



Office of the Auditor General

AUDIT OF THE BUILDING SERVICES BRANCH

2006 Report

Chapter 4

Table of Contents

EXECUTIVE SUMMARY	i
SOMMAIRE	xi
1 INTRODUCTION	1
2 BACKGROUND	1
3 AUDIT SCOPE	5
4 AUDIT APPROACH	5
5 AUDIT OBJECTIVES	6
6 DETAILED OBSERVATIONS AND RECOMMENDATIONS.....	7
6.1 Audit Objective #1 - Determine whether BSB complies with the OBC.....	7
6.2 Audit Objective #2 - Determine whether financial management practices and policies are in place.....	15
6.3 Audit Objective #3 - Determine whether performance monitoring and reporting are in place to assess the economy, effectiveness and efficiency of current operations.....	17
7 CONCLUSION	27
8 ACKNOWLEDGEMENT	28
Appendix A - Documentation Reviewed	29

EXECUTIVE SUMMARY

Introduction

The Audit of the Building Services Branch (BSB or the Branch) was included in the City of Ottawa Auditor General's Audit Plan for 2006, presented to City Council on December 15, 2004. The purpose of the audit was to conduct an examination of all aspects of the City of Ottawa's BSB, including plan reviews, issuance of building permits, inspections, and enforcement.

Background

BSB is one of four branches under the responsibility of the Deputy City Manager, Planning, Transit and the Environment. It is responsible for ensuring that new construction meets the health, safety and structural sufficiency requirements of the Ontario Building Code (OBC) and other applicable laws, and to effectively manage the risks inherent in administering and enforcing the OBC. For 2006, BSB has an establishment of 175.25 FTEs employees, of which 166 are full-time employees and 9.25 temporary (summer students). Of the 166 FTEs, 42 are presently vacant. The majority of BSB employees are located at Ben Franklin Place, with the others co-located with Client Service Centre staff primarily at 110 Laurier, the Kanata and Cumberland offices and periodically at the other three rural Client Service Centres.

The three primary organizational units of the Branch are:

- (i) Building Permits – Plan Reviews and Approvals
- (ii) Building Permits – Inspections and Enforcement
- (iii) Legal and Service Integration

The Table below summarizes the Branch's building permit and inspection activity for 2004 and 2005.

Year	Permits Issued	Inspections Conducted
2004	8,539	82,759
2005	7,646	79,944

The overall objectives of BSB are to:

- Assist property owners and the development industry to ensure that building construction meets the health, safety, and structure sufficiency requirements of the

OBC and other applicable laws;

- Review pool enclosure applications, issue permits, and undertake safety inspections;
- Review and approve applications for permanent signs on private property;
- Assign civic addresses; and
- Provide accurate and timely compliance reports, agency letters of approval, release of development agreements, and access to building permit records and documents.

Recent legislation has significantly changed the role of the BSB and its clients, and established new requirements for the operation of the Branch. Key changes include requirements for the establishment of operational policies for Building Officials, certification requirements for BSB staff, prescribed timeframes within which decisions must be made on issuing building permits, and mandatory notices and inspections at key construction stages.

Audit Scope and Approach

The scope of our audit included an examination of BSB's:

- Compliance to regulatory requirements;
- Financial results of operations against short and longer term plans;
- Financial systems and controls against stated criteria to permit adequate recording and reporting of revenue collection and cost recovery; and
- Assessment of performance including management practices and goals and objectives related to monitoring and reporting against stated criteria to assess the efficiency, effectiveness, and economy of current operations.

The audit also considered the adequacy of support that BSB receives from the City of Ottawa's centres of expertise to support its basic functions, but did not examine the functioning of the centres of expertise or the activities of other groups that provide services to BSB.

We have drawn from the work of industry professionals, industry associations, and the municipalities of London and Mississauga to identify leading practices which remain relevant with changes in legislation, or which are emerging, as new requirements are met. Our work also included a review of permit and inspection files and assessing BSB against the criteria as identified below.

Audit Objectives and Criteria

The objective of the audit was to provide an independent and objective assessment of BSB and to evaluate the following:

Audit Objectives	Audit Criteria
Compliance to the OBC – to determine whether BSB is compliant with the OBC.	Staff qualifications meet legislative requirements.
	Municipal building bylaws implement legislative framework.
	The permit review process meets appropriate standard of care.
	The inspection process is consistent with the OBC, municipal policies, and standard of care.
Financial Management Practices and Processes – to determine whether financial management practices and processes are in place.	Policies and procedures are in place to ensure that fees for applications are correctly calculated and charged.
	Financial performance is appropriately budgeted and monitored and expenditures are adjusted where required.
Performance monitoring and reporting practices and processes – to determine whether performance monitoring and reporting are in place to assess the economy, effectiveness, and efficiency of current operations.	Performance is measured to desired outcomes and the results are used to improve operations.
	Building Services effectively serves its clients.
	Operations are efficient and effective.

Summary of Observations and Recommendations

This section summarizes the observations and recommendations related to each of the audit objectives. Overall, we found that BSB has addressed many of the priority requirements resulting from the revisions to the OBC and appears to be meeting the needs of its clients. Consultations revealed that BSB coordinates and communicates its activities effectively with other Branches and service providers within the City, and that BSB staff are diligent, competent, and attentive to customer service. Further, we found that BSB has been proactive in reviewing and transforming its management practices and processes to become more efficient and effective. In summary, BSB has successfully adapted its service delivery to the new requirements. However, there are significant aspects of the change process that remain to be addressed. The recommendations address these areas.

Audit Objective #1 - Determine whether BSB complies with the OBC

Observations

Significant changes to Ontario's building regulatory system, set out in amendments to the *Building Code Act 1992* (BCA) came into effect over the past two years. The revisions outline the role of the Chief Building Official and include the establishment of operational policies for the enforcement of the Act and the Building Code, and co-ordination and oversight of its enforcement. While the BCA outlines what BSB must do, it is the potential for liability that determines how it should be done, and managing the risk of liability is a key concern.

A major concern with the new requirements is the requisite standard of care that Building Officials must provide in the conduct of their inspections. BSB has adopted an innovative approach involving refundable inspection fees and a target of same-day response to inspection requests to minimize wasted inspection effort. Both Mississauga and London have implemented the legislated 48-hour turnaround time target for mandatory inspections to alleviate workload. While the result in Ottawa is better service to the industry, there is concern the quality of service may be compromised given current staffing levels and demand for inspections. Areas in which further improvements are necessary include:

- We understand that considerable effort is being devoted to achieving compliance to prescribed timeframes with respect to permit applications and building inspections; however, reporting on performance measures is not currently available to assess the actual level of compliance.
- Inspectors are working overtime in their efforts to complete all inspections required within the 24-hour target timeframe, resulting in some staff requiring stress leave and a risk of poor service delivery and inadequate resources to address peripheral issues;
- While it is clear that risk management is not a specific component of the OBC, it is an overarching theme for the required revisions to the Code and a key consideration in decision-making within the Branch. BSB's current risk management strategy is outdated. Consideration of risk was last addressed in the 1999 risk assessment conducted for the former City of Ottawa, which included specific established operational policy statements, but has not been updated since amalgamation, and more importantly, since the new BCA provisions took effect;
- Building Inspections has compiled a handbook entitled "Policies, Guidelines and Standards" which serves as a guide for all Inspectors to ensure consistency and thoroughness in the conduct of inspections. Similar documentation does not exist for all plans examination functions, and those that do exist predate the new BCA. In addition, this documentation does not emanate from an overall risk management policy statement approved by Council;
- Currently policies and procedures are not in place for the use and approval of equivalents. Further, mechanisms for considering precedents and the decisions made related to approval of equivalents are not documented; and
- Although not mandatory per the OBC, policies and procedures for the Legal & Service Integration Division have not been formally documented.

Recommendation 1

That BSB formally review, assess, prioritize, and document its significant risks, revise the risk management strategy, and ensure staff are trained in the risk management strategy once adopted. A risk assessment should be conducted more frequently, particularly when there is significant policy, legislative, regulatory,

and/or court decision related changes. The risk management strategy should include revised operational policies for the enforcement of the Act in the areas of inspections and permit approvals, and be developed in consultation with Legal Services.

Management Response

Management agrees with this recommendation. A formal review of the Risk Management Policy is scheduled for 2007 following the implementation of both the Building Code Statute Law Amendment Act, referred to as Bill 124 (January 1, 2006) and the new Building Code with the objective based code format (January 1, 2007). The updating of the Branch's operational policies, procedures and guidelines will follow suit as will risk management training of Branch staff. It is anticipated that these activities will be completed in Q4 2008.

Recommendation 2

That BSB consider documenting its policies and procedures for key activities within the Legal and Service Integration Division.

Management Response

Management agrees with this recommendation. Particular focus will be made on completing the documentation of those policies and procedures that are related to servicing building permits and the enforcement of the Building Code Act and Code. The process mapping of Legal and Service Integration has been largely completed and policies and procedures are being documented/developed. This is a work-in-progress as resources have been dedicated firstly to mandatory activities, that of servicing building permits and enforcing the Building Code Act and the Code. This initiative will be completed by Q1 2009.

Audit Objective #2 - Determine whether financial management practices and policies are in place

Observations

As part of its mandate, BSB is required to charge fees that correspond to its costs related to Building Code enforcement. Therefore, it is expected that BSB will recover its costs to sustain operations. Challenges arise in that expenditures are largely related to staffing costs, and are essentially fixed in the short term, however, revenues are variable and affected by external and other cyclical factors which the Branch does not control, or even influence.

In 2005, in order to address these concerns and meet its financial obligations, three separate reserve funds were established to deal with capital purchases, protection against litigation, and revenue stabilization; for the sole use by BSB. London and Mississauga have also established reserve funds.

Specifically we observed that expenditure adjustment is difficult due to fluctuating volumes, the significance of salaries and benefits as a major expenditure category, and the difficulty in recruiting qualified staff. However, the creation of the reserve funds provides some protection for BSB in the event of declining volumes, and/or damages awarded through litigation. BSB's annual operating budget is approximately \$11 million, however, the aggregated reserve fund balance, currently valued at approximately \$2.2 million is inadequate to sustain current operating costs.

Recommendation 3

That BSB consider options that focus on building the reserve funds as rapidly as possible.

Management Response

Management agrees with this recommendation. In the report to Council entitled: Building Regulatory Changes - Impact of Building Code Statute Law Amendment Act and Ontario Regulation 305/03 (ACS2005-PGM-BLD-0010), Branch Management proposed to maintain the building permit fee rate (\$13.50 per \$1000 in construction value) to enable an accelerated rate of contribution over the next five years of surplus revenues into the reserve funds. At 2005 year end, \$2.2 M in surplus revenues were allocated to the reserve funds. For 2006 year end, a higher contribution will be possible due to higher than expected vacancies and lower outsourcing costs.

Recommendation 4

That BSB maintain a log of outstanding litigation claims that could lead to damages awarded against the City and track the likely exposure to these claims against the reserve fund balance.

Management Response

Management agrees with this recommendation. This will be pursued following the updating and adoption of the Risk Management Policy. This initiative will be completed by Q4 2008.

Audit Objective #3 - Determine whether performance monitoring and reporting are in place to assess the economy, effectiveness, and efficiency of current operations

Observations

The new Building Code legislation has recognized performance measurement as a useful management tool and has incorporated several quantitative indicators as part of its requirements. BSB has addressed some Building Code requirements related to performance measures by capturing data on timeframes, but has mainly focused its

efforts on developing the new service delivery model and meeting other key requirements of the revised Building Code Act.

The new legislated timeframes and other requirements for the issuance of building permits and related inspections have necessitated an increase in staffing levels. In the past, BSB relied on the services of contractors during peak periods and/or former BSB employees; however, legislated requirements related to certification and insurance have effectively eliminated these options. In addition, there is competition from the construction industry, which also requires the same qualifications to prepare building permit applications, resulting in further difficulties with external recruitment. Further, the pay scale for Inspectors and Examiners appears to be a factor in deterring potential candidates from applying for positions within BSB. Added to this is the significant number of experienced staff that are expected to retire in 2008.

Benchmarking the activities of Mississauga and London found that both municipalities have improved their performance measurement system and maintain weekly performance reporting on permit processing timeframes, which is made available to the public. In addition both have implemented initiatives for increased e-service delivery.

