to the application of the regulations regarding temporary occupancy of the public domain. They should also implement follow-up mechanisms for staff training to ensure staff knowledge is kept up to date in this regard.

4.1.2.B. Recommendation

We recommend that the Direction des travaux publics of the Ville-Marie and Côte-des-Neiges–Notre-Dame-de-Grâce boroughs:

- **put in place control mechanisms to ensure that all the staff involved in the application of regulations concerning the occupancy of the public domain have updated versions of the by-laws in effect to reduce the risk of errors in the application of regulations;**
- **determine training needs for the staff involved in the application of regulations related to the temporary occupancy of the public domain, and put in place follow-up mechanisms for the staff training to keep their expertise up to date and promote compliance with laws and by-laws.**

Business units' responses:

VILLE-MARIE BOROUGH

[TRANSLATION] We made sure that the entire team had the correct version of the by-law. A reminder about the importance of this aspect was sent out. A quarterly verification will be conducted to ensure that the entire team is using the proper by-law. (Planned completion: June 2015)

Training needs are already determined with the staff at the beginning of each year. Training on minor violations was just given to all the staff involved in issuing permits.

We will plan for our employees' training needs, as always, according to the changes in the laws and by-laws. **(Completed)**

CÔTE-DES-NEIGES–NOTRE-DAME-DE-GRÂCE BOROUGH

[TRANSLATION] Once the By-law concerning fees is updated by the Division du greffe, the document will be systematically sent to the entire borough staff. **(Planned completion: April 2015)**

Ongoing internal training for staff during statutory meetings held at least monthly:

- explanation of changes to by-laws, if applicable;
- review and explanation of specific features of the current regulations;
- discussions and case studies;
- question periods. **(Planned completion: April 2015)**

4.1.2.C. Recommendation

We recommend that the Direction des travaux publics of the Côte-des-Neiges–Notre-Dame-de-Grâce borough produce a procedures guide on the application of regulations regarding the temporary occupancy of the public domain and make it available to the staff involved to support them in the application of these regulations.

Business unit's response:

[TRANSLATION] Development of a guide explaining all the parameters to consider when issuing permits for the temporary occupancy of the public domain and the elements to take into account during an inspection. Implementation of guidelines regarding the following safety measures:

- need to require a signed and sealed signage board;
- presence of flaggers;
- presence of police officers;
- modifications to traffic lights. **(Planned completion: August 2015)**

4.2. By-law Concerning the Protection of Buildings Against Sewer Back-ups

4.2.A. Background and Findings

The Service de l'eau has been reporting an increase in the frequency of heavy rainfall over the entire territory for several years now. Rainfall is considered heavy when a significant number of millilitres falls within a span of less than two hours. According to the information obtained from the Service de l'eau, this phenomenon is being exacerbated by climate change.

In terms of damages to buildings caused by water, Table 3 below presents the number of claims received by the City over the past few years:

Table 3 – Number of Claims Received by the City^[a]

Year	Number of complaints
2002	150
2003	226
2004	422
2005	5,326
2006	398
2007	209
2008	2,864
2009	1,880
2010	819
2011	1,105
2012	4,314
2013	681
2014 (9 months)	216

^[a] Data source: Bureau des réclamations de la Ville.

Between 2005 and 2009, in response to a significant number of claims from citizens regarding damages caused by water, the City began a process to look for solutions to this problem. The considerable increase in the number of claims for this type of damage posed a high financial risk for the City. The City faces risks of lawsuits, financial losses and high costs related to processing claims. For their part, the residents forced to deal with this problem are left in crisis, since several consequences result from the damage, including financial losses and health risks.

With the aim of finding solutions to this crisis situation and reducing the impacts of heavy rainfall on citizens, the Service de l'eau, in collaboration with the boroughs, began work on an integrated approach involving regulations, communication tools and education as well as guides.

In order to gain a clearer picture of the situation, between 2010 and 2011 the Service de l'eau conducted over 600 inspections in buildings affected by a sewer back-up or flood, for which citizens volunteered. These inspections revealed that most buildings affected by a sewer back-up, namely 80%, were lacking the protection of a backwater valve. In addition, close to half of the buildings (46%) were lacking the protection of a catch basin and drain pump. One of these pieces of equipment was either missing or not functional, reducing the building's protection against sewer back-ups, and thus increasing the risks of a flood or sewer back-up.

Following this finding, one of the solutions proposed in the integrated approach, which was to adopt a by-law on the protection of buildings against sewer back-ups, was implemented. A by-law was adopted in June 2011²⁸ by City council, which delegated its application to the boroughs wanting to take part in it.

This main purpose of this by-law is to reduce the impacts of heavy rainfall on citizens' buildings by making it mandatory to install equipment intended to protect the building against sewer back-ups and floods. The by-law is aimed at three types of buildings:

- new buildings;
- buildings where alterations are made to a plumbing system;
- buildings affected by a back-up or flood.

Furthermore, the main measures provided for in this by-law involve the installation of equipment, specifically a backwater valve on all plumbing equipment requiring protection, a catch basin where drainage water can collect near the foundation and a drain pump in the catch basin equipped with a mechanism allowing for emergency drainage to the outside of the building.

For the City, the purpose of adopting this by-law was to reduce claims related to sewer back-ups and floods, and reduce the impacts on citizens.

It should be noted that this by-law came into force in 2011²⁹ for 16 boroughs and in 2014 for two more. At the time this audit report was produced (March 2015), one borough³⁰ was still not applying this by-law. According to the information obtained from the Service de l'eau, applying the by-law resulted in a reduction in the number of claims made to the City for the boroughs that applied it.

To assess compliance with the provisions of the *By-law concerning the protection of buildings against sewer back-up*, we wanted to be sure that the boroughs selected for this audit properly applied the by-law with regard to the important aspects. We therefore examined the following aspects:

- application of the by-law;
- follow-up of inspections and notices produced for important equipment.

We examined whether control mechanisms had been put in place to ensure compliance with these regulations. We also looked at whether measures had been taken to identify situations

²⁸ *By-law concerning the protection of buildings against sewer back-up* – City council resolution: CM11 0533.

²⁹ For the two boroughs audited, the by-law came into force on July 1, 2011.

³⁰ Plateau-Mont-Royal borough.

of non-compliance. Lastly, we examined whether mechanisms had been put in place to inform and train the staff in the business units involved.

4.2.1. Implementation of Control Mechanisms Aimed at Ensuring Compliance as well as Measures to Detect Non-Compliances

4.2.1.A. Background and Findings

In order for managers to ensure compliance with laws and by-laws affecting them, control mechanisms must be put in place. These control mechanisms help ensure that the important aspects of regulations are identified and verified before actions are taken. These mechanisms will therefore help to reduce the risks associated with non-compliance with laws and by-laws. These control mechanisms can take many forms, including internal checks, computer applications and analysis grids.

In the sections that follow, we will describe the key aspects of the by-law, which, when not adhered to, cause the business units to be non-compliant and to expose themselves to risks that can have major consequences. Through interviews and surveys, we assessed the extent to which the selected business units complied with the regulatory requirements related to these key aspects. In addition, we examined whether control mechanisms had been put in place to allow for the detection of situations of non-compliance.

To carry out our audit, we selected inspection and follow-up files from the lists of inspections and follow-ups conducted. For each of the boroughs audited, we selected a total of four files covering the years 2013 and 2014 (up until August 31, 2014).

4.2.1.1. Application of the By-law

4.2.1.1.A. Background and Findings

One of the first key elements regarding the application of the *By-law concerning the protection of buildings against sewer back-up* is its field of application, that is, the buildings and situations that it covers. As previously mentioned, the by-law applies to the following three situations:

- a new building;
- a building where alterations are made to a plumbing system;
- a building affected by a sewer back-up or flood.

The by-law stipulates that boroughs can use various means to verify compliance, including inspections and certificates of compliance and proper functioning of the systems or components installed.

In the case of new construction or alteration work requiring the installation of plumbing fixtures, compliance with the by-law should be established when the permit is issued. In the case of buildings affected by a sewer back-up or a flood, compliance with the by-law should be established when informed about this event.

For a building in one of these situations, non-compliance with the by-law poses several risks for the boroughs and the City. In the case of a new building or a building undergoing alteration work, if the by-law is not applied in order to detect non-compliances, the risks of back-up or flood remain present, and if these occur at a later time, they can result in even greater consequences. The work to be carried out by the owner could be more complicated and costly than if it had been done during the construction of the building. The same applies to alteration work on a building. In the case of buildings affected by a back-up or flood, failure to apply the by-law and detect non-compliances can result in the building remaining at risk for other back-ups or floods resulting in damages, and new claims being made to the City.

It is therefore important that regulations be applied by the borough in order to identify situations of non-compliance in the case of the three situations presented above. It is also important that the staff responsible for applying the by-law have the tools and means to enable them to apply the regulations in such a way as to reduce the risks described above.

Furthermore, the *By-law concerning the delegation of City council powers to borough councils*³¹ provides that the borough council must submit to the director of the Service de l'eau a yearly list of addresses that were inspected and, if applicable, the non-compliances uncovered and the actions taken to correct them.

At this stage in our audit, we sought to examine whether the business units systematically applied the by-law to new buildings, buildings where alterations are being made to a plumbing system and buildings affected by a sewer back-up or a flood, to ensure compliance. We also wanted to evaluate the extent to which control mechanisms had been put in place to detect situations of non-compliance with the regulations.

Application of the by-law in the two selected boroughs is the responsibility of the Division des permis et des inspections within the DAUSE. In the Ville-Marie borough, a single building

³¹ City council of the Ville de Montréal, by-law No.02-002, December 18, 2001.

inspector is in charge of applying this by-law. For the CDN-NDG borough, this by-law is enforced by four building inspectors.

First, for the two boroughs, we observed that the by-law is not applied to new buildings. We also found that the by-law is also not applied for buildings where alterations are being made to a plumbing system. Among the permits issued for alteration work, we were unable to determine which ones involved plumbing work. When alteration permit requests are made, there is no control mechanism in place to detect those involving plumbing work. For these two types of buildings, the managers we met with stated that the staff required had not been deployed since the by-law came into effect.

Yet, according to the information obtained from the individuals we met with attached to the Service de l'eau, data compiled during inspections conducted between 2011 and 2014, and involving new buildings as well as those for which a permit was granted for plumbing work, reveal that, in more than 70% of cases, the catch basin and drain pump do not comply with the by-law. Moreover, in over 30% of cases, the valve does not comply with the by-law. Consequently, we feel that it is important to apply the by-law to these buildings to make them compliant, otherwise several of the risks discussed earlier could occur. Also, we feel that, when a permit request is processed, a regulatory analysis grid should include the *By-law concerning the protection of buildings against sewer back-up* so that the staff can ensure that it is systematically applied to the buildings in question. In addition, for alteration permit requests, a control mechanism to detect those involving a plumbing system in a building should be in place to facilitate application of the by-law.

Second, we observed that, since its coming into force, the by-law is applied essentially to buildings affected by a sewer back-up or a flood. For both boroughs, our audit revealed that the building inspections conducted since 2011 were completed based on a list of buildings affected by a sewer back-up and for which citizens submitted a claim to the City as a result of the damages incurred. This list comes from the Service de l'eau.

In the case of the Ville-Marie borough, building inspections related to compliance with the by-law began in 2011, but they were conducted by the Service de l'eau at the time. The borough took over in 2012. In relation to the number of claims received in the years 2012, 2013 and 2014 for buildings affected by a sewer back-up or a flood, the number of inspections conducted by the borough for the same period represents a percentage of 37%. According to the information provided by the manager we met with at the Division des permis et des inspections, the inspections carried out in 2013 and 2014 primarily involved claims submitted by citizens in 2012. We feel that measures should be taken to ensure that inspections are carried out more promptly.

For the CDN-NDG borough, building inspections related to compliance with the by-law also began in 2011, but they were conducted by the Service de l'eau. The borough took over in 2012. According to the information obtained, no inspections were conducted in 2014. According to the manager we met with at the Division des permis et des inspections, the inspections carried out in 2012 and 2013 mainly involved claims submitted by citizens in 2012. A comparison between the number of inspections conducted by the borough and the number of claims received for the years 2012, 2013 and 2014 (up until August 31) demonstrates that a small proportion of claims were inspected, namely 7.5%. This said, over the course of our audit in this borough, a new procedure that the individuals we met with intend to use systematically from now on was applied for three files of buildings affected by a sewer back-up in 2014. In this procedure, the borough sends the building owner a request for a compliance certificate with regard to the equipment mentioned in the by-law. This certificate must be produced by the owner or a contractor and must indicate that the plumbing equipment stated in the by-law is compliant. The individuals we met with stated that they plan on no longer conducting inspections and using this method systematically to verify compliance with the by-law. In our opinion, while this method is provided for in the by-law, we feel that it is important for the borough staff to ensure they receive an inspection report from the building owner or contractor in support of the required compliance certificate. Given that the borough must report on inspections conducted in the buildings affected by a sewer back-up or flood, we feel that such reports are necessary.

Furthermore, even though inspections are conducted with regard to buildings that have been the subject of claims, it is important to remember that the by-law applies to all buildings affected by a back-up or flood, regardless of whether a claim or request was submitted to the borough by a citizen. It should also be mentioned that not all buildings affected by a sewer back-up or a flood have been the subject of a claim. Our audit revealed that boroughs must respond to numerous calls concerning citizen requests related to sewer back-ups and the functioning of a sump or sewer, resulting in more resources being used and extra costs incurred.

According to the documents we obtained, these requests are primarily handled by the boroughs' Direction des travaux publics, and the DAUSE is not involved in the handling of these requests. A comparison between the lists of requests made by citizens and the lists of claims shows that certain requests were also subject to claims. Such requests that were also subject to claims are likely to involve an inspection by the DAUSE, which is not the case for the other requests, even though there is a risk that the building was affected by a sewer back-up or a flood. In our opinion, control mechanisms aimed at detecting citizen requests related to a building affected by a sewer back-up or a flood for which a claim has not been made should be put in place by the boroughs in order to verify compliance with the by-law. The

failure to identify buildings affected by a back-up leaves them in a situation where they are at risk for a back-up or flood and this, in turn, creates a new risk of claims for the City and the borough.

We feel that additional efforts should be put forth so that all buildings affected by a back-up or flood are subject to an inspection or a compliance certificate.

4.2.1.1.B. Recommendation

We recommend that the Direction de l'aménagement urbain et des services aux entreprises of the Ville-Marie and Côte-des-Neiges–Notre-Dame-de-Grâce boroughs:

- apply the by-law to new buildings and buildings where alterations are done to a plumbing system, and put in place control mechanisms to ensure that the by-law is systematically applied to these buildings to ensure compliance with the by-law;
- ensure that inspections are performed or actions are taken as soon as possible with regard to all buildings affected by a sewer back-up or a flood in order to reduce the risks of back-up or flood for these buildings and, in turn, the risks of claims;
- put in place mechanisms aimed at detecting, among requests submitted by citizens, the buildings affected by a sewer back-up in order to be able to conduct or take actions in accordance with the by-law.

Business units' responses:

VILLE-MARIE BOROUGH

- *[TRANSLATION] Apply the by-law to new construction and extensions.*
- *Train the staff on this by-law.*
- *Provide the applicant with documentation including the requirements of the by-law when the permit request is submitted.*
- *Create two dedicated follow-up lines in Oracle, one for the permit issuing clerks and one for inspectors to use to ensure application of the by-law. (Planned completion: October 2015)*

Take action as soon as a flood or back-up is brought to our attention (claim or complaint) by sending a notice to the owner requiring him/her to comply with the regulations and submit a compliance certificate within 90 days of the notice being sent. (Planned completion: October 2015)

Develop a sewer back-up investigation transmission process with the Direction des travaux publics. (Planned completion: October 2015)

CÔTE-DES-NEIGES–NOTRE-DAME-DE-GRÂCE BOROUGH

[TRANSLATION] Computer coding (named CO REFOUL) with automatic entry already exists as part of permit request follow-up in the Gestion du territoire – permis

computer application when an alteration or construction permit request is entered. When analysis confirms application of the by-law, a sticker is applied on the plans informing the applicant of the obligation to comply with the by-law. **(Planned completion: May 2015)**

The diagrams in Appendix C and D of the by-law as well as the inspection form will be included with the documents remitted with the issued permit for which the work is subject to the by-law following review by the permit issuing clerk. **(Planned completion: May 2015)**

The claims compilation will be consulted once a week by a designated employee in order to respond more quickly. One requisition per address will then be entered in the Gestion du territoire – permis computer application and given to the inspector in charge. A new application directive will establish a response time. **(Planned completion: April 2015)**

The new directive on the procedure for application of the by-law will include a detection mechanism for sewer back-up requisitions. **(Planned completion: June 2015)**

4.2.1.1.C. Recommendation

We recommend that the Direction de l'aménagement urbain et des services aux entreprises of the Côte-des-Neiges–Notre-Dame-de-Grâce borough ensure, for situations in which compliance certificates are requested, that they are accompanied by an inspection report so as to satisfy the requirements of the *By-law concerning the delegation of City council powers to borough councils* with regard to accountability in terms of the list of addresses where an inspection was conducted, which must be submitted annually.

Business unit's response:

[TRANSLATION] The new directive on the procedure for the application of the by-law will confirm the need to attach the inspection form to the non-compliance notice. (Planned completion: June 2015)

4.2.1.2. Follow-up to Inspections and Notices of Non-Compliance

4.2.1.2.A. Background and Findings

To protect buildings against risks of sewer back-up or flood, the by-law provides for the installation of certain equipment that ensures protection of the building, in particular a backwater valve on the plumbing equipment, a catch basin to collect drain water near foundations, and a drain pump in the catch basin with an emergency drain toward the outside

of the building. These are the key aspects of the by-law regarding the equipment to be installed. The presence of this equipment in a building helps to reduce the risks of sewer back-ups and floods.

In order to verify whether a building complies with the regulations related to these key aspects, namely to ensure that this equipment is installed in a building, checks must be conducted by the borough. The by-law provides for various means for the borough to conduct these checks, including through inspections or compliance certificates. When a sewer back-up or flood occurs in a building and when an inspection or work must be conducted, it is important that it be done as soon as possible to reduce the risks of a sewer back-up or flood occurring again. In addition, when an inspection has been carried out and a notice of non-compliance has been produced with a time limit, it is important that a follow-up be conducted at the end of the time period to ensure that the required corrective measures have been taken so as to comply with the by-law.

Since, at the time of our audit, the two selected business units were not applying the by-law to new buildings and those where alterations were done to plumbing system, we focused our audit on buildings affected by a sewer back-up or flood. We chose our sample files from lists of inspections and follow-ups of buildings affected by a sewer back-up or flood for which a claim was made to the City.

At this stage of our audit, we therefore wanted to determine whether the key equipment stated in the by-law was systematically subjected to an inspection or servicing. We also wanted to evaluate the means used to ensure corrective measures are taken when situations of non-compliance are uncovered. Lastly we examined whether a follow-up was performed promptly to ensure compliance with the by-law and reduce the risks related to non-compliance.

4.2.1.2.1. Ville-Marie Borough

4.2.1.2.1.A. Background and Findings

The four files examined are related to inspections conducted in 2013 (Nos. 1 and 2) and 2014 (Nos. 3 and 4). These files involve heavy rainfall and claim events dating from 2011 (No. 1) and 2012 (Nos. 2, 3 and 4). Our audit revealed that the four files involved an inspection of three main pieces of equipment required by the by-law (see Appendix 6.2, Table A, Column a) and that an inspection form was used in electronic form in each of the cases in order to cover all the elements required by the by-law (see Appendix 6.2, Table A, Column b).

We also found, for the four cases, that the inspections revealed non-compliant elements on the equipment checked (valve, catch basin and drain pump) (see Appendix 6.2, Table A, Column c). Notices of non-compliance were produced in which the owner was asked to contact the inspector within three weeks of receiving the notice to establish the date the non-compliances were corrected (see Appendix 6.2, Table A, Column e).

While the inspection and the notices of non-compliance are well documented, we question the long time span between the date on which the sewer back-up occurred and the date of the last contact with the owner. While none of the four files are closed permanently yet, at the time of our audit, the processing time varied between 742 days and 1,192 days (see Appendix 6.2, Table A, Column f).

First, for the purpose of our audit, we were interested in the follow-up done to ensure inspections are carried out within a reasonable time frame. To begin with, we found that the inspections had been conducted more than 12 months after the date of the rainfall event and the claim submitted to the City. Based on the process in place, before conducting an inspection in the building affected by a back-up or flood, the DAUSE must contact the owner by way of an inspection notice letter. The owner is generally given a certain time frame to make an appointment with the borough. For the four files examined, we found that these notices were sent long after the sewer back-up had occurred. For example, for file Nos. 1 and 2, these letters were sent more than a year later. Moreover, we also found that a time limit had not been indicated on the inspection notice for file Nos. 1 and 2 (see Appendix 6.2, Table A, Column d). We believe it is important to indicate a time limit on the inspection notice in order to formalize the inspection requirement and provide evidence if this time limit is not adhered to. It should be mentioned that, for the two other files (Nos. 3 and 4), the owner was given ten days to establish contact with the borough.

Second, we were also interested in the follow-up of notices of non-compliance to ensure corrective actions were taken. We first found that, in the notice of non-compliance sent to the owner, the borough gave a three-week time limit to establish the date of correction of non-compliances. We did not, however, find evidence of another document on which the time limit agreed on between the borough and the owner to complete the work is indicated. At the time of our audit, we observed that two of the notices of non-compliance (Nos. 1 and 2) had been produced over a year ago and a follow-up still had not been conducted.

It should be noted that the *By-law concerning the protection of buildings against sewer back-up* states that “The authority having jurisdiction may, by way of a notice, order that the owner of a building that does not comply with this by-law render it compliant within a timeframe it

*determines, not to exceed 90 days.*³² We feel that the notice of non-compliance should be accompanied by a time frame within which the owner is ordered to carry out the work required to comply with the by-law. This would make owners more inclined to carry out the work required, especially since the by-law provides for fines ranging from \$300 to \$4,000, for violations, depending on whether it is a natural person or a corporate entity.

Moreover, while we found that the four files had been registered in the Gestion du territoire – permis computer application, we also found that the data entry did not allow for an effective follow-up to be conducted. For example, the time frames indicated in the inspection notice letter, the date of the notices of non-compliance and the time frames given to take corrective action were not entered in the application so as to enable a follow-up to be done at the appropriate time. In addition, upon reading the files, we found no evidence that a follow-up had been performed subsequent to the latest inspections. For example, for file Nos. 3 and 4, our examination of the files revealed that inspections were carried out in June and July 2014 and that corrective work was to be completed by the owners in the following weeks. At the time of our audit, however, we did not find any evidence that a follow-up had been performed, and this was more than six months after the notice of non-compliance was sent. In our opinion, it would be important that a follow-up to ensure corrective measures have been taken be done as soon as possible after the time frame agreed on by the borough and the owner (see Appendix 6.2, Table A, Column g).

In conclusion, we feel that the current practice does not promote diligence in the implementation of corrective measures by the owner and does not allow the City to reduce the risk of a new event affecting the building and of another claim resulting from it. We feel that an analysis of the processing times should be conducted to determine the steps of the process that could be done differently or more promptly following the back-up or flood event. Subsequently, we feel it would be important that control mechanisms be put in place to ensure that files are followed up on promptly for all the steps that involve an inspection and a notice of non-compliance. We also feel that any notice should be accompanied by a time frame in order for corrective measures to be taken as soon as possible to reduce the risks of a sewer back-up or flood.

³² Article 13.

4.2.1.2.1.B. Recommendation

We recommend that the Direction de l'aménagement urbain et des services aux entreprises of the Ville-Marie borough take the necessary measures to:

- ensure that the inspection notice letter is systematically accompanied by a time limit to formalize the inspection requirement in order to facilitate the follow-up of files and provide official proof in anticipation of the issuing of a notice of violation, if applicable;
- ensure that the notice of non-compliance is systematically accompanied by a time limit within which the owner is ordered to complete the required work in order to facilitate the follow-up of files and provide official proof in anticipation of the issuing of a notice of violation, if applicable;
- reiterate to the staff involved the importance of entering the notices and time limits given to the owner as well as the follow-up visits conducted in the Gestion du territoire – permis computer application to facilitate the planning of actions to take and allow for a subsequent verification.

Business unit's response:

[TRANSLATION] Systematically send a notice stating the obligation to comply with the by-law and to send us a compliance certificate within 90 days of notification as soon as we are informed of a sewer back-up or flood. (Planned completion: October 2015)

Create a dedicated requisition in Oracle as soon as we are informed that a building has been affected by a sewer back-up or flood (claim or complaint). All data related to follow-up will appear on it (notice, time limit, return of certificate). (Planned completion: October 2015)

4.2.1.2.1.C. Recommendation

We recommend that the Direction de l'aménagement urbain et des services aux entreprises of the Ville-Marie borough perform an analysis of the processing times for inspection files involving buildings affected by a sewer back-up or a flood to determine the steps of the process that could be done differently in order to accelerate the process and reduce the risks of claims for the City.

Business unit's response:

[TRANSLATION] Systematically send a notice stating the obligation to comply with the by-law and to send us a compliance certificate within 90 days of notification as soon as we are informed of a sewer back-up or flood. (Planned completion: October 2015)

4.2.1.2.2. Côte-des-Neiges–Notre-Dame-de-Grâce Borough

4.2.1.2.2.A. Background and Findings

Out of the four files examined, three were subject to inspections carried out in 2013. The fourth file was subject to a compliance certificate request from the borough. These files involved heavy rainfall events and claims dating from 2012 to 2014 (see Appendix 6.2, Table A).

Our audit revealed the fact that three files were subject to an inspection of the three main pieces of equipment required in the by-law (see Appendix 6.2, Table A, Column a, Nos. 5, 6 and 7). We found no evidence for file No. 5 that an inspection form had been used, but handwritten notes had been produced. In addition, for file No. 7, we found that the inspection form had been partially completed (see Appendix 6.2, Table A, Column b). For file No. 8, we were unable to evaluate the use of the inspection form since it was sent with the compliance certificate request and the file was still open at the time of our audit. Nevertheless, we feel that an inspection form should be used systematically for all files at the time of an inspection or action to ensure that all the elements provided for in the by-law are covered and ensure compliance with it.

We also observed for the three cases that inspections revealed non-compliant elements on the equipment checked (valve, catch basin and drain pump) (see Appendix 6.2, Table A, Column c). We did not, however, find any evidence that notices of non-compliance had been produced to require the owner to take the necessary corrective measures (see Appendix 6.2, Table A, Column e).

As with the Ville-Marie borough, we question the relatively long processing time between the date on which the sewer back-up occurred and the date of the last contact with the owner. While none of the four files are permanently closed, at the time of our audit, the processing time ranged from 141 days to 385 days (see Appendix 6.2, Table A, Column f). It should be noted that, in the case of the CDN-NDG borough, the date of the last contact is that of the inspection or the sending of the compliance certificate request, and there is no evidence of any notice of non-compliance or follow-up visit being conducted to ensure that the situations were corrected.

First, as part of our audit, we were interested in the follow-up done to ensure inspections are carried out within a reasonable time frame. To begin with, we found that the inspections had been conducted more than 12 months after the date of the rainfall event and the claim submitted to the City. However, we cannot attribute this significant delay to the late sending of an inspection notice letter because we found no evidence of such letters (see Appendix

6.2, Table A, Column d). We feel that efforts should be made to ensure inspections are conducted as soon as possible after the sewer back-up or flood event in order to reduce the risk of a sewer back-up or flood affecting the building once again and resulting in another claim for the City.

Second, with regard to the follow-up of non-compliances to ensure that the necessary corrective measures are taken, we were unable to assess it because we found no evidence of this in the file (see Appendix 6.2, Table A, Column e). In our opinion, it is important that, when non-compliances are uncovered, notices of non-compliance accompanied by a time limit be given to the offender to ensure that corrective measures are ordered to comply with the by-law. Moreover, it is important that, when the notice time limit is up, a check be performed as soon as possible to determine whether corrective measures were applied in accordance with the by-law. It is also important that a follow-up report be produced, both to facilitate the planning of actions to be taken by the staff and to facilitate the checking of actions by the manager.

File No. 8 involves a new procedure being used by the managers in charge at the time of our audit. We were unable to assess the effectiveness of this method since the file was not closed. According to the information obtained, however, it primarily concerns buildings affected by a back-up or flood. It does not apply to new buildings or those undergoing alterations to a plumbing system. It consists in sending a notice to the owners of buildings affected by a sewer back-up or a flood asking them to provide a certificate of compliance with the by-law signed either by them or by a contractor. The letter is accompanied by an inspection form including the aspects provided for in the by-law and an action sheet that the owner or contractor must fill out. According to the borough's procedure, a 90-day time limit is given to the owner. If this time limit is not met, a second notice will be sent with a 30-day time limit.

We question the fact that a second notice is sent given that the first notice provides a 90-day time limit to produce the compliance certificate. We feel that such a procedure complicates the application of the by-law given that two notices are sent with the same purpose. In addition, we feel that this procedure may lead to at-risk situations by increasing response times. In our opinion, the procedure put in place should apply to all types of buildings to which the by-law refers, and should promote a simplified application aimed at taking corrective measures as soon as possible in order to protect the building against sewer back-ups and floods and, ultimately, reduce the risk of claims for the City. Therefore, while efforts are made to manage the application of the regulations by way of a procedure, we feel that it should be modified to include the various elements that we discussed above.

Moreover, we found that only one file had been entered in the Gestion du territoire – permis computer application. Consequently, the application is not used for file follow-up purposes or to produce reports. This situation does not make it possible for a manager to introduce verification mechanisms.

In conclusion, we feel that the current practice does not promote proper management of the inspections of buildings affected by sewer back-ups for which claims were made. This situation can be explained by the fact that the borough does not use an inspection form, does not produce a notice of non-compliance and does not provide proof of the follow-up conducted to ensure that the corrective measures required of the owner have been taken. This situation does not enable the City to reduce the risk of a new event affecting the building and resulting in another claim. We feel that it would be important that control mechanisms be put in place to ensure that a follow-up of the files is performed as soon as possible for all the steps that involve an inspection and a notice of non-compliance. We also feel that all notices should be accompanied by a time limit so that corrective measures are brought as soon as possible in order to reduce the risks of a sewer back-up or flood.

4.2.1.2.2.B. Recommendation

We recommend that the Direction de l'aménagement urbain et des services aux entreprises of the Côte-des-Neiges–Notre-Dame-de-Grâce borough:

- take the necessary steps to ensure that the inspection form is used and completed for every file so that all the key aspects of by-law are dealt with;
- ensure that notices of non-compliance accompanied by a time limit are produced when non-compliances with the by-law are found so that corrective measures can be applied as soon as possible and to promote the follow-up of files in a timely manner;
- re-evaluate the relevance of providing owners with an additional 30 days to produce the compliance certificates since an initial time limit has already been set, in accordance with the by-law and so as to not complicate the procedure in place;
- take the necessary steps to ensure that follow-up reports generated by the Gestion du territoire – permis computer application are systematically produced for each file in order to facilitate the follow-up of actions and favour verification by the manager in charge;
- take the necessary steps to ensure that the staff involved enters in the Gestion du territoire – permis computer application the inspection forms, the compliance certificates, the notices of non-compliance and the time limits given to the owner as well as the follow-up visits conducted in order to facilitate the planning of actions to be taken and allow for subsequent verification;
- improve the procedure being used to facilitate application of the by-law for all the affected buildings and thus facilitate the resulting management of inspections and accountability reporting.

Business unit's response:

[TRANSLATION] The new directive on the procedure for the application of the by-law will be applicable to each file. (Planned completion: June 2015)

The claims compilation will be consulted once a week by a designated employee in order to respond more quickly. (Planned completion: April 2015)

A re-evaluation of the pertinence of the additional time frame will be performed during production of the new directive. (Planned completion: June 2015)

The file's field and class entered in Oracle allows for the production of this type of report. A standard entry will be included in the directive. (Planned completion: June 2015)

The Gestion du territoire – permis computer application allows for this type of data entry. The directive will standardize the procedure so that all the relevant items are included. (Planned completion: June 2015)

The procedure will be complete, from analysis of permit requests or entering of the requisition to the closing of the file by the inspector. (Planned completion: June 2015)

4.2.2. Staff Information and Training Mechanism

4.2.2.A. Background and Findings

Compliance with laws and by-laws requires that the staff applying them have a certain level of knowledge and expertise, otherwise risks related to non-compliance are likely to arise. These risks can involve claims and lawsuits against the City and the boroughs, major costs, and citizen dissatisfaction with regard to management. It is therefore important that the staff involved in applying the regulations be adequately informed, specifically by being kept up to date on legislative and regulatory modifications and by having the latest versions of the regulations to be applied. It is also important that the staff have proper expertise by having access to training on the regulations that they are responsible for applying.

At this stage, our audit consisted in examining whether mechanisms had been put in place to ensure that the staff in charge of applying the regulations had access in particular to up-to-date information, tools to aid in comprehension and application, and training. The staff responsible for applying these regulations should have appropriate training and be kept up to date on the various aspects of these regulations. Our audit work revealed that the business units had an up-to-date version of the regulations.

In addition, our audit revealed that, as part of the integrated approach adopted by the executive committee, the Service de l'eau provided the boroughs with several tools aimed at assisting them in the application of the by-law. It produced and made available to the boroughs a detailed procedures guide including explanations on the application of the by-law, an inspection form in paper and electronic formats (Excel file) covering all the elements of the regulations as well as examples of letters to use. Moreover, the Service de l'eau provided the boroughs with an electronic directory including the same tools as the guide. We were able to determine that the two selected boroughs had these guides and were aware of the electronic directory of the Service de l'eau as they used it to retrieve the lists of addresses prepared for the boroughs of the buildings affected by a sewer back-up or a flood.

Furthermore, according to the information that we obtained from the individuals we met with and connected to the Service de l'eau and the Division des permis et des inspections of the

two selected boroughs, the inspectors responsible for applying the by-law constantly receive information from the Service de l'eau regarding the by-law. Also, the Service de l'eau offers telephone assistance when needed.

With regard to training, according to the information obtained from these same individuals, inspectors from the two boroughs received training offered by the Service de l'eau on the application of the by-law. However, for the Ville-Marie borough, the manager we met with in the Division des permis et des inspections told us that only one inspector had received the training offered by the Service de l'eau. With regard to the CDN-NDG borough, according to the information provided by the managers we met with, only inspectors received the training offered by the Service de l'eau. In both cases, the managers stated that they do not closely supervise training with regard to this by-law.

For both boroughs, we feel that other categories of employees should also be able to benefit from the training offered by the Service de l'eau, including the permit clerks since they will be asked to apply the by-law with regard to new buildings as well as buildings undergoing alterations to the plumbing system.

While the Service de l'eau participates in staff training for both boroughs, we feel that the managers in charge in the Division des permis et des inspections of these boroughs should be aware of the training needs of their staff regarding application of this by-law and follow-up on this training since other employees besides inspectors may have a need for training.

4.2.2.B. Recommendation

We recommend that the Direction de l'aménagement urbain et des services aux entreprises of the Ville-Marie and Côte-des-Neiges–Notre-Dame-de-Grâce boroughs:

- establish training needs for the staff involved in applying the *By-law concerning the protection of buildings against sewer back-up*;
- put in place follow-up mechanisms regarding staff training to ensure their expertise is kept up to date and provide assurance of compliance with the regulations.

Business units' responses:

VILLE-MARIE BOROUGH

[TRANSLATION] Send a request to the Service de l'eau asking that our staff be trained on this by-law. (Planned completion: October 2015)

Sign an ongoing training agreement with the Service de l'eau. (Planned completion: October 2015)

CÔTE-DES-NEIGES–NOTRE-DAME-DE-GRÂCE BOROUGH

[TRANSLATION] Training will be given to the staff responsible for application of the by-law. This training will be adapted for either permit analysis or building inspection. (Planned completion: June 2015)

An ongoing training mechanism will be put in place to ensure that expertise is kept up to date by means of work team meetings. (Planned completion: June 2015)

4.3. Accountability Mechanisms

4.3.A. Background and Findings

Accountability reporting is a sound management practice that provides managers with information on the state of activities under their responsibility to assist them in decision making. It also makes these managers accountable for the decisions that are made. In the field of public works and urban planning at the municipal level, these decisions are very often related to the application of municipal laws and by-laws.

At this stage, our audit consisted in assessing the extent to which accountability reports on compliance with laws and by-laws are produced by each borough's administrative units to provide information on the current situation with regard to compliance in the application of a regulation. Such accountability reporting may involve, for example, situations of non-compliance, aspects of the regulations that are not being applied, follow-up on the application of a by-law or evaluation of compliance with a by-law with regard to an activity that was carried out.

Our audit revealed that, with regard to the regulations related to the temporary occupancy of the public domain, activity reports are generally produced annually by the Direction des travaux publics of the two boroughs. However, these reports primarily provide information on the number of permits, the category of permits, and the revenue by month or year. Based on the documents consulted and the information obtained, we found no evidence that reports aimed at assuring borough management of compliance with this by-law were produced in order to assist managers in decision making, among other things.

Lastly, with regard to the *By-law concerning the protection of buildings against sewer back-up*, the *By-law concerning the delegation of City council powers to borough councils* provides for an accountability mechanism that requires boroughs to submit a yearly report to the director of the Service de l'eau including a list of addresses where an inspection was conducted in order to verify compliance with the by-law. Also, for each address, this by-law

requires that any non-compliances found as well as the correction of such non-compliance be indicated, if applicable.

For the Ville-Marie borough, an accountability report was submitted during the borough council meetings on July 8, 2014, for the year 2013 and on October 2, 2013, for the year 2012. It should be noted that the accountability report for 2014 was not available at the time this audit report was produced. With regard to the CDN-NDG borough, an accountability report was also tabled during the council meetings on January 12, 2015, for January to December 2014 and on March 3, 2014, for January 2012 to December 2013. According to the information obtained from the individuals connected to the Service de l'eau, the accountability reports submitted by the two boroughs do not meet all the requirements of the by-law. In certain cases, they do not include the lists of addresses of inspections, the non-compliances uncovered and the correction of these non-compliances. In our opinion, it is important that these accountability reports meet all the requirements set out in the *By-law concerning the delegation of City council powers to borough councils* in order to ensure compliance with it. These accountability reports are also important for providing the Service de l'eau with a clear picture of the situation surrounding the application of the *By-law concerning the protection of buildings against sewer back-up*.

While this accountability report exists, we found no evidence of an accountability report related to compliance with laws and by-laws for the affected managers in the borough to help them in their decision making, among other things. Yet, in both boroughs, the by-law is not applied to new buildings or those undergoing alterations to a plumbing system, which, in our opinion constitutes a significant lack of compliance with the regulations. Our review of the decision-making record submitted to the borough council did not reveal any information concerning this matter. We therefore feel that it is important for accountability mechanisms related to compliance with laws and by-laws to be put in place in order to provide a clear picture of the situation surrounding the application of the regulations to facilitate decision making.

4.3.B. Recommendation

We recommend that the Direction des travaux publics of the Ville-Marie and Côte-des-Neiges–Notre-Dame-de-Grâce boroughs:

- **put in place accountability mechanisms related to compliance with the by-laws concerning temporary occupancy of the public domain to provide a clear picture of the situation surrounding the application of the regulations to facilitate decision making.**

Business units' responses:**VILLE-MARIE BOROUGH**

[TRANSLATION] A quarterly report of compliance with the by-law will be produced within management based on monthly samples. (Planned completion: October 2015)

CÔTE-DES-NEIGES–NOTRE-DAME-DE-GRÂCE BOROUGH

[TRANSLATION] Production of a summary report presenting the categories of permits issued, the number and the revenue for each month. Also, an assessment of the situation will be produced presenting a summary of the situations of non-compliances, the aspects of the regulations that are not applied and the modifications that were made during the year. This report will be presented to borough management. (Planned completion: March 2016)

4.3.C. Recommendation

We recommend that the Direction de l'aménagement urbain et des services aux entreprises of the Ville-Marie and Côte-des-Neiges–Notre-Dame-de-Grâce boroughs:

- take the necessary steps to ensure that the documents submitted to the borough council to meet the accountability reporting requirements set out in the *By-law concerning the delegation of City council powers to borough councils* comply with the regulations;
- put in place accountability mechanisms related to compliance with the by-law concerning the protection of buildings against sewer back-ups to provide a clear picture of the situation surrounding the application of regulations to facilitate decision making.

Business units' responses:**VILLE-MARIE BOROUGH**

[TRANSLATION] Define with the Direction du greffe how to send the confidential list of addresses targeted for action. (Planned completion: October 2015)

Produce reports (Oracle extractions) to conduct regular follow-up of activities. (Planned completion: October 2015)

CÔTE-DES-NEIGES–NOTRE-DAME-DE-GRÂCE BOROUGH

[TRANSLATION] The documents provided will meet accountability reporting requirements related to the protection of buildings against sewer back-ups of the By-law concerning the delegation of City council powers to borough councils (02-002). (Planned completion: December 2015)

The Gestion du territoire – permis computer application will be used to extract the data required for accountability reporting. (Planned completion: December 2015)

General comment of the auditor general on the action plan produced by the Ville-Marie borough, Direction des travaux publics

The borough's Direction des travaux publics did not respond in a satisfactory manner to several of the recommendations issued by the Bureau du vérificateur général to ensure that the situations revealed in the audit report be corrected, despite numerous discussions between the Bureau du vérificateur général and the person in charge in the department in question.

5. General Conclusion

Compliance with laws and by-laws is important since they often dictate how activities are to be carried out. Moreover, it is a sound management practice since, in a municipal setting, a large number of the activities to be performed and the services to provide to citizens are governed by laws and by-laws.

We began by examining the *By-law concerning the occupancy of the public domain* and more specifically the temporary occupancy of the public domain, including the regulations in regard to fees. These regulations govern the temporary occupancy of the public domain, namely by requiring permits and measures.

For various aspects surrounding the temporary occupancy of the public domain, we observed several situations of non-compliance with the regulations as well as situations that could lead to a lack of consistency in the application of these regulations:

- Various aspects related to fees that do not comply with the regulations, e.g., fee exemptions applied without any actual regulatory bases, resulting in either a loss of revenue for the boroughs or an overcharging of citizens;
- Major sites of temporary occupancy of the public domain without a permit, which results in loss of revenue for the boroughs as well as risks of claims and lawsuits due to incomplete or missing safety measures for individuals on these sites;
- Lack of evidence that the temporary occupancy sites with a permit are actually inspected to ensure compliance with the conditions of the permit, resulting in a risk of loss of revenue for the borough as well as a risk for the safety of individuals;
- An update, the first in several years, of the fees for temporary occupancy based on the streets that involve special characteristics and various constraints, resulting in a loss of revenue for the boroughs, among other things.

Our audit revealed that these non-compliances and situations were caused primarily by a weakness in the application of the regulations.

We then examined the *By-law concerning the protection of buildings against sewer back-up*. The purpose of this by-law is to set out the equipment that must be present in a building for it to be protected against sewer back-ups and floods. For various aspects surrounding this by-law, we also observed non-compliances and situations that could lead to non-compliances:

- The by-law has not been applied to new buildings and those undergoing alterations to a plumbing system since its coming into force in 2011, leaving these buildings susceptible to a risk of back-up or flood, which in turn puts the City and boroughs at risk for claims and high costs;
- A low number of inspections carried out on buildings in which a sewer back-up has already occurred, leaving these buildings susceptible to risks for the City and boroughs in the event of claims;
- Lack of post-inspection follow-ups and long waits for follow-ups after notices of non-compliance, leaving vulnerable buildings at risk for sewer back-up or flood for long periods of time;
- An incomplete accountability report despite the fact that it is required by a by-law, resulting in elected officials and the Service de l'eau, the intended recipients of this formal accountability report, not being properly informed.

The facts that we observed with regard to this by-law are a concern to us because only one building category, those affected by a sewer back-up or flood, was looked at to verify compliance with the by-law. We question the fact that a by-law duly adopted by City council would only be applied to one category of buildings.

Considering the non-compliances and problematic situations uncovered during examination of the by-laws that our audit dealt with and the risks that result from these, we feel that efforts must be made on the part of the boroughs to put in place control mechanisms providing assurance that the regulations governing their scope of responsibilities are applied accordingly. With regard to the temporary occupancy of the public domain, the risk of financial losses can reach thousands of dollars for a single file. In addition, the number of sites without a permit that we uncovered based on a sample casts a doubt as to the possible existence of the deliberate misappropriation of funds.

6. Appendices

6.1. Application of the Regulations Regarding Temporary Occupancy of the Public Domain

Table A – Sample of Selected Permit Files for Temporary Occupancy of the Public Domain–2014

Investigation file No. Permit amount Duration	(a) Compliance of the permit fee		(b) The permit request includes all the important information	(c) Verification of the compliance of the occupancy with permit issued – Evidence in the file	(d) Work completion notice sent to the borough	Safety measures other than general conditions		(g) General conditions of the permit (included with the permit) – Evidence in the file	The fee for width of occupancy is established based on: • A street listed in Appendix A (street map) • Other street not listed in Appendix A • The street includes a bus route or bicycle lane or includes neither			
	Yes	No	Evidence in the file		Evidence in the file	(e) Indicated on the permit	(f) Verification of compliance		(h) Street listed in the appendix	(i) Fee based on street listed in the appendix or other street	(j) Bus route and/or bicycle lane	(k) Confusion in the regulations
VILLE-MARIE BOROUGH												
1 \$121.99 1 day		X	No	No	No	Yes	No	No	No	Other street	Yes	Yes
2 \$431.98 1 day	X		Yes	No	No	No	No	No	One street yes; one street no	Street in the appendix	No	Yes
3 No charge 4 days		X	Yes	No	No	No	No	No	Yes	Street in the appendix	Yes	No
4 \$1,149.98 2 days	X		Yes	No	No	Yes	No	No	Yes	Street in the appendix	Yes	No
5 \$1,099.74 3 days		X	No	No	No	Yes	No	No	No	Other street	Yes	Yes
6 \$16,362.75 31 days	X		Yes	Yes	No	Yes	No	No	No	Other street	Yes	Yes
CÔTE-DES-NEIGES–NOTRE-DAME–DE-GRACE BOROUGH												
7 \$239.15 1 day		X	No	No	No	No	No	No	No	Other street	No	No
8 \$433.46 3 days		X	Yes	No	No	Yes	No	No	No	Other street	No	No
9 No charge 1 day	X		Yes	No	No	No	No	No	Yes	No charge	Yes	No
10 \$2,147.74 3 days		X	Yes	No	No	No	No	No	Yes	Street in the appendix	Yes	No
11 \$1,156.65 11 days		X	No	No	Yes	Yes	No	No	No	Other street	Yes	Yes
12 \$1,779.81 18 days		X	Yes	No	No	Yes	No	Yes	No	Other street	Yes	Yes

Table B – Detection of Sites of Temporary Occupancy Without a Permit–Visit on October 3, 2014

Detected site No.	(a) A permit is required for this type of occupancy	(b) A permit was issued for this site of temporary occupancy of the public domain		Year of issuance of the permit	(c) Compliance of safety and signage
		Yes Amount of the permit and length	No		
VILLE-MARIE BOROUGH					
1	Yes		X	-----	No
2	Yes	X \$5,017; 43 days		2014	No
3	Yes		X	-----	No
4	Yes	X No charge; 86 days		2014	No
5	Yes	X Permit 1: \$127; 1 day Permit 2: \$1,374; 27 days		2014	No
6	Yes		X	-----	No
7	Yes		X	-----	No
8	Yes	X No charge; 725 days		2013	Yes
9	Yes		X	-----	No
CÔTE-DES-NEIGES–NOTRE-DAME-DE-GRÂCE BOROUGH					
10	Yes		X	-----	No
11	Yes		X	-----	No
12	Yes		X	-----	No
13	Yes	X \$3,714.84; 31 days		2014	Yes
14	Yes		X	-----	No
15	Yes	X No charge; 12 days		2014	No
16	Yes		X	-----	No
17	Yes		X	-----	No
18	Yes		X	-----	No

6.2. Application of the Regulations Regarding the Protection of Buildings Against Sewer Back-ups

Table A – Sample of Selected Inspection Files–Buildings Affected by a Back-up (2013 and 2014)

Investigation file No.	Date of the event	Date of the last contact	(a) An inspection was conducted The main elements were inspected (valve, catch basin and drain pump)	Non-compliances were found, a notice was sent	Letters and notices with time limits Evidence in the file		(f) File processing time – From the time of the event to the last contact	(b) Use of the inspection form	(g) Corrective measures taken
			Evidence in the file	(c) Non-compliances found In the building	(d) Inspection notice letters with a time limit	(e) Notice of non-compliance with a time limit	In number of days	Evidence in the file	
VILLE-MARIE BOROUGH									
1	July 18, 2011	October 22, 2014	Yes	Yes	No	Yes	1,192 days	Yes	No
2	May 29, 2012	November 5, 2014	Yes	Yes	No	Yes	890 days	Yes	No
3	May 30, 2012	June 10, 2014	Yes	Yes	Yes	Yes	742 days	Yes	No
4	May 29, 2012	July 28, 2014	Yes	Yes	Yes	Yes	790 days	Yes	No
CÔTE-DES-NEIGES–NOTRE-DAME-DE-GRÂCE BOROUGH									
5	May 29, 2012	June 18, 2013	Yes	Yes	No evidence	No evidence	385 days	No	No
6	May 29, 2012	June 13, 2013	Yes	Yes	No evidence	No evidence	380 days	Yes	No
7	May 29, 2012	June 13, 2013	Yes	Yes	No evidence	No evidence	380 days	Yes, partially	No
8	June 3, 2014	October 22, 2014	No	No inspection	No evidence	Certificate request with a time limit	141 days	Yes, sent with the request	No



Report of the Auditor General of the Ville de Montréal to the City Council and to the Urban Agglomeration Council

For the Year Ended December 31, 2014

4.8

STOCK MANAGEMENT



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List of Acronyms

SCARM	Service de concertation des arrondissements et ressources matérielles	SPO	Service de la performance organisationnelle
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4.8. Stock Management

1. Introduction

Every year, the Ville de Montréal (the City) acquires goods intended for use during the normal course of business. Thus, the vast majority of the City's business units keep goods in stock in stores, satellite stores, depots or even mobile units.¹ These stored items, which represent assets worth \$30 million in the financial statements for 2012 and 2013, include a multitude of items of various kinds, sizes and values and they must, as property owned by the City, be managed so as to ensure their completeness, value and protection.

In recent years, several internal documents have been distributed to the City in order to provide specifications to the business units concerning, among other things, the procedure for accounting for goods as inventory, as well as the methods to be used to manage and evaluate them. Thus:

- the City's *Politique d'approvisionnement* [TRANSLATION: Procurement Policy]² was updated in November 2011 by the Service de concertation des arrondissements et ressources matérielles (SCARM).³ It provides the framework governing the responsibilities of the Service de l'approvisionnement,⁴ the boroughs and the central departments concerning, among other things, the acquisition and management of goods;
- the *Guide de référence en gestion des stocks*⁵ [TRANSLATION: Stock Management Reference Guide], prepared by the Service de l'approvisionnement in August 2009, is intended to direct users to standard stock management practices. It covers stock categories, inventory taking and stock obsolescence, among other things;
- the guideline entitled *Comptabilisation des inventaires*⁶ [TRANSLATION: Inventory Accounting] was published in February 2013 by the Service des finances. It presents notions concerning the evaluation and recording of inventory in the books for the business units;
- the *Guide des procédures de fin d'exercice financier* [TRANSLATION: Fiscal Year-end Procedures Guide], transmitted to the business units at the end of the fiscal year by the Service des finances, is intended to serve as a reference tool for the preparation of the City's financial statements.

¹ Terms used in the City's *Politique d'approvisionnement* [TRANSLATION: Procurement Policy].

² *Politique d'approvisionnement* of the Ville de Montréal, no. C-RM-SCARM-PA-11-001, November 24, 2011.

³ Now called the "Service de la concertation des arrondissements".

⁴ Formerly known as the "Direction de l'approvisionnement" of the SCARM.

⁵ *Guide de référence en gestion des stocks* [TRANSLATION: Stock Management Reference Guide], Service de l'approvisionnement, August 2009.

⁶ "Comptabilisation des inventaires (Directive)" [TRANSLATION: Inventory Accounting Guideline], no. C-RF-SFIN-D-13-001, February 4, 2013.

In addition to these documents, which are made available to the managers of the City's business units, efforts must be made to ensure that the Policy, the Guideline and the guides published concerning stock management are transmitted to the users for whom they are intended, are understood and are duly applied.

2. Purpose and Scope of the Audit

The audit was performed first and foremost to determine whether the management frameworks concerning stock management are adequate and applied correctly so as to ensure that the stocks presented in the financial statements are properly evaluated and monitored.

Our audit included two basic tasks:

- The first was intended to ensure that the current management framework, specifically with respect to stock management (policy, guideline and guides) that serves as a pertinent reference for all of the business units (boroughs and central departments) is complete and consistent.
- The second involved making sure that this management framework is applied in an adequate and consistent manner by the boroughs in order to ensure that:
 - the stocks are adequately monitored and evaluated;
 - access to the stocks is restricted to authorized individuals.

More specifically with respect to this second task, our audit was intended to make sure that:

- the management of the storage areas guarantees the completeness of the stocks presented in the fiscal year-end financial statement;
- the documentation concerning the year-end valuation of the stocks agrees with the value of the stocks as presented in the books at that date;
- a process whereby the City's business units provide accounting information regarding their year-end stock balances to the Service des finances has been implemented and is adequately followed;
- physical access to the stocks is restricted to authorized individuals.

Our audit was limited to the stocks stored in depots and did not cover any other type of stocks also held by the business units. For example, we did not cover the management of the supplies of gas used for the City's rolling stock.

Our audit covered fiscal years 2013 and 2014 and was conducted on a sample of four boroughs for certain divisions that hold stocks in depots.

Our audit concerned the following boroughs and divisions:

- Mercier–Hochelaga-Maisonneuve borough:
 - Direction des travaux publics:
 - Division des parcs et de l'horticulture,
 - Division de la voirie;
- Rosemont–La Petite-Patrie borough:
 - Direction des travaux publics:
 - Division de l'entretien de l'éclairage, de la signalisation et du marquage de la chaussée,
 - Division des parcs et des installations,
 - Division de la voirie;
- Saint-Laurent borough:
 - Direction des travaux publics:
 - Division de la mécanique des bâtiments et de l'éclairage des rues,
 - Division des parcs et des espaces verts,
 - Division de la voirie;
- Ville-Marie borough:
 - Direction des travaux publics:
 - Division des parcs et de l'horticulture,
 - Division de la voirie.

Our audit took place between May 15 and October 30, 2014. It involved, among other things, reading stock management and accounting reference documents distributed by the City, announced and guided visits of the storage areas, gathering information during meetings with managers and conducting surveys deemed necessary under the circumstances, in order to obtain information that was conclusive, sufficient and necessary to support our audit report.

At the end of our audit, a draft report was presented for discussion purposes to the managers concerned in the four boroughs audited (Mercier–Hochelaga-Maisonneuve, Rosemont–La Petite-Patrie, Saint-Laurent and Ville-Marie), the manager of the Service de l'approvisionnement, the manager of Comptabilité et des informations financières of the Service des finances and the City manager. Following this, the final report was transmitted to the four boroughs audited, the Service de l'approvisionnement, the Service des finances and the Direction générale in order to obtain action plans and the schedules for implementing them.

3. Summary of Findings

Our audit indicated that improvements are required in several areas, particularly with respect to the following elements:

- Overall stock management framework (Section 4.1.1):
 - The roles and responsibilities of the Service des finances, which is responsible for inventory accounting, are not clearly defined in the City's *Procurement Policy*;
 - The accounting procedure for various stakeholders, specifically for the two departments that play important and different, yet complementary, roles in inventory management and accounting, namely the Service de l'approvisionnement and the Service des finances, is not clearly established in the policy;
 - The lack of clear benchmarks and guidelines provided under a single, flagship policy and the absence of links and coordination between these two departments mean that several documents prepared by them lack consistency and do not provide all of the information needed by the users;
 - In the absence of clear accountability requirements on the part of the two major stakeholders, it is difficult for the Direction générale to have an overall picture of all of the storage sites, to evaluate the extent to which the *Procurement Policy* is applied and to make the necessary modifications in a timely manner.

- The City's *Procurement policy* and *Stock Management Reference Guide* (section 4.1.2.):
 - The policy, which is dated November 2011, has not been updated to reflect the new name of the Service de l'approvisionnement, in keeping with the City's current organization chart;
 - The policy states the responsibilities of the boroughs and the central departments, but does not indicate who is responsible for organizing, managing and monitoring the mobile units;
 - Nine of the 13 managers responsible for stocks whom we met in the four boroughs audited know about the policy but only one knew of the guide;
 - The Service de l'approvisionnement does not assume the responsibilities assigned to it in the policy with respect to organizing, managing and monitoring stocks in all stores and depots;
 - The guide does not specify for whom it is intended and does not provide clear and concrete guidelines or examples in order to focus the item count work on the inventory items to be considered. For example, the notion of "depot" as used in the guide is not the same as that used in the policy.

- *Inventory Accounting Guideline and Fiscal Year-end Procedures Guide* (Section 4.1.3.):
 - More than half of the 13 managers we met in the four boroughs audited were unaware of the guideline and only 31% of them knew of the procedures guide;
 - The definitions of “depot,” “inventory” and “stock” in the guideline are not clear, which creates confusion for the managers;
 - There is no mention in the 2013 Procedures Guide of its scope;
 - The 2013 Procedures Guide does not require any formal accounting in the form of detailed year-end inventory lists that would ensure an adequate valuation of the stocks.

- Stock management system (Section 4.2.1) :
 - Although required by the guideline, none of the divisions in the four boroughs visited has a permanent inventory record, manual or computerized. Thus, stock movements are not monitored during the course of the year, meaning that the reliability of the stock situation at the end of the year cannot be guaranteed, a situation that significantly increases the risk of loss or active theft;
 - In the divisions visited, there is no detailed list of items in stock at the end of 2013 with descriptions of the items, their location and their cost, as well as the basis for the cost evaluation;
 - According to a survey we conducted of 26 managers (19 borough managers and 7 department managers), two of them were able to provide complete and detailed lists of the items on hand at that date and three had prepared an analysis and an evaluation of the obsolescence of the stocks for which they were responsible at the end of 2013.

- Frequency of the physical item counts (Section 4.2.2):
 - No item count with detailed lists was made of the depots from the end of 2013 to the end of our audit work in October 2014 by the managers of the business units visited;
 - According to a survey we conducted of the directors of the 19 boroughs and the 7 central departments⁷ that have inventories, only 15 of them had had an inventory taken at the end of 2013.

- Security and access to storage sites (Section 4.2.3.):
 - Doors and gates that were supposed to block access to storage sites were open and unsupervised when we visited some boroughs;

⁷ Service de la gestion et de la planification immobilière – Direction des immeubles, Service de police de la Ville de Montréal, Service de sécurité incendie de Montréal, Service du matériel roulant et des ateliers, Service de l'approvisionnement, Service de l'Espace pour la vie and Service de l'eau.

- Managers responsible for depots do not know exactly who has magnetic card access to their secure depots. Indeed, the access lists we were given by the division managers did not correspond to lists of people who actually have access prepared by the Division de la sécurité, which reports to the Service de la gestion et de la planification immobilière. This division manages access permission and cancellation requests;
- Magnetic cards providing access to the secured stock storage sites were still active at the time of our audit for employees who had left their job;
- In the case of depots equipped with a locked door, there is no monitoring mechanism to identify all of the keys or indicate the identities of the people who have keys;
- Certain divisions use locks or padlocks whose keys can be easily copied without authorization;
- For most of the business units visited, there is no surveillance system in place for the depots;
- There are weaknesses in the surveillance systems.

4. Detailed Findings and Recommendations

4.1. Stock Management Framework

We identified certain elements which we believe to be essential components of written guidelines to be transmitted to the managers of the business units. These include:

- a clear definition of the roles and responsibilities of all inventory management and accounting stakeholders;
- the obligation to determine what constitutes stock (assets) and what constitutes an expense;
- the obligation to take inventory and the required frequency;
- the stock valuation process;
- the procedure for determining whether items in stock are obsolete;
- access control and security of the storage sites;
- the accountability of each stakeholder.

Good business practices inevitably involve following structured and observable rules. The same applies to stock management. In the case of the City, our audit identified four documents that cover inventory management and accounting:

- The *Politique d'approvisionnement de la Ville de Montréal* [TRANSLATION: Procurement Policy];

- The *Guide de référence en gestion des stocks* [TRANSLATION: Stock Management Reference Guide], published by the Service de l'approvisionnement;
- The *Directive sur la comptabilisation des inventaires* [TRANSLATION: Inventory Accounting Guideline];
- The *Guide des procédures de fin d'exercice financier* [TRANSLATION: Fiscal Year-end Procedures Guide], prepared by the Service des finances, provides a list of the rules to be applied by the business units.

These documents were distributed to inform the reader about the corporate measures to be taken with respect to inventory management and accounting.

We assessed the degree to which these documents contain the elements we consider essential. We also took steps to ensure that some of the components of these documents, which we targeted, are known to and applied by the stakeholders concerned.

4.1.1. Documents Supporting the Stock Management Framework

4.1.1.A. Background and Findings

Several documents complement the overall stock management framework:

- The City's *Procurement Policy*, issued by the SCARM and prepared and revised by the Service de l'approvisionnement;
- The *Stock Management Reference Guide*, prepared by the Service de l'approvisionnement;
- The *Inventory Accounting Guideline* prepared by the Service des finances;
- The *Fiscal Year-end Procedures Guide*, prepared by the Service des finances.

During our audit, while reading the various documents that make up the overall supply management and inventory accounting management framework, we noted that not all of the roles of the stakeholders concerned are clearly defined in the City's *Procurement Policy*, updated in November 2011.

Indeed, two departments play important and complementary roles in supporting current stock management and accounting activities. While the Service de l'approvisionnement is responsible for the operational management of stocks, specifically for ensuring that they are available and access to them is secure in keeping with the policy, the Service des finances is responsible for their valuation, accounting for them and presenting them adequately in the accounting books. Thus, linking the responsibilities of these two departments, whose roles

are intended to be complementary, is crucial in order to guarantee that the acquisition of goods by the administrative units, their use during the year and the recording of the stocks of goods left at the end of the year are properly reflected in the City's books. Moreover, in order to ensure that this linking is adequate, the accountability required on the part of each of the two departments with respect to the administrative units concerned must serve to establish clear limits to their responsibilities and ensure better accountability with respect to the expected results.

We noted that the policy did not integrate the inventory accounting aspect or the responsibilities of the Service des finances. Moreover, the policy did not provide for accountability on the part of the various stakeholders concerned by the policy, specifically those attributed to the Service de l'approvisionnement and the Service des finances, respectively.

Thus, due to a lack of clear benchmarks and guidelines outlined in a flagship policy combined with the absence of links and coordination between the two departments that play different yet complementary and essential roles with respect to inventory management and accounting, we noted that the other related documents prepared by these two departments to provide a framework for stock management lack consistency and do not provide all of the information needed for users be able to adequately manage the inventories for which they are responsible.

Moreover, in the absence of clear accountability requirements on the part of the major stakeholders, it is difficult for the Direction générale to have an overall picture of all of the storage sites that belong to the City, as well as to evaluate the extent to which the *Procurement Policy* is applied and make necessary amendments in a timely manner.

This lack of coordination resulted in the preparation of two reference documents, the *Stock Management Reference Guide* and the *Inventory Accounting Guideline*, covering similar topics. Even so, as a result of this situation, certain elements which are essential for healthy stock management are not contained in either document. In Sections 4.2.1 and 4.2.2, we will cover the principal elements that are either inconsistent or are missing, as identified by our examination of these two documents. By way of example, however, we noted that the *Stock Management Reference Guide* covers item counts, but does not specify the level of detail expected, while the *Inventory Accounting Guideline* requires details that enable the identification and valuation of the stock items counted. Indeed, the guideline stipulates that a permanent inventory record must be implemented and should provide the following information:

- Description of each item;
- Location of items;
- Quantities on hand;
- Unit cost;
- Total cost of the stocks.

We believe that the existence of several documents concerning stock management practices increases the risk of confusion for the users concerned and that, as a result, errors or omissions could occur with respect to the procedures to be followed to adequately manage stocks.

4.1.1.B. Recommendation

We recommend that the Direction générale make sure that the Service de l'approvisionnement, in cooperation with the Service des finances, designs and implements a unique, complete and useful reference framework to support stock management activities, including, among other things, the acquisition of goods, their use during the year and the accounting of stocks of goods left over at the end of the year. Moreover, we recommend that the Direction générale ensure that:

- the City's *Politique d'approvisionnement* [TRANSLATION: Procurement policy] indicates the roles and responsibilities of all stakeholders closely or peripherally involved in the management of stocks, particularly those in the Service des finances;
- the City's *Politique d'approvisionnement* [TRANSLATION: Procurement policy] integrates the accounting elements required by each stakeholder to ensure better accountability and better monitoring of the degree to which the policy is applied;
- an overall picture of all stock storage sites belonging to the City is prepared and kept up-to-date.

Business unit's response:

[TRANSLATION] In 2014, the City created a Service de la performance organisationnelle (SPO), which started work on 12 priority areas. One of these areas concerns procurement and will entail several sub-projects over the coming years. (Planned completion: progressive implementation from 2015 to 2019)

On a short-term basis, the SPO has already proposed a project chart for inventory management, which was adopted by the performance improvement committee.

Management will make sure that the recommendations of the auditor general are implemented through this work. (Planned completion: December 2019)

4.1.1.C. Recommendation

We recommend that the Service de l'approvisionnement work with the Service des finances to:

- ensure that the reference documents (policy, guideline and guides) issued by the two departments contain all of the sufficient and necessary information to enable the managers concerned to adequately fulfil their responsibilities with respect to the management and valuation of the stocks for which they are responsible;
- undertake a complete revision of the following documents:
 - the *Guide de référence en gestion des stocks* [TRANSLATION: Stock Management Reference Guide];
 - the *Directive sur la comptabilisation des inventaires* [TRANSLATION: Inventory Accounting Guideline];
 - the *Guide des procédures de fin d'exercice financier* [TRANSLATION: Fiscal Year-end Procedures Guide];

in order to create a unique and complete reference framework for the acquisition, receipt, physical handling, accounting and protection of inventory.

Business units' responses:

SERVICE DE L'APPROVISIONNEMENT ET SERVICE DES FINANCES

[TRANSLATION] Creation of a coordination committee to completely revise and update the following documents:

- *Guide de référence en gestion des stocks [TRANSLATION: Stock Management Reference Guide];*
- *Directive sur la comptabilisation des inventaires [TRANSLATION: Inventory Accounting Guideline];*
- *Guide des procédures de fin d'exercice financier [TRANSLATION: Fiscal Year-end Procedures Guide].*

Make sure that the documents are complete and enable the managers of the business units to adequately fulfil their responsibilities with respect to managing and evaluating inventories.

P.S. The definition of the new business model is a prerequisite to this action. (Planned completion: December 2016)

Auditor General's Comments:

We feel that the planned completion date (December 2016) determined by the Service de l'approvisionnement and the Service des finances for updating these documents is too late. The managers of the business units that have inventories depend on these documents to ensure the adequate and effective management of their inventories. We ask the

Service des finances to work with the Service de l’approvisionnement to plan alternative measures so as to properly support the business units with respect to taking inventory for December 31, 2015.

4.1.2. Procurement Policy of the Ville de Montréal and Stock Management Reference Guide

4.1.2.A. Background and Findings

Procurement Policy of the Ville de Montréal

The City’s *Politique d’approvisionnement* [TRANSLATION: Procurement Policy] defines, among other things, the responsibilities of the Service de l’approvisionnement with respect to the development of a business model that applies to all of the business units in order to promote optimum stock management. It also establishes the responsibilities of the boroughs and central departments in this respect.

The policy specifies that the Service de l’approvisionnement is responsible for developing and updating the policy. We noted, however, that the policy did not indicate the exact name of the Service de l’approvisionnement, in keeping with the City’s organization chart, which was updated in January 2015. Indeed, the policy refers instead to the Direction de l’approvisionnement, although the status of the department was modified and the name was changed to “Service de l’approvisionnement” when the administrative re-organization of the City was made official in May 2014. As a result, we conclude that the policy does not seem to have been revised recently.

Also, although the *Procurement Policy* is intended for all business units, only 9 of the 13 managers we met from the boroughs audited knew of its existence. In our opinion, this lack of knowledge concerning the policy results in the risk that the policy’s objectives are not known and respected by the managers responsible for applying it. Thus, the approach retained for managing stock could be different from that prescribed in the policy, making it impossible to ensure its consistent application.

Moreover, the policy states that the City must have a main store, satellite stores and depots and that the Service de l’approvisionnement is responsible for organizing, managing and monitoring them. In fact, only one of the 30 depots we visited in the four boroughs audited is managed by the Service de l’approvisionnement. According to the managers we met, all of the other depots we visited are managed by borough personnel. Thus, in most cases, blue-collar workers, under the supervision of foremen, are responsible for managing and

distributing the goods in stock. In our opinion, this assignment of duties to employees who are not necessarily trained in the matter could result in non-compliance, involuntary or otherwise, in the application of the practices prescribed by the Service de l'approvisionnement.

We noted that the policy does not explicitly state who is responsible for organizing, managing and monitoring stocks contained in the mobile units, which consist of vehicles containing stocks that certain City employees use to perform several daily tasks.

Stock Management Reference Guide

The *Guide de référence en gestion des stocks* [TRANSLATION: Stock management reference guide] complements the City's *Politique d'approvisionnement* [TRANSLATION: Procurement policy], which was developed by the Service de l'approvisionnement. It establishes the process and the practices to be followed for making a physical count and managing stocks.

The guide does not state who it is intended for in its foreword. We asked the managers we met within the four boroughs audited whether they were familiar with the guide. Only one of the 13 managers we consulted already knew of the guide and only because he had previously held a position in a central department. The fact that this guide is not known and, as a result, not consulted results in major risks to the fiscal year-end inventory count process since the practices prescribed by the City for this purpose may not be followed. We noted, for example, that in the business units where a count was made as of December 31, 2013, the documentation concerning the count was deficient, containing little or insufficient details to provide a good appreciation of the items listed. For example, we identified several situations in which the inventory amounts were transmitted to the Service des finances for the purposes of preparing financial statements, although no list of the assets in question was produced. This situation is of concern since items may not be included in the inventory, may be counted twice or may be the object of theft, without the managers responsible for them being aware of the situation.

The reference guide makes the following subtle distinction between items in stock and those in a depot: items in stock are considered assets from an accounting standpoint and are recorded as such in the books as long as they have not been consumed. Items in depots, on the other hand, as of their acquisition, are considered an expense (therefore, already consumed) since they are expected to be used in a very short time-frame. In any case, we noted that it becomes difficult for the user of all these documents to make sense of them.

Moreover, the guide does not include clear and concrete guidelines or examples to focus the item count process on goods that are to be considered stock items. Thus, in the case of the inventory lists that were given to us, we noted that, as a result of an incorrect interpretation of the notion of inventory (goods intended to be used on a short-term basis), the managers concerned included items in their inventory that do not correspond to the accounting notion of inventory, such as tools used to maintain parks, park benches themselves and other used municipal equipment. For lack of clear rules, goods that are considered capital assets or expenses (used items) may incorrectly be recorded as inventory.

The guide covers certain aspects of taking inventories, but does not provide any guidelines with respect to the recommended approach, whether it be the recommended frequency, procedure, or documentation to be used. Our audit revealed that the documentation concerning inventories taken does not always provide details about the items counted, such as the item name, the quantity, the unit cost and the location, does not specify the method used to calculate the cost and shows no indication of a review by an authorized person. As a result, it is very difficult to ensure that the value of the stocks is adequate and is determined in keeping with the stock valuation method selected by the City, namely the average cost.

Moreover, we noted that the guide does not cover the procedures recommended for receiving goods, storing them, distributing them and protecting them.

As a result of this lack of clear rules, individuals responsible for these activities receive inadequate support to ensure these practices, which could potentially result in the loss or theft of “stocks” that are poorly stored or not protected.

