
Property Assessment Data

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Property Assessment Data

1. Introduction

The OCA reviewed the process of summarizing property assessment data, establishing data access controls, and maintaining data security. This review originated with an investigation conducted during 2005 to attempt to establish whether internal property assessment data had been distributed to an outside party. Although the investigation was inconclusive, some data access issues were identified. This review was designed to evaluate those data access issues.

2. Background

The City of Edmonton collects property information such as permits in an application called POSSE which has been in use at the City of Edmonton since 1995. POSSE has been designated as a corporate-wide application (part of ERP). When building permits are initiated in POSSE, the permit information is automatically input into TACS (Taxation, Assessment and Collection System) and a property assessment review is initiated. TACS is a computer application that is used for tracking business and property parcels, for deriving assessment values using modeling, real costs and other techniques and production of assessment and tax notices. It allows for full transactional accounting, appeal tracking and collection recovery documentation. The property value is then assessed or re-assessed using an assessment model created and maintained by the City. The assessed or re-assessed property is then validated against provincial standards and the assessed values are sent to Alberta Municipal Affairs. The Province audits the assessed values for reasonability using the Assessment Shared Services Environment (ASSET). This program shares information with the participating municipalities. Occasionally, the assessed value is disputed by a taxpayer and the City is required to defend their assessment at an assessment tribunal.

To assist in determining assessed values, the Assessment Quality Management Section collects sales information from the Provincial Land Titles office. This information is compiled on an Excel spreadsheet, reviewed for validity and sent to the operations staff to use in refining assessments based on actual sales values.

All programs and files reside on a City server and are accessed via eCity or mobile computer access technology.

3. Objective

To ensure that appropriate security of property assessment data is in place.

4. Scope and Methodology

The OCA interviewed Assessment & Taxation Branch and Information Technology Branch personnel to determine:

- The primary internal and external users of property assessment data
- The processes in place to ensure that data is protected from unauthorized use
- The processes in place to ensure that access to confidential data is restricted to a “need to know basis” only

The OCA tested several employees’ access to network directories assigned to other sections and to confidential data. In addition, the OCA assessed individuals’ ability to save data to external storage devices or send it via email.

5. Observations and Analysis

5.1. Access to Property Assessment Data

Each user has a logon profile that restricts their access to TACS tables. Whatever data a user is able to access can be downloaded to a local file for further analysis using other applications (e.g., Excel, statistical analysis software).

In general, residential assessors only have access to network directories that are related to residential property. Occasionally, some of the residential assessors and modelers have access to files in network directories that are assigned to other sections. Commercial and industrial assessors and modelers generally have access to each other’s network directories. Sales validation spreadsheets are generally available to all assessors.

Currently, access to TACS and network directories are not logged. Therefore, access cannot be tracked for subsequent review. Logging in TACS is theoretically possible, but may hamper system performance.

5.2. Downloading Data to External Storage Devices

Desktop, laptop, and tablet computers all have USB ports that can be used to save large amounts of data to external storage devices (e.g., flash drives, iPods, recordable CDs). Information Technology Branch does not monitor data downloads unless they are large enough to disrupt the network. Additionally, large files (up to 20 MB) can be sent to unauthorized persons by email. Email transactions, however, are logged and can be reviewed at a later date.

The Taxation and Assessment Branch has taken some steps to control the data that can be downloaded to external storage devices. Writeable CD drives are restricted to three computers that have either physical access restrictions (locked door) or log the

last person who accessed the computer. Some tablet computers have their USB ports disabled, but others do not. Initially, Information Technology Branch disabled all USB ports in tablet computers, but switched their policy to disable only upon request since the ports are also used to upload data from digital cameras, etc.

5.3. Confidential Information

Electronic access to confidential data, such as rent information, is restricted to Commercial and Industrial assessors. The original documents (hard copies) are kept in a locked file room with restricted access. However, the data can be downloaded or printed from TACS.

6. Conclusions and Recommendations

Although the Taxation and Assessment Branch has taken some steps to restrict access to property assessment data and confidential information, it is still possible for an employee to pass privileged and/or confidential information to an outside party. Each employee signs a code of conduct form that clearly prohibits this practice but the ability to prevent or monitor data security breaches is currently limited.

If a breach of information occurs, it is difficult to determine which individual accessed that information. Logging each access to TACS would facilitate data security breach investigations.

Recommendation 1	Management Response and Action Plan
<p>The OCA recommends that Assessment and Taxation Branch evaluate access logging as a tool to facilitate investigation of suspected data security breaches.</p>	<p>Accepted Comments: The Assessment and Taxation Branch in conjunction with the IT Branch will identify opportunities to track access log-ins. Once an approach is identified it will be tested to identify system issues that may occur.</p> <p>Planned Implementation: The testing will be implemented without the knowledge of the users to have a true understanding of system impacts. This is expected to be complete by June 2006. If there are no problems, it will remain in place.</p> <p>Responsible Party: Applications Unit in the Branch in conjunction with IT and the City Assessor.</p>

Additionally, information that is downloaded to external storage devices should be logged to track potential violations of data security.

Recommendation 2	Management Response and Action Plan
<p>The OCA recommends that Assessment and Taxation Branch evaluate data download logging as a tool to facilitate investigation of suspected data security breaches.</p>	<p>Accepted Comments: The Assessment and Taxation Branch will review software that will track downloading of City data. In conjunction with IT Branch, identify other possible City applications. Once a solution is identified, complete IT evaluation for system compatibility and certification.</p> <p>Planned Implementation: This may be dependant on IT resources and Oracle upgrade, but is expected to be complete by January 2007.</p> <p>Responsible Party: Applications Unit in the Branch in conjunction with IT and the City Assessor.</p>

The OCA thanks the management team and staff of the Assessment & Taxation Branch for their assistance during this review.