Specifically we observed the following:

- Data is reported on building permit volumes and related value of construction activities, and there are systems in place to capture data on time frames as required by the new legislation. However, reporting on efficiency and effectiveness relative to legislative timeframes is currently not available;
- There are several long-term employees within BSB with significant corporate knowledge who clearly understand their tasks and tasks of others because of their familiarity with the procedures and actions; however, some policies and related procedures are not documented.
- Considerable effort has gone into developing effective interfaces between BSB and the other branches and services with which it deals, particularly By-Law Services and Planning and Infrastructure Approvals. However, these procedures have not been well documented; and
- Insufficient resources exist within BSB to continue to effectively manage workload. Currently, BSB has vacancies of approximately 42 full-time positions. BSB is experiencing difficulty in recruiting individuals who meet the new legislated qualifications and it does not appear that BSB has developed and documented a strategy to mitigate recruitment and retention risks.

Recommendation 5

That BSB focus on developing a suite of performance measures that cover outcomes related to legislative compliance, customer service, efficiency and effectiveness, and

on developing the capacity to report on these measures, with results of these measures posted in public areas. While BSB should continue to work with Information Technology Services in this regard, it should also strengthen its internal ability and capacity to query and report on data within MAP.

Management Response

Management agrees with this recommendation. In tandem with the development and implementation of the new business processes as a result of Bill 124 and the changes made to MAP (the City's computerized management information system), Branch management is developing the capacity to report on the Branch's performance with respect to the mandatory turnaround times and other services and activities. ITS Project 1085 – Building Services Performance is near completion and will provide reporting data on the Branch's performance vis-à-vis the mandatory turnaround times for decisions. This project is scheduled for Q1 2007 to coincide with the annual OMBI reporting timeframe and the first Annual Report to be issued by the Branch in accordance with the Building Code Act, on April 1, 2007.

Tracking the performance of inspections vis-à-vis the mandatory timeframe requires the development and implementation of remote technology and further MAP enhancements, the subject of Recommendation 8 (below).

Recommendation 6

That BSB develop and continue to evolve plans for effective use of technology, including portable devices and e-based application processing, consistent with evolving technologies.

Management Response

Management agrees with this recommendation. In 2003, the Branch undertook a business process analysis of Branch procedures and activities related to servicing building permits and enforcing the Building Code Act and Building Code. The assessment provided for the establishment of the Foundation Project, whereby process changes and MAP enhancements were identified that would streamline processes and enable the implementation of the Building Code Statute Law Amendment Act. The Foundation Project has served as a blueprint for a number of IT Projects, which have been underway since 2004. As technology evolves, BSB will review, assess (business case), test/pilot new technologies to determine their suitability in enhancing the Branch's effectiveness in meeting the legislative responsibilities and increasing efficiencies.

Recommendation 7

That BSB develop a human resources plan to deal with difficulties experienced in recruitment and retention of individuals qualified under the new Building Code Act. In addition, the human resources plan should include formal succession planning initiatives for the management team, and ongoing staff training initiatives with

opportunities for continuing education and cross-training, including improving the technical knowledge of objective-based codes at all levels.

Management Response

Management agrees with this recommendation. Funding has been earmarked for core competency training of the Building Officials to expand their knowledge base and to ensure cover off and progression/succession. Due to recruitment difficulties and the new legislated requirements for qualifications, a Building Official Internship Program has been developed. Specific components of the program will be submitted to the Province for review and approval. The Branch will identify and allocate resources in 2007 for the development of a Human Resources Plan and will continue to work with Employee Services in developing a succession plan and strategies for addressing recruitment difficulties. Completion of the Human Resources Plan, including a succession plan and strategies will be in Q2 2008.

Recommendation 8

That BSB consider improving its human resource and information technology skills set and experience with the recruitment of the two new positions within the Legal & Service Integration Division.

Management Response

Management agrees with this recommendation. Recommended resourcing relates to above Recommendations 6 and 7. A report on the establishment of two new operational support positions will be presented to Council Q2 2007 and recruitment will follow thereafter. Funding from building permit revenues is available to offset such additional costs as computers, compensation and accommodation.

Recommendation 9

To improve customer service, Client Service Centres should be provided with complete and accurate information on BSB activities on a regular basis. BSB should consider conducting periodic customer satisfaction surveys to obtain feedback to improve the effectiveness of service delivery through the identification of problem areas

Management Response

Management agrees with this recommendation. Customer satisfaction surveys targeted to building permit applicants will be undertaken with the assistance of the Client Services and Public Information Branch, commencing Q3 2007.

Recommendation 10

BSB should clearly identify and document the interfaces, relationships, processes, and activities that are coordinated between BSB, By-Law Services, and Planning and Infrastructure Approvals Branch.

Management Response

Management agrees with this recommendation. This initiative will be completed Q4 2009.

Conclusion

Since 2004, the Building Services Branch has been focusing its efforts on meeting the new provisions of the Act, in particular with respect to requirements for certification and training of staff. Innovative approaches such as refundable inspection fees have been well received and should improve operational efficiency for inspections and client services going forward.

There is a need to enhance the Branch's ability to monitor its compliance to the timelines established by the Act regarding permit issuance and inspections. Although the Act requires a 48-hour turnaround on inspections, the Branch has established an internal target of conducting inspections within 24 hours of the request. However, the Branch currently does not have an effective mechanism to track actual performance against the target or the legislative timelines.

Our analysis indicates that the decision as to whether a permit can be issued or not is for the most part made within required timelines. However, as with inspections, the Branch currently cannot generate reports to track compliance for permits.

The requirements of the new legislation regarding qualifications have created challenges in recruiting sufficient and adequate resources. Other Ontario municipalities appear to have had more success in this regard. A comprehensive human resources strategy is required at the City of Ottawa in order to ensure these challenges are addressed in a timely manner.

Finally, the nature of building permits and inspections processes requires that all municipalities have an effective risk assessment and strategy in order to demonstrate an adequate level of oversight on construction activities. The City's risk assessment in this area requires updating (and regular re-assessment) to ensure risks are adequately managed. The updating of the risk management strategy will necessitate developing policies and guidelines for both permit approvals and inspection. Once updated, the City's risk strategy should be presented to Council for approval.

Acknowledgement

We wish to express our appreciation for the cooperation and assistance afforded the audit team by Management.

SOMMAIRE

Introduction

La vérification de la Direction des services du bâtiment (DSB) a été incluse dans le Plan de vérification du vérificateur général de la Ville d'Ottawa de 2006 qui a été présenté au Conseil le 15 décembre 2004. La vérification avait pour objet d'examiner tous les aspects de la DSB de la Ville d'Ottawa, y compris les examens des plans, l'émission des permis de construction, les inspections et la mise en application des lois et règlements.

Contexte

La DSB était une des quatre directions relevant du directeur municipal adjoint, Urbanisme, Transport en commun, Environnement. La DSB a pour responsabilité de s'assurer que les nouveaux projets de construction répondent aux exigences en matière de santé, de sécurité et de suffisance structurelle du *Code du bâtiment de l'Ontario* (CBO) et d'autres lois pertinentes, ainsi que de gérer efficacement les risques inhérents à l'administration et à l'application du CBO. Pour 2006, la DSB compte 175,25 employés équivalents à temps plein (ETP), soit 166 employés à temps plein et 9,25 employés temporaires (étudiants occupant un emploi d'été). Des 166 ETP, 42 sont actuellement vacants. La plupart des employés de la DSB travaillent à la Place-Ben-Franklin; les autres partagent des locaux avec les employés des Services à la clientèle, en grande partie au 110, rue Laurier et aux bureaux de Kanata et de Cumberland et périodiquement dans les trois bureaux ruraux des Services à la clientèle.

Les trois principales unités organisationnelles de la DSB sont :

- (i) Permis de construction – Examens et approbations des plans
- (ii) Permis de construction – Inspections et mise en application
- (iii) Intégration juridique et des services

Le tableau ci-après résume les activités de la DSB liées au activité d'émission des permis de construction et aux inspections pour 2004 et 2005 :

Année	Permis émis	Inspections réalisées
2004	8 539	82 759
2005	7 646	79 944

Objectifs généraux de la DSB :

- Aider les propriétaires fonciers et l'industrie de l'aménagement à s'assurer que les

travaux de construction d'immeubles répondent aux exigences en matière de santé, de sécurité et de suffisance structurelle du CBO et d'autres lois pertinentes;

- Examiner les demandes de permis de clôture de piscine, émettre des permis et réaliser des inspections de sécurité;
- Examiner et approuver les demandes de panneaux permanents sur des terrains privés;
- Attribuer des adresses municipales; et
- Présenter des rapports de conformité exacts et en temps opportun, fournir des lettres d'approbation aux agences, diffuser des ententes d'aménagement et donner accès à des dossiers et à des documents concernant les permis de construction.

Les lois récentes ont profondément changé le rôle de la DSB et de ses clients et ont entraîné de nouvelles exigences pour le fonctionnement de la DSB. Parmi les changements clés, mentionnons les exigences relatives à l'établissement de politiques opérationnelles pour les agents du bâtiment, les exigences relatives à l'accréditation des employés de la DSB, les délais d'exécution prescrits dans le cadre desquels les décisions doivent être prises sur la délivrance de permis de construction et les avis et les inspections obligatoires au cours des étapes clés des travaux de construction.

Vérification – Portée et approche

Notre vérification comprenait un examen de la DSB en ce qui concerne :

- sa conformité aux exigences réglementaires;
- ses résultats financiers d'exploitation par rapport aux plans à court et à plus long terme;
- ses systèmes et ses contrôles financiers par rapport aux critères énoncés, afin de permettre un enregistrement et une reddition de comptes adéquats en ce qui concerne la perception de recettes et le recouvrement des coûts; et
- son rendement, y compris ses pratiques de gestion et ses buts et ses objectifs liés au contrôle et à la reddition de comptes par rapport aux critères énoncés, afin d'évaluer l'efficacité, l'efficacité et l'économie de ses activités actuelles.

La vérification a aussi pris en compte la pertinence du soutien apporté par les centres d'expertise de la Ville d'Ottawa à l'égard des fonctions de base de la DSB, mais elle n'a pas pris en considération le fonctionnement des centres d'expertise ou les activités d'autres groupes offrant des services à la DSB.

Nous nous sommes inspirés de travaux réalisés par des professionnels de l'industrie, des associations professionnelles et les municipalités de London et de Mississauga pour déterminer les principales pratiques qui demeurent pertinentes malgré les modifications apportées à la loi ou qui surgissent à mesure que de nouveaux besoins

sont comblés. Nous avons également examiné les dossiers des permis et inspections et évalué la DSB en fonction des critères indiqués ci-après.

Objectifs et critères de la vérification

La vérification visait à fournir une évaluation indépendante et objective de la DSB et à évaluer les éléments suivants :

Objectifs de la vérification	Critères de la vérification
Respect du CBO – pour déterminer si la DSB se conforme au CBO.	Les qualifications du personnel sont conformes aux exigences législatives.
	Les règlements municipaux sur les bâtiments mettent en œuvre le cadre législatif.
	Le processus d'examen des permis respecte la norme de diligence pertinente.
	Le processus d'inspection respecte le CBO, les politiques municipales et la norme de diligence.
	Les droits et frais d'obtention de permis sont conformes aux paramètres législatifs.
Pratiques et processus de gestion financière – pour déterminer si des pratiques et des processus de gestion financière sont en place.	Des politiques et des procédures sont en place pour s'assurer que les droits liés aux demandes sont correctement calculés et imputés.
	Le rendement financier est correctement budgétisé et contrôlé, et les dépenses sont modifiées au besoin.
Pratiques et processus de surveillance et d'établissement de rapports en matière de rendement – pour déterminer si des pratiques et des processus de surveillance et d'établissement de rapports en matière de rendement sont en place pour évaluer l'économie, l'efficacité et l'efficacité des activités actuelles.	Le rendement est mesuré en fonction des résultats désirés, et les résultats servent à l'amélioration des activités.
	Les Services du bâtiment servent efficacement leurs clients.
	Les activités sont efficaces et efficaces.

Sommaire des constatations et des recommandations

La présente section résume les constatations et les recommandations relatives à chacun des objectifs de la vérification. En général, nous avons conclu que la DSB a respecté un grand nombre des exigences prioritaires découlant des révisions apportées au CBO et semble répondre aux besoins de ses clients. Des entrevues ont permis d'établir que la DSB travaille efficacement avec les autres directions et les fournisseurs de services au sein de la ville en ce qui concerne la coordination et la communication de ses activités et que les employés de la DSB sont diligents, compétents et soucieux du service à la clientèle. En outre, nous avons conclu que la DSB s'est montrée proactive dans l'examen et la transformation de ses pratiques et de ses processus de gestion pour augmenter son efficacité et son efficacité. En gros, la DSB a su adapter sa prestation de services aux nouvelles exigences. Cependant, il reste à aborder certains aspects importants du processus de changement. Les recommandations portent sur ces domaines.