4.1.2.B. Recommendation

We recommend that the Service de l’approvisionnement:

- **make sure that the City’s *Politique d’approvisionnement* [TRANSLATION: Procurement policy] is updated to reflect its name in the organization chart in effect;**
- **plan to deploy its resources to adequately assume its responsibilities with respect to the organization, management and monitoring of the stocks in all of the stores and depots, as stipulated in the *Politique d’approvisionnement* [TRANSLATION: Procurement Policy];**
- **specify its responsibilities with respect to the mobile units in the *Politique d’approvisionnement* [TRANSLATION: Procurement policy];**
- **make sure that the *Politique d’approvisionnement* [TRANSLATION: Procurement policy] is known and that its objectives are applied by all the business units.**

Business unit's response:

[TRANSLATION] Revision of the Politique d'approvisionnement [TRANSLATION: Procurement Policy] to reflect its name, as indicated in the City's current organization chart: replace "Direction de l'approvisionnement" with "Service de l'approvisionnement." (Planned completion: June 2015)

The responsibilities of the Service de l'approvisionnement and the business units with respect to the mobile units will be defined in the new business model. (Planned completion: December 2016)

Auditor General's Comments:

We feel that the planned completion date (December 2016) determined by the Service de l'approvisionnement for defining its responsibilities and those of the business units with respect to the mobile units is too late. There is currently no guideline requiring accountability on the part of managers of the business units with mobile units. We ask the Service de l'approvisionnement to work with the Service des finances to make sure that the inventory of these mobile units is counted as of December 31, 2015.

Deployment of resources to manage and monitor the inventories of all stores and depots, in keeping with the new business model. (Planned completion: progressive implementation from 2015 to 2019)

Auditor General's Comments:

We feel that the deadline (from 2015 to 2019) determined by the Service de l'approvisionnement for the deployment of resources to manage and monitor the inventories of all the stores and depots is too vague and too distant. It is important to implement these measures rapidly in order to determine the nature, quantity and value of the stocks held in these depots so as to prevent any loss, theft or other waste of assets. A detailed deployment in stages, starting in 2015, would allow the City to better follow up and manage the progress of the project.

Update the Politique d'approvisionnement [TRANSLATION: Procurement Policy] to specify the responsibilities with respect to the mobile units in keeping with the new business model.

Disseminate the Politique d'approvisionnement [TRANSLATION: Procurement Policy] and make sure the objectives stated in it are applied by all the business units. (Planned completion: December 2019)

Auditor General's Comments:

We feel that the deadline (December 2019) determined by the Service de l'approvisionnement for updating the procurement policy, distributing it and validating its application is too late. This policy is the flagship document on which all of the other guidelines and documents concerning inventories are based. This policy must be updated by December 2016, before all the other documents concerning its application are updated, in order to make the necessary changes in keeping with this planned improvement in inventory management.

4.1.2.C. Recommendation

We recommend that the Service de l'approvisionnement work with the Service des finances to make a complete revision of the following documents:

- The *Guide de référence en gestion des stocks* [TRANSLATION: Stock Management Reference Guide];
- The *Directive sur la comptabilisation des inventaires* [TRANSLATION: Inventory Accounting Guideline];
- The *Guide des procédures de fin d'exercice financier* [TRANSLATION: Fiscal Year-end Procedures Guide];

in order to create a unique and complete reference framework for the acquisition, receipt, physical handling, accounting and protection of stocks.

Business units' responses:**SERVICE DE L'APPROVISIONNEMENT ET SERVICE DES FINANCES**

[TRANSLATION] Creation of a coordination committee to completely revise and update the following documents:

- *Guide de référence en gestion des stocks [TRANSLATION: Stock Management Reference Guide];*
- *Directive sur la comptabilisation des inventaires [TRANSLATION: Inventory Accounting Guideline];*
- *Guide des procédures de fin d'exercice financier [TRANSLATION: Fiscal Year-end Procedures Guide].*

Make sure that the documents are complete and help the managers of the business units to adequately fulfil their responsibilities with respect to managing and evaluating inventories.

P.S. The definition of the new business model is a prerequisite to this action. (Planned completion: December 2016)

4.1.2.D. Recommendation

We recommend that the Service de l'approvisionnement work with the Service des finances, specifically with respect to the findings concerning the *Guide de référence en gestion des stocks* [TRANSLATION: Stock Management Reference Guide], to:

- specify which units the new document is intended for;
- provide clarifications in the guide concerning the notions of stocks (assets) and depots (expenses), with concrete examples of items to be counted adapted to the various realities of the business units;
- include precise procedures in the guide that have to be followed in order to ensure the physical count of goods and the related documentation are handled properly, along with precise instructions for implementing means to adequately protect goods in stock and for monitoring incoming and outgoing goods;
- specify clear rules in the guide for the receipt, storage, distribution and protection of goods in stock.

Business units' responses:

SERVICE DE L'APPROVISIONNEMENT ET SERVICE DES FINANCES

[TRANSLATION] Creation of a coordination committee to revise and update the stock management reference guide so as to:

- specify the units to which it applies;
- clarify the notions of stocks (assets) and depots (charges) with concrete examples of items to be counted;
- integrate or make a reference in the guide to specific procedures for physically counting goods and documenting this, so as to implement adequate means for protecting inventoried goods in order to monitor incoming and outgoing items;
- provide clear receiving, storage and distribution rules in the guide. **(Planned completion: December 2016)**

4.1.3. Inventory Accounting Guideline and Fiscal Year-end Procedures Guide

4.1.3.A. Background and Findings

The Inventory Accounting Guideline

The *Directive sur la comptabilisation des inventaires* [TRANSLATION: Inventory Accounting Guideline] is intended for all business units that have an inventory of goods. It defines what an inventory is and stipulates the accounting methods for stocks and obsolete items.

Moreover, the term “inventory” is inaccurate. In fact, an “inventory” is the activity that serves to count “stocks.” The appropriate term is “stock” and not “inventory.” As a result, when documents are revised, it would be a good idea, as recommended in several places in the report, to use the terms “stock” and “inventory” in their proper sense.

We noted that the people responsible for stocks have not been given adequate information about the objectives and use of this guideline. In fact, only six of the 13 managers met in the boroughs audited indicated that they had heard about this guideline, while saying that they did not apply it fully. Therefore, the rules provided in the guideline may not be followed by those responsible for stock management in the various business units, which increases the risk that the value of the stocks recorded at the end of the year will be inadequate.

Moreover, several of the managers we met indicated that they find certain terms used or certain notions presented in the guideline unclear, resulting in confusion on their part in the interpretation and understanding of concepts such as “depot,” “inventory” and “stocks.” As a result, several managers told us that they do not take an inventory of the depots at the end of the year and do not assign a value to the assets held. This situation results in an incorrect valuation of the stocks recorded in the City’s books.

For a few business units involved in similar activities that do take inventory, we compared the inventory lists produced. These units are responsible for similar activities. We noted disparities among the business units with respect to the items included in these lists. Indeed, several categories of items tracked on some lists are not found on other lists, such as stationery and small tools. We can deduce from this that the definitions of what constitutes an inventory item are not clear in the guideline.

Moreover, although the guideline states that the basis for evaluating the cost of the stocks held by the City is the average cost, it does not provide any guidance to the reader in specific situations where the cost may be something other than the simple purchase cost. For example, managers responsible for preparing inventory lists told us that they do not know how to establish the cost of the items that were either recuperated on the City’s territory (e.g., following replacements) or restored by blue-collar workers. The items included in stock may be evaluated in an inappropriate manner, resulting in incorrect entries in the accounting books.

Fiscal Year-end Procedures Guide

The *Guide des procédures de fin d'exercice financier* [TRANSLATION: *Fiscal Year-end Procedures Guide*], which is produced annually by the Service des finances for the users in

the business units concerned, covers various topics pertaining to the preparation of the City's financial statements.

Yet the guide does not specify who it is intended for nor which individuals should apply it. Only four of the 13 managers we met from the boroughs audited said that they were aware of the existence of this guide.

In the previous section, we observed that the notion of “depot” and its accounting method as required by the Service des finances were poorly understood by several of the managers we met. When examining the guide, we found little information in this respect to help managers better understand this notion.

Moreover, we noted that the 2013 *Fiscal Year-end Procedures Guide* does not require formal accounting, in the form of detailed lists, on the part of the business units with respect to the goods they hold at the end of the year. Yet, this information is essential in order to ensure adequate valuations and accounting of the goods held by the various boroughs and central departments at the end of the year. For this reason, in a recommendation letter dated October 29, 2014, and addressed to the manager and treasurer of the Service des finances, we submitted recommendations that were to have been taken into consideration rapidly for the preparation of the financial statements as of December 31, 2014. Among other things, they concerned:

- Clarification of the concepts of “stock” and “depot”;
- Specifications with respect to the means of establishing the cost of stocks;
- The procedure to be used by the business units for making physical counts and preparing inventory lists (lists authorized by the managers).

Most of these recommendations were taken into consideration in the 2014 version of the procedures guide, which was distributed to the business units. Nevertheless, in our opinion, another revision of the guide is necessary. Indeed, examples of what constitutes an inventory to be recorded at the end of the year were added. However, some of these examples are not adequate. For example, the guide stipulates that elements such as street lights and fire hydrants should be included in the year-end inventories. Yet, by their very nature, these types of goods must be considered fixed assets that have to be amortized over several years and presented as long-term assets. They are stocks only when they are ordered and stored by the borough which has exclusive control over supplying them and installing them throughout the City (e.g., street lights), until they are installed permanently on the sites in question.

The findings reported in the previous sections reveal a general problem that we have identified in the four documents we examined:

- the *Politique d'approvisionnement* [TRANSLATION: Procurement policy];
- The *Guide de référence en gestion des stocks* [TRANSLATION: Stock Management Reference Guide];
- The *Directive sur la comptabilisation des inventaires* [TRANSLATION: Inventory Accounting Guideline];
- The *Guide des procédures de fin d'exercice financier* [TRANSLATION: Fiscal Year-end Procedures Guide];

This problem has led to two principal findings:

- The lack of precision in the definition of terms and the means of accounting for them, which results in confusion and a lack of understanding on the part of the managers;
- Inconsistencies in the recommended approaches in these documents.

More specifically, we noted the following facts:

- The terms “depot,” “stock” and “inventory” used in the documents are confusing.
 - The *Procurement Policy* treats the term “stock” in its totality and includes in this term the notions of “main store,” “satellite store” and “depot.” The *Inventory Accounting Guideline* makes a distinction between the notion of “stock” and the notion of “depot.” However, as we mentioned in the previous section, the managers do not understand this distinction clearly, which leads to non-compliance in the physical counts made of the depots at the end of the year.
 - The *Procurement Policy* does not specify the role of the Service des finances in the City’s procurement process, which includes “stock management.”
 - The *Stock Management Reference Guide* refers to the *Procurement Policy*. However, it includes a new notion, “inventory,” and we do not know if this notion explicitly includes the “stock” element. Moreover, the definition provided in the guide states that the inventory is the [TRANSLATION] “list of all of the items stored to be used later on a short-, medium- and long-term basis. The items are inventoried in stores and depots.” This definition is, moreover, repeated in the *Inventory Accounting Guideline*, but with the term “stores” replaced by “stocks.” An informed reader could deduce that the notion of “store” corresponds to the notion of “stock.” However, other readers could have different interpretations. Yet, according to the generally accepted accounting principles that the City must apply when preparing its financial statements, goods intended to be used on a medium- or long-term basis must normally be considered

capital assets. As a result, there is a disparity, for example, with street lights and fire hydrants being considered as “stocks” by one borough and as “capital assets” by the other boroughs. In the City’s books, assets such as street lights and fire hydrants should be recorded as capital assets and amortized from the time they are used in order to ensure uniform accounting of items of the same nature in the City’s consolidated financial statements.

Furthermore, there is no mention in the document as to what is meant by the notions “short-term,” “medium-term” and “long-term,” adding to the confusion the managers might experience when applying the prescribed guidelines.

- In the *Inventory Accounting Guideline*, the notions of “stock” and “depot” are briefly explained, but this explanation is insufficient and does not include concrete examples. This same observation applies to the *Fiscal Year-end Procedures Guide*.

In short, we wanted to demonstrate, with brief illustrations, several inconsistencies and disparities in the four documents consulted, the absence of concrete examples and a lack of clear procedures to be followed by the managers and users throughout the procurement cycle, which includes stock management.

Moreover, none of the documents provides a clear definition of capital asset.

Furthermore, the 2014 version of the procedures guide requires the information about the basis for the valuation of the stock to be indicated on the inventory list and the example provided in the guide refers, among other things, to the notion of cost established on a “first in, first out” basis, whereas the average cost is the accounting method retained by the City to present its stocks in the financial statements.

The guide does not require the inventory lists to be approved by managers.

4.1.3.B. Recommendation

- We recommend that the Service de l'approvisionnement work with the Service des finances to make a complete revision of the following documents:
- The *Guide de référence en gestion des stocks* [TRANSLATION: Stock Management Reference Guide];
- The *Directive sur la comptabilisation des inventaires* [TRANSLATION: Inventory Accounting Guideline];
- The *Guide des procédures de fin d'exercice financier* [TRANSLATION: Fiscal Year-end Procedures Guide];

in order to create a unique and complete reference framework for the acquisition, receipt, physical handling, accounting and protection of stocks.

Business units' responses:

SERVICE DE L'APPROVISIONNEMENT ET SERVICE DES FINANCES

[TRANSLATION] Creation of a coordination committee to completely revise and update the following documents:

- *Guide de référence en gestion des stocks* [TRANSLATION: Stock Management Reference Guide];
- *Directive sur la comptabilisation des inventaires* [TRANSLATION: Inventory Accounting Guideline];
- *Guide des procédures de fin d'exercice financier* [TRANSLATION: Fiscal Year-end Procedures Guide].

Make sure that the documents are complete and enable the managers of the business units to adequately fulfil their responsibilities with respect to managing and evaluating inventories.

P.S. The definition of the new business model is a prerequisite to this action. (Planned completion: December 2016)

4.1.3.C. Recommendation

We recommend that the Service des finances work with the Service de l’approvisionnement to:

- clarify, in this new unique reference framework, the definitions of the terms “depot,” “inventory,” “stock” and “capital asset” and specify the major guidelines to be used to establish the categories to be developed;
- specify in the application procedures which stakeholders are concerned;
- provide examples of the items to be counted that will apply in a general manner to all of the business units and, as needed, provide examples that are closer to the reality of certain business units;
- make sure that the accounting procedure integrated in the 2014 version of the guide (count and detailed lists) is covered by the application procedures and make sure that it is used by all of the business units targeted, so that the stocks indicated in the financial statements clearly reflect the actual stocks held at the end of the year;
- make sure that all of the business units are familiar with and apply the application procedures.

Business units’ responses:

SERVICE DES FINANCES ET SERVICE DE L’APPROVISIONNEMENT

[TRANSLATION] The coordination committee and the members of the SPO will clarify the terms “depot,” “inventory,” “stocks” and “capital assets” and provide broad guidelines for establishing the categories that have to be developed. (Planned completion: December 2015)

Preliminary revision as part of the annual revision of the fiscal year-end procedures guide. (Planned completion: December 2015)

Revision of the guideline and guide so as to:

- *specify who it applies to;*
- *make sure that accountability is covered by the application terms. (Planned completion: December 2016)*

Provide examples of items to be counted. (Planned completion: December 2015)

4.2. Application of the Current Stock Management Framework

4.2.1. Stock Management System

4.2.1.A. Background and Findings

The *Directive sur la comptabilisation des inventaires* [TRANSLATION: Inventory Accounting Guideline], issued by the Service des finances, and the *Guide de référence en gestion des stocks* [TRANSLATION: Stock Management Reference Guide], produced by the Service de l'approvisionnement, indicate that a permanent stock management system is required. The Guideline stipulates, among other things, that a permanent inventory record must be established and that, when the inventory module of SIMON (the City's integrated management system) does not meet their needs, the business units must, along with the Service de l'approvisionnement and the Service des finances, have the use of another system authorized. Moreover, the Guideline also states that the record must specifically provide the following information: description of each item, location, quantities on hand, the unit cost and the total cost of the inventory. Moreover, the guideline and the reference guide state that, for the purposes of establishing the total cost of the inventory, any obsolescence of the stocks on hand must be indicated.

We tried to determine which tools are used by the managers of the depots in the divisions of the four boroughs audited, in order to comply with the requirements.⁸

We noted that, in the divisions visited, there is no permanent inventory record, either computerized or manual. Therefore, once the merchandise is delivered to the depots, there is no documented monitoring of incoming and outgoing items or of stock quantities. Also, the managers we met indicated that they did not have detailed lists of the items in stock at the end of 2013, indicating locations, costs and the valuation method used to determine their cost. Moreover, these managers did not analyze or evaluate the obsolescence of the stocks for which they were responsible. We conducted a survey of directors of the 19 boroughs and 7 departments holding stocks in order to determine whether they had a detailed list of the stocks they held at the end of 2013 and whether they had analyzed and evaluated their obsolescence. Only two central departments were able to provide a list of the items in stock, indicating all of the elements required under the guideline. Moreover, three of the business units analyzed and evaluated the obsolescence of their stocks.

⁸ The material contained in the satellite store of the Saint-Laurent borough (located in the buildings that house the Direction des travaux publics) does not belong to the borough but to the Service de l'approvisionnement. Its stock is managed by the Service de l'approvisionnement using the "inventory" module of the City's integrated system and is not covered by our audit.

It should be noted that, of the four boroughs visited, only the Division de la voirie of the Ville-Marie borough notes the removal of waterworks supplies from the inventory on work orders (for purposes other than tracking inventory). In our opinion, these work orders, as they are currently used, do not provide a reliable basis for supporting the items removed from inventory for waterworks activities since, among other things:

- they are not prepared systematically every time something is withdrawn from inventory;
- they are not numbered;
- they are completed by the blue-collar workers assigned to do the work, but there is no sign of approval by a supervisor;
- they are often incomplete since they do not always indicate the quantities used and the exact names of the items (often, abbreviations are used).

These situations are problematic since goods could be lost or stolen without being correctly identified.

4.2.1.B. Recommendation

We recommend that the Service des finances work with the Service de l’approvisionnement to:

- make sure that all of the business units with an inventory of goods, in the form of either “stocks” or “depots,” implement a permanent inventory register when required and specify the means for using such a register;
- disseminate the rules concerning the analysis and evaluation of the obsolescence of stocks and make sure the rules are applied.

Business units’ responses:

SERVICE DES FINANCES ET SERVICE DE L’APPROVISIONNEMENT

[TRANSLATION] Implement a permanent inventory record in the depots, when required, and specify the procedure for using such a record. (Planned completion: progressive implementation from 2015 to 2019)

P.S. The definition of the new business model and the deployment of the computer solution are prerequisites to this action. (Planned completion: December 2019)

Create an administrative framework based on the procedure for handling obsolescence used by the Division logistique.

Distribute the administrative framework to the depots, along with rules concerning the analysis and evaluation of inventory obsolescence.

Before the framework is distributed, we need an overall picture of all the storage sites for inventory belonging to the City. **(Planned completion: December 2015)**

4.2.1.C. Recommendation

We recommend that the Mercier–Hochelaga-Maisonneuve, Rosemont–La Petite-Patrie, Saint-Laurent and Ville-Marie boroughs:

- implement a permanent inventory record when required and produce inventory lists including all of the pertinent information required;
- analyze and evaluate the obsolescence of the stocks they hold.

Business units' responses:

MERCIER–HOCHELAGA-MAISONNEUVE BOROUGH

[TRANSLATION] Since this concerns depots, a permanent inventory is not required.

Nevertheless, we plan to implement an inventory record so as to be able to produce an annual inventory at the end of the fiscal year.

*With a record of inventoried material and products, we will be able to analyze and determine their obsolescence. **(Planned completion: December 2015 for Voirie and December 2016 for Parcs)***

Auditor General's Comments:

We feel that the completion date (December 2016) determined by the Mercier–Hochelaga-Maisonneuve borough for implementing a record for the purpose of taking an annual inventory of the depots of the Division des parcs et de l'horticulture is too late. The inventory record must be implemented for December 2015 since it is important to implement this oversight rapidly in order to determine the nature, quantity and value of the stocks held in these depots so as to prevent any loss, waste or theft of the assets held and to ensure an adequate evaluation of the obsolescence of the stocks held by the borough.

ROSEMONT–LA PETITE-PATRIE BOROUGH

[TRANSLATION] Inventory list and obsolescence of merchandise

*The Division des ressources financières will contact the Service de l'approvisionnement to have them support our managers with respect to identifying the merchandise that must be considered when taking inventory and the criteria for obsolescence. Moreover, a resource person will have to be identified by the Service de l'approvisionnement to answer specific questions that may arise. **(Planned completion: July 2015)***

The Division des ressources financières will improve the standard form so as to:

- ensure that it complies with the level of detail required by the inventory accounting guideline / fiscal year-end procedures guide;
- include a tab for indicating the obsolete merchandise. **(Planned completion: July 2015)**

The inventory will be recorded on the standard form.

The division managers will:

- keep an up-to-date list of the depots containing the material and the names of the people responsible for these depots and their inventories;
- identify the staff responsible for taking inventory;
- present and explain the need to correctly complete the count document to the staff assigned to taking inventory. **(Planned completion: November 2015)**

SAINT-LAURENT BOROUGH

[TRANSLATION] Update the inventory taken as of December 31, 2015, on a quarterly basis.

First quarterly count to be made on March 31, 2015. **(Planned completion: April 2015)**

As of December 31 each year, evaluate the obsolescence of the inventories. **(Planned completion: January 2016)**

VILLE-MARIE BOROUGH

[TRANSLATION] Given that certain recommendations concern the revision of inventory management documents to be done by the Service de l'approvisionnement jointly with the Services des finances, the borough will adjust its practices in keeping with the new procedures, particularly with respect to implementing a permanent record for the depots. **(Planned completion: Once the tools and guidelines are received from the corporate divisions involved)**

Given that the operations of the Direction des travaux publics (and particularly the Service de l'aqueduc) require the borough to maintain a minimum level of certain items, when the count is made of the depots at the end of the year, it will be compared with the count for 2014. This will serve to target any surpluses and adjust procurement accordingly. **(Planned completion: December 2015)**

4.2.2. Frequency of Physical Counts of Stocks

4.2.2.A. Background and Findings

The *Directive sur la comptabilisation des inventaires* [TRANSLATION: Inventory Accounting Guideline], issued by the Service des finances, and the *Guide de référence en gestion des stocks* [TRANSLATION: Stock Management Reference Guide], produced by the Service de

l'approvisionnement, indicate that items in stock must be counted physically at least once a year. However, we noted that no period is indicated. Ideally, in order to obtain an accurate picture of the value of the stocks to be reflected in the books, the count should be made close to December 31 of each year, date on which the City's fiscal year ends. We tried to determine whether such a count had been made in the four boroughs visited and, more generally, in the 19 boroughs and the seven central departments holding stocks.⁹

Mercier–Hochelaga-Maisonneuve borough

We asked the borough management to confirm whether or not the managers had made a physical count and whether detailed lists were available. Based on the information obtained, no inventory was made in 2013 or during the course of 2014, up to the date on which our work ended, in October 2014.

Rosemont–La Petite-Patrie borough

We noted that approaches vary from one division to another in the same borough.

Indeed, the manager responsible for the Division de l'entretien de l'éclairage, de la signalisation et du marquage de la chaussée asked for physical counts to be made at the end of the year in the depots held by his division. We obtained the results of this inventory. Goods in stock were not listed in a detailed manner. Instead, an "overall value" had been estimated per asset category.

The manager we met from the Division de la voirie told us that she had asked the foremen to evaluate the value of the goods in stock at the end of the year, based on a visual inspection, so that it could be reported to the Service des finances.

Moreover, the managers of the Division des parcs et des installations indicated that they had made no inventory count and had estimated the value of the goods held in each depot at less than \$75,000, the threshold at which the Service des finances requires a physical count at the end of the year, according to an email sent in November 2013 to the business units holding stocks. After learning of this email, we asked the manager and treasurer of the Service des finances, in a letter we sent on October 29, 2014, not to use the notion of meaningful threshold in the requests sent to the business units for information to prepare the

⁹ The 2014 version of the *Guide des procédures de fin d'exercice financier* [TRANSLATION: Fiscal Year-end Procedures Guide] of the Service des finances states that physical counts must be made of the inventory at the end of the fiscal year by the business units that have depots. At the time our audit report was being prepared, it was too early for us to be able to determine whether work pertaining to this request had been undertaken by the business units.

financial statements since any stock must be recorded as an asset in the books, regardless of value or quantity. The Service des finances followed up on our recommendation in an email sent to the boroughs and central departments concerning the information requested with respect to year-end inventories for the preparation of the 2014 financial statements.

Saint-Laurent borough

During our visits to the divisions concerned, the managers we met indicated that they had not asked for physical counts of the inventory for 2013 or during the course of 2014, up to the date on which our audit ended, in October 2014.

Ville-Marie borough

The manager of the Division des parcs et de l'horticulture told us that he had asked students hired in the summer of 2013 to count the items held in stock by his division. This inventory consisted solely of a count, and no financial value was indicated in the list for these items. He also told us that no count has been made since that date.

At the same time, the managers of the Division de la voirie told us that they had made a general count in December 2012, but only of items pertaining to waterworks, sewers and bulk materials. The employees evaluated the quantities in stock, but without making a count. The managers told us that they used the 2012 count to estimate the value of the stocks on hand as of December 31, 2013, a value which has not changed in the books, since they determined that the stock levels were basically the same as the previous year. However, no documentation supports this decision.

In order to determine the extent to which the rule requiring a physical inventory count once a year is observed throughout the City, we surveyed the managers of the 19 boroughs and seven central departments that hold stocks. According to the information obtained, only 11 of the boroughs and four of the central departments indicated that they made a total or partial count of the goods for which they are responsible at the end of 2013 or during the course of 2014 (until the end of our work on the survey, in August 2014) whereas, based on our knowledge of the activities of the business units or the similarity of their operations, counts should have been made in all cases.

4.2.2.B. Recommendation

We recommend that the Service des finances work with the Service de l’approvisionnement to make sure that all of the business units that hold goods in inventory make a physical inventory count, at least once a year. It is important, at the time of the inventory, to ensure the adequate separation of duties. Thus, the person who handles the goods in inventory should not be the one who records the goods in the inventory record. In the event that the permanent inventory record required has not been implemented, it would be pertinent for the count to be made at the end of the fiscal year or a date close to it.

Business units’ responses:

SERVICE DES FINANCES ET SERVICE DE L’APPROVISIONNEMENT

[TRANSLATION] Make sure that the business units holding goods in inventory undertake an adequate physical count at last once a year.

An overall picture of all the inventory storage sites belonging to the City is required prior to this. (Planned completion: December 2015)

4.2.2.C. Recommendation

We recommend that the boroughs of Mercier–Hochelaga-Maisonneuve, Rosemont–La Petite-Patrie, Saint-Laurent and Ville-Marie make a count of their items in stock at least once a year. In the event that the permanent inventory record is not required, the count would have to be made at the end of the fiscal year or a date close to it.

Business units’ responses:

MERCIER–HOCHELAGA-MAISONNEUVE BOROUGH

[TRANSLATION] The physical count of the items in inventory will be made as close as possible to December 31 each year.

The count will be indicated in the inventory record. (Planned completion: December 2015 for Voirie and December 2016 for Parcs)

Auditor General’s Comments:

We feel that the planned completion date (December 2016) determined by the Mercier–Hochelaga-Maisonneuve borough for implementing a record for the purpose of taking an annual inventory of the depots of the Division des parcs et de l’horticulture is too late. The inventory record must be implemented for December 2015 since it is important to implement this oversight rapidly in order to determine the nature,

quantity and value of the stocks held in these depots so as to prevent any loss, waste or theft of the assets held and to ensure an adequate evaluation of the obsolescence of the stocks held by the borough.

ROSEMONT–LA PETITE-PATRIE BOROUGH

[TRANSLATION] For all of the divisions, steps will be taken to ensure that physical inventory counts are undertaken before the end of the year, namely in November.

An inventory will be taken for the Division des parcs since all of the merchandise must be considered and the threshold of \$75,000 no longer exists. (Planned completion: November 2015)

SAINT-LAURENT BOROUGH

[TRANSLATION] Count inventoried items on December 31 each year. (Planned completion: December 2016)

VILLE-MARIE BOROUGH

Division des ressources financières et matérielles

[TRANSLATION] A general presentation was made to the management committee and a second one was adapted and given to the managers of the Direction des travaux publics to present the findings and the guidelines for progress concerning inventory management.

The count tool available from the Service de l'approvisionnement was improved and adapted by the Division des ressources financières. It was presented to the managers of the Direction des travaux publics. They were also coached in this undertaking by a professional employee from the Division des ressources financières. (Completed)

Direction des travaux publics

With respect to the goods used for water main and sewer activities, a specific file was developed to facilitate taking inventory and evaluating the related amounts. This document includes photos of various items to facilitate counting. (Completed)

The managers responsible for the other activities of the Direction des travaux publics counted the items for which they are responsible. (Completed)

4.2.3. Security and Access to Storage Sites

4.2.3.A. Background and Findings

According to the City's *Politique d'approvisionnement* [TRANSLATION: Procurement Policy] one of the things for which the Service de l'approvisionnement is responsible is managing the stocks of products in the main store, the satellite stores and the depots, in keeping with the *Guide de référence en gestion des stocks* [TRANSLATION: Stock Management Reference Guide]. However, clear and precise instructions concerning access security and

management are lacking for both “stocks” and “depots.” Certain general principles concerning the protection of goods held in stock are provided in the reference guide.

Our visits to the various sites were intended specifically to determine the extent to which security measures exist and are properly applied in an ongoing manner. Generally, the depots visited are equipped with gates and doors that block access to these storage sites. The doors can be opened with magnetic cards or keys. We did, however, note that the planned monitoring is not always properly applied and that there are shortcomings with respect to both the protection and surveillance of the goods in terms of managing access to the various sites.

4.2.3.B. Recommendation

We recommend that the Service de l’approvisionnement:

- **establish and give the managers of the business units that hold stocks clear, uniform and complete rules with respect to the security of the storage sites in keeping with the City’s *Politique d’approvisionnement* [TRANSLATION: Procurement Policy];**
- **make sure that these rules are applied.**

Business unit’s response:

[TRANSLATION] Establish more appropriate means and rules for ensuring the security of and access to storage sites.

Send a memo to the business units reminding them about the security of municipal buildings, in keeping with the administrative frameworks:

- *Sécurité dans les édifices municipaux [TRANSLATION: Security in municipal buildings] (POLICY) - C-OG-SCARM-PA-14-001;*
- *Rôles, responsabilités et reddition de comptes en matière de sécurité dans les édifices municipaux [TRANSLATION: Roles, responsibilities and accountability with respect to security in municipal buildings] (GUIDELINE) - C-OG-SCARM-D-14-001.*

Enhance the administrative frameworks mentioned to include a section on securing goods in buildings.

Make sure that the established rules are applied. (Planned completion: December 2016)

4.2.3.C. Recommendation

We recommend that, while they are waiting for the rules to be established by the Service de l'approvisionnement, the Mercier–Hochelaga-Maisonneuve, Rosemont–La Petite-Patrie, Saint-Laurent and Ville-Marie boroughs make sure that access to the stocks for which they are responsible is protected and limited to authorized personnel.

Business units' responses:

MERCIER–HOCHELAGA-MAISONNEUVE BOROUGH

[TRANSLATION] An action plan aimed at correcting the identified shortcomings was produced. (Planned completion: December 2017)

Auditor General's Comments:

We feel that the planned completion date (December 2017) determined by the Mercier–Hochelaga-Maisonneuve borough for implementing all of the procedures to ensure the adequate security of access to its depots is too late. Certain measures could be implemented immediately to ensure that access to inventories is limited to authorized individuals at all times, in order to mitigate the risks of theft, vandalism and unauthorized entry.

ROSEMONT–LA PETITE-PATRIE BOROUGH

[TRANSLATION] An action plan aimed at correcting the identified shortcomings was produced. (Planned completion: November 2015)

SAINT-LAURENT BOROUGH

[TRANSLATION] An action plan aimed at correcting the identified shortcomings was produced. (Planned completion: June 2015 to September 2015)

VILLE-MARIE BOROUGH

[TRANSLATION] An action plan aimed at correcting the identified shortcomings was produced. (Completed)

5. General Conclusion

Our audit revealed a situation giving cause for concern for the City. The lack of coordination between the two departments that play a major role in the management of procurement and the monitoring of the use of stocks, namely the Service de l'approvisionnement and the Service des finances, deprives the City, and more specifically the business units concerned, of a unique, complete and useful reference framework.

We noted that the documents prepared by the Service de l'approvisionnement and by the Service des finances lack consistency, are often incomplete and do not serve as effective reference tools that enable the business units to:

- adequately monitor the stocks for which they are responsible;
- ensure adequate accounting with respect to the use, valuation and appropriate presentation of the stocks remaining at the end of the fiscal year for the purpose of preparing financial statements that are exempt from inaccuracies;
- ensure that access to these stocks is limited to authorized individuals in keeping with their duties.

Indeed, the current management framework includes three documents pertaining to the application of the City's *Politique d'approvisionnement* [TRANSLATION: Procurement Policy] and related topics. Thus, the *Directive sur la comptabilisation des inventaires* [TRANSLATION: Inventory Accounting Guideline], the *Guide de référence en gestion des stocks* [TRANSLATION: Stock Management Reference Guide] and the *Guide des procédures de fin d'exercice financier* [TRANSLATION: Fiscal Year-end Procedures Guide] stipulate the requirements and provide information concerning the management and recording of inventories for the managers concerned.

The managers of each of the business units must therefore be familiar with and, above all, understand the objectives of, each of these three documents in order to fulfil their stock management responsibilities adequately, which is not simple since the three documents do not contain all of the sufficient and necessary information and occasionally cause confusion with respect to some of the terms used. There is therefore a high risk of error. Given this situation, it is our opinion that these documents must be revised in order to provide a unique and complete reference framework for the managers.

With respect to the resulting non-compliance situations, in addition to the effect they have on the information provided under the "stocks" item in the City's financial statements, there are also risks pertaining to possible theft and vandalism of these stocks, given the lack of effective measures concerning the security and surveillance of the storage sites.

The managers of each business unit are responsible for ensuring adequate monitoring of the stocks made available to them and effective surveillance of the storage sites in order to make sure that these stocks are used solely for the purposes for which they are intended and that access to the goods is restricted to authorized individuals. During our work, we noted several shortcomings: the movement of stocks is not always monitored and surveillance is not always adequate to restrict unauthorized access to the stored inventories.



Report of the Auditor General of the Ville de Montréal to the City Council and to the Urban Agglomeration Council

For the Year Ended December 31, 2014

4.9

BUSINESS CONTINUITY MANAGEMENT



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List of Acronyms

BIA	Business Impact Analysis	SIM	Service de sécurité incendie de Montréal
CCTI	Centre de commandement et de traitement de l'information	SPVM	Service de police de la Ville de Montréal
CO	Centres opérationnels	STI	Service des technologies de l'information
DEP	Direction de l'eau potable		
PDQ	Poste de quartier		

Note to Readers

The implementation of our recommendations by the business units depends on Recommendations 4.1.B and 4.2.B, which we issued to the Direction générale, concerning the development of management frameworks for the City's business continuity program and ensuing allocation of resources.

In response to these recommendations, the Direction générale informed us that it intends to broaden the mandate of the emergency management centre within the Service de sécurité incendie de Montréal (SIM) and give it the added responsibility of ensuring resilience. The emergency management centre explained that, as part of its broader mandate, it will submit to the Direction générale a comprehensive business continuity action plan in December 2015.

Accordingly, the business units' responses to our recommendations, set out in this report, must be read in light of this comprehensive action plan, which will prescribe more specifically the nature of the actions the business plans are to implement as well as timelines for their implementation.

We also plan to evaluate this comprehensive action plan in order to ensure that it will help meet our recommendations adequately.

4.9. Business Continuity Management

1. Introduction

Organizations such as Ville de Montréal (the City) are more vulnerable now than ever, because natural, technological and social incidents occurring at the local or regional level now have major impacts on their normal operations.

The City provides services to approximately 1.8 million people. Some of these are essential services such as:

- **The Service de sécurité incendie de Montréal (SIM):** Its mandate is to make the Montreal agglomeration safer by protecting lives, property and the environment;
- **The Service de l'eau – Direction de l'eau potable (DEP):** Its mandate includes the production and distribution of drinking water to the population, organizations and industries of Montreal;
- **The Service des technologies de l'information (STI):** It is mandated to support the delivery of the City's information and communications technology services;
- **The Service de police de la Ville de Montréal (SPVM):** Its mission is to protect the lives and property of citizens, to maintain the peace and ensure public safety, to prevent and fight crime and to enforce existing laws and regulations.

Since these essential services must be operational at all times, it is crucially important that the City be prepared for any emergency situation that could cause a shutdown or major disruption in their operations. The business continuity management process takes this into account and is designed to minimize impacts in the event of a disaster or major event affecting the City's business units.

1.1. Business Continuity Management

Business continuity management is a process of planning to ensure that critical operations are resumed when an event interrupts a business unit's regular operations. It provides for measures and procedures to resume these operations in another location within a reasonable time (based on the maximum interruption time allowed).

Business continuity management must be based on a program that includes the following components:

- **Governance:**

The City has established a governance structure (e.g., assignment of responsibilities; management, administration and accountability mechanisms) for the purpose of managing business continuity effectively.
- **Business continuity program structure:**

The structure of the business continuity program includes the minimum elements providing for the establishment of effective strategies, a business continuity culture, and relevant, measurable and achievable objectives.
- **Crisis management structure:**

The City has established a crisis management structure responsible for the strategic and operational responses that ensure coordination and communication among business units and external stakeholders.
- **Business impact analysis and business continuity strategies:**

For each of the City's business units, a business impact analysis helps identify its functions properly in order to establish their criticality level and a chronological order for resuming operations in the event that they are interrupted. It helps determine the maximum interruption time for each operation. A business continuity strategy corresponds to the needs that were established when the impact analysis was conducted. In particular, it helps ensure that the maximum acceptable interruption time is not exceeded and it helps in the planning of premises, resources and equipment required to meet these needs.
- **Business continuity plans and procedures:**

Business continuity documentation ensures the City reacts appropriately to a crisis and provides all instructions needed to resume critical activities.
- **Business continuity training:**

Following a disaster, all stakeholders involved in resuming operations have received appropriate training, in particular by participating in the establishment of recovery processes and by taking part in exercise drills to validate business continuity procedures.
- **Business continuity exercise programs:**

The only way to validate business continuity procedures adequately is to carry out evaluation exercises regularly. The exercises are prepared on the basis of objectives to be achieved, and the debriefing objectively assesses whether the objectives were achieved.
- **Updating business continuity documentation:**

In order to ensure effectiveness and business sustainability, business continuity documentation is always updated in accordance with a process.

1.2. Differences Between Emergency Management Measures and Business Continuity Management

Emergency management measures are used to react to a major event that has a direct impact on the City's residents. They are aimed at maintaining the capacity of crisis and emergency management services to respond so that they can:

- come to residents' assistance as promptly as possible;
- save lives;
- protect residents and stakeholders;
- provide residents with safe housing;
- inform the population;
- reduce social and economic losses.

While the City has emergency management measures in place, it must also have a business continuity management program. This program ensures that the City's critical activities are maintained in the event of a disaster that jeopardizes its operations. Without such a program, the City's ability to respond could be reduced, jeopardizing the welfare of its residents.

2. Purpose and Scope of the Audit

The purpose of our audit was to determine whether the City takes the necessary steps to address risks that a disaster could affect its operations, and to ensure the continuity of those considered critical.

Our audit was conducted in accordance with the value-for-money auditing standard in the public sector included in the CPA¹ Canada Handbook – Certification.

For this audit, we relied on the following international standards:

- ISO 27001 – Information security management systems;
- ISO 22301 – Business continuity management systems;
- ISO 31000 – Risk management.

Our audit was conducted with the participation of specialists recognized in the field of business continuity management.

¹ Handbook published by Chartered Professional Accountants Canada.

As a follow-up to the results of our risks analysis, our audit focused on the following business units, which we considered critical:

- Direction générale;
- DEP;
- SIM;
- STI;
- SPVM.

A separate detailed report was produced for the SPVM because of the highly sensitive, confidential information that it contains. Nevertheless, this report discusses our public findings in Section 5.

Our audit evaluated the following sections:

- Section 1 – Governance;
- Section 2 – Business continuity program structure;
- Section 3 – Crisis management structure;
- Section 4 – Business impact analysis and business continuity strategies;
- Section 5 – Business continuity plans and procedures;
- Section 6 – Business continuity training;
- Section 7 – Business continuity exercise programs;
- Section 8 – Updating business continuity documentation.

Our audit did not cover the following:

- SPVM Postes de quartier (PDQ), because each PDQ can be relieved by the others as a result of their numbers and proximity;
- Information technologies recovery management, which is the subject of a separate audit;
- Emergency management, which was covered by a separate report in 2007.

Our audit was conducted from September 2013 to December 2014.

3. Summary of Findings (Direction générale, DEP, SIM and STI)

Overall, we noted that neither the Direction générale nor the other business units audited had established a business continuity program. Table 1 presents a summary of our findings.

Table 1 – Summary of Findings

Report section	Finding	Risk level ^[a]
4.1	Governance	MODERATE
4.2	Business continuity program structure	HIGH
4.3	Crisis management structure	HIGH
4.4	Business impact analysis and business continuity strategies	HIGH
4.5	Business continuity plans and procedures	CRITICAL
4.6	Business continuity training	HIGH
4.7	Business continuity exercise programs	CRITICAL
4.8	Updating business continuity documentation	HIGH

^[a] A description of risk levels is given in Appendix 7.1.

4. Detailed Findings and Recommendations (Direction générale, DEP, SIM and STI)

4.1. Governance

4.1.A. Background and Findings

To manage business continuity effectively, organizations such as the City establish sound governance in the areas of management frameworks; assignment of responsibilities; and management, administration and accountability mechanisms.

Management frameworks are documents that determine the scope, requirements, roles and responsibilities of members of the City's management and its business units under a business continuity program. These documents generally take the form of administrative policies and guidelines, and rather than establishing what the program must consist of or how it is to be implemented, they establish the objectives to be achieved.

The goal is to develop a single coordinated approach that is aligned for all the City's business units, in order to provide an effective response and maintain the City's critical functions when a disaster occurs.

The City must clearly define its objectives and expectations in the area of business continuity, by means of an administrative policy, in order to ensure that critical activities are resumed at the time of a disaster or any other event that could affect operations and the services provided

to the population. Management frameworks should cover the organizational structure, the roles and responsibilities of the key stakeholders, as well as the program tools and requirements. The policy will guide business units in the establishment and implementation of business continuity plans.

For business units, management frameworks can take the form of guidelines and procedures, determining how these will achieve the objectives and meet the requirements of the municipal policy through a process adapted to their operational reality. They must establish an organizational structure, assign roles and responsibilities to stakeholders and specify the tools and activities established in response to the management frameworks of the Direction générale.

During our audit, we noted the following deficiencies:

- There is no business continuity program in the City, either within the Direction générale or the other business units audited, in case of serious incidents that would interfere with a unit's activities, even though this is required by emergency management. It should be pointed out that the business units we took into account in our audit are critical for the welfare of City residents;
- No business continuity management framework was developed by the Direction générale or by the other business units audited.

Since the scope of the business continuity program must cover all the City's activities, the senior levels of its administration must be ultimately responsible for its implementation, its objectives and monitoring progress. According to sound management practices, the business continuity program should be assigned to a member of the executive committee and its development coordinated by the Direction générale. At the same time, it should also be assigned to a member of each business unit's management team.

The result of the City not having a business continuity program is that:

- Business continuity is not represented within the executive committee and the Direction générale. It is not assigned to a member of the executive committee or the Direction générale;
- Business continuity is not monitored by municipal authorities;
- No objectives are established or communicated to business units. These objectives can set out expectations regarding continuity (e.g., determine the critical activities, establish continuity strategies and plans and keep them up to date to reduce the impacts of an interruption and report annually on preparedness). Business units are not held accountable for ensuring that they have in fact established adequate plans;

- No accountability or representation mechanisms and no objectives have been defined for business continuity for the DEP, the SIM and the STI.

We consider the risk level to be **moderate** (see Table 2), because the Direction générale, the DEP, the SIM and the STI face the following potential risks:

- No systematic, standardized approach is possible without management frameworks showing the support of the City's management. For business units, this could result in an inadequate process that fails to meet their business continuity objectives. These efforts would be incomplete, uneven, inconsistently applied and erratic in their effectiveness, making them more difficult to align. The terminology, sequence of activities and program components would be different, which would have significant impacts on the ability of the business units' stakeholders to coordinate their responses;
- With a continuity process that is not framed by overall and specific objectives, no coherent development of continuity plans is possible within the various business units' management teams and their critical functions. The continuity processes would be uneven, inconsistent and lacking in direction in the short, medium and long term.

Table 2 – Risk Level

Impact ^[a]	Probability ^[a]				
	Highly probable	PROBABLE	Possible	Unlikely	Improbable
Catastrophic	Critical	Critical	High	High	Moderate
Major	Critical	High	High	Moderate	Low
MODERATE	High	MODERATE	Moderate	Low	Low
Minor	Low	Low	Low	Low	Low

^[a] A description of impact and probability levels is given in Appendix 7.1.

4.1.B. Recommendation

We recommend that the Direction générale develop specific management frameworks for the City's business continuity program that include:

- a description of general objectives;
- a definition of the roles and responsibilities of members of the City's and business units' management teams;
- the scope of management frameworks (e.g., business units and paramunicipal corporations);
- business continuity requirements imposed on business units.

Business unit's response:

[TRANSLATION] The Direction générale intends to broaden the mandate of the emergency management office and give it the added responsibility of ensuring resilience. This decision is in keeping with the program established by the Rockefeller Foundation for which Ville de Montréal was selected. (Planned completion: 2015–2020)

4.1.C. Recommendation

Subject to Recommendation 4.1.B., addressed to the Direction générale, we recommend that the Direction de l'eau potable, the Service de sécurité incendie de Montréal and the Service des technologies de l'information:

- **develop their management frameworks along the same lines as the City's, and ensure that, at the very least, they provide for:**
 - a definition of the department's continuity objectives,
 - a detailed impact analysis of interruptions,
 - a continuity strategy for reducing these impacts,
 - continuity plans that describe in detail activities carried out to resume critical operations within an acceptable time,
 - a review and regular exercise drill schedule;
- **assign responsibility for business continuity to a member of each of their management teams;**
- **establish specific business continuity objectives for each of their management teams;**
- **establish a coordinated communication, monitoring and accountability process on the achievement of objectives.**

Business units' responses:**DIRECTION DE L'EAU POTABLE**

[TRANSLATION] In order to develop its business continuity program, the Direction de l'eau potable must comply with the management framework of the City's Direction générale.

Since the Direction générale mandated the City's emergency management division to develop this management framework, we must wait for it to be implemented in order to develop ours in a coherent manner.

We have already identified Myriam Beaudoin as the person who will be responsible on this front in our management team.

*The associated management structures and budgets will be identified as soon as we familiarize ourselves with the City's management framework. **(Planned completion: 8 months after the Direction générale establishes the management framework)***

SERVICE DE SÉCURITÉ INCENDIE DE MONTRÉAL

[TRANSLATION] The Direction générale asked SIM's management to broaden the mandate of Montreal's emergency management centre to include the concepts of resilience and business continuity.

*Under the 100 Resilient Cities program, overseen by the Rockefeller Foundation, the emergency management centre must establish a resilience strategy for the Montreal community in the fall of 2015. As part of this reflection process, a comprehensive business continuity action plan will be submitted to the Direction générale by the end of the year. **(Planned completion: December 2015)***

SERVICE DES TECHNOLOGIES DE L'INFORMATION

*[TRANSLATION] The Service des technologies de l'information will follow the City's business continuity guidelines as set out in the corporate framework that will be announced by the Direction générale. **(Planned completion: undetermined)***

The STI is currently conducting a reorganization. Its control and continuous improvement division will be responsible for the department's business continuity.

*The IT services continuity manager will be appointed no later than December 31, 2015. **(Planned completion: December 2015)***

4.2. Business Continuity Program Structure

4.2.A. Background and Findings

At the very least, the structure of a business continuity program contains components for establishing effective strategies; a culture of business continuity; and relevant, measurable and achievable objectives.

These components are:

- The organizational structure of the program;
- Allocation of resources and operating budgets;
- Tools, common approach and municipal coordination of the program.

Organizational Structure of the Program

The organizational structure of the business continuity program is made up of committees and stakeholders to supervise, coordinate and ensure a structured, aligned and effective implementation of business continuity initiatives.

The structure is based on roles and responsibilities designed according to the City's hierarchy and management levels. It must provide for an approval level and ultimate responsibility and provide the broad guidelines of the program. The Direction générale directs and supervises the work of business units, which propose and implement program activities.

This structure must be representative of all the City's activities and provide for communication and accountability mechanisms in order to ensure that information is shared and that there is a common perception of the issues, objectives and results of the program.

During our audit, we noted that the Direction générale, the DEP, the SIM and the STI did not have a business continuity organizational structure.

Allocation of Resources and Operating Budgets

The establishment of a business continuity program and its activities cannot be a one-time process that is carried out on a project-by-project basis and is not integrated into ongoing operations. It must be based on a recurring allocation of financial, material and human resources.

We noted that in the case of both the Direction générale and the other business units audited, no budget was allocated specifically to business continuity.

Tools, Common Approach and Municipal Coordination of the Program

To ensure the development and the establishment of a coherent, effective continuity program, the City must have a step-by-step procedure in place to properly frame the efforts of each business unit and ensure that the business continuity objectives are achieved. To facilitate their development and establishment, tools will also be needed, such as:

- training on the desired process;
- manuals or templates for each development phase;
- models or procedures to follow for performing exercises;
- tools for sharing and exchanging ideas (e.g., collaboration websites).

Similarly, coordination and overall monitoring of the business continuity program, centralized within a single municipal entity, would facilitate accountability and evaluation of the City's actual emergency preparedness. This same entity could provide business units with content expertise and keep the continuity process up to date while integrating the latest advances in the field into it.

As mentioned in the previous section, without a business continuity program, the Direction générale and the other business units audited do not have centralized processes and tools.

We consider the risk level to be **high** (see Table 3), because the Direction générale, the DEP, the SIM and the STI face the following potential risks:

- When an organizational structure is absent or deficient, it is not possible to manage all levels of a crisis (strategic, tactical and operational). Some aspects of event management might be overlooked and staff required to assume these responsibilities would not be properly equipped to respond. Stakeholders would remedy these deficiencies by improvising, increasing the risk that the situation would degenerate into a crisis.
- Without recurring financial or human resources, the process would lack cohesiveness and relevance to business units' ongoing operations. The continuity objectives would probably not be achieved, putting operations at risk in the event of a disaster. Without sustained funding, efforts already undertaken might be wasted because components established in the past might have become obsolete.
- Without tools and without a common business continuity process, in the event of a disaster, recovery activities would be improvised, substantially increasing the time required to resume normal operations. The terminology, sequence of activities and program components would be different, adversely affecting stakeholders' ability to discuss and share information, to collaborate, and to coordinate their work, their initiatives and their responses. When staff members are replaced, knowledge of critical program components could not be communicated.

It should be pointed out that with regard to emergency management, several advisory and management committees are already in place that could be used in a business continuity process.

Table 3 – Risk Level

Impact ^[a]	Probability ^[a]				
	Highly probable	PROBABLE	Possible	Unlikely	Improbable
Catastrophic	Critical	Critical	High	High	Moderate
MAJOR	Critical	HIGH	High	Moderate	Low
Moderate	High	Moderate	Moderate	Low	Low
Minor	Low	Low	Low	Low	Low

^[a] A description of impact and probability levels is given in Appendix 7.1.

4.2.B. Recommendation

We recommend that the Direction générale:

- provide specific recurring budgets for the development, implementation and maintenance of a business continuity program;
- make municipal tools (recipe books) available to business units, such as:
 - the operational structure of the business continuity program,
 - training sessions on the desired process,
 - manuals or templates for each development phase,
 - models or procedures to follow for performing exercises,
 - tools for sharing and exchanging ideas (e.g., collaboration websites).

Business unit's response:

[TRANSLATION] Implementation of this recommendation will ensue from the implementation of Recommendation 4.1.B. (Planned completion: 2015–2020)

4.2.C. Recommendation

We recommend that the Direction de l'eau potable, the Service de sécurité incendie de Montréal and the Service des technologies de l'information:

- develop their management structures for the implementation of the business continuity program, including:
 - determining the persons responsible,
 - describing the roles and responsibilities of each,
 - defining the communication and accountability process;
- provide specific recurring business continuity budgets in connection with the established objectives.

Business units' responses:

DIRECTION DE L'EAU POTABLE

[TRANSLATION] In order to develop its business continuity program, the Direction de l'eau potable must comply with the management framework of the City's Direction générale.

*Since the Direction générale mandated the City's emergency management division to develop this management framework, we must wait for it to be implemented in order to develop ours in a coherent manner. **(Planned completion: undetermined)***

SERVICE DE SÉCURITÉ INCENDIE DE MONTRÉAL

[TRANSLATION] The Direction générale asked the SIM's management to broaden the mandate of Montreal's emergency management centre to include concepts of resilience and business continuity.

*Under the 100 Resilient Cities program overseen by the Rockefeller Foundation, the emergency management centre must establish a resilience strategy for the Montreal community in the fall of 2015. As part of this reflection process, a comprehensive business continuity action plan will be submitted to the Direction générale by the end of the year. **(Planned completion: December 2015)***

SERVICE DES TECHNOLOGIES DE L'INFORMATION

*[TRANSLATION] The Service des technologies de l'information will follow the City's business continuity guidelines as set out in the corporate framework that will be announced by the Direction générale. **(Planned completion: undetermined)***

*The STI is currently conducting a reorganization. Its control and continuous improvement division will be responsible for the department's business continuity. The management structure will depend on the guidelines introduced by the Direction générale. **(Planned completion: undetermined)***

4.3. Crisis Management Structure

4.3.A. Background and Findings

When a disaster occurs, the City must react quickly and efficiently to minimize its impacts and quickly resume operations.

In order for a response structure to be effective, its members must have a thorough understanding of their roles and responsibilities, their areas of concern, tools to be used and communication protocols to be applied.

During our audit, we noted the following:

- The DEP does not have a business continuity response structure integrating all critical operations. However, it established a response structure in its emergency plans for the operations of drinking water production plants and for responding to major water main breaks. This structure was reviewed when the pandemic plan (2009–2010, revised in 2013) was developed. It is integrated into the municipal emergency management structure, because drinking water production and distribution are defined as one of its critical missions.
- The SIM developed a response structure for its service continuity plans that does not take into account business continuity of the SIM as a whole, i.e., events that could affect its own operations and facilities outside fire stations.
- The STI has an emergency response structure in the form of a document called “Plan de mobilisation,” which was revised in 2013. However, it does not take business continuity into account.

We consider the risk level to be **high** (see Table 4), because without a comprehensive response structure, the DEP, the SIM and the STI face the following potential risks:

- It will probably be difficult to react promptly to an event affecting their own operations and ensure cohesion in recovery activities.
- The business units audited will probably no longer have the ability to deliver all essential public services. This could result in serious consequences for the welfare of City residents and in other areas.

Business continuity could be integrated into the SIM's and STI's existing crisis management structures.

Table 4 – Risk Level

Impact ^[a]	Probability ^[a]				
	Highly probable	PROBABLE	Possible	Unlikely	Improbable
Catastrophic	Critical	Critical	High	High	Moderate
MAJOR	Critical	HIGH	High	Moderate	Low
Moderate	High	Moderate	Moderate	Low	Low
Minor	Low	Low	Low	Low	Low

^[a] A description of impact and probability levels is given in Appendix 7.1.

4.3.B. Recommendation

We recommend that the Direction de l'eau potable, the Service de sécurité incendie de Montréal and the Service des technologies de l'information develop a response structure to meet business continuity needs and objectives that integrates all their critical operations.

Business units' responses:

DIRECTION DE L'EAU POTABLE

[TRANSLATION] In order to develop its business continuity program, the Direction de l'eau potable must comply with the management framework of the City's Direction générale.

Since the Direction générale mandated the City's emergency management division to develop this management framework, we must wait for it to be implemented in order to develop ours in a coherent manner. (Planned completion: undetermined)

SERVICE DE SÉCURITÉ INCENDIE DE MONTRÉAL

[TRANSLATION] The Direction générale asked SIM's management to broaden the mandate of Montreal's emergency management centre to include the concepts of resilience and business continuity.

Under the 100 Resilient Cities program, overseen by the Rockefeller Foundation, the emergency management centre must establish a resilience strategy for the Montreal community in the fall of 2015. As part of this reflection process, a comprehensive business continuity action plan will be submitted to the Direction générale by the end of the year. (Planned completion: December 2015)

SERVICE DES TECHNOLOGIES DE L'INFORMATION

[TRANSLATION] With respect to a response structure, the STI has a mobilization plan that can be updated to meet the IT services business continuity objectives that will be developed as a result of the City's business continuity guidelines. (Planned completion: undetermined)

4.4. Business Impact Analysis and Business Continuity Strategies

4.4.A. Background and Findings

A business impact analysis (BIA) is aimed at evaluating the consequences of an interruption in an entity's operations, including on its ability to perform its mission. The process is intended for all the City's business units and generally classifies impacts into four areas: financial, legal, operational and "the organization's image and reputation."

This analysis compiles an inventory of each business unit's operations and helps prioritize them while establishing their maximum tolerance to an interruption in operations. At the same time, it clarifies interdependent relationships and determines the resources required to maintain the minimum acceptable level of operation.

This analysis also helps develop a common vision of priorities and align different perceptions of the City's operations and its critical functions. It forms the basis of any business continuity process. The City's management then has a clear, detailed and prioritized profile of its operations, which will serve as the basis for the process of developing the City's business continuity strategies.

During our audit, we noted the following:

- The DEP and the STI did not conduct impact analyses and did not have business continuity strategies.
- The SIM had conducted a simplified impact analysis of some of its activities in the event of a pandemic, which helped determine the criticality of some of its operations. However, we were not able to obtain comprehensive documentation justifying the conclusions of the analysis. Many of the continuity strategies documented were not implemented and no updates were made since the analysis in 2009. Furthermore, it was concerned only with pandemic scenarios, whereas the range of potential events that are likely to affect the SIM's continuity of operations is much greater.

We consider the risk level to be **high** (see Table 5), because the DEP, the SIM and the STI face the following potential risks:

- Without a comprehensive, detailed BIA, several critical functions may not be detected and as a result, they would not benefit from any continuity strategy or plan.
- In the event of a disaster, these business units would most likely not be able to recover all the critical functions required to maintain essential public services.

Table 5 – Risk Level

Impact ^[a]	Probability ^[a]				
	Highly probable	PROBABLE	Possible	Unlikely	Improbable
Catastrophic	Critical	Critical	High	High	Moderate
MAJOR	Critical	HIGH	High	Moderate	Low
Moderate	High	Moderate	Moderate	Low	Low
Minor	Low	Low	Low	Low	Low

^[a] A description of impact and probability levels is given in Appendix 7.1.

4.4.B. Recommendation

We recommend that the Direction de l'eau potable, the Service de sécurité incendie de Montréal and the Service des technologies de l'information:

- conduct an impact analysis for all their operations;
- communicate the results of the impact analysis to all business continuity program stakeholders;
- develop continuity strategies based on the results of the business impact analysis.

Business units' responses:

DIRECTION DE L'EAU POTABLE

[TRANSLATION] In order to develop its business continuity program, the Direction de l'eau potable must comply with the management framework of the City's Direction générale.

Since the Direction générale mandated the City's emergency management division to develop this management framework, we must wait for it to be implemented in order to develop ours in a coherent manner. **(Planned completion: undetermined)**

SERVICE DE SÉCURITÉ INCENDIE DE MONTRÉAL

[TRANSLATION] The Direction générale asked SIM's management to broaden the mandate of Montreal's emergency management centre to include the concepts of resilience and business continuity.

Under the 100 Resilient Cities program, overseen by the Rockefeller Foundation, the emergency management centre must establish a resilience strategy for the Montreal community in the fall of 2015. As part of this reflection process, a comprehensive business continuity action plan will be submitted to the Direction générale by the end of the year. **(Planned completion: December 2015)**

SERVICE DES TECHNOLOGIES DE L'INFORMATION

[TRANSLATION] The Service des technologies de l'information will follow the City's business continuity guidelines as set out in the corporate framework that will be announced by the Direction générale. **(Planned completion: undetermined)**

4.5. Business Continuity Plans and Procedures

4.5.A. Background and Findings

When a disaster strikes, the City must respond quickly in order to minimize its impacts and quickly resume normal operations. It is important that organizations destabilized by an

incident be able to perform critical activities in an orderly fashion in order to resume operations as quickly as possible.

As a way of facilitating decision-making under pressure, the business continuity plan must account for all the activities and procedures established in the organization to maintain or quickly resume operations based on the priorities defined in the impact analysis.

Management tools that give clear details on “who does what, when, how and where” for specific situations help reduce uncertainty time due to any incident, as well as develop the optimum response reflexes within the continuity teams.

During our audit, we identified the following deficiencies:

- The STI does not have a business continuity plan.
- The DEP has no business continuity plan. In 2009 and 2010, the Service de l'eau developed a draft plan for dealing with the eventuality of an H1N1 flu pandemic (chapter 9 of the document “Plan de mesures d'urgence”), specifying the affected operations that would be maintained with the reduced levels of staff available. This document was updated in 2013 and does not include business continuity elements.
- The SIM does not have an up-to-date business continuity plan that covers all its operations. Nevertheless, in 2009 and 2010, the SIM developed a service continuity plan for dealing with the eventuality of an H1N1 flu pandemic, specifying the affected operations that would be maintained with the reduced levels of staff available. This plan provides an initial glimpse into SIM operations and possible strategies for maintaining them in a pandemic or disaster situation. It has not been updated since that time, and we were not able to track down all the supporting documents.

The SIM established a disaster relief process for its communications centre. This process is activated several times a year and will be explored in greater detail in our audit of information technology recovery management.

We consider the risk level to be **critical** (see Table 6), because the DEP, the SIM and the STI face the following potential risks:

- Without a business continuity plan, employees involved in resuming operations would improvise. The responses would probably be incoherent and adversely affect other activities.
- These business units might not recover their critical operations in a timely manner. Essential public services might not be maintained, which would have serious consequences for the welfare of City residents.

Table 6 – Risk Level

Impact ^[a]	Probability ^[a]				
	HIGHLY PROBABLE	Probable	Possible	Unlikely	Improbable
Catastrophic	Critical	Critical	High	High	Moderate
MAJOR	CRITICAL	High	High	Moderate	Low
Moderate	High	Moderate	Moderate	Low	Low
Minor	Low	Low	Low	Low	Low

^[a] A description of impact and probability levels is given in Appendix 7.1.

4.5.B. Recommendation

We recommend that the Direction de l'eau potable, the Service de sécurité incendie de Montréal and the Service des technologies de l'information develop business continuity plans for all their critical functions, including:

- defining the criteria for continuity plan activation;
- defining the roles and responsibilities of each stakeholder or each continuity team;
- defining activities to be performed in the event of a disaster in order to maintain an adequate level of service;
- determining critical resources (staff, equipment, etc.) required to relocate essential operations;
- listing employees and third parties who must participate in continuity activities, including ways to contact them;
- developing operational procedures in the event of a disaster.

Business units' responses:

DIRECTION DE L'EAU POTABLE

[TRANSLATION] In order to develop its business continuity program, the Direction de l'eau potable must comply with the management framework of the Direction générale de la Ville de Montréal.

Since the Direction générale mandated the City's emergency management division to develop this management framework, we must wait for it to be implemented in order to develop ours in a coherent manner. (Planned completion: undetermined)

SERVICE DE SÉCURITÉ INCENDIE DE MONTRÉAL

[TRANSLATION] The Direction générale asked SIM's management to broaden the mandate of Montreal's emergency management centre to include the concepts of resilience and business continuity.

Under the 100 Resilient Cities program, overseen by the Rockefeller Foundation, the emergency management centre must establish a resilience strategy for the Montreal community in the fall of 2015. As part of this reflection process, a comprehensive business continuity action plan will be submitted to the Direction générale by the end of the year. (Planned completion: December 2015)

SERVICE DES TECHNOLOGIES DE L'INFORMATION

[TRANSLATION] The current mobilization plan includes roles of the various key stakeholders and their contact information. It will be realigned with the City's business continuity guidelines as set out in the corporate framework that will be announced by the Direction générale. (Planned completion: undetermined)

4.6. Business Continuity Training

4.6.A. Background and Findings

A business continuity process cannot succeed without an educational component. In order to maximize the effectiveness of responses in the event of a disaster, it is important that all employees be trained on the response process, the steps to take and the procedures to follow.

Training promotes a common understanding of objectives, decision-making processes and standard response methods within the organization when an emergency situation arises. During training sessions, participants have the opportunity to develop and consolidate their knowledge and skills. The training program must take into account the needs of staff and requirements of business units.

As mentioned in previous sections, in the absence of a business continuity program, the business units audited had not developed any training and awareness programs.

We consider the risk level to be **high** (see Table 7), because the DEP, the SIM and the STI face the following potential risks:

- Without a training and awareness program, staff members who need to respond during interruptions in operations would not be prepared to take action. Their responses would be improvised and largely ineffective.
- These business units could probably not recover their operations in a timely manner. Essential public services might not be maintained.

Table 7 – Risk Level

Impact ^[a]	Probability ^[a]				
	Highly probable	PROBABLE	Possible	Unlikely	Improbable
Catastrophic	Critical	Critical	High	High	Moderate
MAJOR	Critical	HIGH	High	Moderate	Low
Moderate	High	Moderate	Moderate	Low	Low
Minor	Low	Low	Low	Low	Low

^[a] A description of impact and probability levels is given in Appendix 7.1.

4.6.B. Recommendation

We recommend that the Direction de l'eau potable, the Service de sécurité incendie de Montréal and the Service des technologies de l'information develop a training program for all business continuity plan stakeholders.

Business units' responses:

DIRECTION DE L'EAU POTABLE

[TRANSLATION] In order to develop its business continuity program, the Direction de l'eau potable must comply with the management framework of the Direction générale de la Ville de Montréal.

Since the Direction générale mandated the City's emergency management division to develop this management framework, we must wait for it to be implemented in order to develop ours in a coherent manner. (Planned completion: undetermined)

SERVICE DE SÉCURITÉ INCENDIE DE MONTRÉAL

[TRANSLATION] The Direction générale asked the SIM's management to broaden the mandate of Montreal's emergency management centre to include the concepts of resilience and business continuity.

Under the 100 Resilient Cities program, overseen by the Rockefeller Foundation, the emergency management centre must establish a resilience strategy for the Montreal community in the fall of 2015. As part of this reflection process, a comprehensive business continuity action plan will be submitted to the Direction générale by the end of the year. (Planned completion: December 2015)

SERVICE DES TECHNOLOGIES DE L'INFORMATION

[TRANSLATION] The Service des technologies de l'information will follow the City's business continuity guidelines as set out in the corporate framework that will be announced by the Direction générale. (Planned completion: undetermined)

4.7. Business Continuity Exercise Programs

4.7.A. Background and Findings

The effectiveness with which an organization reacts to an emergency or crisis depends largely on the exercise programs it has set up.

Business continuity exercises give participants the opportunity to put theoretical learning into practice, become familiar with their roles and responsibilities and test the different procedures. They also help participants develop positive response reflexes, so that getting procedures under way, making decisions quickly and communicating effectively become automatic reflexes. The response as a whole therefore becomes more efficient.

In a spirit of continuous improvement in disaster preparedness, exercises play a key role in assessing the effectiveness of existing plans and procedures, as well as in determining concrete ways of improving action taken to correct existing deficiencies.

A business continuity process is a balanced mixture of exercises and training. Closely associated with the training program, an exercise program helps make the transition from theory to practice in the area of business continuity activities.

As mentioned in previous sections, in the absence of a business continuity program, the business units audited had not developed a business continuity exercise program, except for the SIM's communications centre.

In fact, the SIM periodically uses its disaster recovery centre as a communications centre. It moves staff to the recovery centre when events are planned that can interfere with access to its headquarters (located at 4040 avenue du Parc), for example, during demonstrations or when important work is being done at the main site, so this recovery serves as exercises because it validates the recovery facilities.

However, these activities are not part of a formal business continuity exercise program.

We consider the risk level to be **critical** (see Table 8), because the DEP, the SIM and the STI face the following potential risks:

- If drill exercises are not performed regularly or adequately for business continuity plans, the plans cannot be effectively validated. Stakeholders who are not given the opportunity to perform exercises with the aid of simulations would probably not develop the reflexes required to respond effectively to destabilizing events;

- Furthermore, without formal exercise programs, existing weaknesses in continuity plans would not be detected promptly;
- These business units might not recover their operations in a timely manner. Essential public services might not be maintained.

Table 8 – Risk Level

Impact ^[a]	Probability ^[a]				
	HIGHLY PROBABLE	Probable	Possible	Unlikely	Improbable
Catastrophic	Critical	Critical	High	High	Moderate
MAJOR	CRITICAL	High	High	Moderate	Low
Moderate	High	Moderate	Moderate	Low	Low
Minor	Low	Low	Low	Low	Low

^[a] A description of impact and probability levels is given in Appendix 7.1.

4.7.B. Recommendation

We recommend that the Direction de l'eau potable, the Service de sécurité incendie de Montréal and the Service des technologies de l'information develop exercise programs for members of business continuity response teams. Specifically:

- **determine the types of exercises required;**
- **develop the objectives to be achieved for each type;**
- **develop an exercise drill schedule;**
- **document the learning acquired during exercises.**

Business units' responses:

DIRECTION DE L'EAU POTABLE

[TRANSLATION] In order to develop its business continuity program, the Direction de l'eau potable must comply with the management framework of the City's Direction générale.

Since the Direction générale mandated the City's emergency management division to develop this management framework, we must wait for it to be implemented in order to develop ours in a coherent manner. (Planned completion: undetermined)

SERVICE DE SÉCURITÉ INCENDIE DE MONTRÉAL

[TRANSLATION] The Direction générale asked SIM's management to broaden the mandate of Montreal's emergency management centre to include the concepts of resilience and business continuity.

Under the 100 Resilient Cities program, overseen by the Rockefeller Foundation, the emergency management centre must establish a resilience strategy for the Montreal community in the fall of 2015. As part of this reflection process, a comprehensive business continuity action plan will be submitted to the Direction générale by the end of the year. (Planned completion: December 2015)

SERVICE DES TECHNOLOGIES DE L'INFORMATION

[TRANSLATION] The Service des technologies de l'information will follow the City's business continuity guidelines as set out in the corporate framework that will be announced by the Direction générale. (Planned completion: undetermined)

4.8. Updating Business Continuity Documentation

4.8.A. Background and Findings

All organizations like the City go through changes over time, with evolving business processes, staff turnover and operations being redefined. The result of these changes is that some aspects of continuity plans no longer apply to the reality of the business units.

Updating the components of a business continuity program ensures that information on continuity of operations is reliable and accurate. Time frames are determined on the basis of the type of information to be kept up to date. This updating can also be done following a continuity exercise.

Without a business continuity program, no process for updating documentation was developed by the business units audited.

We consider the risk level to be **high** (see Table 9), because the DEP, the SIM and the STI face the following potential risks:

- Without a review schedule or a continuous improvement process, the business continuity program would quickly become obsolete, significantly reducing the business unit's ability to maintain its essential operations in the event of a disaster;
- The initial investment for establishing plans could be lost, the planning would have to be redone, which would require a substantial investment to return to the original business continuity objectives.

Table 9 – Risk Level

Impact ^[a]	Probability ^[a]				
	Highly probable	PROBABLE	Possible	Unlikely	Improbable
Catastrophic	Critical	Critical	High	High	Moderate
MAJOR	Critical	HIGH	High	Moderate	Low
Moderate	High	Moderate	Moderate	Low	Low
Minor	Low	Low	Low	Low	Low

^[a] A description of impact and probability levels is given in Appendix 7.1.

4.8.B. Recommendation

We recommend that the Direction de l'eau potable, the Service de sécurité incendie de Montréal and the Service des technologies de l'information establish a process for updating business continuity documentation that includes the following activities:

- determining components that need to be updated;
- developing a periodic review schedule;
- communicating changes to the various stakeholders;
- amending plans to take into account learning acquired during exercises or when the plans are used during interruptions in operations.

Business units' responses:

DIRECTION DE L'EAU POTABLE

[TRANSLATION] In order to develop its business continuity program, the Direction de l'eau potable must comply with the management framework of the City's Direction générale.

Since the Direction générale mandated the City's emergency management division to develop this management framework, we must wait for it to be implemented in order to develop ours in a coherent manner. **(Planned completion: undetermined)**

SERVICE DE SÉCURITÉ INCENDIE DE MONTRÉAL

[TRANSLATION] The Direction générale asked SIM's management to broaden the mandate of Montreal's emergency management centre to include the concepts of resilience and business continuity.

