Corporate Report

REGULAR COUNCIL

TO: **Mayor & Council**   DATE: **July 10, 2006**

FROM: **General Manager, Finance, Technology & HR**   FILE: **0250-07**
& Acting General Manager, Planning and
Development

SUBJECT: **2006 Community Excellence Awards (Best Practice Category) – City's Archival**
Records System

RECOMMENDATION

That Council approve the attached application to the Union of B.C. Municipalities' 2006 Community Excellence Awards (Best Practices category) for the development of Surrey's Archival Records System.

INTENT

To obtain the required Council approval for an application to the Union of B.C. Municipalities' 2006 Community Excellence Awards (Best Practices category) for the development of Surrey's Archival Records System.

BACKGROUND

In 2005, the City of Surrey launched a project that involved the implementation of an information system called City's Archival Records System (CARS) for the storage and retrieval of building records and plans. The City's Planning and Development Department has issued a record number of building permits over the last several years. On average, the Department currently issues about 100 building permits per week, generating anywhere from 60 to 100 documents related to each property. About 6,000 to 10,000 separate documents flow through the department's records management system on a weekly basis.

Prior to the implementation of CARS, the process of checking plans and issuing building permits was labour intensive and time consuming. There was a large amount of duplicated manual work required to transpose notations from the original checked drawings onto a second set of drawings for record purposes. Also, the Fire Department relied on a labour intensive digital tracing process to capture commercial drawings into their Computer Aided Dispatch system (CAD).
There was a high risk for error in both of these processes. Additionally, stakeholders (Fire Department and BC Assessment Authority) relied on this information for their own operations.

DISCUSSION

The City of Surrey is applying for the B.C Municipalities Annual Excellence Award under the 'Best Practices' category. A copy of the submission is attached as *Appendix A*. Applications are due July 14, 2006 and must be supported by a resolution from a Municipal Council or Regional Board. The Best Practices category recognizes local governments that have "improved or revised an existing program or service." The implementation of CARS is an excellent example of best practices for a variety of reasons:

- **Efficiency:** It aligns with and supports the City's corporate goal of improving customer service, pursuing operating efficiencies and initiating process improvements. It is the cornerstone for one of Council's key thrusts of expanding e-business;

- **Effectiveness:** Scanning drawings (CARS) instead of manually transposing building plans (old system) reduces the risk of error and provides more reliable information. This also results in reduced turnaround times for the issuance of building permits. The reproduction quality and clarity of the archived documents is significantly increased, over the use of microfiche;

- **Cost-effectiveness:** Since the implementation of CARS, Planning and Development Department has experienced a 50% reduction in plan review and notation processing time. Also, customers costs have been reduced because they are now only required to submit one set of plans instead of two;

- **Accessibility:** Access to the newly archived records is simple, convenient and quick. It is available to staff from their personal computers thus providing efficient archived information at a reduced cost. Fire Department can now access current building plans and import them into their CAD system in less than five minutes, and

- **Flexibility:** The use of digital records provides a definite benefit over microfiched records because it facilitates a broader application in other digital environments such as Word, PowerPoint, Excel or publishing software.

The uniqueness of this implementation is what sets it apart from other enterprise information management system implementations that have been initiated by other organizations. Surrey began with the implementation in one department only. This represents a strategic incremental approach that minimizes the risk and costs, yet offers significant payback potential if successful. The simplicity and effectiveness of this approach has motivated other City departments to adopt the newly introduced technology. Although it started as a departmental initiative, it quickly became an opportunity for a corporate archival solution.

CONCLUSION

The success of this implementation has set the stage for Surrey to expand the archival system corporately. It has created a significant cultural shift in the organization by demonstrating the real benefits of digital records in an effort to move the City towards an enterprise-wide document management system. By applying for this award, the City of Surrey acknowledges that this system is a best practice that is highly applicable and transferable to other small, mid-size and large urban municipalities and urban districts.

Vivienne Wilke, CGA   How Yin Leung
General Manager, Finance,   Acting General Manager,
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UBCM COMMUNITY EXCELLENCE AWARDS

BEST PRACTICES CATEGORY

Planning and Development Department

"City's Archival Records System"

PROJECT OVERVIEW

Already home to 400,000 residents, the City of Surrey is among the fastest-growing municipalities. Such dynamic growth means lots of work for the Planning and Development Department and the Information Technology Division. The City of Surrey's Planning and Development Department, in partnership with the Information Technology Division, has recently implemented an information system for the storage and retrieval of building records and plans. All City departments, government agencies and the public are able to take advantage of this new system. The system is called the "City's Archival Records System" (CARS) and has been enthusiastically received by our staff. The system has drastically reduced the cost, time and effort required to search for and retrieve required data. The system has also reduced processing time and costs for taxpayers associated with building permit applications. Staff and outside agencies have access to the data via their desktop computers.