Objectif de vérification n° 1 – Déterminer si la DSB respecte le CBO

Constatations

D'importants changements apportés au système de réglementation de la construction de bâtiments de l'Ontario, énoncés dans les modifications à la *Loi sur le code du bâtiment de 1992*, sont entrés en vigueur au cours des deux dernières années. Les révisions mettent en évidence le rôle du chef du bâtiment et comprennent l'établissement de politiques opérationnelles pour la mise en application de la *Loi* et du *Code du bâtiment* et la coordination et la surveillance de leur mise en application. Si la *Loi sur le code du bâtiment* énonce les obligations de la DSB, c'est le potentiel de responsabilité qui détermine la façon de s'en acquitter, et la gestion des risques de responsabilité est une préoccupation importante.

La norme de diligence que doivent appliquer les agents du bâtiment dans le cadre de leurs inspections constitue une préoccupation importante par rapport aux nouvelles exigences. La DSB a adopté une approche novatrice comportant des frais d'inspection remboursables et un objectif de réponse le même jour pour les demandes d'inspection, afin de réduire au minimum le gaspillage des efforts consacrés aux inspections. Tant la Ville de Mississauga que la Ville de London ont mis en œuvre l'objectif de délai d'exécution de 48 heures, imposé par la loi, pour les inspections obligatoires afin de réduire la charge de travail. Si le résultat à Ottawa est un service amélioré offert à l'industrie, il y a la crainte que la qualité du service puisse être compromise compte tenu des niveaux de dotation actuels et de la demande d'inspections. Voici des domaines dans lesquels d'autres améliorations sont nécessaires :

- Nous sommes conscients des efforts énormes déployés pour respecter les délais d'exécution prescrits concernant les demandes de permis et les inspections des bâtiments. Cependant, il n'existe pas actuellement de mécanisme de reddition de comptes sur les mesures du rendement pour évaluer le niveau réel de conformité.
- Les inspecteurs effectuent des heures supplémentaires pour terminer les inspections à l'intérieur du délai d'exécution visé de 24 heures, ce qui donne lieu à des demandes de congé lié au stress de la part d'employés, à un risque de services de piètre qualité et à des ressources inadéquates pour s'attaquer à des questions accessoires.
- Si la gestion des risques n'est manifestement pas une composante précise du CBO, elle représente un thème dominant pour les révisions requises au *Code* et un facteur clé dans la prise de décisions au sein de la DSB. La stratégie actuelle de gestion des risques de la DSB est désuète. La question des risques a été abordée pour la dernière fois dans l'évaluation des risques réalisée en 1999 pour l'ancienne Ville d'Ottawa, qui renfermait des énoncés de principe opérationnels établis précis. Cette évaluation n'a pas toutefois été mise à jour depuis la fusion et, plus important encore, depuis que les nouvelles dispositions de la *Loi sur le code du bâtiment* sont entrées en vigueur.

- Les Services d'inspection des bâtiments ont préparé un manuel intitulé « Politiques, Lignes directrices et Normes », qui aide tous les inspecteurs à assurer la cohérence et la rigueur des inspections. Des documents similaires n'existent pas pour toutes les fonctions d'examen des plans, et ceux qui existent sont antérieurs au nouveau CBO. En outre, ces documents ne découlent pas d'un énoncé de principe général sur la gestion des risques approuvé par le Conseil.
- À l'heure actuelle, des politiques et des procédures ne sont pas en place pour l'utilisation et l'approbation d'équivalents. Par ailleurs, les mécanismes pour l'analyse des précédents et des décisions prises sur l'approbation d'équivalents ne sont attestés par aucun document.
- Si elles ne sont pas obligatoires en vertu du CBO, les politiques et les procédures visant la Division de l'intégration juridique et des services n'ont pas été officiellement documentées.

Recommandation 1

Que la DSB examine, évalue, hiérarchise et documente de manière officielle ses risques importants, passe en revue la stratégie de gestion des risques et s'assure que les employés reçoivent une formation sur la stratégie de gestion des risques sitôt cette dernière adoptée. Il faudrait réaliser plus souvent une évaluation des risques, en particulier lorsque surviennent des changements stratégiques, législatifs, réglementaires et/ou des changements découlant de décisions judiciaires. La stratégie de gestion des risques doit inclure des politiques opérationnelles révisées pour l'application de la *Loi* dans les domaines des inspections et des approbations de permis et être élaborée en collaboration avec les services juridiques.

Réponse de la direction

La direction est d'accord avec cette recommandation.

Un examen officiel de la Politique sur la gestion des risques est prévu pour 2007, à la suite de la mise en œuvre de la *Loi modifiant des lois en ce qui concerne le code du bâtiment*, appelée projet de loi 124 (1^{er} janvier 2006) ainsi que du nouveau *Code du bâtiment* et du code axé sur les objectifs (1^{er} janvier 2007). Suivront la mise à jour des politiques, des procédures et des lignes directrices de la DSB ainsi que la formation sur la gestion des risques à l'intention des employés de la DSB. Ces activités devraient prendre fin au quatrième trimestre de 2008.

Recommandation 2

Que la DSB envisage de documenter ses politiques et procédures pour les activités essentielles entreprises au sein de la Division de l'intégration juridique et des services.

Réponse de la direction

La direction est d'accord avec cette recommandation.

Une attention particulière sera accordée à l'achèvement de la documentation des politiques et procédures relatives au traitement des permis de construction et à l'application de la *Loi sur le code du bâtiment* et du CBO. L'élaboration du processus d'Intégration juridique et des services est en grande partie achevée, et les politiques et procédures sont en cours de documentation/d'élaboration. Il s'agit d'un travail en cours, étant donné que les ressources ont été consacrées avant tout à des activités obligatoires, soit le traitement des permis de construction et l'application de la *Loi sur le code du bâtiment* et du CBO. Cette initiative prendra fin d'ici le premier trimestre de 2009.

Objectif de vérification n° 2 – Déterminer si des pratiques et des politiques de gestion financière sont en place

Constatations

Dans le cadre de son mandat, la DSB doit imputer des frais correspondant à ses coûts associés à l'application du *Code du bâtiment*. Par conséquent, il est prévu que la DSB doit recouvrer ses coûts pour soutenir les activités. Les difficultés augmentent en raison du fait que les dépenses sont largement attribuables aux coûts de dotation en personnel et qu'elles sont essentiellement fixes à court terme. Cependant, les revenus sont variables et sont touchés par des facteurs externes et autres facteurs cycliques sur lesquels la DSB n'a aucune prise.

En 2005, afin d'écarter ces préoccupations et d'aider la DSB à respecter ses obligations financières, trois fonds de réserve distincts ont été établis pour effectuer les achats d'immobilisations, assurer une protection contre les litiges et stabiliser les revenus. Ces fonds sont à l'usage exclusif de la DSB. La Ville de London et la Ville de Mississauga ont également établi des fonds de réserve.

En particulier, nous avons observé que la régularisation des dépenses est compliquée par la fluctuation des volumes, l'importance des salaires et des avantages sociaux en tant que catégorie de dépenses majeures et la difficulté à recruter des personnes qualifiées. Cependant, la création des fonds de réserve assure une certaine protection pour la DSB dans l'éventualité d'une baisse des volumes et/ou d'un paiement de dommages-intérêts ordonné par un tribunal. Le budget de fonctionnement annuel de la DSB est d'environ 11 millions de dollars, mais le fonds de réserve agrégat, évalué actuellement à environ 2,2 millions de dollars, ne suffit pas pour supporter les coûts de fonctionnement actuels.

Recommandation 3

Que la DSB envisage les options portant sur l'établissement des fonds de réserve dès que possible.

Réponse de la direction

La direction est d'accord avec cette recommandation. Dans le rapport présenté au Conseil intitulé « Modifications des règlements sur le bâtiment – Répercussions de la *Loi modifiant des lois en ce qui concerne le code du bâtiment* et Règlement de l'Ontario 305/03 » (ACS2005-PGM-BLD-0010), la direction de la DSB a proposé de maintenir le tarif des permis de construction (qui représentent une valeur de 13,50 \$ par tranche de 1 000 \$) pour permettre un taux accéléré de versement des revenus excédentaires dans les fonds de réserve au cours des cinq prochaines années. À la fin de 2005, 2,2 millions de dollars en revenus excédentaires ont été versés dans les fonds de réserve. Pour la fin de 2006, un versement plus important sera possible en raison de taux de vacance plus élevés que prévu et de coûts d'impartition plus bas.

Recommandation 4

Que la DSB tienne un registre des réclamations par voie de litige en cours qui pourraient se traduire par des dommages-intérêts dus par la Ville et contrôle l'exposition probable à ces réclamations par rapport au solde des fonds de réserve.

Réponse de la direction

La direction est d'accord avec cette recommandation. Elle entend y donner suite après la mise à jour et l'adoption de la Politique sur la gestion des risques. Cette initiative prendra fin d'ici le quatrième trimestre de 2008.

Objectif de vérification n° 3 – Déterminer si les mécanismes de surveillance du rendement et de production de rapports connexes sont en place pour évaluer l'économie, l'efficacité et l'efficience des activités actuelles

Constataions

Le nouveau CBO a reconnu que la mesure du rendement est un outil de gestion utile et a intégré plusieurs indicateurs quantitatifs à ses exigences. La DSB a donné suite à certaines exigences du CBO relatives au mesure de rendement en saisissant des données sur les délais d'exécution, mais s'est surtout efforcée d'élaborer le nouveau modèle de prestation de services et de répondre à d'autres exigences importantes de la *Loi sur le code du bâtiment* révisée.

Les nouveaux délais d'exécution législatifs et d'autres exigences sur l'émission de permis de construction et la réalisation des inspections connexes ont nécessité une augmentation des niveaux de dotation en personnel. Dans le passé, la DSB a compté sur les services d'entrepreneurs durant les périodes de pointe et/ou sur d'anciens employés de la DSB. Cependant, les exigences législatives liées à l'accréditation et aux assurances ont dans les faits éliminé ces options. En outre, la concurrence provenant de l'industrie de la construction, qui exige également les mêmes qualifications pour la préparation des demandes de permis de construction, suscite des difficultés supplémentaires en matière

de recrutement externe. Par ailleurs, l'échelle salariale des inspecteurs et des examinateurs semble être un facteur qui dissuade des candidats potentiels de postuler un emploi au sein de la DSB. Enfin, un grand nombre d'employés d'expérience devraient prendre leur retraite en 2008.

Une analyse comparative des activités de la Ville de Mississauga et de celles de la Ville de London a permis d'établir que ces deux municipalités ont amélioré leur système de mesure du rendement et ont produit des rapports hebdomadaires en matière de rendement sur les délais d'exécution pour le traitement des permis. Ces rapports sont accessibles au public. De plus, les deux villes ont mis en œuvre des initiatives visant à accroître la prestation de services électroniques.

En particulier, nous avons observé ce qui suit :

- Des données sont déclarées sur les volumes de permis de construction et la valeur connexe des activités de construction, et il y a des systèmes en place pour saisir des données sur les délais d'exécution, conformément aux nouvelles mesures législatives. Cependant, il n'existe pas actuellement de mécanisme pour rendre compte de l'efficacité et de l'efficacités des délais d'exécution législatifs.
- Plusieurs employés travaillant depuis longtemps à la DSB possèdent beaucoup de connaissances de l'organisation et comprennent à fond leurs tâches et celles des autres, compte tenu de leur niveau de familiarité avec les procédures et les mesures adoptées. Cependant, certaines politiques et des procédures connexes ne sont pas documentées. (Voir Objectif de vérification n° 1 - Déterminer si la DSB respecte le CBO pour discussion complémentaire.)
- D'importants efforts ont été consacrés à l'établissement de relations efficaces entre la DSB et les autres directions et services avec lesquels elle fait affaire, en particulier les Services des règlements municipaux et la Direction de l'approbation des demandes d'aménagement et d'infrastructure. Cependant, ces procédures n'ont pas été bien documentées.
- Il manque de ressources au sein de la DSB pour continuer à gérer efficacement la charge de travail. À l'heure actuelle, la DSB compte environ 42 postes à temps plein vacants. La DSB éprouve des difficultés à recruter des personnes qui répondent aux nouvelles exigences législatives et ne semble pas avoir élaboré ni documenté une stratégie d'atténuation des risques liés au recrutement et au maintien en poste.