Under the 100 Resilient Cities program, overseen by the Rockefeller Foundation, the emergency management centre must establish a resilience strategy for the Montreal community in the fall of 2015. As part of this reflection process, a comprehensive business continuity action plan will be submitted to the Direction générale by the end of the year. **(Planned completion: December 2015)**

SERVICE DES TECHNOLOGIES DE L'INFORMATION

[TRANSLATION] The Service des technologies de l'information will follow the City's business continuity guidelines as set out in the corporate framework that will be announced by the Direction générale. (Planned completion: undetermined)

5. Findings of a Public Nature for the SPVM

A separate detailed report was produced for the SPVM because of the highly sensitive and confidential information that it contains. Nevertheless, in this section we present those of our findings that can be made public.

Overall, we noted that the SPVM's business functions for the 9-1-1 Emergency Centre, the Centre de commandement et de traitement de l'information (CCTI) and the operational centres (OCs) considered critical have continuity of operations in the event of a disaster. However, the other business functions categorized as having their "services covered"² in the event of a disaster, do not have a business continuity process.

Table 10 presents a summary of our findings for the business functions of the 9-1-1 Emergency Centre, the CCTI and the Centres opérationnels (COs), while Table 11 presents a summary of findings for the SPVM's other business functions categorized as having their "services covered" in the event of a disaster.

² Business functions categorized as having their "services covered" in the SPVM operational planning document entitled *Plan de continuité des opérations*, dated November 19, 2009.

Table 10 – Summary of Findings for Operations of the 9-1-1 Emergency Centre, the CCTI and the COs

Report section	Finding	Risk level ^[a]
5.1	Governance	LOW
5.2	Business continuity program structure	MODERATE
5.3	Crisis management structure	LOW
5.4	Business impact analysis and business continuity strategies	LOW
5.5	Business continuity plans and procedures	LOW
5.6	Business continuity training	LOW
5.7	Business continuity exercise programs	LOW
5.8	Updating business continuity documentation	MODERATE

^[a] A description of risk levels is given in Appendix 7.1.

Table 11 – Summary of Findings for the Other Business Functions Requiring Continuity of Operations

Report section	Finding	Risk level ^[a]
5.1	Governance	MODERATE
5.2	Business continuity program structure	HIGH
5.3	Crisis management structure	LOW
5.4	Business impact analysis and business continuity strategies	HIGH
5.5	Business continuity plans and procedures	HIGH
5.6	Business continuity training	HIGH
5.7	Business continuity exercise programs	HIGH
5.8	Updating business continuity documentation	HIGH

^[a] A description of risk levels is given in Appendix 7.1.

5.1. Governance

5.1.A. Background and Findings

To manage business continuity effectively, organizations such as the City and the SPVM establish sound governance in the areas of management frameworks; assignment of responsibilities; and management, administration and accountability mechanisms.

During our audit, we noted the following:

- Business continuity procedures are in place for the 9-1-1 Emergency Centre, the CCTI and COs. The SPVM has no management framework for the other business functions categorized as having their “services covered” in the event of a disaster;
- Apart from the 9-1-1 Emergency Centre, the CCTI and the COs, no accountability mechanisms, no representation mechanisms and no business continuity objectives were defined for the other business functions that the SPVM categorizes as having their “services covered” in the event of a disaster.

9-1-1 Emergency Centre, CCTI and COs

We consider the risk level to be **low** (see Table 12) for the operation of the COs, the 9-1-1 Emergency Centre and the CCTI because they have accountability and representation mechanisms and business continuity objectives and procedures.

Table 12 – Risk Level

Impact ^[a]	Probability ^[a]				
	Highly probable	PROBABLE	Possible	Unlikely	Improbable
Catastrophic	Critical	Critical	High	High	Moderate
MAJOR	Critical	High	High	Moderate	Low
Moderate	High	Moderate	Moderate	Low	Low
MINOR	Low	LOW	Low	Low	Low

^[a] A description of impact and probability levels is given in Appendix 7.1.

Other Business Functions Categorized as Having Their “Services Covered” in the Event of a Disaster

We consider the risk level to be **moderate** (see Table 13), because the SPVM faces the following potential risks:

- The absence of management frameworks could result in an inadequate process that does not meet the business continuity objectives. These efforts would be incomplete, uneven, and inconsistent in their effectiveness and application, making them more difficult to align. The terminology, sequence of activities and program components would be different and would have significant impacts on SPVM stakeholders’ ability to coordinate their responses;
- With a continuity process that is not framed by overall and specific objectives, there would be no coherent development of continuity plans within the SPVM’s various management teams and business functions categorized as having their “services covered” in the event of a disaster. The continuity processes would be uneven, inconsistent and lacking in direction in the short, medium and long term.

Table 13 – Risk Level

Impact ^[a]	Probability ^[a]				
	Highly probable	PROBABLE	Possible	Unlikely	Improbable
Catastrophic	Critical	Critical	High	High	Moderate
Major	Critical	High	High	Moderate	Low
MODERATE	High	MODERATE	Moderate	Low	Low
Minor	Low	Low	Low	Low	Low

^[a] A description of impact and probability levels is given in Appendix 7.1.

5.1.B. Recommendation

Subject to Recommendation 4.1.B., addressed to the Direction générale, we recommend that the Service de police de la Ville de Montréal:

- develop its management frameworks along the lines of the City's, and ensure that, at the very least, they provide for:
 - a definition of the department's continuity objectives,
 - a detailed impact analysis of interruptions,
 - a continuity strategy to reduce these impacts,
 - continuity plans that describe in detail activities carried out to resume critical operations within an acceptable timeframe,
 - a review and periodic exercise drill schedule;
- assign responsibility for business continuity to a member of its management team;
- establish specific business continuity objectives for each of its management units;
- establish a coordinated communication, monitoring and accountability process on the achievement of objectives.

Remark: This recommendation has already been issued to the SPVM as part of a detailed report issued separately because of the confidential information it contains.

Business unit's response:

The plan cannot be disclosed due to security-related confidentiality constraints.

5.2. Business Continuity Program Structure

5.2.A. Background and Findings

The structure of a business continuity program contains minimum elements providing for the establishment of effective strategies; a culture of business continuity; and relevant, measurable and achievable objectives.

During our audit, we noted the following:

- Apart from the 9-1-1 Emergency Centre, the CCTI and the COs, the SPVM did not have an organizational structure or budget for business continuity for its other business functions categorized as having their "services covered" in the event of a disaster;
- The SPVM does not have centralized processes and tools. The 9-1-1 Emergency Centre, the CCTI and the COs each have their own processes and tools.

9-1-1 Emergency Centre, CCTI and COs

We consider the risk level to be **moderate** (see Table 14) for the operations of the COs, the 9-1-1 Emergency Centre and the CCTI, because the SPVM is exposed to the following potential risk. Without tools or a common business continuity process, the terminology, sequence of activities and program components would be different, adversely affecting stakeholders' ability to discuss and share information, to collaborate, and to coordinate their work, their initiatives and their responses.

Table 14 – Risk Level

Impact ^[a]	Probability ^[a]				
	Highly probable	PROBABLE	Possible	Unlikely	Improbable
Catastrophic	Critical	Critical	High	High	Moderate
Major	Critical	High	High	Moderate	Low
MODERATE	High	MODERATE	Moderate	Low	Low
Minor	Low	Low	Low	Low	Low

^[a] A description of impact and probability levels is given in Appendix 7.1.

Other Business Functions Categorized as Having Their “Services Covered” in the Event of a Disaster

We consider the risk level to be **high** (see Table 15), because the SPVM faces the following potential risks:

- Because the organizational structure is lacking or deficient, all levels of a crisis (strategic, tactical and operational) might not be managed. Some aspects of event management might be overlooked, and the staff required to assume these responsibilities would not be properly equipped to respond. The stakeholders might remedy these deficiencies by improvising, thereby increasing the risk that the situation would degenerate into a crisis;
- Without recurring financial or human resources, the process would lack coherence and would not be linked with the SPVM's ongoing operations. The continuity objectives would probably not be achieved, putting operations at risk in the event of a disaster. Without sustained funding, efforts already undertaken might be wasted because components established in the past would have become obsolete;
- Without tools or a common business continuity process, if a disaster were to strike, recovery activities would be improvised, significantly increasing the time required to resume normal operations. The terminology, sequence of activities and program

components would be different, adversely affecting stakeholders' ability to discuss and share information, to collaborate, and to coordinate their work, their initiatives and their responses. When staff members are replaced, knowledge of critical components of the program might not be communicated.

Table 15 – Risk Level

Impact ^[a]	Probability ^[a]				
	Highly probable	PROBABLE	Possible	Unlikely	Improbable
Catastrophic	Critical	Critical	High	High	Moderate
MAJOR	Critical	HIGH	High	Moderate	Low
Moderate	High	Moderate	Moderate	Low	Low
Minor	Low	Low	Low	Low	Low

^[a] A description of impact and probability levels is given in Appendix 7.1.

5.2.B. Recommendation

We recommend that the Service de police de la Ville de Montréal:

- **develop its management structures for the implementation of the business continuity program, including:**
 - **determining persons responsible,**
 - **describing the roles and responsibilities of each,**
 - **defining the communication and accountability process;**
- **provide specific recurring business continuity budgets in connection with the established objectives.**

Remark: This recommendation has already been issued to the SPVM as part of a detailed report issued separately because of the confidential information it contains.

Business unit's response:

The plan cannot be disclosed due to security-related confidentiality constraints.

5.3. Crisis Management Structure

5.3.A. Background and Findings

When a disaster strikes, the SPVM must react quickly and effectively to minimize its impacts and resume normal operations quickly.

During our audit, we noted the following:

- The SPVM developed a response structure for the continuity plans of the 9-1-1 Emergency Centre, the operations of the CCTI and the CO. These structures are operational at all times. Exercise drills are held for them frequently, either during exercises planned for the certification of the 9-1-1 Emergency Centre, or, in the case of the CCTI, during special events;
- For the other business functions categorized by the SPVM as having their “services covered,” no other crisis management structure is documented.

We consider the risk level to be **low** (see Table 16), because the existing structure of the CCTI could be used to manage a disaster situation. Even so, the SPVM faces the following potential risks:

- It would be difficult to react promptly to an event affecting their own operations and ensure coherence in recovery activities for operations other than those of the 9-1-1 Emergency Centre, the CCTI and the COs;
- Some SPVM services might require more time to resume operations.

Table 16 – Risk Level

Impact ^[a]	Probability ^[a]				
	Highly probable	PROBABLE	Possible	Unlikely	Improbable
Catastrophic	Critical	Critical	High	High	Moderate
MAJOR	Critical	High	High	Moderate	Low
Moderate	High	Moderate	Moderate	Low	Low
MINOR	Low	LOW	Low	Low	Low

^[a] A description of impact and probability levels is given in Appendix 7.1.

5.3.B. Recommendation

We recommend that the Service de police de la Ville de Montréal develop a response structure to meet business continuity needs and objectives that integrates all operations that need to be recovered in the event of a disaster.

Remark: This recommendation has already been issued to the SPVM as part of a detailed report issued separately because of the confidential information it contains.

Business unit’s response:

The plan cannot be disclosed due to security-related confidentiality constraints.

5.4. Business Impact Analysis and Business Continuity Strategies

5.4.A. Background and Findings

A business impact analysis (BIA) is aimed at evaluating the consequences of an interruption in an entity's operations, including on its ability to perform its mission. This process generally classifies impacts into four areas: financial, legal, operational and "the organization's image and reputation."

During our audit, we noted the following:

- The SPVM obtains risk analyses, particularly for locations where the 9-1-1 Emergency Centre is maintained or is likely to be located in a disaster recovery situation;
- While we did not track down a formal impact analysis, in 2009, the SPVM identified business activities that would need to be maintained (services covered), partially maintained (services partially covered) and interrupted (services not covered) in an operational planning document entitled *Plan de continuité des opérations*. However, this list does not prioritize functions within the categories;
- Continuity strategies are in place for operations of the COs, the 9-1-1 Emergency Centre and the CCTI;
- For the other business functions that the SPVM has categorized as having their "services covered" in the event of a disaster, no continuity strategy has been developed.

9-1-1 Emergency Centre, CCTI and COs

We consider the risk level to be **low** (see Table 17) for the operations of the COs, the 9-1-1 Emergency Centre and the CCTI because they have business continuity strategies.

Table 17 – Risk Level

Impact ^[a]	Probability ^[a]				
	Highly probable	PROBABLE	Possible	Unlikely	Improbable
Catastrophic	Critical	Critical	High	High	Moderate
MAJOR	Critical	High	High	Moderate	Low
Moderate	High	Moderate	Moderate	Low	Low
MINOR	Low	LOW	Low	Low	Low

^[a] A description of impact and probability levels is given in Appendix 7.1.

Other Business Functions Categorized as Having Their “Services Covered” in the Event of a Disaster

We consider the risk level to be **high** (see Table 18) for the other business functions that the SPVM has categorized as having their “services covered” in the event of a disaster because the SPVM faces the following potential risks:

- Without a comprehensive, detailed BIA, several functions requiring disaster recovery might not be detected and, as a result, would not have a continuity strategy or plan;
- Without continuity strategies for the other business functions categorized as having their “services covered” in the event of a disaster, the SPVM would not be able to recover them in order to maintain public services.

Table 18 – Risk Level

Impact ^[a]	Probability ^[a]				
	Highly probable	PROBABLE	Possible	Unlikely	Improbable
Catastrophic	Critical	Critical	High	High	Moderate
MAJOR	Critical	HIGH	High	Moderate	Low
Moderate	High	Moderate	Moderate	Low	Low
Minor	Low	Low	Low	Low	Low

^[a] A description of impact and probability levels is given in Appendix 7.1.

5.4.B. Recommendation

We recommend that the Service de police de la Ville de Montréal:

- **conduct an impact analysis for all its operations;**
- **communicate the results of the impact analysis to all business continuity program stakeholders;**
- **develop continuity strategies based on the results of the business impact analysis.**

Remark: This recommendation has already been issued to the SPVM as part of a detailed report issued separately because of the confidential information it contains.

Business unit’s response:

The plan cannot be disclosed due to security-related confidentiality constraints.

5.5. Business Continuity Plans and Procedures

5.5.A. Background and Findings

When a disaster occurs, the SPVM must respond quickly to minimize its impacts and quickly resume operations. When organizations are destabilized by an incident, it is important that they be able to carry out critical activities in an orderly fashion in order to resume operations as quickly as possible.

During our audit, we identified the following:

- The 9-1-1 Emergency Centre has a business continuity plan and disaster recovery sites. Drills are carried out for this plan periodically;
- The CCTI also has a recovery site, and some procedures are already in place to ensure rapid transfer of operations if necessary;
- Each CO is paired with another, so that if one CO is evacuated and temporarily shut down, the other can take over its operations;
- The SPVM has no business continuity plan covering all the other business functions categorized as having their “services covered” in the event of a disaster.

9-1-1 Emergency Centre, CCTI and COs

We consider the risk level to be **low** (see Table 19) for the operations of the COs, the 9-1-1 Emergency Centre and the CCTI because they have business continuity plans and procedures in place.

Table 19 – Risk Level

Impact ^[a]	Probability ^[a]				
	HIGHLY PROBABLE	Probable	Possible	Unlikely	Improbable
Catastrophic	Critical	Critical	High	High	Moderate
MAJOR	Critical	High	High	Moderate	Low
Moderate	High	Moderate	Moderate	Low	Low
MINOR	LOW	Low	Low	Low	Low

^[a] A description of impact and probability levels is given in Appendix 7.1.

Other Business Functions Categorized as Having Their “Services Covered” in the Event of a Disaster

We consider the risk level to be **high** (see Table 20) for the other business functions categorized as having their “services covered” in the event of a disaster because the SPVM faces the following potential risks:

- Without a business continuity plan, employees involved in resuming operations would improvise. The responses would probably be incoherent and adversely affect other activities;
- The SPVM might not be able to recover all its business functions categorized as having their “services covered” in the event of a disaster in order to maintain public services.

Table 20 – Risk Level

Impact ^[a]	Probability ^[a]				
	Highly probable	PROBABLE	Possible	Unlikely	Improbable
Catastrophic	Critical	Critical	High	High	Moderate
MAJOR	Critical	HIGH	High	Moderate	Low
Moderate	High	Moderate	Moderate	Low	Low
Minor	Low	Low	Low	Low	Low

^[a] A description of impact and probability levels is given in Appendix 7.1.

5.5.B. Recommendation

We recommend that the Service de police de la Ville de Montréal develop business continuity plans for all its business functions categorized as having their “services covered” in the event of a disaster, including:

- defining criteria for continuity plan activation;
- defining the roles and responsibilities of each stakeholder or each continuity team;
- defining activities in the event of a disaster to maintain an adequate level of service;
- determining critical resources (staff, equipment, etc.) required to relocate essential operations;
- listing employees and third parties who must participate in continuity activities, including ways to contact them;
- developing operational procedures in the event of a disaster.

Remark: This recommendation has already been issued to the SPVM as part of a detailed report issued separately because of the confidential information it contains.

Business unit’s response:

The plan cannot be disclosed due to security-related confidentiality constraints.

5.6. Business Continuity Training

5.6.A. Background and Findings

A business continuity process cannot succeed without an educational component. In order to maximize the effectiveness of responses in the event of a disaster, it is important that all employees be trained on the response process, the steps to take and the procedures to follow.

During our audit, we identified the following:

- Continuity plans for the 9-1-1 Emergency Centre and the CCTI are implemented regularly and employees are provided with procedures for this purpose. In our opinion, this constitutes business continuity staff training;
- Operational procedures associated with the implementation of temporary operational centres or the transfer of operations from one centre or one neighbourhood police station to another are commonly used. In our opinion, this constitutes business continuity staff training;

- For the other business functions categorized as having their “services covered” in the event of a disaster, the SPVM had not developed a business continuity training and awareness program.

9-1-1 Emergency Centre, CCTI and COs

We consider the risk level to be **low** (see Table 21) for operations of the 9-1-1 Emergency Centre, the CCTI and the COs because continuity plans are implemented regularly and this provides adequate training.

Table 21 – Risk Level

Impact ^[a]	Probability ^[a]				
	Highly probable	PROBABLE	Possible	Unlikely	Improbable
Catastrophic	Critical	Critical	High	High	Moderate
MAJOR	Critical	High	High	Moderate	Low
Moderate	High	Moderate	Moderate	Low	Low
MINOR	Low	LOW	Low	Low	Low

^[a] A description of impact and probability levels is given in Appendix 7.1.

Other Business Functions Categorized as Having Their “Services Covered” in the Event of a Disaster

We consider the risk level to be **high** (see Table 22) for the other business functions categorized as having their “services covered” in the event of a disaster, because the SPVM faces the following potential risks:

- Without a training and awareness program, staff that need to respond to interruptions would not be prepared to take action. Their responses would then be improvised and largely inefficient;
- The SPVM would probably not be able to recover, in a timely manner, all business functions categorized as having their “services covered” in the event of a disaster. Certain public services might not be maintained.

Table 22 – Risk Level

Impact ^[a]	Probability ^[a]				
	Highly probable	PROBABLE	Possible	Unlikely	Improbable
Catastrophic	Critical	Critical	High	High	Moderate
MAJOR	Critical	HIGH	High	Moderate	Low
Moderate	High	Moderate	Moderate	Low	Low
Minor	Low	Low	Low	Low	Low

^[a] A description of impact and probability levels is given in Appendix 7.1.

5.6.B. Recommendation

We recommend that the Service de police de la Ville de Montréal develop a training program for all business continuity plan stakeholders.

Remark: This recommendation has already been issued to the SPVM as part of a detailed report issued separately because of the confidential information it contains.

Business unit's response:

The plan cannot be disclosed due to security-related confidentiality constraints.

5.7. Business Continuity Exercise Programs

5.7.A. Background and Findings

The effectiveness with which an organization reacts to an emergency or crisis depends largely on the exercise drill programs it has set up.

During our audit, we identified the following:

- Drill exercises are performed several times a year for the 9-1-1 Emergency Centre. A register of the use of the 9-1-1 recovery centre is kept. In addition to the regular exercises, the disaster recovery centre is used when work is planned for the equipment or in the usual places of work. The technological aspects of recovery at the 9-1-1 Emergency Centre will be covered in detail in our audit on information technology recovery management.

The CCTI disaster recovery site is occasionally used during power failures or while renovation or other work is being done in its main premises.

Operational procedures associated with the implementation of temporary operational centres or the transfer of operations from one centre or one neighbourhood police station to another are commonly used.

For the other business functions categorized as having their “services covered” in the event of a disaster, no exercise program has been developed by the SPVM.

9-1-1 Emergency Centre, CCTI and COs

We consider the risk level to be **low** (see Table 23) for operations of the COs, the 9-1-1 Emergency Centre and the CCTI.

Table 23 – Risk Level

Impact ^[a]	Probability ^[a]				
	HIGHLY PROBABLE	Probable	Possible	Unlikely	Improbable
Catastrophic	Critical	Critical	High	High	Moderate
MAJOR	Critical	High	High	Moderate	Low
Moderate	High	Moderate	Moderate	Low	Low
MINOR	LOW	Low	Low	Low	Low

^[a] A description of impact and probability levels is given in Appendix 7.1.

Other Business Functions Categorized as Having Their “Services Covered” in the Event of a Disaster

We consider the risk level to be **high** (see Table 24) for the other business functions categorized as having their “services covered” in the event of a disaster, because the SPVM faces the following potential risks:

- If drill exercises are not performed regularly or adequately for business continuity plans, the plans cannot be validated effectively. Stakeholders who are not given the opportunity to perform exercises with the aid of simulations would probably not develop the reflexes required to respond effectively to destabilizing events;
- In the absence of formal exercise programs, existing weaknesses in continuity plans would not be detected promptly;
- The SPVM probably could not recover in a timely manner all business functions categorized as having their “services covered” in the event of a disaster. Some public services might not be maintained.

Table 24 – Risk Level

Impact ^[a]	Probability ^[a]				
	Highly probable	PROBABLE	Possible	Unlikely	Improbable
Catastrophic	Critical	Critical	High	High	Moderate
MAJOR	Critical	HIGH	High	Moderate	Low
Moderate	High	Moderate	Moderate	Low	Low
Minor	Low	Low	Low	Low	Low

^[a] A description of impact and probability levels is given in Appendix 7.1.

5.7.B. Recommendation

We recommend that the Service de police de la Ville de Montréal develop business continuity exercise programs for response team members. Specifically:

- determine the types of exercises required;
- define the objectives to be achieved for each type;
- establish a drill exercise schedule;
- document the learning acquired during the exercises.

Remark: This recommendation has already been issued to the SPVM as part of a detailed report issued separately because of the confidential information it contains.

Business unit's response:

The plan cannot be disclosed due to security-related confidentiality constraints.

5.8. Updating Business Continuity Documentation

5.8.A. Background and Findings

All organizations like the SPVM go through changes over time, with evolving business processes, staff turnover and operations being redefined. The result of these changes is that some aspects of continuity plans no longer apply to the reality of the department.

During our audit, we identified the following:

- There is no review schedule or continuous improvement process for the business continuity documentation;
- For the 9-1-1 Emergency Centre and the CCTI, the business continuity documentation was updated in October 2013 and August 2014. These documents are highly technical

and do not need to be updated systematically, but mainly when changes are made to work methods, infrastructure and essential systems. This will be explored in greater detail in our audit on technological recovery management;

- For the other business functions categorized as having their “services covered” in the event of a disaster by the SPVM, since they do not have formal documentation, no updating process has been developed.

9-1-1 Emergency Centre, CCTI and COs

We consider the risk level to be **moderate** (see Table 25) for the operations of the 9-1-1 Emergency Centre and the CCTI, because without a review schedule or a continuous improvement process, business continuity plans could become obsolete and reduce the department’s ability to maintain those of its operations that must be recovered in the event of a disaster.

Table 25 – Risk Level

Impact ^[a]	Probability ^[a]				
	Highly probable	PROBABLE	Possible	Unlikely	Improbable
Catastrophic	Critical	Critical	High	High	Moderate
Major	Critical	High	High	Moderate	Low
MODERATE	High	MODERATE	Moderate	Low	Low
Minor	Low	Low	Low	Low	Low

^[a] A description of impact and probability levels is given in Appendix 7.1.

Other Business Functions Categorized as Having Their “Services Covered” in the Event of a Disaster

We consider the risk level to be **high** (see Table 26) for the other business functions categorized as having their “services covered” in the event of a disaster, because the SPVM faces the following potential risks:

- Without a review schedule and a continuous improvement process, the business continuity program could quickly become obsolete, significantly reducing the department’s ability to maintain those of its operations that must be recovered in the event of a disaster;

- The initial investment for establishing plans might be lost, the planning would need to be redone and a substantial investment would be required to return to the level of the original business continuity objectives.

Table 26 – Risk Level

Impact ^[a]	Probability ^[a]				
	Highly probable	PROBABLE	Possible	Unlikely	Improbable
Catastrophic	Critical	Critical	High	High	Moderate
MAJOR	Critical	HIGH	High	Moderate	Low
Moderate	High	Moderate	Moderate	Low	Low
Minor	Low	Low	Low	Low	Low

^[a] A description of impact and probability levels is given in Appendix 7.1.

5.8.B. Recommendation

We recommend that the Service de police de la Ville de Montréal establish a process for updating business continuity documentation, including, among other things:

- determining components that need to be updated;
- developing a regular review schedule;
- communicating changes to the various stakeholders;
- amending plans to take into account the learning acquired during exercises or when the plans must be used due to operations being interrupted.

Remark: This recommendation has already been issued to the SPVM as part of a detailed report issued separately because of the confidential information it contains.

Business unit's response:

The plan cannot be disclosed due to security-related confidentiality constraints.

6. General Conclusion

While the City has emergency management measures in place that enable it to react to a major event with a direct impact on its residents, we may conclude that it does not have the necessary measures in place to deal with the risk of a disaster affecting its operations, especially essential activities. Indeed, based on the results of our audit, we did not find evidence of business continuity programs within either the Direction générale or some of the

most critical business units: the Direction de l'eau potable (DEP), the Service de sécurité incendie de Montréal (SIM) and the Service des technologies de l'information (STI).

Nonetheless, the SIM's communications centre has a working disaster recovery plan that will be explored in greater detail in our audit of information technology recovery management.

We may conclude that the Service de police de la Ville de Montréal (SPVM) does not have the necessary measures in place to address the risk of a disaster for all its business functions categorized as having their "services covered"³ in the event of a disaster. Indeed, we found that the SPVM had business continuity plans only for the following critical activities:

- The SPVM's 9-1-1 Emergency Centre and its Centre de commandement et de traitement de l'information (CCTI) have a working disaster recovery plan that will be explored in greater detail in our audit of information technology recovery management. Exercise drills are held for these plans, and employees have access to procedures for implementing them;
- With respect to operational centres (OCs), procedures associated with the implementation of temporary Centres opérationnels (COs) or the transfer of operations from one centre to another are commonly used.

Like the City's other business units, the SPVM has emergency management measures in place that enable it to deal adequately with events that have a direct impact on the population.

If a disaster were to affect essential operations, there is no doubt that the City would resort to improvising its responses. As a result, it is unlikely that critical activities could be recovered in a timely manner. Essential public services would be difficult to maintain.

Even though emergency management requires that the City's business units have a business continuity program, this is not part of the strategic planning of the Direction générale.

Table 27 shows the overall results of our audit for each of the risk areas identified.

³ Business functions categorized as having their "services covered" in the operational planning document entitled *Plan de continuité des opérations*, dated November 19, 2009.

Table 27 – Overall Results for Each Risk Area

Risk Area	Inherent risk ^[a]	Residual risk ^[b] (Direction générale, DEP, SIM, STI)	Residual risk ^[b] SPVM (9-1-1, CCTI, COs)	Residual risk ^[b] SPVM (Other “services covered”)
Governance Inefficient business continuity management without an adequate governance structure (assignment of responsibilities, management frameworks, management, administration and accountability mechanisms).	MODERATE ^[c]	MODERATE	LOW	MODERATE
Business continuity program structure Ineffective business continuity strategies; business continuity objectives that are not relevant, measurable or achievable. No business continuity culture.	HIGH	HIGH	MODERATE	HIGH
Crisis management structure No coordination or decision-making elements are in place in the occurrence of an event, emergency or disaster. This situation leads to a loss of efficiency, a risk of interference and poor communication among stakeholders.	CRITICAL	HIGH	LOW	LOW
Business impact analysis and business continuity strategies Without a comprehensive, detailed business impact analysis (BIA), several critical functions are not detected and cannot be properly recovered. Essential public services are not maintained.	HIGH	HIGH	LOW	HIGH
Business continuity plans and procedures The plans and procedures required to implement the business continuity strategies do not exist, with the result that the continuity of critical functions in the event of a disaster is not assured, putting public health at risk.	CRITICAL	CRITICAL	LOW	HIGH
Business continuity training Those responsible for implementing the continuity plan are poorly informed or receive no training on their roles and responsibilities. As a result, they will not be able to maintain essential services if a disaster strikes.	HIGH	HIGH	LOW	HIGH
Business continuity exercise programs If drill exercises are not performed regularly or adequately for business continuity plans, the plans cannot be validated effectively. This loss of efficiency in emergency management can put public health at risk in the event of a disaster.	CRITICAL	CRITICAL	LOW	HIGH
Updating business continuity documentation Documentation and information on business continuity are not updated and are therefore obsolete. In the event of a disaster, critical operations will not be recovered in a timely manner. Essential public services will no longer be available.	HIGH	HIGH	MODERATE	HIGH

^[a] Gross risk without consideration of monitoring mechanisms.

^[b] Exposure to risk following an evaluation of the monitoring mechanisms in place.

^[c] See Appendix 7.1.

In the interest of managing its operations responsibly, the City should promote a business continuity culture within its business units. In this regard, the Direction générale should implement the following constituent parts of a business continuity program:

- specific management frameworks on the business continuity program that will establish the program's objectives, scope and requirements, as well as the roles and responsibilities of managers within the City and its business units. These management frameworks must cover the managements of all business units that maintain critical operations;
- a standardized accountability process that is based on an understanding of the objectives, goals and expectations for the program;
- definition of roles and responsibilities.

In order to manage their business continuity adequately, the DEP, the SIM and the STI should implement the measures required to achieve the program objectives and follow the guidelines set out by the Direction générale. More specifically:

- in internal management frameworks for the business continuity program requirements that will establish its objectives, scope, requirements, roles and responsibilities;
- in the business continuity program structure;
- in the business impact analysis (BIA) and continuity strategies;
- in continuity plans and the crisis management structure;
- in training, exercises and updates.

We believe that if the Direction générale sets up a business continuity program within the City, the DEP, the SIM, the STI, the SPVM and the other business units will benefit from a standardized problem-solving process in the event of a disaster, reducing the time required to resume critical operations.

7. Appendices

7.1. Description of Risk Levels

Impact	Probability				
	Highly probable	Probable	Possible	Unlikely	Improbable
Catastrophic	CRITICAL	CRITICAL	HIGH	HIGH	MODERATE
Major	CRITICAL	HIGH	HIGH	MODERATE	LOW
Moderate	HIGH	MODERATE	MODERATE	LOW	LOW
Minor	LOW	LOW	LOW	LOW	LOW

7.2. Description of Impact Levels

Impact Level	Description
Catastrophic	Direct consequences on public health, major threat to essential services, the environment, the City's reputation and public confidence.
Major	Consequences for public health, undermining of essential services, damage to the environment, the City's reputation and public confidence.
Moderate	Possible consequences for public health, moderate impacts on essential services, the environment, the City's reputation and public confidence.
Minor	Minor impacts on the City's operations and business units. Loss of public confidence in the City is unlikely.

7.3. Description of Probability Levels

Probability	Description
Highly probable	Will occur in most circumstances.
Probable	Will probably occur in most circumstances.
Possible	Should occur at some point.
Unlikely	Should not occur.
Improbable	Can occur only in exceptional circumstances.



Report of the Auditor General of the Ville de Montréal to the City Council and to the Urban Agglomeration Council

For the Year Ended December 31, 2014

4.10

COLLECTION AND TRANSPORTATION OF RECYCLABLE MATERIALS BY DIRECT LABOUR



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List of Acronyms

OHS	occupational health and safety	RPASO	review of program activities, services and operations
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4.10. Collection and Transportation of Recyclable Materials by Direct Labour

1. Introduction

In exercising their powers,¹ the boroughs of the Ville de Montréal (the City) are responsible for planning and organizing the collection² of recyclable materials that residents discard on their respective territories. The term “recyclable materials” refers mainly to paper,³ glass,⁴ metal,⁵ plastic containers and plastic wrap.⁶

In exercising this responsibility, boroughs can choose to do the work of collecting recyclable materials internally or entrust it to a private contractor (on a contract basis).

Historically, according to the documents consulted, the practice of collecting recyclable materials, or collective selection, began to take root in the boroughs of the former Ville de Montréal in 1989. At that time, Montreal residents had to separate recyclable materials by type in various bins. Trucks were equipped with separate compartments to respect the initial sorting done by residents when recyclable materials were collected. Later, compactor trucks were introduced to collect unsorted materials deposited in bins by residents.

In most of the City’s boroughs, the collection of recyclable materials has been done by contract from the outset. However, in 2009, Ahuntsic-Cartierville, Le Sud-Ouest and Villeray–Saint-Michel–Parc-Extension boroughs elected to handle the collection of recyclable materials using their own resources (by direct labour). However, Le Sud-Ouest borough, after using its own internal resources to provide this service throughout its territory from 2009 to 2011, decided to go back to outsourcing the collection of recyclable materials on part of its territory while continuing to insource this work on the other part. Le Plateau-Mont-Royal

¹ Under the *Act respecting the exercise of certain municipal powers in certain urban agglomerations* (CQLR, chapter E-20.001), jurisdiction over waste material management is distributed as follows: the related municipalities and the City’s boroughs are responsible for the collection and transportation of waste materials to recovery or disposal sites determined by the agglomeration. The agglomeration is itself responsible for the reclamation and disposal of waste materials and other aspects of their management if they are hazardous.

² In this audit report, to facilitate reading of the text, the term “collection” is used to refer to both collection and transportation activities.

³ Newsprint, fine paper, corrugated board or cardboard, flyers, journals, magazines, cereal boxes, egg cartons, telephone books, books, brown paper bags and any other material of the same type.

⁴ Glass bottles or jars, soft drink, spring water, food product, household maintenance, beauty and health product containers, garden pots.

⁵ Food cans, aluminum cans, all metal lids.

⁶ Juice and dairy product containers, packaging, grocery and overwrap bags, bread bags, food product bags and dry cleaning bags.

borough undertook the collection of recyclable materials internally on part of its territory in 2009 and extended this to its entire territory in 2010. Unlike the other three boroughs, it continued to use its own internal resources to provide the service of collecting household waste on part of its territory.

The boroughs that chose to handle the collection of recyclable materials by direct labour were already using their own resources to handle the collection of household waste on part of their territories before they contracted out all the work, with the exception of Le Plateau-Mont-Royal borough, which continued to use its own resources for household waste collection on part of its territory. These boroughs reassigned resources that were previously handling household waste collection to recyclable materials collection. The main factors cited by boroughs as motivating their decision to provide this service using internal resources instead of outsourcing it are:

- The context of the RPASO (review of program activities, services and operations), which, in the case of Le Plateau-Mont-Royal borough, was intended to reduce operating costs;
- The opportunity to reduce costs while meeting the minimum employment level;
- The high occupational health and safety (OHS) costs observed in household waste collection operations;
- The motivation of employees, who considered the collection of household waste to be unrewarding work;
- Anticipation of a significant increase in costs upon expiry of existing contracts for the collection of recyclable materials.

As part of this audit, we held a consultation with the other 15 boroughs to ask them why they chose not to consider the option of handling recyclable materials collection by direct labour, and we obtained the following information:

- Prior to 2009, all boroughs contracted out 100% of the collection of household waste and recyclable materials, with the exception of Mercier–Hochelaga-Maisonneuve, which handled household waste collection on part of its territory by direct labour;
- All boroughs remarked that using this mode of operation for collection would mean they would have to hire more staff and purchase additional equipment, which would lead to additional costs;
- All expected or feared an increase in OHS and overtime costs;
- Two boroughs, LaSalle and Mercier–Hochelaga-Maisonneuve, considered providing the service of collecting recyclable materials by direct labour. However, this did not get past the reflection stage.

In view of the issues (quality of public services, savings to be realized, internal expertise, etc.) involved in the decision to handle this operation internally, we thought it worthwhile to

undertake this audit because it would assure us that this decision was sound and appropriate and that it enabled the boroughs concerned to realize the potential savings they anticipated.

2. Purpose and Scope of the Audit

The purpose of the audit was to ensure that the boroughs' decision to handle recyclable materials collection using their own human and material resources (internally, or by direct labour) is supported by conclusive analyses of their financial viability and operational efficiency.

For this purpose, we focused our efforts on boroughs that elected to have recyclable materials collection done by their own employees: Ahuntsic-Cartierville, Le Plateau-Mont-Royal, Le Sud-Ouest and Villeray–Saint-Michel–Parc-Extension boroughs. The period covered by this audit was from 2009 to 2013 inclusively. Prior to this period, this activity was contracted out for the most part. We examined the documents that these boroughs produced to support their decision to handle recyclable materials collection internally. We also examined the enforcement of certain clauses in the collective agreement dealing with the transfer of activities performed by contract to a publicly controlled system, the mechanisms established to monitor this activity and the financial data obtained during this reference period (2009-2013).

In addition, we held a telephone consultation with the other 15 boroughs to enquire about the reasons motivating their decision to continue contracting out recyclable materials collection.

3. Summary of Findings

During our audit, we identified deficiencies in analyses concerning the decision to handle recyclable materials collection by direct labour. For the four boroughs concerned, the following points are an overall summary of our findings with respect to:

- Analyses that were conducted to demonstrate the advantages of having internal resources handle all operations related to recyclable materials collection (section 4.1):
 - Ahuntsic-Cartierville, Le Plateau-Mont-Royal and Le Sud-Ouest boroughs conducted a brief or incomplete analysis to support their decision to handle this activity internally;
 - Villeray–Saint-Michel–Parc-Extension borough did not produce any formal analysis to support its choice;
 - The analyses do not take into account the causal relationships between changes in the costs of household waste collection (change in the mode of operation from

insourcing to outsourcing) and changes in the costs of recyclable materials collection (change in the mode of operation from outsourcing to insourcing).

- The establishment of both mechanisms for monitoring and evaluating the performance obtained as a result of the changeover in the operational mode for recyclable materials collection to direct labour and accountability reporting mechanisms (section 4.2):
 - No borough established periodic operational performance monitoring and evaluation mechanisms used for transfer of this activity;
 - No borough produced formal, structured accountability reporting.

4. Detailed Findings and Recommendations

According to the data submitted to us, from 2009 to 2013, the four boroughs spent a total of \$33.8 million on recyclable materials collection by direct labour. Table 1 shows the actual annual expenditures for each of the four boroughs covered by our audit.

**Table 1 – Recyclable Materials Collection by Direct Labour
Actual Costs from 2009 to 2013
(in thousands of dollars)**

Borough	2009	2010	2011	2012	2013	Total
Ahuntsic-Cartierville	2,432.6	2,220.6	2,425.3	2,216.7	2,223.8	11,519.0
Le Plateau-Mont-Royal ^[a]	1,039.2	1,406.0	1,325.3	1,432.1	1,443.4	6,646.0
Le Sud-Ouest ^[b]	1,562.3	1,579.9	1,632.9	1,171.5	1,042.4	6,989.0
Villeray–Saint-Michel–Parc-Extension	1,706.5	1,621.2	1,689.0	1,808.6	1,838.2	8,663.5
Total	6,740.6	6,827.7	7,072.5	6,628.9	6,547.8	33,817.5

^[a] In 2009, recyclable materials collection was done by direct labour only on part of this borough's territory. Since 2010, this activity has been carried out by direct labour on its entire territory.

^[b] Since 2012, recyclable materials collection has been contracted out on part of this borough's territory.

Source: Data submitted by boroughs.

4.1. Analyses Supporting the Decision to Change the Mode of Operation for Recyclable Materials Collection to Direct Labour

The decision to provide the recyclable materials collection service by direct labour even though this service has always been contracted out is a strategic decision requiring a cost evaluation and formal approval of the borough council. To determine whether such a mechanism was used to support this decision, we examined the following elements. First, we consulted analyses developed by boroughs showing the advantages of handling all operations associated with recyclable materials collection by direct labour. Second, we

ensured that all operational data supporting these analyses were complete, reliable and verifiable. Third, we checked to make sure that business units documented their analyses and recommendations and submitted them formally to the borough council so that it could make a decision on the strategy to be adopted.

4.1.A. Background and Findings

4.1.1. Ahuntsic-Cartierville Borough

Before the change in the mode of operation used in residual materials management (collection of household waste and recyclable materials), 57% of household waste collection was outsourced, at an annual cost of \$930,800, and 43% of it was done by direct labour, at an annual cost of \$1,746,600, amounting to a total of \$2,677,400 for 2008. As for recyclable materials collection, 100% of it was outsourced, at a total annual cost of \$1,483,700 for 2008. Overall, the costs of residual materials collection totalled \$4,161,100⁷ in 2008.

In 2008, as the expiry date of existing contracts for recyclable materials collection (2003-2008) in Ahuntsic-Cartierville borough approached, management embarked on a reflection process to review the methods used for this activity. For this purpose, the Direction des travaux publics et de l'aménagement urbain and the Division de l'administration, des relations avec les citoyens et du greffe of the Direction de la performance, des relations avec les citoyens, du greffe et des services administratifs jointly conducted an economic analysis, which was presented in the form of a budget scenario. This analysis was based on the underlying assumption that all employees assigned to the collection of household waste—a total of 24 people—would be transferred to recyclable materials collection.

To support these conclusions, the analysis was based on budget and operational data on the collection of household waste, such as:

- labour and social security costs (30%) for using the services of blue collar workers (drivers and garbage collectors);
- the cost of equipment (rental of compactor trucks or purchase of trucks);
- a rough estimate of fuel costs.

⁷ Document produced by the borough entitled *Évaluation du transfert de la collecte sélective en régie à 100 %*, [TRANSLATION: *Evaluation of the transfer of the selective collection to 100% direct labour*] May 8, 2007.

Finally, the analysis anticipated the following benefits: substantial potential savings for the borough and a foreseeable drop in the OHS cost. It also identified possible obstacles to be overcome, such as:

- future negotiations with the blue collar workers' union;
- the purchase of additional equipment (trucks);
- the reorganization of territories (10 territories in which eight teams handle collective selection by direct labour) by means of proposed new collection routes.

This analysis is summary and incomplete, because it does not take into account OHS costs, truck purchase costs (depreciation), additional operating costs (fuel and maintenance) for the compactor truck fleet, overtime and management and administration fees.

Even though we have at our disposal a document entitled *Évaluation du transfert de la collecte sélective en régie à 100 %* [TRANSLATION: *Evaluation of the transfer of the selective collection to 100% direct labour*], dated May 8, 2007, and a decision-making summary stating that recyclable materials collection will be handled internally, we were given no assurance that the borough's elected officials were clearly informed of the costs of each household waste and recyclable materials collection activity from 2008 to 2009 and the changes in costs involved.

With respect to the potential savings assessment, savings estimates were based on the assumption that household waste collection teams (24 people) would handle selective collection with no increase or reduction in blue collar workers and without any additional investments. These expected "potential savings" of \$552,900 were calculated based on the costs of the selective collection contract that existed in 2008, or \$1,483,700; additional costs were subtracted from this amount for the outsourcing of 100% of household waste collection (increase from 57% to 100% of the work covered by contract), or \$930,800. These costs should have been compared with the costs of recyclable materials collection both before and after the change in the mode of operation.

Table 2 shows changes in costs associated with the collection of household waste and recyclable materials.

Table 2 – Changes in Costs Associated with the Collection of Household Waste and Recyclable Materials from 2007 to 2013
(in thousands of dollars)

	Historical situation		Situation after changeover to 100% direct labour for recyclable materials collection				
	2007	2008	2009	2010	2011	2012	2013
Household waste collection							
By contract (100%) ^[a]	–	–	3,434.3	3,571.7	3,714.5	3,863.1	4,017.6
By contract (57%)	925.6	930.8	–	–	–	–	–
Internally (43%)	1,707.9	1,746.6	–	–	–	–	–
Total	2,633.5	2,677.4	3,434.3	3,571.7	3,714.5	3,863.1	4,017.6
Variation			28%	4%	4%	4%	4%
Recyclable materials collection							
By contract (100%)	1,467.5	1,483.7	–	–	–	–	–
Internally (100%)	–	–	2,432.6	2,220.6	2,425.3	2,216.7	2,223.8
Total	1,467.5	1,483.7	2,432.6	2,220.6	2,425.3	2,216.7	2,223.8
Variation			64%	-9%	9%	-9%	0.3%
Residual materials collection							
Overall total	4,101.0	4,161.1	5,866.9	5,792.3	6,139.8	6,079.8	6,241.4
Variation			41%	-1%	6%	-1%	3%

^[a] According to the decision-making summary (1084656007) a five-year contract was awarded for household waste collection. Source: Data supplied by the borough.

The analysis of changes in costs from 2008 to 2013 leads to the following findings:

- With respect to the collection of household waste:

The overall cost increased from \$2,677,400 in 2008 to \$3,434,300 in 2009, for a 28% increase. This variation is due mainly to the fact that the portion of the territory covered by contract increased to 100% (part of the territory was covered by direct labour in 2008), as well as the integration of bulky waste into waste collection.

- With respect to the collection of recyclable materials:

The overall cost increased from \$1,483,700 in 2008 to \$2,432,600 in 2009, for a 64% increase. This situation results from the complete transfer of human resources (24 people) previously assigned to household waste collection to recyclable materials collection and the rental of additional equipment.

The fluctuations noted from 2010 to 2012 are mainly due to variations in overtime and rolling stock maintenance costs.

Overall, the cost of residual materials collection, which was \$4,161,100 in 2008 increased to \$5,866,900 in 2009, for a 41% increase.

4.1.2. Le Plateau-Mont-Royal Borough

When the borough changed its mode of operation for residual materials collection in 2009, household waste collection was handled in part on a contract basis, at an annual cost of \$853,900 in 2008, and in part by direct labour, at an annual cost of \$3,005,600, for a total of \$3,859,500. As for recyclable materials collection, 100% of this activity was performed by contract in 2008, at a total annual cost of \$2,140,400. Overall, the costs of residual materials collection totalled \$5,999,900 in 2008.

The changeover from outsourcing to 100% direct labour for recyclable materials collection took place over a two-year period. An initial transfer of 15.8 person-years previously assigned to the collection of household waste to the collection of recyclable materials took place in 2009, and a second transfer of 6.2 person-years was made in 2010. The changeover, which was made under the RPASO, allowed a medium-term reduction of 4.5 person-years in staff assigned to household waste collection, as shown in Table 3.

Table 3 – Changes in Staff Assigned to Residual Materials Collection from 2008 to 2010 During the RPASO (in person-years)

	2008	2009	2010
Household waste collection by direct labour	50.5	31.3	24.0
Recyclable materials collection by direct labour		15.8	22.0
Total	50.5	47.1	46.0

Source: Data supplied by the borough.

The decision to make these changes is the result of a reflection process embarked on by managers and elected officials, who reached the following conclusions:

- Handling 100% of recyclable materials collection by direct labour;
- Integration of the collection of large items into private contracts;
- Elimination of one of the two household waste collections for a six-month period;
- Making changes to a certain number of operational arrangements, such as:
 - the collection methods and the type of container used by Montreal residents,
 - collection spread over five days and carried out in the daytime,
 - collection of recyclable materials in bulk (previously residents sorted recyclable materials).

With respect to the documentation supporting the decision, we made the following findings:

- The source of the parameters that were used for the analysis are mainly the borough's budget data and the results of the review of household waste and recyclable materials collection activities performed under the RPASO;
- Since downsizing is the central focus of concern under the RPASO, the analysis essentially took payroll data into account, failing to examine other costs that are essential to decision-making (e.g., equipment maintenance, fuel, overtime).

Table 4 shows changes in costs associated with the collection of household waste and recyclable materials during the various implementation phases of the operational strategy.

Table 4 – Changes in Costs Associated with the Collection of Household Waste and Recyclable Materials from 2007 to 2013
(in thousands of dollars)

	Historical situation		Situation during the implementation period for recyclable materials collection by direct labour		Situation after the changeover to recyclable materials collection by 100% direct labour		
	2007	2008	2009	2010	2011	2012	2013
Household waste collection							
By contract	800.1	853.9	1,939.0	2,222.6	2,226.9	2,232.1	2,243.1
Internally	2,970.4	3,005.6	2,334.1	1,922.4	1,775.4	1,434.6	953.6
Total	3,770.5	3,859.5	4,273.1	4,145.0	4,002.3	3,666.7	3,196.7
Variation			11%	-3%	-3%	-8%	-13%
Collection of recyclable materials							
By contract ^[a]	1,930.1	2,140.4	538.6	159.7	–	–	–
Internally ^[a]	–	–	1,039.2	1,406.0	1,325.3	1,432.1	1,443.4
Total	1,930.1	2,140.4	1,577.8	1,565.7	1,325.3	1,432.1	1,443.4
Variation			-26%	-1%	-15%	8%	0.8%
Collection of residual materials							
Overall total	5,700.6	5,999.9	5,850.9	5,710.7	5,327.6	5,098.8	4,640.1
Variation			-2%	-2%	-7%	-4%	-9%

^[a] 100% of recyclable materials collection done by contract for 2007 and 2008; divided between modes of operation by contract and by direct labour for 2009; and carried out 100% by direct labour as of 2010.

Source: Data supplied by the borough.

The analysis of changes in costs associated with the collection of household waste and recyclable materials leads to the following findings:

- With respect to household waste collection:

Beginning in 2009, the borough gradually increased spending on household waste collection by contract, with a \$1.4 million increase from 2008 to 2011; in the same period, it continued to spend a smaller proportion on direct labour for household waste collection, reducing this expenditure by \$1.2 million.

Generally, the 11% increase witnessed from 2008 to 2009 for the costs of household waste collection (by contract and by direct labour) is associated with the increase in the portion of the borough's territory that was covered by contract. Subsequently, costs decreased gradually due to the transfer of resources used for household waste collection to recyclable materials collection for 2009 and 2010.

In 2012, the borough gradually introduced organic waste collection by direct labour, resulting in reduced costs for household waste collection by direct labour from 2011 to 2013. The overall effect of this change was a decrease in the overall costs of household waste collection, from \$3.9 million in 2008 to \$3.2 million in 2013.

- With respect to the collection of recyclable materials:

The borough completed implementation of the collection of recyclable materials by direct labour in 2010. This led to a reduction in expenditures for this activity, from \$2,140,400 in 2008 to \$1,325,300 in 2011, for an overall decrease of 38%.

Generally, as shown in Table 4, the borough reduced its costs for the collection of residual materials by 5%, from \$5,999,900 to \$5,710,700, from 2008 to 2010, but without taking into account all costs. The costs continued to drop in subsequent years, mainly because of the introduction of organic waste collection.

4.1.3. Le Sud-Ouest Borough

Up until 2008, household waste collection was done by contract (70%) and by direct labour (30%), and 100% of the collection of recyclable materials was contracted out. In 2009, the borough made changes in the modes of operation for these types of collection on two occasions.

First, beginning in 2009 and up until 2011, the borough decided to handle 100% of recyclable materials collection by direct labour and 100% of the collection of household waste, bulky waste and green waste by contract.

Subsequently, in 2012, the borough divided its territory into two sectors⁸ and made a decision to handle the various types of collection in both sectors as follows:

- Collection of household waste and bulky waste: by contract and by direct labour;
- Collection of recyclable materials: by contract and by direct labour;
- Collection of illegally dumped waste, construction materials, green waste and public recycling and waste bins: by direct labour.

These changes in the mode of operation for managing residual materials collection were supported by analyses.

The first analysis, which concerns the first changeover (2009), was submitted to the elected officials in September 2008.⁹ In order to handle 100% of recyclable materials collection by direct labour, the analysis recommended the reassignment of three compactor trucks, the rental of three other trucks and the transfer of 18 employees to this activity. It also recommended relevant operational parameters (weekly frequency of collection for each collection type, the adaptation of trucks originally used for household waste collection, an internal and external communication plan targeting the public, etc.). Finally, this analysis estimated the costs of collecting recyclable materials to be \$1,556,020 and forecast savings of \$177,255 for the borough.

According to our understanding of the documents supplied by the borough, this evaluation took into account both direct costs (payroll and others) and indirect costs, mainly OHS costs. In the absence of detailed costs, we found no evidence that equipment maintenance and operation costs and management fees were taken into account in the proposed estimates.

The second analysis, which concerns the second changeover (2012), essentially addressed a concern for cleanliness in the residual materials management model. Since 2009, the borough provided collection services twice a week for household and bulky waste and once a week for recyclable materials for each dwelling unit. As a result, residual materials were found on sidewalks three days out of seven, since the collection days were not the same.

⁸ Sector 1 is located south of the Lachine Canal and represents 65% of the borough's territory. Sector 2 is located north of the Lachine Canal and represents 35% of the borough's territory.

⁹ Submitted by the borough's Direction des travaux publics in 2008, with 2007 used as a reference year.

In light of this situation, the Direction des travaux publics conducted a comprehensive analysis¹⁰ of the management of residual materials on its territory, using the environment, costs and cleanliness as the evaluation criteria. Under the strategy that was adopted for the residual materials management model, the collection of household waste and bulky waste was to be reduced from twice to once a week, and they were to be collected on the same day as recyclable materials. Residual materials were found on sidewalks only one day out of seven.

To ensure proper coordination between household and bulky waste collection and recyclable materials collection, the borough's territory was separated into two sectors. In one of the sectors, household waste and recyclable materials would be collected on a contract basis while in the other sector these activities would be carried out by direct labour. For each dwelling unit, service would be provided under the new management model, namely a single collection on the same weekday. With this model, the Direction des travaux publics anticipated a decrease of \$557,417 in the overall cost of the collection of residual materials (household waste and recyclable materials), or a 16% decrease in the costs obtained in 2011, which were estimated to be \$3,446,580.

Table 5 shows changes in costs associated with the collection of household waste and recyclable materials based on various changes in the operational strategy.

¹⁰ Submitted by the borough's Direction des travaux publics on August 11, 2011.

Table 5 – Changes in Costs Associated with the Collection of Household Waste and Recyclable Materials from 2007 to 2013
(in thousands of dollars)

	Historical situation, with 100% of recyclable materials collection outsourced		Situation after the changeover to 100% of recyclable materials collection by direct labour			Situation after the territory was separated into two sectors and residual materials collection was done by both outsourcing and by direct labour	
	2007	2008	2009	2010	2011	2012	2013
Household waste collection							
By contract ^[a]	1,715.9	1,779.2	1,848.3	1,902.5	2,088.1	1,155.6	710.4
Internally ^[b]	511.6	517.7	–	–	–	1,004.1	1,389.8
Total	2,227.5	2,296.9	1,848.3	1,902.5	2,088.1	2,159.7	2,100.2
Variation			-20%	3%	10%	3%	-3%
Recyclable materials collection							
By contract ^[c]	966.2	976.6	–	–	–	337.6	469.3
Internally ^[c]	–	–	1,562.3	1,579.9	1,632.9	1,171.5	1,042.4
Total	966.2	976.6	1,562.3	1,579.9	1,632.9	1,509.1	1,511.7
Variation			60%	1%	3%	-8%	0.2%
Residual materials collection							
Overall total	3,193.7	3,273.5	3,410.6	3,482.4	3,721.0	3,668.8	3,611.9
Variation			4%	2%	7%	-1%	-2%

^[a] Household waste collection service provided on part of the territory by contract for 2007, 2008, 2012 and 2013. From 2009 to 2011, the collection service was contracted out on all of the territory.

^[b] Household waste collection service provided on part of the territory by direct labour for 2007, 2008, 2012 and 2013.

^[c] 100% of recyclable materials collection service provided by contract for 2007 and 2008; from 2009 to 2011 100% of this service was provided by direct labour. As of 2012, the collection service was provided under the mixed model, involving both contract work and direct labour on the borough's territory, which was separated into two sectors.

Source: Data supplied by the borough.

The analysis of changes in the costs associated with the collection of household waste and recyclable materials, taking into account changes in modes of operation, leads to the following findings:

- With respect to the household waste collection:

Expenditures for household waste collection dropped from \$2,296,900 in 2008 to \$1,848,300 in 2009, for a 20% decrease. The variation was due mainly to the transfer of resources in order to handle household waste collection by direct labour. From 2008 to 2009, the costs of contracts increased by 4%, from \$1,779,200 to \$1,848,300, as a result of a 100% increase in the size of the territory to be covered.

Later, during the second change in the mode of operation, in 2012, total expenditures for household waste collection, as shown in Table 5, increased from \$2,088,100 in 2011 to

\$2,159,700 in 2012, a 3% increase that was due to the renewed use, in part, of direct labour to handle household waste collection. Indeed, the cost of this activity by direct labour increased to \$1,004,100 in 2012, whereas it dropped to \$1,155,600 by contract.

- With respect to the collection of recyclable materials:

During the first change in the mode of operations, which took place in 2009, 100% of the recyclable materials collection was transferred from contract work to direct labour, with impacts on the costs that ranged from \$976,600 in 2008 to \$1,562,300 in 2009, for a 60% increase.

During the second changeover in the mode of operations, in 2012, under the mixed formula, whereby recyclable materials were collected by contract on part of the territory and by direct labour on the other part, the costs of recyclable materials collection declined from \$1,632,900 in 2011 to \$1,509,100 in 2012, for an 8% decrease.

The variation observed in 2009 for the costs associated with the collection of household waste and recyclable materials may be suitable for analysis for changes made in the modes of operation, i.e. the transition from 100% of the work done by contract to 100% of the work done by direct labour, while the other parameters remained unchanged (the number of collections, the number of collection days, etc.). In the case of the second change, the analysis of the variations noted is more complex, because it was necessary to take into account the percentages of collections handled by contract compared to those handled by direct labour, the operational parameters (a single collection of household waste and recyclable materials per day, on the same day and at the same time, once a week) which directly affect the costs of the collection, regardless of the mode used (outsourcing as opposed to direct labour).

Generally, as illustrated in Table 5, a cost comparison for the collection of residual materials from 2008 to 2013 reveals that these costs rose from \$3,273,500 to \$3,611,900, for a 10% increase.

4.1.4. Villeray–Saint-Michel–Parc-Extension Borough

When the borough changed the mode of operation for residual materials collection in 2009, 100% of recyclable materials collection was handled by contract at an annual cost of \$1,821,800 in 2008. Household waste collection was handled partly on a contract basis, at

an annual cost of \$2,894,600 and partly by direct labour, at an annual cost of \$3,200,000;¹¹ the total combined cost was \$6,094,600. Overall, the costs of collecting residual materials totalled \$7,916,400 in 2008.

When contracts for the collection of recyclable materials came to term, the Direction des travaux publics, anticipating a possible increase in the costs of these contracts, conducted an analysis to examine the appropriateness of using internal resources to handle the collection of recyclable materials. However, despite our request, we did not obtain a formal document on this analysis.

The people we met with supplied us with what appears to be a reconstruction of the amounts spent on the collection of recyclable materials since 2006. We were provided with explanatory notes on the methodology used for estimates, which documented the following items:

- Labour costs and added social security costs;
- Truck rental;
- Fleet repair costs (10 compactor trucks);
- Fuel, for which some data were obtained by extrapolation.

The decision-making summaries we consulted (2009, 2010 and 2011), which deal with the rental or purchase of equipment used for the collection of recyclable materials, show that the borough increasingly had recourse to these rentals or acquisitions, which reflects the fact that there was no background document assessing needs when it was decided that the collection of recyclable materials would be handled internally. However, in the 2009 decision-making summary¹² requesting that a rental contract be awarded for a dump truck, the following note is found under the heading “Justification”:

[TRANSLATION] As of January 1, 2009, the Direction des travaux publics made a major change in the organization of its collections. Indeed, [recyclable] materials collection is now handled completely by direct labour while [household] waste collection is now handled out by contractors.

In conclusion, we found no evidence that a well-documented, structured analysis had been prepared and submitted to elected officials for decision-making.

Table 6 shows changes in costs associated with the collection of household waste and recyclable materials from 2007 to 2013 based on various changes in the operational strategy.

¹¹ This cost of \$3,200,000 includes household waste, bulky waste, green waste, the collection of Christmas trees and public recycling and waste bins.

¹² GDD 1091309007.

Table 6 – Changes in Costs Associated with the Collection of Household Waste and Recyclable Materials from 2007 to 2013
(in thousands of dollars)

	Historical situation		Situation after the changeover to 100% of recyclable materials collection handled by direct labour				
	2007	2008	2009	2010	2011	2012	2013
Household waste collection							
By contract ^[a]	2,830.2	2,894.6	2,993.8	3,184.2	3,225.1	3,356.9	3,430.5
Internally ^[b]	3,240.2	3,200.0	–	–	–	–	–
Total	6,070.4	6,094.6	2,993.8	3,184.2	3,225.1	3,356.9	3,430.5
Variation			-51%	6%	1%	4%	2%
Recyclable materials collection							
By contract (100%)	1,756.4	1,821.8	–	–	–	–	–
Internally (100%)	–	–	1,706.5	1,621.2	1,689.0	1,808.6	1,828.2
Total	1,756.4	1,821.8	1,706.5	1,621.2	1,689.0	1,808.6	1,828.2
Variation			-6%	-5%	4%	7%	1%
Residual materials collection							
Overall cost	7,826.8	7,916.4	4,700.3	4,805.4	4,914.1	5,165.5	5,258.7
Variation			-41%	2%	2%	5%	2%

^[a] Household waste collection was contracted out for part of the territory for 2007 and 2008. From 2009 to 2013, 100% of household waste collection was contracted out for the entire territory.

^[b] Household waste collection done on part of the territory by direct labour for 2007 and 2008.

Source: Data submitted by the borough.

The analysis of changes in costs associated with the collection of household waste and recyclable materials, taking into account changes in modes of operation, leads to the following findings:

- With respect to the collection of household waste:

With respect to the changeover made in 2009, expenditures for the outsourcing of household waste collection rose by 3%, from \$2,894,600 in 2008 to \$2,993,800 in 2009, which, in our view, raises serious questions about the validity of the data that the borough provided us with, especially since this collection covers 100% of the territory. Furthermore, household waste collection in the part of the borough's territory that was previously covered by direct labour cost the borough \$3,200,000.

- With respect to the collection of recyclable materials:

The changeover, in 2009, to 100% of recyclable materials collection handled by direct labour was reflected in a reduction in expenditures of \$115,300 (6%) for this activity; these expenditures decreased from \$1,821,800 in 2008 to \$1,706,500 in 2009.

4.1.B. Recommendation

We recommend that Ahuntsic-Cartierville, Le Plateau-Mont-Royal, Le Sud-Ouest and Villeray–Saint-Michel–Parc-Extension boroughs, as part of changeovers in modes of operation from contracting out to direct labour, for all activities performed, consider all cost components and various qualitative aspects before adopting a new operational strategy.

Business units' responses:

AHUNTSIC-CARTIERVILLE BOROUGH

[TRANSLATION] Budget compilation and analysis (financial, material and human resources) for each activity. (Planned completion: October 2015)

Compilation and analysis of requests and complaints for each activity. (Planned completion: October 2015)

Production of a report on the situation in anticipation of the development of an operational strategy. (Planned completion: October 2015)

LE PLATEAU-MONT-ROYAL BOROUGH

[TRANSLATION] Le Plateau-Mont-Royal borough undertakes to consider all cost components as well as various qualitative aspects before adopting a new operational strategy, within the framework of changes in the mode of operation from contract work to direct labour for all activities. (Planned completion: December 2015)

LE SUD-OUEST BOROUGH

[TRANSLATION] During the next analysis, which will concern a return to direct labour for certain activities now performed by private contractors, we will make sure that we include all components affected by the possible change.

In 2012, we decided to take a comprehensive approach. Le Sud-Ouest borough proposed using an analytical method that takes into account all residual material collections on its territory; waste, recycling, public recycling and waste bins, green waste and Construction/Renovation/Demolition (CRD) waste. However, in accounting for all these costs, we found it impossible to put an exact figure on each individual cost component. We therefore had to fall back on aggregate data, with the result that some cost components were underestimated.

Since this situation arose, we have been working with the finance department to ensure that the costs allocated to each element of the residual materials collection activity is properly identified in terms of both projected and actual expenditures. This will put us in a better position, during the next changeover, to have more accurate data on the actual costs of an operational change. (Planned completion: December 2015)

VILLERAY–SAINT-MICHEL–PARC-EXTENSION BOROUGH

[TRANSLATION] Update of detailed budget data for each activity (human, financial and material resources) in the various accounting systems, so that we will be better able to document analyses conducted prior to decision-making in the development of operational strategies. (Planned completion: October 2015)

4.1.C. Recommendation

We recommend that the Direction générale, should it decide to prioritize the use of internal resources to perform activities, develop a model containing all cost components as well as the various qualitative aspects, that could be used to help all boroughs make an informed decision and promote joint action.

Business unit's response:

[TRANSLATION] The City created the Service de la performance organisationnelle. One of its twelve priority projects is the implementation of activity-based management, which is intended to determine the full costs of the City's main activities. In the future, activity-based management will be the basis for the key management decisions, including the decision as to whether to have activities performed by direct labour or by contract.

The process of implementing activity-based management will begin in the fall of 2015 and will be spread over a period of about 3 years. The establishment of a model for public works activities (including recyclable materials management) should be 50% completed as of December 31, 2016 and 100% completed as of December 31, 2017. (Planned completion: December 2016 (50%) and December 2017 (100%))

**4.2. Operational Performance Monitoring and Evaluation
Mechanisms and Accountability Reporting Mechanisms**

To support the decision-making process and demonstrate that elected officials' concerns were taken into account, the managers of each borough had to submit results of analyses they conducted to the borough council. This would reflect the borough's commitment to achieving the underlying objectives of the strategy set forth by elected officials. For this purpose, in order to evaluate the effectiveness of changes made to the mode of operation used for recyclable materials collection, the borough had to establish mechanisms for monitoring changes in operational outcomes resulting from the impacts of these changes. During our audit, we verified whether these performance monitoring and evaluation mechanisms were in place. These mechanisms should include criteria related to the quality of the work done, public satisfaction, staying within budgets and compilation of all associated costs. These same mechanisms should enable the borough to prepare periodic

accountability reports on monitoring operations and costs to ensure that the decision to continue providing this service using internal resources is still appropriate in light of all the parameters established.

4.2.A. Background and Findings

4.2.1. Ahuntsic-Cartierville Borough

In this borough, the change in the mode of operation for recyclable materials collection (from outsourcing to insourcing) was initiated in 2009. To make this decision, the Direction des travaux publics conducted an analysis highlighting the advantages of adopting this solution.

Our audit established that this analysis was submitted to the borough's management at the same time as the annual budget framework was submitted. However, we had no assurance that this was the subject of a formal submission to the borough council.

At our request, we obtained tables showing statistics on OHS costs, the average tonnage for 2010 and 2011, the actual annual costs for the period from 2009 to 2013 and letters of agreement signed as part of the establishment of the collection of recyclable materials by direct labour.

We found that the borough did not establish a formal mechanism for monitoring changes in operational parameters involved in the establishment of recyclable materials collection. Systems for compiling data on actual costs, accidents and tonnages no doubt exist, but there was no report integrating the various types of information that can be used to monitor changes in the collection of recyclable materials as a whole. We did not track down any such document. According to our understanding, monitoring is done reactively, as a result of an obvious fact (incident, complaint, etc.). There is no management chart used for monitoring.

We noted that there was no accountability reporting within the framework of the change in the mode of collecting recyclable materials to direct labour. According to the information obtained, the Direction des travaux publics prepares reports upon request, but not systematically.

4.2.2. Le Plateau-Mont-Royal Borough

For Le Plateau-Mont-Royal borough, the catalyst for changing the mode of operation for collection was the RPASO conducted in 2008. At that time, the resulting analysis formally

recommended that internal resources be used for recyclable materials collection. A summary of the RPASO recommendations and the results of the analysis were submitted to management and the borough council at the same time.

In the case of Le Plateau-Mont-Royal borough, we noted that there is no mechanism for evaluating the performance of activities performed by direct labour. The analysis conducted under the RPASO had focused on the payroll and downsizing. No performance monitoring criterion or indicator was defined in the establishment of the collection of recyclable materials. In our opinion, the borough should have provided for mechanisms and measures that would enable it to evaluate the performance of this activity by direct labour.

Furthermore, there was no report integrating the various types of information used to monitor changes in recyclable materials collection as a whole. There was no formal assessment, except budget monitoring. On the other hand, overtime is monitored on the basis of changes in budget allocations, but this is not done systematically.

With respect to accountability, the information obtained reveals that management produces an annual report on tonnage when the budget is prepared. However, we noted that there was no formal, structured accountability reporting within the context of the transfer of the mode of collecting recyclable materials to direct labour.

4.2.3. Le Sud-Ouest Borough

The documents that we examined show that the Direction des travaux publics submitted the results of the analysis conducted in 2008 to the borough council. A decision-making summary explicitly states that, since 2009, the collection of recyclable materials is done by direct labour. However, this decision was not the subject of a council resolution.

In 2011, the Direction des travaux publics conducted a comprehensive analysis of its management of residual materials on its territory. This analysis was conducted not as part of an evaluation process that was provided for or planned when the collection of recyclable materials was established in 2009, but at the request of the borough council, which was seeking a solution to sanitation problems in general.

From 2009 to 2011, according to the documents obtained, no mechanisms were in place for systematically monitoring and evaluating the performance of the collection of recyclable materials.

At our request, the borough produced tables showing the actual costs for the collection of recyclable materials from 2009 to 2014. However, we did not obtain any evidence that they are produced and analyzed systematically or that they are the subject of periodic follow-up reports.

Furthermore, in light of the information obtained from people we met within Le Sud-Ouest borough, no formal accountability reporting process was in place for the collection of recyclable materials by direct labour.

4.2.4. Villeray–Saint-Michel–Parc-Extension Borough

In this borough, the collection of recyclable materials by direct labour began in January 2009. Based on the information we obtained, it was not possible to establish that a structured analysis had been produced.

At our request, the borough produced the following documents:

- A reconstruction of the actual costs associated with the collection of recyclable materials from 2006 to 2013;
- The letter of agreement signed with blue collar workers as part of the establishment of the collection of recyclable materials by direct labour (2009);
- A CSST statement¹³ that includes a list of occupational injuries for each worker;
- A list of accidents with a description of events for each worker;
- A list summarizing the costs of rolling stock for each vehicle category (2009-2013).

Examination of these documents showed that the information, while incomplete, is accessible. However, it is not used to monitor changes in individual costs (OHS costs, costs of rolling stock, etc.). Moreover, no mechanism was provided for that purpose. Furthermore, there was no report integrating these data for the purpose of monitoring or evaluating the overall performance of recyclable materials collection.

There is no particular accountability for recyclable materials collection by direct labour.

¹³ Commission de la santé et de la sécurité du travail.

4.2.B. Recommendation

We recommend that Ahuntsic-Cartierville, Le Plateau-Mont-Royal, Le Sud-Ouest and Villeray–Saint-Michel–Parc-Extension boroughs:

- formally prepare an assessment of the results obtained for residual materials collection since the change in the operational strategy was implemented in 2009;
- take the necessary steps to ensure that, subsequently, succinct management reports are produced periodically for this activity performed both by direct labour and by contract;

in order to inform elected officials of changes in costs and ensure that the operational strategy selected is still the best solution.

Business units' responses:

AHUNTSIC-CARTIERVILLE BOROUGH

[TRANSLATION] Production and submission of an assessment retroactive to January 2009. (Planned completion: October 2015)

Submission of a management follow-up report twice a year, in January and June. Submission of the results to elected officials. (Planned completion: October 2015)

LE PLATEAU-MONT-ROYAL BOROUGH

[TRANSLATION] Le Plateau-Mont-Royal borough will develop a report presenting a comparative statement of results from the 2007 to 2015 budget period to show changes in the costs of residual materials collection since the operational strategy was implemented in 2009. The report will be prepared by December 31, 2015 and will be submitted to elected officials at an information meeting.

In addition, the borough will submit a semi-annual report on changes in costs of the blue-collar activity to the managers concerned, in order to analyze changes and explain variances.

A re-evaluation will be carried out during the budget preparatory exercises to assess whether or not it is appropriate to continue to have the collection and transportation of recyclable materials handled by direct labour. (Planned completion: December 2015)

LE SUD-OUEST BOROUGH

[TRANSLATION] Before May 1, 2015, we will submit to council members a comprehensive assessment of the results obtained from the two operational changes that have taken place since 2009.