SUMMARY REPORT

The following summary includes the situation, as it existed prior to the implementation of this system, how the solution was found as well as its benefits.

1.0 Situation

The Planning and Development Department issues 100 building permits per week, generating anywhere from 60 to 100 records related to each property. At a minimum, 6,000 records flow into the departments records management system on a weekly basis.

The CARS project sponsor, Manager of Administration and Special Projects was looking to obtain processing efficiencies and cost reductions within business processes that access building records and drawings. The following process improvement opportunities, information needs and problems were identified:

1.1 Process Efficiencies

The process of checking residential plans and issuing building permits was dependent upon the labour intensive and time consuming transposition of plan checkers' notations from the original checked drawings, onto a second set of drawings for record purposes. Similarly, the Surrey Fire Department relied on a labour intensive and time-consuming digital tracing process to capture commercial drawings into their Computer-aided Dispatch System (CAD). Both of these processes had a high risk of error, thus liability. Additionally, stakeholders such as the Fire Department and the B.C. Assessment Authority rely on this building information for the efficient operation of their processes. For the Fire Department this means the availability of data for preparing fire plans that can directly impact firefighter safety. For the B.C. Assessment Authority it means timely access to building data for property assessment purposes and providing this data in electronic format so it can align with their current and future use of technology to manage data efficiently.

1.2 Access to Building Information

The City's counter staff, planners, building inspectors, customers, file registry staff and various agencies and departments access the City's building records, to view the building activity on a property. This information was stored in microfiche and microfilm format. Access to the information in this format is cumbersome, time consuming and frustrating.   In addition, the quality of microfiche was poor due to excessive handling.   The Planning and Development Department's challenge was to improve access to building records in a cost effective manner.

1.3 Space in File Registry

The limited space in the file registry is required for active records. Archived/history building records needed to be removed to create additional room.

1.4 Benefits to Taxpayers

Timeliness and cost of the building permit approval service has been hampered by the dependence on the paper world. Permit applications required the submission of a double set of plans, which was costly for the applicant, and both of sets needed to be processed, which extended the application turnaround time. The challenge was to reduce the reliance on paper plans and reduce the permit turnaround time through the use of technology.

2.0 Solution

The solution began with a simple request for a large-format scanner recognizing the regulatory ramifications of storing scanned records on a network without a comprehensive records management plan and to address the needs and problems identified, a pilot project to implement digital imaging technology was initiated. The pilot was to focus on the building records of the Planning and Development Department.

2.1 Project Scope

The scope of the project included the following criteria:

- Implement digital imaging technology and document management software;

- Prepare a policy and procedures manual outlining all practices required to capture, store and retrieve building records;

- Obtain acceptance on the manual from the City's Legal Services and Legislative Services Divisions;

- Receive endorsement from the City's Senior Management Team on the use of digital records as a regular and ongoing business practice;

- Implement in-house scanning equipment for residential building plans and select a scanning vendor for all other building records, and

- Train staff in the Planning and Development, By-Laws, Legal and Fire Departments and the B.C. Assessment Authority.
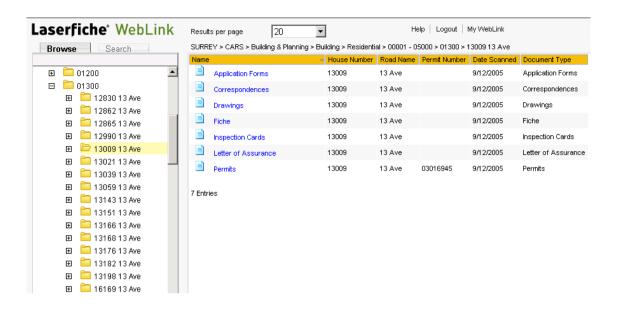
2.2 Process Improvement Opportunities

The project would need to include the following process improvement opportunities:

- Replace micro fiche/film with digital data for archiving City records;

- Achieve process efficiencies through the electronic retrieval of information;

- Create a digital data foundation to which other applications can be added;

- Position the City as a leading-edge paperless organization in the future;

- Reduce the City's potential legal liability by minimizing errors/omissions in processing;

- Support the Fire Department's – Pre-Incident Planning process and increase Firefighter Safety;

- Improve taxpayer service and reduce their costs;

- Offer efficiencies and reduced operating costs to key stakeholder, and

- Set a solid platform and positive stage for the acceptance of new technology.

An electronic system called CARS was delivered for the storage and retrieval of the City's permanent building records.