Recommandation 5

Que la DSB concentre ses efforts sur l'élaboration de mesures du rendement qui englobent les résultats relatifs à la conformité législative, au service à la clientèle, à l'efficacité et l'efficacités, ainsi que sur le développement de la capacité à rendre compte de ces mesures. Les résultats de ces mesures seront affichés dans des endroits publics. Si la DSB devrait continuer à travailler avec les Services de technologie de

l'information à cet égard, elle devrait également renforcer sa capacité interne à faire des requêtes et à rendre compte de données dans MAP (le système informatisé de gestion de l'information de la Ville).

Réponses de la direction

La direction est d'accord avec cette recommandation.

Parallèlement à l'élaboration et à la mise en œuvre des nouveaux processus d'affaires découlant du projet de loi 124 et des changements apportés au MAP (le système informatisé de gestion de la Ville), la direction de la DSB développe sa capacité de faire rapport sur le rendement de la DSB en regard des délais d'exécution obligatoires et à d'autres services et activités. Le projet 1085 des Services de la technologie de l'information – Rendement des services du bâtiment tire à sa fin et permettra de fournir des données de rapport sur le rendement de la DSB en regard des délais d'exécution obligatoires relatifs aux décisions. Ce projet est prévu pour le premier trimestre de 2007, afin qu'il coïncide avec le délai d'exécution de l'Initiative d'analyse comparative des services municipaux de l'Ontario et avec le premier rapport annuel qui sera présenté par la DSB conformément à la *Loi sur le code du bâtiment* le 1^{er} avril 2007.

Le suivi du rendement des inspections par rapport au délai d'exécution obligatoire nécessite l'élaboration et la mise en œuvre d'une technologie à distance et d'autres améliorations au MAP, l'objet de la recommandation 8 (ci-dessous).

Recommandation 6

Que la DSB élabore des plans et développe ceux-ci de manière continue pour assurer une utilisation efficace de la technologie, y compris des dispositifs portatifs et le traitement électronique des demandes, conformément aux technologies en évolution.

Réponse de la direction

La direction est d'accord avec cette recommandation. En 2003, la DSB a entrepris une analyse des processus d'affaires portant sur ces procédures et activités liées au traitement des permis de construction et à l'application de la *Loi sur le code du bâtiment* et du CBO. L'évaluation prévoyait l'établissement du projet Fondation, dans le cadre duquel ont été cernés les changements aux processus et les améliorations au MAP qui permettraient de simplifier les processus et de mettre en œuvre la *Loi modifiant des lois en ce qui concerne le code du bâtiment*. Le projet Fondation a servi de modèle à un certain nombre de projets de TI qui sont en cours depuis 2004. À mesure qu'évolue la technologie, la DSB procédera à l'examen, à l'évaluation (analyse de rentabilisation) et à l'essai de nouvelles technologies pour déterminer leur capacité d'aider la DSB à respecter les responsabilités législatives et à augmenter l'efficacité.

Recommandation 7

Que la DSB élabore un plan de ressources humaines pour écarter les difficultés éprouvées dans le recrutement et le maintien en poste de personnes qualifiées en vertu de la nouvelle *Loi sur le code du bâtiment*. En outre, le plan de ressources humaines devrait inclure des initiatives officielles de planification de la relève pour l'équipe de direction, ainsi que des initiatives continues de formation des employés, avec possibilités de formation continue et de transfert d'apprentissage, y compris l'amélioration des connaissances techniques relatives aux codes axés sur les objectifs à tous les niveaux.

Réponse de la direction

La direction est d'accord avec cette recommandation. Les fonds ont été réservés à la formation liée aux compétences de base à l'intention des agents du bâtiment, afin d'accroître leurs connaissances, de s'assurer que tous les postes sont occupés et de garantir une progression/releve. En raison des difficultés de recrutement et des nouvelles exigences législatives concernant les qualifications, un programme de stages à l'intention des responsables des bâtiments a été mis au point. Des composantes précises du programme seront soumises à l'examen et à l'approbation de la Province. La DSB déterminera et attribuera les ressources en 2007 pour l'élaboration du plan de ressources humaines et continuera à travailler avec les Services aux employés à l'élaboration d'un plan de relève et de stratégies pour aplanir les difficultés de recrutement. L'élaboration du plan de ressources humaines, y compris un plan de relève et des stratégies, se terminera au deuxième trimestre de 2008.

Recommandation 8

Que la DSB envisage d'accroître ses compétences en ressources humaines et en technologie de l'information, ainsi que son expérience concernant la dotation des deux postes nouvellement créés à la Division de l'intégration juridique et des services.

Réponse de la direction

La direction est d'accord avec cette recommandation. Le renouvellement du personnel recommandé concerne les recommandations 6 et 7. Un rapport sur l'établissement de deux nouveaux postes de soutien opérationnel sera présenté au Conseil au deuxième trimestre de 2007 – le recrutement se fera après coup. Des fonds découlant des revenus de permis de construction existent pour compenser des coûts supplémentaires (p. ex. ordinateurs, rémunération et locaux).

Recommandation 9

Pour améliorer le service à la clientèle, la Division des centres de services à la clientèle devrait obtenir régulièrement de l'information complète et exacte sur les activités de la DSB. La DSB devrait envisager de réaliser des sondages périodiques

sur la satisfaction de la clientèle pour améliorer l'efficacité de la prestation de services grâce à la désignation des problèmes.

Réponse de la direction

La direction est d'accord avec cette recommandation. Des sondages sur la satisfaction de la clientèle visant les demandeurs de permis de construction seront entrepris à compter du troisième trimestre de 2007 en collaboration avec la Direction des services à la clientèle et de l'information au public.

Recommandation 10

La DSB devrait clairement définir et documenter les communications, les relations, les processus et les activités qui sont coordonnés entre la DSB, les Services des règlements municipaux et la Direction de l'approbation des demandes d'aménagement et d'infrastructure.

Réponse de la direction

La direction est d'accord avec cette recommandation. Cette initiative se terminera au quatrième trimestre de 2009

Conclusion

Depuis 2004, la DSB s'efforce de satisfaire aux nouvelles dispositions de la *Loi*, surtout en ce qui concerne les exigences relatives à l'accréditation et à la formation des employés. Des approches novatrices telles que les frais d'inspection remboursables ont été bien accueillies et devraient améliorer l'efficacité opérationnelle des inspections et des services à la clientèle dans l'avenir.

Il faut améliorer la capacité de la DSB à contrôler son niveau de conformité par rapport aux calendriers établis par la *Loi* concernant l'émission des permis et les inspections. Si la *Loi* exige un délai d'exécution de 48 heures pour les inspections, la DSB s'est fixé comme objectif de donner suite à une demande d'inspection dans un délai de 24 heures. Cependant, la DSB n'a pas actuellement de mécanisme efficace pour surveiller le rendement réel par rapport à l'objectif ou aux délais d'exécution législatifs.

Selon notre analyse, la décision d'émettre ou pas un permis est en général prise à l'intérieur des délais d'exécution requis. Cependant, comme pour les inspections, la DSB ne peut pas actuellement produire des rapports pour surveiller la conformité relative aux permis.

Les exigences des nouvelles mesures législatives concernant les qualifications ont entraîné des difficultés dans le recrutement de ressources suffisantes et adéquates. D'autres municipalités de l'Ontario semblent avoir eu plus de succès à cet égard. La Ville d'Ottawa a besoin d'une stratégie de ressources humaines exhaustive pour écarter rapidement ces difficultés.

Enfin, la nature des processus liés aux permis de construction et aux inspections oblige toutes les municipalités à mettre en place un mécanisme d'évaluation des risques et une stratégie de gestion des risques efficaces, de manière à démontrer un niveau adéquat de surveillance des activités de construction. Le mécanisme d'évaluation des risques de la Ville nécessite une mise à jour à cet égard (et une réévaluation régulière) pour assurer une gestion adéquate des risques. La mise à jour de la stratégie de gestion des risques nécessitera l'élaboration de politiques et de lignes directrices pour les approbations de permis et les inspections. Une fois mise à jour, la stratégie de gestion des risques de la Ville doit être soumise à l'approbation du Conseil.

Remerciement

Nous désirons remercier la direction pour la collaboration et l'aide apportées à l'équipe de vérification.

1 INTRODUCTION

The Audit of the Building Services Branch (BSB or the Branch) was included in the City of Ottawa Auditor General's Audit Plan for 2006, presented to City Council on December 15, 2004. The purpose of the audit was to conduct an examination of all aspects of the City of Ottawa's BSB, including building permits, plans, approvals, inspections, and enforcement.

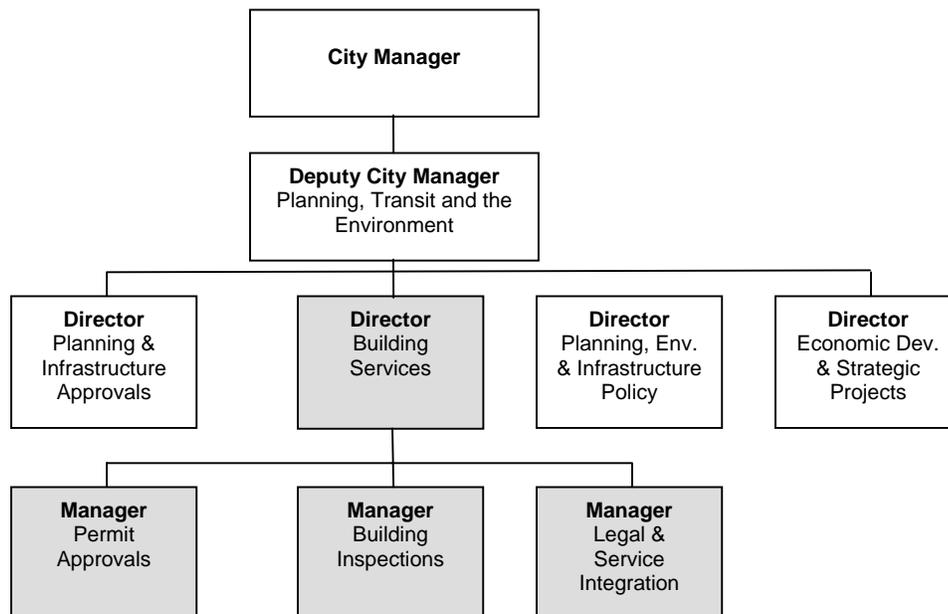
2 BACKGROUND

BSB is one of four branches under the responsibility of the Deputy City Manager, Planning, Transit and the Environment. It is responsible for ensuring that new construction meets the health, safety and structural sufficiency requirements of the Ontario Building Code (OBC) and other applicable laws, and to effectively manage the risks inherent in administering and enforcing the OBC. For 2006, BSB has an establishment of 175.25 FTEs employees, of which 166 are full-time employees and 9.25 temporary (summer students).

The three primary organizational units of the Branch are:

- (i) Building Permits - Plans Review and Approvals
- (ii) Building Permits - Inspections and Enforcement
- (iii) Legal and Service Integration.

The Branch's organizational chart is presented below:



The overall objectives for BSB are to:

- Assist property owners and the development industry to ensure that building construction meets the health, safety, and structure sufficiency requirements of the OBC and applicable laws;
- Review pool enclosure applications, issue permits, and undertake safety inspections;
- Review and approve applications for permanent signs on private property;
- Assign civic addresses; and
- Provide accurate and timely compliance reports, agency letters of approval, release of development agreements, and access to building permit records and documents.

While the roles of the Permit Approvals and Building Inspections Divisions are self-evident, the Legal and Services Integration Division's role requires clarification. The Division provides support to the operational divisions through two units. Enterprise Services is responsible for monthly reporting and for business process improvements and managing the Technical Clerks who support both Permit Approvals and Building Inspections Divisions and work in Client Services Centres. Compliance & Enforcement provides compliance reporting (responding to written requests from the legal community for details on permits and/or stop work orders on specific residential and/or commercial properties), and prepare and coordinate all prosecution files as well as undertake research and preparation of response to claims filed against the City. The other arm of this group is Policy, which conducts special projects, e.g. documenting changes in business processes, writing reports to Council.