Subsequently, every year in May, we will submit to the council members an assessment of results for the previous year. In this way, the council will be aware of

changes in costs and be able to make any necessary changes to the guidelines before the budget is tabled the following year. **(Planned completion: May 2015)**

VILLERAY–SAINT-MICHEL–PARC-EXTENSION BOROUGH

[TRANSLATION] Production of the detailed assessment of results in two (2) phases:

- *Update of detailed data for 2015 retroactively to January 1, 2015; **(Planned completion: April 2015)***
- *Update of detailed data covering the period from January 1, 2009 to December 31, 2014; **(Planned completion: September 2015)***
- *Once the assessment is completely updated from January 1, 2009 until the present, production of a semi-annual management report in January and in June of every year. Elected officials will be informed at the same time. **(Planned completion: October 2015)***

5. General Conclusion

The main reason that prompted four boroughs, in 2009 and in 2010, to handle the collection of recyclable materials on their respective territories by direct labour was to generate savings, because some boroughs were expecting substantial price hikes from contractors when contracts that were coming to term were to be renewed.

However, our audit did not provide any evidence that their decision was based on an exhaustive analysis of all the factors that should have influenced their decision. Instead, following our audit, what we obtained, in view of the financial data that boroughs submitted to us, was a mixed picture. According to these cost compilations, in two boroughs (Ahuntsic-Cartierville and Le Sud-Ouest), the expenditures for this activity actually increased rather than decreased, while in the other two (Le Plateau-Mont-Royal and Villeray–Saint-Michel–Parc-Extension), costs did in fact decline. However, in all cases, the analyses were incomplete and did not take into account all relevant costs associated with the activity.

As part of our audit, we also contacted the other 15 boroughs that continue, year after year, to entrust the work of collecting recyclable materials entirely to contractors. According to all these boroughs, it would be more expensive to change this operational strategy and have the City's internal resources handle this activity. However, we were not provided with any structured analysis to support their perception.

Still, it is curious that most boroughs (15) have a different perception from the four boroughs that elected to change their modes of operation. More surprising still is that two of these four boroughs, within which part of all of this activity is carried out by direct labour, reached the conclusion that costs are higher than when they outsource this activity. However, even after

several years, these two boroughs have kept this mode of operation. It is possible that other qualitative factors were taken into consideration by these boroughs, but we found no documented analysis to that effect.

As a result, we are not certain that all the elements relevant to decision-making were submitted to borough councils to support this operational change, especially since it was not demonstrated that the boroughs were able to generate savings.

The mode of operation for the collection of recyclable materials (from contracting out to direct labour) was changed by moving internal resources away from the collection of household waste (from direct labour to outsourcing). In attempting to reduce costs associated with the collection of recyclable materials, the boroughs had to offset this shortage of internal resources for other activities by awarding additional contracts to contractors, which invariably led to higher costs for the collection of household waste. A comprehensive analysis method should have been employed to assess the financial and qualitative impacts of these two types of collections.

Moreover, these four boroughs did not put in place mechanisms for monitoring and evaluating the performance of each of these activities in order to determine whether the potential savings were realized as expected and whether the other qualitative factors taken into account were well founded. A periodic assessment dealing primarily with all costs associated with the collection of recyclable materials and household waste was not relayed to elected officials in each borough so that they could make sure that the decision made was still appropriate. Under the circumstances, then, it is difficult to conclude that these changes in operational strategy were beneficial.

Finally, under the Borough Financing Plan Reform, the City needs to review its methods for several operational activities, particularly in the area of the removal, transportation and disposal of residual materials.¹⁴ It is therefore crucially important that, before any changes in operational strategy (from direct labour to outsourcing, and vice versa) are decided upon, all cost components and the various qualitative aspects are taken into account in the comprehensive evaluation. A model should be developed by the Direction générale so that it will have assurance that all boroughs follow the same procedure and it can consider the same elements before a decision is made on the mode of operation to be adopted.

¹⁴ Under section 85.5 of *Charter of Ville de Montréal*, the City council was declared, as of January 1, 2015, to have jurisdiction over the removal, transportation and disposal of residual materials (Resolution CM14 1126).



Report of the Auditor General of the Ville de Montréal to the City Council and to the Urban Agglomeration Council

For the Year Ended December 31, 2014

4.11

TECHNOPARC MONTREAL



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List of Acronyms

CEO	chief executive officer	NPO	non-profit organization
CITEC	Centre d'initiative technologique de Montréal	R&D	research and development
IQ	Investissement Québec	SPP	special planning program

4.11. Technoparc Montréal

1. Introduction

Technoparc Montréal is a non-profit organization (NPO) constituted in 1987 by letters patent under Part III of the *Companies Act*¹ of Quebec under the original name of Centre d'initiative technologique de Montréal (CITEC). On two subsequent occasions, the organization changed its name, first to Technoparc Saint-Laurent (in November 1997) and finally to Technoparc Montréal (in February 2008). In order to simplify this audit report, the name Technoparc Montréal will be used regardless of the historical period concerned.

Technoparc Montréal is located on the territory of Saint-Laurent borough and is a major industrial park dedicated to research and development (R&D) (Saint-Laurent Campus). The Saint-Laurent Campus site occupies almost 30 million square feet of which 23 million belonged to Technoparc Montréal. To ensure long-term development, specific zoning was enacted for this site, which sets out R&D use restrictions, among other things.

Technoparc Montréal's original mission was to ensure Technoparc's real estate development (sale of lots) through promotional and prospecting activities aimed at attracting and assisting companies operating in high-tech sectors, especially the life sciences,² information technologies and aerospace. Indeed, to create a high-tech park on its territory, the Ville de Saint-Laurent was granted certain powers under special legislation, the *Act respecting the Ville de Saint-Laurent*,³ one of which was the right to expropriate any land on its territory with the purpose of transferring it thereafter to Technoparc Montréal.⁴ From 1992 to 1998, the Ville de Saint-Laurent served several expropriation notices, resulting in Technoparc Montréal becoming the owner of these expropriated lands in addition to lands granted to it by the federal government for the creation of a high-tech park. Following the municipal merger, the Ville de Montréal (the City) became the successor to the rights and obligations of the Ville de Saint-Laurent. In March 2002, a Quebec court ruled that the City should pay \$17 million in compensation to the owners of the expropriated lands. According to the terms of a loan agreement, Technoparc Montréal became indebted to the City⁵ and a first mortgage-backed security was registered on behalf of the City on certain of Technoparc Montréal's lands.

¹ CQLR, Chapter C-38, Section 218.

² The activity sectors involved include, among others, pharmacology, biotechnology and medical technologies.

³ QL, 1992, Chapter 69.

⁴ Following the municipal merger, most provisions of the *Act respecting the Ville de Saint-Laurent* were largely integrated into Sections 232 to 253.1 of Schedule C, Chapter VI, of the *Charter of Ville de Montréal* (CQLR, Chapter C-11.4).

⁵ Based on the audited financial statements at December 31, 2013, the balance of the debt owed to the City was \$14.8 M.

Technoparc Montréal also incurred a debt with Investissement Québec⁶ (IQ), which was secured by Technoparc Montréal lands. At that time, IQ agreed to provide funding to enable Technoparc Montréal to acquire land privately.⁷ These debts owing to the City and to IQ are reimbursed as the lands held by Technoparc Montréal are sold.

In addition to real estate development on its Saint-Laurent Campus, Technoparc Montréal obtained additional letters patent in 2009, allowing it henceforth to conduct its activities on the entire territory of Montreal (agglomeration). From that time on, Technoparc Montréal's mission read⁸ as follows:

[TRANSLATION]

- *To support the installation and development of technology companies and research centres on the entire territory of the Island of Montreal;*
- *To encourage innovation and technology transfer in conjunction with Montreal's technological hubs.*⁹

By focusing on the emergence and development of technological and scientific projects, Technoparc Montréal works to offer various solutions to business and property development partners (e.g., property needs assessment, construction costs assessment, custom design, project start-up and funding, construction project management). To enable it to fulfill its mission and obtain funding, Technoparc Montréal was constituted in 1997 as the Fiducie du Technoparc Montréal¹⁰ (Fiducie). The board members of Technoparc Montréal and of the Fiducie are one and the same. Moreover, Technoparc Montréal is the sole recipient of profits generated by the activities of the Fiducie, which itself can access funding from a company also constituted in 1997, the Société immobilière technologique de Montréal Inc.¹¹ The Fiducie holds a 13% stake in the Société immobilière technologique de Montréal Inc. (The Technoparc Montréal organizational chart is shown in Appendix 6.1).

The City makes an annual financial contribution to Technoparc Montréal to enable it to fund its activities. The most recent management contract between the City and Technoparc was signed in 2012 for a period of five years, from January 1, 2013, to December 31, 2017, in the amount of \$2.6 million per year (or \$13 million over five years). Also, the lands held by

⁶ Based on the audited financial statements at December 31, 2013, the balance of the debt owed to IQ was \$10.3 M.

⁷ Based on information obtained, the financial assistance came from a government decree to provide funding for the development of a world-class scientific park.

⁸ 2012 Technoparc Montréal Activity Report, p. 5.

⁹ These technological hubs are aimed at the following sectors: aerospace, life sciences, information and communications technologies, clean technologies and nanotechnologies.

¹⁰ Formerly known under the name Fiducie du parc technologique du CITEC.

¹¹ According to information obtained, the shareholders of this company are: Desjardins Financial Security (Life Insurance), Alfred-Nobel Limited Partnership (Phase II) and Desjardins Group Pension Plan.

Technoparc Montréal receive a tax exemption¹² from the City. As a result, the applicable taxation rate is capped at \$0.50 per \$100 of property value.

Finally, Technoparc Montréal is part of the City's reporting entity.¹³ Consequently, its audited financial statements are incorporated into the City's consolidated financial statements.

2. Purpose and Scope of the Audit

The purpose of our audit was to examine aspects surrounding compliance with the management contract between the City and Technoparc Montréal for the payment of an annual contribution, as well as all other management frameworks regulating the activities of this organization.

Our audit focused primarily on Technoparc Montréal and dealt with the years 2012, 2013 and 2014. For some aspects, data prior to these years were also taken into consideration. Apart from our examination and validation of the group's organizational structure and mode of operation, the Fiducie and the Société immobilière technologique de Montréal Inc. were excluded from the scope of this audit since these entities were inactive at the time of our audit. Indeed, no project was completed nor investment by the partners made during the audited period.

3. Summary of Findings

Our audit revealed sectors where improvements should be made. The following sections of this audit report highlight discrepancies regarding:

- Follow-Up of the Management Contract and Accountability (Section 4.1):
 - No one has been designated by the City to follow up on the financial assistance provided to Technoparc Montréal, and there are no regular assessment and accountability mechanisms in place;
 - No consultation mechanism with the City has been put in place to ensure the coordination and synergy of actions undertaken by the various stakeholders in the scientific and technological development community.

¹² The granted exemption involves the general tax only and not the tax on local improvements.

¹³ Definition: All the organizations considered to be under the control of the City based on the evaluation of criteria such as the authority to confirm nomination of the City manager and to grant or withdraw funding.

- Governance (Section 4.2):
 - The composition of the board of directors does not technically comply with the current letters patent;
 - The rules of ethics and professional conduct in place are not all strictly observed;
 - The mode of operation of the two oversight committees does not comply with established rules.

- Internal Management Rules Governing the Approval of Expenses (Section 4.3):
 - Internal controls have flaws, including issues pertaining to prior approvals and adequate supporting documentation submitted for reimbursement of expenses;
 - The method of awarding contracts lacks structure.

- Sale of Lands (Section 4.4):
 - The sales process is not subject to a documented policy governing the way markets are solicited, purchase prices are determined and prior approvals are obtained;
 - The recording of minutes of meetings is sometimes non-existent, inaccurate or inadequate.

- Strategic Planning (Section 4.5):
 - No status report is produced to allow assessment of the degree of progress achieved on measures set out in the action plans.

4. Detailed Findings and Recommendations

4.1. Follow-Up of the Management Contract and Accountability

4.1.A. Background and Findings

A management contract exists between Technoparc Montréal and the City governing the financial contribution that the City pays to this organization to enable it to fulfill its mission and pursue its activities. The allocated funding consists of a payment of \$2.6 million yearly for a period of five years, from January 1, 2013, to December 31, 2017, for a total financial contribution of \$13 million.¹⁴ This is, in fact, a renewal of the management contract as the City has been paying a financial contribution to Technoparc Montréal since the municipal merger of 2002. The previous three-year agreement (2010, 2011 and 2012), along with those

¹⁴ Management contract approved by City council on June 18, 2012 (Resolution CM12 0856).

entered into earlier, provided annual funds of \$2.85 million.¹⁵ Prior to the municipal merger, Saint-Laurent borough supported this organization financially. In light of the information contained in Technoparc Montréal's audited financial statements at December 31, 2013, while the organization has generated revenues from sales of land in recent years, we noted that the City's financial contribution represented 99% and 97% of the recurring revenue sources of this organization for 2012 and 2013 respectively. A large portion of the allocated funds serve to help Technoparc Montréal pay the municipal taxes on the lands it holds. For the years 2012 and 2013, the municipal taxes payable represented 44% and 43% of the allocated funds, respectively. Clearly the survival of Technoparc Montréal depends on this financial contribution by the City.

The significant monetary value and recurrence of the financial support provided to Technoparc Montréal undoubtedly call for stringent follow-up on the part of the City to ensure that the terms of the contract related to the organization's obligations are met and the allocated funds are used for the purposes for which they were intended in order to achieve the expected economic development benefits. To this end, it is imperative that a person be formally designated to ensure follow-up and that assessment and accountability mechanisms be put in place and applied.

Our audit focused on locating and examining the measures taken by the City to follow-up the management contract signed with Technoparc Montréal. Once we had completed our work, we were surprised to conclude that no one from the City had been formally designated to ensure the follow-up, assessments and accountability required in the management contract since the approved renewal of the last management contract in 2012 (ending in 2017).

Indeed, the representatives of the Service du développement économique we met in the course of our audit mentioned that they did not consider themselves responsible for following up this management agreement since the financial contribution stemming from it did not come from their department's operating budget but rather was charged against the expenses of the central City's operating budget. According to these same representatives, the Service des finances is the department responsible for the file. We therefore contacted various persons at the Service des finances to find the person in charge of the dossier. Our search was in vain since all the parties contacted at the Service des finances pointed to the Service du développement économique as the department responsible for ensuring follow-up of the management contract and accountability for it. Moreover, we found that:

¹⁵ Starting in 2011, as part of the focus on financial contributions and the search for recurring savings, City council ratified the decision to reduce the funds allocated to Technoparc Montréal from \$2.85 M to \$2.6 M. The management contract then in force was amended accordingly.

- the management contract was signed by Technoparc Montréal and the City but uses the term “manager,” referring back to the manager of economic and urban development;¹⁶
- the decision-making summary supporting the approval of the management contract by City council in 2012 came from the department of economic and urban development at the time;
- a section head of the Service du développement économique currently sits as a board observer on Technoparc Montréal’s board of directors.

Thus, while this has not been the case since the management contract was renewed, we would have been justified in believing that the Service du développement économique was assuming this responsibility.

The ambiguity of the situation resulted in Technoparc Montréal’s contractual obligations not being followed up, resulting in somewhat haphazard communication and transmission of most of the documentation required by the contract between the organization and the City. For example, we found that:

- At the end of each fiscal year, Technoparc Montréal is required to submit to the City a status report on its activities, actions taken and results achieved in the past year, as well as a strategic plan for the development of its activities. We found that Technoparc Montréal posts its annual activity report on its website but, for 2012 and 2013, this document was not sent to the Service du développement économique in particular or any other designated unit to ensure follow-up of the management contract. The 2013 activity report was, however, sent by Technoparc Montréal to the City’s Direction du greffe¹⁷ to be tabled at City council in compliance with a resolution¹⁸ adopted by City council in 2013. As for Technoparc Montréal’s (2014–2017) strategic plan, representatives of the Service du développement économique we met mentioned that they had received a copy but had not verified the contents;
- Technoparc Montréal must submit its budget forecasts for the coming year to the “manager.”¹⁹ Technoparc Montréal produces budget forecasts, but we were unable to find any proof that these had been requested by the Service du développement économique and forwarded by Technoparc Montréal;
- According to the information obtained from Technoparc Montréal’s vice-president of finance, a copy of the audited financial statements is sent to the person responsible for financial and material resources at Saint-Laurent borough. The latter then forwards them

¹⁶ This department is now known as the Service du développement économique, reporting to the assistant City manager for development.

¹⁷ Now known as the Service du greffe.

¹⁸ Resolution CM13 1157.

¹⁹ As previously mentioned, the management contract defines this term as the manager, Développement économique et urbain, now the Service du développement économique.

to the Service des finances to consolidate the financial data in the City's financial statements.²⁰ Nevertheless, no copy is forwarded to the Service du développement économique or to any other designated person responsible for ensuring follow-up of the management contract supporting the allocated funding.

While Technoparc Montréal makes documentation about the organization available²¹ to all members of its board of directors, in our opinion someone should be formally designated as the person responsible to channel the information received and required to assess compliance with the management contract and use of the allocated funds. We also consider that the management contract should set out Technoparc Montréal's obligation to provide the designated person with other documents that are not currently specified but that would undoubtedly ensure more stringent follow-up of completed activities, given the amounts allocated, and ultimately provide accountability for them (e.g., audited financial statements, action plans produced annually by the organization and, where applicable, related status reports to assess whether the directions in its strategic plan have been met.) The management contract should be amended accordingly.

While this aspect will be discussed in greater detail in Section 4.2 of this audit report dealing with governance, it should be stated here that a Montreal City councillor²² has sat for several years as a member on Technoparc Montréal's board of directors, in addition to two other civic officials,²³ who sit as board observers. The presence of these individuals at the working sessions of Technoparc Montréal's board of directors could, to some extent, serve as a channel for conveying the information needed for the accountability process. We believe, however, that the presence of these authorized representatives, named by the City, on the organization's board of directors cannot fully replace the follow-up that should be conducted by the City to assess how operations are managed and the extent to which anticipated results have been achieved, given the amount of the allocated funds.

Moreover, our examination of the management contract also led us to conclude that some clauses stipulating Technoparc Montréal's obligations were worded in such a general way as to make it more difficult to assess the achievement of anticipated results and benefits derived from the allocated funding. For example, the management contract specifies that, in exchange for the financial contribution paid by the City, Technoparc Montréal agrees to:

²⁰ Indeed, Technoparc Montréal is included in the City's reporting entity.

²¹ Technoparc Montréal has a Web portal that can house data and electronic document management – "Leading Boards."

²² This councillor sits on Montreal's City council and is the mayor of Saint-Laurent borough.

²³ The Saint-Laurent borough manager and a division head of the Service du développement économique.

[TRANSLATION]

- *Facilitate and support the implementation and development of high-tech projects, businesses and research centres on the territory of Montreal;*
-
- *Develop new consultation and support networks for high-tech companies [...];*
 - *Collect information, put in place a team of direct industry sellers and develop a prospecting network [...] to identify investors in the high-tech sector.*

What is more, according to information obtained, no performance indicator was formally agreed to between the parties to the management contract. In our opinion, this management tool would have enabled the stakeholders to evaluate the organization's performance in achieving the targets it set for itself and, ultimately, make it accountable for them.

Finally, given that Technoparc Montréal has had the authority to conduct its activities on the entire territory of Montreal since 2009, we wanted as part of our audit to determine the mechanisms that could have been put in place to ensure the coordination and synergy of the actions of the Service du développement économique and Technoparc Montréal. The information obtained from the stakeholders we met at the Service du développement économique revealed that Technoparc Montréal's roles and responsibilities in relation to those of the Service du développement économique were not always clear and sometimes even overlapped. They also pointed out that, in some respects, the presence of several other industry partners,²⁴ sometimes soliciting the same spheres of activity, made it more difficult to assess each one's real contribution to the success of the projects. Nevertheless, we understand from the information obtained from both the representatives of the Service du développement économique and those of Technoparc Montréal that no concrete measures currently exist to ensure the coordination and synergy of their activities. In addition, while Technoparc Montréal has been involved in the development of various projects, the absence of any evaluation or accountability criteria makes it difficult to assess the real economic benefits attributable to Technoparc Montréal.

By familiarizing ourselves with the City's strategic framework for economic development for 2011 to 2017, we were able to determine that the City had planned to put in place various strategic initiatives for urban innovation, including the "Montréal Technopole" project aimed at encouraging the development of scientific and technological assets. The "Montréal Technopole" initiative was to have proposed an intervention model to ensure better coordination in developing the region's science and technology assets. Technoparc Montréal

²⁴ For example, the other partners involved are: Montréal International (attracting international investors), TechnoMontréal (focusing on information and communications technologies [ICT]), the local development centres (CLD), and Montréal InVivo (developing businesses active in the life sciences and health technologies sectors).

was one of the collaborating partners targeted for this project, along with Montréal International, Montréal InVivo and others. According to information obtained, it appears that the pursuit of this initiative was never assured and it fell by the wayside.

4.1.B. Recommendation

We recommend that the Direction générale of the City take the necessary steps to ensure that the management contract signed with Technoparc Montréal for the payment of an annual financial contribution be properly followed up, in particular by:

- formally designating someone responsible;
- amending the management contract to specify all the relevant documents that Technoparc Montréal must provide to the designated person in charge to enable the latter to ensure more stringent follow-up of the activities carried out by the organization and to assess compliance with the management contract in light of the funds allocated;
- mandating the designated person to establish, together with Technoparc Montréal, measurable performance targets and indicators to assess the degree of progress attained;
- requiring regular reporting by the designated person on results of the evaluations carried out.

Business unit's response:

[TRANSLATION] The Service du développement économique will be designated responsible for the dossier. (Planned completion: April 2015)

An amended management contract specifying the relevant documents that Technoparc Montréal must provide to ensure follow-up of its activities will be presented to the authorities for approval. (Planned completion: December 2015)

Performance targets will be set at the same time. (Planned completion: December 2015)

An annual reporting process will be put in place; the first status report will be one year after completion of the two previous points. (Planned completion: February 2017)

4.1.C. Recommendation

We recommend that, to ensure the coordination and synergy of various science and technology stakeholders' activities, the Service du développement économique put in place the necessary consultation mechanisms to clarify the roles and responsibilities of each of the stakeholders involved in this sphere of activity.

Business unit's response:

[TRANSLATION] The management of the Service du développement économique will be producing an economic development action plan for the entire territory of Montreal. The Service du développement économique will re-examine whether the actions set out in Technoparc Montréal's strategic plan are in line with the directions put forth in the City's economic action plan.

Beyond this harmonization, semi-annual meetings will be held to keep the action plans and implementation responsibilities aligned. (Planned completion: December 2015)

4.2. Governance

4.2.1. Compliance of the Composition of the Board of Directors

4.2.1.A. Background and Findings

Our audit then focused on examining the compliance of the composition of Technoparc Montréal's current board of directors. To this end, we referred to the most recent changes made to the supplementary letters patent delivered on January 21, 2009. In addition to limiting to 12 the number of members that must now make up the board of directors, the letters patent also make changes to the choice of board members.²⁵ In particular, they stipulate that:

[TRANSLATION]

The number of board members of the legal entity is limited to 12. They are chosen based on the following grid:

- *Nine of the board members of the legal entity must come from the private sector. They are admitted after consultation with the City;*
- *Two of the board members of the legal entity are chosen from among City officials or other persons that the City puts forward as candidates; and*
- *The 12th board member of the legal entity, who acts as CEO, is admitted upon agreement with the City.*²⁶

²⁵ Section 6.4 of the supplementary letters patent issued on January 21, 2009.

²⁶ Our underlining.

At the time of our audit,²⁷ the board of directors was composed of 11 members (one position being vacant) chosen in the following manner:

- Nine members from the private sector, in accordance with the letters patent. In light of information collected, however, we found no evidence that they were admitted after consultation with the City, as prescribed;
- Only one representative designated²⁸ by the City sat as a member on the board, while the supplementary letters patent stipulated that two members must be chosen from among civic officials or other persons that the City puts forward as candidates. As previously stated, two civic officials²⁹ also attend the working sessions of Technoparc Montréal's board of directors as board observers (non-voting members);
- Finally, the chief executive officer (CEO) is also a board member. We determined that his appointment was the object of a City council resolution³⁰ in accordance with the provisions of Technoparc Montréal's letters patent.

We conclude that, in certain respects, the composition of Technoparc Montréal's board of directors does not comply technically with the current letters patent.

We also became aware of a memo written in February 2014 by the City's comptroller general, to the Direction générale, recommending that no elected official or other civic official sit, as part of his duties, as a member on the board of directors of a paramunicipal organization or NPO when the City seeks the authority to oversee the organization's management. This recommendation, which was supported by an opinion on the matter from the City's legal department,³¹ produced in April 2014, is mainly founded on the duty of loyalty and obligation to act "*in the interest of the legal person*" required under the Civil Code of Québec³² for any person acting as a member of a board of directors. In spite of the City's authority to appoint members as set out in the letters patent, this legal opinion illustrates the fact that the City would like the member it appoints to look first at safeguarding and promoting its own interests to ensure a right to follow up how the organization conducts its business and activities. This requires that the member be able to juggle his duties and the City's expectations, a task that could at the very least prove difficult, and sometimes create a conflict. The problem resides in the fact that the elected official or civic official named as a board member also has the duty of loyalty to the City, meaning that he is not only expected to act with honesty and loyalty in the interests of the legal entity for which he is a director but also in the interests of the City.³³

²⁷ In October 2014.

²⁸ Reference: Resolution CM08 0694 of the City council session held on August 25, 2008.

²⁹ This refers to the manager of Saint-Laurent borough and a division head of the SDE.

³⁰ Reference: Resolution CM08 0694 of the City council session held on August 25, 2008.

³¹ Reporting to the Service des affaires juridiques et de l'évaluation foncière.

³² QL, 1991, Chapter 64, Section 322.

³³ Service des affaires juridiques et de l'évaluation foncière, legal opinion, April 3, 2014.

Yet, the member's duty of loyalty under the Civil Code of Québec requires that he act in the interests of the legal entity and not of the City. By combining the two functions, he risks a conflict of interest. This risk is even more apparent when the representative named by the City to sit on the board of directors of an organization such as Technoparc Montréal is also an elected City council official and the mayor of Saint-Laurent borough.

That being said, both the memo written by the comptroller general and the legal opinion emphasize that, if the City's intention is to ensure the presence of an overseer on the board of directors of an organization to which it allocates funds, nothing prevents elected officials or civic officials from sitting on this board as board observers. Since their role is limited to observing and not decision making, the board observers mandated by the City are not bound by the same duty of loyalty prescribed for a director under the Civil Code of Québec. Under such circumstances, the management contract signed by the parties should be amended to provide for the insertion of specific clauses governing, in particular, the nomination of board observers to the board of directors, who shall have access to all relevant information.

Finally, to validate whether the composition of Technoparc Montréal's board of directors is compliant, we examined the information disclosed to the registrar of enterprises of Quebec, whose duty is to keep a register of enterprises under the *Act respecting the legal publicity of enterprises*.³⁴ During this examination, we found that information regarding the board members in the register was inaccurate. On the one hand, the register showed Technoparc Montréal's CEO as chair of the board rather than as a board member, while the person who actually holds the position of chair was shown as a member. On the other hand, the register failed to reflect the changes made regarding new members admitted to the board, while members who had stepped down (three persons) still appeared there. The Act cited above stipulates³⁵ that it is the duty of the organization, in this case Technoparc Montréal, to verify the accuracy of the declarations filed and, in the case of inaccurate information, to make the appropriate correction by filing an updating declaration "without delay." Failing this, Technoparc Montréal is guilty of an offence under the Act³⁶ and may be liable to a fine ranging from \$600 to \$6,000. Finally, the person entered on the register of enterprises without just cause could be involved in litigation in spite of himself if, as the facts show, he no longer acts as a board member or does not hold the office shown in the register.

³⁴ CQLR, Chapter P-44.1.

³⁵ CQLR, Chapter P-44.1, Sections 39 and 40.

³⁶ CQLR, Chapter P-44.1, Sections 152 and 159.

4.2.1.B. Recommendation

We recommend that, to ensure that the composition of the board of directors complies with the regulatory documents, Technoparc Montréal take the necessary measures so that the nomination of board members from the private sector is subject to prior consultation with the City, as stipulated in the letters patent.

Business unit's response:

[TRANSLATION] The organization has existed since 1987, and adjustments to its constituent documents must be discussed with the City to account for the evolution of its activities and the City's governance context.

Based on talks with the City, Technoparc Montréal's general by-laws and letters patent will be amended and approved by the governance committee and the board of directors. (Planned completion: November 2015)

4.2.1.C. Recommendation

We recommend that Technoparc Montréal, together with the Direction générale take the necessary measures to:

- amend the letters patent of Technoparc Montréal so that no elected official or civic official sits on the board of directors as a member but rather as a board observer;
- amend the management contract signed by Technoparc Montréal and the City to integrate specific clauses to this effect;

in order to avoid placing the board members designated by the City in a situation that might compromise their duty of loyalty to the organization that they represent.

Business units' responses:

TECHNOPARC MONTRÉAL

[TRANSLATION] The current letters patent provide for two City representatives to sit as members of the board of directors whereas, in fact, only one person named by the City sits as a board member. Two City officials also act as board observers.

In accordance with the City's guidelines, amendments will be incorporated into the general by-laws and letters patent regarding the status of City representatives sitting on the board of directors. If necessary, an addendum to amend the relevant clause in the management contract will be put forward for approval by the governance committee and the board of directors.

Our objective is to simultaneously address all the amendments to be made to the organization's constituent documents, i.e., the general by-laws and letters patent, in agreement with the City. (Planned completion: November 2015)

DIRECTION GÉNÉRALE

[TRANSLATION] As mentioned in the report, no civic official currently sits as a board member; they have observer status.

The Direction générale will collaborate on implementing this recommendation by ensuring that no civic official may potentially hold the position of board member but may only sit as a board observer, as is currently the case.

Furthermore, the Direction générale considers that it is not its role to decide on the presence of elected officials on boards of directors and informed the chair of the executive committee of the contents of the recommendation, for consideration. (Planned completion: November 2015)

4.2.1.D. Recommendation

We recommend that Technoparc Montréal verify the accuracy of the information entered in the register of enterprises and make the necessary corrections regarding the designation of board members and the position they occupy in order to comply with the obligations stipulated in the *Act respecting the legal publicity of enterprises*.

Business unit's response:

[TRANSLATION] The accuracy of the information entered in the register of enterprises was verified and the necessary changes will be made in the coming weeks.

As a follow-up to discussions with the City regarding the names and status of its representatives on the board of directors, other adjustments will be made, where necessary. (Planned completion: May 2015)

4.2.2. Compliance with Rules of Ethics and Professional Conduct

4.2.2.A. Background and Findings

Board members must, in the performance of their duties, act with prudence, loyalty and integrity to the extent required of them by, among other things, the law, letters patent, by-laws as well as the rules and regulations of the organization that they represent.

With this in mind, and with the intention of overseeing the practices and behaviour of not only its board members but also its managers and employees, Technoparc Montréal adopted a code of ethics and professional conduct (the code). Two versions of this code were provided to us during our audit:

- A version approved by Technoparc Montréal's board of directors at its meeting held on March 15, 2012;

- A second version amended in form and content. This alternate version is not dated, however, and we were unable to find any resolution referring to its approval by Technoparc Montréal's board of directors. Only one mention appears in the minutes of the board meeting of June 20, 2013, suggesting that the existing code should be simplified.

For the purposes of assessing compliance with the application of this regulatory framework, we examined the minutes of meetings available at the time of our audit for the years 2011 to 2014.³⁷ We also sampled professional fees incurred from 2012 to 2014.³⁸ At the end of this examination, our attention was drawn to three situations involving board members.

The first situation involved the chair of the board of directors. The minutes of the board meeting held on December 13, 2012, revealed, under the heading "Other Business," that the chair of the board wished to develop charters for the audit and property risk management committee, as well as for the new oversight committees³⁹ that would be created in 2013. He suggested freeing up his time to see to the establishment and proper functioning of these committees and to provide active support within the implementation framework of Technoparc Montréal's new strategic plan. The resolution to this effect in the minutes of the meeting stipulates: *[TRANSLATION] "On motion duly seconded, it is unanimously resolved to approve the maximum amount of \$25,000 to be allocated to Mr. [X] in his role as consultant to TM [Technoparc Montréal] for the year 2013."*

This agreement was subsequently renewed for 2014, whereas at the February 27, 2014, meeting, during which the chair was also present, the following resolution appeared in the minutes: *[TRANSLATION] "On motion duly seconded, it is unanimously resolved to approve the agreement between [Mr. X's management company] and Technoparc Montréal for the monthly sum of \$2,000."*

We acknowledge that an NPO can award contracts to certain board members as long as the disclosure obligations adopted by the organization and the legal obligations governing conflicts of interest have been met by the board member. However, this situation involving Technoparc Montréal's senior member led us to the following observations:

- The information obtained revealed that, other than discussions reported in the minutes of the meetings, no professional services contract detailing how the expected services

³⁷ The most recent minutes examined were from a session of the board of directors of Technoparc Montréal held on October 30, 2014.

³⁸ Audit conducted up to October 2014.

³⁹ These new committees are the "governance and ethics committee" and the "human resources committee."

would be delivered was signed by the chair and Technoparc Montréal for 2013 and 2014. Payments under the agreement were made to the chair's management company and posted to Technoparc Montréal's professional fees.

- Neither of the minutes of the meetings involved mention the chair withdrawing from deliberations or abstaining from voting on the matter. In fact, in both cases the minutes show that the proposal was adopted unanimously, implying that the chair voted in favour of his own contract. In our opinion, in the interests of greater transparency regarding a situation that could, at least in appearance, be likened to a conflict of interest, the chair should have withdrawn from deliberations and abstained from voting. This is exactly what Technoparc Montréal's code of ethics and professional conduct prescribes, as shown below:

- According to Section 5.9 of the code approved in 2012:

[TRANSLATION]

... the board member shall take every means to avoid placing himself in a situation of real or apparent conflict of interest [...]

The board member involved shall abstain from taking part in all deliberations and any decisions regarding a situation in which he finds himself in a conflict of interest. In particular, he shall withdraw from the meeting for the duration of the deliberations and decision-making regarding this situation.

- According to Section 3.4, "Contract with Technoparc," of the amended code (not approved at the time of our audit):

[TRANSLATION]

Section 3.4.1

The board member, manager or employee who is a party to a contract with Technoparc or a subsidiary [...] must disclose in writing the nature and scope of his interest to the CEO or the chair of the board.

Section 3.4.4

The board member must abstain from deliberating and voting on any matter related to this interest and avoid trying to influence any decision in this regard. He must also withdraw from the meeting for the duration of the deliberations and for the vote on this matter.

The second situation that attracted our attention also involved a member of Technoparc Montréal's board of directors, in this case a lawyer. During our examination of professional fees, we found some invoices paid in 2013 and 2014 for a mandate entrusted to this board member's firm. These invoices showed the board member as the person responsible for the mandate whereas we found that, for most of these invoices, he was paid for a few hours of work that he did himself. While the amounts billed are not significant (approximately \$10,000), from an ethical standpoint this situation remains questionable. We could not find any

evidence that this board member expressly mentioned his interest or requested that this fact be entered into the minutes of the board's deliberations. Indeed, only one mention regarding this mandate appears, in the minutes of the meeting of April 18, 2013, as follows: [TRANSLATION] *"The mandate of [firm X] for [...] is under way and must be approved by the board of directors."*

We consider that the necessary measures should be taken to comply with Technoparc Montréal's code of ethics and professional conduct and that all facts underlying this situation involving a board member should be recorded in the minutes.

Lastly, the third situation involved Technoparc Montréal's CEO. As mentioned previously, the CEO also sits as a member on the board of directors, in accordance with the letters patent of Technoparc Montréal. We observed that the CEO's work contract made provisions, from the time he was hired in 2007 to 2013, for him to receive commissions on the net sale price of the lands held by Technoparc Montréal. While this benefit was removed from the work contract and replaced with a bonus beginning in 2014, the CEO's performance review includes a performance objective related to the monetary threshold of the lots to be sold annually. This being said, the perceived problem does not necessarily stem from the fact that the CEO is also a board member but rather from the fact that, in reading the minutes, we did not find any evidence that he withdrew from board meetings for the duration of deliberations or abstained from voting when the subject was the approval of a land sale. It is clear that the ethics and professional conduct rules developed by Technoparc Montréal were, once again, not applied.

In conclusion, we noted that Section 5.10 of the code of ethics and professional conduct approved by Technoparc Montréal's board of directors in March 2012 stipulated that a declaration entitled [TRANSLATION] *"Declaration respecting conflicts of interests of members of the board of directors of Technoparc Montréal"* must be completed and remitted to the chair of the board at the time that a person assumes his duties. Based on the information obtained from the people we met at Technoparc Montréal, it appears that no board member completed such a declaration.

In light of these findings, we are of the opinion that corrective measures should be taken to ensure that the actions of board members comply with the rules of ethics and professional conduct in force.

4.2.2.B. Recommendation

We recommend that Technoparc Montréal take the necessary corrective measures to ensure that the actions of board members regarding personal or business interests comply with the rules of ethics and professional conduct in force at the organization.

Business unit's response:

[TRANSLATION] The code of ethics and professional conduct was reviewed and approved by the board of directors at its meeting of February 25, 2015, and is in force.

The members of the board also signed a commitment to honour this code of ethics and professional conduct.

*In future, in order to ensure that our minutes reflect the commitments made by board members on matters of ethics and professional conduct, we will improve the recording of minutes of meetings on all matters involving possible or apparent conflicts of interest for board members, in particular by reporting the interventions, actions (e.g., withdrawal) and declarations of these members. **(Planned completion: May 2015)***

4.2.2.C. Recommendation

We recommend that Technoparc Montréal improve the recording of the minutes of board meetings to increase the transparency of decisions taken, especially when they involve one of its board members.

Business unit's response:

*[TRANSLATION] The recording of the minutes of meetings has already improved and will be further enhanced to better document the topics and questions addressed, in particular in matters dealing with the awarding of contracts and the sale of land. **(Planned completion: May 2015)***

4.2.3. Compliance with the Composition of Oversight Committees

4.2.3.A. Background and Findings

As previously mentioned, in addition to the audit and property risk management committee that already existed, two other oversight committees were created in 2013 at the urging of the chair of Technoparc Montréal's board of directors: the governance and ethics committee and the human resources committee.

The mandate and role of the audit and property risk management committee is to review such aspects as the annual operating budget, audited financial statements, land sales and associated risks. For its part, the governance and ethics committee's duties include formulating rules of governance and ethics for conducting Technoparc Montréal's business affairs, creating competency and experience profiles for the nomination of members to the board of directors and establishing criteria for evaluating how the board operates. The human resources committee has particular responsibility for making recommendations to the board of directors for approval of human resources policies, proposing output and performance targets, as well as the criteria for the CEO's performance evaluation, and making recommendations to the board of directors on the CEO's remuneration.

At the same time, each of these committees must have a charter to limit not only their respective mandate but also aspects related to the composition of the committees and their mode of operation (e.g., number of members, number of meetings per year, issuing of notices of meetings, quorum). Each of the charters developed must then be submitted to Technoparc Montréal's board of directors for approval.

Having clarified these details, we began by inquiring about the existence of these charters and their approval by Technoparc Montréal's board of directors. We then examined whether they were compliant with their provisions with respect to the composition of the committees and their respective mode of operations, especially regarding the number of meetings held versus the number planned.

From the outset, we observed that the two new committees, the governance and ethics committee and the human resources committee, were effectively created and became operational in 2013. During the same year, a charter was also drawn up for each of the oversight committees, including the audit and property risk management committee.

The charter of the audit and property risk management committee and that of the human resources committee were approved by Technoparc Montréal's board of directors on October 13, 2013, and June 20, 2013, respectively. The charter of the governance and ethics committee, however, was at the draft stage and had not been approved by Technoparc Montréal's board of directors at the time of our audit in October 2014.

The results of our examination of compliance with the provisions of the oversight committees' charters for 2013 and the first 10 months of 2014, regarding the composition of the committees and number of meetings held vs. number planned, revealed the following:

- No irregularity was detected regarding the audit and property risk management committee, which operates as described in its charter.
- Since the charter of the governance and ethics committee was at the draft stage and had never been approved by Technoparc Montréal's board of directors, it was difficult to corroborate with any certainty whether the committee complied with the charter's provisions. Nevertheless, we were able to observe that very few meetings were held in 2013 and 2014. While the charter prescribed four meetings a year, we only obtained minutes for two meetings held in 2013 and only one in the first 10 months of 2014. We concluded, therefore, that this committee is not very active and that further efforts are required to consolidate the committee's mandate and operations.
- As for the human resources committee, it appears that it is not fully operational according to the operations described in its charter. The following facts were noted:
 - The charter stipulates that the committee must be made up of at least three independent members named by Technoparc Montréal's board of directors. At the time of our audit, only two members comprised this committee. As well, the committee members have changed since it was created in early 2013 and we were not able to find any new resolution of the board of directors approving the nomination of the chair and the other member currently forming this committee;
 - According to the charter, meetings should be held at least four times a year. Only one meeting was held in 2013⁴⁰ and one other during the first 10 months of 2014;⁴¹
 - Section 3.7 of the charter stipulates that: *[TRANSLATION] "the discussions of the Committee regarding the evaluation criteria and performance evaluation of the chief executive officer and managers of the Corporation [Technoparc Montréal] are held in camera in the absence of the Committee secretary, chief executive officer or any other employee of the Corporation."* In both the minutes of the meeting held in 2013 and those of the meeting held in 2014, however, we observed no mention of the withdrawal of the CEO, who remained present during the meetings as an invited member and acted as the secretary. What is more, the minutes are not always signed.

By creating these oversight committees, we concluded that Technoparc Montréal has equipped itself with governance mechanisms that should ensure more stringent follow-up of business operations and compliance with its guidelines and serve to support informed decision-making by members of the board of directors. If Technoparc Montréal's intention is to maintain this governance structure, we believe that, to ensure that they can become fully operational, the rules established for the composition and operations of the oversight

⁴⁰ Meeting held on May 8, 2013.

⁴¹ Meeting held on February 7, 2014.

committees must be formally adopted and applied in accordance with the specific provisions of their respective charters.

4.2.3.B. Recommendation

We recommend that, to make the two new oversight committees fully operational, Technoparc Montréal take the necessary measures to:

- **reach a consensus about the contents of the governance and ethics charter and have it formally approved by the board of directors;**
- **ensure consistent application of the provisions set out in each of their respective charters.**

Business unit's response:

[TRANSLATION] The governance committee's charter was approved at the meeting of the board of directors held on February 25, 2015. The provisions of the charters of the three committees (governance and ethics, human resources and audit and property risk management) are in force accordingly.

In light of the comments made by the auditor general, adjustments will be proposed for each of the charters in force and approved by the board of directors of April 2015. (Planned completion: August 2015)

4.3. Internal Management Rules Governing Approval of Expenses

In order to appreciate the extent to which Technoparc Montréal prudently uses the public funds entrusted to it, our audit focused on examining certain expenses and rules of internal management associated with them. To this end, we requested all the management frameworks and guidelines in force at Technoparc Montréal. The CEO provided us with a document entitled [TRANSLATION] "Main administrative procedures in force at Technoparc Montréal," which is a summary description of the process in place for, in particular, choosing suppliers, approving employee expenses, paying invoices and issuing cheques.

From the outset, we noticed that this document had been prepared in September 2014, shortly before our audit began, and had not been approved by the board of directors. Indeed, our examination of the minutes of meetings for the years 2011 to 2014 failed to find evidence that any approval had been granted. As well, according to the information obtained from the CEO, no official administrative policy had been approved in the years prior to 2011. In a context in which a major portion of the funds required by Technoparc Montréal to conduct its current activities comes from the public purse, we believe that the internal rules of procedure

meant to ensure more stringent control of operations management should be subject to a formal framework approved by the organization's board of directors.

Under the circumstances, we examined how the administrative process described in the document⁴² provided to us by the CEO was applied. More specifically, we began by sampling expenses incurred by the staff of Technoparc Montréal, how they were approved and whether the supporting documentation submitted for approval purposes (see Section 4.3.1) was adequate. We then examined the process for awarding contracts (see Section 4.3.2) and, finally, the CEO's work contract (see Section 4.3.3).

4.3.1. Staff Expenses

4.3.1.A. Background and Findings

In the document describing the administrative procedures in force at Technoparc Montréal, the following appears under the heading [TRANSLATION] "Pre-approval of staff expenses": [TRANSLATION] "Extraordinary expenses or those related to an ad hoc activity (\$250 or more in travel or foreign travel expenses, participation in a trade show, conference or convention) must be pre-approved by the president⁴³ or the vice-president of finance."

In addition, the heading entitled [TRANSLATION] "Approval of staff expenses by the supervisor" states the following: [TRANSLATION] "Approval by the immediate supervisor (president or vice-president of finance) of costs pertaining to travel and accommodation, entertainment, participation in a training activity, trade show, conference or convention, in Quebec or abroad. In the case of the CEO, the chair of the audit committee authorizes the reimbursement of the aforementioned expenses."

The document make no mention of approval of the expenses incurred by Technoparc Montréal's other board members.

Having clarified these details, we examined the expense reports submitted by and reimbursed to four persons, the CEO, the vice-president of finance and two managers, for the years 2012, 2013 and the first 10 months of 2014, in order to assess the extent to which the described procedures were reflected in Technoparc Montréal's operations. For each expense report submitted, we specifically looked for evidence that approval was obtained in compliance with the described procedure, verified the accuracy of the reimbursements made and examined whether the supporting documents provided were adequate.

⁴² Document entitled "Main administrative procedures in force at Technoparc Montréal."

⁴³ According to information obtained, this refers to the CEO of Technoparc Montréal.

The document describing the administrative procedures in force at Technoparc Montréal indicates that the reimbursement of expenses must be approved as shown in Table 1.

Table 1 – Approval of Staff Expenses

Expenses submitted by	Expenses approved by
CEO	Chair of the audit and property risk management committee
Vice-president of finance	CEO
Managers	CEO or vice-president of finance

Our examination of the expense reports of the four people chosen revealed that a total of 223 expense reports had been submitted by them during the three years⁴⁴ of the period audited. In 32 (14.3%) of the 223 reports submitted, we found no evidence of any approval. These expense reports were those of the CEO (29 reports) and the vice-president of finance (3 reports). We also found that 10 (4.5%) of the 223 expense reports examined had been approved by someone other than the person named in the described administrative procedure. These 10 cases involved expense reports submitted by the CEO. These expense reports were approved by the vice-president of finance rather than the chair of the audit and property risk management committee, as stipulated in Table 1.

We also observed that the expense reports were not always systematically dated by the claimant and/or the person approving the claim. In some cases, the claimants never entered the date on which they had filled out the request. As for the date of approval, we noted that the claim forms used in 2012 and 2013 did not provide space for the person approving the claim to write in the date on which the approval was granted. While the format of the form was amended in 2014 to allow for the date of the claimant's request for reimbursement and the date of approval to be entered, our examination nevertheless found that this information was not always systematically provided.

Regarding the expense reports submitted by the vice-president of finance, representing 35 of the 223 reports examined, we concluded that 21 cheques had been issued by Technoparc Montréal to reimburse these expenses (some expense reports were grouped together for payment purposes). In the case of 10⁴⁵ of these 21 cheques issued, we noticed that the issue date was earlier than the date of approval by the CEO for the majority of underlying expense reports. A fundamental tenet of internal controls is that no cheque is issued and no transaction is entered into the accounts before the reimbursement has been approved. In our

⁴⁴ 2012, 2013 and the first 10 months of 2014.

⁴⁵ Note that 10 cheques were used to reimburse 14 of the 35 expense reports.

opinion, this finding clearly highlights a problem in the performance of incompatible tasks by the vice-president of finance. The latter is responsible for reviewing and approving staff expenses and other types of expenses not exceeding \$10,000, entering these transactions in the accounting ledgers and preparing the cheques. We even found that he is one of the two required signatories of cheques.

In addition to this, the examination of all the cheques paid out for the years 2012, 2013 and the first 10 months of 2014 enabled us to trace 13 cheques for which at least one of the signatures of the authorized signatories was missing. Note that cheques require the signature of two authorized signatories. We also observed that one of these 13 cheques had not been signed at all (by either of the two required signatories) but, astonishingly, it was honoured by the financial institution concerned. One of the 13 cheques was signed by the CEO only, while the other 11 cheques were signed by the vice-president of finance only. The amount of these 13 cheques ranged from \$52 to \$41,752, totalling more than \$70,000. It was only in September 2014 that Technoparc Montréal's minutes of meetings made mention of a resolution⁴⁶ adopted by the board members regarding the appointment of persons as signatories of cheques: the CEO, the vice-president of finance and two board members. Based on the information obtained from the CEO, apparently no resolution regarding such appointments had been made previously. In light of our examination of reports for the period audited, we were nevertheless able to confirm that the usual signatories of cheques are the CEO and the vice-president of finance.

While our objective was not to question the integrity of the vice-president of finance, the fact remains that undertaking incompatible tasks increases the risk of errors being covered up or irregularities not being detected in a timely manner. Therefore, in the interests of more stringent internal controls to protect assets and the reliability and integrity of Technoparc Montréal's financial and operational information, we are of the opinion that measures must be taken to ensure that no one person performs all the tasks involved in the business process leading ultimately to the issuing of cheques by Technoparc Montréal.

On a different note, our audit also examined the accuracy of the expense reimbursements made. We found six cases (2.7%) from among the 223 expense reports examined, in which the amount reimbursed by Technoparc Montréal did not exactly match the amount owed. In five of the six cases (83.3%), the difference was attributable to an error in the formula for calculating the sales tax on the electronic expense report form. In the sixth case, there was an error in the amount claimed for transportation costs (mileage). While the monetary value of the errors detected was on the whole negligible,⁴⁷ these findings nevertheless sow doubt

⁴⁶ Minutes of a session of the board of directors held on September 11, 2014.

⁴⁷ The errors detected totalled close to \$200.

as to the soundness of the internal controls in place, all the more so because the reports showed evidence of a compliant approval.

Finally, although the description of the administrative procedures in force at Technoparc Montréal does not mention any specific requirement regarding the particular specifications of supporting documents that must be submitted by staff for reimbursement purposes, we nevertheless examined this aspect based on best practices.

The results of our examination of the supporting documents for the 223 expense reports submitted in 2012, 2013 and during the first 10 months of 2014 by the four people in our sample⁴⁸ are presented in Table 2.

Table 2 – Examination of Supporting Documents Submitted for Reimbursement of Expenses

Quality of supporting documents submitted	2012	2013	2014 ^[a]	Total no. of expense reports examined
Adequate	54 (73%)	61 (68%)	36 (61%)	151 (68%)
Inadequate or missing	20 (27%)	29 (32%)	23 (39%)	72 (32%)
Total no. of expense reports examined	74 (100%)	90 (100%)	59 (100%)	223 (100%)

^[a] For the months of January to October inclusively.

As can be seen, we found 72 expense reports from among the 223 (32%) reports examined in which there was at least one inadequate or missing supporting document, for a total of 83 supporting documents ranging across the categories shown in Table 3.

⁴⁸ As previously stated, our sample consisted of the CEO, the vice-president of finance and two managers.

Table 3 – Distribution of Inadequate or Missing Supporting Documents by Category

Category	Number of supporting documents involved	Percentage
Credit card statements	37	45%
Credit card or debit card transaction receipts ^[a]	23	28%
Electronic payment statements	9	11%
Unsigned or blank mileage forms	8	9%
Missing or partial invoices	6	7%
Total	83	100%

^[a] Note that the transaction receipts submitted for reimbursement were, in all cases, for meals claimed as entertainment expenses.

Based on best practices for stringent internal controls, all expenses claimed must be duly accompanied by supporting documents attesting to the facts and accuracy of the transactions made. The supporting documents submitted must also be original and sufficiently detailed source documents, such as an invoice, which can corroborate that the expenses claimed are justified and are eligible for reimbursement by the organization. Accordingly, credit card statements, credit card or debit card transaction receipts and electronic payment statements are not acceptable supporting documents for the purposes of approving a reimbursement. All these documents imply that an original invoice was issued. By accepting to reimburse expenses on the basis of these documents, Technoparc Montréal leaves itself open to the risk of paying twice if the original invoice were to be submitted later on another expense report and the duplication were to go undetected. It should be mentioned, however, that our audit did not find any example of the realization of such an inherent risk.

In order to set clear safeguards and ensure transparent and stringent management of the process for reimbursing the expenses of staff and board members, we believe that it would have been timely for Technoparc Montréal to put in place formally approved frameworks establishing the nature of the expenses eligible for reimbursement, the supporting documents required, the dollar limits and the circumstances in which expenses would be reimbursed by Technoparc Montréal.

We conclude that there is a need for Technoparc Montréal to review its practices and immediately put in place the necessary corrective measures to tighten its internal controls.

4.3.1.B. Recommendation

We recommend that, in order to tighten internal controls and foster more transparent operations management, Technoparc Montréal review its administrative practices and take the necessary corrective measures to put in place management frameworks approved by the board of directors for all aspects related to:

- rules for delegating the authority to approve expenses;
- reimbursement of eligible expenses of staff and board members.

Business unit's response:

[TRANSLATION] The policy framework for delegating authority to approve expenses already exists and will be updated, including the list of eligible expenses and related supporting documents required. This policy will be approved by the audit and property risk management committee and submitted to the board of directors.

Since January 2015, in compliance with the requirements of the auditor general, Technoparc Montréal has reviewed the documentary evidence (supporting documents) required for the reimbursement of an expense. (Planned completion: May 2015)

4.3.1.C. Recommendation

We also recommend that, in order to tighten internal controls aimed at protecting assets and ensuring the reliability and integrity of financial information, Technoparc Montréal take the necessary measures to ensure proper separation of incompatible duties so that all operational tasks leading to the issuing of cheques cannot be entrusted to only one person.

Business unit's response:

[TRANSLATION] The processes and signing authority will be analyzed and recommendations sent for approval to the audit and property risk management committee and to the board of directors.

In spite of the small size of the organization, we will review the operational structure of management activities to ensure a separation between incompatible management functions (e.g., approval of expenses and issuing of cheques). (Planned completion: May 2015)

4.3.2. Awarding of Contracts

4.3.2.A. Background and Findings

While Technoparc Montréal is an NPO to which the City allocates annual funds and the organization is included in the reporting entity for the purposes of consolidating the City's financial statements, it is nevertheless not considered to be a paramunicipal agency. Indeed, from the start, this organization was not created under the *Charter of Ville de Montréal* but under special legislation, the *Act respecting the Ville de Saint-Laurent*, which applied to Saint-Laurent borough prior to the 2002 municipal merger. This means that Technoparc Montréal is not subject to the rules that apply to the City in the awarding of contracts, as prescribed under Section 573 of the *Cities and Towns Act*.⁴⁹

Accordingly, Technoparc Montréal is required to adopt its own operational framework. In light of the information contained in the document entitled [TRANSLATION] “Main administrative procedures in force at Technoparc Montréal” and additional information obtained, it seems that no contract is ever awarded as a result of a public call for tenders. Depending on the monetary value, contracts are awarded privately or following a call for tenders by invitation to at least three suppliers. We found no evidence, however, that this mode of operation has been formally approved by Technoparc Montréal's board of directors.

Based on information obtained, the recommended mode of operation can be summed up as shown in Table 4.

Table 4 – Method of Awarding Contracts and Delegating Authority to Approve Expenses

Amount	Expense approval (hierarchy level)	Mandatory submission ^[c]
Less than \$250	Employee	No
\$250–\$999	Project manager	No
\$1,000–\$9,999	Vice-president of finance	No
\$10,000–\$24,999 ^[a]	CEO	Yes
\$25,000 and above ^[b]	Board of directors	Yes

^[a] Unless decided otherwise by the CEO.

^[b] Unless decided otherwise by the board of directors for reasons of efficiency, quality of the suppliers or cost savings.

^[c] Mandatory submission requiring the invitation of at least three suppliers.

In order to appreciate the extent to which the recommended mode of operation was applied, after reviewing expenditure items we selected three contracts at random for each of the fiscal

⁴⁹ CQLR, Chapter C-19.

years covered by our audit,⁵⁰ for a total of nine contracts. In our sample, five of the nine contracts could be awarded privately while the other four were subject to a call for tenders by invitation, in compliance with the prescribed mode of operation for amounts ranging from \$10,000 to \$24,999.

Our examination of the supporting documents for these four contracts revealed that only one had been the object of the prescribed call for tenders by invitation. In that case, while the method of awarding the contract followed the prescribed procedure, we were unable to find any documentation showing the analysis of the proposals received or the selection of the bidder retained.

In the other three cases, the contract was awarded privately, this being a more appropriate approach in the opinion of the CEO. This is allowed according to the mode of operation described above. Here again, we found no documentation justifying the reasons for the decision to deviate from the prescribed way of awarding contracts. It should be noted, however, that the four contracts chosen were duly approved by the CEO.

In our opinion, in the interests of ensuring transparent management of decisions taken, given the public sums that the organization receives, it would be appropriate for Technoparc Montréal to put in place a procurement policy approved by its board of directors, which, in addition to setting the rules for soliciting, selecting and approving suppliers, should stipulate the obligation to justify and document the method of awarding contracts, analyzing proposals and choosing the supplier retained.

4.3.2.B. Recommendation

We recommend that, in the interests of greater transparency of the decisions taken and fairness towards suppliers, Technoparc Montréal put in place a procurement policy formally approved by its board of directors, stipulating among other things:

- **the rules for soliciting, selecting and approving suppliers;**
- **the obligation to justify and document the method of awarding contracts, analyzing proposals and choosing the supplier retained.**

Business unit's response:

[TRANSLATION] The rules that currently exist for approving expenses are followed by all members of staff. The same holds true for terms and conditions for awarding contracts based on their value (<\$25,000 and >\$25,000). In the latter case, at least three suppliers must be solicited and a weighting grid takes into account price,

⁵⁰ 2012, 2013 and the first 10 months of 2014.

expertise and experience for professional services and price only for a comparable product.

Be that as it may, we will improve our purchasing procedure by updating a policy clarifying the procedure, rules and documentation related to this policy. It will then be approved by the governance committee and submitted to the board of directors. (Planned completion: November 2015)

4.3.3. Work Contract of the Chief Executive Officer

4.3.3.A. Background and Findings

A work contract approved by the board of directors is signed annually by Technoparc Montréal and the CEO to set his working conditions. For the audited period,⁵¹ we examined the elements constituting the remuneration paid to the CEO.

Our examination of the work contract in effect for 2012 and 2013 found that, in addition to a base salary, the prescribed remuneration included other benefits paid by Technoparc Montréal, including:

- a commission on the sale of lands belonging to Technoparc Montréal;
- a car allowance of \$1,250 per month, in addition to reimbursement of the costs of operating and using his automobile in the performance of his duties.

For the year 2014, we noted that the elements of the CEO's work contract were essentially the same, with the exception of the following two amendments:

- The clause relating to the commission on the sale of lands was removed and replaced by the awarding of a bonus to be determined based on the CEO's performance evaluation;⁵²
- The clause relating to the car allowance was amended so that, from now on, rental fees and the cost of operating and using his automobile in the performance of his duties are included in the basic \$1,250 monthly allowance.

While the clause relating to the payment of a commission on the sale of lands was removed from the work contract in 2014, we observed, nonetheless, that for the years 2012 and 2013, this clause would have entitled the CEO to receive commissions totalling \$29,998 and \$97,325, respectively. Considering that the CEO's annual base salary was slightly more than \$200,000 during these two years, these added commissions, without counting the other benefits agreed to, appear questionable at the very least, given that this is an NPO that is largely subsidized by the City.

⁵¹ 2012, 2013 and the first 10 months of 2014.

⁵² At the time of our audit in October 2014, the amount of the bonus paid to the CEO was still unknown.

We also found that the provision of a car allowance (\$1,250/month or \$15,000/year) entitled the CEO to receive reimbursements in 2012, 2013 and 2014 of \$20,914, \$18,901 and \$15,000, respectively. The payments for 2012 and 2013 were higher because the work contract allowed the CEO to be reimbursed for the costs of operating and using his own car in addition to the basic allowance. While Technoparc Montréal limited the maximum car allowance payable to the CEO to \$15,000/year beginning in 2014, this benefit still appears very generous compared with the administrative frameworks in force at the City for these purposes. Depending on the case, the City authorizes payment of a maximum car allowance of \$3,372/year. We believe that Technoparc Montréal would gain from revising its approach and putting in place an administrative framework governing the payment of car allowances and other reimbursable travel expenses. This framework could be supported by a comparative analysis of industry practices and those in force at the City.

4.3.3.B. Recommendation

We recommend that, in the interests of responsible use of public funds, Technoparc Montréal take the necessary steps to put in place an administrative framework governing staff benefits, to be supported by a comparative analysis of industry practices and those in force at the City.

Business unit's response:

[TRANSLATION] Technoparc Montréal's wage policy is based on a 2009 independent study conducted by Groupe Aon on behalf of the Regroupement des organismes de développement économique du Québec. The salary framework and employee benefits in force at Technoparc Montréal comply with the essential parameters of this study and are comparable to industry norms.

*The human resources committee will review the elements of the wage policy and regulatory framework for all Technoparc Montréal's employees, compared with similar organizations and what the City offers. Against this backdrop, we will collect data in order to propose an adjustment to staff conditions. **(Planned completion: November 2015)***

4.4. Sale of Lands

Technoparc Montréal has an inventory of lots on the Saint-Laurent Campus. At the time of our audit, 26%⁵³ of the total area of the campus spread across 18 lots was unsold. Appendix 6.2 shows a map of Technoparc Montréal lots sold from 2012 to 2014, as well as those still available for sale.

⁵³ Approximately 6 million sq. ft. over a total area of almost 23 million sq. ft.

Table 5 presents some data related to the sale of lots from 2012 to 2014. It should be noted that three of the five completed sales, representing almost 75% of the total amount of the sales in these years, were to the same real estate promoter. As explained in greater detail in Section 4.4.3, this promoter benefited from the removal of the mandatory six-month building clause imposed by Technoparc Montréal on all land purchasers on its territory. At the time of our audit, no development project had yet been planned for these lots.

Table 5 – Land Sales for the Years 2012 to 2014

Year	Purchaser	Lot no.	Surface area in sq. ft.	Price per sq. ft.	Sale price	Percentage
2012	Buyer A (and owner of an adjoining lot)	Part of Lot 10	26,882	\$15.00	\$403,230	2%
2012	Promoter B	Lot 1163827	181,553	\$9.00	\$1,633,977	8%
2013	Promoter B	Lots 9 and 10	576,741	\$11.25	\$6,488,336	32%
2014	Promoter B	Lots 11 and 12	645,333	\$10.13	\$6,538,509	33%
2014	Foreign company	Lot 14	679,612	\$7.21	\$4,900,000	25%
Total sales					\$19,964,052	100%

We analyzed these sales to determine whether the marketing and setting the sale price, permitted uses, sales conditions and approval process complied with Technoparc Montréal's guidelines and mission.

As previously mentioned, the City and IQ are creditors of Technoparc Montréal. The loan agreements reached between the parties stipulate, in particular, that:

- The debts are interest-free but, upon full repayment of Technoparc Montréal's debt to the City and IQ, the creditors will continue to be entitled to a share of the net sale price of the lots;
- The mortgaged lots will be provided as security to the creditors;
- The debt owed by Technoparc Montréal to its creditors is to be reimbursed as percentages of the net sale price of the lots belonging to Technoparc Montréal;
- Technoparc Montréal may retain 20% of the net sale price of the lots mortgaged with the City and 10% of the net sale price of the lots mortgaged with IQ.

The terms and conditions for allocating the net sale prices are presented in Table 6.

Table 6 – Allocating the Net Sale Prices for Reimbursement of Technoparc Montréal’s Debts to Creditors

	City	IQ	Technoparc Montréal
Lots mortgaged with the City and IQ	60%	20%	20%
Lots mortgaged with IQ only	0%	90%	10%

4.4.1. Marketing and Setting a Sale Price

4.4.1.A. Background and Findings

Technoparc Montréal has no documented policy governing the sale of its lots. A flow chart⁵⁴ provided to us suggests, however, that sales are the product of an internal development initiative or a proposal from a real estate agent to his client. Technoparc Montréal’s mission is to foster the economic development of the Island of Montreal, and one component of that mission involves the development of the territory of the Saint-Laurent Campus. To this end, Technoparc Montréal considers that its unsold lots are available for sale at all times. Information regarding the location, area and use restrictions specific to each lot is accessible on Technoparc Montréal’s website. A potential buyer can thus refer to it before contacting Technoparc Montréal directly.

Lots are sold privately and not through a public offering, mainly because the permitted uses of the land, such as the R&D use restriction, are intended to attract a particular client group. Technoparc Montréal targets clients in the aerospace, life sciences, information and communications technologies and clean technologies fields. Its team solicits businesses while the real estate consultants (hereafter “consultant”) that it mandates solicit other real estate agents. According to information obtained, Technoparc Montréal has always used consultants to sell its lots, so that they may provide the necessary support during negotiations and assess real estate projects.

We noted that Technoparc Montréal does not have a written policy for setting the sale price of a lot. Nevertheless, it seeks a sale price that is within fair market value, that is, between the “minimum” price and the “desired” or “asking” price. The minimum price does not correspond to the municipal assessment. The list of prices for lots, including the minimum price and desired price, is updated annually. Technoparc Montréal mandated an independent chartered appraiser to determine the fair market value of its lots. This expert’s assessment report outlined the fair market value of Technoparc Montréal’s unsold lots at June 30, 2009, based, among other things, on a review of comparable sales in this sector.

⁵⁴ Document entitled [TRANSLATION] “Prospecting and proposal structure,” May 2011.

During the period covered by our analysis (2012 to 2014), the fair market values were increased annually by the consultant hired by Technoparc Montréal. However we found no documentation to validate the hypotheses used to increase the fair market values thus established. In our opinion, given the continual rise in property values in recent years, it would have been appropriate to conduct a new independent assessment of the market value of the lots.

Based on information obtained, the upper range of the fair market value (asking price) served as a starting point for negotiations with a potential buyer. Responsibility for certain charges related to the sale could also be the subject of negotiations. For example, we were told that, prior to 2012, Technoparc Montréal negotiated to pay its clients' contributions to parks,⁵⁵ whereas from 2012 to 2014, it negotiated to no longer assume these costs.

Without entering into all the details, let us generally compare this process with that of the City, which also has an inventory of unsold lots. In the latter's case, land is sold in three ways: privately, by a public call for tenders or by a public request for proposals. For example, residential lots that can be developed are generally sold to the highest bidder following a public call for tenders. Industrial and commercial lots are sold privately at their fair market value. Whether the sale is completed after a public offering or privately, the sale price must be in the range of the fair market value. The range between the minimum and maximum fair market values of a lot is established by a chartered appraiser from the Section de l'évaluation immobilière.⁵⁶ The potential for development, permitted use and location are only a few of the parameters used to determine the range of the fair market value of a lot. It is current practice for the fair market value, municipal assessment and differences between these values and the sale price to be documented in order to enable City authorities to make an informed decision before authorizing the sale.

Based on the provisions of its loan agreement with the City,⁵⁷ Technoparc Montréal will not sell a lot below \$4.50/sq. ft. without prior approval from the City. According to information obtained, this price corresponds to the average land acquisition cost. No similar provision is stipulated in the loan contract between Technoparc Montréal and its IQ mortgage creditor.

⁵⁵ According to By-law 08-005 of Saint-Laurent borough, in general a contribution to parks must be required within the framework of a cadastral operation at the time of a subdivision permit request and of a request for a building permit. The owner has the choice of ceding 10% of the site and/or paying the borough a compensatory sum equivalent to 10% of the real value of the site.

⁵⁶ This department reports to the Division évaluation et transactions immobilières of the Service de la gestion et de la planification immobilière.

⁵⁷ According to Section 8.8 of the document entitled [TRANSLATION] "Loan Agreement," dated November 3, 2003 (section not covered by amendments to the agreement of February 15, 2007, and December 9, 2013).

During the period examined, we noted that no lot was sold at a price lower than the average acquisition price (\$4.50) and only one lot was sold below the municipal assessment. In the case of that lot, Technoparc Montréal claims to have received verbal approval from one of its creditors (IQ) for the agreed price. Table 7 presents the difference between the sale price and the minimum price at the time the lots were sold.

Table 7 – Comparison of the Sale Price and the Minimum Price

Transaction date	Purchaser	Lot no.	Municipal assessment per sq. ft.	Minimum price (MP) per sq. ft.	Sale price (SP) per sq. ft.	Difference between SP and MP in %
April 2012	Buyer A (and owner of an adjoining lot)	Part of lot 10	\$6.50	\$10.00	\$15.00	50%
July 2012	Promoter B	Lot 1163827	\$6.50	\$8.50	\$9.00	6%
December 2013	Promoter B	Lots 9 and 10	\$6.50	\$11.25	\$11.25	0%
September 2014 ^[a]	Promoter B	Lot 11	\$8.83	\$9.55	\$10.25	7%
September 2014 ^[a]	Promoter B	Lot 12	\$8.83	\$8.99	\$9.75	8%
September 2014	Foreign company	Lot 14	\$8.30	\$8.99	\$7.21	-25%

^[a] Lots 11 and 12 were sold together. They are presented separately since the minimum price of the two lots was not the same.

In April 2012, the owner of the lot adjoining Lot 10 (buyer A) purchased a parcel of land at Technoparc Montréal needed for its activities. Indeed, for several years, the purchaser had been encroaching on this lot to access his facilities. The parties were hoping to resolve the matter before Lot 10 was sold. Technoparc Montréal was able to demand a much higher sale price than the minimum price (positive difference of 50%).

In the case of the three sales to promoter B, we found that the lots were sold to this purchaser at a price close to the minimum price. According to the City's property expert we consulted during our audit, the agreed sale prices were reasonable and corresponded to the fair market values at the time. Technoparc Montréal maintains that, in spite of all the attempts to solicit potential purchasers, only one other buyer submitted an offer for one of these lots. The offer was accepted by Technoparc Montréal but the sale fell through when the buyer withdrew his offer. Even if it is normal practice to sell industrial lands privately, Technoparc Montréal might have gained from issuing a public call for tenders or request for proposals to validate the fair market value of these lots. Had the proposed prices been too low, Technoparc Montréal could have refused to accept any submissions and reserved the right to cancel the call for tenders.

In the case of the sale price of Lot 14, transferred to a foreign company at a price below the municipal assessment and minimal price, negotiations with this purchaser took place over an extended period and required the participation of several stakeholders, including one of

Technoparc Montréal's creditors, IQ. In January 2013, and again in February 2014, Technoparc Montréal offered the land to this purchaser at the price of \$8.00/sq. ft. This price was then 31%⁵⁸ higher than the 2013 municipal assessment of \$6.11/sq. ft. In April 2014, the final agreed price was \$7.21/sq. ft.⁵⁹ It was only when the sale was almost concluded that Technoparc Montréal learned that the municipal assessment of this lot had risen by 36%,⁶⁰ resulting in Technoparc Montréal accepting a price below the municipal assessment.

4.4.1.B. Recommendation

We recommend that, in the interests of fostering a better management framework for its operations, Technoparc Montréal establish a procedure formally approved by its board of directors for the sale of its lands regarding such aspects as:

- **the method of soliciting markets, including the possibility of going to public tender when sales conditions allow;**
- **the setting of a sale price;**
- **the approvals to be obtained.**

Business unit's response:

[TRANSLATION] Members of the audit and property risk management committee deal with all the real estate transaction files. Following analysis by the committee, members make a recommendation for final decision by the board of directors. The management acts as a support to members of the various committees.

The management agreed with members of the audit and property risk management committee on a new documentary framework in order to present a real estate transaction portfolio (purchases-sales) to the committee for the purposes of making recommendations.

*Documentation related to the process of developing the lands held by Technoparc Montréal will be reviewed in order to update the information available regarding the method of soliciting markets and determining the sale price, as well as the stages and required approvals. **(Planned completion: November 2015)***

⁵⁸ Offer price of \$8.00/sq. ft. less the municipal assessment price of (\$6.11/sq. ft.) / (\$6.11/sq. ft.) = 31%.

⁵⁹ Agreed price of \$4.9 M/679,612 sq. ft. (excluding contributions to parks of 10% of the sale price) = \$7.21/sq. ft.

⁶⁰ 2014 municipal assessment (\$8.30/sq. ft.) less that of 2013 (\$6.11/sq. ft.) / (\$6.11/sq. ft.) = 36%.

4.4.1.C. Recommendation

We recommend that, to ensure transparency in the sale of lands and to have all the negotiation parameters at its disposal, Technoparc Montréal:

- improve the documentation supporting the establishment of the fair market values of its lands;
- conduct an independent assessment of the fair market value of its lands at a frequency to be determined by the board of directors.

Business unit's response:

[TRANSLATION] A chartered appraiser will update the market valuation of the lands available for sale. (Planned completion: May 2015)

The changes to the documentation related to land sales, to be developed and approved by the authorities, will stipulate what the required documents should contain, especially in terms of establishing fair market values. (Planned completion: November 2015)

Based on the recommendations of the audit and property risk management committee, the board of directors will decide how frequently this evaluation should be updated. (Planned completion: November 2015)

4.4.1.D. Recommendation

We recommend that, to enable its board members to make an informed decision, Technoparc Montréal document the justification for the difference between the asking price (fair market value) of a lot and the purchase price suggested by the buyer.