This system accurately captures building plans submitted with permit applications. The City now uses both in-house and outsourced scanning technology to capture building records into a searchable Laser-fiche repository. Authorized users then can access documents (plans, application form, correspondence, etc.) from their computers using a Web-browser interface to search for civic address or words in the full-text record.

The system has reduced potential liability by eliminating error potential inherent in the old manual copying process. It has also reduced the on-going costs of maintaining and searching manual files and fiche. Many of the original project goals outlined prior to the implementation have been exceeded. CARS has achieved an award winning level of success as demonstrated by the City's receipt of the British Columbia Public Sector Technology Award.

3.0 Excellence

The uniqueness of the implementation of CARS is the organizational context in which it was initiated. Over the past decade, the city had struck several committees to pursue an enterprise information management solution without success. Due to the magnitude of the scope and cost of such an initiative, no sponsor was willing to come forward. This project is worthy of consideration for this award because it represents a strategic incremental pilot project approach that minimized risks and cost, yet offered significant payback potential if successful. The approach was simple yet the effectiveness has motivated other City Departments to adopt the newly introduced technology. Although this initiative began as a departmental proposal, it quickly became an opportunity for a corporate archival solution. Its success has become a positive impetus and continues to be a strong driving force in expediting the pursuit of an enterprise information management decision.

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CRITERIA FOR EVALUATING THE EXCELLENCE IN BEST PRACTICES

The following criteria are required for evaluating excellence in 'Best Practices':

1.0 Improved Efficiency, Effectiveness and Cost-Effective Solution

The CARS initiative was a very successful pilot. The project not only met all of the goals initially set, but exceeded some goals to provide an extremely high degree of benefit to clients and taxpayers. Specifically, improvements in processes produced benefits and cost savings to internal and external customers. The following outlines some of the impacts of the project:

1.1   Improved Efficiency and Effectiveness

The CARS program aligns with and supports the city's corporate goal of improving customer service, pursuing operating efficiencies and implementing process improvements. It is the cornerstone for one of City Council's key thrusts of expanding e-business. The Planning and Development Department has improved efficiency and effectiveness in the following areas:

- Reduce risk of error by scanning residential drawings instead of manual transposition of the plan checkers' comments on building plans;

- 50% reduction in plan-review and notation processing time;

- Improve tracking of outputs that can measure service improvements over time;

- Clarity of reproduced archived documents is increased significantly when compared to the use of microfiche;

- Access to archived records is quick, simple, convenient and available to staff on their personal computers;

- The Fire Department Pre-Incident Team is now able to retrieve current building plans from the CARS repository and import the file into their CAD system within five minutes;

- Flexibility in the use of digital records provides a definite benefit over microfiche records as digital records facilitate a broader application in other digital environments such as Word, Power Point, Excel or publishing software, and

- The key benefit of this initiative is its proven success thereby setting the stage and foundation for expanding the archival system corporately and creating a significant cultural shift in the organization by acknowledging the real benefits of digital records. It will now move the City towards an enterprise document management system. The incremental pilot project approach demonstrated innovative flexibility by all participants and stakeholders to ensure the greatest possible degree of success in introducing a significantly different approach and mindset about the use of technology within the organization.

1.2   Highly Cost Effective

The solution has been very cost effective:

- The CARS initiative is a cost effective electronic archiving system with a cost-recovery period of 2 years, and

- Planning and Development Department estimates reductions in search and retrieval costs alone at $30,000 - $50,000 annually.

1.3   Highly Applicable and Transferable to Others

The solution implemented by the City of Surrey is highly applicable and transferable to other small, mid-size, large urban municipalities and regional districts.

The following components can be used to assist other municipalities to fast track their way to a similar CARS solution:

- Use of CARS Project Management Templates – Project Charter, Project Plan, and Project Related Documents can enable other to quickly implement a similar solution in less than one year;

- Training Manuals (Full User Manual and Quick Cheat Sheets) – The two training manuals have assisted with staff acceptance of this solution. These manuals are written in language that is easily understood by non-technical people;

- CARS Practices and Procedural Manual - A Practices and Procedures Manual has been developed to document all the steps required to scan, store and retrieve the building plans and records.   The manual is based on the current Canadian standard – "Microfilm and Electronic Images as Documentary Evidence".

1.4   Improved Public Accountability and Awareness

- External customers benefit from lower costs since only one set of house plans is now required instead of two sets previously needed;

- Access to archived records is simple, convenient and quick and available to outside agencies on their PC thus providing efficient and reduced cost of delivering archived information;

- The Fire Department is able to access data for preparing fire plans, which can directly impact firefighter safety.

- B.C. Assessment Authority is able to access to building data in electronic format for property assessment purposes. This can better align with their current and future use of technology, and

- It has assisted the public because it has reduced turnaround time for the issuance of Building Permits.