BSB has authority for 175.25 FTEs, of which 166 are full-time employees and 9.25 temporary (summer students). Of the 166 FTEs, 42 are presently vacant. The majority of BSB employees are located at Ben Franklin Place, with the others co-located with Client Service Centre staff primarily 110 Laurier, the Kanata and Cumberland offices and periodically at the other three rural Client Service Centres. The breakdown of the number of employees by organizational unit is as follows:

Positions	Director's Office	Permit Approvals	Building Inspections	Legal & Integration Services	Students	Total
Staffed Positions	4	40.5	44.5	35		124
Vacancies	2	24	12	4		42
Students					9.25	9.25
Total	6	64.5	56.5	39	9.25	175.25

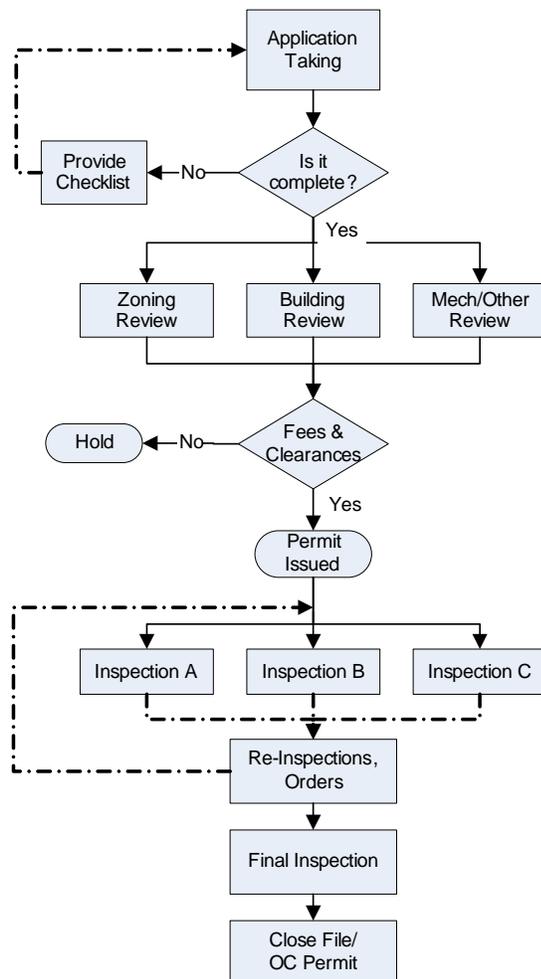
The table below summarizes Branch activity for 2004 and 2005 and is followed by a summary of the Branch's budget.

Year	Permits Issued	Inspections Conducted
2004	8,539	82,759
2005	7,646	79,944

Building Services	2004 Actual (\$000)	2005 Actual (\$000)
By Program		
Director's Office	706	654
Permit Approvals	3,173	3,282
Building Inspections	3,563	3,712
Legal and Service Integration	2,026	2,234
Contribution to Reserves		2,216
Total Gross Expenditures	9,468	12,098
Recoveries	(289)	(321)
Total Net Expenditures	9,179	11,777
Revenues		
Federal/Provincial	-	-
City Reserves	-	-
General/Fees/Charges	(22,396)	(21,123)
Total Revenues	(22,396)	(21,123)
Net Requirement	(13,217)	(9,346)
By Expenditure Type	2004 Actual (\$000)	2005 Actual (\$000)
Compensation and Benefits	8,217	8,768
Materials and Services	902	695
Transfers/Grants	-	2,216
Financial Charges	-	-
Fleet Costs	137	131
Other Internal Costs	212	288
Total Gross Expenditures	9,468	12,098
Full-Time Equivalent	140.5	175.25

Recent legislation has significantly changed the role of the BSB and its clients, and established new requirements for the operation of the Branch. These changes include new certification requirements for both BSB staff and those who submit building permit applications, and established timeframes in which reviews of applications must be completed. These are discussed further in the sections which follow.

The chart below provides a very simplified view of the key processes related to building permit issuance and inspection of the resulting construction.



Generally, municipalities examine the permit application, plans, and supporting material for completeness when they are initially received. This is a critical activity as it affects the speed with which the application is processed.

The plan review occurs in multiple streams such as zoning, building code, grading and other applicable laws. These reviews can be conducted in parallel or in sequence. This phase also includes issuing notices (deficiency letters) which may require plan amendments and/or review of equivalents (meaning a different approach to building design that is “equivalent” to the standard approach).

After completion of plan review and the application is approved, the permit is ready for permit issuance. Typically, at this stage, the file is checked to ensure that all fees and levies are paid and all other approvals that may be a required for permit issuance are in place.

The provisions of the OBC with respect to the safety of buildings, and as such the role of the BSB in new construction and development, is limited to the building itself, including plumbing, electricity, etc. within the building. BSB therefore works closely with other branches and services including:

- Planning and Infrastructure Approvals Branch (within Planning, Transit and the Environment Department) for approval of grading and services leading to the building;
- By-law Services (within the Community and Protective Services Department) for

issues related to existing buildings;

- Infrastructure Services (within the Public Works and Services Department) for inspection of grading and services leading to the building; and
- Rideau Valley Conservation Authority for the enforcement of Part 8 the OBC regarding the sewage systems, in particular the approval and inspection of septic systems.

The City of Ottawa operates under a “centres of expertise” model. BSB can therefore rely on specialized groups to support its activities in such areas as client services, financial services, information technology services, legal services, and human resources management.

3 AUDIT SCOPE

The scope of our audit included an examination of BSB’s:

- Compliance to regulatory requirements;
- Financial results of operations against short and longer term plans;
- Financial systems and controls against stated criteria to permit adequate recording and reporting of revenue collection and cost recovery; and
- Assessment of performance, including management practices and goals and objectives related to monitoring and reporting against stated criteria, to assess the efficiency, effectiveness, and economy of current operations.

The audit considered the adequacy of support that BSB receives from the centres of expertise to support its basic functions, but did not examine the functioning of the centres of expertise or the activities of other groups that provide services to BSB.

4 AUDIT APPROACH

Our approach to the audit included consultation with selected members of management and staff from BSB, key individuals from other related Branches and services; and reviews of documentation provided, permit and inspection files, and leading practices. The information gained from these sources allowed us to assess management practices using a common set of criteria to enable a consistent and efficient analysis.

4.1 Documentation Review

Our work reviewed how BSB determines and monitors compliance with relevant legislation, assesses its staffing needs, addresses its training gaps, whether management policies and practices are in place to address the needs of users, and if performance measures are sufficient in pointing out areas of risk which are in need of management’s attention. A summary of the documentation reviewed can be found in Appendix A.

4.1.1 Consultations

Consultations were conducted with 22 individuals, selected from BSB management and staff and other key branches and services within the City, to obtain information on the roles and responsibilities of BSB, the Branch's significant processes, the allocation of key responsibilities between BSB and other key branches/services, and client service satisfaction.

4.1.2 Data Analysis and File Review

We obtained the data for 2005 and 2006 contained in the MAP system¹ from Information Technology Services in order to conduct a comprehensive analysis of permit activity. In addition, we selected a sample of 18 permit files to further examine activity in an effort to assess the level of compliance to the Act.

4.1.3 Benchmarking

Given the recent changes in legislation, municipalities across the Province have been struggling to find the best ways to implement the new legislation. We have drawn from the work of industry professionals, industry associations and selected municipalities to benchmark and identify leading practices which remain relevant with the changes in legislation, or which are emerging as the new requirements are met.

5 AUDIT OBJECTIVES

The objective of the audit was to provide an independent and objective assessment of BSB and to evaluate the following:

- (i) Compliance to the OBC – to determine whether BSB is compliant with the OBC;
- (ii) Financial management practices and processes – to determine whether financial management practices and processes are in place; and
- (iii) Performance monitoring and reporting practices and processes – to determine whether performance monitoring and reporting are in place to assess the economy, effectiveness, and efficiency of current operations.

Audit criteria for the measurement of each of the above-noted objectives were established and discussed with management, and have been identified in the following section.

¹ The Municipal Application Program which provides GIS, data and process management resources to support a variety of municipal programs, including BSB.

6 DETAILED OBSERVATIONS AND RECOMMENDATIONS

This section outlines the detailed observations related to each of the audit objectives. Suggested recommendations have been grouped by audit objectives. In some cases, observations may relate to a number of objectives, all of which have been identified.

Overall, we found that BSB has adequately addressed many of the priority requirements under the revisions to the OBC and appears to be meeting the needs of its clients. Consultations revealed that BSB coordinates and communicates its activities effectively with other Branches and service providers within the City and that BSB staff are diligent, competent, and attentive to customer service. Further, we found that BSB has been proactive in reviewing and transforming its management practices and processes to become more efficient and effective.

6.1 Audit Objective #1 - Determine whether BSB complies with the OBC

6.1.1 Background

Significant changes to Ontario's building regulatory system were set out in amendments to the *Building Code Act 1992*, and the OBC. The revisions outline the role of the Chief Building Official and include the establishment of operational policies for the enforcement of the Act and the Building Code, and coordination and oversight of its enforcement. Some revisions came into effect September 2003, with the majority of changes coming into force July 2005 under Bill 124. This two-year grace period was provided by the Province in order to give municipalities sufficient time to transition and adapt to the new building regulatory regime. Significant provisions were later delayed until January 2006. The Government expects that the implementation of the legislation will streamline the building regulatory system, increase the safety and quality of building construction in Ontario, enhance accountability, and create a more transparent and innovation-friendly regulatory environment for the construction industry. Key changes include the following:

- Establishment of operational policies for the enforcement of the Act;
- Mandatory qualifications for Building Officials (Chief Building Officials, Plans Examiners and Inspectors);
- Code of conduct for Building Officials;
- New list of "applicable law" related to the OBC;
- Prescribed timeframes within which decisions must be made on issuing a building permit;
- Mandatory notices and inspections at key construction stages; and

- New rules governing building permit fees to enhance transparency, including the requirement for the preparation and publication of an annual fee report.

Central to the required changes is the focus on compliance with the role of the municipality, Chief Building Officer, and Inspectors with the BCA, and the management of risk.

BSB has been proactive in this area as risk management is a key element of BSB operations. Due to the volume of transactions experienced, it is not practical to achieve with 100% certainty that all applications are consistent with all aspects of the Building Code as this would require verification of each calculation within the building design process. Similarly, ensuring that every element of every construction project conforms to plan would require constant inspection. The courts have recognized the practical limitations of code enforcement (although decisions under the new Act are not yet available at this early stage) and have determined that municipalities must provide an “appropriate standard of care” to limit their liability. However, municipalities have been found to have a very small share of the liability for building defects, only to be forced to pay large judgement amounts when contractors and designers pass away, reorganize their limited liability companies, become insolvent, or otherwise fail to cover their share of damages. It is therefore incumbent on the City to minimize its likely potential liabilities by focusing its enforcement efforts in the areas where damages are most likely to occur, or most likely to be significant. Decisions also suggest it is not the number of building inspections or examinations completed that is significant, but rather the effectiveness with which they are carried out.

Moderating the municipality’s risk are amendments to the Building Code Act which provide for a sharing of risk between the municipality and its clients, where the onus has shifted to the client to employ qualified designers to prepare building plans and to submit a complete permit application before the permit approval process may begin by BSB. The Act also requires that BSB conduct inspections at certain stages of the construction process.

6.1.2 Audit Criteria

- Staff qualifications meet legislative requirements;
- Municipal building by-laws implement legislative framework;
- The permit review process meets appropriate standard of care;
- The inspection process is consistent with the OBC, municipal policies, and standard of care; and
- Permit fees and charges meet legislative parameters.

6.1.3 Observations

Generally, we found that BSB has complied with several requirements of the revised OBC. The following sets out our observations based on the above-noted audit criteria.

Criteria - Staff qualifications meet legislative requirements

- BSB was proactive in assessing training gaps for required certification under the new legislation and, as such, Building Officials successfully completed the examination program administered by the Ministry of Municipal Affairs and Housing by the legislated deadline of January 1, 2006. Examination information is filed with the Ministry on behalf of each staff member. Looking forward, the new certification requirements have been incorporated in job requirements for future hires;
- By-law #2001-17 - Appointment of Inspectors, Property Standards Officers, and Municipal Law Enforcement Officers, together with amending by-laws, identify the individuals appointed as Building Officials; and
- BSB has adopted the City of Ottawa's Code of Conduct, which forms part of the City's employment contract. Upon employment, each employee must sign the contract. A signed copy of the contract is filed with Employee Services and acknowledges that the employee has reviewed the Code of Conduct. The Code of Conduct has been published on the City's website.

Criteria - Municipal building by-laws implement legislative framework

- By-Laws have been created to implement and enforce the OBC. Specifically, the Building By-Law clearly outlines the classes of permits and associated permit fees, requirements for permit applications, plans and specifications, and the requirement for inspection of newly constructed buildings. Appendix A lists other applicable by-laws that further support the implementation and enforcement of the OBC.