Business unit's response:

[TRANSLATION] At each sale, the difference between the asking price and the offer price is discussed with committee members and board members. A list of minimum prices and discount prices exists for all Technoparc Montréal's lands and is available in an electronic version to members of Technoparc Montréal's board of directors and to all staff. (Planned completion: November 2015)

We will assemble the documentation in a single document to make the price setting policy for lands easier to understand. This document will set out the policy governing the sale of lands, which policy will be developed and approved by the authorities and will stipulate what the necessary documentation must contain in order to justify the difference between the asking price (fair market value) for a lot and the purchase price proposed by the buyer, if such is the case. (Planned completion: November 2015)

4.4.2. Permitted Uses

4.4.2.A. Background and Findings

Technoparc Montréal's lands all have R&D use restrictions based on various thresholds (15%, 30% and 85% or headquarters).⁶¹ These restrictions are outlined in a special planning program (SPP)⁶² that applies exclusively to the territory of the Saint-Laurent Campus. This SPP is included in the chapter of the City's urban development plan related to Saint-Laurent borough and is the result of the borough's desire to ensure that the original R&D vocation of the territory is preserved. We noted that the R&D use restrictions stipulate that no purely commercial and industrial activity is permitted on the land. The restrictions also stipulate that the owners must comply with a 40% ratio of green space when landscaping their site, as well as a ratio of a required number of parking spaces. Other provisions are aimed at monitoring the installation, form and appearance of buildings.

Exceptionally, easements applying to the entire territory of Technoparc Montréal were also granted to the first buyer of a lot in order to guarantee the R&D vocation of the territory.⁶³ Even if a zoning change were to occur, these easements would enforce R&D activities on the entire territory. Since judgments could challenge the legal authority of these easements, Technoparc Montréal entered into negotiations with the first buyer and legal steps are under way to abolish them.⁶⁴

Technoparc Montréal considers that the R&D use restrictions are hindering its development. On February 28, 2013, the board of directors approved guidelines to be proposed to Saint-Laurent borough outlining the various amendments allowing for the implementation of the master plan for the Hubert Reeves Eco-Campus and the development of the Saint-Laurent Campus. These guidelines stem from a report produced in November 2012 by a consultant hired by Technoparc Montréal. In doing this, Technoparc Montréal is attempting to demonstrate to the borough that the zoning of the Saint-Laurent Campus is too restrictive and the architecture criteria are more stringent than those of lands located just outside its territory and in other industrial parks. Below are some of the proposed guidelines:

- Technoparc Montréal wants the borough to allow it to include conservation areas when calculating green spaces. Plans are to give a portion of the wetlands located in the Hubert Reeves Eco-Campus to the City to be integrated into a park. By doing so, Technoparc Montréal hopes to bring the ratio of green spaces required for compensation from 40%

⁶¹ With the exception of lots 9 and 10, which allow for commercial and/or R&D activities.

⁶² The SPP is a component of Saint-Laurent borough's urban development plan. It allows for greater clarification of the planning for this sector. The adoption of an SPP by City council represents an amendment to the urban development plan and was preceded by public consultation.

⁶³ Over the years, a total of three easements were granted.

⁶⁴ The board of directors' resolution of February 28, 2013.

to 25% for the undeveloped lands belonging to Technoparc Montréal and other owners of the Saint-Laurent Campus. These lands are located in the eastern and southern parts of the Saint-Laurent Campus. The western part would remain at 40%;

- Technoparc Montréal wants an easing of the R&D definition and wants the term to be replaced in the zoning regulation. It considers this to be a barrier to access since the interpretation of potential buyers might not match that of the persons responsible for applying Saint-Laurent borough's zoning regulation. Apparently, potential buyers see in it the more restrictive criteria used for eligibility for the R&D tax credit while those at the borough do not use these criteria to authorize an occupancy permit. For this reason, Technoparc Montréal has been using the term "innovative activity" for almost a year when talking to potential buyers. By replacing the term, Technoparc Montréal hopes to attract buyers from the new information and communications technologies sector;
- Technoparc Montréal wants to redefine uses by allowing them to be mixed on certain sites, thereby fostering a quality living environment for users. It also hopes to add service areas. The sites in question are located in the eastern and southern portions of the Saint-Laurent Campus. Specifically, Technoparc Montréal suggests setting up commercial businesses on lots 9, 10 and 11. Building a long-term residential facility on Lot 11 has even been considered;⁶⁵
- Finally, Technoparc Montréal hopes to review the minimum R&D ratio threshold on certain lots and extend the zone to allow for the establishment of head offices and administrative centres.

Further to this exercise, Saint-Laurent borough agreed, in 2013, in the wake of an agreement in principle, to reduce the ratio of green spaces as requested by Technoparc Montréal. Prior to revising the urban development plan, minor exemptions will be granted to the owners on a case by case basis, after analysis of the requests. According to information obtained, the borough is open to Technoparc Montréal's requests to expand the service areas but is waiting for the tabling of its new master plan before making any further decisions.

In 2014, to support its new amendment requests, Technoparc Montréal ordered a second report from outside consultants to develop its new master plan for the territory of the Saint-Laurent Campus and the peripheral industrial area. The drafting of this report is expected to include public consultations during which the owners of Technoparc Montréal's lands and its subsidiary zone can voice their concerns about the potential requests to amend the zoning. The master plan is expected to come up with solutions and adjustments to the land-use planning criteria, including installation and development. The tabling of this report is scheduled for May 2015.

⁶⁵ Document entitled [TRANSLATION] "Memo for decision" prepared by Technoparc Montréal, dated February 20, 2013, and report prepared by the IBI-DAA group, preliminary version of November 29, 2012, p. 30.

We also found that Technoparc Montréal's deeds of sale did not include a price adjustment clause in the event of a zoning change. Such a clause enables the sale price to be changed to reflect an increase in the market value of the lands in question, thereby returning the added value of a lot to the seller when there is a zoning change between the selling date and the issue date of a building permit for the site. According to information obtained from City representatives, this clause is systematically included in the City's deeds of sale. Adding such a clause would have enabled Technoparc Montréal to guard against such an event.

4.4.2.B. Recommendation

We recommend that Technoparc Montréal add a specific clause to its deeds of sale enabling it to update the sale price in order to guard against an increase in the market value of a lot between the selling date and the date a building permit is issued.

Business unit's response:

[TRANSLATION] In general, Technoparc Montréal sells its lands with a rather short building clause (from 6 to 8 months compared with 2 years for the City), which, in our opinion, does not justify updating the sale amount.

*On the other hand, in the case of a land sale without the obligation to build, the audit and property risk management committee will study the possibility of inserting such a clause during negotiations on the purchase price to account for any potential change in zoning (highly unlikely) or in the valuation conditions of the site. **(Planned completion: November 2015)***

4.4.3. Sale Conditions and Approval Process

4.4.3.A. Background and Findings

Mandatory Six-Month Building Clause

Based on the information obtained from Technoparc Montréal's management, all deeds of sale for lots on the Saint-Laurent Campus historically contained a clause requiring the purchaser to begin construction of his project within six months of the sale. In the event of default, the clause allowed Technoparc Montréal to buy back the land from the purchaser at a price below the price paid. According to Technoparc Montréal, the inclusion of this clause was not mandatory but rather was a way of ensuring that the purchaser would help develop the park as desired.

As a general rule, any deed of sale for industrial, commercial or residential land held by the City that can be developed stipulates such an obligation on the purchaser to build on the site within a pre-determined timeframe. In the event that the purchaser fails to comply with this obligation, a security guarantee is attached to this clause. The guarantee may take the form of a cancellation clause⁶⁶ inserted in the contract, a first mortgage or a bank guarantee.

On April 14, 2011,⁶⁷ Technoparc Montréal's board of directors designated four lots⁶⁸ that it hoped to sell through a real estate broker. Based on information obtained, Technoparc Montréal needed the money to reimburse debts owed to the City and IQ. According to the CEO, discussions took place with the City during which it indicated its preference for a short-term reimbursement. The City did not, however, state this request in writing.

Seeing the mandatory building clause as another impediment to the sale of its lands, Technoparc Montréal's board of directors decided, during discussions at its meeting of April 14, 2011, to allow this clause to be removed for certain sales. However, we were unable to find any explicit mention of this in the minutes of the meeting. While we are in no doubt that the board members were aware of this decision, it would have been important for the minutes of this meeting to record the discussions and to clearly state the reasons for this decision given the singular and specific nature of the resolution. In our opinion, it is critical that all discussions held and decisions taken during board meetings be adequately recorded in the minutes, not only to protect the organization against potential law suits, for example, but also to enable board members who were absent to acquaint themselves with the discussions and decisions taken on the various topics addressed at the meeting. It should be noted that no board member or board observer named by the City was present at this meeting.

From our reading of the minutes of subsequent meetings of Technoparc Montréal's board of directors and its audit and property risk management committee, it appears that its board members questioned this decision on several occasions, in particular:

- On March 15, 2012, a board member who had been absent when the decision was made to remove the mandatory building clause asked if the sale proposals for the lands in question included a six-month building timeframe. The vice-president of finance offered the following clarification:

[TRANSLATION]

... in general, purchase offers stipulate a six-month period to complete the construction of a building, failing which the seller may take back the land.

⁶⁶ This refers to provisions in the contract by which the parties foresee, in the case of total or partial failure to perform obligations, that the resolution would be applied to the fullest extent of the law.

⁶⁷ Minutes of the meeting of Technoparc Montréal's board of directors held on April 14, 2011.

⁶⁸ Lots 3479349, 1163848 (lots 9 and 10), 2132604 (lot 14) and 1163827 (promoter B option).

- On April 19, 2012, board members and board observers representing the City [TRANSLATION] “shared their concern that removing this clause hampered the development of the Technoparc.” They asked that the transactions be well documented;
- In 2013, a board member was concerned that, by selling its lands before revisions were made to its strategic plan, Technoparc Montréal would not get the best price;⁶⁹
- In 2013, the notion that the sale of lands should be in the interests of the organization and not simply to achieve the objective of \$2.5 million in land sales per year, as stipulated in one of the CEO’s annual performance evaluation criteria,⁷⁰ was even raised.

During the period covered, three sales were made to a real estate promoter this clause removed. The most recent sale to promoter B involved lots (11 and 12) that were not initially covered by the board’s resolution allowing the removal of the clause in 2011. The board of directors authorized the transaction by requiring, for the first time, that promoter B render an accounting of his efforts to develop the site. To date, no status report has been prepared since the sale in September 2014, the six-month timeframe having not yet elapsed. Some board members seem to question the promoter’s ability to implement the development projects since there has been no actual construction or construction plan on the lands acquired by promoter B.

As previously stated, at the time of our audit, none of the lots sold with the removal of this obligation to build within six months had been the focus of any development project. Technoparc Montréal runs the risk that the purchaser could resell the land as it pleases and benefit from potential added value, thereby opening the door to property speculation. That being said, to guard against such a possibility, it would have been good practice for Technoparc Montréal to include a return of profit clause or other pre-emptive right in its deed of sale should the purchaser sell the land in less than five years (see Recommendation 4.4.2.B). This was not done.

Approval of Land Sales by the Board of Directors

All land sales must be approved by Technoparc Montréal’s board of directors. Since 2013, the terms and conditions of the sale of a lot have been analyzed by the audit and property risk management committee.⁷¹ The committee’s recommendations are then shared and discussed at a meeting of the board of directors. By resolution, the board mandates

⁶⁹ Minutes of the meeting of the audit and property risk management committee held on September 30, 2013.

⁷⁰ *Ibid.*

⁷¹ The first discussions and recommendations of this committee regarding the sale of a lot are found in the minutes of the meeting of the audit and property risk management committee held on September 30, 2013.

Technoparc Montréal's CEO to either negotiate a sale according to the terms and conditions that it establishes or to accept an offer to buy as submitted.

For four of the five sales analyzed,⁷² we found shortcomings in the approval process for land sales. These were mainly inaccuracies or missing information in Technoparc Montréal's minutes of meetings. The following facts were observed:

- The sale price of Lot 1163827 as shown in the deed of sale (\$9.00/sq. ft.) was less than the price approved by the board members (\$9.50/sq. ft.), based on the resolution of the board of directors, for a total difference of \$90,777. The minutes did not state any reasons justifying this difference;
- Aspects related to discussions and major resolutions were poorly documented in the minutes. For example:
 - The resolution that should have contained the board members' approval for removal of the mandatory construction clause did not mention it explicitly,
 - No mention was found pertaining to the payment of \$100,000 in professional fees to the consultant in spite of the termination of his contract. This point is addressed in Section 4.4.4.

The result was that board members who were absent from the meeting did not have a fair representation of the discussions held and decisions made. Since the minutes are intended to be a permanent memory of what is discussed and decided at meetings, it is important that they be an accurate and objective reflection of the ideas formulated and decisions made by members so that all interested persons are able to refer back to them over time.

Approval of Land Sales by the Creditors

As previously mentioned in this report, following appropriation notices served by Technoparc Montréal between 1992 and 1998, the City assumed responsibility for compensating the expropriated owners. Consequently, under a loan agreement, Technoparc Montréal acknowledged its debt to the City and a first mortgage guarantee was recorded on behalf of the City on certain lands held by Technoparc Montréal.

In reviewing the loan agreement signed by the parties, we found that Section 8.8 stipulates the following:

⁷² The sale to buyer A (owner of an adjoining lot – part of lot 10) as well as the three sales to promoter B (lot 1163827, lots 9 and 10 and lots 11 and 12).

[TRANSLATION]

Technoparc agrees to inform the Ville de Montréal in advance of the sale, transfer or projected disposal of all or part of the property or all or part of the rights held in the property [...]

Technoparc agrees not to sell vacant lots [...] at a price below [...] \$4.50/sq. ft., except with the prior approval of the Ville de Montréal^{73,74} [...]

According to information obtained, the set price of \$4.50/sq. ft. corresponds to the average acquisition cost of the lands held by Technoparc Montréal. Since this is an interest-free loan, the City expects to receive a return on its loan equivalent to the added value of the land versus its cost. Consequently, the higher the sale price the greater the return for the City. Since the City's approval is only required for a sale below \$4.50/sq. ft., it cannot oppose a sale whose agreed price is slightly above \$4.50/sq. ft. but below the fair market value or municipal assessment of the lot. In our opinion, this places the City in a risky position regarding the return on its loan. While the risk is mitigated by the fact that it is in Technoparc Montréal's interest to maximize the sale price since it receives a 20% share of the net sale price, the risk is no less real.⁷⁵ It should be noted that at the time of renewing the loan agreement in 2007, the average municipal assessment of Technoparc Montréal's unsold lots was \$4.55/sq. ft.⁷⁶ In 2014, the average municipal assessment was \$8.83/sq. ft., considerably higher than the minimum sale price stipulated in the loan agreement.

As for the IQ, the *mortgage guarantee* signed by the parties stipulates that Technoparc Montréal will not sell a mortgaged property without the written consent of its creditor. Section 3.9 of this document states that: [TRANSLATION] *"The Debtor shall not dispose of or rent the mortgaged property and, in particular, shall not grant any licence related to any intellectual property, without the written consent of the Creditor."*^{77,78}

In the opinion of Technoparc Montréal's CEO, the mortgage creditors, be it the City or IQ, should be consulted at the time of the sale of a lot only if the offer price is below the average acquisition cost (approximately \$4.50/sq. ft.). The CEO also mentioned that the creditors delegate representatives to Technoparc Montréal's board of governors. Consequently, these representatives have access to all the relevant land sale documents and the creditors are thus kept informed of all sales.

⁷³ Our underlining.

⁷⁴ *Loan Agreement*, November 3, 2003 (section not covered by amendments to the agreement of February 15, 2007, and December 9, 2013).

⁷⁵ When a lot is mortgaged to the City and IQ, Technoparc Montréal retains 20% of the net sale price and reimburses 60% to the City and 20% to IQ (see Table 6).

⁷⁶ *Assessment Report of Cushman & Wakefield Lepage*, June 2009, page 22.

⁷⁷ Our underlining.

⁷⁸ *Mortgage guarantee*, December 14, 2007.

Overall we found no evidence that the City was informed of land sales other than through its representatives. Since the City did not officially designate someone in charge, we found no attempt on its part that it had tried to verify that Technoparc Montréal was complying with this commitment.

As for IQ, we cannot attest to the fact that it ever agreed in writing to the sale of mortgaged lots on its behalf. Technoparc Montréal's CEO maintains that he received verbal authorization from IQ for a sale at a price slightly below the municipal assessment for the lot.

By failing to meet its commitments to its creditors, Technoparc Montréal runs the risk of placing itself in a default situation. In our opinion, in order to comply with the requirements set out in the loan agreements, Technoparc Montréal must obtain proof of prior approval, attach it to the internal file and enter this information in the minutes.

Finally, to ensure that the best sale price is obtained for the lands it holds as a loan guarantee, we believe that it would be timely for the City to:

- increase the sale price threshold requiring its prior approval;
- require Technoparc Montréal to obtain written approval from the City;
- take the necessary measures to ensure that these amendments are reflected in the loan agreement.

4.4.3.B. Recommendation

We recommend that, to increase transparency regarding facts discussed, actions undertaken and decisions made, Technoparc Montréal improve the recording of the minutes of meetings of the board of directors regarding all aspects related to land sales, including obtaining the necessary approvals from the mortgage creditors.

Business unit's response:

[TRANSLATION] The documentation was already reviewed in February 2015 for the purposes of documenting all essential aspects of a real estate transaction and, if necessary, it will be adjusted based on the new policy governing real estate transactions.

*Moreover, terms and conditions for following up on real estate transactions will be determined with the City to secure its agreement and to comply with potentially amended mortgage agreements with the City and Investissement Québec. **(Planned completion: November 2015)***

4.4.3.C. Recommendation

We recommend that, to comply with its commitments to its creditors and avoid placing itself in a default situation, Technoparc Montréal ensure that:

- the City is informed beforehand of the sale of a mortgaged lot on its behalf and the related documentary proof is preserved;
- written approval is obtained from Investissement Québec prior to the sale of a mortgaged lot on its behalf.

Business unit's response:

[TRANSLATION] Based on talks to be held with the City and Investissement Québec, the new policy governing the real estate transactions will clarify the agreed terms and conditions for follow-up and information.

*Management will ensure that this policy is followed up in order to document and inform stakeholders throughout the decision-making process. This is currently the case with Investissement Québec and is planned with the City. On the other hand, in the latter case, three representatives sit on Technoparc Montréal's board of directors and are well positioned to obtain all information as it becomes available. In addition, each sale cannot be completed without the permission of both mortgage creditors: the City and Investissement Québec. **(Planned completion: November 2015)***

4.4.3.D. Recommendation

We recommend that, in order for the City to be assured that Technoparc Montréal obtains the best sale price for the lands designated as its loan guarantee, the Direction générale of the City take the necessary measures to:

- require that Technoparc Montréal obtain prior written approval, at all times, from the City's designated representative for the sale of land, including the disclosure of specific sales conditions such as the removal of the mandatory building clause, to ensure that the organization's obligations as set out in the management contract with the City are met;
- increase the sale price threshold requiring the City's prior approval;
- ensure that the required amendments are reflected in the loan agreement signed by the parties.

Business unit's response:

*[TRANSLATION] The Direction générale has mandated the manager of the Service du développement économique, along with the Service de la gestion et de la planification immobilières, to ensure that this recommendation is implemented. **(Planned completion: June 2015)***

4.4.4. Professional Fees Paid to the Real Estate Consultant

4.4.4.A. Background and Findings

On February 28, 2011, retroactive to February 1, 2011, Technoparc Montréal signed a contract with a real estate consultancy firm (hereafter “the consultant”) to manage the rental and sale of its property. According to the contract, the consultant would receive a fixed monthly amount of \$5,000 for its representatives’ prospecting services on behalf of Technoparc Montréal. In addition to this remuneration, fees would be paid for each land sale. These fees amounted to \$0.20 per square foot of area sold, to a maximum of \$100,000 per sale.

We noted, to begin, that the contract with the consultant was signed prior to approval by the board of directors. In fact, the consultancy contract was signed on February 28, 2011, whereas the board’s resolution authorizing the recruitment of the consultant was dated April 14, 2011. Furthermore, we noticed that the fixed payment (\$5,000) and professional fees (\$0.20 per square foot of surface area sold), as well as the terms and conditions of the contract, were not discussed at the board’s meeting. The CEO is the signatory to the contract. Based on the prescribed mode of operation at Technoparc Montréal, the board of directors is the designated authority for approving expenses above \$25,000. Consequently, this contract should not have been signed before its terms and conditions were formally approved by Technoparc Montréal’s board of directors.

Table 8 details the total amount of remuneration paid (before taxes) by Technoparc Montréal to the consultant on land sales from 2012 to 2014.

Table 8 – Total Remuneration Paid to the Consultant (2012–2014)

Year	Remuneration (before taxes)	Fees (before taxes)	Total remuneration
2012	\$55,000	\$41,691	\$96,691
2013	\$65,000	\$100,000	\$165,000
2014	\$17,150	\$200,000	\$217,150
Total	\$137,150	\$341,691	\$478,841

In early 2014, Technoparc Montréal drew up the terms and conditions to end the contract with the consultant⁷⁹ as of January 31, 2014. From that date on, the consultant would no

⁷⁹ [TRANSLATION] “Agreement governing the termination of the service contract dated February 28, 2011,” in force as of January 31, 2014.

longer receive a fixed monthly sum but, in exchange for services rendered, could receive remuneration based on an hourly rate of \$150 during the sale period that ended in November 2014. This agreement, signed by the CEO, contains a list of protected files⁸⁰ for which the consultant could receive fees. However, we found no discussion or decision by the board of directors regarding the agreement to terminate the contract. We noted that Technoparc Montréal paid fees of \$100,000 for each of two sales in 2014. While one⁸¹ of the sales for which fees were paid was not part of the list of protected files, we consulted documents that showed that the consultant had approached this purchaser prior to the notice of termination of its contract, thereby justifying the payment of the fees. This decision was not documented in the minutes of board meetings.

4.4.4.B. Recommendation

We recommend that, to ensure prudent management of operations in compliance with established rules for delegating authority, Technoparc Montréal take the necessary measures to ensure that all contracts and their related terms and conditions are submitted to the board of directors for approval prior to their signing.

Business unit's response:

[TRANSLATION] Based on the review of the procurement policy, required approval levels will be established according to the value of the contracts and members of the human resources committee and of the board of directors will be involved in decision making. (Planned completion: November 2015)

4.5. Strategic Planning

4.5.A. Background and Findings

Section 10 of the preamble of the management contract (2013–2017) signed between the City and Technoparc Montréal for the annual financial contribution of \$2.6 million stipulates that *[TRANSLATION] “[...] the Parties concede that a new agreement must be supported by an explicit business plan covering at least the period of the agreement and allowing for progress to be measured along the way.”*⁸² As well, Section 4.8 stipulates that Technoparc Montréal's obligations include *[TRANSLATION] “to submit to the City [...] a strategic development plan for its activities for the remaining period of the current agreement.”*

⁸⁰ List of files for which the real estate consultant could claim remuneration if the sale was completed or promised prior to the deadline of the set period (Appendix E of the termination agreement).

⁸¹ Commission paid on the 2014 sale to promoter B.

⁸² Our underlining.

Strategic planning or the preparation of business plans was already part of Technoparc Montréal's management practices. We found that it had established a new strategic plan for the period from 2014 to 2017, outlining the organization's main directions and objectives. The steps leading to the adoption of this plan by Technoparc Montréal's board of directors on December 19, 2013, began in December 2012. At the very least, this strategic plan should have been harmonized with the directions of the strategic economic development framework adopted by the City. In the absence of a designated person responsible for the dossier, we found no evidence that Technoparc Montréal's strategic plan had been validated by the City.

As part of the follow-up process in place, we noted that Technoparc Montréal's management prepares a detailed action plan annually with strategic directions and fixed objectives. For the purposes of our audit, the action plans for the years 2012, 2013 and 2014 were obtained and examined. Overall we found that these action plans established the directions, objectives, envisioned strategy and action priorities for the organization. As well, each action priority was generally accompanied by indicators to measure whether the priority had been achieved, the resource responsible for implementing it, the timeline and, as the case may be, the required budget.

We also found that Technoparc Montréal prepares an activity report annually containing a variety of information, including the company profile, data on its financial situation, main projects under way and completed activities grouped according to Technoparc Montréal's activity sectors (e.g., aerospace, clean technologies, life sciences, communications), and more. This report is made public on Technoparc Montréal's website. This makes it possible to assess the work done by Technoparc Montréal on the main projects under way, such as:

- The development of the Saint-Laurent Campus (e.g., sale of lots, installation of new businesses, rental of office space, mitigation of problems related to public transit on the campus);
- The Hubert Reeves Eco-Campus, an ambitious sustainable development project consisting of developing Montreal's 21st regional park and 12 buildings totalling 625,000 sq. ft. spread over an area of 2.3 million sq. ft.⁸³ This project is still ongoing;
- the Quartier de la santé de Montréal, in which Technoparc Montréal has been involved since 2008 as a property partner. According to information obtained at the time of our audit, the future vocation of this project is currently under review.

We noted, however, that no status report was regularly prepared to make it possible to assess the degree of progress achieved globally on the objectives set out in the annual action plan adopted by the board of directors. The CEO affirmed that accountability for these action plans

⁸³ 2013 Technoparc Montréal Activity Report, page 23.

is reported through activity reports made public each year. He also mentioned that, at each board meeting, board members are informed about the progress of current files.

We reconciled the activity reports and action plans for 2012 and 2013⁸⁴ to assess to what extent the former reported achievements made on measures prescribed in the latter for these years. Our analysis revealed that it was a fairly onerous job to find concrete achievements or the progress made on each of the measures underlying the objectives set out in the action plan. It also appears that several action priorities contained in the plans were not specifically mentioned in the activity reports. For example, the 2013 action addresses the following:

- The development of the Montreal agglomeration's technology hubs – aerospace sector. One of the action priorities was [TRANSLATION] *“to target businesses interested in short- and medium-term expansion-relocation projects.”* The performance indicator shows *“5 to 10 businesses.”* The activity report made no mention that this had been achieved;
- The design and structuring of world-class projects, of which one is the establishment of a *“Cloud Montreal data processing centre.”* The action priorities were [TRANSLATION] *“to come up with a building concept,” “sign the rental offer” and “prepare plans and estimates and a submission process.”* The activity report was silent on this matter;
- The action plan for repositioning the Saint-Laurent Campus. The plan indicated, among other things, that there was a need to [TRANSLATION] *“review zoning for the Saint-Laurent Campus in terms of uses and installation criteria.”* The activity report did not address this.

While in some respects the action plans set out performance indicators, with no status report it is difficult to assess to what extent the planned actions have been initiated, fully completed or abandoned. In the view of the CEO, measures in the plan that were not undertaken would be reported in the subsequent action plan.

In our opinion, Technoparc Montréal would benefit from improving its accountability procedure by regularly preparing status reports on the various measures in the action plan. This management tool would enable members of the board of directors and, ultimately, the City's designated representative to assess, throughout the year, the extent of progress of planned measures in achieving the directions and objectives of the strategic plan.

4.5.B. Recommendation

We recommend that, to be able to assess the extent of progress on planned measures in achieving the directions and objectives of the strategic plan, Technoparc Montréal improve its accountability procedure by preparing, at a frequency to be determined, status reports on the action plans produced.

⁸⁴ The 2014 Activity Report was not available at the time of our audit.

Business unit's response:

[TRANSLATION] To this end, a monitoring chart will be developed to allow for yearly follow-up and evaluation of the action plan, taking into account the management contract with the City and the directions and objectives set out in Technoparc Montréal's 2014–2017 strategic plan. (Planned completion: August 2015)

5. General Conclusion

While Technoparc Montréal is a non-profit organization (NPO) that is relatively independent in its operations, it is largely dependent on significant funding that the City has been providing for several years to enable it to pursue its activities. A large portion (slightly over 40%) of this funding from the City is used by Technoparc Montréal to pay municipal taxes on the land it holds.

Its mission is especially to contribute to property development on the territory of Montreal by attracting and installing businesses in high-tech sectors. Close to 75% of the lands it held have already been sold and developed or are about to be, with the exception of the sale of three lots to a real estate promoter.

In spite of the monetary value and recurrence of funding allocated to Technoparc Montréal, it is difficult to establish the link between its efforts and real results obtained. To begin, the management contract signed by the parties makes no mention of performance targets and indicators that could be used to assess whether the expected benefits to economic development have been achieved. Furthermore, there does not appear to be perfect coordination and synergy between the actions of the Service du développement économique and various other stakeholders in the sector who also participate in scientific and technological development on the territory of Montreal.

Our audit raised several questions regarding the management practices in force at Technoparc Montréal, both from the standpoint of good governance practices and on an operational level, in particular:

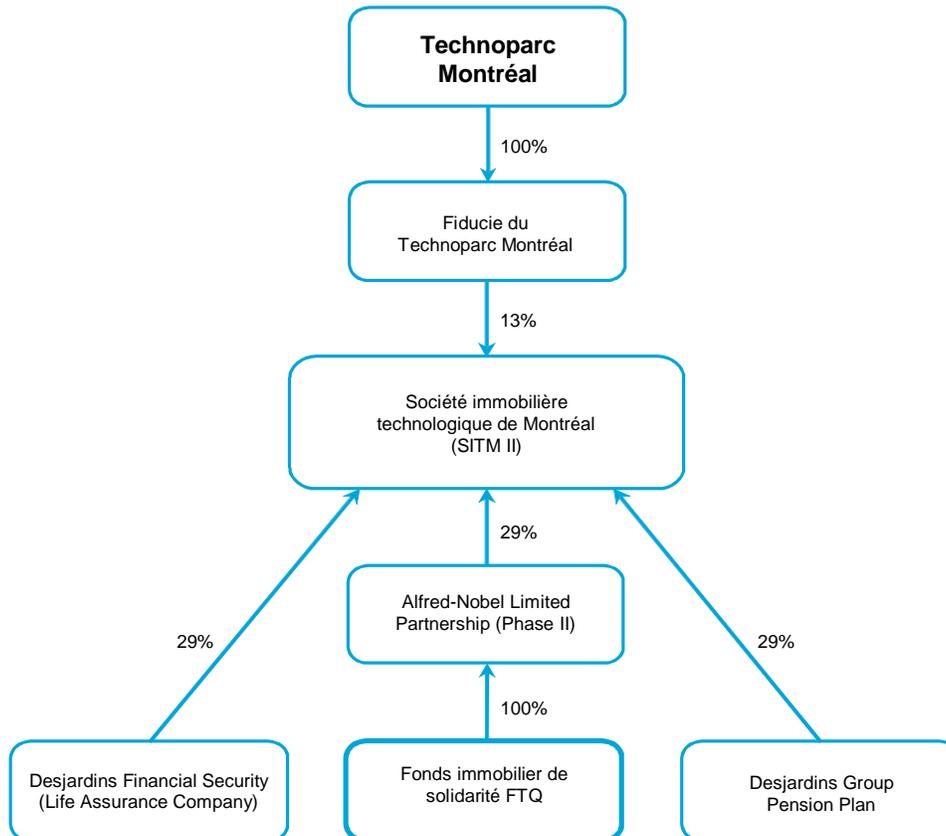
- The adoption by Technoparc Montréal of a governance framework worthy of mention (e.g., governance policy, code of ethics and professional conduct, implementation of a structure providing for the action of three separate oversight committees), while the rules of conduct and operations stipulated in them are not necessarily followed, even by the board members who put them in place;
- A lack of thoroughness in documenting decisions taken, making it sometimes impossible to check the validity of certain facts;

- The absence of administrative frameworks formally approved by the board of directors regarding, among other things, operating costs and internal control shortcomings observed;
- The sale of land, since 2012, to the same real estate promoter with the removal of the clause requiring the purchaser to build on the land within six months of purchase, not the usual practice at Technoparc Montréal;
- An incomplete accountability process, making it difficult to establish a link between the strategic plan, the action plans and the activity reports produced.

Given that Technoparc Montréal is largely funded by the City and that its survival depends on this funding, one could legitimately question why these public municipal funds are not subject to the same thoroughness, prudence and management framework as those used directly by the various City departments.

6. Appendices

6.1. Organizational Chart of Technoparc Montréal



6.2. Map of Technoparc Montréal's Lands



- Technoparc Montréal perimeter
- Hubert-Reeves Eco-Campus perimeter
- ▨ Land sold to buyer A (owner of the neighbouring lot)
- ▨ Lands sold to promoter B
 - 2012: lot 1163827
 - 2013: lots 9 and 10
 - 2014: lots 11 and 12
- ▨ Land sold to the foreign company (lot 14)

Unsold lots

Minimum percentage of innovative activities	
15 %	▨
30 %	▨
85% (or head office)	▨



Report of the Auditor General of the Ville de Montréal to the City Council and to the Urban Agglomeration Council

For the Year Ended December 31, 2014

4.12

MANAGEMENT OF FINANCIAL CONTRIBUTIONS

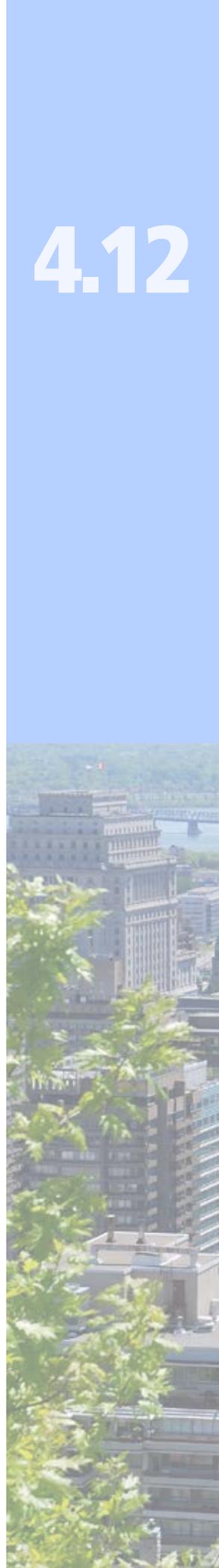


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List of Acronyms

AGM	annual general meeting	DOÉÉPS	Division des orientations, équipements, événements et pratique sportive
BD	board of directors		
CTA	<i>Cities and Towns Act</i>	MHM	Mercier–Hochelaga-Maisonneuve
DCSLDS	Direction de la culture, des sports, des loisirs et du développement social	NPO	non-profit organization
DDS	Division de la diversité sociale	RDP–PAT	Rivière-des-Prairies–Pointe-aux-Trembles
DGIS	Division de la gestion des installations sportives	RLPP	Rosemont–La Petite-Patrie
		VSMPE	Villeray–Saint-Michel–Parc-Extension

4.12. Management of Financial Contributions

1. Introduction

Budgets are allocated to the central departments and to the boroughs to enable them to support paramunicipal bodies and other non-profit organizations (NPOs) operating in various sectors (e.g., the social, community, cultural and economic sectors), mainly in the form of financial contributions. From 2009 to 2013, the sums allocated by Ville de Montréal (the City) in the form of financial contributions increased from \$574 million to \$662 million. Apart from the sums allocated to the AMT¹, the CMM², municipal bodies audited by the auditor general of the Ville de Montréal³, CLDs⁴ and CDECs⁵, the financial contributions granted other organizations increased from \$81 million in 2009 to \$99 million in 2013. Moreover, the City also supports organizations' activities through non-monetary contributions, for example, by providing the free use of premises and sports facilities.

Four authorities are responsible for approving the contributions made to organizations, namely the agglomeration council and City council, in the case of contributions of \$50,000 or more, the executive committee for amounts less than \$50,000 and the borough councils regardless of the amount.

When contributions are to be approved, a decision-making record, generally accompanied by an agreement reached between the City and the organization, is presented to the competent authority. Two chapters of a guide produced by the Direction du greffe in 2011 deal with the content and the presentation of decision summaries concerning financial contributions. The decision summaries must namely describe the organization's activities as well as the activities for which support is being granted, the amount, in the case of financial support, as well as the nature of any non-monetary support provided. The agreement between the parties, i.e., the legal document, also specifies the nature, amount and duration of the support provided and is accompanied by contract provisions that mainly stipulate the parties' obligations.

Once financial contributions have been granted, the City's central departments and boroughs are responsible for ensuring that the NPOs comply with the agreements' provisions. This

¹ Agence métropolitaine de Montréal.

² Communauté métropolitaine de Montréal.

³ Conseil des arts de Montréal, Office de consultation publique de Montréal, Office municipal d'habitation de Montréal, Société de transport de Montréal, Société d'habitation et de développement de Montréal, Société du parc Jean-Drapeau.

⁴ Centres locaux de développement.

⁵ Centres de développement économique communautaire.

includes making sure that the contributions made are used for the purposes set out in the agreements.

With respect specifically to contributions of \$100,000 or more, Section 107.9 of the *Cities and Towns Act* (CTA) provides that any legal person receiving an annual subsidy from the City of \$100,000 or more is required to have its financial statements audited. Said financial statements, copies of which must be forwarded to the City, provide the independent opinion of an auditor on the organization's financial situation, the results of its activities and its cash flows. The legal person's auditor is namely required to provide the City's auditor general with a copy of these audited financial statements.

2. Purpose and Scope of the Audit

The objective of the audit was to ascertain the extent to which the business units had monitored contributions made by the authorities to ensure that:

- The organizations complied with Section 107.9 of the CTA;
- The allocated sums had been used for the intended purposes.

For this purpose, we examined the process used to identify and monitor the organizations subject to Section 107.9 of the CTA. Moreover, we examined the authorizations for the contributions made by the concerned authorities, the existence of agreements between the parties as well as the provisions of such agreements. Furthermore, we examined the accountability requirements imposed on the organizations receiving support as well as the monitoring carried out by the persons in charge within the business units.

The scope of our audit covered the financial contributions made to NPOs in 2013. In certain regards, data dating back prior to 2013 were also taken into consideration. We conducted the bulk of our audit in 2014, but it also took into account information provided to us up until March 2015.

During our audit, we focused on both central departments and boroughs. The following business units were audited:

- Service de la culture;
- Service de la diversité sociale et des sports;
- Service des grands parcs, du verdissement et du Mont-Royal;
- Ahuntsic-Cartierville borough;
- LaSalle borough;
- Mercier–Hochelaga-Maisonneuve (MHM) borough;

- Montréal-Nord borough;
- Rosemont–La Petite-Patrie (RLPP) borough;
- Rivière-des-Prairies–Pointe-aux-Trembles (RDP–PAT) borough;
- Saint-Léonard borough;
- Le Sud-Ouest borough;
- Villeray–Saint-Michel–Parc-Extension (VSMPE) borough.

3. Summary of Findings

Our audit work revealed sectors where improvements are required. The following sections of this audit report highlight deficiencies with respect to:

- Compliance with Section 107.9 of the CTA (Section 4.2):
 - No formal process has been established to identify all of the organizations subject to this section of the Act.
- Contributions of goods and services (Section 4.3):
 - No process exists to evaluate all of these contributions to establish the actual and total values of the contributions made to the organizations on an annual basis.
- Business units' management of the financial contributions (Section 4.4):
 - In the case of most of the contributions examined, measurable objectives had not been set;
 - The organizations are not subject to the same requirements for all contributions. The requirements depend on the agreements and applications for support. This may complicate the business units' evaluation of how the allocated sums were used;
 - The existing monitoring procedures made it possible to evaluate expected outcomes in only 33% of the contributions;
 - The existing monitoring procedures made it possible to establish whether the contributions had been used for the intended purposes in only 19% of cases;
 - Elected officials and City employees sat as directors on the boards of directors of 15 organizations, possibly compromising their duty of loyalty to the City.

4. Detailed Findings and Recommendations

4.1. Portrait of the Financial Contributions Made

4.1.A. Background and Findings

To conduct this audit, we first took stock of the amounts paid out in contributions from 2009 to 2013. This portrait is based on the transactions recorded in the SIMON application. Over the course of this period, the financial contributions made to NPOs increased 22%, from \$80.8 million in 2009 to \$98.8 million in 2013. As indicated in the table below, the contributions increased gradually over this period.

Table 1 – Total Financial Contributions (2009–2013)

Year	Total contributions (\$M)	Variation (current year / previous year)	Variation (2009–2013)
2013	98.8	+1%	22%
2012	97.8	+5.8%	
2011	92.4	+6.8%	
2010	86.5	+7%	
2009	80.8		

We also sought to establish, for the years 2009 to 2013, the distribution of the total contributions between those of \$100,000 or more and those of less than \$100,000. Table 2 below indicates that the sums allocated to organizations having received a contribution of \$100,000 or more represented between 75% and 79% of all contributions for these years (see Table 2, Column d). Conversely, the sums allocated to organizations having received a contribution of less than \$100,000 represented between 21% and 25% of the total (see Table 2, Column h). With respect to the distribution of the number of organizations, our analysis indicates that fewer than 10% of the organizations (see Table 2, Column f) received support totalling \$100,000 or more. Conversely, a little more than 90% of the organizations (see Table 2, Column j) received less than \$100,000 in support.

Table 2 – Consolidated Portrait of Contributions (2009–2013)

Year	Total contributions		Contributions of \$100,000 or more				Contributions of less than \$100,000			
	(a) (\$M)	(b) Number of NPOs	(c) (\$M)	(d) % (c/a)	(e) Number of NPOs	(f) % (e/b)	(g) (\$M)	(h) % (g/a)	(i) Number of NPOs	(j) % (i/b)
2013	98.8	1,805	78.2	79%	161	9%	20.6	21%	1,644	91%
2012	97.8	1,833	77.2	79%	158	9%	20.6	21%	1,675	91%
2011	92.4	1,699	72.9	79%	151	9%	19.3	21%	1,548	91%
2010	86.5	1,687	67.3	78%	146	9%	19.2	22%	1,541	91%
2009	80.8	1,742	60.4	75%	146	8%	20.4	25%	1,596	92%

Given that the City's budget divides financial contributions between the central departments and the boroughs, we also looked into the distribution of the financial contributions between the central departments and the boroughs over the same period. From 2009 to 2013, between 66% and 69% of the total financial contributions came from the central departments' budgets (see Appendix 6.1, Table A). Conversely, the boroughs' budgets were used to make financial contributions representing between 31% and 34% of all contributions (see Appendix 6.1, Table A).

At this stage, we continued the analysis to determine the percentage of the sums allocated to organizations having received contributions of \$100,000 or more, for both the central departments and the boroughs. In the case of the central departments, the sums allocated to these organizations represented between 78% and 81% of the total (see Appendix 6.1, Table B). Conversely, the sums allocated to organizations having received a contribution of less than \$100,000 represented between 19% and 22% of the total. Taking into consideration the number of organizations having received support from the central departments, our analysis indicates that only 11% to 13% of them received contributions of more than \$100,000. Conversely, most of the organizations, i.e., between 87% and 89%, received support totalling less than \$100,000.

With respect to the boroughs, the sums allocated to organizations having received a contribution of \$100,000 or more represented between 58% and 81% of the total (see Appendix 6.1, Table C). Conversely, the sums allocated to organizations having received a contribution of less than \$100,000 represented between 19% and 42% of the total. Taking into account the number of organizations, our analysis indicates that only 4% to 5% of them received support totalling \$100,000 or more. Conversely, most of the organizations, i.e., between 95% and 96%, received less than \$100,000 in support.

This analysis indicates that most of the organizations supported by the central departments or the boroughs receive financial contributions of less than \$100,000. For illustrative

purposes, we looked at the distribution of organizations by contribution amount for 2013. We also matched the value of the contributions to each range. As indicated in Table 3, close to half of the organizations received a contribution of more than \$5,000, representing 95% of the amount of the financial contributions in this category.

**Table 3 – Contributions of Less Than \$100,000
Distribution of the Number of Organizations by Contribution Amount
of Contributions Paid
(2013)**

From	To	Number of organizations		Value (\$M)	
\$1	\$4,999	881	54%	\$0.9	5%
\$5,000	\$9,999	208	13%	\$1.4	7%
\$10,000	\$14,999	119	7%	\$1.4	7%
\$15,000	\$24,999	127	8%	\$2.4	11%
\$25,000	\$49,999	196	12%	\$6.7	32%
\$50,000	\$74,999	70	4%	\$4.1	20%
\$75,000	\$99,999	43	2%	\$3.7	18%
Total		1,644	100%	\$20.6	100%

In conclusion, the portrait of the sums allocated as financial contributions can be used to inform the measures that the different business units must take to ensure that the organizations subject to Section 107.9 of the CTA are compliant and to implement various monitoring mechanisms.

4.2. Compliance with Section 107.9 of the *Cities and Towns Act*

4.2.A. Background and Findings

Beyond the fact of whether the subsidies are managed by the central departments or the boroughs, it remains that Section 107.9 of the CTA applies to all organizations that receive an annual subsidy of \$100,000 or more from the City. All organizations subject to the Act are under obligation to have their financial statements audited and to have their auditor forward a copy of said audited annual financial statements to the auditor general of the City.

From the onset, financial statements are prepared to meet the needs of several users. For example, they can be used to take stock of an organization's financial situation before granting it financial support. They should also allow the concerned business units to verify whether the allocated sums were used in accordance with the application for funding and

subsequent approval. Audited financial statements provide the independent opinion of a CPA auditor on the organization's financial situation, its operating results and its cash flow.

In order for the City to receive the audited financial statements of the organizations subject to Section 107.9 of the CTA and the auditor general of the City to receive a copy of said financial statements, the organizations must be systematically informed of their obligation and the City must clearly establish a monitoring procedure. A business unit responsible for managing a contribution of \$100,000 or more must make sure that it receives audited financial statements. Moreover, monitoring mechanisms must be implemented to detect situations where two or more business units manage contributions of less than \$100,000 made to a single organization resulting in a total annual financial contribution made to the organization of more than \$100,000.

Firstly, as part of our audit, we evaluated the extent to which the business units responsible for managing financial contributions of \$100,000 or more received audited financial statements from the organizations, in compliance with Section 107.9 of the CTA.

To this end, we requested that each borough and the Direction générale provide us with the list of organizations that were granted contributions of \$100,000 or more in 2013 as well as the audited financial statements provided in accordance with Section 107.9 of the CTA.

For this aspect in particular, we focused our audit on five boroughs: the LaSalle, MHM, RDP–PAT, RLPP and VSMPE boroughs. We identified 39 organizations in these boroughs that had received contributions of more than \$100,000. With respect to the central departments, we selected ten organizations supported by the Service de la culture and the Service de la diversité sociale et des sports. It should be noted that a total annual contribution of \$100,000 or more made to an organization may consist of several contributions. During the year, each contribution must be approved by the competent authority and an agreement is usually reached between the City and the organization. Generally speaking, a provision stipulates that the organization is required to produce audited financial statements in accordance with Section 107.9 of the CTA when it receives more than \$100,000 from the City. Thus, for these 49 organizations, we identified 177 contributions made, 129 of which were the subject of an agreement (see Table 4).

Based on the information we received from the business units, 43 out of a total of 49 organizations, or 88%, had provided audited financial statements. However, 6 out of 49 organizations, or 12%, did not comply with Section 107.9 of the CTA in that they had either not had their financial statements audited, not provided financial statements or not provided the auditor's report. We noted, however, that these six organizations had been informed of

their obligation in at least one agreement reached with the City. It is our opinion that the business units should take the necessary measures to ensure that organizations produce audited financial statements.

**Table 4 – Audited Financial Statements Forwarded
in Accordance with Section 107.9 of the CTA
Sample of 49 Organizations**

Business unit	Number of organizations having received a contribution of \$100,000 or more	Number of organizations having been informed of their obligations under Section 107.9 of the CTA in at least one agreement	Number of audited financial statements received by the business units	Financial statements not compliant with Section 107.9	Number of contributions	Number of agreements
LaSalle borough	5	3	4	1	13	8
MHM borough	14	14	12	2	43	25
RDP-PAT borough	4	4	3	1	12	10
RLPP borough	7	7	7	0	27	18
VSMPE borough	9	9	9	0	51	39
Service de la culture	7	5	6	1	18	17
Service de la diversité sociale et des sports	3	2	2	1	13	12
Total	49	44	43	6	177	129

Secondly, we determined whether mechanisms had been implemented to detect situations in which more than one business unit had made financial contributions of less than \$100,000 to an organization resulting in that organization receiving a total amount greater than \$100,000.

As part of our audit, we used the SIMON application to identify 15 organizations that had received total financial contributions of \$100,000 or more but for which the boroughs and central departments involved had individually managed contributions of less than \$100,000. We questioned the boroughs involved on 11 of these cases in order to determine the extent to which they had received audited financial statements. Our audit reveals that most of the organizations at issue had fulfilled their obligation regarding the audited financial statements. Thus, the boroughs involved had received nine audited financial statements and two unaudited financial statements. However, there was no evidence that these financial statements had been received as part of a formal monitoring process. It is our opinion that monitoring mechanisms should be implemented to detect such situations and ensure that the organizations fulfil their obligations regarding audited financial statements.

Thirdly, we also evaluated the extent to which a formal process had been implemented to identify all organizations subject to Section 107.9 of the CTA and verify that they had fulfilled their obligations.

Firstly, in December 2013, City council unanimously resolved that organizations receiving an annual subsidy of \$100,000 or more subject to Section 107.9 of the CTA from the City be required to file their annual report with City council. The resolution also applies to paramunicipal bodies and legal persons required under Section 107.7 of the CTA to have their accounts and affairs audited by the City's auditor general. These organizations' officers must make themselves available for a plenary session of City council in accordance with the *Règlement sur la procédure d'assemblée et les règles de régie interne du conseil municipal*.

Since this resolution was adopted, the organizations concerned have filed annual reports, activity reports or financial statements with municipal council assemblies. A list titled "Répertoire des organismes ayant déposé leur rapport annuel/d'activité/ou états financiers en vertu de la résolution CM13 1157", updated on March 9, 2015, provides the dates on which documents were filed by 43 organizations subject to Section 107.9 (at assemblies between May 26, 2014, and February 23, 2014). In our opinion, this list does not enable users to identify all of the organizations to which City council's resolution applies and does not provide information on the outcomes of the implemented process. Based on the data we extracted from the SIMON application, a total of 161 organizations were granted a contribution of \$100,000 or more in 2013 (see Table 2, Column e). However, 73% of the organizations concerned had not yet filed their annual reports (including audited financial statements) with City council as of February 23, 2015. We believe that a formal process should be established requiring that the list of all organizations subject to Section 107.9 of the CTA be kept up to date. This list should provide the results of the monitoring carried out with respect to receipt of the audited financial statements.

Moreover, it should be noted that it is during our audit that the business units provided the auditor general of the City with the audited financial statements. Had it not been for the request we made to all business units in May 2014, we would not have systematically received copies of the audited financial statements, as prescribed under the CTA. Thus, the process is neither formal nor systematic. In our opinion, a formal process should be implemented to ensure that the auditor general of the City receives the audited financial statements of all of the organizations subject to Section 107.9 of the CTA.

4.2.B Recommendation

We recommend that the LaSalle, Mercier–Hochelaga-Maisonneuve and Rivière-des-Prairies–Pointe-aux-Trembles boroughs as well as the Service de la culture and the Service de la diversité sociale et des sports implement monitoring mechanisms to ensure that they systematically receive the audited financial statements of organizations subject to Section 107.9 of the *Cities and Towns Act* in accordance with the legislation in force.

Business units' responses:

LASALLE BOROUGH

[TRANSLATION] Ever since the Politique de reconnaissance et de soutien des organismes LaSallois was revised in the fall of 2014, each recognized organization is required to file all documents needed for the purpose of renewing their status by December 1 of each year.

The organizations must provide the following documents:

- *Copy of the last annual declaration;*
- *List of board of directors (BD) members;*
- *List of the organization's members (along with full contact information);*
- *Copy of the activity report;*
- *Financial statement and/or budget estimates;*
- *Minutes of the last annual general meeting (AGM);*
- *Proof of insurance.*

Obviously, the borough complies with Section 107.9 of the CTA and requires that organizations that are allocated financial contributions of more than \$100,000 provide audited financial statements. (Completed)

MERCIER–HOCHELAGA-MAISONNEUVE BOROUGH

[TRANSLATION] For each organization:

- *Identify all of the support provided by the borough;*
- *Verify whether the borough provided an amount of \$100,000 in support;*
- *Remind the organizations concerned of their obligations under Section 7.4.1 of the agreement (obligation to provide financial statements within a prescribed period and to have them audited when the contributions made total more than \$100,000);*
- *Explain to the organizations the nature of the support taken into consideration to determine whether or not Section 7.4.1 of the agreement applies;*
- *Ensure that audited financial statements have been provided within 30 days following the AGM. (Planned completion: June 2015)*

RIVIÈRE-DES-PRAIRIES–POINTE-AUX-TREMBLES BOROUGH

[TRANSLATION] The four organizations subject to Section 107.9 provided audited financial statements. However, in the scanned documents of one of the organizations' audited financial statements sent to the auditor general, the notes page was missing. (Planned completion: April 2015)

Auditor General's Comments:

At the time of our audit, the organization had not provided an auditor's report. The auditor's report that we eventually received was not dated.

SERVICE DE LA CULTURE

[TRANSLATION] Involve the Service des affaires juridiques to have agreement templates systematically include a provision clearly stipulating that when the "combined" total value of subsidies received by the organization is \$100,000 or more, the organization is required to provide its audited financial statements to the auditor general and the person in charge of its file at the Service de la culture.

When financial contributions are granted, send a letter to the organization's manager to remind him/her of the organization's main obligations.

Hold a central registry of the organizations and financial contributions.

Systematically send a letter or email on a yearly basis to remind the organizations to provide their audited financial statements to the auditor general, with a copy to the person in charge of their file at the Service de la culture.

Implement standardized tools for all business units to ensure closer monitoring. (Planned completion: March 2016)

SERVICE DE LA DIVERSITÉ SOCIALE ET DES SPORTS

Division de la diversité sociale (DDS)

[TRANSLATION] Include a provision in all proposed agreements, if not already done, informing organizations of the obligation for organizations subject to Section 107.9 of the CTA to provide audited financial statements to the manager and auditor general.

For contributions managed by the DDS, develop a monitoring worksheet, if one does not already exist, to verify whether organizations met their obligations under the proposed agreement. This worksheet will apply to all recommendations made in the audit report, will be an integral part of the file and will include the following:

- *Audited financial statements for contributions of \$100,000 or more;*
- *Measurable objectives;*
- *Separate accounting;*
- *Consultation of account books and supporting documents;*
- *Separate financial information;*

- Signed confirmation of the use of the allocated sums;
- Production of reports on each contribution;
- Forwarding of the information deemed necessary;
- Conditional terms of payment;
- Separate presentation of the expenditures incurred for each contribution;
- Use of the allocated sums.

For contributions managed by the boroughs, ask the boroughs to develop a monitoring worksheet, if one does not already exist, to verify whether the organizations met their obligations under the proposed agreement. This worksheet will be an integral part of the file and will be sent to DDS management. **(Planned completion: December 2015)**

Division de la gestion des installations sportives (DGIS) and Division des orientations, équipements, événements et pratique sportive (DOÉÉPS)

[TRANSLATION] Pursue the action undertaken since 2014 to include in the agreement a provision informing organizations of their obligation to comply with Section 107.9 of the CTA.

Develop a monitoring worksheet for the obligations stipulated in the agreement for each organization, with corresponding timelines, namely to obtain audited financial statements from the organizations subject to Section 107.9 of the CTA. Provide this sheet to the organizations. This worksheet will also be used by the person in charge of the agreement in question to monitor the organization's compliance with its obligations. **(Planned completion: December 2015)**

4.2.C Recommendation

We recommend that the Direction générale implement monitoring mechanisms aimed at identifying all organizations that receive a total contribution of \$100,000 or more and ensuring that they fulfil their obligations regarding the audited financial statements in accordance with Section 107.9 of the *Cities and Towns Act*.

Business unit's response:

[TRANSLATION] The Direction générale estimates that the required measures to achieve this objective have been taken as part of the management systems currently in use.

The Direction générale will mandate the Service des finances to ensure that this objective can be achieved through the next financial accounting system. **(Planned completion: December 2015)**

4.2.D Recommendation

We recommend that the Direction générale implement a formal process under which a list providing the results of the monitoring carried out with respect to the receipt of annual reports (including audited financial statements) by all supported organizations subject to Section 107.9 of the *Cities and Towns Act* is kept up to date and made available to users, including the auditor general of the City.

Business unit's response:

[TRANSLATION] The Direction générale will prepare the list of organizations that were granted an annual subsidy of more than \$100,000, as it did in 2014. This time, the list will include all subsidies granted by borough councils.

The list will be sent to the competent units to enable them to make sure that the organizations concerned comply with this legal requirement (providing audited financial statements) and the resolution passed by City council (filing annual reports) to support sound accountability of all public funds spent on subsidies.

*The list will also be filed with the clerk's office for the purpose of taking stock of all annual reports filed under CM13 1157. **(Planned completion: June 2015)***

4.3. Contributions of Goods and Services

4.3.A. Background and Findings

Apart from financial contributions, the City also makes non-monetary contributions to organizations. The support provided may be of a technical, logistical or physical nature. For example, the City provides organizations with free access to premises and sports facilities. It can also pay for the upkeep and electricity costs associated with the premises occupied by an organization or provide an organization with professional services.

In certain cases, the value of contributions of goods and services may be significant. When it is possible to estimate the fair value of such goods and services, the estimated value is added to the value of the financial contributions.

During our audit, we sought to estimate the extent of the City's contributions of goods and services to organizations. For this aspect in particular, we based our audit on the same selection of organizations as in Section 4.2. The following business units were therefore audited: the LaSalle, MHM, RDP-PAT, RLPP and VSMPE boroughs as well as the Service de la culture and the Service de la diversité sociale et des sports. As previously stated, we identified 49 organizations that received a contribution of \$100,000 or more and we examined

129 agreements reached between those organizations and the City (see Table 4). Our audit revealed that non-monetary contributions of goods and services were made to 28 out of a total of 49 organizations, or 57%, in 2013 (see Table 5).

**Table 5 – Contributions of Goods and Services
Sample of 49 Organizations Having Received Contributions of \$100,000 or more**

Business unit	Number of organizations	Number of organizations receiving non-monetary contributions	Nature of the non-monetary contributions
LaSalle borough	5	4	Building including maintenance and electricity, sports facilities, office space, equipment
MHM borough	14	10	Facilities and material, stage equipment, computers
RDP-PAT borough	4	3	Facilities and material
RLPP borough	7	5	Sports facilities, rooms, equipment, tables
VSMPE borough	9	5	Sports facilities, material
Service de la culture	7	1	Facility maintenance
Service de la diversité sociale et des sports	3	0	
Total	49	28 (57%)	

In accordance with the accounting standards in the CPA Canada Handbook – Accounting, these non-monetary operations should be evaluated on the basis of the most reliable assessment of their fair value. Currently, these contributions are not evaluated for the purpose of the agreements or for accounting purposes.

It is our opinion that the value of the goods and services provided to organizations should be established to determine the value of these contributions. Although the organizations making up our sample received contributions of \$100,000 or more and were already required to produce audited financial statements, situations could arise where contributions received by other organizations could total \$100,000 or more if non-monetary contributions were considered.

4.3.B. Recommendation

We recommend that the LaSalle, Mercier–Hochelaga-Maisonneuve, Rivière-des-Prairies–Pointe-aux-Trembles, Rosemont–La Petite-Patrie and Villeray–Saint-Michel–Parc-Extension boroughs as well as the Service de la culture establish the fair value of the goods and services they provide to the non-profit organizations that they support in order to determine the real value of the contributions made and to make the appropriate decisions.

Business units' responses:

LASALLE BOROUGH

[TRANSLATION] By the end of 2015, for the purpose of renewing the status of recognized organizations in 2016, we will assess the fair value of the goods and services provided to non-profit organizations (NPOs) under the Politique de reconnaissance et de soutien des organismes LaSallois.

We will therefore evaluate and quantify, in monetary terms, the services offered to our organizations and comply with the recommendation made by the Bureau du vérificateur général, that organizations that receive an estimated value of more than \$100,000 in services per year be required to provide audited financial statements. (Planned completion: December 2015)

MERCIER–HOCHELAGA-MAISONNEUVE BOROUGH

[TRANSLATION] The evaluation of the fair value of the goods and services will take into account the following items:

- *The sum of all financial contributions made by the borough to the organization;*
- *The rental value of the facilities provided by the borough;*
- *The lease cost of the facilities provided by the borough;*
- *The value of the human resources provided by the borough to provide services to the population;*
- *The value of the rental costs of sports facilities;*
- *The value of the equipment loaned by the borough.*

A detailed statement will be presented annually to the organization before it holds its AGM. (Planned completion: June 2015)

RIVIÈRE-DES-PRAIRIES–POINTE-AUX-TREMBLES BOROUGH

[TRANSLATION] The lack of information can be explained by the fact that this file is not managed by the same department that usually grants subsidies.

Indeed, useful information for the purpose of determining the value of real property support is compiled by the department in charge of providing facilities to the organization, whereas another department in this latter case prepared the

organization's agreement and subsidy file. To ensure that all information is included in the decision-making record, the borough's management will make sure to require the involvement of the two departments when required and to accurately calculate the value of each form of support in goods and services to the organizations. **(Planned completion: December 2015)**

ROSEMONT-LA PETITE-PATRIE BOROUGH

[TRANSLATION] Catalogue the types of activities and events that are supported. **(Planned completion: June 2015)**

Estimate the rental value of the facilities loaned to certain NPOs. **(Planned completion: September 2015)**

Create an annual registry (table) of all NPOs supported by the borough and include the following amounts:

- The borough's financial contributions;
- The City's financial contributions;
- The borough's non-monetary contributions. **(Planned completion: November 2015)**

Update the registry annually. **(Planned completion: January of each year)**

VILLERAY-SAINT-MICHEL-PARC-EXTENSION BOROUGH

[TRANSLATION] In response to this recommendation, a workgroup will be set up by the table of cultural, sports, leisure and social development managers to establish common guidelines for the entire network.

Implementation of the committee: end of spring 2015.

Committee's work: throughout 2015. **(Planned completion: January 2016)**

SERVICE DE LA CULTURE

[TRANSLATION] More effectively frame and entrench the practice of the mandatory evaluation of goods and services throughout all of the department's units. Ensure the support of the different departments to obtain the required information (the Service des finances, the Service de la gestion et de la planification immobilière, etc.).

Systematically provide the value of goods and services under the 'Financial Aspects' of each decision-making record. **(Planned completion: March 2016)**

4.4 Business Units' Management of Financial Contributions

4.4.A. Background and Findings

As previously mentioned, the central departments and boroughs are jointly responsible for managing the financial contributions made to NPOs.

Firstly, contributions are made under different programs, each of which has a general objective and specific objectives. When these programs are launched, eligible organizations are asked to apply for support and to present their projects or a service offer, as the case may be. Applications are evaluated by a selection panel based on selection criteria. Under certain programs, a list of selected projects is drawn up. This list includes the names of the organizations and the recommended subsidy amount and is approved by the competent authority. No agreements are signed between the selected organizations and the City. In the case of other programs, the selected organization proposes a service offer that is approved by the competent authority along with the amount of support and the agreement reached between the parties.

In other cases, the contributions are not made as part of programs. Generally, the organizations that receive them applied to the City to receive support for a given project or were approached by the City to conduct ongoing or event-specific activities. For contributions of this type, the authorities approve the nature of the supported activities, the type of support, the amount and terms of payment as well as the funding source. Decision-making records are generally accompanied by an agreement between the parties.

When authorizing contributions to several NPOs, the authorities expect that these organizations will use the sums they receive for the intended purposes and abide by the terms and conditions agreed to by the parties. They also expect that the intended objectives will be achieved.

As part of our audit, we sought to evaluate the extent to which the business units had followed up on the contributions granted by the authorities to ensure that the allocated sums had been used for the intended purposes.

To achieve this, we first sought to determine the existence of agreements (or equivalent) between the organizations and the City. Secondly, we verified whether measurable objectives had been agreed on with the organizations when these contributions were approved. Thirdly, we examined whether or not the agreements provided for monitoring by the responsible business units, imposed accountability requirements on the supported

organizations and protected the City's interests in cases of default. Finally, we examined the follow-up carried out by the business units to receive the requested reports and obtain the assurance that the sums had been used for the intended purposes.

In this respect, for the purpose of our audit, we selected 24 organizations that had received support from a central department or a borough. The central departments and boroughs were selected on the basis of the value of the contributions they had made in 2013. We thus selected organizations supported by the boroughs of MHM (4) and VSMPE (3), the Service de la diversité sociale et des sports (11), the Service de la culture (5) and the Service des grands parcs, du verdissement et du Mont-Royal (1). Among this sample, 19 organizations received contributions of \$100,000 or more and 5 benefitted from contributions of less than \$100,000. For the selected business units, a total of 54 contributions were made to these 24 organizations. Note that contributions paid out of the budget of the Service de la diversité sociale et des sports are managed by other business units. Our selection is presented in Appendix 6.2.

4.4.1. Existence of Agreements Between the Organizations and the City

4.4.1.A. Background and Findings

During our audit, we first made sure that the competent authorities had approved all of the contributions. Based on the results of our audit, we can confirm that all contributions had been approved by the borough councils, the executive committee, City council or the agglomeration council.

We also evaluated the extent to which agreements had been concluded between the parties for the contributions made in 2013. Out of a total of 54 contributions, agreements existed for 83%, or 45 of them (see Appendix 6.2, Table A, Column a). These agreements contained provisions describing the nature of the support, the amount and terms and conditions of the contribution as well as the organization's obligations.

For the nine contributions for which there was no agreement:

- Three had been granted to organizations following an application for support under programs managed by the Service de la culture⁶ (see Appendix 6.2, Table A, Column b, Nos. 16b, 16c and 16d). According to the operational model, the organizations must not only apply for a contribution, but also sign a registration form indicating their consent to

⁶ Programme montréalais d'action culturelle 2013, Programme de partenariat culture et communauté 2013 and Programme de soutien à la diffusion du patrimoine montréalais 2013.

abide by all of the relevant program's conditions should the executive committee approve their application for financial assistance in whole or in part. The organizations also acknowledge that the acceptance of their application for financial assistance by the executive committee constitutes the agreement between the parties. Thus, once the City approves the application for support, the organization accepts to abide by all of the program's conditions and this acceptance constitutes a binding agreement with the City. Note that the programs and registration form stipulate the obligations that are binding upon the organization. It is the opinion of the City's legal department that this is an acceptable approach.

- Three contributions (nos. 2a, 3a and 4b) were made by the MHM borough (see Appendix 6.2, Table A, Column b). The organizations were invited to apply for support. Contrary to the Service de la culture, the organizations were not required to sign a registration form, acknowledging that the acceptance of their application for financial assistance constituted the agreement between the parties. In the borough's opinion, the application for support replaced the agreement. However, we were unable to find a list of the obligations binding upon the organizations in either the support program or the application for support. It is our opinion that the business units should have seen to including, either in the application for financial support or in a registration form, the main conditions imposed on organizations applying for financial support in order to protect the City's interests in the event services were not provided as intended.
- For three contributions made to organizations (nos. 2b, 3c and 14a), we were unable to track down agreements between the parties (see Appendix 6.2, Table A, Column b). Contributions nos. 2b and 3c were made by the MHM borough. In the first case, the contribution was in addition to contribution no. 2c, which was already subject to an agreement. Contribution no. 3c involves the renewal of support granted in 2012 for which an agreement had been signed. Finally, in the case of contribution no. 14a, paid from the budget of the Service de la diversité sociale et des sports but managed by the RLPP borough, we were not provided with a copy of the agreement between the parties. In our opinion, for these three contributions, the pertinent business units should have an agreement or an addendum (as the case may be) approved, such as to create binding obligations on the organizations and protect the City's interest should the organizations not provide services as intended.

4.4.1.B. Recommendation

We recommend that the Mercier–Hochelaga-Maisonneuve borough, as part of its support programs, see to including, either in the application for financial support or a registration form, the main conditions imposed on organizations applying for financial support such as to protect the City’s interests in the event services are not provided as intended.

Business unit’s response:

[TRANSLATION] For all financial contributions made by the borough, make sure to include the required provisions in the legal documents. (Planned completion: January 2016)

4.4.2. Establishment of Measurable Objectives for Contributions Made

4.4.2.A. Background and Findings

In general, NPOs apply for financial contributions namely to fund projects or ongoing or event-specific activities. To enable the business units to ascertain the extent to which the City benefits from the contributions it makes, objectives must first be agreed upon with the supported organizations. To be able to periodically measure the achievement of these objectives, they must be measurable.

As part of our audit, we evaluated the extent to which measurable objectives had been set for each of the contributions made.

In this optic, we determined whether objectives had been set for each contribution granted and whether these objectives had been included in agreements or equivalent instruments.

As indicated in Table 6 below, our audit revealed that measurable objectives had been set for only 22 contributions out of a total of 54, or 41%. These organizations will thus be able to compare the outcomes produced with what had been forecasted and the responsible business units will be able to determine how the sums were used. Note that four contributions managed by the Service de la culture were granted for upgrading buildings to standard (see Appendix 6.2, Table A, Column e, nos. 15, 16a, 19a and 19b). In these cases, we considered that the measurable objectives matched the allocated budget and established timeframe. Also, a non-negligible proportion of these results can be attributed to seven contributions paid directly from the budget of the Service de la diversité sociale et des sports – division du développement social (see Appendix 6.2, Table A, Column e, nos. 10a, 10b, 12b, 13b, 14a,

14b and 14c). These sums are derived from agreements reached with the Quebec government⁷ and distributed namely to support boroughs' eligible projects. The process used is based on that of the provincial government. Indeed, organizations seeking to obtain such funds must first complete a standard application for financial support in which they must describe the project, its objectives, its planned activities and its expected outcomes. Once the project has been approved, the application for support is annexed to the agreement concluded between the City and the organization. The objectives described on this application become the objectives for monitoring and accountability purposes.

Although measurable objectives were established for these contributions, they will be useful for the business units only on the condition that accountability mechanisms are developed and the project is monitored to ensure the organization achieves the expected outcomes.

In the other cases, totalling 26 contributions out of 54, or 48% (see Appendix 6.2, Table A, Column e), our audit of the agreements and applications for support indicated that there were objectives but that these were not stated in measurable terms. We believe that the accountability requirements imposed on the organizations will not make it possible to demonstrate the extent to which the objectives were achieved nor how the allocated sums were used. Consequently, the business units will not be able to ascertain whether the sums were used for the intended purposes.

Finally, in the case of 6 contributions out of 54, or 11%, we noted that the parties had not agreed on objectives (see Appendix 6.2, Table A, Column d). At issue were three contributions (nos. 7, 8a and 8b) granted by the VSMPE borough and by the Service de la diversité sociale et des sports – division du développement social to finance organizations' ongoing activities. Also at issue were two contributions (nos. 2b and 3c) granted by the MHM borough without any agreement having been reached between the parties. With respect to the last contribution, no. 20, in the amount of \$800,000, it was paid in 2013 directly out of the budget of the Service de la diversité sociale et des sports – division des orientations, équipements, événements et pratiques sportives. This contribution matched one of the five annual payments provided under a \$4 million agreement over a five-year period. Under this agreement, the City—along with other partners—made a contribution for the modernization and expansion of a sports stadium. This agreement was signed in 2009 and managed at the time by the Service de la mise en valeur du territoire. Although the agreement required the organization to provide the City with plans and specifications upon request, our audit revealed

⁷ Administrative agreement on the management of the Fonds québécois d'initiatives sociales dans le cadre des alliances pour la solidarité, administrative agreement regarding social development and the fight against poverty and social exclusion, agreement reached between the Ministère de l'Immigration et des Communautés culturelles (MICC) and the City, 2011–2014.

that no such plans or specifications had been requested. The City was therefore not in a position to verify whether the organization had achieved the established objectives, i.e., compliance with costs and schedules.

**Table 6 – Establishment of Objectives in Measurable Terms
Selection of 54 Contributions**

Business unit	Number of contributions	Objectives ^[a]		No objectives ^[b]
		Measurable	Non-measurable	
MHM borough	9	1	6	2
VSMPE borough	11	2	8	1
Service de la diversité sociale et des sports – Division du développement social	5	0	3	2
• Managed by the Ahuntsic-Cartierville borough	2	2	0	0
• Managed by Le Sud-Ouest borough	3	0	3	0
• Managed by the Montréal-Nord borough	3	1	2	0
• Managed by the Saint-Léonard borough	1	1	0	0
• Managed by the RLPP borough	3	3	0	0
Service de la diversité sociale et des sports – Division des orientations – équipements, événements et pratique sportive	4	2	1	1
Service de la culture	9	9	0	0
Service des grands parcs, du verdissement et du Mont-Royal	4	1	3	0
Total	54	22 (41%)	26 (48%)	6 (11%)

^[a] Audit results (Appendix 6.2, Table A, Column e).

^[b] Audit results (Appendix 6.2, Table A, Column d).

In our opinion, the business units concerned should systematically agree on measurable objectives for each approved contribution made at the time of approval by the authorities. This would make it easier to monitor the use of the allocated sums.

4.4.2.B. Recommendation

We recommend that the Mercier–Hochelaga-Maisonneuve, Villeray–Saint-Michel–Parc-Extension, Le Sud-Ouest and Montréal-Nord boroughs as well as the Service de la diversité sociale et des sports and the Service des grands parcs, du verdissement et du Mont-Royal implement mechanisms ensuring systematic agreements with the supported organizations on measurable objectives for each contribution made in order to facilitate organizations’ accountability and to be able to evaluate how the allocated sums were used.

Business units' responses:

MERCIER-HOCHELAGA-MAISONNEUVE BOROUGH

[TRANSLATION] Under the agreements, organizations will be required to provide annual action plans. The action plan is filed with the borough by the organization for prior approval.

*Under the memorandums of understanding, the evaluation will be made by comparing the proposed activities to the activities carried out. **(Planned completion: January 2016)***

VILLERAY-SAINT-MICHEL-PARC-EXTENSION (VSMPE) BOROUGH

*[TRANSLATION] Agree on measurable objectives with the partner regarding the activities supported in its action plan. **(Planned completion: April 2015)***

LE SUD-OUEST BOROUGH

*[TRANSLATION] Training will be offered to all partners to inform them of our expectations regarding the objectives set for their projects. The training will be based on the SMART (specific, measurable, achievable, realistic, time-bound) model. **(Planned completion: September 2015)***

*We will mandate our administrative consultant to develop this training. The borough's community development consultant will also contact the City's social diversity and sports team to jointly develop the training content. **(Planned completion: June 2015)***

MONTRÉAL-NORD BOROUGH

*[TRANSLATION] Develop a guide on drafting objectives for our partner organizations to enable them to include measurable objectives in their applications for financial support, and implement related training coaching. **(Planned completion: March 2016)***

SERVICE DE LA DIVERSITÉ SOCIALE ET DES SPORTS

DDS

[TRANSLATION] If applicable, annex to the proposed agreements the organization's application for financial support containing a description of the project, objectives, planned activities and expected outcomes.

For contributions managed by the DDS, develop a monitoring worksheet, if one does not already exist, to verify whether the organizations met their obligations under the agreement. This worksheet will apply to all recommendations made in the audit report, will be an integral part of the file and will include the following:

- *Financial statements for contributions of \$100,000 or more;*
- *Measurable objectives;*
- *Separate accounting;*
- *Consultation of account books and supporting documents;*
- *Separate financial information;*
- *Signed confirmation of the use of the allocated sums;*
- *Production of reports on each contribution;*
- *Forwarding of the information deemed necessary;*
- *Conditional terms of payment;*
- *Separate presentation of the expenditures incurred for each contribution;*
- *Use of the allocated sums.*

*For contributions managed by the boroughs, ask the boroughs to develop a monitoring worksheet, if one does not already exist, to verify whether the organizations met their obligations under the agreement. This worksheet will be an integral part of the file and will be sent to DDS management. **(Planned completion: December 2015)***

DGIS and DOÉÉPS

*[TRANSLATION] Pursue the action undertaken since 2014, namely with the Cadre de référence en matière de soutien financier aux organismes, to agree on measurable objectives for the supported activities (annexed to the agreement or in the organization's action plan appended to the agreement). **(Completed)***

SERVICE DES GRANDS PARCS, DU VERDISSEMENT ET DU MONT-ROYAL

*[TRANSLATION] The SGPVMR will implement mechanisms to systematically agree with the supported organizations on measurable objectives for each contribution made, in order to increase organizations' accountability and better evaluate the extent to which the allocated sums were used. **(Planned completion: June 2015)***

4.4.3. Provisions of the Agreements Between the City and Supported Non-profit Organizations

4.4.3.A. Background and Findings

To ensure that the organizations use the allocated sums for the intended purposes, the business units are required to monitor the supported activities or projects. To enable such monitoring, the organizations must fulfill certain obligations as set out in the agreements reached between the parties or in other documents, if applicable. The organizations must

also be informed that the City is authorized to recover any sums that were not used for the intended purposes.

4.4.3.1. Mode of Operation Demonstrating the Use of the Allocated Sums

4.4.3.1.A. Background and Findings

During our audit, we sought to determine whether the organizations were under an obligation to implement a mode of operation demonstrating the use of the sums they had received. We thus sought namely to determine whether the organizations were required to:

- Keep separate accounts for the supported activities or projects;
- Allow the City to consult their account books and supporting documents;
- Provide separate financial information on the subsidized activities in their financial statements.

For this purpose, we analyzed the agreements and applications for support for each contribution included in our selection to confirm the existence of such provisions. Despite the fact that templates for agreements concerning financial contributions are available on the intranet, we observed disparities in the use of the provisions provided in the templates. Thus, for all of the contributions examined, we observed (see Table 7) that:

- In close to half of the cases, the responsible business units had provided provisions concerning:
 - Separate accounts (52%);
 - The consultation of account books and supporting documents (52%);
 - Separate financial information on the subsidized activities in the financial statements (41%).

**Table 7 – Requirements Imposed on Organizations to Enable Monitoring by the City
Selection of 24 Organizations and 54 Contributions**

Business unit	Number of contributions	Separate accounts ^[a]	Consultation of account books and supporting documents ^[b]	Separate financial information on the subsidized activities or projects ^[c]
MHM borough	9	1	2	3
VSMPE borough	11	2	3	2
Service de la diversité sociale et des sports – Division du développement social	5	5	5	4
• Managed by the Ahuntsic-Cartierville borough	2	2	2	2
• Managed by Le Sud-Ouest borough	3	2	2	2
• Managed by the Montréal-Nord borough	3	3	3	2
• Managed by the Saint-Léonard borough	1	1	1	1
• Managed by the RLPP borough	3	2	2	2
Service de la diversité sociale et des sports – Division des orientations – équipements, événements et pratique sportive	4	2	2	1
Service de la culture	9	6	4	0
Service des grands parcs, du verdissement et du Mont-Royal	4	2	2	3
Total	54	28 (52%)	28 (52%)	22 (41%)

[a] Audit results (Appendix 6.2, Table A, Column f).

[b] Audit results (Appendix 6.2, Table A, Column g).

[c] Audit results (Appendix 6.2, Table A, Column i).

Beyond the general results of our sample, each audited business unit's situation is different. Thus:

- The MHM borough did not systematically require the organizations to comply with the three accountability requirements regarding the use of the allocated sums, including with respect to two contributions of \$100,000 or more (nos. 1 and 3b). Furthermore, no agreement had been reached by the parties in five cases (nos. 2a, 2b, 3a, 3c and 4b). Such a situation fundamentally places the borough at risk of not being able to verify how the allocated sums were used;
- The VSMPE borough also did not systematically impose on the organizations the three accountability requirements with respect to the use of the allocated sums. Although the obligation to provide financial statements is stipulated in most agreements, it is our belief that the borough risks not being able to verify the use of the allocated sums if the organizations are not informed of all of their obligations;

- Generally, the Service de la diversité sociale et des sports – Division du développement social required the supported organizations—through the business units managing the contributions—to implement an operating mode that accounts for the use of the allocated sums. It must be pointed out that all of the contributions examined, with the exception of contribution no. 14a (see Appendix 6.2, Table A, Column b), were accompanied by agreements and that most of the contributions are funded through agreements between the City and the Quebec government. The City itself must give accounts on how it uses the budget it receives from the Quebec government. Fundamentally, this will make it easier to verify the use of the allocated sums for the boroughs that are managing the contributions as well as for the Service de la diversité sociale et des sports – Division du développement social;
- The Service de la diversité sociale et des sports – Division des orientations – équipements, événements et pratique sportive also did not systematically require the organizations to fulfill the three accountability requirements regarding the use of the allocated sums, including in the case of one contribution of more than \$100,000 (no. 22). In the case of one of the contributions, no. 23, we identified a requirement for the organization to fill out a form indicating the sums allocated by the City that were used exclusively to carry out the project. This is a good practice. However, in the case of the other contributions, the situation places the Service at risk of not being able to verify how the allocated sums were used;
- The Service de la culture also did not systematically impose on the organizations the three accountability requirements regarding the use of the allocated sums. Indeed, for the three contributions (nos. 16b, 16c and 16d) granted under cultural programs, even though signing the registration form is binding upon the organization to use the contribution to carry out the project as submitted, the pertinent provisions were absent from the document. In the case of two contributions of more than \$100,000 (nos. 17 and 18), however, the agreements require the organizations to sign a form confirming that the allocated sums were used for the sole purpose of carrying out the project. Notwithstanding this obligation applying to contributions nos. 17 and 18, the situation places the Service at risk of not being able to verify the use of the allocated sums for all contributions;
- The Service des grands parcs, du verdissement et du Mont-Royal partially required the supported organizations to implement an operating mode ensuring and accountability mechanism regarding the use of the allocated sums. As is the case with the other business units, the situation nevertheless places the Service at risk of not being able to verify the use of the allocated sums for all contributions.

In conclusion, the fact that provisions requiring the implementation of an operating mode that favours accountability on the use of the allocated sums are not systematically included in the

agreements does not enable the business units to monitor the use of the allocated sums. The fact however remains that, where contributions are governed by agreements containing all of the provisions favouring monitoring of the use of the allocated sums, conclusive results will depend on the monitoring actually carried out by the business units. This subject is covered in Section 4.4.4 of our report.

4.4.3.1.B. Recommendation

We recommend that the Mercier–Hochelaga-Maisonneuve, Villeray–Saint-Michel–Parc-Extension, Le Sud-Ouest, Montréal-Nord, Rosemont–La Petite-Patrie and Saint-Léonard boroughs as well as the Service de la diversité sociale et des sports, the Service de la culture and the Service des grands parcs, du verdissement et du Mont-Royal systematically include the following obligations in agreements reached with the supported organizations:

- **To keep separate accounts for the supported activities or projects;**
- **To allow the City to consult account books and supporting documents;**
- **To provide separate financial information on the subsidized activities in the financial statements;**
- **To sign a form confirming the use of the allocated sums for the sole purpose of carrying out the project or planned activities;**

in order to be able to verify the use of the allocated sums when monitoring the contributions granted.

Business units' responses:

MERCIER–HOCHELAGA-MAISONNEUVE BOROUGH

[TRANSLATION] Under the agreement:

- *The requirement of separate accounting is provided under Section 7.4.2;*
- *The use of the sums for the sole purpose of carrying out the project or planned activities is provided in the program booklet appended to the agreement.*

Under the memorandums of agreement:

- *The requirement of separate accounting is provided under Section 4.9;*
- *The use of the sums for the sole purpose of carrying out the project or the proposed activities is provided under Section 4.3. (Planned completion: January 2016)*

VILLERAY–SAINT-MICHEL–PARC-EXTENSION BOROUGH

[TRANSLATION] Include in all agreements for contributions of more than \$100,000 reached with the supported organizations the following obligations:

- Keep separate accounts for the supported activities or projects;
- Allow the City to consult the account books and supporting documents;
- Provide separate financial information on the subsidized activities in the financial statements;
- Sign an agreement confirming the use of the allocated sums for the sole purpose of carrying out the supported activities. **(Planned completion: April 2015)**

LE SUD-OUEST BOROUGH

[TRANSLATION] Two of the obligations in the recommendation are already included on the current agreement form that is included in the City's legal bank of decision-making summaries. The obligations are as follows:

[TRANSLATION]

Section 4 – Organization's obligations

4.6 Financial aspects.

4.6.1 Hold separate accounts on the use of the sums allocated by the City under this agreement.

4.6.2 Authorize the manager of the Service des finances and the auditor general or their representatives to examine the account books and ledgers reserved for the use of the sums allocated by the City as well as supporting documents and make free copies thereof.

We will ask the partner to initial this paragraph when signing the agreement to confirm that it was read and understood. **(Planned completion: May 2015)**

We will review the agreement and ask the Service juridique to insert paragraphs stipulating the organization's obligations to:

- Provide separate financial information on the subsidized activities in the financial statements;
- Sign a form confirming the use of the sums allocated for the sole purpose of carrying out the project or planned activities.

Upon receipt of the legal department's opinion, we will request amendments to the agreement and have the document replaced in the legal bank.

The new agreement will be used once this has been completed. **(Planned completion: June 2015)**

MONTRÉAL-NORD BOROUGH

[TRANSLATION] The following two provisions are already included in the agreements currently reached between the borough and the supported organizations in order to:

- Allow the City to consult the account books and supporting documents;
- Provide separate financial information on the subsidized activities in the financial statements.

In order to verify how the allocated sums were used when monitoring the contributions made to the organizations, the Direction de la culture, des sports, des loisirs et du développement social (DCSLDS) will see to systematically including in each agreement the obligation to hold separate accounts on supported activities or projects and will have the documents validated by the borough's clerk.

The DCSLDS will develop a form confirming that the sums allocated to the organizations were used for the sole purpose of carrying out the project or planned activities. This form will be signed by the organization's manager at the same time as the agreement.

The DCSLDS will inform the Service de la diversité sociale et des sports—with whom it works closely under municipal programs and agreements reached with the Quebec government—of corrective measures that it intends to implement in response to the recommendations made in the audit report. **(Planned completion: March 2016)**

ROSEMONT-LA PETITE-PATRIE BOROUGH

[TRANSLATION] Our agreements already stipulate the obligation to hold separate accounts for the activities, programs and projects. It is important to point out that several partners receive a financial contribution from the borough to leverage or support their mission. This contribution is sometimes minute compared with their other sources of funding.

Catalogue all of our agreements currently in effect. **(Planned completion: June 2015)**

Harmonize the agreements through the addition, if applicable, of provisions requiring:

- Separate accounts per activity, program or project;
- Access by the City to their account books and supporting documents;
- The production of separate financial information on subsidized activities in the financial statements or in an explanatory notes, when justified. **(Planned completion: January 2016)**

NOTE: In cases where agreements are currently in effect, the new clauses will be added when the agreements are renewed.

Verify that accounting and monitoring costs are not disproportionate to the risks (for both the municipal administration and the supported NPOs). **(Planned completion: September 2015)**

Develop a simple method (confirmation form or the equivalent such as an annual evaluation grid confirming compliance signed by both parties) to enable the borough to make sure the NPOs are using the allocated sums for the intended purpose. **(Planned completion: September 2015)**

Inform the NPOs of the new method and monitor it. **(Planned completion: November 2015)**

SAINT-LÉONARD BOROUGH

[TRANSLATION] The agreement reached as part of the administrative agreement on the management of the Fonds québécois d'initiatives sociales dans le cadre des alliances pour la solidarité between the Ministère du Travail, de l'Emploi et de la Solidarité sociale and the City (2013–2016) stipulates the following obligations:

[TRANSLATION]

4.6 Financial aspects.

4.6.1 Hold separate accounts on the use of the sums allocated by the City under this agreement.

4.6.2 Authorize the manager of the Service des finances and the auditor general or their representatives to examine the account books and ledgers reserved for the use of the sums allocated by the City as well as supporting documents and make free copies thereof.

4.6.3 Provide the City with a copy of its annual financial statements within 30 days following their adoption. Said financial statements must provide financial information on the activities subject to this agreement separately from that of the organization's other sectors of activity, if applicable.

Sign the final report form. **(Planned completion: April 2015)**

SERVICE DE LA DIVERSITÉ SOCIALE ET DES SPORTS

DDS, DGIS and DOÉÉPS

[TRANSLATION] Include in proposed agreements that do not already contain such a provision the obligation on the part of the supported organizations to:

- Keep separate accounts for the supported activities or projects;
- Allow the City to consult the account books and supporting documents;
- Provide separate financial information on the subsidized activities in the financial statements;
- Sign a form confirming the use of the allocated sums for the sole purpose of carrying out the project or planned activities. **(Planned completion: December 2015)**

SERVICE DE LA CULTURE

[TRANSLATION] During the review and harmonization of practices, the Service de la culture, jointly with the Service des affaires juridiques, will see to including in all agreements the organizations' obligations to, namely:

- *Provide a balance sheet or financial statements presenting the supported activities or projects separately as well as expenses incurred for them;*
- *Allow the City to consult the account books and supporting documents;*
- *Confirm the use of the sums allocated for the sole purpose of carrying out the project or planned activities.*

Furthermore, the department will use the relevant monitoring processes and tools to achieve these objectives. (Planned completion: March 2016)

SERVICE DES GRANDS PARCS, DU VERDISSEMENT ET DU MONT-ROYAL

[TRANSLATION] The SGPVMR agrees to require the organization, through the agreement, to systematically meet the following obligations:

- *Keep separate accounts for the supported activities or projects;*
- *Allow the City to consult the account books and supporting documents;*
- *Provide separate financial information on the subsidized activities in the financial statements;*
- *Sign a form confirming the use of the allocated sums for the sole purpose of carrying out the project or planned activities. (Planned completion: June 2015)*

4.4.3.2. Scheduled Reports

4.4.3.2.A. Background and Findings

During our audit, we verified whether the organizations were required to produce reports on the use of the allocated sums, on one hand, and on the achievement of the expected outcomes, on the other hand. To do so, we examined the agreements and the other documents binding the parties to determine whether or not the organizations were required to account for the outcomes of their activities.

As shown in Table 8, our audit demonstrated that, in the case of a majority of the contributions examined, (44 out of a total of 54, or 81%), either the agreements contained provisions stipulating that activity or other reports were to be produced or the applications for financial support referred to dates for producing interim and final reports.

**Table 8 – Accountability Requirements Imposed on the Organizations
Selection of 24 Organizations and 54 Contributions**

Business unit	Number of contributions	Requirement to provide reports ^[a]	Nature of the information required ^[b]	Production of financial statements in reference to Section 107.9 of the CTA ^[c]
MHM borough	9	5	1	3
VSMPE borough	11	8	0	10
Service de la diversité sociale et des sports – Division du développement social	5	5	0	4
• Managed by the Ahuntsic-Cartierville borough	2	2	0	2
• Managed by Le Sud-Ouest borough	3	3	0	3
• Managed by the Montréal-Nord borough	3	3	0	3
• Managed by the Saint-Léonard borough	1	1	0	1
• Managed by the RLPP borough	3	3	0	2
Service de la diversité sociale et des sports – Division des orientations – équipements, événements et pratique sportive	4	1	0	4
Service de la culture	9	9	8	4
Service des grands parcs, du verdissement et du Mont-Royal	4	4	1	4
Total	54	44 (81%)	10 (19%)	40 (74%)

^[a] Audit results (Appendix 6.2, Table A, Column j).

^[b] Audit results (Appendix 6.2, Table A, Column k).

^[c] Audit results (Appendix 6.2, Table A, Column h).

Consequently, in 19% of the contributions granted, the production of reports by the organizations was not mandatory. Namely:

- Four contributions made by the MHM borough (see Appendix 6.2, Table A, Column j, nos. 2b, 3b, 3c and 4a). The amounts at issue varied between \$16,000 and \$103,823;
- Three contributions made by the VSMPE borough (see Appendix 6.2, Table A, Column j, nos. 5a, 5b and 5f), for which the amounts at issue varied between \$18,900 and \$29,747;
- Three contributions made by the Service de la diversité sociale et des sports – Division des orientations – équipements, événements et pratique sportive (see Appendix 6.2, Table A, Column j, nos. 20, 22 and 24), the amounts at issue varying between \$35,900 and \$800,000.

Contribution no. 20 was paid in 2009 by the Service de la mise en valeur du territoire for the modernization and expansion of a sports stadium (\$4 million over a five-year period). In 2011,

the responsibility for this contribution was transferred to the Service de la diversité sociale et des sports – Division des orientations – équipements, événements et pratique sportive. Beyond the transfer of responsibilities resulting from administrative reorganizations, the organization was required under the agreement to immediately provide the City only upon request by the assistant City manager, documents including agreements, contracts, reports, plans, specifications, progress estimates, supporting documents, invoices and engineering or architecture certificates certifying the work had been carried out. In our opinion, the wording of this provision poses an accountability risk with respect to the organizations. Given the extent of the project, we believe that the production of reports and supporting documents should systematically be made mandatory.

Moreover, the agreements or financial support programs of only ten contributions, or 19%, described the nature of the information required from the organizations. For the other contributions, the business units had not specified the information they required. The business units are therefore at risk of receiving reports that do not meet their expectations. This is especially true of the ten agreements (nos. 3b, 4a, 5a, 5b, 5c, 5d, 6a, 6b, 6c and 6d) containing a provision referring to an evaluation of the achievement of the objectives stipulated in the plan of action without however requiring the production of a corresponding report. We believe that such an evaluation should be mandatory for all contributions. Also, in our opinion, the business units should systematically specify the information they require in order to verify the use of the allocated sums and the achievement of the outcomes.

Finally, among all of the contributions examined, our audit revealed that 14 out of a total of 54 agreements, or 26%, contained no provision informing the organization of its obligation to provide audited financial statements to the auditor general of the City in the case of contributions of \$100,000 or more. We contend that this obligation must be systematically stipulated in all agreements reached with the supported organizations.

4.4.3.2.B. Recommendation

We recommend that the Mercier–Hochelaga-Maisonneuve, Villeray–Saint-Michel–Parc-Extension, Ahuntsic–Cartierville, Le Sud-Ouest, Montréal-Nord, Saint-Léonard and Rosemont–La Petite-Patrie boroughs as well as the Service de la diversité sociale et des sports, the Service de la culture and the Service des grands parcs, du verdissement et du Mont-Royal systematically include in the agreements reached with the supported organizations the following obligations:

- The obligation to provide reports on each contribution made;
- The information required in each mandatory report;

in order to provide accountability on the achievement of the expected outcomes and the use of the allocated sums for the intended purposes.

Business units' responses:

MERCIER–HOCHELAGA-MAISONNEUVE BOROUGH

[TRANSLATION] The following additions will be made to the legal documents:

- *The content of the required reports will be determined by the borough and shared with the organization before the agreement is signed;*
- *The summaries filed by the organizations will be evaluated based on the action plan filed. (Planned completion: January 2016)*

VILLERAY–SAINT-MICHEL–PARC-EXTENSION BOROUGH

[TRANSLATION] Include in all agreements for contributions of more than \$100,000 reached with the supported organizations the obligation to:

- *Produce an activity report on the supported activities;*
- *Specify that the report must demonstrate the achievement of results based on the stated measurable objectives. (Planned completion: April 2015)*

AHUNTSIC-CARTIERVILLE BOROUGH

[TRANSLATION] Request progress reports from the organizations to ensure better mid-point follow-up and final reports providing detailed information on how the funds were used.

Together with the Service de la diversité sociale et des sports, evaluate the possibility of producing various progress and final report forms that more effectively demonstrate achievement of the expected results. (Planned completion: March 2016)

LE SUD-OUEST BOROUGH

[TRANSLATION] The progress report (if applicable) and the final report will be provided to the manager and will include the required information, including the breakdown of

activities, the use of the allocated sums, the project's objectives and its impact on the community or targeted client groups.

We will ask the partner to initial this paragraph when signing the agreement to confirm that it was read and understood. **(Planned completion: April 2015)**

MONTREAL-NORD BOROUGH

[TRANSLATION] The obligation to produce a report on each contribution received is already stipulated in the agreements currently in effect between the borough and the supported organizations.

For the purpose of accountability demonstrating that the expected results were achieved and the allocated sums were used for the intended purposes, the DCSLDS will see to systematically including in the agreements reached with the organizations the information that must be provided in the required reports and will have the borough's clerk validate the documents. To this end, the DCSLDS will develop indicators that are specific to each contribution made. **(Planned completion: March 2016)**

SAINT-LÉONARD BOROUGH

[TRANSLATION] Refer to the agreement's "Progress Report / Final Report" form for the requested information. **(Planned completion: April 2015)**

ROSEMONT-LA PETITE-PATRIE BOROUGH

[TRANSLATION] The obligation to produce an activity report is already stipulated in most of our agreements.

Catalogue the activities, programs and projects of the NPOs supported by the borough. **(Planned completion: June 2015)**

Determine the clauses that are missing from the legal documents. **(Planned completion: September 2015)**

Add details in our legal documents concerning the information that the activity reports must provide. **(Planned completion: January 2016)**

NOTE: In cases where agreements are currently in effect, the new clauses will be added when the agreements are renewed.

Inform the NPOs of the required details. **(Planned completion: November 2015)**

Implement and follow up annually (e.g., during the annual evaluation). **(Planned completion: January 2016)**

SERVICE DE LA DIVERSITÉ SOCIALE ET DES SPORTS**DDS**

[TRANSLATION] For the purpose of accountability demonstrating that the expected results were achieved and that the allocated sums were used for the intended purposes, include in proposed agreements that do not already contain such a provision the obligation on the part of the supported organizations to:

- Produce a report on each contribution made;
- Provide the necessary information in the required reports. **(Planned completion: December 2015)**

DGIS and DOÉÉPS

[TRANSLATION] Include in proposed agreements that do not already contain such a provision the obligation to produce activity reports on the supported activities. Specify that the report will outline the achievement of the results with respect to the applicable measurable objectives. **(Planned completion: December 2015)**

SERVICE DE LA CULTURE

[TRANSLATION] Agree with the organization on indicators that measure the expected results.

Make sure to adequately detail the nature of the information required in the reports that the organizations are required to file for each contribution received. **(Planned completion: March 2016)**

SERVICE DES GRANDS PARCS, DU VERDISSEMENT ET DU MONT-ROYAL

[TRANSLATION] The SGPVMR agrees to require the organization, through the agreement, to systematically include:

- The obligation to provide reports for each contribution made;
- The information required in each mandatory report. **(Planned completion: June 2015)**

4.4.3.2.C. Recommendation

We recommend that the Mercier–Hochelaga–Maisonneuve, Villeray–Saint-Michel–Parc-Extension and Rosemont–La Petite-Patrie boroughs as well as the Service de la diversité sociale et des sports and the Service de la culture systematically include in the agreements reached with the supported organizations, for all contributions, the obligation to provide audited financial statements to the auditor general of the City when the annual contribution received by an organization is of \$100,000 or more such as to inform the organizations of their obligations under the *Cities and Towns Act*.

Business units' responses:

MERCIER–HOCHELAGA-MAISONNEUVE BOROUGH

[TRANSLATION] The obligation is stipulated in Section 7.4.1 of the agreement.

The organizations concerned will be informed of this obligation on an annual basis before they hold their AGM.

The manager will send a written reminder to the organization within 15 days following its AGM. (Planned completion: January 2016)

VILLERAY–SAINT-MICHEL–PARC-EXTENSION BOROUGH

[TRANSLATION] Include in agreements for contributions of more than \$100,000 reached with the supported organizations the obligation to provide the auditor general with audited financial statements when the organization receives an annual financial contribution of \$100,000 or more, in order to inform the organizations of their obligations under the CTA. (Planned completion: April 2015)

ROSEMONT–LA PETITE-PATRIE BOROUGH

[TRANSLATION] The obligation to provide audited financial statements to the auditor general is already stipulated in most of our agreements.

Catalogue the activities, programs and projects of the NPOs supported by the borough. (Planned completion: June 2015)

Harmonize the legal documents to systematically include the obligation to provide audited financial statements to the auditor general for annual contributions received from the City totalling \$100,000 or more (include the auditor general's address to facilitate the process). (Planned completion: January 2016)

Harmonize the legal documents with the addition of an obligation to also provide the borough with the audited financial statements. (Planned completion: January 2016)

NOTE: In cases where agreements are currently in effect, the new or amended clauses will be added when the agreements are renewed.

Inform the NPOs of their obligations. Issue annual reminders (e.g., during evaluations). (Planned completion: November 2015)

IMPORTANT: Certain agreements managed by the borough were drafted by another City department. Said department will have to make the necessary adjustments to the clauses.

SERVICE DE LA DIVERSITÉ SOCIALE ET DES SPORTS**DDS**

[TRANSLATION] Include in proposed agreements that do not already contain such a provision an obligation on the part of the organizations supported under Section 107.9 of the CTA to provide the auditor general with a copy of the audited financial statements for each contribution when the annual contribution is \$100,000 or more. (Planned completion: December 2015)

DGIS and DOÉÉPS

[TRANSLATION] Include in proposed agreements that do not already contain such a provision the obligation to provide the auditor general with audited financial statements when the organization receives an annual financial contribution of \$100,000 or more, in order to inform the organizations of their obligations under the CTA. Include this obligation on the monitoring worksheet. (Planned completion: December 2015)

SERVICE DE LA CULTURE

[TRANSLATION] Involve the Service des affaires juridiques in order to have agreement templates systematically include a provision clearly stipulating that when the “combined” total value of subsidies received by the organization is \$100,000 or more, the organization is required to provide its audited financial statements to the auditor general and the person in charge of its file at the Service de la culture.

When financial contributions are granted, send a letter to the organization’s manager as a reminder of the organization’s main obligations.

Keep a central registry of the organizations and financial contributions for the department.

Systematically send a letter or email on a yearly basis to remind the organizations to provide their audited financial statements to the auditor general, with a copy to the person in charge of their file at the Service de la culture.

Implement standardized tools for all business units to ensure more accurate monitoring. (Planned completion: March 2016)

4.4.3.3. Recovery of Allocated Sums Not Used for the Intended Purposes

4.4.3.3.A. Background and Findings

As mentioned in the previous sections, the business units are responsible for imposing conditions mandating the organizations to demonstrate that they used the sums they received for the intended purposes and whether they achieved the expected outcomes. The

organizations must also be informed of the measures that the City will take if the contributions made were not used for the intended purposes.

During our audit, we sought to ensure that the City was adequately protected in cases where supported organizations did not use the allocated sums for the intended purposes.

As shown in Table 9, the results of our audit reveal that for 30 contributions out of a total of 54, or 56%, the agreements contained provisions providing for the recovery of all sums not used for the intended purposes from the organizations.

**Table 9 – Presence of Provisions Aimed at Protecting the City's Interests Where Contributions are not Used for the Intended Purposes
Selection of 24 Organizations and 54 Contributions**

Business unit	Number of contributions	Presence of provisions on remitting unused sums ^[a]	Conditions related to payments ^[b]
MHM borough	9	1	0
VSMPE borough	11	2	1
Service de la diversité sociale et des sports – Division du développement social	5	5	2
• Managed by the Ahuntsic-Cartierville borough	2	2	2
• Managed by Le Sud-Ouest borough	3	2	2
• Managed by the Montréal-Nord borough	3	3	3
• Managed by the Saint-Léonard borough	1	1	1
• Managed by the RLPP borough	3	2	2
Service de la diversité sociale et des sports – Division des orientations – équipements, événements et pratique sportive	4	1	1
Service de la culture	9	9	6
Service des grands parcs, du verdissement et du Mont-Royal	4	2	3
Total	54	30 (56%)	23 (43%)

^[a] Audit results (Appendix 6.2, Table A, Column l).

^[b] Audit results (Appendix 6.2, Table A, Column m).

In the case of the 24 other contributions (44%), the agreements contained no provision to this effect (see Appendix 6.2, Table A, Column l). The comments below apply to the following business units:

- MHM borough:
 - For three contributions including two of more than \$100,000 (nos. 2c and 3b), it is only in the event of termination that the organizations were required to remit the unused portion of the sums received;

- In the case of five contributions, no provision authorized the borough to demand the reimbursement of sums that were not used to carry out the planned activities, given the absence of an agreement between the parties (see Appendix 6.2, Table A, Column b, nos. 2a, 2b, 3a, 3c and 4b).
- VSMPE borough:
 - In the case of ten contributions, it is only in the event of termination that the organizations were required to remit the unused portion of the sums received (nos. 5a, 5b, 5c, 5d, 5e, 5f, 6a, 6b, 6c and 6d).
- Service de la diversité sociale et des sports – Division du développement social:
 - In the case of one contribution managed by the Le Sud-Ouest borough (no. 9a), it is only in the event of termination that the organizations were required to remit the unused portion of the sums received.
- Service de la diversité sociale et des sports – Division des orientations – équipements, événements et pratique sportive:
 - In the case of three contributions, it is also only in the event of termination that the organizations were required to remit the unused portion of the sums received (nos. 20, 23 and 24).

In our opinion, the business units should ensure that each agreement includes provisions stipulating that the organization is required to remit the portion of sums received that was not used to carry out a supported project or activities to the City.

Moreover, our examination of the agreements and other documents revealed that, in the case of several of the contributions that had been made, the allocated sum was paid in full—or a significant portion was paid—at the time the parties signed the agreement. At the time the sums are disbursed, the supported activities or projects have not yet been carried out and the allocated sums are therefore not used. As previously noted, 19 agreements contain a provision authorizing the managing business unit to make the last contribution payment only after having received or approved, as the case may be, an interim or final report. This situation further applies to four more contributions (see Appendix 6.2, Table A, Column M, nos. 15, 16a, 19a and 19b). Indeed, we have found provisions authorizing the business unit to proceed with the last payment upon receipt of the architect's written confirmation that the planned work has been completed. In our opinion, this is a good practice and we contend that such provisions give organizations an incentive to provide the requested reports and required information. Another good practice concerns one of the provisions of the agreement governing contribution no. 21a of the Service des grands parcs, du verdissement et du Mont-Royal. It is a performance measure that is taken into consideration at the time of final payment. The effect of this measure is to reduce the amount of the final payment if the objectives were not met. In our opinion, terms of payment that are conditional on the

production of reports or the achievement of the established objectives should be considered for agreements reached with organizations, depending on the monetary value of the contribution.

In conclusion, although some agreements provide for the recovery of unused sums, if applicable, it nevertheless remains that the results depend on how rigorously and stringently the management of the agreements is monitored.

4.4.3.3.B. Recommendation

We recommend that the Mercier–Hochelaga–Maisonneuve, Villeray–Saint-Michel–Parc-Extension, Le Sud-Ouest and Rosemont–La Petite-Patrie boroughs as well as the Service de la diversité sociale et des sports and the Service des grands parcs, du verdissement et du Mont-Royal systematically include in the agreements reached with the supported organizations provisions authorizing them to recover sums not used for the intended purposes in order to protect the City’s interests.

Business units’ responses:

MERCIER–HOCHELAGA-MAISONNEUVE BOROUGH

[TRANSLATION] For all financial contributions made by the borough, make sure the required sections in are included the legal documents. (Planned completion: January 2016)

VILLERAY–SAINT-MICHEL–PARC-EXTENSION BOROUGH

[TRANSLATION] Include in the agreements for contributions of more than \$100,000 to supported organizations provisions that authorize the borough to recover sums that were not used for the intended purposes. (Planned completion: April 2015)

LE SUD-OUEST BOROUGH

[TRANSLATION]

Section 4 – Organization’s obligations

4.6.4 *Upon expiry of this agreement, remit to the City all sums not spent on the project’s activities within five days following the manager’s written request to this effect.*

We will ask the partner to initial this paragraph when signing the agreement to confirm that it was read and understood. (Planned completion: April 2015)

ROSEMONT–LA PETITE-PATRIE BOROUGH

[TRANSLATION] Catalogue the activities, programs and projects of the NPOs supported by the borough. **(Planned completion: June 2015)**

Identify the risks of services not being provided to protect the City's interests. **(Planned completion: September 2015)**

Verify that a legal document or its equivalent is associated with each financial contribution. **(Planned completion: October 2015)**

Harmonize the legal documents to include a provision authorizing the City to recover sums that were not used for the intended purposes and terms for reimbursement. **(Planned completion: January 2016)**

NOTE: In cases where agreements are currently in effect, the new or amended clauses will be added when the agreements are renewed.

Inform the NPOs of their obligations. Issue annual reminders (e.g., during evaluations). **(Planned completion: November of each year)**

SERVICE DE LA DIVERSITÉ SOCIALE ET DES SPORTS

DDS

[TRANSLATION] Include in agreements that do not already contain such a provision the obligation on the part of the supported organizations to remit to the City all sums that were not used for the intended purposes. **(Planned completion: December 2015)**

DGIS and DOÉÉPS

[TRANSLATION] Include in proposed agreements that do not already contain such a clause provisions authorizing the City to recover sums that were not used for the intended purposes. **(Planned completion: December 2015)**

SERVICE DES GRANDS PARCS, DU VERDISSEMENT ET DU MONT-ROYAL

[TRANSLATION] The SGPVMR will ensure that each agreement includes provisions stipulating that the organization is required to remit to the City the portion of sums allocated that was not used to complete a supported project or carry out supported activities. **(Planned completion: June 2015)**

4.4.3.3.C. Recommendation

We recommend that the Mercier–Hochelaga–Maisonneuve, Villeray–Saint-Michel–Parc-Extension, Le Sud-Ouest and Rosemont–La Petite-Patrie boroughs as well as the Service de la diversité sociale et des sports, the Service de la culture and the Service des grands parcs, du verdissement et du Mont-Royal, depending on the monetary value of the contributions, include in the agreements terms and conditions of payment conditional on the production of reports or the achievement of the established objectives in order to protect the City’s interests when the allocated sums were not used for the intended purposes.

Business units’ responses:

MERCIER–HOCHELAGA-MAISONNEUVE BOROUGH

[TRANSLATION] This item will be added and detailed in Appendix 4 of the agreement in the case of sums justifying such a measure.

This item will be added to memorandums of understanding when justified by the amount and duration of the project. (Planned completion: January 2016)

VILLERAY–SAINT-MICHEL–PARC-EXTENSION BOROUGH

[TRANSLATION] Specify in the agreements terms of payment of the annual financial contribution that are conditional on producing progress reports for the supported activities and forwarding proof of accountability to date when payments are made. These terms of payment will vary according to the value of the annual contribution.

This action will need to be validated by the Service des affaires juridiques. (Planned completion: April 2015)

LE SUD-OUEST BOROUGH

[TRANSLATION] We will review the agreement and request that the Service des affaires juridiques insert a paragraph stipulating terms of payment that are conditional on producing reports or achieving the established objectives in order to protect the City’s interests if the sums were not used for the intended purposes. (Planned completion: May 2015)

Upon receipt of the Service des affaires juridiques’ opinion, we will request amendments to the agreement and have the document replaced in the City’s legal bank. The new agreement will be used once this has been completed. (Planned completion: June 2015)

ROSEMONT–LA PETITE-PATRIE BOROUGH

[TRANSLATION] Catalogue the activities, programs and projects of the NPOs supported by the borough. (Planned completion: June 2015)

Identify the number of payments made for each project, activity or event. (Planned completion: August 2015)

Catalogue the existing and required legal documents. (Planned completion: September 2015)

Identify the contribution threshold that would make managing instalments an economical choice for the municipal administration.

Identify the circumstances under which an instalment could be conditional on the production of reports. (Planned completion: December 2015)

Harmonize the legal documents with the addition of a clause making it possible to withhold an instalment until a report has been produced or established objectives have been achieved. (Planned completion: November 2015)

NOTE: In cases where agreements are currently in effect, the new or amended clauses will be added when the agreements are renewed.

Inform NPOs of their obligations. Issue annual reminders (e.g., during evaluations). (Planned completion: November of each year)

SERVICE DE LA DIVERSITÉ SOCIALE ET DES SPORTS

DDS

[TRANSLATION] Include in agreements that do not already contain such a clause a provision setting out terms of payment that are conditional on the production of reports or the achievement of the established objectives. (Planned completion: December 2015)

DGIS and DOÉÉPS

[TRANSLATION] Specify in proposed agreements that do not already contain such a provision terms of payment for the annual financial contribution that are conditional on producing progress reports for the supported activities and forwarding proof of accountability to date when payments are made. These terms of payment will vary according to the value of the annual contribution. (Planned completion: December 2015)

SERVICE DE LA CULTURE

[TRANSLATION] Several agreements already establish clear terms that make payments conditional on the production of reports, summaries, etc. As part of the harmonization

of its practices, the Service de la culture will make sure to provide a clear and standardized procedure. (Planned completion: March 2016)

SERVICE DES GRANDS PARCS, DU VERDISSEMENT ET DU MONT-ROYAL

[TRANSLATION] The SGPVMR will ensure that each agreement includes provisions stipulating that the organization is required to remit to the City the portion of sums allocated that was not used to complete a supported project or carry out supported activities. (Planned completion: June 2015)

4.4.4. Monitoring the Receipt of Requested Reports and the Use of Allocated Sums

4.4.4.A. Background and Findings

Despite the agreements reached between the parties, business unit managers must take steps to ensure that the organizations carry out their activities or that projects are completed as planned. Steps must also be taken to ensure reports and financial statements are received as planned and to enable the business units to evaluate the use of the allocated sums for the intended purposes as well as the achievement of the expected results.

Firstly, we evaluated the extent to which the steps taken by the business units had resulted in the production of the requested reports, enabling the business units to evaluate the achievement of the objectives set forth in the agreements. Secondly, we also examined the extent to which the business units had obtained the assurance that the contributions granted to the organizations had been used for the intended purposes. Finally, we questioned the business units on the mechanisms deployed to recover any sums that had not been used for the intended purposes.

Generally, the designated officials informed us that the following steps were taken to monitor the contributions that had been made:

- Visits to the organizations to verify that the supported activities were carried out or projects completed;
- Attendance, as observers, at board meetings;
- Consultation of the organizations' minutes;
- Consultation of the organizations' advertising of supported events;
- Email or telephone communication with the organizations.

However, only in a small percentage of the audited contributions (20 out of 54, or 37%) was there evidence that at least one of these measures had been taken (see Table 10 below).

**Table 10 – Monitoring of Contributions Made
Selection of 24 Organizations and 54 Contributions**

Business unit	Number of contributions	Evidence of at least one measure taken ^[a]	Reports obtained ^[b]	Reports making it possible to determine whether the objectives had been achieved ^[c]	Monitoring mechanisms aimed at verifying the use of the sums awarded for the intended purposes ^[d]
MHM borough	9	2	5	0	0
VSMPE borough	11	0	10	4	0
Service de la diversité sociale et des sports – Division du développement social	5	1	3	1	1
• Managed by the Ahuntsic-Cartierville borough	2	0	2	1	0
• Managed by Le Sud-Ouest borough	3	3	3	0	0
• Managed by the Montréal-Nord borough	3	0	3	2	2
• Managed by the Saint-Léonard borough	1	0	1	1	1
• Managed by the RLPP borough	3	3	2	1	0
Service de la diversité sociale et des sports – Division des orientations – équipements, événements et pratique sportive	4	3	3	2	1
Service de la culture	9	4	2	2	2
Service des grands parcs, du verdissement et du Mont-Royal	4	4	4	4	3
Total	54	20 (37%)	38 (70%)	18 (33%)	10 (19%)

^[a] Audit results (Appendix 6.2, Table A, Column n).

^[b] Audit results (Appendix 6.2, Table A, Column o).

^[c] Audit results (Appendix 6.2, Table A, Column p).

^[d] Audit results (Appendix 6.2, Table A, Column q).

Beyond the fact of whether or not measures are documented, we observed that the measures taken by the business units resulted in the receipt of 38 reports on the 54 contributions, or 70%. Given that, according to the agreements and applications for support, a total of 44 reports were required (see Table 8) and given that six reports were received without the applicable provisions in the agreements (see Appendix 6.2, Table A, nos. 4a, 5a, 5b, 5f, 22 and 24), a total of 12 reports (22%) are therefore missing.⁸ Note that for contributions nos. 15 and 16a, the final report stipulated under the agreement was not yet due at the time of our audit. At this stage, we question the adequacy of the steps taken to ensure receipt of the requested reports.

⁸ Number of missing reports: 44 reports required (according to Table 8) minus 38 received (according to Table 10) plus six reports received despite the absence of the applicable provisions in the agreements. The missing reports concern contributions nos. 2c, 7a, 8b, 11b, 14a, 15, 16a, 16b, 16c, 16d, 19a and 19b.

Moreover, of the 38 reports received, we noted that a just under half (18 or 47%) enabled the business units to assess whether the expected outcomes had been achieved.

When these results are extrapolated to the 54 contributions, the business units were therefore able to assess the outcomes in 33% of the cases (18 reports out of the 54 contributions). This is due to the fact that either the objectives had not been initially established in measurable terms or that the organizations did not provide reports demonstrating the achievement of the objectives or that reports had simply not been produced.

In the first case, we already observed in Section 4.4.2. that the objectives were not always worded in measurable terms. Moreover, we recommended in 4.4.2.B. the implementation of mechanisms to ensure the supported organizations systematically agree on objectives worded in measurable terms for each of the contributions granted to facilitate accountability on the part of the organizations. In the second case, we also observed in Section 4.4.3.2. that the business units had not yet specified their needs at the time of requiring reports. In 4.4.3.2.B., we recommended that the business units systematically include provisions specifying the information that was to be provided in the required reports in all agreements reached with the organizations.

Secondly, we also examined the extent to which the business units had implemented adequate monitoring mechanisms to obtain the assurance that the contributions made to the organizations had been used for the intended purposes.

Our audit enabled us to conclude that the business units had implemented monitoring mechanisms aimed at verifying the use of the allocated sums for the intended purposes in only 19% of the contributions examined, 10 out of a total of 54. These mechanisms were however not always sufficient to provide such assurance. Below are our observations concerning the following business units:

- Service de la diversité sociale et des sports – Division du développement social:
 - For 3 of the 17 contributions, managed respectively by the Montréal-Nord and Saint-Léonard (nos. 12b, 12c and 13b) boroughs, and for one managed by the Division du développement social (no. 13a), the reports received from the organizations contained information on the actual and forecasted expenses, indicating how the sums had been used. However, there is no evidence that the business unit managers had carried out the necessary verifications to validate the information provided.

- Service de la diversité sociale et des sports – Division des orientations – équipements, événements et pratique sportive:
 - In the case of contribution no. 23, the Service requested a confirmation that the organization had used the allocated sums. However, there is no evidence that business unit managers had carried out the necessary verifications to validate the information provided.
- Service de la culture:
 - For two of the nine contributions audited (nos. 17 and 18), we were able to track down a confirmation stipulating that all allocated sums had been used for the sole purpose of carrying out the project. This is a good practice. However, there is no evidence that the Service obtained financial information on how the allocated sums were used.
- Service des grands parcs, du verdissement et du Mont-Royal:
 - For three of the four contributions, the Service obtained the assurance that the sums had been used for the intended purposes. For example, we obtained a follow-up table of the accounting documents provided and proofs of achievement of the deliverable (no. 21c). In the case of contribution no. 21d, we also tracked down a form concerning the hiring of the project manager. This form, signed by the responsible manager, stipulated that the organization had fulfilled all of its obligations.

As for the other contributions, the persons in charge did not deploy monitoring mechanisms to be assured of the use of the allocated sums and did not request information useful for this purpose nor did they provide evidence that they had obtained such assurance. This in spite of the fact that provisions in the agreement authorized certain business units to monitor activities. For example, they could require separate financial information on the contribution activities. They could also ask to consult the organizations' account books and supporting documents. We even observed cases where the financial statements or other reports indicated surpluses for the supported activities without any evidence of a documented analysis. Below are our observations concerning the following business units:

- MHM borough: The reports received from the organizations or other information had not been analyzed with respect to the use of the allocated sums. In certain cases, budget forecasts had been initially provided with the application for support, but the information had not been reconciled with the actual project expenditures.

In the case of contribution no. 1, although the borough was not able to provide assurance that the allocated sums had been used for the intended purposes of the contribution, the person in charge nevertheless pointed out that the financial statements indicated

substantial accumulated surpluses (\$776,000) and asked the organization, at the time of renewal, to bring down these surpluses—without, however, reducing its contribution. It is our opinion that the use of this contribution should be audited, all the more so as the agreement reached between the parties allows the City to consult the account books and supporting documents.

- VSMPE borough: For both contributions examined (nos. 5a and 5b), we found an evaluation form used at the time the contributions were renewed. The person in charge was required to make a decision regarding the use of the allocated sums. However, we found no evidence of an analysis or documentation in this regard.

Monitoring mechanisms available to the business units could include the financial statements provided the information they contain for the fiscal year is useful. During our audit, we examined whether the financial statements received from the 24 organizations provided relevant information allowing the business units to ascertain that the allocated sums had been used for the intended purposes. Our audit reveals that most of the financial statements (20 out of a total of 24, or 83%) did not present separate information on the expenditures related to each contribution. Consequently, they were of no use to the business units. And yet:

- In the case of eight organizations (nos. 2, 3, 4, 8, 11, 12, 13 and 14), the agreements contained this provision. In this regard, we believe that the business units must take measures to ensure compliance with this provision;
- For 12 organizations (nos. 1, 6, 7, 15, 16, 17, 18, 19, 20, 22, 23 and 24), the agreements did not stipulate a requirement that the subsidized activities be reported separately. We believe that the provision should be worded such as to provide for separate follow-up. In Section 4.4.3.1. of this report, we namely recommended that the agreements reached with the supported organizations systematically include the requirement to provide separate financial information on the subsidized activities in the financial statements.

In the case of the other four organizations' financial statements, we were able to track down information that partially met the business units' needs. Thus:

- Two organizations (4%) provided financial information related to the contributions separately from other activities, when stipulated in the agreements (nos. 9b, 9c, 10a and 10b). This information was useful for determining the use of the allocated sums;
- One organization (no. 5) provided in its financial statements program-based results in accordance with the agreement's provision stipulating that the revenues and expenditures related to each subsidized activity (program) be presented separately. However, it was not possible to obtain separate information on the use of the sums allocated by the borough since the organization had received other contributions for the

same programs as those targeted by the City's contribution. We believe that the provision should be worded such as to allow for separate follow-up;

- In the case of one organization (no. 21), one contribution (no. 21a) out of the four was presented separately in the financial statements as required under the agreements. For contributions nos. 21c and 21d, the organization nevertheless provided a statement on the final cost of the subsidized activity consolidating these two contributions. Although this statement was not accompanied by the auditor's opinion (it was accompanied by a notice to the reader), it still made it possible to ascertain how the allocated sums had been used. The statement indicates a surplus of \$4,000. In our opinion, the relevance of extending this practice to other contributions should be evaluated.

In short, the results of our audit led us to conclude that the business units do not dispose of relevant and useful information to ascertain that the allocated sums were used for the intended purposes. In our opinion, this information could be obtained from financial statements providing separate financial information on the contributions granted or—at a minimum—from an appendix. Also, we believe that different mechanisms could be applied depending on the monetary value of the contributions made. For example, a statement of the final cost of the subsidized activity could be relevant for smaller contributions.

When the business units receive information enabling them to determine the use of the allocated sums, they must analyze the information received. Currently, the fact that few business units have implemented monitoring mechanisms to evaluate the use of the allocated sums has consequences for the City. It is possible that sums allocated to organizations were not used for the intended purposes; such situations would negatively affect the City's credibility.

Finally, we evaluated whether the business units had deployed mechanisms to recuperate any sums that had not been used for the intended purposes. Our audit reveals that such mechanisms were not deployed either because the agreements did not contain provisions to this effect or because the business units had not exercised their right to recover overpaid amounts. And yet, in the case of ten contributions, the financial statements indicated surpluses:

- In six cases (4b, 5a, 5b, 5c, 5e, 5f), the organizations had received contributions from other sources, making it impossible to determine whether a portion of the surplus could be allocated to the activities supported by the City. We found no evidence on file indicating that the person in charge had raised questions on this issue. The agreements did not provide for the remittal of unused sums;
- In four cases (9b, 9c, 21c and 21d), the agreements contained provisions, but the two business units at issue had not exercised their right to recover sums.

4.4.4.B. Recommendation

We recommend that the Mercier–Hochelaga–Maisonneuve, Villeray–Saint-Michel–Parc-Extension, Le Sud-Ouest, Montréal-Nord, Saint-Léonard and Rosemont–La Petite-Patrie boroughs as well as the Service de la diversité sociale et des sports, the Service de la culture and the Service des grands parcs, du verdissement et du Mont-Royal monitor compliance with the provisions requiring a separate presentation of the expenditures related to each contribution in order to be in a position to evaluate the use of the allocated sums.

Business units' responses:

MERCIER–HOCHELAGA-MAISONNEUVE BOROUGH

[TRANSLATION] An addition will be made to the agreement's legal document to require the filing of financial statements.

The required frequency of these filings will vary between two and four times per year depending on the value of the contribution.

The borough and the organization will agree on the frequency of these filings before signing the agreement. (Planned completion: January 2016)

VILLERAY–SAINT-MICHEL–PARC-EXTENSION BOROUGH

[TRANSLATION] Ensure separate financial information on the activities covered by the financial contribution is received.

Include in the agreement the obligation to provide separate financial information on the activities supported by the financial contribution in the financial statements. (Planned completion: April 2015)

LE SUD-OUEST BOROUGH

[TRANSLATION] We will review the agreement and request that the Service des affaires juridiques insert a paragraph stipulating that the organization is required to file a document, along with the progress and final reports, that presents the expenses incurred under each contribution separately in order to be able to evaluate the use of the sums allocated. (Planned completion: May 2015)

Upon receipt of the Service des affaires juridiques' opinion, we will request amendments to the agreement and have the document replaced in the City's legal bank. The new agreement will be used once this has been completed. (Planned completion: June 2015)

MONTRÉAL-NORD BOROUGH

[TRANSLATION] To ensure that the organizations that receive financial contributions from the borough present the expenditures incurred under each contribution received separately, the DCSLDS will require that the organizations' managers (the chair of the BD and the organization's management) present the expenses associated with each contribution made by the borough separately, in an integrated manner, in their financial statements or as an appendix.

A letter concerning the introduction of this new measure will be sent to the organizations' managers. Thereafter, the DCSLDS will follow up to verify compliance with the measure. Organizations will be provided with the necessary support upon request. **(Planned completion: March 2016)**

SAINT-LÉONARD BOROUGH

[TRANSLATION] An audit worksheet with the councillor's comments will be included in the progress and final reports. This document will be included with the supporting documents and sent to the person in charge of the file.

A request to develop the audit worksheet has been sent to the Service de la diversité sociale et des sports. **(Planned completion: December 2015)**

ROSEMONT-LA PETITE-PATRIE BOROUGH

[TRANSLATION] Determine the best time to examine the financial statements each year in order to track the revenue and expenses associated with the contributions made:

- At the annual evaluation of compliance with the agreement (November);
- At the NPO's AGM (April).

If clarifications are required, request additional information and access to the account books and supporting documents.

In case of doubt, call upon the services of an external firm specialized in accounting.

In cases where the presentation is not satisfactory, request adjustments.

Verify that accounting and monitoring costs are not disproportionate to the risks (for both the municipal administration and the supported NPOs). **(Planned completion: November 2015)**

SERVICE DE LA DIVERSITÉ SOCIALE ET DES SPORTS

DDS

[TRANSLATION] For contributions managed by the DDS, develop a monitoring worksheet, if one does not already exist, to verify whether the organizations met their obligations under the agreement. This worksheet will apply to all recommendations made in the audit report, will be an integral part of the file and will include the following:

- Financial statements for contributions of \$100,000 or more;
- Measurable objectives;
- Separate accounting;
- Consultation of account books and supporting documents;
- Separate financial information;
- Signed confirmation of the use of the allocated sums;
- Production of reports on each contribution;
- Forwarding of the information deemed necessary;
- Conditional terms of payment;
- Separate presentation of the expenditures incurred for each contribution;
- Use of the allocated sums.

For contributions managed by the boroughs, ask the boroughs to develop a monitoring worksheet, if one does not already exist, to verify whether the organizations met their obligations under the proposed agreement. This worksheet will be an integral part of the file and will be sent to DDS management. **(Planned completion: December 2015)**

DGIS and DOÉÉPS

[TRANSLATION] Provide separate financial information on the activities covered by the financial contribution:

- Include in proposed agreements that do not already contain such a provision the obligation to provide separate financial information on the activities supported by the financial contribution in the financial statements;
- Include this obligation on the organization's obligation monitoring worksheet;
- Provide this monitoring worksheet to the organization;
- Use this sheet to verify whether the organization (the employee responsible for monitoring the agreement) met its obligations, including this obligation. **(Planned completion: December 2015)**

SERVICE DE LA CULTURE

[TRANSLATION] Already, certain units provide organizations that receive contributions with accountability grids. The tools must however take into account the amounts received and must be adapted to different options. A review will be carried out to take into account these different realities.

The Service de la culture agrees to take part in a comprehensive reflection on the development of a common guideline for the entire City regarding the obligation to present separate financial data on the expenditures incurred for each contribution made. **(Planned completion: March 2016)**

SERVICE DES GRANDS PARCS, DU VERDISSEMENT ET DU MONT-ROYAL

[TRANSLATION] The SGPVMR will ensure it receives relevant and useful information to obtain the assurance that the allocated sums were used for the intended purposes. **(Planned completion: June 2015)**

4.4.4.C. Recommendation

We recommend that the Mercier–Hochelaga-Maisonneuve, Villeray–Saint-Michel–Parc-Extension, Ahuntsic–Cartierville, Le Sud-Ouest, Montréal-Nord, Saint-Léonard and Rosemont–La Petite-Patrie boroughs as well as the Service de la diversité sociale et des sports, the Service de la culture and the Service des grands parcs, du verdissement et du Mont-Royal implement monitoring mechanisms enabling an evaluation of the use of the allocated sums in order to be able to recover unused sums, if applicable.

Business units' responses:

MERCIER–HOCHELAGA-MAISONNEUVE BOROUGH

[TRANSLATION] For all financial contributions made by the borough, make sure to include the required sections in the legal documents. (Planned completion: January 2016)

Auditor General's Comments:

Although the proposed action plan provides for the addition of contractual obligations, this cannot be considered a monitoring mechanism in itself.

We therefore reiterate our recommendation to the effect of implementing a monitoring mechanism to verify how the sums paid were used and to recover overpaid amounts.

VILLERAY–SAINT-MICHEL–PARC-EXTENSION BOROUGH

[TRANSLATION] Implement monitoring mechanisms to evaluate the use of the allocated sums:

- *Produce an activity report for the supported activities (specify that the report will outline the achievement of the results based on the applicable measurable objectives);*
- *Sign a form confirming the use of the allocated sums for the sole purpose of carrying out the project or planned activities;*
- *Plan three evaluation meetings with the organization per year;*
- *Include in the agreement the obligation to remit unused sums, if applicable. (Planned completion: May 2015)*

AHUNTSIC-CARTIERVILLE BOROUGH

[TRANSLATION] Evaluate the organizations' largest expenditures, including salaries.

Verify that the promoting organizations use the funds for the planned activities.

Identify mechanisms to monitor the use of the funds.

Verify the compliance of the actual expenditures with the budget forecasts presented in the application for financial support.

Plan a meeting with the funded organizations to inform them of the new financial contribution management practices. (Planned completion: March 2016)

LE SUD-OUEST BOROUGH

[TRANSLATION] The borough's personnel is required to fill out a form following each visit. This form provides information such as the number of persons present, the condition of the premises, the activities under way, etc.

Particular attention will be given to social development projects and the number of visits per project will be tracked. (Planned completion: June 2015)

MONTRÉAL-NORD BOROUGH

[TRANSLATION] To ensure a correct evaluation of the use of the financial contributions made to the organizations and to be able to recover unused sums, if applicable, the DCSLDS intends to implement the following monitoring mechanisms:

- *Create a form to monitor the expenditures and activities carried out that the DCSLDS will provide to the organizations. The form will be completed prior to projects' midterm visits and signed by the organization's manager. Once validated, the form will then be signed by the person in charge of project monitoring for the DCSLDS.*

A letter concerning the introduction of this new measure will be sent to the organizations' managers. Thereafter, the DCSLDS will follow up to verify compliance with the measure. Organizations will be provided with the necessary support upon request.

The DCSLDS will inform the Service de la diversité sociale et des sports—with whom it works closely under municipal programs and agreements reached with the Quebec government—of corrective measures that it intends to implement in response to the recommendations made in the audit report. (Planned completion: March 2016)

SAINT-LÉONARD BOROUGH

[TRANSLATION] Following the audit commented by the councillor and the budget report audit, a recovery plan will be implemented if necessary. This document will be

included with the supporting documents and sent to the person in charge of the file. **(Planned completion: December 2015)**

ROSEMONT–LA PETITE-PATRIE BOROUGH

[TRANSLATION] Adjust the grids used for the annual evaluation of compliance with the agreements in order to validate the use of the allocated sums, and have it signed by the competent division manager as well as the manager of the DCSLDS. **(Planned completion: September 2015)**

Integrate a management monitoring tool to validate the receipt and analysis of the documents required from the NPOs. **(Planned completion: September 2015)**

Prior to implementation, approve the NPOs' action plans in connection with the contributions made.

On an occasional basis (e.g., 3 times per year), carry out visits to evaluate the activities supported by the borough in terms of compliance and quality.

On a yearly basis, evaluate the achievement of the objectives established in the action plan.

At the time of the annual evaluation, determine whether certain sums will not be used.

Determine the recoverable amount or obtain a satisfactory reassignment plan. **(Planned completion: November of each year)**

SERVICE DE LA DIVERSITÉ SOCIALE ET DES SPORTS

DDS

[TRANSLATION] For contributions managed by the DDS, develop a monitoring worksheet, if one does not already exist, to verify whether the organizations met their obligations under the agreement. This worksheet will apply to all recommendations made in the audit report, will be an integral part of the file and will contain the following items:

- Financial statements for contributions of \$100,000 or more;
- Measurable objectives;
- Separate accounting;
- Consultation of account books and supporting documents;
- Separate financial information;
- Signed confirmation of the use of the allocated sums;
- Production of reports on each contribution;
- Forwarding of the information deemed necessary;
- Conditional terms of payment;
- Separate presentation of expenditures incurred for each contribution;
- Use of the allocated sums.

For contributions managed by the boroughs, ask the boroughs to develop a monitoring worksheet, if one does not already exist, to verify whether the organizations met their obligations under the proposed agreement. This worksheet will be an integral part of the file and will be sent to DDS management. (Planned completion: December 2015)

DGIS and DOÉÉPS

[TRANSLATION] Evaluation of the use of the allocated sums for the intended purposes:

- *Sign a form confirming the use of the allocated sums for the sole purpose of completing the project or carrying out the planned activities;*
- *Produce an activity report for the supported activities. Specify that the report will outline the achievement of the results based on the applicable measurable objectives;*
- *Plan an evaluation meeting with the organization, at least once a year. (Planned completion: December 2015)*

SERVICE DE LA CULTURE

[TRANSLATION] Already, the organizations are required to present balance sheets demonstrating that the allocated sums were used for the intended purposes.

The grids that provide for monitoring mechanisms and are already used by the different units will be harmonized and applied to all units. (Planned completion: March 2016)

SERVICE DES GRANDS PARCS, DU VERDISSEMENT ET DU MONT-ROYAL

[TRANSLATION] The SGPVMR will make sure it receives relevant and useful information to obtain the assurance that the allocated sums were used for the intended purposes.

Establish monitoring mechanisms to evaluate the use of the allocated sums in order to be able to recover unused sums, if applicable. (Planned completion: June 2015)

4.5. Presence of Elected Officials or City Employees as Directors on Organizations' Boards of Directors

4.5.A. Background and Findings

As part of the work we carried out in 2014, we were informed of a memorandum issued in February 2014 by the City's comptroller general to the Direction générale following a mandate concerning the composition of the boards of directors (BDs) of paramunicipal bodies. As part of this mandate, the comptroller general had worked jointly with the City's legal department to issue an opinion on the City's obligations and the problems it faced in deciding whether to appoint elected officials and public servants to BDs. In his memorandum, the comptroller

general recommended that no elected officials or public servants should serve, within the scope of their official functions, as directors on BDs unless the organization's letters patent required otherwise. This recommendation was based on Section 322 of the Civil Code of Quebec, which reads as follows:

A director shall act with prudence and diligence. He shall also act with honesty and loyalty in the interest of the legal person.

Thus, when an elected official or public servant sits on a BD within the scope of his official functions with the City, his duties and responsibilities are to the organization rather than to the City. This situation may create a conflict of interest with respect to the person's duty of loyalty to the City.

In his memorandum, the comptroller general stated that elected officials and public servants could sit as observers. In such cases, they do not vote and do not participate actively in the organization's activities. Agreements must therefore provide observers with the possibility of attending all meetings and having access to all documents provided to board members.

According to the information obtained, the Direction générale has yet to provide the City's business units with a guideline to this effect. The line endorsed by the Direction générale would be to prevent all public servants from sitting as directors on BDs of organizations receiving support from the City. However, situations would be settled on a case-by-case basis.

During our audit, we sought to determine whether elected officials or City employees sat on BDs of the supported organizations. For this purpose, we focused on the 66 organizations that we audited. This number corresponds to the 49 organizations selected in Section 4.2. of this report and the 24 selected in Section 4.4. From these, we subtracted 7 organizations that had been selected under both sections. We sought to identify the composition of the BDs and to determine whether elected officials or City employees sat on these boards.

In Table 11, below, the results of our audit reveal that three elected officials sat on BDs of four organizations and that 14 employees sat on BDs of 11 organizations.

**Table 11 – Elected Officials or Employees Sitting as Directors on BDs of Organizations Receiving Support from the City
Selection of 66 Organizations**

Business unit	Number of organizations selected	Number of organizations concerned		Elected official sitting on the BD	Employee sitting on the BD
		Contribution of \$100,000 or more	Contribution of less than \$100,000		
LaSalle borough	5	3	0	3	3
MHM borough	15	1	0		1
RDP-PAT borough	4	1	0		1
RLPP borough	7	1	0		1 ^[b]
VSMPE borough	10	1	0		1
Service de la culture	10	2	0		5
Service de la diversité sociale et des sports – Division du développement social	10	2	0		2 ^[a]
Service de la diversité sociale et des sports – Division des orientations – équipements, événements et pratique sportive	4	1	0	1	
Service des grands parcs, du verdissement et du Mont-Royal	1		0		
Total	66	12	0	4	14

^[a] Organizations supported directly from the budget of the Service de la diversité sociale et des sports. One contribution is managed by the Saint-Laurent borough and the other by the Division du développement social.

^[b] Organization of which a director is employed by the Service de l'environnement.

We also examined the extent to which each of these organizations had granted, under at least one agreement, an observer status to a representative of the managing business unit. The results provided in Table 12 indicate that 36 organizations out of a total of 66, or 54%, have already granted observer status to a public servant under at least one agreement with the City.

**Table 12 – Provision Granting Observer Status Under at Least One Agreement
Selection of 66 Organizations**

Business unit	Number of organizations selected	Provision concerning the observer status present in the agreements
LaSalle borough	5	4
MHM borough	15	13
RDP–PAT borough	4	4
RLPP borough	7	4
VSMPE borough	10	7
Service de la culture	10	1
Service de la diversité sociale et des sports – Division du développement social	10	0
Service de la diversité sociale et des sports – Division des orientations – équipements, événements et pratique sportive	4	3
Service des grands parcs, du verdissement et du Mont-Royal	1	0
Total	66	36 (54%)

Since our audit focused on only 66 organizations, we are well aware that other similar situations could exist. Consequently, it is our opinion that the Direction générale should provide clear instructions to all of the City's business units to the effect that the City's elected officials or employees are not to serve, within the scope of their duties, as directors on a BD unless the organization's letters patent require otherwise.

Moreover, we believe that all of the agreements reached with the organizations should systematically include a provision on observer status enabling the City to appoint a representative to a BD when necessary.

4.5.B. Recommendation

We recommend that the Direction générale take the necessary measures to prevent elected officials and City employees from sitting, within the scope of their duties, as directors on the board of directors of a supported organization, unless required under the letters patent, to avoid situations where said directors' duty of loyalty to the City could be compromised.

Business unit's response:

[TRANSLATION] With respect to public servants, the Direction générale will issue a directive forbidding public servants from sitting on the BD of an organization that is subsidized by the City.

*Moreover, the Direction générale does not consider that it is its role to make a decision regarding the appointment of elected officials to BDs and has informed the president of the executive committee of the content of the recommendation for his consideration. **(Planned completion: December 2015)***

4.5.C. Recommendation

We recommend that the LaSalle, Mercier–Hochelaga-Maisonneuve, Rivière-des-Prairies–Pointe-aux-Trembles, Rosemont–La Petite-Patrie and Villeray–Saint-Michel–Parc-Extension boroughs as well as the Service de la culture, the Service de la diversité sociale et des sports and the Service des grands parcs, du verdissement et du Mont-Royal include in agreements reached between the City and supported organizations a provision granting observer status to a City representative authorizing the latter to attend the meetings of the board of directors when necessary.

Business units' responses:

LASALLE BOROUGH

*[TRANSLATION] The borough's DCSLDS will verify that no public servant and/or elected official sits on the BD of a recognized organization under the Politique de reconnaissance et de soutien des organismes LaSallois other than as an observer in accordance with a clear provision included in an agreement reached between the parties. **(Planned completion: September 2015)***

MERCIER–HOCHELAGA-MAISONNEUVE BOROUGH

*[TRANSLATION] Already provided under Section 10.1 of the agreements. **(Completed)***

ROSEMONT–LA PETITE-PATRIE BOROUGH

*[TRANSLATION] Catalogue the activities, programs and projects of the NPOs supported by the borough. **(Planned completion: June 2015)***

*Make sure that the presence of a municipal employee on the BD of the supported NPO, even as a non-voting observer, does not jeopardize the financial support allocated to the NPO by other bodies (e.g., the Secrétariat à l'action communautaire autonome does not tolerate such a practice). **(Planned completion: December 2015)***

Harmonize the agreements with the addition of a clause granting observer status to the City, at least at the AGM and certain BD meetings involving the agreement. **(Planned completion: January 2016)**

NOTE: In cases where agreements are currently in effect, the new clauses will be added when the agreements are renewed.

Inform the NPOs of the new obligation, if applicable. **(Planned completion: November 2015)**

VILLERAY–SAINT-MICHEL–PARC-EXTENSION BOROUGH

[TRANSLATION] Include in agreements reached between the borough and supported organizations a provision granting observer status to a representative of the borough for the purpose of attending BD meetings if necessary. (Planned completion: April 2015)

SERVICE DE LA CULTURE

[TRANSLATION] The recommendation can be applied in certain cases. However, this corrective measure is problematic at different levels and cannot be applied unilaterally. For example, certain agreements signed with organizations are agreements reached with government departments that fund certain programs (e.g., Imaginer-Réaliser Montréal 2025). (Planned completion: March 2016)

SERVICE DE LA DIVERSITÉ SOCIALE ET DES SPORTS

DDS

[TRANSLATION] Include in agreements that do not already contain such a clause a provision making it possible to grant observer status to the manager or his/her authorized representative for the purpose of attending the organization's AGM or BD meetings, if necessary. (Planned completion: December 2015)

DGIS and DOÉÉPS

[TRANSLATION] Pursue the action undertaken since 2014 to include in the agreements reached between the City and the supported organizations a provision granting observer status to a City representative for the purpose of attending BD meetings if necessary. (Completed)

SERVICE DES GRANDS PARCS, DU VERDISSEMENT ET DU MONT-ROYAL

[TRANSLATION] The SGPVMR will include in agreements reached between the City and the supported organizations a provision granting observer status to a City representative for the purpose of attending BD meetings if necessary. (Planned completion: June 2015)

4.6. Guide on Managing Contributions Made to Organizations

4.6.A. Background and Findings

As we mentioned at the beginning of this report, several organizations receive support from more than one business unit. These same organizations may therefore have received several contributions during the course of the year.

Our audit revealed certain contributions that were made under programs and others that were not. In the first case, the contributions were not accompanied by agreements between the City and the organizations. In the second case, signed agreements exist. In both cases, it is important to make sure that the organizations carry out the activities or projects for which they received support, as planned.

After having identified the provisions contained in the agreements, programs and applications for support, we noted that certain provisions were not always included (e.g., keeping separate accounts for the organizations, providing separate financial information on supported activities or projects, recovering unused sums). In other cases, a comparative analysis of the provisions of the various agreements revealed a different wording (e.g., the payment of a contribution is sometimes subject to the approval of a report; in other cases, the payment is approved upon receipt of a report; other agreements contain no such provisions). Another example: the provision on forwarding the financial statements is worded differently. This lack of consistency may create confusion for the supported organizations.

Also, as part of our audit, we noted that the persons responsible for monitoring the contributions were not able to demonstrate that the outcomes had been achieved or provide assurance that the allocated sums had been used for the intended purposes. In our opinion, a lack of guidance is partly responsible for this situation.

For this reason, we believe that it would be appropriate for the business units to have access to a reference guide to support them in this process and help them adopt a common approach. This guide could establish a process for evaluating contributions of goods and services and taking this information into consideration with respect to the agreements reached with organizations. It could also provide information on the different steps of the monitoring process. Finally, it could establish a practice whereby organizations certify their use of the allocated sums and another practice by which the responsible manager provides this certification.

This guide could also describe the responsibilities of the various stakeholders involved in keeping up to date a list of the audited financial statements provided in compliance with Section 107.9 of the CTA. It goes without saying that we believe that the Service de la concertation avec les arrondissements should be involved in this process.