Criteria - The permit review process meets appropriate standard of care

- BSB ensures that the approved permit application form "Application for a Permit to Construct or Demolish" is completed for all permits. A checklist has been created in MAP to ensure all required information is received and reviewed prior to accepting the permit application. The permit application is available from the City's website and at Client Service Centres;
- MAP has built-in controls to assist in ensuring that a permit cannot be issued until the zoning and grading reviews have been completed and signed off;
- Communication between BSB and Planning and Infrastructure Approvals with respect to Building Code issues appears to be effective. Each group understands its roles and communicates on a regular basis;
- The objective-based codes, expected to come into effect in 2007, will allow for creative solutions to meeting Code requirements. This will require a greater use of

judgement in assessing compliance to the Ontario Building Code. BSB is currently recruiting a Mechanical Engineer with the skills necessary to assess objective-based compliance;

- Each day, a list of new applications requiring examination are printed from MAP in order of due date, and compiled in a tracking book. The Examiners use this book to prioritize their work, each taking the next file on the list and initialling next to the file name. This helps to ensure that legislated time frames will be met, each file is reviewed, and accountability enforced. Smaller residential files, including decks, sheds, porches etc., are reviewed by students with oversight by qualified Examiners;
- We understand that considerable effort is being devoted to achieving compliance to prescribed timeframes with respect to permit applications; however, reporting on performance measures is not currently available to assess the actual level of compliance. See Audit Objective #3 - Performance Monitoring and Reporting (Audit Criteria - Performance measurement);
- The level of effort invested in plan review and inspection activities is determined by the Branch, with a view to managing the risks involved, e.g. devoting the maximum effort where there is the highest risk. While it is clear that risk management is not a specific component of the OBC, it is an overarching theme for the required revisions to the Code and a key consideration in decision making within the Branch. However, BSB's current risk management strategy is outdated. The risk management strategy was last addressed in the 1999 risk assessment conducted for the former City of Ottawa, which included specific established operational policy statements, but has not been updated since amalgamation and, more importantly, since the new Building Code Act provisions took effect;
- Currently, policies and procedures are not in place for the use and approval of equivalents. Further, mechanisms for considering precedents and decisions made related to approvals of equivalents are not documented;
- An overall policy statement has not been formally established and approved by Council which documents BSB's responsibility for enforcement of the Act related to permit applications, specifically the application-taking process, legislated timeframes, and related service levels to assess performance;
- Although not mandatory per the OBC, policies and procedures for the Legal & Service Integration Division have not been formally documented.

Criteria - The inspection process is consistent with the OBC, municipal policies, and standard of care

- Under the OBC, there is a requirement for the municipality to conduct a minimum of 10 mandatory inspections for residential construction;
- The following table describes these inspections in more detail:

Inspection	Description
Lateral Inspection	Prior to backfill of sanitary and storm sewers and water service.
	Your Building Official does not perform the lateral sewers and water service inspections.
	These inspections may be arranged by contacting the following: East of the Rideau River (Canal) Debbie Mills 613-580-2424 ext. 44148 West of the Rideau River (Canal) Kathy Kreuk 613-580-2424 ext. 33246
Excavation Inspection	Required prior to placement of concrete footings. A supplementary geotechnical soils report confirming soil-bearing capacity must be submitted to the Building Official for all new dwelling units.
Plumbing - Underground Inspection	Required prior to covering underground plumbing. (Test required - direct to where available)
Foundation Inspection	Required prior to backfill of foundation.
Plumbing - Rough-In Inspection	Required at completion of plumbing rough-in, which includes drains, waste, vent and water piping system. (Test Required - direct to where available)
Framing and Mechanical Rough-In Inspection	Required at completion of structural framing, stairs, including components of fire separation and fire stopping. Completion of rough-in for electrical system, fireplace, ductwork for heating, ventilation and air conditioning. Exterior of building must be weather proofed. A copy of the as-built survey plan should be provided to the Building Official at this stage.
Insulation/Vapour Barrier Inspection	Required at completion of insulation, air barrier and vapour barrier installation.
Plumbing - Final Inspection	Required at completion of plumbing system, fixtures and appliances. (Test required)
Occupancy Inspection	A person may occupy a dwelling that has not been fully completed provided an Occupancy Permit for a partially completed building has been issued by the Building Official. To be eligible there must be no outstanding Building Code Orders and certain building components and systems must be complete and inspected under Articles 2.4.3.1. or 2.4.3.2.
Final Inspection	Required at completion of the building. Final Occupancy Permit for a fully completed building will be issued by the Building Official.

- Building Inspections has compiled a handbook entitled “Policies, Guidelines and Standards” which serves as a guide for all Inspectors to ensure consistency and thoroughness in the conduct of inspections;
- BSB has adopted some innovative practices with respect to the inspection process,

resulting from effective consultation with clients. The Branch endeavours to meet all inspection requests within 24 hours, and employs a refundable inspection fee system, with penalties for clients who request inspections before they are in fact ready for the inspection. This approach reduces the likelihood of premature inspection requests, which can waste considerable inspector time;

- Although it is our understanding that prescribed timeframes with respect to building inspections are being met, reporting on performance measures is not currently available to assess the actual level of compliance. See Audit Objective #3 - Performance Monitoring and Reporting (Audit Criteria - Performance measurement) for related discussion;
- In order to meet the targeted timeframes for all inspections with current staffing levels, inspectors may be conducting more inspections in a day than is desirable during peak periods. Inspectors are working overtime in their efforts to complete all inspections, resulting in some staff requiring stress leave. This may affect the quality of the service and increase the risk of litigation;
- The chart below summarizes inspection activity for 2004-2006 (to the time of the audit):

	2004	2005	2006 (9 mos)
Total Inspections	82,759	79,944	61,240
By Active Inspectors *	82,655	79,836	61,103
Inspector FTEs	55.5	48	44
Inspections per Day	6.9	7.7	8.6
Inspections By Full Year Employees **	77,034	75,480	57,493
Full Year Employees	49	44	40
Inspections per Day	7.3	8.0	8.9

* Excludes individuals who performed fewer than 100 inspections

** Excludes summer students, new or departing employees

Criteria - Permit fees and charges meet legislative parameters

- Building Permit fees are legislated and outlined in the Building By-law;
- Permit fees and charges are set so as not to exceed the anticipated reasonable costs of administering and enforcing the Building Code Act. Any surpluses are transferred to reserve funds to protect against shortfalls in future years. See Audit Objective #2 - Financial Management Practices and Processes for related discussion;
- Changes in fees are discussed with industry representatives, communicated at industry association meetings, and updated on the City's website;
- There is a new requirement for the production and publication of an annual fee

report outlining the fees and costs of administering and enforcing the *Building Code Act* to be issued within three months after the end of each fiscal year. The collection of data, preparation of the report, and mechanisms for tracking requests for the report are currently being developed. BSB expects to meet the reporting deadline.

6.1.4 Risks

- Significant changes in BSB's structure and operations, coupled with changes in legislative requirements and relevant case law related to the Building Code in recent years, should be considered in managing and mitigating risk. Risks may be approached differently by different staff, which could result in unnecessary exposure to lawsuits and damage claims;
- Since the new legislation came into effect, BSB's focus has been on developing a new service delivery model and meeting the requirements of the amended Building Code Act;
- In the absence of a current risk management policy, or current guidelines and standards for plan reviews, there is a risk of inconsistency in the application of procedures;
- The lack of documented policies and procedures related to the use of equivalents may lead to inefficiencies in planning and workload, should an increase in equivalencies occur. Although there have been few requirements for the use of equivalents to date, this may become more significant with the introduction of objective-based codes in the near future. Decisions may be inconsistent and efficiency may be lost due to the lack of documentation to consider precedents;
- There is a risk of changing case law, with the impacts to become more apparent in future years.

6.1.5 Benchmarking

- The application-taking process is weak in many municipalities. London is experiencing about 80% completion rates with a red flag sent to the Manager for Permit Applications for applications that are past due the 10-day turnaround times. In Mississauga only approximately 20% of applications are complete, due to the complexity of the projects resulting in more sequential permits as they are experiencing a surge in condominium housing. Partial permits are the norm for 80% of the applications received by the department;
- There is a duty for a permit holder to notify the Chief Building Official about readiness for certain stages of construction to enable inspection of the construction by the Inspector, and it is mandatory for a municipality to complete every inspection for which it is notified. London and Mississauga have adopted a policy of attending every site inspection for which they have received proper notification. London has implemented a 48-hour turnaround time for mandatory inspections. An Inspector can complete about 8 to 10 inspections per day; therefore staff experience a backlog

during the peak season which is covered by overtime. To deal with this requirement, the department has a large overtime budget allocation and has been given carte-blanche with respect to the use and level of overtime. London's by-laws include a 100% surcharge of permit fees if construction commenced within 15 days of the application. Mississauga has employed a 48-hour turnaround time for mandatory inspections for many years. They are currently coping with the work load, although increasing in-fill development poses some challenges. However, they do not anticipate an increase in staff at this time. They have used practice manuals to promote uniformity and timeliness.

Recommendation 1

That BSB formally review, assess, prioritize, and document its significant risks, revise the risk management strategy, and ensure staff are trained in the risk management strategy once adopted. A risk assessment should be conducted more frequently, particularly when there is significant policy, legislative, regulatory, and/or court decision related changes. The risk management strategy should include revised operational policies for the enforcement of the Act in the areas of inspections and permit approvals, and be developed in consultation with Legal Services.

Management Response

Management agrees with this recommendation.

A formal review of the Risk Management Policy is scheduled for 2007 following the implementation of both the Building Code Statute Law Amendment Act, referred to as Bill 124 (January 1, 2006) and the new Building Code with the objective based code format (January 1, 2007). The updating of the Branch's operational policies, procedures and guidelines will follow suit as will risk management training of Branch staff. It is anticipated that these activities will be completed in Q4 2008.

Recommendation 2

That BSB consider documenting its policies and procedures for key activities within the Legal and Service Integration Division.

Management Response

Management agrees with this recommendation. Particular focus will be made on completing the documentation of those policies and procedures that are related to servicing building permits and the enforcement of the Building Code Act and Code. The process mapping of Legal and Service Integration has been largely completed and policies and procedures are being documented/developed. This is a work-in-progress as resources have been dedicated firstly to mandatory activities, that of servicing building permits and enforcing the Building Code Act and the Code. This initiative will be completed by Q1 2009.

6.2 Audit Objective #2 - Determine whether financial management practices and policies are in place

6.2.1 Background

As part of its mandate, BSB is required to charge fees that correspond to its costs related to building code enforcement. Therefore it is expected that BSB will recover its costs to sustain operations. Expenditures are largely related to staffing costs, and are essentially fixed in the short term. However, revenues are variable and affected by external and other cyclical factors which the Branch does not control, or even influence.

In 2005, in order to address these concerns and meet its financial obligations, three separate reserve funds were established to deal with capital purchases, protection against litigation, and revenue stabilization. Although the Building Code Act is silent on a requirement for reserve funds, the OBC states that if a reserve fund has been established, then the amount of the fund at the end of the year must be reported in an annual report on fees. The reserve funds are for the sole use of BSB and have a current aggregated total of approximately \$2.2 million.

6.2.2 Audit Criteria

- Procedures are in place to ensure that fees for applications are correctly calculated and charged; and
- Financial performance is appropriately budgeted and monitored and expenditures are adjusted where required.

6.2.3 Observations

Criteria - Policies and procedures are in place to ensure that fees for applications are correctly calculated and charged

- MAP automatically calculates fees based on the value of construction and/or the square footage. The value of construction is reviewed by the Plans Examiner and adjusted if necessary; and
- Procedures appear to be in place for permit applications to assist in ensuring that fees, development charges, levies, and refunds, where applicable, are correctly calculated and charged.

Criteria - Financial performance is appropriately budgeted and monitored and expenditures are adjusted where required

- The budgeting process appears to be timely and adequately supported. BSB requests assistance from Finance in analyzing financial reports and budget development. Actual revenues and expenses are monitored throughout the year; and
- Expenditure adjustment is difficult due to the limited ability to significantly reduce

major expenditures such as salaries and benefits; however, the reserve funds provide some protection for BSB in the event of declining volumes, and/or litigation.

6.2.4 Risks

- It is highly likely that BSB will incur a deficit when volumes decline. Given the inadequate supply of human resources, there is a real risk of significantly decreasing expenditures (such as reducing BSB's staff complement) when faced with declining volumes, which may be short term;
- BSB's operating budget is approximately \$11 million, however current balances in the reserve funds are inadequate to sustain current operating costs for a significant period of time;
- The courts may impose significant costs against the City as a result of litigation due to joint and several liability; and
- Significant costs related to litigation, or the need to apply the reserve funds to support a deficit position in the short term would create a financial strain on BSB, and may require the City to contribute unbudgeted funds.