4.6.B. Recommendation

We recommend that the Direction générale and the Service de la concertation des arrondissements develop a guide on the management of contributions made to organizations in order to standardize all business units' operations.

Business unit's response:

DIRECTION GÉNÉRALE

[TRANSLATION] The Direction générale will prepare such a management guide. (Planned completion: December 2015)

5. General Conclusion

A large number of organizations receive annual contributions from the City. These are mainly financial contributions, but there are also contributions of goods and services. By law, organizations that receive an annual contribution of \$100,000 or more are required to provide audited financial statements under Section 107.9 of the *Cities and Towns Act* (CTA). Concurrently, in December 2013, City council adopted a motion to receive the annual reports of the organizations subject to Section 107.9 of the CTA. The business units responsible for managing the contributions receive these financial statements. Also, the Direction du greffe files these financial statements at municipal council meetings. Our audit indicated that no formal process had been established to identify all of the organizations concerned to constitute an up-to-date register of audited financial statements. Consequently, City council has no assurance whatsoever of receiving all of the annual reports.

For the purpose of managing the contributions, the business units invoke various provisions contained in the agreements, applications for financial support, registration forms or programs.

Our audit indicated that measurable objectives had not been established for most of the contributions examined. This risks limiting the business units' ability to assess whether the objectives have been achieved. Moreover, the organizations are not all subject to the same obligations for all contributions. This also risks limiting the business units' ability to evaluate

whether the allocated sums were used for the intended purposes. Indeed, the obligations differ or are sometimes altogether absent with respect to the implementation of an operating mode that demonstrates the organizations' use of the contributions, the receipt of the required reports and the information they provide, the production of financial statements and the recovery of allocated sums if not used for the intended purposes.

With respect to monitoring, the business units were able to:

- Evaluate the achievement of the outcomes for only 33% of the contributions, because either the objectives had not been initially established in measurable terms, the organizations had not provided reports indicating the achievement of the objectives or the reports had simply not been provided;
- Implement monitoring mechanisms to evaluate the use of the contributions granted for the intended purposes for only 19% of the contributions, in part because the required information had not been requested.

Thus, for only 12% of the contributions did the financial statements obtained from the organizations provide information that was useful to the business units for evaluating the use of the allocated sums for the intended purposes.

We observed that three elected officials sit on boards of directors (BD) of four organizations and that 14 City officials sit on BDs of 11 organizations. The fact that they hold director status could affect their duty of loyalty to the City.

Finally, to standardize the provisions contained in the agreements, applications for support and other documents, as well as to better define the responsibilities of the various stakeholders, we recommend that a reference guide be developed to give direction to all business units. It goes without saying that the monitoring mechanisms implemented will need to be modulated to take into account the value of the contributions.

6. Appendices

6.1. Portrait of Financial Contributions Made to Non-profit Organizations

Table A – Distribution of the Contributions Between the Central Departments and the Boroughs from 2009 to 2013 (\$M)

	2009 ^[a]				2010 ^[a]				2011 ^[a]				2012 ^[a]				2013 ^[a]			
	\$	%	Number of org.	%	\$	%	Number of org.	%	\$	%	Number of org.	%	\$	%	Number of org.	%	\$	%	Number of org.	%
Boroughs	27.2	34%	1,448	70%	26.8	31%	1,365	67%	29.9	32%	1,426	70%	30.9	31%	1,536	68%	30.5	31%	1,526	69%
Central departments	53.5	66%	625	30%	59.7	69%	673	33%	62.5	68%	623	30%	66.9	69%	720	32%	68.4	69%	693	31%
Total	80.7	100%	2,073	100%	86.5	100%	2,038	100%	92.4	100%	2,049	100%	97.8	100%	2,256	100%	98.9	100%	2,219	100%

[a] The number of organizations differs from that presented in Table 2 due to the fact that certain organizations received support from both boroughs and central departments.

**Table B – Contributions Paid Directly from
Central Departments’ Budgets from 2009 to 2013
(\$M)**

	2009				2010				2011				2012				2013			
	\$	%	Number of org.	%	\$	%	Number of org.	%	\$	%	Number of org.	%	\$	%	Number of org.	%	\$	%	Number of org.	%
\$100,000+	41.6	78%	83	13%	47.8	80%	75	11%	50.0	80%	75	12%	54.2	81%	87	12%	55.3	81%	88	13%
Less than \$100,000	11.9	22%	542	87%	11.9	20%	598	89%	12.5	20%	548	88%	12.7	19%	633	88%	13.1	19%	605	87%
Total	53.5	100%	625	100%	59.7	100%	673	100%	62.5	100%	623	100%	66.9	100%	720	100%	68.4	100%	693	100%

**Table C – Contributions Paid Directly from
Boroughs’ Budgets from 2009 to 2013
(\$M)**

	2009				2010				2011				2012				2013			
	\$	%	Number of org.	%	\$	%	Number of org.	%	\$	%	Number of org.	%	\$	%	Number of org.	%	\$	%	Number of org.	%
\$100,000+	15.7	58%	61	4%	16.4	61%	63	5%	19.8	66%	73	5%	19.7	64%	73	5%	19.5	64%	73	5%
Less than \$100,000	11.5	42%	1,387	96%	10.4	39%	1,302	95%	10.0	34%	1,353	95%	11.2	36%	1,453	95%	11.0	36%	1,453	95%
Total	27.2	100%	1,448	100%	26.8	100%	1,365	100%	29.8	100%	1,426	100%	30.9	100%	1,526	100%	30.5	100%	1,526	100%

6.2. Management of Financial Contributions

Table A – Audit Results (Selection of 24 Organizations and 54 Contributions) – 2013

Organization no.	Total contribution paid from the business unit's budget	Contribution no.	Contributions (2013) \$	Non-monetary support	Agreement		Non-compliance / Agreement signed (c)	Objectives		Provisions present in the agreement or application for support								Monitoring carried out			
					Yes (a)	No (b)		Yes/ No (d)	In measurable terms (e)	Separate accounts (f)	Consultation of accounts (g)	Production of financial statements (h)	Separate financial information (i)	Production of reports (j)	Nature of the information required in the reports (k)	Remittal of sums not used for intended purposes (l)	Terms and conditions of payment (m)	Enables evidence of steps taken (n)	Reports		Monitoring mechanisms aimed at verifying the use of allocated sums (q)
																			Obtained (o)	Evaluation of the objective achieved (p)	
MERCIER-HOCHELAGA-MAISONNEUVE BOROUGH																					
1	\$234,000	1	\$234,000	YES	X		YES		X			X	X				X				
2	\$213,049	2a	\$6,000 and \$5,200			X	YES						X				X				
		2b	\$37,780			X	NO														
		2c	\$164,069		X		YES		X	X	X	X	X	X							
3	\$131,823	3a	\$12,000			X	YES						X				X				
		3b	\$103,823		X		YES			X	X										
		3c	\$16,000			X	NO														
4	\$45,221	4a	\$39,321		X		YES			X	X					X	X				
		4b	\$5,900			X	YES	X					X			X	X				
VILLERAY-SAINT-MICHEL-PARC-EXTENSION BOROUGH																					
5	\$334,934 ^[a]	5a	\$29,747	YES	X		YES			X	X						X				
		5b	\$29,747	YES	X		YES			X	X						X				
		5c	\$15,005	YES	X		YES			X		X					X				
		5d	\$41,451	YES	X		YES			X		X					X				
		5e	\$193,980		X		YES	X	X	X	X		X	X		X		X			
		5f	\$18,900		X		YES	X	X	X					X	X		X			
6	\$178,923 ^[b]	6a	\$63,584	YES	X		YES			X		X					X	X			
		6b	\$63,584	YES	X		YES			X		X					X	X			
		6c	\$10,750	YES	X		YES			X		X					X	X			
		6d	\$32,374		X		YES			X		X					X	X			
7	\$33,602 ^[c]	7	\$31,700		X		NO		X	X		X									

^[a] Adjustments totalling \$6,104 were not examined.

^[b] Adjustments totalling \$8,631 were not examined.

^[c] Adjustments totalling \$1,902 were not examined.

Table A – Audit Results (Selection of 24 Organizations and 54 Contributions) – 2013 (continued)

Organization no.	Total contribution paid from the business unit's budget	Contribution no.	Contributions (2013) \$	Non-monetary support	Agreement		Non-compliance / Agreement signed (c)	Objectives		Provisions present in the agreement or application for support								Monitoring carried out			
					Yes (a)	No (b)		Yes/ No (d)	In measurable terms (e)	Separate accounts (f)	Consultation of accounts (g)	Production of financial statements (h)	Separate financial information (i)	Production of reports (j)	Nature of the information required in the reports (k)	Remittal of sums not used for intended purposes (l)	Terms and conditions of payment (m)	Enables evidence of steps taken (n)	Reports		Monitoring mechanisms aimed at verifying the use of allocated sums (q)
																			Obtained (o)	Evaluation of the objective achieved (p)	
SERVICE DE LA DIVERSITE SOCIALE ET DES SPORTS – DIVISION DU DEVELOPPEMENT SOCIAL																					
8	\$410,000	8a	\$360,000		X		NO		X	X	X	X	X		X		X	X			
		8b	\$50,000		X		NO		X	X	X	X	X		X						
9	\$198,486 ^[f]	9a	\$18,613		X		N/C	YES			X		X			X	X				
		9b	\$134,100 and \$25,000		X		YES		X	X	X	X	X		X	X	X	X			
		9c	\$20,775		X		YES		X	X	X	X	X		X	X	X	X			
10	\$52,000 ^[g]	10a	\$27,000		X		N/C	YES	X	X	X	X	X		X	X		X	X		
		10b	\$25,000		X		N/C	YES	X	X	X	X	X		X	X		X			
11	\$218,000	11a	\$178,000		X		YES		X	X	X	X	X		X	X		X			
		11b	\$40,000		X		YES		X	X	X	X	X		X	X					
12	\$185,000 ^[h]	12a	\$70,000	YES	X		YES		X	X	X		X		X	X		X			
		12b	\$100,000	YES	X		YES	X	X	X	X	X	X		X	X		X	X		
		12c	\$15,000	YES	X		YES		X	X	X	X	X		X	X		X	X		
13	\$51,000 ^[d]	13a	\$25,000		X		N/C	YES		X	X		X		X			X	X		
		13b ^[f]	\$20,000		X		YES	X	X	X	X	X	X		X	X		X	X		
14	\$103,913 ^[i]	14a	\$18,613			X	YES	X					X			X					
		14b	\$47,300		X		YES	X	X	X	X	X	X		X	X		X	X		
		14c	\$38,000		X		YES	X	X	X	X	X	X		X	X		X			
SERVICE DE LA DIVERSITE SOCIALE ET DES SPORTS – DIVISION DES ORIENTATIONS – EQUIPEMENTS, EVENEMENTS ET PRATIQUE SPORTIVE																					
20	\$800,000 ^[e]	20	\$800,000		X		NO		X	X	X				X	X					
22	\$149,100	22	\$149,100		X		YES	X			X					X	X				
23	\$200,000	23	\$200,000		X		YES	X	X	X	X	X				X	X	X	X		
24	\$35,900	24	\$35,900		X		YES				X					X	X	X			

[d] Includes a payment of \$6,000 for a 2012 contribution (not audited).
[e] \$4 million (5 annual payments of \$800,000 each between January 2010 and January 2014).
[f] Contribution managed by Le Sud-Ouest borough.
[g] Contribution managed by the Ahuntsic-Cartierville borough.
[h] Contribution managed by the Montréal-Nord borough.
[i] Contribution managed by the Saint-Léonard borough.
[j] Contribution managed by the RLPP borough.

Table A – Audit Results (Selection of 24 Organizations and 54 Contributions) – 2013 (continued)

Organization no.	Total contribution paid from the business unit's budget	Contribution no.	Contributions (2013) \$	Non-monetary support	Agreement		Non-compliance / Agreement signed (c)	Objectives		Provisions present in the agreement or application for support								Monitoring carried out			
					Yes (a)	No (b)		Yes/ No (d)	In measurable terms (e)	Separate accounts (f)	Consultation of accounts (g)	Production of financial statements (h)	Separate financial information (i)	Production of reports (j)	Nature of the information required in the reports (k)	Remittal of sums not used for intended purposes (l)	Terms and conditions of payment (m)	Enables evidence of steps taken (n)	Reports		Monitoring mechanisms aimed at verifying the use of allocated sums (q)
SERVICE DE LA CULTURE																					
15	\$195,784	15	\$195,784		X			YES	X	X				X	X	X	X		Note ^[k]		
16	\$405,933	16a	\$349,933		X			YES	X	X				X	X	X	X		Note ^[k]		
		16b	\$30,000			X ^[l]		YES	X					X		X					
		16c	\$13,000			X ^[l]		YES	X					X	X	X					
		16d	\$13,000			X ^[l]		YES	X					X	X	X					
17	\$130,000	17	\$130,000	X			YES	X	X	X	X		X	X	X	X	X	X	X	X	
18	\$100,000	18	\$100,000	X			YES	X	X	X	X		X	X	X	X	X	X	X	X	
19	\$1,795,000	19a	\$1,430,000		X			YES	X	X	X	X		X	X	X	X	X			
		19b	\$365,000		X			YES	X	X	X	X		X	X	X	X	X			
SERVICE DES GRANDS PARCS, DU VERDISSEMENT ET DU MONT-ROYAL																					
21	\$220,592	21a	\$100,000		X			YES	X			X	X	X	X		X	X	X	X	X
		21b	\$93,395		X			YES				X		X			X	X	X		
		21c	\$3,440		X		N/C ^[m]	YES		X	X	X	X	X		X	X	X	X	X	X
		21d	\$23,757		X			YES		X	X	X	X	X		X	X	X	X	X	X
Total contributions		54			45	9	6	54	22	28	28	40	22	44	10	30	23	20	38	18	10

^[k] The final report required under the agreement was not yet due at the time of our audit.

^[l] The program and registration form signed by the organization nevertheless specify the applicable obligations.

^[m] Non-compliant.



Report of the Auditor General of the Ville de Montréal to the City Council and to the Urban Agglomeration Council

For the Year Ended December 31, 2014

4.13

MAINTENANCE OF FIRE HYDRANTS



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List of Acronyms

AWWA	American Water Works Association	RAO	répartition assistée par ordinateur
CCSI	Centre de communications du Service de sécurité incendie de Montréal	RDP–PAT	Rivière-des-Prairies–Pointe-aux-Trembles
CNPI	Code national de prévention des incendies	SE	Service de l'eau
DGSRE	Direction de la gestion stratégique des réseaux d'eau	SIM	Service de sécurité incendie de Montréal
GEA	gestion de l'entretien des actifs	UIRP	Unité d'intervention rapide et prioritaire
		VSMPE	Villeray–Saint-Michel–Parc-Extension

4.13. Maintenance of Fire Hydrants

1. Introduction

The Service de sécurité incendie de Montréal (SIM) exercises urban agglomeration powers in the areas of fire safety and the development and implementation of the fire safety cover plan. These responsibilities include firefighting, rescues during these operations, evaluation of fire, accident or disaster risks and prevention of these events.

Effective fire risk management requires that the resources needed for different types of fire responses (equipment, staff, fire hydrants, etc.) be properly planned for, on a timely basis, in order to limit the consequences of a fire breaking out.

Within the framework of its authority, the SIM had its first *fire safety cover plan* (hereinafter referred to as the “plan”) adopted by the urban agglomeration council on December 18, 2008. This plan, which covers the years 2009 to 2013, describes fire safety on the territory and provides for an action plan and an implementation plan outlined in three components: prevention, emergency response and water supply.

More particularly, the guidelines issued by the Public Safety Minister concerning the development of this plan stressed the importance of the water supply component in responding to fires: [TRANSLATION] “*The availability of water and the reliability of the water supply have a direct impact on the effectiveness of responses.*”¹ These guidelines therefore require the SIM to have a thorough knowledge of the condition of fire hydrants and the water supply system and its capacity in the different parts of the City’s territory.

To provide fire protection on the territory of the agglomeration of the Ville de Montréal (the City), the SIM relies on some 31,000 fire hydrants. Most are on public land, with some 22,600 (73%) located on the City’s territory and about 7,350 (24%) in related municipalities. The remaining 1,050 (3%) are private property fire hydrants, generally located on land belonging to companies or institutions.

It is therefore vitally important that fire hydrants be accessible and in good operating condition in order to carry out effective emergency responses. For the territory of the agglomeration covered by the SIM, the Service de l’eau (SE), related municipalities or private owners are responsible for fire hydrant management, depending on the areas of jurisdiction established. In the first case, for fire hydrants located on the City’s territory, the SIM must rely on the SE,

¹ *Orientations du ministre de la Sécurité publique en matière de sécurité incendie*, May 2001.

which in turn relies on the 19 boroughs to perform maintenance work on them in accordance with current standards. In the second case, the SIM must rely on related municipalities for fire hydrants located on their territories. And lastly, for private property fire hydrants, it is the owners who are responsible for maintenance work. The SIM can be assured that they are in good working order only during preventive inspections.

In its fire safety cover plan, the SIM provided for a series of measures aimed at improving the water supply. Responsibility for implementing these measures was shared between the SIM and the SE,² depending on the task. With respect to the serviceability of fire hydrants, this sharing of responsibilities is described as follows:

The SIM was to:

- complete the inventory of locations of existing fire hydrants integrated in the répartition assistée par ordinateur (RAO) application;
- make available information on the condition of fire hydrants and the flow available from them using computers in vehicles;
- improve reporting and monitoring of the condition of defective fire hydrants;
- establish and maintain liaisons with the Service de l'eau and related municipalities, who are responsible for providing an adequate water supply for firefighting.

The SE was to:

- complete the overall flow rate and pressure profile for the City's entire waterworks system;
- improve the inspection, maintenance and condition of fire hydrants.

Moreover, knowledge of the condition of water assets, including fire hydrants, is important not just for fire safety purposes, but also for the purpose of complying with the City's equipment and infrastructure policy.³ Through this policy, the City set the goal of determining the planning activities necessary to keep its equipment and infrastructures in good working order, by means of a structured preventive maintenance program. The policy stresses that in order to ensure that information relevant to decision-making is provided on a timely basis, it is important that managers have a complete, permanent inventory of assets and their condition.

At the end of the implementation period for the fire safety cover plan, from 2009 to 2013, we think it is appropriate to assess the extent to which the SE and the SIM implemented the proposed measures concerning fire hydrants in order to validate certain aspects of the

² Known as the Direction de l'eau when the fire safety cover plan was adopted.

³ This policy is part of the budget documents approved every year by City council and the urban agglomeration council. It was approved for the first time when the 2004 budget was adopted.

equipment and infrastructure policy. Our findings and recommendations can then be taken into account when the fire safety cover plan provided for in the *Fire Safety Act*⁴ is revised.

2. Purpose and Scope of the Audit

From the standpoint of fire protection, the objectives of the audit were to ensure that:

- the SE has an accurate overall picture of fire hydrant maintenance so that it can show that boroughs are complying with both current standards and those established by the City;
- the SIM has reliable information on the condition of fire hydrants and their available flow.

While a discussion about fire protection must consider numerous factors, such as prevention, operations and the water supply, our audit focused more specifically on the water supply component since it includes both hydrant maintenance management and the SIM's knowledge of the hydrants' condition.

Our audit focused mainly on fire hydrant maintenance activities carried out in 2013, but also takes into account information that was submitted to us up to March 2014. For some elements, data prior to 2013 were also taken into account.

It should be noted that the term "maintenance," as used in this audit report, encompasses inspections, repairs and preventive maintenance carried out on fire hydrants.

Our audit focused on the SE's Direction de la gestion stratégique des réseaux d'eau (DGSRE) and the SIM's Direction de la prévention et de la planification. It was also conducted within the Direction des travaux publics of the following four boroughs: LaSalle, Rivière-des-Prairies–Pointe-aux-Trembles (RDP–PAT), Ville-Marie and Villeray–Saint-Michel–Parc-Extension (VSMPE).

3. Summary of Findings

Our audit revealed sectors where improvements need to be made. The following sections of this audit report reveal deficiencies in the areas of:

⁴ CQLR, chapter S-3.4.

- Establishment of fire hydrant maintenance standards (section 4.1):
 - The DGSRE has not explicitly established a framework governing fire hydrant maintenance;
 - Standards expressed in the form of objectives have not been circulated to boroughs for all maintenance activities;
 - The mechanism for prioritizing fire hydrant repair operations established by the DGSRE has not been clearly defined.

- Implementation of fire hydrant maintenance procedures (Section 4.2):
 - Planned fire hydrant inspections (Section 4.2.1):
 - Fire hydrant maintenance objectives appearing in target tables do not always comply with DGSRE standards,
 - Inspection activities carried out by boroughs are not always in compliance with the standards expected by the DGSRE;
 - Corrective maintenance of fire hydrants (Section 4.2.2):
 - The GEA application⁵ does not provide access to real-time data and cannot be used to produce management reports to help plan and monitor corrective maintenance activities for fire hydrants,
 - The tools placed at the boroughs' disposal by the DGSRE are not used effectively to permit optimal management of their fire hydrant maintenance activities,
 - No objectives have been set concerning deadlines for maintenance work performed to correct deficiencies detected on fire hydrants;
 - Compliance with staff qualification requirements (Section 4.2.3):
 - There is a lack of compliance with provisions governing the qualifications of staff assigned to fire hydrant maintenance operations, set out in the *Regulation respecting the quality of drinking water*.⁶

- Profile of the condition of fire hydrants available to the SE (Section 4.3):
 - The SE does not have a comprehensive, up-to-date profile of the condition of fire hydrants on the City's territory.

- Profile of the condition of fire hydrants available to the SIM (Section 4.4):
 - The SIM does not have a comprehensive, up-to-date profile of public fire hydrants that are out of service or have flow rates below the minimum threshold set by the Ministère de la Sécurité publique;
 - The SIM is not assured of having a comprehensive, up-to-date profile of the condition of fire hydrants located on the territories of related municipalities;

⁵ gestion de l'entretien des actifs.

⁶ *Gazette officielle du Québec [GO]. Part 2*, vol. 133, no. 24, June 13, 2001, p. 3561–73.

- The SIM has neither a complete inventory of private fire hydrants located on the agglomeration’s territory nor a profile of their condition;
 - The SIM is still unable to identify all problematic sectors, in terms of flow rates and pressures, that impact on fire protection on the agglomeration’s territory.
- Accountability reporting (Section 4.5):
 - The SIM activity report does not give an account of the implementation of the measures pertaining to the profile of the condition of fire hydrants and the flow rate profile for the entire system, as provided for by the SE in the fire safety cover plan;
 - Accountability mechanisms for management of fire hydrants involving the SIM, the SE and the boroughs have not been established;
 - The revision of the fire safety cover plan was not completed during the sixth year, as provided for in the *Fire Safety Act*, and the Ministère de la Sécurité publique was not formally notified of a new deadline.

4. Detailed Findings and Recommendations

Various references for standards and regulations governing fire hydrant maintenance specify the obligations enforceable by municipal administrations as well as good practices, including:

- Code national de prévention des incendies (CNPI);⁷
- American Water Works Association⁸ (AWWA) standards;
- Directive 001⁹ of the Ministère de l’Environnement;¹⁰
- The *Regulation respecting the quality of drinking water*;
- The technical training guide for waterworks system attendants.¹¹

With respect to Canadian standards, the CNPI uses American standards for inspection, testing and maintenance of water-based fire protection systems. Furthermore, the AWWA recommends:

- fire hydrant inspections at least once every two years and after each use;
- inspections twice a year in freezing weather;
- flow tests on water distribution systems to determine the flow available at various sites.

⁷ Code national de prévention des incendies – Canada 2010 – NRCC 53303.

⁸ The AWWA is the largest scientific and educational association dedicated to managing and treating water. It provides solutions to improve public health and protect the environment.

⁹ Directive 001 – “Captage et distribution de l’eau,” which came into force on February 20, 1984, and was revised in August 2002.

¹⁰ Now known by the name Ministère du Développement durable, de l’Environnement et de la Lutte contre les changements climatiques.

¹¹ “Formation technique des compagnons – Profil P6B,” Cégep de Saint-Laurent.

At the provincial level, Directive 001 of the Ministère de l'Environnement provides that water asset operators must carry out two inspections a year: [TRANSLATION] “*a special inspection of water mains and all fire hydrants and valves at the end of the spring (after the thaw) and every year in the fall before the first snowfall.*”

Furthermore, it should be stressed that the *Regulation respecting the quality of drinking water* requires that the work of operating and monitoring facilities, including fire hydrants, must be performed by a person certified as qualified. In addition, persons in charge of a distribution system must, as of March 8, 2012, have proof that their employees are competent and hold a certificate of qualification to work as a waterworks system attendant issued by Emploi-Québec.

The training leading to this qualification covers the components of fire hydrant maintenance:

- Complete inspections at least once a year;
- Spot inspections: before (if hydrants are used for purposes other than putting out a fire [e.g., a contractor]) and after each use;
- Winter inspections to ensure that fire hydrants are not frozen;
- Repair of defects following observations noted during inspections.

What the reference documents have in common is that they all state that fire hydrants must be inspected twice a year to ensure that they are in proper working order, that spot inspections must be conducted on them following their use and that any malfunctions detected in them must be repaired.

Compliance with requirements and good practices regarding fire hydrants helps ensure the efficiency of operations during a fire. In this regard, the SIM mentioned, in its fire safety cover plan, the importance of:

- The location of fire hydrants;
- Rapid identification of out of service fire hydrants;
- Diligent repair and inspection of fire hydrants;
- Regular preventive maintenance of fire hydrants;
- A minimum flow rate of 1,500 L/min for fire hydrants.

While these are important, the SIM is concerned only with the following aspects: knowledge of fire hydrants: where they are located, which ones are not in serviceable condition and which ones have flow rates below 1,500 L/min, if any. Accordingly, the SIM assumes that the other fire hydrants are functional. It therefore relies on maintenance work carried out by the 19 boroughs and 14 related municipalities (not counting the institutions and businesses with private fire hydrants). The SE, as the unit responsible for the boroughs' assets, plays an

important role, ensuring that the boroughs comply with standards and good practices and helping them achieve their fire hydrant maintenance objectives. In the case of fire hydrants located in related municipalities, each related municipality is responsible for ensuring compliance with standards and good practices as are the owners in the case of fire hydrants located on private land.

This is the context in which fire hydrants are managed as assets to be used for fire protection purposes. In this audit report, we first discuss the establishment of maintenance standards for fire hydrants located on the agglomeration's territory. Second, we discuss the implementation of maintenance procedures for them, including inspections and repairs. For this purpose, we examined more specifically fire hydrants located on the City's territory, since our audit did not concern related municipalities. Third, we discuss the profile of the condition of fire hydrants available to the SE, as the unit responsible for this type of asset. Fourth, we report on the profile of the condition of fire hydrants available to the SIM, including both public fire hydrants managed by the SE and related municipalities and private fire hydrants. Finally, we address the issue of accountability mechanisms established to inform decision-makers about fire protection and asset management for fire hydrants managed by the SE.

4.1. Establishment of Fire Hydrant Maintenance Standards

The standards communicated to officers in charge of fire hydrant maintenance must be based on current standards and good practices in the field. In a complex organizational structure, common standards must be agreed upon to promote a uniform understanding on the part of the various stakeholders.

During our audit, we therefore examined whether common standards had been established throughout the agglomeration's territory. Next, more specifically with regard to the City, we assessed the extent to which fire hydrant maintenance standards that were in compliance with current regulations and good practices in the field had been established and circulated by the SE.

4.1.1. Establishing Common Standards for the Agglomeration

4.1.1.A. Background and Findings

When the fire safety cover plan was developed, a fire hydrant maintenance profile was produced for all boroughs and related municipalities. In particular, this profile brought to light

differences in the ways inspections were conducted, the type of maintenance carried out and criteria used to classify fire hydrants as out of service. In order to meet an adequate level of fire hydrant inspection and standardize fire hydrant maintenance on the agglomeration's territory, the fire safety cover plan stipulated that the Direction de l'eau,¹² boroughs and related municipalities had to agree on common standards no later than 2008.

According to the information obtained, since the adoption of the fire safety cover plan in December 2008, the SIM has held meetings with the SE and related municipalities in which the issue of fire hydrant maintenance has been addressed. However, common standards have not been agreed upon.

Considering that six years have elapsed since the adoption of the fire safety cover plan, we think it would be appropriate for the SIM to update the fire hydrant maintenance profile in order to determine whether boroughs and related municipalities still had different practices resulting from different interpretations of the information that was sent to them. We discuss this matter in Section 4.4 of this audit report, which concerns the profile of the condition of fire hydrants available to the SIM.

4.1.2. Setting and Disseminating Standards for Ville de Montréal

4.1.2.A. Background and Findings

Within the SE, it is specifically the DGSRE, in partnership with the boroughs, that is responsible for setting up a management structure for secondary water system assets, mainly in the areas of infrastructure maintenance and renewal.

Besides setting hydrant maintenance standards, we examined the extent to which these standards were defined and circulated to the boroughs and whether management tools had been made available for follow-up purposes.

First, with respect to setting standards, within the framework of the development of the *Plan d'intervention pour les réseaux d'aqueduc et d'égout*, the SE produced the *City of Montreal State of the Infrastructure Report for Water Distribution and Wastewater Collection Systems* in 2009,¹³ which established the type and frequency of operations considered necessary for

¹² Name of the SE when the fire safety cover plan was developed.

¹³ This report presents a comprehensive qualitative picture of the condition of secondary water systems and their related assets for each borough, as well as an assessment of the operations and investments required for maintenance purposes.

the maintenance of the different secondary system assets, based on good practices. Table 1 shows fire hydrant maintenance operation details.

**Table 1 – Operations Required for Fire Hydrant Maintenance
According to the 2009 State of the Infrastructure Report**

Fire hydrant maintenance activity	Frequency of operation
Complete inspection, including pressure and flow rate measurement	Once/year
Partial inspection (visual, winterization, etc.)	Once/year
Minor repair (painting, etc.)	Once/4 years
Internal mechanism repair (major repair)	Once/25 years
Fire hydrant replacement	Once/75 years

Second, these standards are disseminated through partnership agreements that are concluded every year between the DGSRE and each borough. These agreements formalize both the boroughs' commitment to perform maintenance work on assets on their territories and the support provided by the DGSRE. The agreements also stress the need to use corporate tools to supply the databases.

For each borough, the partnership agreement refers to a target table in which objectives are set for certain water asset maintenance activities. In these tables, the standards governing complete and partial inspections of fire hydrants are expressed in the form of objectives for their entire inventory. Every month, boroughs must compile their achievements in these tables. For fire hydrant repair and replacement, the DGSRE did not express standards in the form of objectives set for boroughs. Nevertheless, in the comprehensive 10-year vision of the Montreal Water Strategy¹⁴ and its strategic objectives (adopted by the urban agglomeration council in June 2012), the SE outlined specific objectives for fire hydrants that were to be achieved on an ongoing basis (2011–2020):

- Repair 4% of fire hydrants every year;
- Replace 1.33% of fire hydrants every year.

The boroughs are to enter in the target table on a monthly basis the number of repairs (minor, major) and replacements carried out, without any objectives established.

With respect to the other types of inspections prescribed as good practices, spot inspections and winter inspections, the DGSRE has not issued clear guidelines. According to the information obtained, boroughs are responsible for implementing them. However, our audit

¹⁴ *Rapport du Comité de suivi du projet d'optimisation du réseau d'eau potable – Version intégrale*, September 2011.

revealed no evidence that any such inspections were conducted. We think that clear guidelines should be issued to boroughs for deciding on how to conduct such inspections so that they are in compliance with good practices.

Third, with respect to the definition of standards and the management tools made available to boroughs, we first noted that there are two standardized inspection sheets produced by the DGSRE: a complete inspection sheet and a partial inspection sheet. Each lists a set of potential deficiencies that might be detected during inspections. Table 2 shows the operations that must be carried out during inspections.

Table 2 – Operations Carried Out During Fire Hydrant Inspections

Operation	Complete inspection	Partial inspection
Checking of parts and accessories	√	√
Leak detection (flow tests)	√	
Handling of isolation valve	√	
Static and dynamic pressure measurements	√	

However, during our audit, we did not find any management frameworks or formal guidelines that would make the use of such sheets mandatory and define the types of deficiencies appearing on them (e.g., an out of service fire hydrant) so that operations could be standardized and differences in interpretation avoided.

We did, however, track down a memo that was circulated to boroughs, in which the DGSRE marked each deficiency appearing on inspection sheets as major or minor. Even though the DGSRE requests the number of major and minor repairs, we think that boroughs cannot use such data later to assess whether an objective related to fire hydrant repair was achieved.

The DGSRE also developed a model for prioritizing operations (repairs) performed on fire hydrants. In addition to all the deficiencies that can be identified on fire hydrants, inspection sheets include the following six categories of “restoration priorities”:

- Immediate restoration required;
- Urgent restoration required;
- Urgent restoration required before the winter;
- To be restored in the medium term;
- Possibly needs to be restored;
- No deficiencies.

The restoration priority established by the DGSRE is an optional tool that was originally introduced to assist boroughs with management. We noted that no guidelines were issued to

define restoration priorities. Indeed, our work revealed discrepancies among boroughs in their interpretation of both deficiencies (e.g., deficiencies in the out of service category) and restoration priorities (e.g., “urgent restoration required” as opposed to “immediate restoration required”).

For example, the stakeholders we met agreed that an out of service hydrant was an immediate restoration priority. One deficiency for which a fire hydrant can be considered out of service is inaccessibility. Some stakeholders we met followed this rule, but others did not, because they considered the hydrant operational. The ambiguity lies in the fact that hydrants are inspected with different objectives in mind: either to ensure fire protection or to manage this type of asset. This situation affects the classification of the fire hydrant when a level of restoration prioritization needs to be set. In fact, some consider that an inaccessible fire hydrant calls for an immediate restoration priority while others consider this to be “no deficiencies.”

The lack of guidelines paves the way for a lack of consistency in determining the operating condition of fire hydrants, which is likely to affect both the overview of all fire hydrants available to the SE and the reporting of out of service hydrants to the SIM. We think that the DGSRE should define those priorities so that inventory profiles can be compared between boroughs.

Finally, to help manage the maintenance of water assets that pertain to fire hydrants, the DGSRE, in collaboration with the Service des technologies de l’information and boroughs, saw to the development of the corporate “asset maintenance management” application (GEA). Entering data on fire hydrant maintenance activities should facilitate the boroughs’ planning and monitoring of operations for the purpose of showing that standards are met and objectives are achieved. This application could be said to be an effort on the part of the DGSRE to brief boroughs on the importance of compiling data on water asset maintenance, as stipulated in partnership agreements. In Section 4.2 we discuss the use of the GEA application.

In closing, we think that all fire hydrant maintenance activities overseen by the DGSRE must be an integral part of uniform maintenance standards, so that boroughs have a uniform understanding of them. While the responsibility for maintaining these assets was delegated to boroughs, the fact remains that the SE is responsible for managing them and is therefore entitled to define its expectations. Furthermore, the City, in its equipment and infrastructure policy, stresses the importance of having a structured preventive maintenance program and keeping a comprehensive perpetual inventory of its assets and their condition to ensure that it has complete information relevant to decision-making and sound management of public

funds. For this purpose, the DGSRE must issue clear guidelines on the manner in which prioritization categories are to be used by boroughs. Not only will this assist them in planning and provide them with a reliable profile of the condition of their inventories, it will also eventually help them reach the point where they can keep fire hydrants in good working order, thereby facilitating the SIM's responses. It is a given that an adequate management framework implies appropriate support (e.g., training) and follow-up for the boroughs provided by the DGSRE.

4.1.2.B. Recommendation

We recommend that the Direction de la gestion stratégique des réseaux d'eau establish a management framework based on current standards and good practices in order to better define fire hydrant maintenance with respect to:

- all inspection and repair activities that need to be carried out, as well as their frequency;
 - the interpretation of any deficiencies that may be observed during inspections;
- so that boroughs have standardized practices with a view to sound asset management and fire protection.

Business unit's response:

[TRANSLATION] One way in which practices will be standardized is by delegating maintenance work to boroughs through the adoption of a by-law respecting the delegation of separate powers. This by-law will reference a guide for boroughs on the secondary water and sewer system maintenance activities carried out by boroughs. (Planned completion: December 2015)

Another way in which practices will be standardized is by establishing a training program for employees assigned to maintenance work. (Planned completion: June 2016)

4.1.2.C. Recommendation

We recommend that the Direction de la gestion stratégique des réseaux d'eau express all standards for the inspection, repair and replacement of fire hydrants in terms of objectives and include these in the target tables provided for in partnership agreements so that all boroughs can help achieve the results expected by the Service de l'eau and the Service de sécurité incendie de Montréal.

Business unit's response:

[TRANSLATION] Based on results of fire hydrant inspections, objectives for repairing and replacing them will be set for boroughs based on restoration priorities for current

and future years. Inspection objectives, on the other hand, will be included in the target table. **(Planned completion: April 2015)**

4.1.2.D. Recommendation

We recommend that the Direction de la gestion stratégique des réseaux d'eau define the manner in which all the restoration priorities appearing on fire hydrant inspection sheets are to be interpreted so that practices can be aligned and profiles of the condition of fire hydrants can be compared between boroughs.

Business unit's response:

*[TRANSLATION] The DGSRE will review restoration priorities based on deficiencies and they will be defined in the guide on the maintenance work delegated to boroughs, which will help standardize all operations for all boroughs. **(Planned completion: December 2015)***

4.2. Implementation of Fire Hydrant Maintenance Work

Boroughs must plan their maintenance activities in such a way that they meet the standards established by the DGSRE in order to comply with good practices. In carrying out activities, they must use common management tools, not only to ensure consistency in practices, but also to supply databases that can be used to make management information accessible.

In our audit, we examined the extent to which boroughs carried out maintenance activities in accordance with established standards. Even though planned inspection activities and corrective maintenance activities are closely related, we discuss them separately. We also examined the extent to which maintenance activities were carried out by qualified resources.

4.2.1. Planned Fire Hydrant Inspections

4.2.1.A. Background and Findings

First it should be pointed out that a fire hydrant inspection can be conducted internally (by the boroughs' blue-collar workers) or contracted out to an external firm, in accordance with standards determined in the target table. In both cases, complete inspections are generally carried out in the spring, while partial inspections take place in the fall. In the following paragraphs, we will briefly outline the inspection process.

For boroughs that conduct inspections internally, inspections must be documented by the inspector on the DGSRE's standardized inspection sheets. Once inspections are completed, a restoration priority should be assigned to each fire hydrant so that repairs can be planned on the basis of their degree of urgency.

On an ongoing basis, an office clerk or technical officer enters data from each inspection sheet in the GEA application. Accordingly, data on the condition of fire hydrants (concerning deficiencies) are updated.

For boroughs that contract out fire hydrant inspection to external firms, the DGSRE has standardized, in tender documents, a deficiency chart that appears on inspection sheets. In 2013, 11 of the City's 19 boroughs hired external firms to conduct complete inspections.

The results of inspections are compiled in an electronic file initially provided by the borough. When all of the inspections are completed by the external firm, this file is loaded directly in the GEA application to update data that can be used to describe the condition of fire hydrants (concerning deficiencies). According to the specifications, the hired firms submit a report on inspection results that includes the prioritization of maintenance operations to be carried out on fire hydrants based on the deficiencies detected. This prioritization is set according to the firm's judgment.

During their inspections, inspectors both from the boroughs and from external firms must report any deficiency identified that prevents or compromises fire protection (e.g., out of service fire hydrants¹⁵) as soon as it is detected. Boroughs should be able to refer to these reports to notify the SIM of them and promptly perform the corrective maintenance work necessary to restore defective fire hydrants to working order.

To assess the effectiveness of steps taken by the DGSRE to oversee fire hydrant management, we first examined whether inspection standards expressed in terms of objectives had been circulated to boroughs. We also evaluated whether the objectives set were achieved.

¹⁵ Examples of reasons for categorizing a fire hydrant as out of service: inaccessibility of the hydrant, obstruction to the handling of the hydrant, total or partial obstruction of the internal mechanism of the hydrant, no water supply, frozen hydrant.

Application of Inspection Standards of the Direction de la gestion stratégique des réseaux d'eau

To do this, we compared the objectives appearing in the target table that was provided for in partnership agreements with the expected inspection standards (complete and partial inspections for the entire inventory) for the four boroughs selected. Two of the boroughs selected, LaSalle and RDP-PAT, contract out their inspections to external firms while Ville-Marie and VSMPE boroughs conduct their inspections internally. The results of this comparison are presented in Table 3.

**Table 3 – Fire Hydrant Inspection Objectives Appearing in
Target Tables Provided for in Partnership Agreements – 2013**

Planned fire hydrant inspection activity	Boroughs			
	LaSalle	RDP-PAT	Ville-Marie	VSMPE
Fire hydrant inventory ^[a]	1,533	2,210	1,330	1,223
Complete inspection	100%	100%	100%	100%
Partial inspection	100%	0%	100%	100%

^[a] Based on the 2009 inventory.

The DGSRE established fire hydrant inspection standards; however, we noticed right at the outset that one of the objectives in the target tables provided for in partnership agreements does not meet these standards. RDP-PAT borough had only an objective of carrying out complete inspections. We think that a target that meets the established standards should have been set to ensure consistency in methods.

Inspection activities planned by LaSalle and VSMPE boroughs are in compliance with the standards defined by the DGSRE, which is also reflected in the objectives appearing in the target tables that were provided for in partnership agreements.

In Ville-Marie borough, the objectives shown in the target table correspond to the standards established by the DGSRE, but in the following paragraphs, we will show that the achievement of these objectives is another matter altogether.

Carrying out Planned Inspection Activities

Second, we attempted to assess the extent to which boroughs achieved the targets set by the DGSRE. To do this, we compared data from inspections conducted with their

corresponding objectives shown in the target tables provided for in partnership agreements in 2013. The results are shown in Table 4.

Table 4 – Planned Inspections Conducted According to Target Tables Provided for in Partnership Agreements – 2013

	Boroughs							
	LaSalle		RDP-PAT		Ville-Marie		VSMPE	
Inspection	Complete	Partial	Complete	Partial	Complete	Partial	Complete	Partial
Objective ^[a]	1,533	1,533	2,210	0	1,330	1,330	1,223	1,223
Achievement ^[b]	1,538	1,534	2,307	0	60	546	1,221	1,002
Percentage	100%	100%	104% ^[b]	N/A	5%	41%	100%	82%

^[a] Based on the 2009 fire hydrant inventory.

^[b] Inspections were carried out on fire hydrants that had not been inventoried in 2009.

Although the DGSRE has made certain means (e.g., additional resources) available to boroughs to assist them in the maintenance activities that were delegated to them, we note that two boroughs did not reach the objectives set.

This is the case for Ville-Marie borough, for example. Its target table shows that out of an inventory of 1,330 fire hydrants, 60 complete inspections, or 5%, were conducted. Even with this low percentage, we are unsure of its validity because stakeholders told us that they have not conducted complete inspections since 2011. As a result of our audit, we discovered that in reality, this rate represents inspections conducted on defective fire hydrants to confirm deficiencies that were already known to exist before they were repaired. Diagnosis of the condition of a fire hydrant is a step in the repair procedure rather than a complete inspection. As a result, we have no evidence that complete inspections, in accordance with the DGSRE's standards, were actually conducted by the borough. As for partial inspections, we found that 41% (546 out of 1,330) of them were conducted by Ville-Marie borough. According to the borough's stakeholders, this result can be explained by operational weaknesses. Some of the factors cited are non-optimal work organization, the complexity inherent in conducting operations in a core sector such as downtown, the obsolescence of assets, and the limited resources in the face of the extensive needs associated with their delegated responsibilities.

This is also the case with VSMPE borough, which achieved 82% (1,002 out of 1,223) of the partial inspection objective. According to the information obtained, this borough introduced and began conducting complete inspections for the first time in 2013, in addition to conducting the partial inspections that were already part of the borough's practices. The stakeholders we met explained that this situation arose because the introduction of the new complete inspection activity required an additional effort to review the organization of the work and resources as well as to become familiar with the various tools and systems.

When boroughs fail to carry out an activity related to a complete inspection, and when their partial inspection objectives are not achieved, they do not meet the maintenance standards requirements defined by the DGSRE. The result is that deficiencies are not detected on fire hydrants, and appropriate corrective action cannot be taken diligently. This also prevents boroughs and the SE from having an accurate profile of the operating condition of fire hydrants.

During our audit, we discussed these results with DGSRE stakeholders. It appears that because of the condition of their assets, some boroughs have too many repairs to carry out. They struggle to conduct the necessary repair work to correct malfunctions already known to exist and improve the condition of their assets. In these circumstances, these boroughs consider it less appropriate to invest resources in inspection activities. This is the case for Ville-Marie borough, for example, which has introduced only partial inspections, and for RDP–PAT borough, which conducts only complete inspections. This will be discussed in Section 4.3.

In conclusion, on the subject of planned inspections, we noted that fire hydrant standards were not applied consistently in the boroughs selected. We think that uniform targets should be set for all boroughs in order to comply with good practices. As well, boroughs should take the necessary steps to meet the targets set for inspections that need to be conducted.

4.2.1.B. Recommendation

We recommend that the Direction de la gestion stratégique des réseaux d'eau set uniform targets for all boroughs in order to comply with the standards established in accordance with good practices so that they can ensure sound management of their assets and meet fire protection requirements.

Business unit's response:

[TRANSLATION] The DGSRE will set uniform targets for all boroughs in order to comply with the standards established in accordance with good practices. The targets will be defined in the guide on standardized maintenance work that will be part of the by-law respecting the delegation of separate powers to boroughs in the area of secondary water and sewer system maintenance activities. (Planned completion: December 2015)

4.2.1.C. Recommendation

We recommend that Rivière-des-Prairies–Pointe-aux-Trembles, Ville-Marie and Villeray–Saint-Michel–Parc-Extension boroughs take the necessary steps to ensure that fire hydrant inspection activities are carried out in accordance with the standards established by the Direction de la gestion stratégique des réseaux d'eau so that they meet requirements in the areas of sound management of assets and fire protection.

Business units' responses:

RIVIÈRE-DES-PRAIRIES–POINTE-AUX-TREMBLES BOROUGH

[TRANSLATION] The section manager will be mandated to establish the following:

- *Up-to-date inventory of the number of fire hydrants:*
 - *Public domain;*
 - *Private domain. (Planned completion: February 2015)*

- *Evaluation of the resources needed to conduct partial inspections on an annual basis:*
 - *Human resources (positions and deadlines);*
 - *Material resources. (Planned completion: March 2015)*

A meeting will be scheduled with the DGSRE division manager in order to take advantage of the following under the 2015 partnership agreement:

- *Renewal of the contract for the complete inspection of fire hydrants on an annual basis through the involvement of the DGSRE;*
- *Development and availability of a budget dedicated to the borough to pay for resources for partial inspection of all fire hydrants on an annual basis. (Planned completion: March 2015)*

Every year the section manager will submit a report to the division manager that will be useful in the analysis of objectives pertaining to progress associated with partial inspections of fire hydrants. (Planned completion: June 2015)

Resources assigned to partial inspections will be adjusted as needed in order to achieve the objective established on an annual basis. (Planned completion: June 2015)

VILLE-MARIE BOROUGH

[TRANSLATION] In 2015, the borough intends to:

- *ensure that complete inspections will start up at the end of April, with a 60-day window to complete them; (Planned completion: May 2015)*
- *award a contract in May for partial inspections in the fall. (Planned completion: December 2015)*

VILLERAY–SAINT-MICHEL–PARC-EXTENSION BOROUGH

[TRANSLATION] As per our request, the DGSRE will outsource complete inspection of fire hydrants to an external firm. (Planned completion: June 2015)

Partial inspection of fire hydrants will be conducted by our team internally. (Planned completion: October 2015)

4.2.2. Corrective Maintenance of Fire Hydrants

4.2.2.A. Background and Findings

From the standpoint of sound asset management and fire protection, it is expected that boroughs carry out corrective maintenance work diligently when deficiencies are detected. In order to manage these operations effectively, prioritization mechanisms should be established to help assign resources in an optimal manner to ensure that assets are in serviceable condition.

To assess the extent to which repairs were carried out by boroughs, we wanted to evaluate the repair rates of fire hydrants based on the prioritization categories in which they were classified, as well as repair times. Since none of the boroughs was able to provide this information, we attempted to understand how they carried out their repair work.

Since the prioritization set out on inspection sheets has yet to be defined by the DGSRE, we first examined the prioritization methodology used by each of the boroughs selected. As previously stated, fire hydrant inspection sheets include six categories of “restoration priorities,” but the DGSRE did not determine either the deficiencies or the factors used to characterize any of these categories.

Our examination revealed the following facts:

- In the two boroughs where inspections are conducted by an external firm (LaSalle and RDP–PAT), fire hydrants are classified according to the six categories established by the DGSRE, based on the judgment of the external firm’s inspectors. Despite this classification, it is the stakeholders within the boroughs that ultimately decide on the order of priorities for all repairs to be carried out.
- For Ville-Marie borough, the stakeholders we met told us that the restoration priority should be determined as part of partial inspections, based on the categories established by the DGSRE. However, our audit revealed that 21% of the partial inspection sheets compiled¹⁶ did not specify the restoration priority.

¹⁶ 460 partial inspection sheets were compiled out of a total of 546 appearing in the target table.

- In the case of VSMPE borough, the six prioritization categories developed by the DGSRE are not used. Instead, according to the information obtained, three categories serve to determine restoration priority according to the judgment of an employee in charge of coordinating repairs.

The stakeholders we met are of the view that, in order to establish the proper order of priorities for restoration, in addition to the deficiencies noted, the reality of each borough and how it affects operating conditions should also be considered. Considerations like these involve more than just placing deficiencies in order of rank. For example, a fire hydrant located in a core sector such as a hospital would be a factor to take into account in establishing a priority. Other factors (e.g., presence of construction sites, traffic density, parking constraints) can play a key role in evaluation of the order of operations.

Although prioritization methodologies are applied differently from one borough to the next, all the stakeholders we met with agree on the importance of taking immediate action in the case of deficient fire hydrants in the out of service category, since they directly compromise the effectiveness of fire protection.

Since this is a common concern shared by boroughs, we examined specifically the repair rate of deficient fire hydrants in the out of service category. To do this, we compiled evidence of repair work that was carried out on such fire hydrants from the inspection date in 2013 to the end of 2013. For these repairs, we also examined the extent to which repairs had been recorded in the GEA application. Lastly, we noted the time frames in which repairs had been carried out. The result of this analysis is shown in Table 5.

Table 5 – Repair Work Performed on Out of Service Fire Hydrants in 2013

Borough	Out of service fire hydrants – 2013 inspection ^[a]	Evidence of repair as of December 20, 2013			
		Number ^[b]	Percentage	Average repair time (days)	Entry in the GEA application (number)
LaSalle	14	13	93%	72	9
RDP-PAT	34	14	41%	72	14
Ville-Marie	19	2	11%	60	0
VSMPE	16	4	25%	26	0
Total	83	33	40%		23

^[a] Source of data: results of inspections conducted in 2013.

^[b] Sources of data: GEA application, repair sheets or auxiliary files kept by boroughs.

First, the analysis shows, on the one hand, that only 40% of out of service fire hydrants for the boroughs selected were repaired in 2013. Since fire hydrants with this type of deficiency

are considered a priority by stakeholders, we expected a much higher repair rate, especially considering the impact on fire protection. On the other hand, 70% (23/33) of these repairs were recorded in the GEA application. The stakeholders we met gave various reasons for these results:

- In LaSalle borough, the problem is not with the repair rate for out of service hydrants, since 93% of them were repaired, but rather the repair entry rate in the GEA application. According to stakeholders, there is a considerable time lag between fire hydrant inspections and the loading of deficiencies identified into the GEA application. In many cases, the repair work had already been carried out prior to the data transfer. This situation contributes to the accumulation of repair sheets and increases the risk that data will not be recorded.
- In RDP–PAT borough, the problem concerns the repair rate for out of service fire hydrants (41%). According to the information obtained, corrective maintenance of fire hydrants is one of many activities for which employees assigned to work on water mains and sewers are responsible, and it is carried out only when resources are available. Moreover, all repairs were recorded in the GEA application.
- In Ville-Marie borough, the low repair rate for out of service fire hydrants (11%) can likewise be explained by the fact that repairs are carried out only when resources are available. Moreover, there is a major problem concerning the use of the GEA application to manage fire hydrant repairs.
- For VSMPE borough, while we obtained evidence that 4 out of 16 (25%) out of service fire hydrants were restored to working order, people in charge stated that they repaired 13 of them (81%). The reason given for this discrepancy is that repairs are not systematically documented by work orders, and when they are, repair sheets are not always posted in the GEA application, mainly because they are not completed.

To improve the rate at which repairs are carried out and recorded in the GEA application, we believe that several steps should be taken. First, the application should provide access to the real-time data needed for adequate management of maintenance activities. The problem with time lags between the start of inspections and the transfer of inspection data to the GEA application affects all boroughs for which inspections are conducted by external firms. Since this time lag can last up to three months, it is impossible for boroughs to record repair data during this interval, because the corresponding deficiencies do not appear in the application. Consequently, with this mode of operation, it is not possible to have real-time data. The second step is to encourage boroughs to enter all repair data promptly in the GEA application.

Finally, the third step is to make the application capable of producing management reports so that corrective maintenance work performed on fire hydrants can be planned and monitored. At present, the GEA application cannot be used to produce management reports,

for example for the purpose of measuring repair times. This situation leads us to question how diligently repairs are carried out by boroughs.

During our audit, we calculated that the average repair times for out of service fire hydrants ranged from 26 to 72 days, depending on the borough (see Table 5). Other than the comparison of the different boroughs, what we found significant was the level of emergency response assigned to out of service fire hydrants. We find it difficult to conceive that these fire hydrants were not repaired for several months after they were found to be “out of service,” especially since the people we met with stressed the urgency of taking action to remedy the deficiencies. The situation is even more troubling if we consider that, as of December 20, 2013, 60% of out of service fire hydrants had not yet been repaired (in Ville-Marie borough, for instance, there are fire hydrants that have been out of service since 2012).

According to the information obtained, the DGSRE and the boroughs have to date not agreed on standard repair times. In our opinion, it would be appropriate for the DGSRE to decide on a maximum response time for the repair of fire hydrants with such deficiencies.

4.2.2.B. Recommendation

We recommend that the Direction de la gestion stratégique des réseaux d’eau make a corporate application available to boroughs that:

- **provides access to real-time data;**
- **can be used to generate management reports;**

in order to be able to achieve optimal management of fire hydrant maintenance activities.

Business unit’s response:

[TRANSLATION] Development of a mobile application is under way to allow inspection data to be entered in the field in real time. Rollout will begin in 2015, with complete implementation scheduled for 2018. The DGSRE will introduce standardized management reports based on data from the GEA application beginning on December 31, 2015. (Planned completion: December 2018)

4.2.2.C. Recommendation

We recommend that LaSalle, Rivière-des-Prairies–Pointe-aux-Trembles, Ville-Marie and Villeray–Saint-Michel–Parc-Extension boroughs take the necessary steps to ensure that the tools placed at their disposal by the Direction de la gestion stratégique des réseaux d'eau (inspection sheets, gestion de l'entretien des actifs (GEA) application) are used systematically to support optimal management of fire hydrant maintenance activities and thereby promote the achievement of objectives.

Business units' responses:

LASALLE BOROUGH

[TRANSLATION] Continue to use the tools placed at our disposal by the DGSRE to help achieve the objectives set. Confirm that staff certified as qualified to perform this task understand the work, and train staff as needed. (Planned completion: February 2015)

Create a working group that includes all partners who use data to evaluate tools, and suggest modifications that would make the tools more accurate and user-friendly. (Planned completion: May 2015)

Create a working group mandated to develop adequate training on how to enter data in the management system. (Planned completion: January 2016)

RIVIÈRE-DES-PRAIRIES–POINTE-AUX-TREMBLES BOROUGH

[TRANSLATION] The section manager will be mandated to assess the following:

- *The inventory of unrepaired fire hydrants associated with previous inspections;*
 - *Evaluation of the availability of information on fire hydrant inspections for the current year;*
 - *Establishment of the borough's internal priorities;*
 - *Establishment of repair timeframes based on the type of priority;*
 - *Evaluation of available resources assigned to repairs (human and material).*
- (Planned completion: March 2015)***

A meeting will be scheduled with the DGSRE division manager to obtain the budget to pay for both the human resources assigned by the borough to perform corrective maintenance work on fire hydrants and the leasing of equipment and purchase of materials, under the 2015 partnership agreement. (Planned completion: March 2015)

Every month the section manager will submit to the division manager a report specifying the inventory of fire hydrants to be repaired at the start of the season, including references to priority levels, desired response times and actual response times. (Planned completion: June 2015)

Resources assigned to repair work will be adjusted as needed to take into account desired repair times for fire hydrants classified as out of service. **(Planned completion: June 2015)**

VILLE-MARIE BOROUGH

[TRANSLATION] Since early 2014, the borough has been using the GEA application systematically to produce and compile all fire hydrant inspection and repair activities. The borough works together with the DGSRE to ensure that data in target tables match data in the GEA application. **(Completed)**

VILLERAY–SAINT-MICHEL–PARC-EXTENSION BOROUGH

[TRANSLATION] Since complete inspections are carried out by the private contractor, the SE will enter data from the sheets in the GEA application. We will use only repair sheets. **(Planned completion: June 2015)**

For partial inspections (conducted internally), inspection sheets are printed from the GEA application by the office clerk and are submitted to inspectors. Following inspections, data from the sheets are entered again in the application for follow-up purposes and to generate the deficiencies report. This report is submitted to forepersons in charge of the activity so that the fire hydrants can be repaired. Following the repairs, the sheets are returned to the office clerk, who completes and closes the file. **(Planned completion: October 2015)**

4.2.2.D. Recommendation

We recommend that the Direction de la gestion stratégique des réseaux d'eau set objectives for boroughs concerning repair times for performing corrective maintenance work on fire hydrants, in order to minimize the number of non-operational hydrants and improve the condition of all the other hydrants, thereby promoting the effectiveness of the operations of the Service de sécurité incendie de Montréal.

Business unit's response:

[TRANSLATION] The DGSRE will set objectives for boroughs in terms of deadlines for corrective maintenance operations performed on fire hydrants. The targets will be defined in the guide on standardized maintenance work that will appear in the by-law respecting the delegation of separate powers to boroughs in the area of secondary water and sewer system maintenance activities. **(Planned completion: December 2015)**

4.2.3. Compliance with Staff Qualification Requirements

4.2.3.A. Background and Findings

Provisions governing the qualifications of people who carry out maintenance or repair work on equipment connected to a drinking water main (e.g., fire hydrants, valves) or who supervise the performance of these duties are set out in the *Regulation respecting the quality of drinking water* of the Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques, in force since June 2001. It provides that tasks related to the operation and monitoring of drinking water production and distribution facilities, including fire hydrants, must be performed by people certified as competent. People who have taken recognized training programs are certified as competent. New requirements amending the Regulation provide that:

- persons in charge of a distribution system must, as of March 8, 2012, have proof of the competency of their employees, and they must provide this proof to the Ministère upon request;
- all the people affected by the Regulation must, as of March 8, 2013, obtain from Emploi-Québec a certificate of qualification, which they must carry at all times while performing duties, and they must show it upon request. This certificate of qualification must also be renewed at a frequency established by Emploi-Québec.

During this audit, we assessed the extent to which the selected boroughs ensured that they had proof of the competency of people involved in fire hydrant maintenance operations, including employees of both the external firms hired and boroughs. It should be noted that contracts awarded to external firms concern only fire hydrant inspections.

The results of our analysis revealed that in general, boroughs had no evidence that resources assigned to fire hydrant maintenance had the competencies required under the *Regulation respecting the quality of drinking water* (see Table 6).

Table 6 – Proof of Employee Certification Kept by Boroughs – 2013

Boroughs	Origin of staff assigned	Number of people assigned to fire hydrant operations ^[a]	Number of people for whom proof of certification was obtained	Compliance with the regulation
LaSalle	Borough	6	5	Yes
	External firm	9	1	No
RDP-PAT	Borough	5	0	No
	External firm ^[b]	5	3	No
Ville-Marie	Borough	6	1	No
VSMPE	Borough	6	4	No
Total		37	14 (38%)	

^[a] For inspection and repair activities.

^[b] The DGSRE is the contractor for the fire hydrant inspection contract for RDP-PAT borough.

In fact, for employees of external firms, we found that neither the DGSRE nor the boroughs follow a formal procedure to confirm that their employees are qualified. And yet, tender documents include a clause specifying that staff assigned to handling accessories of a drinking water distribution system must hold a P6b certificate issued by Emploi-Québec.

For staff employed by boroughs, only LaSalle borough had in its possession proof that all its staff were qualified, with the exception of one employee. While we have no evidence that this took place, the borough claims to have performed a check with Emploi-Québec confirming that this employee was qualified. For the other boroughs, the persons in charge were unable to prove to us that they performed the necessary checks to ensure that the resources concerned had the required qualifications. According to the information obtained, when a person assigned to fire hydrant maintenance work does not have the recognized qualifications, that person must be under the immediate supervision of a person certified as qualified. However, the stakeholders we met told us that partial inspections could be conducted “solo.” In the event that the people conducting them are not properly qualified, this situation would not comply with the regulation. In short, our audit did not enable us to obtain evidence that the boroughs selected complied with the staff qualification requirements provided for in the *Regulation respecting the quality of drinking water*.

This situation poses risks associated with the handling of fire hydrants by unqualified staff, including erroneous diagnoses, contamination of the water system and breaks caused by improper handling of fire hydrants. Furthermore, under the *Regulation respecting the quality of drinking water*, both the City and staff assigned to emergency responses face penalties ranging from \$250 to \$250,000 relating to the proof of competency required by this regulation. We therefore think that boroughs or the DGSRE, as the case may be, should ensure that they have proof that resources covered by the Regulation, including employees of both the

external firms mandated and boroughs, are qualified. In addition, only people who are qualified within the meaning of the *Regulation respecting the quality of drinking water*, or people who are under the immediate supervision of a person certified as qualified, should be assigned to fire hydrant maintenance. Finally, people in charge at the boroughs should also brief the people affected by the Regulation on the importance of carrying their certificates of qualification at all times while performing their duties.

4.2.3.B. Recommendation

We recommend that LaSalle, Rivière-des-Prairies–Pointe-aux-Trembles, Ville-Marie and Villeray–Saint-Michel–Parc-Extension boroughs and the Direction de la gestion stratégique des réseaux d'eau:

- make sure they have proof that resources assigned to fire hydrant maintenance are qualified, including both staff of the external firms hired and borough employees;
- take the necessary steps to ensure that only employees who carry on their person certificates of qualification issued by Emploi-Québec, or those who are under the immediate supervision of a qualified person, are assigned to carry out operations on drinking water distribution and production equipment, including fire hydrants;
- take the necessary steps to make employees covered by the *Regulation respecting the quality of drinking water* aware that, while performing their duties, they are required to carry on their person their certificates of qualification issued by Emploi-Québec attesting to their competency;

in order to comply with the requirements of the *Regulation respecting the quality of drinking water*.

Business units' responses:

LASALLE BOROUGH

[TRANSLATION] Review the process currently in place to ensure that resources assigned to fire hydrant maintenance, both internal and external, are qualified. **(Planned completion: March 2015)**

Suggest a method for following up on the confirmation of this qualification for both internal and external resources. **(Planned completion: March 2015)**

Establish a follow-up process that will include various partners involved in carrying out fire hydrant maintenance work, such as forepersons, division managers, human resource managers, as well as those responsible for different job sites that might be affected by the requirements of the *Regulation respecting the quality of drinking water*. **(Planned completion: April 2015)**

RIVIÈRE-DES-PRAIRIES–POINTE-AUX-TREMBLES BOROUGH

[TRANSLATION] The section manager will be mandated to establish the following:

- Register of staff certified by Emploi-Québec (updated with changes in the work schedule), including the following information:
 - Employee's name;
 - Date of certification;
 - Date of renewal of the qualification certificate at a frequency established by Emploi-Québec;
 - Copy of the qualification certificate. **(Planned completion: February 2015)**

Needs assessment on resources assigned to inspection, maintenance and repair of the water system. **(Planned completion: February 2015)**

Needs assessment on training accredited by Emploi-Québec. **(Planned completion: March 2015)**

Training planning and coordination. **(Planned completion: March 2015)**

VILLE-MARIE BOROUGH

[TRANSLATION] During the start-up meeting, the contractor responsible for the complete inspection submitted its employees' certificates to DGSRE project managers. The borough hired two technical officers to conduct random checks in 2014 to verify whether the contractor had in its possession the certificates as submitted at start-up meetings. **(Completed)**

For maintenance work carried out internally, the borough registered 17 employees in Emploi-Québec certification programs. The process leading to certification, which involves a "buddy system," ended in early 2015, and five employees are currently waiting to be summoned by Emploi-Québec to take the exam and have their certification validated. **(Planned completion: June 2015)**

Guideline issued reminding employees to keep the Emploi-Québec certificate on their person at all times. **(Completed)**

VILLERAY–SAINT-MICHEL–PARC-EXTENSION BOROUGH

[TRANSLATION] The external firm that will conduct the complete inspection of fire hydrants in our borough will be checked during the start-up meeting with the DGSRE to provide us with the assurance that its employees have the qualifications required under the Regulation respecting the quality of drinking water. **(Planned completion: May 2015)**

For the partial inspection of fire hydrants, conducted internally, employees who entered their names on the list of willing teams will be registered for the appropriate training at Cégep de St-Laurent. **(Planned completion: June 2015)**

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[TRANSLATION] The DGSRE will ensure that it keeps on hand certifications of employees of external firms assigned to fire hydrant inspections. (Planned completion: May 2015)

4.3. Profile of the Condition of Fire Hydrants Available to the Service de l'eau

4.3.A. Background and Findings

As a result of both the City's equipment and infrastructure policy and the SE objectives set forth in the fire safety cover plan, the DGSRE must have an accurate profile of the condition of fire hydrants in order to ensure sound management of these assets. This information is used to compare data year over year in order to assess improvement or deterioration in the condition of fire hydrants and to make decisions concerning budget allocations for maintenance or investments.

During our audit, we assessed the extent to which the SE had an accurate profile of the condition of fire hydrants.

As mentioned above, boroughs provide two sources of information: data recorded in target tables, as prescribed by partnership agreements, and data entered in the corporate GEA application. The target table provides the number of complete and partial inspections carried out, the number of major and minor repairs performed and the number of replaced fire hydrants. This means that inspection and repair data must be recorded on a regular basis by each of the units responsible. On this subject, we noted in Section 4.2.2, concerning the implementation of corrective maintenance procedures by boroughs, that boroughs did not have management reports providing them with a profile of the condition of their fire hydrant inventories. As a result, the DGSRE does not have a comprehensive picture of the condition of fire hydrants for all boroughs.

Nevertheless, during our audit, we wanted to show the extent to which the DGSRE had comprehensive data on fire hydrants. To this end, we compared the number of inspections and repairs recorded in 2013 in target tables by the four boroughs selected with data these boroughs entered in the GEA application. The results of this analysis are shown in Table 7.

Table 7 – Comparison Between Inspection and Repair Data Entered in Target Tables and Inspection and Repair Data Entered in the GEA Application – 2013

Total (6,435 fire hydrants)				
Activity	Target table ^[a]	GEA ^[b]	Discrepancy	Variation
Complete inspections	5,135	5,065	70	1%
Partial inspections	3,157	3,018	139	4%
Major repairs ^[c]	354	288	66	19%
Minor repairs ^[d]	859	248	611	71%

^[a] Number of operations that the selected boroughs carried out and compiled in the target tables provided for in partnership agreements.

^[b] Number of operations entered in the GEA application by the four boroughs selected.

^[c] Mainly internal mechanism repairs.

^[d] Repairs that do not require much time, such as painting, replacing a bolt, applying lubricant, installing a hydrant marker.

This comparison confirms a problem that we raised in Section 4.2.2 concerning the total number of repairs entered in the GEA application. Indeed, 19% of data on major repairs and 71% of data on minor repairs were not entered in it, even though the partnership agreements stress the importance of updating digital networks and other corporate databases. This prevents the DGSRE from having reliable information on fire hydrants and from determining the extent to which their condition has improved. It should be noted that the discrepancies could be greater if boroughs do not record all the information in target tables.

Since it is the out of service fire hydrants that are of concern to the SIM, we extended our analysis further and attempted to assess the extent to which data missing from the GEA application are reflected in the profile of out of service fire hydrants available to the SE.

We therefore compared the list of fire hydrants that were out of service as of December 20, 2013, which was accessible to the SE through the GEA application, with the profile that was provided to us by the boroughs concerned. It should be pointed out that the profile available to the boroughs is drawn from auxiliary data, i.e., maintenance activities compiled in spreadsheets and used as a reference to fill out the target table. The results of this comparison are presented in Figure 1.

Figure 1 – Comparison Between the Number of Out of Service Fire Hydrants Known to Boroughs and the Number Known to the SE – December 20, 2013



Discrepancy in the numbers of fire hydrants: 65

As shown above, a comparison of the two lists reveals that as of December 20, 2013, the four audited boroughs indicated that they had 56 out of service hydrants on their territories, whereas the SE was aware of 57 out of service hydrants. A data analysis reveals that 24 out of service fire hydrants were known to both sides. Since boroughs have an accurate profile of out of service fire hydrants, this means that in reality, 32 hydrants are out of service but not identified in the GEA application. Also, information available to the SE reveals that 33 fire hydrants described as “out of service” in the GEA application were in fact supposedly operational.

The discrepancies appear to have occurred either because out of service fire hydrants with deficiencies had not been entered by boroughs in the GEA application at the time of a complete inspection, partial inspection or reports made in the course of the year, or because data on repairs carried out had not been entered in the GEA application.

All the explanations obtained show, in our opinion, that not all the stakeholders concerned within the boroughs are made aware of the importance of documenting operations and entering data in the GEA application. On this subject, we think that all stakeholders should be briefed on the importance of their contribution to the process of managing fire hydrants.

In conclusion, the SE does not have access to reliable information on out of service fire hydrants. Data missing from the GEA application prevent the SE from having an accurate profile of all fire hydrants, and more specifically, out of service hydrants that require priority responses. It is therefore not possible to assess improvement or deterioration in the situation.

4.3.B. Recommendation

We recommend that the Direction de la gestion stratégique des réseaux d'eau take the necessary steps to ensure that the corporate application provides an accurate profile of the condition of fire hydrants so that it can ensure sound management of its assets.

Business unit's response:

[TRANSLATION] The DGSRE will brief all stakeholders on the importance of documenting responses and entering data in the GEA application by various means:

- *Training; (Planned completion: December 2016)*
- *The guideline; (Planned completion: May 2015)*
- *The maintenance guide. (Planned completion: December 2015)*

4.4. Profile of the Condition of Fire Hydrants Available to the Service de sécurité incendie de Montréal

4.4.A. Background and Findings

To ensure effective operations, SIM stakeholders stress the importance of having reliable, timely information on the location of:

- all hydrants on the Montreal agglomeration territory;
- out of service fire hydrants;
- fire hydrants with flow rates below the minimum acceptable threshold of 1,500 L/min, in accordance with the Ministère de la Sécurité publique guidelines.¹⁷

In 2008, the SIM compiled inventory data on approximately 31,000 fire hydrants on the waterworks system throughout the Montreal agglomeration. This inventory is integrated into a database¹⁸ that can be fed into the RAO application. This application, which is operated by the SIM, can forward emergency calls to fire stations, dispatch vehicles to the scene of a fire and manage information, including the location and condition of fire hydrants, that is necessary for an emergency response.

When an emergency call is received, the RAO application automatically locates three available fire hydrants close to the scene of the fire. Information is sent directly to the fire stations concerned and to computers in fire trucks that are dispatched to the scene of a fire. With respect to data on the condition of the inventory, when fire hydrants are out of service, this information is entered directly in the RAO application from reports received from

¹⁷ The Ministère de la Sécurité publique guidelines provide for a basic flow rate of 1,500 L/min for 30 minutes. However, this standard is for a minimum response, i.e., an initial attack, and not the prevention of a major fire.

¹⁸ The SIM database: BD PROD-CARTO-SIM.

boroughs and related municipalities. However, information on fire hydrants with flow rates below the minimum threshold is not recorded in the RAO application as soon as a diagnosis is made during fire hydrant inspections.

Since it is important for the SIM to have accurate, up-to-date profiles of the condition of fire hydrants on the City's territory, we attempted to assess their reliability. Reports originating in boroughs will therefore be discussed separately from those originating in related municipalities.

4.4.1. Profile of the Condition of Fire Hydrants in Boroughs

4.4.1.1. Out of Service Fire Hydrants

4.4.1.1.A. Background and Findings

A formal reporting process should be established so that the SIM is assured of receiving the information it needs to describe the condition of fire hydrants. This process should formalize the type of information, the frequency with which it is updated and the responsibilities of each stakeholder concerned.

Our work revealed the existence of informal reporting processes designed to disseminate the coordinates of out of service fire hydrants, including following complete and partial inspections or when emergency situations arise (e.g., accidents, breaks caused by handling). These informal processes also cover the restoration to working order of fire hydrants following repairs.

We will briefly describe the routing of reports of out of service fire hydrants, depending on whether they come from boroughs or from the SIM. In twelve boroughs,¹⁹ the application for managing citizen enquiries (GDC, or Gestion des demandes des citoyens) is used to report fire hydrants described as "out of service" or rehabilitated hydrants to the Unité d'intervention rapide et prioritaire (UIRP), which comes under the purview of the Service de la concertation des arrondissements. The UIRP, in turn, faxes the information to the Centre de communications du Service de sécurité incendie de Montréal (CCSI). For the other seven boroughs,²⁰ reports are forwarded directly to the SIM (CCSI) during regular business hours, and pass through the UIRP at other times.²¹

¹⁹ RDP-PAT, Ville-Marie and VSMPE boroughs are among these.

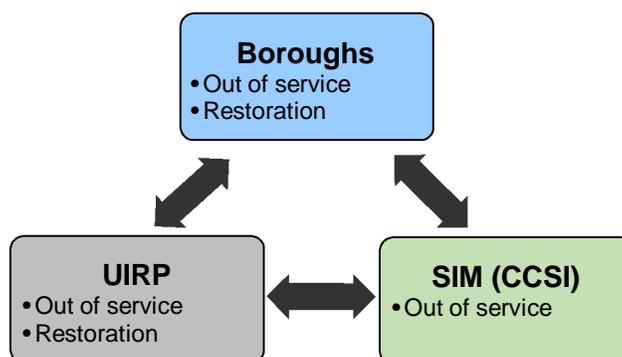
²⁰ LaSalle borough is part of this group.

²¹ Evenings and weekends.

Reports of out of service fire hydrants received by the CCSI are recorded directly in the RAO application. The fire hydrant number, the date of decommissioning and a theoretical restoration date are entered. Two statuses are then possible for fire hydrants: “available” and “unavailable.” It should also be pointed out that SIM staff may also have to report fire hydrants that were decommissioned following firefighting operations. For this type of reporting, the SIM issued a guideline in August 2010 to all its employees, which stated that information must be communicated to both the CCSI, for integration in the RAO application, and to the borough concerned, so that it can enter the restoration in its corporate application (GEA).

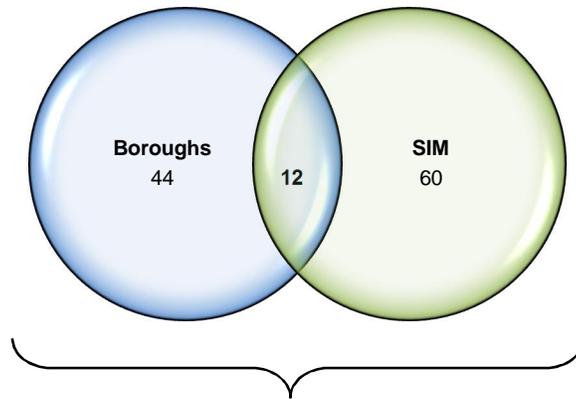
The reporting mechanisms established are illustrated in Figure 2.

Figure 2 – Process for Reporting the Condition of Fire Hydrants



In our audit, we assessed the extent to which the SIM had up-to-date information on the condition of fire hydrants. To do this, we compared the list of out of service fire hydrants available to the SIM with those of the four boroughs audited. The results of the comparison, as of December 20, 2013, are shown in Figure 3.

Figure 3 – Comparison Between the Number of Out of Service Fire Hydrants Known to Boroughs and the Number of Out of Service Fire Hydrants Known to the SIM – December 20, 2013



Discrepancy in the numbers of fire hydrants: 104

Our very first finding was that there is a discrepancy between the number of out of service fire hydrants known to the SIM (72) and the number of out of service fire hydrants known to boroughs (56). Following a detailed analysis of the fire hydrants appearing on each of these lists, we found that these discrepancies are much greater, since only 12 out of service fire hydrants are known to both the SIM and the boroughs.

We can already ascertain that the SIM does not have a comprehensive, up-to-date overview of out of service fire hydrants located in boroughs. This situation raises doubts about the effectiveness of this reporting process.

In view of the discrepancies noted, we attempted to determine at what stage in the process the reporting failed. While it is mainly boroughs that do the reporting, reports can also originate from the SIM. It should be pointed out that our analysis dealt solely with reports on decommissioning or restoration work carried out on fire hydrants in 2013. Regarding the discrepancy of 104 fire hydrants noted (see Figure 3), 64 hydrants had been reported in 2013. Analysis of failures to report yields the following results:

- In 56% of cases, we had no evidence that reports had been forwarded to the SIM, either by boroughs or by the UIRP.
- In 25% of cases, while we had evidence that reports had been forwarded to the SIM, we did not find any records of them in the RAO application.
- In 2% of cases, we had evidence that a report originated from the SIM but that the UIRP had not relayed the information to the boroughs.
- In 17% of cases, we found no evidence indicating where the reporting failed.

In light of these results, we found that failures to report occur throughout the process. On the one hand, since boroughs and the SIM (RAO) use independent sources of information, stakeholders involved in reporting out of service fire hydrants must enter the information twice, which increases the risk of errors.

On the other hand, according to the information obtained, the SIM apparently did not regularly check to determine whether or not the out of service fire hydrants entered in the RAO application had been repaired. The RAO application seems to be programmed such that the status of a fire hydrant that had been reported as out of service will automatically be returned to “available” as soon as the theoretical restoration date entered by the CCSI at the time of the report is reached. This poses the risk that some unrepaired fire hydrants may no longer be identifiable by the SIM in the RAO application. We feel that steps must be taken to ensure that the status of these fire hydrants is not automatically returned to “available” without someone first checking with the boroughs and related municipalities concerned to ascertain their condition.

Furthermore, in addition to the deficiencies in the reporting process, we must take into account the finding pointed out in Section 4.1.2, which is that out of service fire hydrants are not considered as such by the boroughs audited because they have different ways of interpreting deficiencies. This situation has a direct consequence on the reporting of a fire hydrant to the SIM.

Accordingly, we think that all the shortcomings in the reporting process make it impossible for the SIM to have access to reliable information on the condition of fire hydrants, which it needs in order to plan responses. As a result, the SIM probably needs to change its response plan during an emergency according to the actual condition of fire hydrants, which can be established only at the scene of an emergency response. This situation would cause a delayed reaction time, thereby compromising the effectiveness of responses.

We think that formal reporting mechanisms should be established and that all the stakeholders concerned should comply with them, so that the SIM can have a comprehensive, up-to-date overview. This could take the form of an administrative framework that defines the concept of “out of service” for fire hydrants to be reported, the reporting deadline and the responsibilities of each of the stakeholders concerned (the SIM, boroughs and the UIRP) in this process.

Moreover, once the SE’s GEA application makes it possible to have reliable, real-time data, we think that it would be appropriate to assess the possibility of taking steps to develop computer links enabling the two computer applications (GEA and RAO) to relay information

on out of service fire hydrants to each other. This practice would allow the SIM to have access to real-time data, thereby limiting the risk of errors associated with data on the condition of fire hydrants. In the meantime, we think it is essential that the SIM's and the boroughs' inventories of out of service fire hydrants be checked and aligned regularly to ensure the integrity of the data used in planning SIM operations.

4.4.1.1.B. Recommendation

We recommend that the **Service de sécurité incendie de Montréal**, in collaboration with the **Service de l'eau**, produce an administrative framework designed to formalize the process for reporting out of service fire hydrants in order to have a comprehensive, up-to-date overview of out of service fire hydrants on the entire territory. In particular, this management framework should:

- define the concept of “out of service” for fire hydrants to be reported;
- establish the deadline for sending these reports;
- specify the responsibilities of each of the stakeholders concerned (**Service de sécurité incendie de Montréal**, boroughs and Priority Rapid Response Unit) in this process.

Business units' responses:

SERVICE DE SÉCURITÉ INCENDIE DE MONTRÉAL

[TRANSLATION] Identify each partner's resource persons in order to initiate analysis of the process to be established and start up the workshops. (Planned completion: April 2015)

Establish the administrative framework, define the roles and responsibilities of each stakeholder, the process and the way in which reporting of the City's out of service fire hydrants (under the boroughs' responsibility) is kept up to date. (Planned completion: December 2015)

SERVICE DE L'EAU

[TRANSLATION] The SE undertakes to collaborate in the implementation of the SIM's action plan. (Planned completion: according to the SIM's action plan)

4.4.1.1.C. Recommendation

We recommend that the **Service de sécurité incendie de Montréal** and the **Service de l'eau** take steps to develop computer links enabling them to relay to each other information on out of service fire hydrants, so that they each have reliable, real-time information that can help ensure the effectiveness of fire protection response operations.

Business units' responses:

SERVICE DE SÉCURITÉ INCENDIE DE MONTRÉAL

[TRANSLATION] In collaboration with the SE, the SIM will conduct an in-depth analysis, taking into account the capacity of IT services, for the purpose of developing computer links in order to relay information on the condition of the City's fire hydrants (under the boroughs' responsibility). (Planned completion: December 2015)

SERVICE DE L'EAU

[TRANSLATION] The SE undertakes to collaborate in the implementation of the SIM's action plan. (Planned completion: December 2015)

4.4.1.1.D. Recommendation

We recommend that, pending the establishment of computer links between the gestion de l'entretien des actifs and répartition assistée par ordinateur applications, LaSalle, Rivière-des-Prairies–Pointe-aux-Trembles, Ville-Marie and Villeray–Saint-Michel–Parc-Extension boroughs promptly report to the Service de sécurité incendie de Montréal information on fire hydrants that are out of service and fire hydrants that have been recommissioned so that it has comprehensive, up-to-date information.

Business units' responses:

LASALLE BOROUGH

[TRANSLATION] Review the process currently used to communicate information effectively to the different stakeholders and start up workshops. (Planned completion: February 2015)

Establish the administrative framework, define the roles and responsibilities of each stakeholder as well as the process and the way in which reporting of the City's out of service fire hydrants is kept up to date. (Planned completion: June 2015)

RIVIÈRE-DES-PRAIRIES–POINTE-AUX-TREMBLES BOROUGH

[TRANSLATION] Establish an administrative framework and a procedure so that the SIM and the borough can have a reliable register of out of service fire hydrants. (Planned completion: June 2015)

VILLE-MARIE BOROUGH

[TRANSLATION] On February 1, 2015, the borough's senior technical officer directly relayed to the officer in charge of the RAO application all information on decommissioned and recommissioned fire hydrants. (Completed)

VILLERAY–SAINT-MICHEL–PARC-EXTENSION BOROUGH

[TRANSLATION] We will get in touch with the SIM by the end of February 2015 in order to collaborate in the implementation of the required administrative framework and process. For the time being, information on out of service fire hydrants is sent to the UIRP. (Planned completion: September 2015)

4.4.1.1.E. Recommendation

We recommend that the Service de sécurité incendie de Montréal, pending the establishment of computer links between the gestion de l'entretien des actifs and répartition assistée par ordinateur applications, regularly check the accuracy of data on out of service fire hydrants that boroughs have entered in the répartition assistée par ordinateur application so that it has access to reliable information to help ensure the effectiveness of its operations.

Business unit's response:

[TRANSLATION] The SIM will establish a procedure for checking the accuracy of data; the procedure will specify the frequency with which data are checked and the condition of the City's fire hydrants (under the boroughs' responsibility). (Planned completion: May 2015)

4.4.1.1.F. Recommendation

We recommend that the Service de sécurité incendie de Montréal take the necessary steps to ensure that the répartition assistée par ordinateur application no longer allows the automatic restoration of an out of service fire hydrant at the end of an initially scheduled theoretical repair date so that it is assured of having comprehensive information on this fire hydrant category in its inventory.

Business unit's response:

[TRANSLATION] The SIM will send a request to the officer in charge of the RAO application to change the program so that fire hydrants are no longer automatically restored to working order. (Planned completion: May 2015)

4.4.1.2. Fire Hydrants with Insufficient Flow**4.4.1.2.A. Background and Findings**

It is important to have a thorough knowledge of the water supply system and its capacity in the different sectors of the City's territory. It therefore becomes crucially important to know which fire hydrants have available flows below an acceptable threshold for firefighting in order

to ensure the effectiveness of the SIM's emergency responses. The water flow rate needed to extinguish a fire varies according to the building affected.

In 2007, guidelines issued by the Ministère de la Sécurité publique for developing fire safety cover plans stressed that it was important for a fire department to have a thorough knowledge of the water supply system and its capacity in different parts of its territory. This means that firefighters must be able to rely on a water supply capable of producing a basic flow rate of 1,500 L/min for at least 30 minutes. This standard applies when a building is in the “low risk” category, is located in an urban area, and involves a minimum response, i.e., an initial attack but not preventing a major fire. This basic flow rate therefore does not provide an adequate water supply to put out fires in higher-risk buildings.

In 2008, in its fire safety cover plan, the SIM discussed one feature of the water supply component that needed to be improved: a comprehensive flow and pressure profile for the system as a whole was needed in order to locate problematic sectors. This information had to be compiled when boroughs and related municipalities performed maintenance work on fire hydrants.

Flow rate is calculated mainly from pressure measurements, taken during flow tests that are part of complete fire hydrant inspections. The available flow is used to determine whether the acceptable threshold is met for the purpose of providing fire protection for a given sector.

During our audit, the SIM had embarked on a large-scale project that consisted in establishing the water flow rates required on its territory (required fire flow) using firefighting calculation methods. According to the information obtained, this exercise should be completed by the end of 2016. However, to locate problematic fire protection sectors, these data on the required water flow rates must be compared with the data on available flow in the system, calculated by the SE. At the time of our audit, it was anticipated that this flow rate comparison would be carried out as part of the water sectorization and pressure regulation project undertaken by the SE. This project, aimed at measuring flow rate and pressure regulation on the waterworks system, is only in its early stages, and its completion is scheduled for 2023. In the meantime, the SIM is not in a position to identify all the problematic sectors on the agglomeration's territory that have an impact on fire protection and will not have a comprehensive profile of them before 2023 (a wait of at least seven years).

Once these problematic water supply sectors are identified, the SIM will be able to plan the establishment of special operating methods²² and identify fire hydrants of crucial importance,

²² Operating methods that call for additional fire engines to be mobilized and supplied with water from operational fire hydrants in the sector in the event of insufficient water.

those that must be kept operational at all times to guarantee adequate fire protection. In the opinion of SIM management, the fact that problematic sectors have not yet been identified for the entire system is not alarming, because when firefighters arriving at the scene of a fire realize that there are water supply problems, fallback solutions are quickly adopted. However, we believe that such a practice could compromise the effectiveness of operations.

An overview of problematic sectors is not yet available for all of the agglomeration's territory; however, the SIM is working on determining the profile of fire hydrants that do not meet the minimum requirement set by the Ministère de la Sécurité publique: a flow rate of at least 1,500 L/min. Since these hydrants do not meet the minimum requirement, they do not provide an adequate water supply and should therefore be considered "out of service."

During our audit, we examined the way in which the SIM received data on fire hydrants with flow rates lower than 1,500 L/min. We also wanted to assess whether the information the SIM had was comprehensive.

First, we noted that no formal reporting process had been put in place to inform the SIM as soon as a diagnosis was made. Instead, data on flow rates lower than 1,500 L/min are submitted by the SE upon request (on a yearly basis) by the SIM's Centre de services – Expertise et développement de la prévention. At the time of our audit, even though data had been compiled by boroughs during complete inspections, generally conducted in the spring, the SIM was given the data only in November 2013. It should be noted that the previous list that the SIM had received was dated April 2012 and corresponded to information available to the SE as of that date. In an email, the SE stressed that the completeness of the data provided depends on the diligence with which boroughs update the database following complete inspections. It should be noted that at the time of this audit report (January 2015), no other list had been sent by the SE concerning these fire hydrants with flow rates lower than 1,500 L/min.

Second, based on inspection results posted by boroughs in the GEA application, we attempted to verify whether the SIM had the complete list of fire hydrants with flow rates lower than the acceptable threshold for firefighting (1,500 L/min). The results of this comparison are shown in Table 8.

Table 8 – Fire Hydrants with Flow Rates Lower than 1,500 L/min – Comparison of Information Kept by the SIM and by Boroughs 2013

Borough	Inventory ^[a]	Fire hydrants whose flow rates were measured		Fire hydrants with flow rates below 1,500 L/min	
		Number	%	SIM ^[b]	Following borough inspections
LaSalle	1,544	1,474	95%	0	1
RDP–PAT	2,310	2,202	95%	0	2
Ville-Marie	1,352	0	0%	N/A	N/A
VSMPE	1,229	1,144	93%	6	6
Total	6,435	4,820	75%	6	9

^[a] According to the 2013 inventory taken from the spatial geographic information system (SGIS).

^[b] According to a list obtained from the SE, as of November 24, 2013.

First, as shown in Table 8, Ville-Marie borough had not taken any pressure measurements to calculate the flow rates of fire hydrants on its territory. According to the information obtained, this has been the situation since 2011. Consequently, information relayed to the SIM about this borough is incomplete. Considering that Ville-Marie borough is a hub of activity (traffic, population density, high concentration of institutions, etc.), a sector where risk tolerance should be among the lowest, we think it should be noted that under such circumstances, the SIM is unable to contain all the risks associated with insufficient flow rates for fire hydrants located in this vital sector.

Moreover, insofar as pressure readings are taken at the time of complete inspections to calculate the flow rates of fire hydrants, our audit revealed the presence of discrepancies for LaSalle and RDP–PAT boroughs. Even though the discrepancies involving fire hydrants in two of the four boroughs selected account for a small proportion of their respective inventories, the very existence of these discrepancies is troubling. The list submitted to the SIM in November 2013 contained 49 fire hydrants with flow rates below 1,500 L/min for five boroughs, including six in VSMPE borough. We believe that the SE should check with boroughs to validate the data it sends to the SIM so that it can have reliable information at its disposal.

We also examined whether hydrants with flow rates below 1,500 L/min were recorded in the RAO application. Of the boroughs audited, only VSMPE borough appeared on the list received from the SE. We noted that as of December 20, 2013, not one of the six hydrants appearing on this list had been posted in the RAO application. However, as of February 20, 2014, five of them appeared on the list. Our work revealed that after the SIM receives the list from the SE, it must ask boroughs to confirm which fire hydrants have flow rates below 1,500 L/min and report them as out of service if the situation has remained unchanged. In short, not only does the SIM not receive the list of fire hydrants with insufficient flows from

the SE in a timely manner, i.e., in November, even though inspections are generally carried out in the spring, but there are then further delays before these fire hydrants are entered in the RAO application.

Since the SIM does not have comprehensive, up-to-date data on fire hydrants with flow rates below the threshold of 1,500 L/min, it has no guarantee that hydrants assigned to operations by the RAO application have the minimum capacity required during an emergency. As a result, the inaccuracy of data on the condition of fire hydrants could compromise the effectiveness of the SIM's response procedure during a fire.

In closing, concerning the compilation of flow rate data, Ville-Marie borough should take the necessary steps to conduct complete inspections, including taking pressure measurements to calculate flow rates of fire hydrants, as specified in recommendation 4.2.1.C, so that its results are reported to the SIM. We also think that, throughout the year, the SE should report fire hydrants with calculated flow rates below 1,500 L/min to the SIM. In this regard, the SE should make sure that it provides the SIM with validated data, so that it has reliable information. In order to formalize the reporting process for this type of fire hydrant, we believe that an administrative framework should be developed.

Finally, we understand that the guidelines of the Ministère de la Sécurité publique specify that a flow rate of at least 1,500 L/min for 30 minutes is required. However, this is a basic flow rate, and other sectors requiring higher flow rates can also be problematic because of an insufficient water supply. As mentioned above, the SIM will have an overall picture of these problematic sectors only after the SE's water sectorization and pressure regulation project is completed in 2023. We believe that it would be appropriate to assess the risk of knowing which sectors are problematic only at the end of this timeline and limit the consequences of such a situation.

4.4.1.2.B. Recommendation

We recommend that the Service de l'eau check with boroughs to validate the accuracy of data entered in the gestion de l'entretien des actifs application on fire hydrants with flow rates below the acceptable threshold of 1,500 L/min so that they can provide the Service de sécurité incendie de Montréal with reliable information, thereby ensuring the effectiveness of its operations.

Business unit's response:

[TRANSLATION] The SE will establish a procedure for checking with boroughs the accuracy of data entered in the GEA application on fire hydrants with flow rates below

the acceptable threshold of 1,500 L/min so that they can provide the SIM with reliable information, thereby ensuring the effectiveness of its operations. (Planned completion: December 2015)

4.4.1.2.C. Recommendation

We recommend that the Service de sécurité incendie de Montréal, in collaboration with the Service de l'eau, produce an administrative framework aimed at formalizing the reporting process for fire hydrants with flow rates below the minimum acceptable threshold of 1,500 L/min to ensure such situations are reported as soon as boroughs detect the deficiency during inspections so that the Service de sécurité incendie de Montréal has comprehensive, up-to-date information that enables it to provide fire protection.

Business units' responses:

SERVICE DE SÉCURITÉ INCENDIE DE MONTRÉAL

[TRANSLATION] Resource persons within the boroughs and the DGSRE will be contacted to identify and establish the process that must be put in place in order to start up the workshops (work meeting schedule). (Planned completion: December 2015)

Establish the administrative framework, define the roles and responsibilities of each stakeholder, the process and the way in which reporting of the City's fire hydrants (under the boroughs' responsibility) that cannot provide a minimum flow rate of 1,500 L/min is kept up to date. (Planned completion: December 2015)

SERVICE DE L'EAU

[TRANSLATION] The SE undertakes to collaborate in the implementation of the SIM's action plan. (Planned completion: according to the SIM's action plan)

4.4.1.2.D. Recommendation

We recommend that the Direction générale assess the risk of knowing the profile of problematic sectors in the agglomeration, with respect to flow rates and pressures, only upon completion of the water sectorization and pressure regulation project of the Service de l'eau (scheduled for 2023), and take any steps necessary to limit the consequences of such a situation so that the Service de sécurité incendie de Montréal is able to provide adequate fire protection.

Business unit's response:

[TRANSLATION] Produce a report assessing the risks associated with a lack of knowledge of the waterworks system (flow rates and pressures) and the SIM's work methods during responses. (Planned completion: December 2015)

If necessary, establish a temporary procedure to help limit the consequences of a lack of knowledge, to be maintained until completion of the SE's water sectorization and pressure regulation project (slated for 2023). (Planned completion: December 2015)

4.4.2. Profile of the Condition of Fire Hydrants in Related Municipalities

4.4.2.A. Background and Findings

It should first be mentioned that, in order to make its operations more effective, the SIM needs to have as much information on the fire hydrants located in the 14 related municipalities as it does on the hydrants found on the City's territory. The SIM is concerned with knowing the locations of both out of service fire hydrants and those with flow rates lower than the minimum threshold of 1,500 L/min.

As is the case for establishing a profile of the condition of fire hydrants located on the City's territory, a formal reporting process should also be established so that the SIM can be assured of receiving the information it needs to describe the condition of fire hydrants located in related municipalities.

Even though no formal reporting process was adopted by the parties, we were informed that the SIM nevertheless received information allowing it to describe the condition of fire hydrants. This information was obtained from related municipalities either at annual meetings, or when they informed the SIM directly by fax or email (during regular work hours) or through the UIRP (outside of business hours). At the time of our audit, according to the information available to the SIM, out of an inventory of about 7,350 fire hydrants, 68, or close to 1%, were out of service and 12 had flow rates lower than 1,500 L/min.

We would have liked to assess the extent to which the SIM had reliable, up-to-date information on the condition of fire hydrants in related municipalities just as we did with boroughs. Since we do not have access to the data used and processes established by related municipalities for fire hydrant maintenance, we were unable to validate all the data that the SIM had in the RAO application on fire hydrants that were out of service or had flow rates below 1,500 L/min. However, one of the principal stakeholders told us that he was not

certain that the information received was accurate. This could compromise the effectiveness of firefighting operations in related municipalities.

In our opinion, it is essential that the SIM promptly take the necessary steps to ensure that it has comprehensive, reliable data on the condition of fire hydrants located in related municipalities. To achieve this, a reporting process should be put in place for related municipalities to formalize the type of information required, the frequency with which it is to be updated and the responsibilities of each stakeholder concerned. Data on the condition of fire hydrants integrated in the RAO application should also be validated regularly with each related municipality.

4.4.2.B. Recommendation

We recommend that the Service de sécurité incendie de Montréal:

- **put in place a formal reporting process for related municipalities so that it knows the locations of fire hydrants that are out of service or have flow rates lower than 1,500 L/min;**
- **check with related municipalities on a regular basis to validate the data it has on fire hydrants that are out of service or have flow rates below 1,500 L/min;**

so that it has comprehensive, reliable information on the condition of fire hydrants and is able to ensure the effectiveness of its operations.

Business unit's response:

[TRANSLATION] Resource persons within related municipalities will be contacted to determine and establish the process that must be put in place in order to start up the workshops (work meeting schedule). (Planned completion: December 2015)

Establish the administrative framework, define the roles and responsibilities of each stakeholder, the process and the way in which reporting of the City's fire hydrants (under the related municipalities' responsibility) that are out of service or unable to provide a minimum flow rate of 1,500 L/min is kept up to date. (Planned completion: December 2015)

4.4.3. Profile of the Condition of Private Fire Hydrants

4.4.3.A. Background and Findings

Of the roughly 31,000 fire hydrants available to the SIM for fire protection, roughly 1,050 (3%) are privately owned, located on land belonging to companies or institutions. Such hydrants are mainly required for private properties, under the National Building Code or by insurers.

The location and maintenance of private fire hydrants are the responsibility of the owners themselves. Private fire hydrant maintenance is governed by the provisions of the CNPI 2010, which requires that fire hydrants be inspected, tested and maintained in accordance with NFPA Standard 25.²³

The SIM is responsible for ensuring that these provisions are enforced in accordance with current fire prevention by-laws. It should be noted that there are 15 such by-laws on the territory of the agglomeration (one for each related municipality, including Ville de Montréal).²⁴ For this purpose, each related municipality must make sure of the availability and locations of fire hydrants on its territory. The SIM informs owners via its website that routine maintenance of fire hydrants must be carried out by a specialized contractor. For this purpose, an inspection report containing a list of defective or non-compliant items, if any, must be kept. It is imperative that the necessary work be carried out to make equipment operational and effective. Under these by-laws, fines may be imposed in the event of non-compliance.

Moreover, in January 2012, the urban agglomeration council adopted the *By-law concerning the Service de sécurité incendie de Montréal*,²⁵ conferring powers on the SIM that enabled it to assume its responsibilities fully. Provisions governing essential standards stipulate that:

- “fire hydrants must, at all times, be visible and accessible [...] for clear access by firefighters and their equipment”;
- “a copy of the records of trials, inspections or operations related to the maintenance [...] must be kept on the premises.”

The SIM can issue notices of violation to penalize institutions that violate the *By-law concerning the Service de sécurité incendie de Montréal*.

Despite the existence of these provisions, SIM stakeholders informed us that their inventory of private fire hydrants is incomplete and that their condition is unknown. Since private fire hydrants are located near important buildings (e.g., hospitals, universities), there is reason to be concerned about the inevitable consequences that malfunctioning hydrants would have for the effectiveness of the SIM's response to a fire. Furthermore, even though this by-law was adopted by City council on January 23, 2012, the stakeholders we met told us that the SIM had not yet adopted measures to ensure compliance with the provisions governing private fire hydrants.

²³ NFPA Standard 25 refers to inspections of fire hydrants on private land. It provides for inspections on an annual basis as well as after each use. It provides for their accessibility as well as preventive and corrective maintenance work on them.

²⁴ By-law 12-005, *By-law concerning fire safety*, adopted by City council on January 23, 2012.

²⁵ By-law RCG 12-003, adopted on January 26, 2012.

We think that it is necessary to establish programs, as soon as possible, to identify private fire hydrants located on the territory of the agglomeration in order to validate the SIM's inventory. These measures should provide for the updating of the private fire hydrant inventory and its integration in SIM databases.

We also feel that having a profile of the operating condition of private fire hydrants is necessary because it forces owners to take the necessary steps to establish fallback procedures during emergency responses. It would therefore be appropriate to consider setting up a private fire hydrant inspection program to regularly ensure that their owners are in fact carrying out maintenance work and that penalties are imposed if they fail to do so, as provided by the *By-law concerning the Service de sécurité incendie de Montréal*.

4.4.3.B. Recommendation

We recommend that the Service de sécurité incendie de Montréal take the necessary steps to complete the inventory of locations of fire hydrants on private land and ensure that they are integrated into its inventory so that it has comprehensive, reliable information when responses are required.

Business unit's response:

[TRANSLATION] Resource persons within the boroughs, related municipalities and the DGSRE will be contacted, as well as other possible partners who are directly involved (owners and private firms), to obtain comprehensive information on the locations of private fire hydrants. (Planned completion: December 2016)

4.4.3.C. Recommendation

We recommend that the Service de sécurité incendie de Montréal establish an inspection program for fire hydrants located on private land in order to have a profile of their condition and to be able to enforce the provisions of the *By-law concerning the Service de sécurité incendie de Montréal*.

Business unit's response:

[TRANSLATION] A program will be introduced to make private fire hydrant owners aware of their responsibilities vis-à-vis testing, maintenance and inspection of fire hydrants that belong to them (private fire hydrants). (Planned completion: December 2016)

4.5. Accountability Reporting

4.5.A. Background and Findings

It is important that structured accountability mechanisms be established so that management of a department or borough and the municipal administration can keep informed on the management of an activity as well as on the achievement of the objectives set. Management reports must therefore be produced regularly to keep them up to date on achievements and provide reasons for discrepancies, if any. This accountability reporting must foster informed decision-making that guides planning and the allocation of resources needed to achieve the objectives.

As part of our audit, our work consisted in investigating the mechanisms established to account for fire hydrant management.

The fire hydrant management process involves many business units. Accountability mechanisms must be provided because each unit contributes to the achievement of the objectives set, whether in the areas of assets management or fire safety.

Boroughs are responsible for the inspection and repair of fire hydrants. They report on a monthly basis to the DGSRE on activities carried out, using the target table provided for in partnership agreements, specifying the number of fire hydrants inspected, repaired and replaced. Apart from the number of inspections, we found that no mechanisms have been established to enable boroughs to account for their real objectives. Nevertheless, the SE, in its Montreal Water Strategy and its strategic objectives (adopted by the urban agglomeration council in June 2012), set the objective of repairing 4% and replacing 1.33% of fire hydrants every year.

Since the DGSRE is in charge of establishing the management of secondary water system assets, it must account for the execution of these activities and the achievement of objectives for all boroughs. In 2014, for the first time, the DGSRE prepared a *Bilan des activités sur les réseaux secondaires d'eau potable et d'égouts* (activity report on secondary drinking water and sewage systems) for SE management and the Direction générale. In this document, the DGSRE accounts for its achievements by comparing the number of fire hydrants inspected with the number of inspections that should have been conducted according to standards. The DGSRE also presents the number of repaired and replaced fire hydrants, but we found that it did not provide information on the extent to which the objectives set out in the Montreal Water Strategy and its strategic objectives were achieved.

Moreover, we found that the DGSRE, as the unit in charge of secondary system assets, did not account for the condition of the fire hydrant inventory. It should be noted that under the equipment and infrastructure policy, approved by City council and the urban agglomeration council in 2009, managers are required to have a knowledge of the complete inventory and the quality of real estate assets, including wear, that fall under their responsibility. However, the results of our audit showed that the GEA application currently does not allow either boroughs or the DGSRE to have a reliable profile of the condition of fire hydrants that would make it possible to provide accountability reports on them. We believe that this situation should have been disclosed in the report produced by the DGSRE to inform SE management of the measures it intends to implement, along with the planned completion dates, in order to comply with this policy. However, the fact remains that a significant issue such as this should be subject to accountability, for the purpose of showing improvements in or deterioration of the condition of the inventory from year to year, among other things, and to be able to review the objectives that were set.

Finally, when the SIM developed the 2009–2013 fire safety cover plan, measures were introduced in the water supply component, including those dealing with fire hydrant management and the flow rate and pressure profile of the entire water system. These measures concerned either the SIM or the SE. It is worth noting that the City obtained a certificate of compliance for the fire safety cover plan on the basis of all the proposed measures and timelines, including the water supply component.²⁶ Since the development of the fire safety cover plan, the SIM has produced, in compliance with the *Fire Safety Act*, five annual reports for authorities and the Ministère de la Sécurité publique to account for developments in the implementation of the prescribed measures. However, in the case of the water supply component, activity reports overlook the implementation of the measures prescribed for the SE. It was only in December 2013 that the SIM officially appointed an officer responsible for achieving the water-related objectives appearing in the 2009–2013 fire safety cover plan. The role of this person is to establish and maintain liaisons with the Direction de l'eau potable and other municipal stakeholders responsible for providing an adequate water supply for firefighting.

We believe that accountability reporting would have focused attention on the problems encountered and the consequences of not meeting deadlines. This would have facilitated decision-making, resulting in deadlines being met or a review of the allocation of resources.

²⁶ Under section 21 of the *Fire Safety Act*, the Public Safety Minister issues a certificate of compliance to the regional authority or proposes any amendments the Minister deems necessary to remedy any deficiency identified within the time indicated by the Minister.

Since the *Fire Safety Act* requires that the next fire safety cover plan be revised, it would be appropriate for the SIM to obtain from the SE a report on the implementation of the measures set out in it. With such accountability reporting, a new action plan can be developed for all water-related activities, including those involving fire hydrants, that are necessary for fire protection. We think that formal mechanisms should then be established to ensure accountability between the SE and the SIM in order to provide the municipal administration with comprehensive information when the implementation of measures set out in the fire safety cover plan needs to be evaluated.

With regard to this revision of the fire safety cover plan in particular, section 29 of the *Fire Safety Act* provides as follows: “*The fire safety cover plan must, in addition, be revised during the sixth year following the date of its coming into force or of its last certificate of compliance.*”

Considering that its fire safety cover plan was certified as compliant on October 17, 2008, by the Ministère de la Sécurité publique, that it came into force on January 1, 2009, and that it covered a five-year period, that is, until 2013, the SIM should have revised it in 2014 to comply with the provisions of this section. According to information obtained in December 2014, the SIM planned to revise its fire safety cover plan in 2015 and no formal request for an extension of the deadline prescribed for this revision had been sent to the Ministère de la Sécurité publique.

Since the fire safety cover plan, once it is approved by the Public Safety Minister, allows the City, under an urban agglomeration power, to benefit from an exemption from liability (immunity) under section 47 of the *Fire Safety Act*, we think that the SIM must take every necessary step to comply with the provisions governing its revision in particular. The approval of a fire safety cover plan revised by the Ministère de la Sécurité publique and municipal authorities would maintain the City’s immunity beyond any reasonable doubt if a major fire should break out on its territory, for example.

Accordingly, we think that even though the deadline has passed, the SIM should take the necessary steps to revise its fire safety cover plan as promptly as possible in accordance with the provisions set out in the *Fire Safety Act*. In the meantime, the SIM should formally notify the Ministère de la Sécurité publique of the date on which it intends to submit the revision of its fire safety cover plan.

4.5.B. Recommendation

We recommend that the Direction de la gestion stratégique des réseaux d'eau establish accountability mechanisms providing for the participation of boroughs in fire hydrant management so that it can inform the management of both the Service de l'eau and the Direction générale about:

- the execution of activities;
- assessment of the results obtained in comparison with the objectives set and, in the event of any discrepancies, the corrective action to be taken;
- the condition of the inventory.

Business unit's response:

[TRANSLATION] The DGSRE will establish accountability mechanisms that provide for the participation of boroughs in fire hydrant management.

These mechanisms will be defined in the by-law respecting the delegation of separate powers to boroughs in the area of secondary water and sewer system maintenance activities. (Planned completion: December 2015)

4.5.C. Recommendation

We recommend that the Service de sécurité incendie de Montréal ensure that it obtains from the Service de l'eau a report on the implementation of measures dealing with the water supply component that were provided for in the 2009–2013 fire safety cover plan so that it can prepare a new fire protection action plan and take it into account when the fire safety cover plan is revised.

Business unit's response:

[TRANSLATION] A direct link has been established between the SIM and the SE. A request was sent to the SE to find out the costs of implementing the actions identified in the fire safety cover plan. Cooperation is in place to obtain the various details that can be used to produce a report.

A report, combined with a list of the various items in place, can help better determine the needs for the next fire safety cover plan and its implementation. (Planned completion: December 2015)

4.5.D. Recommendation

We recommend that the Service de sécurité incendie de Montréal establish formal accountability mechanisms that integrate the results of the Service de l'eau concerning the implementation of measures provided for in future fire safety cover plans so that it can inform the authorities about all the measures provided for in them.

Business unit's response:

[TRANSLATION] A committee consisting of several people who participated in the development of the initial fire safety cover plan has been set up. This committee will also include departments on which implementation of the fire safety cover plan will have an impact.

A project management approach, with studies, analyses, follow-up, progress reports and accountability reporting will be introduced.

A rolling action plan for implementation will be created and used by the SIM over the next few years. (Planned completion: December 2015)

4.5.E. Recommendation

We recommend that the Service de sécurité incendie de Montréal take the necessary steps to produce the revision of the fire safety cover plan as promptly as possible in order to comply with the provisions set out in the *Fire Safety Act*, notwithstanding the fact that the deadline is past.

Business unit's response:

[TRANSLATION] The SIM will set up a committee consisting of several people who participated in the development of the first fire safety cover plan. This committee will also include municipal departments on which implementation of the fire safety cover plan will have an impact.

A rolling action plan for implementation of the revision of the fire safety cover plan will be created and used by the SIM over the next few years. (Planned completion: December 2015)

4.5.F. Recommendation

We recommend that the Service de sécurité incendie de Montréal, pending completion of the revision of the fire safety cover plan, formally notify the Ministère de la Sécurité publique of the new delivery date on which it plans to submit this revision so that the City can maintain beyond any reasonable doubt the exemption from liability from which it has benefited since the certification of the first fire safety cover plan.

Business unit's response:

[TRANSLATION] A resolution must be approved by the agglomeration so that authorities can be assured that the City will continue to benefit from its exemption from liability. (Planned completion: June 2015)

5. General Conclusion

Fire hydrant maintenance management is one of the essential aspects of fire protection. In the event that deficiencies related to the functioning of fire hydrants or the water supply should materialize during a fire, the City would be liable for any negative consequences. Such consequences could be reflected in a longer emergency response time, compromised citizen safety, greater material damages, etc.

Fire hydrant management is complex because it involves interdependence among the various municipal responsibilities exercised by the Service de sécurité incendie de Montréal (SIM), the Service de l'eau (SE), the 19 boroughs on the City's territory and the related municipalities.

Among the most important factors that enable the SIM to ensure that its operations are effective are the locations of fire hydrants and the rapid identification of fire hydrants that are out of service or have flow rates below 1,500 L/min. To limit the number of out of service fire hydrants while ensuring that the others are in proper working order, the SIM expects all related municipalities and Ville de Montréal to ensure that they are inspected and that diligent repair work and regular preventive maintenance work are carried out on them. Nonetheless, our audit revealed the presence of deficiencies related to a lack of knowledge of the condition of fire hydrants.

First, many of the people we met with in boroughs were not aware of the importance of their participation in the fire hydrant management process, which is aimed primarily at providing the SIM with assurance that hydrants are in good working order.

With respect to the City, the fact that the SIM uses a separate database (répartition assistée par ordinateur (RAO)) from the SE and the boroughs (which use gestion de l'entretien des actifs (GEA)), means that harmonization measures must be adopted in order to allow the flow of information among them. When several stakeholders are involved, there is a greater risk of errors, as our audit has in fact shown. This problem is compounded by the lack of uniform standards for boroughs, the lack of true maintenance objectives, a corporate application (GEA) that does not provide real-time data and that cannot be used to generate management

reports to facilitate the planning and monitoring of maintenance, deficiencies related to repair times and employee qualification. It is therefore easy to understand why accountability reporting is only partial.

It subsequently becomes difficult for the SE and the boroughs to demonstrate that maintenance work is carried out diligently and that the SIM has all the data it needs. There is no denying that a coherent fire hydrant inspection and maintenance program, which was supposed to be established in 2010 under the fire safety cover plan, has still not been set up as of 2014. Moreover, the overall flow rate and pressure profile for the system as a whole still does not allow the identification of all problematic sectors, as provided for in the 2009–2013 fire safety cover plan.

All the problems observed demand that corrective action be taken by each of the business units responsible (SIM, SE and boroughs) so that they have knowledge of the condition of fire hydrants enabling them to respond effectively to a fire.



Report of the Auditor General of the Ville de Montréal to the City Council and to the Urban Agglomeration Council

For the Year Ended December 31, 2014

5

APPENDICES





**Report of the Auditor General
of the Ville de Montréal**
to the City Council and to the
Urban Agglomeration Council

For the Year Ended December 31, 2014

5.1

APPENDIX 1
EXCERPTS FROM THE
CITIES AND TOWNS ACT



5. Appendices

5.1. Appendix 1 – Excerpts from the *Cities and Towns Act*

RSQ, chapter C-19
Updated to December 31, 2014

IV.1. — Chief auditor

2001, c. 25, s. 15.

Chief auditor. **107.1.** The council of every municipality having 100,000 inhabitants or more shall have an officer called the chief auditor.

2001, c. 25, s. 15.

Term. **107.2.** The chief auditor shall, by a resolution approved by a two-thirds majority of the votes of the members of the council, be appointed for a term of seven years. The term may not be renewed.

2001, c. 25, s. 15.

Ineligibility. **107.3.** In no case may the following persons act as chief auditor:

- (1) a member of the council of the municipality and, where applicable, of a borough council;
- (2) the associate of a member mentioned in subparagraph 1;
- (3) a person who, personally or through an associate, has any direct or indirect interest in a contract with the municipality or a legal person referred to in paragraph 2 of section 107.7.

Disclosure of interest. The chief auditor shall disclose in every report produced any situation that could cause a conflict between the chief auditor's personal interest and duties of office.

2001, c. 25, s. 15.

Inability or vacancy. **107.4.** If the chief auditor is unable to act, or if the office of chief auditor is vacant, the council shall,

- (1) not later than at the sitting following the inability to act or the vacancy, designate a person qualified to replace the chief auditor, for a period of not more than 180 days;

- (2) not later than at the sitting following the inability or the vacancy, or not later than at the sitting following the expiry of the period fixed under paragraph 1, appoint a new chief auditor in accordance with section 107.2.

2001, c. 25, s. 15.

Expenses.

107.5. The budget of the municipality shall include an appropriation to provide for payment of a sum to the chief auditor to cover the expenses relating to the exercise of the chief auditor's duties.

Amount of appropriation.

Subject to the third paragraph, the appropriation must be equal to or greater than the product obtained by multiplying the total of the other appropriations provided for in the budget for operating expenses by

- (1) 0.17% where the total of those appropriations is less than \$100,000,000;
- (2) 0.16% where the total of those appropriations is at least \$100,000,000 and less than \$200,000,000;
- (3) 0.15% where the total of those appropriations is at least \$200,000,000 and less than \$400,000,000;
- (4) 0.14% where the total of those appropriations is at least \$400,000,000 and less than \$600,000,000;
- (5) 0.13% where the total of those appropriations is at least \$600,000,000 and less than \$800,000,000;
- (6) 0.12% where the total of those appropriations is at least \$800,000,000 and less than \$1,000,000,000;
- (7) 0.11% where the total of those appropriations is at least \$1,000,000,000.

Exception.

Where the budget of the municipality provides for appropriations for operating expenses related to the operation of a system of production, transmission or distribution of electric power, 50% only of those appropriations shall be taken into account in establishing the total of the appropriations referred to in the second paragraph.

2001, c. 25, s. 15; 2001, c. 68, s. 5.

Duties.

107.6. The chief auditor is responsible for the application of the municipality's policies and standards relating to the management of the human, material and financial resources assigned to auditing.

2001, c. 25, s. 15.

Duties.

107.7. The chief auditor shall audit the accounts and affairs
(1) of the municipality;

- (2) of every legal person
 - (a) that is part of the reporting entity defined in the municipality's financial statements;
 - (b) of which the municipality or a mandatary of the municipality appoints more than 50% of the members of the board of directors; or
 - (c) of which the municipality or a mandatary of the municipality holds more than 50% of the outstanding voting shares or units.

2001, c. 25, s. 15; 2010, c. 18, s. 20.

Audit. **107.8.** The audit of the affairs and accounts of the municipality and of any legal person referred to in paragraph 2 of section 107.7 comprises, to the extent considered appropriate by the chief auditor, financial auditing, auditing for compliance of their operations with the Acts, regulations, policies and directives, and auditing for value-for-money.

Audit. The audit must not call into question the merits of the policies and objectives of the municipality or legal persons referred to in paragraph 2 of section 107.7.

Documents and information. The chief auditor in the performance of his duties is authorized

- (1) to examine any document concerning the affairs and accounts relating to the objects of the audit;
- (2) to require from any employee of the municipality or any legal person referred to in paragraph 2 of section 107.7 all information, reports and explanations the chief auditor considers necessary.

2001, c. 25, s. 15; 2001, c. 68, s. 6.

Audit. **107.9.** Any legal person receiving an annual subsidy from the municipality of at least \$100,000 is required to have its financial statements audited.

Copy. The auditor of a legal person not referred to in paragraph 2 of section 107.7 that receives an annual subsidy from the municipality of at least \$100,000 shall transmit to the chief auditor a copy of

- (1) the annual financial statements of the legal person;
- (2) the auditor's report on the statements;
- (3) any other report summarizing the auditor's findings and recommendations to the board of directors or the officers of the legal person.

Documents and information. That auditor shall also, on the request of the chief auditor,

- (1) place at the disposal of the chief auditor any document relating to the auditor's audit and its results;
- (2) provide all information and explanations the chief auditor considers necessary concerning the auditor's audit and its results.

Additional audit. Where the chief auditor considers that the information, explanations and documents provided by an auditor under the second paragraph are insufficient, the chief auditor may conduct such additional audit as he considers necessary.

2001, c. 25, s. 15.

Audit. **107.10.** The chief auditor may conduct an audit of the accounts or documents of any person having received financial assistance from the municipality or from a legal person referred to in paragraph 2 of section 107.7, as regards the use made of such assistance.

Accounts and documents. The municipality and the person having received the financial assistance are required to furnish to or place at the disposal of the chief auditor any accounts and documents that the chief auditor considers relevant to the performance of the chief auditor's duties.

Information. The chief auditor is authorized to require from any officer or employee of the municipality or from any person having received financial assistance any information, reports and explanations the chief auditor considers necessary to the performance of the chief auditor's duties.

2001, c. 25, s. 15.

Audit. **107.11.** The chief auditor may conduct an audit of the pension plan or pension fund of a pension committee of a municipality or a legal person referred to in paragraph 2 of section 107.7 where the committee requests the chief auditor to do so with the approval of the council.

2001, c. 25, s. 15.

Duties. **107.12.** The chief auditor shall, every time the council so requests, investigate and report on any matter within the competence of the chief auditor. In no case, however, may the investigation take precedence over the primary responsibilities of the chief auditor.

2001, c. 25, s. 15.

- Report. **107.13.** Not later than 31 August each year, the chief auditor shall transmit to the mayor, to be filed with the council at the first regular sitting following its receipt, a report presenting the results of the audit for the fiscal year ending on the previous 31 December and indicate any fact or irregularity the chief auditor considers expedient to mention, in particular in relation to
- (1) control of revenue including assessment and collection;
 - (2) control of expenditure, including authorization, and compliance with appropriations;
 - (3) control of assets and liabilities including related authorizations;
 - (4) accounting for operations and related statements;
 - (5) control and safeguard of property owned or administered;
 - (6) acquisition and utilization of resources without sufficient regard to economy or efficiency;
 - (7) implementation of satisfactory procedures to measure and report effectiveness in cases where it is reasonable to do so.
- Report. The chief auditor may also, at any time, transmit to the mayor or the chair of the board of directors of a legal person described in paragraph 2 of section 107.7 a report of the findings and recommendations that, in the opinion of the chief auditor, warrant being brought to the attention of the council or the board of directors, as applicable, before the transmission of the chief auditor's annual report. The mayor or the chair of the board of directors must file the report with the council or board, as applicable, at the first regular sitting or meeting following its receipt.
- Copy of report. If the chief auditor transmits a report to the chair of the board of directors of a legal person described in paragraph 2 of section 107.7, the chief auditor must also transmit a copy of the report to the mayor of the municipality, to be filed with the council at the first regular sitting following its receipt.
- 2001, c. 25, s. 15; 2010, c. 18, s. 21.
- Report. **107.14.** The chief auditor shall report to the council on the audit of the financial statements of the municipality and the statement fixing the aggregate taxation rate.
- Report. In the report, which shall be transmitted to the treasurer, the chief auditor shall state, in particular, whether
- (1) the financial statements faithfully represent the municipality's financial position on 31 December and the results of its operations for the fiscal year ending on that date;

(2) the effective aggregate taxation rate was fixed in accordance with Division III of Chapter XVIII.1 of the *Act respecting municipal taxation* (chapter F-2.1).

2001, c. 25, s. 15; 2006, c. 31, s. 16; 2010, c. 18, s. 22.

Report. **107.15.** The chief auditor shall report to the boards of directors of the legal persons referred to in paragraph 2 of section 107.7 on the audit of the financial statements before the expiry of the time within which they are to produce their financial statements.

Report. In the report, the chief auditor shall state, in particular, whether the financial statements faithfully represent their financial position and the results of their operations at the end of their fiscal year.

2001, c. 25, s. 15.

Testimony. **107.16.** Notwithstanding any general law or special Act, neither the chief auditor nor the employees under the chief auditor's direction or the professionals under contract may be compelled to give testimony relating to any information obtained in the performance of their duties or to produce any document containing such information.

Immunity. Neither the chief auditor nor the employees under the chief auditor's direction may be prosecuted by reason of any act they have done or failed to do in good faith in the performance of their duties.

Immunity. No civil action may be instituted by reason of the publication of a report of the chief auditor prepared under this Act or of the publication in good faith of an extract or summary of such a report.

Immunity. Except on a question of jurisdiction, no recourse under article 33 of the Code of Civil Procedure (chapter C-25) or extraordinary recourse within the meaning of that Code may be exercised nor any injunction granted against the chief auditor, the employees under the chief auditor's direction or the professionals under contract acting in their official capacity.

Annulment. A judge of the Court of Appeal, on a motion, may summarily annul any proceeding instituted or decision rendered contrary to the provisions of the first paragraph.

2001, c. 25, s. 15.

Audit committee. **107.17.** The council may establish an audit committee and determine its composition and powers.

Audit committee of the urban agglomeration of Montréal. Despite the first paragraph, in the case of the urban agglomeration of Montréal, the council must establish an audit committee composed of not more than 10 members appointed on the proposal of the mayor of the central municipality. Two of the committee members must be council members representing the reconstituted municipalities. Those two members shall take part in deliberations and votes of the committee on any matter related to an urban agglomeration power.

Opinions and information of the committee. In addition to the other powers that may be entrusted to it, the committee established in the case of the urban agglomeration of Montréal shall submit opinions to the urban agglomeration council on the requests, findings and recommendations of the chief auditor concerning the urban agglomeration. It shall also inform the chief auditor of the interests and concerns of the urban agglomeration council with respect to the audit of the accounts and affairs of the central municipality. On an invitation by the committee, the chief auditor or a person designated by the chief auditor may attend a sitting and take part in deliberations.

2001, c. 25, s. 15; 2008, c. 19, s. 11; 2009, c. 26, s. 19.

V. — External auditor

2001, c. 25, s. 16.

External auditors. **108.** The council shall appoint an external auditor for not more than three fiscal years, except in the case of a municipality with a population of 100,000 or more, where the external auditor shall be appointed for three fiscal years. At the end of the term, the external auditor shall remain in office until replaced or reappointed.

Information sent to the Minister. If the external auditor appointed for a fiscal year is not the external auditor in office for the preceding fiscal year, the clerk shall inform the Minister of Municipal Affairs, Regions and Land Occupancy of the name of the new external auditor as soon as possible after his appointment.

R. S. 1964, c. 193, s. 104; 1975, c. 66, s. 11; 1984, c. 38, s. 11; 1995, c. 34, s. 12; 1996, c. 27, s. 12; 1999, c. 43, s. 13; 2001, c. 25, s. 17; 2003, c. 19, s. 110, s. 250; 2005, c. 28, s. 196; 2009, c. 26, s. 109.

Vacancy. **108.1.** If the office of the external auditor becomes vacant before the expiry of his term, the council shall fill the vacancy as soon as possible.

1984, c. 38, s. 11; 2001, c. 25, s. 18; 2003, c. 19, s. 111.

- Duties. **108.2.** Subject to section 108.2.1, the external auditor shall audit, for the fiscal year for which he was appointed, the financial statements, the statement fixing the aggregate taxation rate and any other document determined by the Minister of Municipal Affairs, Regions and Land Occupancy by regulation published in the *Gazette officielle du Québec*.
- Report. The auditor shall make a report of his audit to the council. He shall state in his report, in particular, whether
- (1) the financial statements faithfully represent the municipality's financial position on 31 December and the results of its operations for the fiscal year ending on that date;
 - (2) the effective aggregate taxation rate was fixed in accordance with Division III of Chapter XVIII.1 of the *Act respecting municipal taxation* (chapter F-2.1).
- 1984, c. 38, s. 11; 1996, c. 2, s. 209; 1999, c. 43, s. 13; 2001, c. 25, s. 19; 2003, c. 19, s. 250; 2005, c. 28, s. 196; 2006, c. 31, s. 17; 2009, c. 26, s. 109.
- Duties. **108.2.1.** In the case of a municipality having 100,000 inhabitants or more, the external auditor shall audit, for each fiscal year for which the external auditor has been appointed,
- (1) the accounts relating to the chief auditor;
 - (2) the financial statements of the municipality and any document determined by the Minister of Municipal Affairs, Regions and Land Occupancy by regulation published in the *Gazette officielle du Québec*.
- Report. The external auditor shall make a report of the audit to the council. The external auditor shall state in the report on the financial statements, in particular, whether the financial statements faithfully represent the municipality's financial position on 31 December, and the results of its operations for the fiscal year ending on that date.
- 2001, c. 25, s. 20; 2001, c. 68, s. 7; 2003, c. 19, s. 250; 2005, c. 28, s. 196; 2009, c. 26, s. 109.
- Report to the treasurer. **108.3.** The external auditor shall transmit to the treasurer the report referred to in section 108.2 or, as the case may be, the report referred to in subparagraph 2 of the first paragraph of section 108.2.1.
- Report to the council. The report referred to in subparagraph 1 of the first paragraph of section 108.2.1 shall be transmitted to the council on the date determined by the council.
- 1984, c. 38, s. 11; 2001, c. 25, s. 21; 2010, c. 18, s. 23.

- Audits. **108.4.** The council may require any other audit it considers necessary, and require a report.
1984, c. 38, s. 11.
- Access to books and information. **108.4.1.** The external auditor shall have access to the books, accounts, securities, documents and vouchers and may require the employees of the municipality to furnish any information and explanations necessary for the performance of the external auditor's mandate.
2001, c. 25, s. 22.
- Documents. **108.4.2.** The chief auditor shall place at the disposal of the external auditor all books, statements and other documents prepared or used by the chief auditor during the audit conducted under section 107.7 and that the external auditor considers necessary to carry out his mandate.
2001, c. 25, s. 22; 2005, c. 28, s. 49.
- Ineligibility. **108.5.** In no case may the following persons act as external auditor of the municipality;
(1) a member of the council of the municipality and, where applicable, of a borough council;
(2) an officer or an employee of the municipality;
(3) the associate of a person mentioned in paragraph 1 or 2;
(4) a person who, during the fiscal year for which the audit is carried out, has, directly or indirectly, personally or through his associate, any participation, interest or commission in or under a contract with the municipality or in respect of such a contract, or who derives any benefit from the contract, unless his connection with the contract arises from the practice of his profession.
1984, c. 38, s. 11; 1996, c. 2, s. 209; 1999, c. 40, s. 51; 2001, c. 25, s. 23.
- Partnership. **108.6.** The external auditor may be an individual or a partnership. The external auditor may entrust his employees with his work but his responsibility is then the same as if he had performed all the work personally.
1984, c. 38, s. 11; 1999, c. 40, s. 51; 2001, c. 25, s. 24.

VII. — *Director general*

- Status. **113.** The director general is the chief officer of the municipality.
- Authority. The director general has authority over all the other officers and employees of the municipality, except the chief auditor, who reports directly to the council. With respect to an officer or employee whose duties are prescribed by law, the authority of the director general is exercised only within the framework of his duties as the administrator of human, material and financial resources of the municipality and may in no case hinder the carrying out of duties that are prescribed by law.
- Suspension. The director general may suspend an officer or employee from his duties. He shall immediately make a report of the suspension to the council. The council shall decide the case of the suspended officer or employee, after inquiry.
- R. S. 1964, c. 193, s. 109; 1968, c. 55, s. 5; 1983, c. 57, s. 50; 2001, c. 25, s. 27.



**Report of the Auditor General
of the Ville de Montréal**
to the City Council and to the
Urban Agglomeration Council

For the Year Ended December 31, 2014

5.2

APPENDIX 2
EMPLOYEES OF THE
BUREAU DU VÉRIFICATEUR
GÉNÉRAL AS OF
DECEMBER 31, 2014



5.2. Appendix 2 – Employees of the Bureau du vérificateur général as of December 31, 2014

Management personnel	Support staff
<p>Auditor general Jacques Bergeron, CPA, CA, MBA, M.Sc.</p> <p>Assistant auditors general Robert Duquette, CPA, CA Thuy-Lan Ha, CPA, CA Serge Vaillancourt, FCPA, FCGA</p> <p>Senior audit manager Marie-Ève Lemieux, CPA, CA, CA•IFA, CFF</p>	<p>Executive secretary Délia De Sa</p> <p>Administrative support agent Majorie Brillant</p> <p>Programmer Yolaine Levasseur</p>
Audit professionals	
<p>François Arbez, CISSP, CISM, CGEIT, CISA Martine Beauregard, CPA, CGA Pascal Bianchi, CPA, CGA Régent Bilodeau, CPA, CGA Johanne Boudreau, BAA Jacques Brisson, CPA, CA, CISA Maryse Brunetta, CPA, CGA Khadija Chaya, CPA, CMA, MBA Christian Élomo, CIA, CRMA, MBA Chérif Ferah, MBA Lucie Gauthier, CPA, CGA</p>	<p>Bernard Goyette, CPA, CGA, CMA Marcelo Guédé, CISM, CRISC Éric Laviolette, CPA, CA Annie Lecompte, CPA, CA, CFE Isabelle Léger, CPA, CA, CISA Chantal L'Heureux, CPA, CGA Alexandre Lucena, CPA, CA Joanne Major, CPA, CA Philippe Pitre, CPA, CGA Pierre Rochon, lawyer, MBA</p>



**Report of the Auditor General
of the Ville de Montréal**
to the City Council and to the
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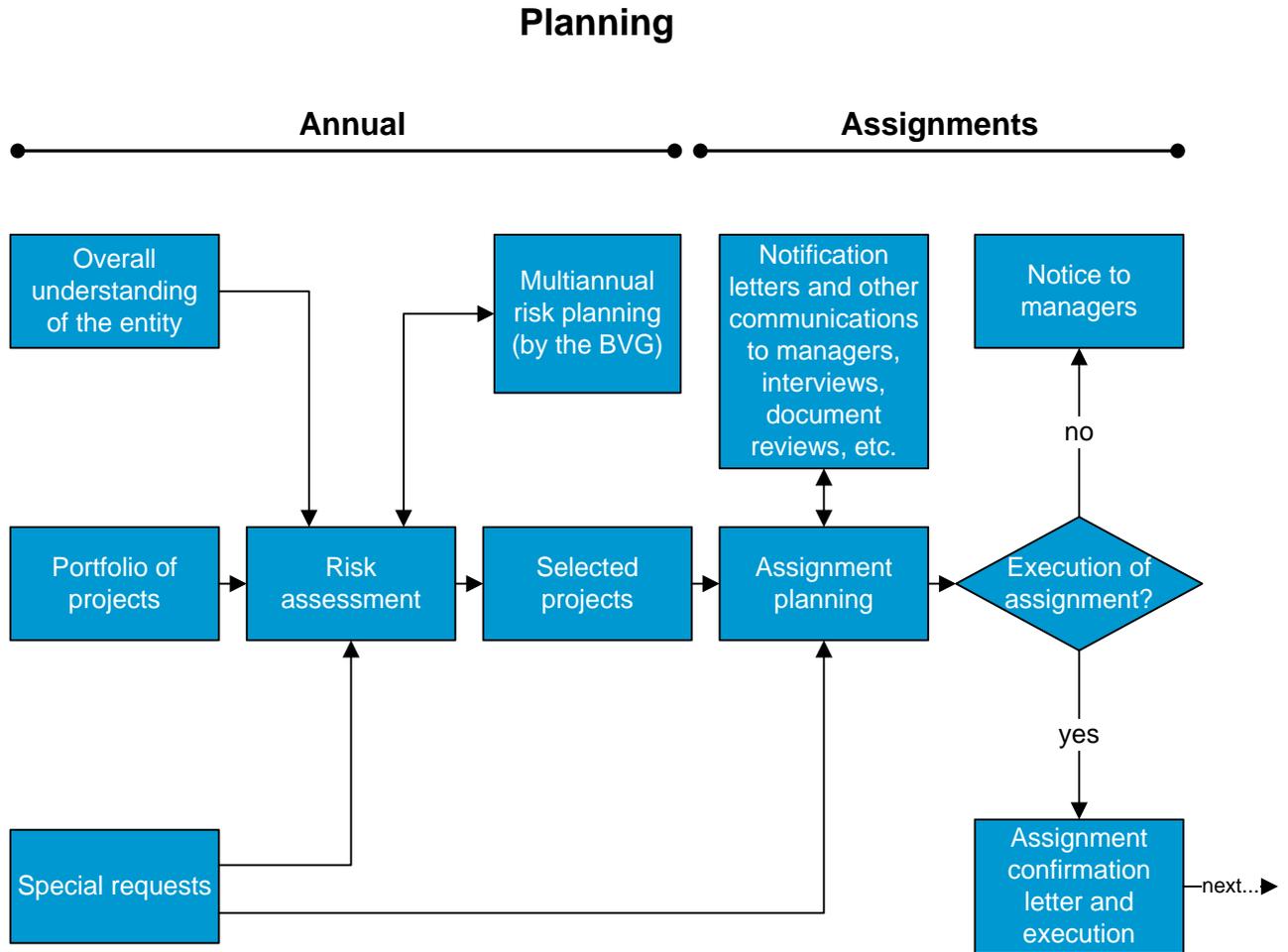
For the Year Ended December 31, 2014

5.3

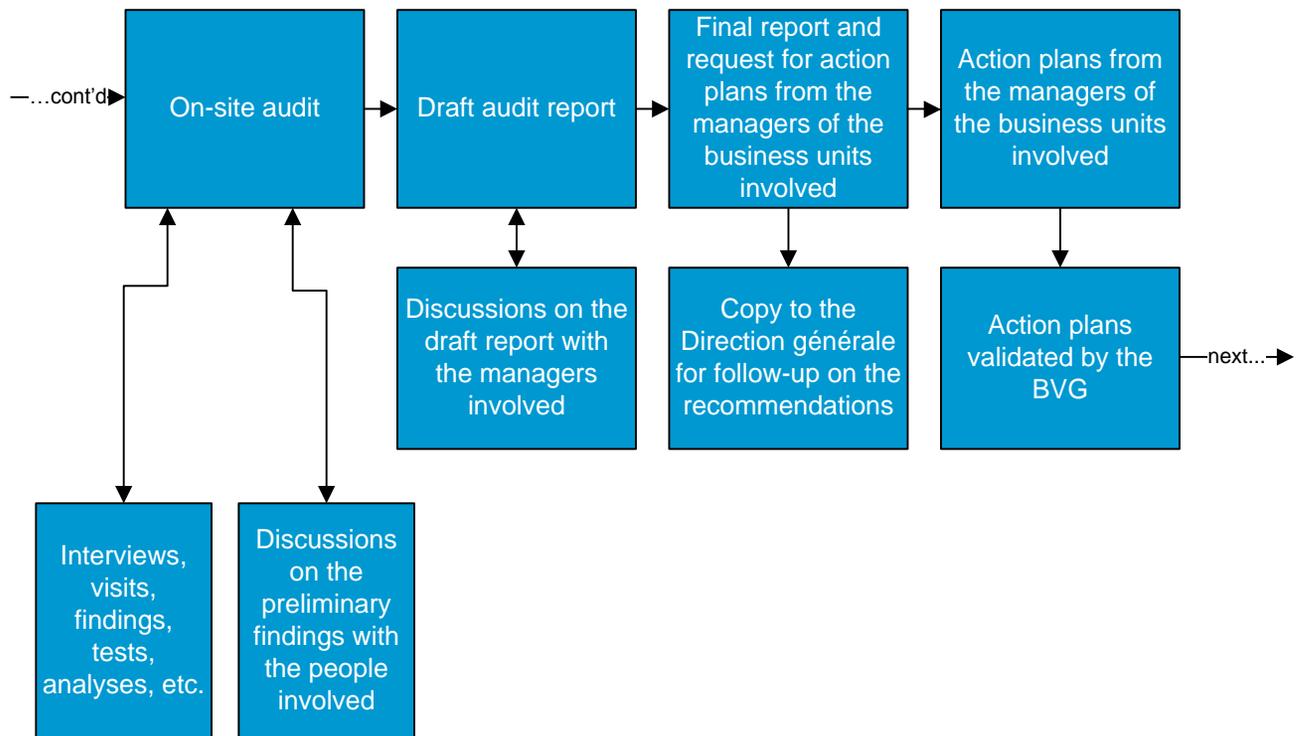
APPENDIX 3
INFORMATION
FLOW CHARTS –
VALUE-FOR-MONEY
AND INFORMATION
TECHNOLOGY AUDIT



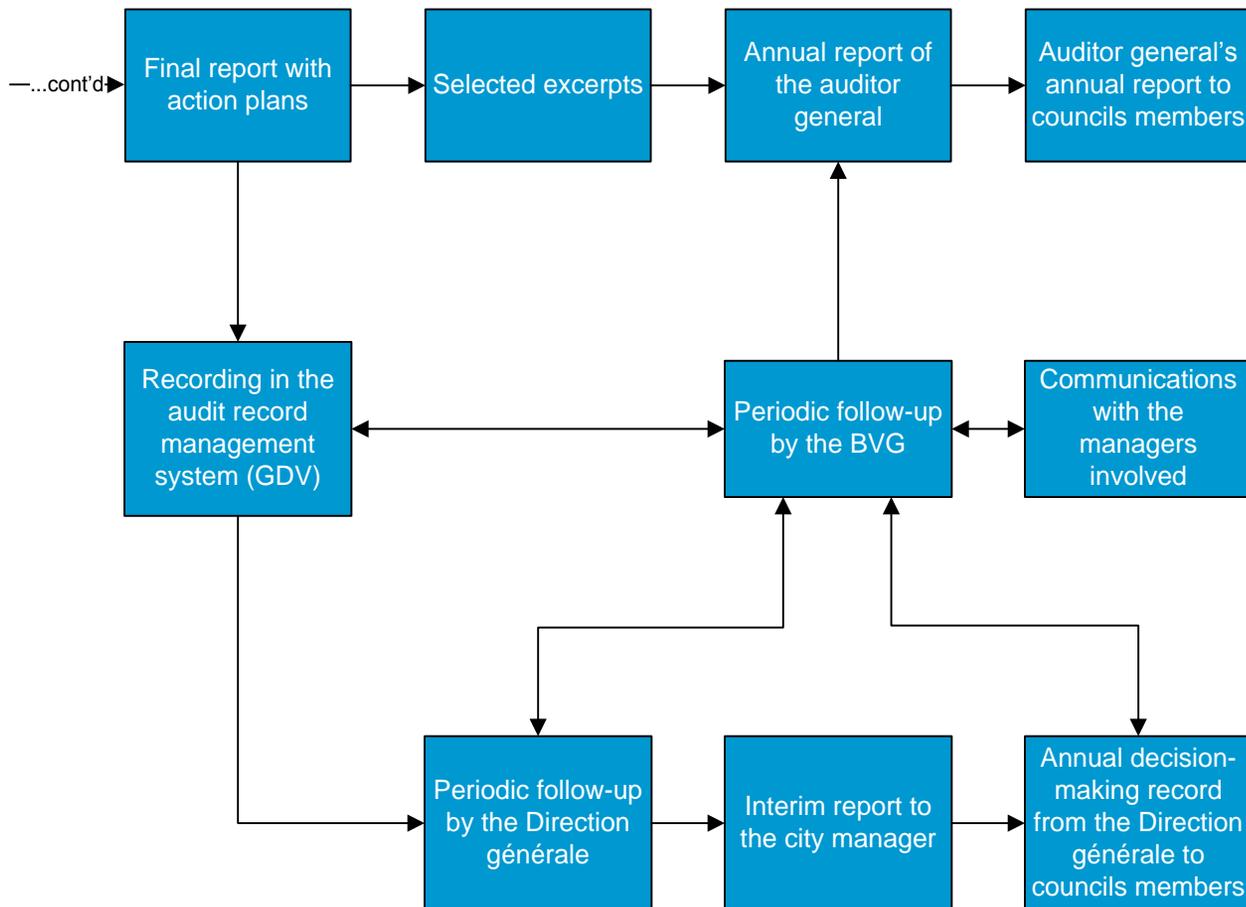
5.3. Appendix 3 – Information Flow Charts – Value-for-Money and Information Technology Audit



Auditing and reports



Annual reports and follow-ups





Report of the Auditor General of the Ville de Montréal to the City Council and to the Urban Agglomeration Council

For the Year Ended December 31, 2014

5.4

APPENDIX 4

ACCOUNTS STATEMENT OF THE BUREAU DU VÉRIFICATEUR GÉNÉRAL



Accounts statement of the
Bureau du vérificateur général of the
Ville de Montréal
(Hereinafter referred to as “Bureau
du vérificateur général”)

December 31, 2014



Deloitte LLP
1 Place Ville-Marie
Suite 3000
Montreal QC H3B 4T9
Canada

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Fax: 514-390-4111
www.deloitte.ca

Independent Auditor's Report

To the Mayor,
the Chairman and Members of the Executive Committee,
the Members of the Council of the Ville de Montréal and
the Members of the Agglomeration Council of the Ville de Montréal

In compliance with the provisions of section 108.2.1 of the *Cities and Towns Act* (the "Act"), we have audited the accounts related to the Bureau du vérificateur général of the Ville de Montréal for the year ended December 31, 2014, and a summary of significant accounting policies and other explanatory information (the "financial information").

Management's Responsibility for the Financial Information

Management of the Bureau du vérificateur général of the Ville de Montréal ("management") is responsible for the preparation of the financial information in accordance with the recognition and measurement principles of Canadian public sector accounting standards, as described in Note 2 to the consolidated financial statements of the Ville de Montréal, and for such internal control as management determines is necessary to enable the preparation of the financial information that is free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on the financial information based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial information is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial information. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial information, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation of the financial information in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates, if any, made by management, as well as evaluating the overall presentation of the financial information.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial information related to the Bureau du vérificateur général of the Ville de Montréal for the year ended December 31, 2014, is prepared in all material respects, in accordance with the recognition and measurement principles of Canadian public sector accounting standards, as described in Note 2 to the consolidated financial statements of the Ville de Montréal.

*Deloitte LLP*¹

April 27, 2015

¹ CPA auditor, CA, public accountancy permit No. A116207

Accounts statement of the Bureau du vérificateur général

Year ended December 31, 2014

(In thousands of dollars)

	2014⁽¹⁾ Budget	2014 Actual	2013 Actual
	\$	\$	\$
Compensation of personnel	4,066	3,919	3,766
Professional, technical and administrative services	1,444	1,333	1,242
Other operating expenses	441	423	498
Total	5,951	5,675	5,506

⁽¹⁾ Approved budget, as modified, presented in the accounting system of the Ville de Montréal for the Bureau du vérificateur général and approved by the executive committee of the Ville de Montréal.

This accounts statement of the Bureau du vérificateur général was prepared in accordance with the recognition and measurement principles of Canadian public sector accounting standards, according to the same accounting policies described in Note 2 to the consolidated financial statements of the Ville de Montréal for the year ended December 31, 2014.



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