6.2.5 Benchmarking

- London has adopted a policy of maintaining 50% of its operating budget as a reserve fund. Based on past years' experience, they do not anticipate a drop in revenue such that revenues will fall beyond the reserve fund of 50%. London has not established any other reserve funds. Mississauga maintains reserve funds for equalization, training and information technology, and development workload. The Building Division has an annual operating budget of \$8 million; the "fully loaded cost" including costs borne by other departments is about \$12.5 million per year.

Recommendation 3

That management consider options that focus on building the reserve funds as rapidly as possible.

Management Response

Management agrees with this recommendation. In the report to Council entitled: Building Regulatory Changes - Impact of Building Code Statute Law Amendment Act and Ontario Regulation 305/03 (ACS2005-PGM-BLD-0010), Branch Management proposed to maintain the building permit fee rate (\$13.50 per \$1000 in construction value) to enable an accelerated rate of contribution over the next five years of surplus revenues into the reserve funds. At 2005 year end, \$2.2 M in surplus revenues were allocated to the reserve funds. For 2006 year end, a higher contribution will be possible due to higher than expected vacancies and lower outsourcing costs.

Recommendation 4

That management maintain a log of outstanding litigation claims that could lead to damages awarded against the City and track the likely exposure to these claims against the reserve fund balance.

Management Response

Management agrees with this recommendation. This will be pursued following the updating and adoption of the Risk Management Policy. This initiative will be completed by Q4 2008.

6.3 Audit Objective #3 - Determine whether performance monitoring and reporting are in place to assess the economy, effectiveness and efficiency of current operations.

6.3.1 Background

The new Building Code legislation has recognized performance measurement as a useful management tool and has incorporated several quantitative indicators as part of its requirements. Concurrent with the revised legislation is the Ontario Municipal Benchmarking Initiative (OMBI), in which the City of Ottawa is currently participating. The objective is to identify and develop appropriate performance measures, capture performance data, and analyze and benchmark results, in order to identify best practices in Ontario municipalities. To date, OMBI has focused on reporting the volume of permits and construction activity pending the development of appropriate performance measures. BSB has addressed some Building Code requirements related to performance measures by capturing data on timeframes, but has mainly focused its efforts on developing the new service delivery model and meeting other key requirements of the revised Building Code Act.

The new legislated timeframes and other requirements for the issuance of building permits and related inspections have necessitated an increase in staffing levels. In the past, BSB relied on the services of contractors during peak periods, however, legislated requirements related to certification and insurance have reduced the availability of these qualified contractors. Similarly, BSB also previously enlisted the use of retired, former BSB employees, which again, due to the new qualification requirements, is no longer an option. In addition, there is competition from the construction industry, which also requires the same qualifications to prepare building permit applications, resulting in further difficulties with external recruitment.

The pay scale for Inspectors and Examiners appears to be a factor in deterring potential internal candidates from applying for positions within BSB. Added to this difficulty is the significant number of experienced staff that retired since amalgamation and those that are expected to retire in 2008.

6.3.2 Audit Criteria

- Performance is measured to desired outcomes and the results are used to improve operations;
- Building Services effectively serves its clients; and
- Operations are efficient and effective.

6.3.3 Observations

Criteria - Performance is measured to desired outcomes and the results are used to improve operations

- Automated tools are under development that will enable management in BSB to access statistical data and reporting needed for performance measurement and more informed decision making;
- Data is being captured on building permit volumes and related value of construction activities, and there are systems in place to capture data on time frames as required by the new legislation. However, reporting on efficiency and effectiveness relative to legislative timeframes is currently not available. See Audit Objective #1 – Compliance with the OBC (Audit Criteria – Permit Review Process Meets Appropriate Standard of Care and the Inspection Process is Consistent with the OBC, Municipal Policies, and Standard of Care) for related discussion; and
- Performance appraisals are not conducted regularly for all non-management staff, only where a program has been formally implemented corporate-wide.

Criteria - Building Services effectively serves its clients

- Service streams are targeted to customer needs and geographic area. There are seven Client Service Centres strategically situated throughout the City, including rural locations, all of which are able to accept permit applications;
- Complementary to their work for BSB, some Building Officials sit on the executive of relevant industry associations and their attendance at industry meetings ensures that frequent users receive timely notice of changes to services or requirements;
- Customer complaints received via a Councillor's office are reviewed and followed up with the Councillor directly and there is a process in place to handle other customer complaints;
- BSB has assumed responsibility from the Client Services and Public Information Division for answering queries from the public, with the establishment of a direct e-mail address to a dedicated BSB staff member, accessible to the public through the City's website. This change results in BSB's ability to assess common information required by the public and establish "templates" for frequently asked questions to ensure consistency of information;
- The BSB dedicated staff member drafts a response to member queries received via the website. All responses are first reviewed by the Manager, Legal & Service

Integration and then by the Director, Building Services Branch; and

- Information on the services provided by BSB and applicable requirements are made available to the public and occasional users. BSB's website includes information on requirements for permit applications and related fees and includes links to relevant by-laws. The website informs the public of the new legislated requirements regarding qualifications for planning and designers. As well, informative brochures are available at Client Service Centres. However, the website does not provide the legislated timeframes to which BSB must comply, nor does it state BSB's service levels related to each of the prescribed timeframes.

Criteria - Operations are efficient and effective

- There have recently been shifts and improvements in processes such as: the re-assignment of Technical Clerks to provide client service at the front counters in order to offer more specialized services; transfer of the Property Standards function to the By-Law Services Branch from BSB; and a shift in responsibility for the cashier function from Client Service Centres to BSB at two of the seven satellite offices - Ben Franklin Place and Centrum;
- BSB has implemented the use of a deposit or "Refundable Inspection Fee" payable at time of permit application. The deposit is drawn down at the discretion of the Building Inspector if the client causes undue inefficiencies in the inspection process (e.g. calls for an inspection too early). This has improved efficiency in the inspection process;
- A range of training programs appear to be in place for new and existing staff;
- BSB has been proactive in creating solutions to increase efficiencies. For example, a fax machine has been supplied to Planning and Infrastructure Approvals, dedicated to BSB, in order to reduce the time taken for the permit application and examination process;
- A project is currently underway to review and analyze business processes to maximize efficiency and further improve operations relative to the revised Building Code Act. For example, MAP will be enhanced so that once the deadline has passed for an order to comply, an automated message will be sent to the Inspector querying whether to proceed with prosecution or a follow-up letter;
- There are several long-term employees within BSB with significant corporate knowledge who clearly understand their tasks and tasks of others because of their familiarity with the procedures and actions; however, some policies and related procedures are not documented. See Audit Objective #1 - Compliance with the OBC (Audit Criteria - Permit Review Process Meets Appropriate Standard of Care and the Inspection Process is Consistent with the OBC, municipal policies, and standard of care) for related discussion;
- Insufficient resources exist within BSB to continue to effectively manage workload,

with vacancies of approximately 42 full-time positions. BSB is experiencing difficulty in recruiting individuals who meet the new legislated qualifications, with the relevant experience required and it does not appear that BSB has developed and documented its strategy to mitigate recruitment and retention risks; and

- Considerable effort has gone into developing effective interfaces between BSB and the other branches and services with which it deals, particularly By-Law Services and Planning and Infrastructure Approvals, however, these procedures have not been well documented.

6.3.4 Risks

- Significant corporate knowledge is not readily transferable, and with the pending retirement of a significant number of experienced BSB staff in 2008, may be lost;
- Performance measures are not in place to identify performance gaps relative to legislative requirements;
- Changes in levels of customer satisfaction may not be detected;
- Staff are overburdened which has resulted in some staff required to take stress leave, further exacerbating the situation;
- With the challenges in recruiting qualified staff, BSB has found it necessary to offer mentoring and apprenticeship programs leading to a longer staff developmental process, which increases the time before a new employee is ready to assume their role independently and potential for higher costs in the longer term;
- Unless the staffing challenges are addressed:
 - BSB may not be able to meet its operational needs efficiently and effectively in the short term;
 - BSB management may not be able to devote the time required to deal with forward focused projects and analyses of operations;
 - BSB may not be able to meet legislative requirements and/or adequately manage risk;
- During peak periods, Inspectors may be carrying out more inspections per day than management believes is desirable. At these times, Inspectors focus on completing only the mandatory inspections and ignore peripheral issues or other lower priority requests for service;
- Lack of proper documentation of roles and responsibilities may result in incomplete inspections, duplication of effort, and/or poor client service delivery; and
- BSB may not be able to develop appropriate performance measurement in a timely manner with limited availability of skilled resources.

6.3.5 Benchmarking

- London's building permit application process has been redesigned. For ICI (industrial, commercial and institutional) and other large projects, all applications

are taken by experienced plan examiners, in a private meeting room near the front counter. Typically, this staff person is an Architectural Technologist and is the person most likely to be the designated plan examiner for that particular application. This has dramatically improved customer relations and performance on turnaround times, and also facilitated the use of sequential permits for large projects. London maintains an extensive set of check lists for the intake of applications and plans examination for all classes of permits. The development pattern in Mississauga is undergoing significant transformation, namely from green field development to more in-fill development. At the present time, staffing the front counter with more senior staff is a challenge that is being addressed. All of the applications are tracked on the in-house developed system and permit applicants can access the "Application Status Reports" via the Internet with special passwords;

- London's performance measurement system has improved as a result of changes required by the Building Code Act. London maintains weekly charts showing turnaround time for permits, which is also publicly displayed. Mississauga has updated their "MAX System" to provide performance measurement information as a result of changes to the Building Code Act. They maintain weekly graphs showing turnaround time for permits, status report letters, and zoning certificates, which are widely available to staff and at the counter. For March 2006, Mississauga achieved turnaround times of 3.5 to 6.1 weeks for residential permits depending upon complexity;
- London has hired two new staff from the private sector in the past year and have not experienced any difficulty in recruitment as they have access to well educated staff from the local college. In addition, many of the construction personnel in private practice are also better trained as other trades and industry associations have escalated training opportunities for their staff. London is continuously changing its business practices. Some of the recent initiatives are as follows:
 - Three-day permits - Premium fee for expedited service for single & semi-detached houses;
 - On line plumbing permits - for licensed plumbers only and is limited to residential repairs and installations that do not require plans. Payment by credit card is accepted;
 - On-line permits for decks and small renovations - Extensive use of standard practice sheets. Customers may e-mail the plans with their permit application, which are red-lined by staff where required. Approved permits are e-mailed to the applicant;
 - The use of electronic document management and storage software which receives plans from surveyors and designers, and scans them as permits are issued. This enables inspectors to download them to pen tablet computers;
 - Designated staff undertake plan examination for "Downtown/East" and provide pre-application consultation on OBC requirements;

- Plan/Building Inspectors are rotated with Plan Examination, Inspection and Property Standard positions for cross-training. Similarly, Building Plan Examiners are trained to undertake zoning approvals for small projects to provide a “one stop” service.
- Mississauga’s MAX system was originally devised for the Building Department by Mississauga IT staff, and has since been extended to all property related functions. They have a web-based portal for live updates, which enables compliance letters to be generated. Title insurance has reduced the volume of compliance letters. They do not issue “field cards” to inspectors. This system is based on Oracle software; however, this platform will not be supported by Oracle in the near future and they are looking at alternatives. Mississauga is devoting much effort to web-based interaction with clients. They offer an e-plan build service on the web which includes: application status, development application status; schedule inspection; purchase compliance report, and purchase tax certificate. Although they run in-house training seminars and study groups on a regular basis and have a training budget of \$400 per year per person, cross-training of staff and the intake application process are areas that continue to require more attention.

Recommendation 5

That BSB focus on developing a suite of performance measures that cover outcomes related to legislative compliance, customer service, efficiency and effectiveness, and on developing the capacity to report on these measures, with results of these measures posted in public areas. While BSB should continue to work with Information Technology Services in this regard, it should also strengthen its internal ability and capacity to query and report on data within MAP.

Management Response

Management agrees with this recommendation.

In tandem with the development and implementation of the new business processes as a result of Bill 124 and the changes made to MAP (the City’s computerized management information system), Branch management is developing the capacity to report on the Branch’s performance with respect to the mandatory turnaround times and other services and activities. ITS Project 1085 – Building Services Performance is near completion and will provide reporting data on the Branch’s performance vis-à-vis the mandatory turnaround times for decisions. This project is scheduled for Q1 2007 to coincide with the annual OMBI reporting timeframe and the first Annual Report to be issued by the Branch in accordance with the Building Code Act, on April 1, 2007.

Tracking the performance of inspections vis-à-vis the mandatory timeframe requires the development and implementation of remote technology and further MAP enhancements, the subject of Recommendation 8 (below).

Recommendation 6

That BSB develop and continue to evolve plans for effective use of technology, including portable devices and e-based application processing, consistent with evolving technologies.

Management Response

Management agrees with this recommendation. In 2003, the Branch undertook a business process analysis of Branch procedures and activities related to servicing building permits and enforcing the Building Code Act and Building Code. The assessment provided for the establishment of the Foundation Project, whereby process changes and MAP enhancements were identified that would streamline processes and enable the implementation of the Building Code Statute Law Amendment Act. The Foundation Project has served as a blueprint for a number of IT Projects, which have been underway since 2004. As technology evolves, BSB will review, assess (business case), test/pilot new technologies to determine their suitability in enhancing the Branch's effectiveness in meeting the legislative responsibilities and increasing efficiencies.

Recommendation 7

That BSB develop a human resources plan to deal with difficulties experienced in recruitment and retention of individuals qualified under the new Building Code Act. In addition, the human resources plan should include formal succession planning initiatives for the management team, and ongoing staff training initiatives with opportunities for continuing education and cross-training, including improving the technical knowledge of objective-based codes at all levels.

Management Response

Management agrees with this recommendation. Funding has been earmarked for core competency training of the Building Officials to expand their knowledge base and to ensure cover off and progression/succession. Due to recruitment difficulties and the new legislated requirements for qualifications, a Building Official Internship Program has been developed. Specific components of the program will be submitted to the Province for review and approval. The Branch will identify and allocate resources in 2007 for the development of a Human Resources Plan and will continue to work with Employee Services in developing a succession plan and strategies for addressing recruitment difficulties. Completion of the Human Resources Plan, including a succession plan and strategies will be in Q2 2008.

Recommendation 8

That BSB consider improving its human resource and information technology skills set and experience with the recruitment of the two new positions within the Legal & Service Integration Division.

Management Response

Management agrees with this recommendation. Recommended resourcing relates to above Recommendations 6 and 7. A report on the establishment of two new operational support positions will be presented to Council Q2 2007 and recruitment will follow thereafter. Funding from building permit revenues is available to offset such additional costs as computers, compensation and accommodation.

Recommendation 9

To improve customer service, the Client Service Centres should be provided complete and accurate information on BSB activities on a regular basis. BSB should consider conducting periodic customer satisfaction surveys to obtain feedback to improve the effectiveness of service delivery through the identification of problem areas

Management Response

Management agrees with this recommendation. Customer satisfaction surveys targeted to building permit applicants will be undertaken with the assistance of the Client Services and Public Information Branch, commencing Q3 2007.

Recommendation 10

BSB should clearly identify and document the interfaces, relationships, processes, and activities that are co-ordinated between BSB, By-Law Services, and Planning and Infrastructure Approvals Branch.

Management Response

Management agrees with this recommendation. This initiative will be completed Q4 2009

General Management Comments:

- Branch operations, including Branch business processes and service delivery model, are defined by legislation and regulations determined by the Province. Since amalgamation, and more so commencing July 1, 2005, the Branch has weathered a number of significant changes to its operational paradigm, whilst continuing to service building permits and enforce the Building Code Act (BCA) and the Ontario Building Code (OBC). This challenge continued into 2006 due to further changes to the Act and the OBC, some changes introduced at the final hour prior to the legislation taking effect.
- Late 2004 and most of 2005, the Branch focused its resources in ensuring building officials (plans examiners, building code inspectors, the Chief Building Official and management) obtained the required training, wrote and passed the Provincial exams and established their qualifications per the new legislation. Delays were encountered as the Province, responsible for the training, testing

and certification documentation, had not anticipated the volume of work (35,000 practitioners had to establish their qualifications). This effort was significant in that it coincided with continued peak workloads generated by the construction industry.

- Resources were and continue to be constrained within the Branch and in such support areas as ITS and ES. Although new FTEs were established in Building Services Branch in 2005 to address the new service delivery model necessitated by the new legislation, the Branch has experienced difficulties in recruiting qualified building officials. As a result, not all the required changes to the business processes and service delivery model could be addressed prior to January 1, 2006 and hence, Branch Management set priorities in line with the Branch's mandatory workloads (plan review, issuance of permits, inspections and enforcement), with other priorities, such as documentation and performance monitoring/reporting to be addressed at a later stage, later on in 2006 and in 2007.
- Training and development of Building Officials is comprehensive and now that the Building Officials have completed the qualification process pursuant to Bill 124, core competency training will resume in 2007.
- Branch Management determined that the risks associated with the enforcement of the Building Code had not changed substantially since 1999 when the former City of Ottawa adopted the Risk Management Policy, nor would exposure to risk significantly decrease as a result of the recent changes to the regulatory scheme. Specifically, a shift or a sharing of risk between municipalities and the industry has not materialized. A true shift would require that municipalities not be held jointly and severally liable along with the other stakeholders for defects and deficiencies not identified through the municipality's Code inspection program. What the amendments to the Act has done is require "designers" to obtain and demonstrate minimum building code knowledge as a first step in supporting a speedier review of permit applications within the mandatory timeframes. In view of the above, the 1999 Policy was adopted as an operational framework for setting up the new Branch at amalgamation.
- Management also recognized that the new Building Code with its objective based code format would likely result in some expansion of risk exposure, and thus the review and update of the Risk Management Policy was scheduled to follow the introduction of the new Code and the implementation of the new business processes related to Bill 124.
- Operational policies and procedures are in place for Building Officials, although as noted above, these require to be updated following the updating of the Branch's Risk Management Policy. Branch Management has recognized the need for updating the Risk Management Policy and the operational policies and

procedures and has slated this task in 2007.

- As noted in the Audit observations, there is a great reliance on the computerized information management system (MAP) that tracks building permit applications and that will eventually track inspections to the same degree. Delays in the development of enhanced applications and tools to assist in evaluating performance have been largely due to the lack of resource capability both with Information Technology Services (ITS) and within the Building Services Branch. Branch Management established some in-house capacity to address some of the workloads and more recently, due to the establishment of the reserve funds, has been able to finance additional resources in ITS to fast track the development and implementation of an e-service application that will support the Branch in meeting the mandatory timeframes consistently while providing an enhanced service to the industry. ITS' inability to provide the desired service levels has not been due to lack of quality service but rather due to lack of resources and the specialized knowledge base of MAP.
- Similarly, the difficulties encountered in developing and implementing a comprehensive human resources plan have been largely due to the lack of resource capability both with Employee Services and within the Building Services Branch itself. Although some progress has been made, as evidenced by the recent establishment of the Building Official Internship Program, assistance is required to address the causes for the recruitment difficulties experienced in attracting experienced and qualified Building Officials (Plan examiners and Building Code Inspectors) and the additional workloads associated with recruiting, training and development, performance tracking, succession planning, etc., which represent higher than normal resource requirement that cannot be met by ES, the centre of expertise.
- Performance appraisals are regularly conducted with staff where a corporate process has been established in line with the respective collective agreement. Branch Management does undertake formal performance reviews with staff on an as required basis. Informal and on-going reviews are being undertaken with staff as a result of Branch Management's strategy of ensuring all Building Officials were trained and had successfully passed the Provincial exams by January 1, 2006, as required by Bill 124. In addition, a detailed matrix for monitoring and evaluating the Interns as they undertake the in-house training program has been developed as a means of tracking performance and providing valuable feed back to the Interns. Formal appraisals of all staff will commence following the completion of the update of Branch operational policies, procedures and standards.
- As noted above, Building Code Inspector workloads do spike at certain times of the year and these spikes present significant challenges for the Branch. However, the quality of the inspections is not impacted by the heavy workloads,

rather it is the handling of peripheral issues that is impacted. Concerns, such as those expressed by a neighbour regarding in-fill construction or disputes between the homeowner and the builder/contractor cannot be effectively addressed or responded to as the Inspector's time is constrained. During these spikes, the Building Officials have no choice but to focus on mandatory and legislated work only, which although addresses the City's mandate vis a vis the Act, does not address the concerns of the community or homeowner.

In conclusion:

- Branch Management has been in much of a reactive role since amalgamation and particularly since 2004. Notwithstanding, its focus has been to, first and foremost, undertake plan reviews, issue building permits, inspect construction and enforce the Ontario Building Code, while addressing the new mandatory requirements. The new legislation required a wholesale change to the majority of the Branch's business processes and these changes were reflected in a report presented to City Council on June 22, 2005.
- Going forward, Branch Management has identified a number of initiatives that will address the Audit report recommendations and has obtained and allocated additional resources to update and expand MAP and other management systems that will support the monitoring, measurement and reporting of performance.
- With respect to benchmarking with other municipalities, the Branch Director/Chief Building Official and the Deputy Chief Building Officials meet twice yearly with other Chief and Deputy Chief Building Officials to compare practices, procedures, discuss issues and challenges and explore best practices. In a number of areas, the Branch's operational policies are similar to those of the benchmarked municipalities.

7 CONCLUSION

Since 2004, the Building Services Branch has been focusing its efforts on meeting the new provisions of the Act, in particular with respect to requirements for certification and training of staff. Innovative approaches such as refundable inspection fees have been well received and should improve operational efficiency for inspections and client services going forward.

There is a need to enhance the Branch's ability to monitor its compliance to the timelines established by the Act regarding permit issuance and inspections. Although the Act requires a 48-hour turnaround on inspections, the Branch has established an internal target of conducting inspections within 24 hours of the request. However, the Branch currently does not have an effective mechanism to track actual performance against the target or the legislative timelines.

Our analysis indicates that the decision as to whether a permit can be issued or not is for the most part made within required timelines. However, as with inspections, the Branch currently cannot generate reports to track compliance for permits.

The requirements of the new legislation regarding qualifications have created challenges in recruiting sufficient and adequate resources. Other Ontario municipalities appear to have had more success in this regard. A comprehensive human resources strategy is required at the City of Ottawa in order to ensure these challenges are addressed in a timely manner.

Finally, the nature of building permits and inspections processes requires that all municipalities have an effective risk assessment and strategy in order to demonstrate an adequate level of oversight on construction activities. The City's risk assessment in this area requires updating (and regular re-assessment) to ensure risks are adequately managed. The updating of the risk management strategy will necessitate developing policies and guidelines for both permit approvals and inspection. Once updated, the City's risk strategy should be presented to Council for approval.

8 ACKNOWLEDGEMENT

We wish to express our appreciation for the cooperation and assistance afforded the audit team by Management.

Appendix A - Documentation Reviewed

<p>Applicable legislation and relevant bylaws</p>	<p>OBC Report to Council on Impact of Building Code Statute Law Amendment Act & Ontario Regulation 305/03 Building By-law - By-law No. 2005-303 Compliance Reports - By-law 2003-69, By-law No. 2005-81, and By-law No. 2006-22 Other Fees and Charges - By-law No. 2003-204, By-law No. 2005-114, and By-law No. 2006-20 Building Code Enforcement Capital Contributions Reserve Fund - by-law No. 2006-2 Building Code Enforcement Insurance Reserve Fund - By-law No. 2006-3 Building Code Enforcement Revenue Stabilization Reserve Fund - By-law No. 2006-4 Records Retention - By-law No. 2003-527, By-law No. 2005-507. Pool Enclosure - By-law No. 2001-259, By-law No. 2003-202 ,and By-law No. 2003-462 Permanent Signs By-law - By-law No. 2005-439, By-law No. 2006-21 Civic Addressing - By-law No. 2005-322 Delegation of Authority By-law No. 2005-503</p>
<p>BSB plans, frameworks, policies, procedures, flowcharts</p>	<p>Organizational charts Code of conduct June 1999 Risk Management Report Permit Approvals Exam Spreadsheet Building Inspections Exam Spreadsheet Job descriptions and job postings Policy manual – building inspections Permit application forms Service level agreement - Client Service Centre & Development Services Dept. Agency letter process Process flow charts - pool enclosures</p>

Financial Data and Analyses	2006-2009 City of Ottawa corporate plan Budget and variance analysis - fiscal years 2004 and 2005 Draft operating budget 2006 2005 operating and capital budget BSB budget vs. actual by cost elements 2004-2006 BSB 2005 interim year-end report Bill 124 2005 departmental operating costs (Part Year) BSB Statistics on Permits by Satellite (December 2004) BSB Statistics on Permits by Satellite (December 2005) Building Services Performance Reporting (1085) Project Charter
Other	Ministry of Municipal Affairs and Housing certificate of completion & Advanced Standing Application Form Selected data from ITS Presentation on Level of Service Provided Training Documents used by Client Service Centres Statistics on the number of service requests, information requests 2002-2005, and number of errors processed for 2002