Cheaper by the millions
Land info translates to savings

GOOD NEWS. IN A program rolling out during 2004, most Ontario municipalities will be able to access basic information on land parcels for only the annual delivery and support charges of the data.

This bonanza is the result of an agreement between the Ontario government (Ministry of Natural Resources), the Municipal Property Assessment Corporation (MPAC) and Teranet Enterprises Inc. The agreement will bring information on the province's estimated four million parcels of land together into a standardized digital database, to be known as the Ontario Parcel Database.

The land parcel mapping data can also be utilized with other Teranet data products, for example, transfer reports and transactional updates.

New fee structure

The new fee structure is music to the ears of Laine Wyman, GIS (geographic information system) manager at the City of Ottawa, who points out that information on land parcels is really the life-blood of any municipality.

Ottawa has been receiving land-mapping services from Teranet since approximately 1995. Initially, the cost for this information came in yearly at around $300,000 says Wyman, falling to around $148,000 as Teranet reduced its charges as its system amortized its capital costs of capturing the data, and finally the cost fell to around $72,000.

Aerial view of the City of Ottawa.

With the licensing agreement that the City of Ottawa is currently signing with the Ontario Parcel Database, this cost will be further reduced to approximately $44,000. However, Wyman points out that this figure is arrived at due to Ottawa's unique requirements.

"To take delivery of the [land parcel] data four times a year as a complete data set under the new agreement, would cost us only $2,900," he says. "However, the City of Ottawa has a "very large

enterprise GIS system that the data is loaded into. Lots and lots of city business hangs off the land parcel data that is in the system. So the city doesn't want all the data, we only want to know what has changed since we last received the information. We pay for transactional updates," explains Wyman, "For this we pay a premium on top of the delivery charge."

"A lot of municipal information [is based on] land parcel mapping," continues Wyman. "If you look at a municipality, a lot of their business is as a development authority, which changes land – its use and value. Municipalities spend a lot of time trying to keep track of land – where it is, who owns it, what it looks like, its description."

In the past, of course, a municipality simply sent people down to the registry office to do title searches which meant it was absorbing employee costs, as well as transportation, mileage, parking, the photocopy costs and so on.

And while this might make economic sense for a small municipality where there are few land transfers annually, for a city the size of Ottawa, an economical way to facilitate access to land parcel information is a necessity.

From P3 to…

Founded originally as a partnership between the private sector and the Ontario government (the government sold its stake to its private sector partners in 2003), Teranet's original mandate was "the task of automating all the land registry offices in Ontario," explains Greg O'Brien, senior account executive at Teranet, making e-government in the land parcel sector a reality.

This was a mammoth undertaking that included updating – through an application called POLARIS (Province of Ontario Land Registration System) – the province's 200-year old paper-based system to create a database that, says O'Brien, is consistent, reliable and accurate. The information can be accessed by municipalities on a regular basis, to be implemented internally in conjunction with their GIS applications.

"Municipalities have a choice whereby they can develop, build, and maintain a parcel mapping database on their own that requires people, time and resources or they can rely on Teranet as an external vendor," he says.

"The land parcel fabric is constantly changing – it's dynamic," continues O'Brien, noting that his company provides the information to municipalities on a monthly or quarterly basis.

The parcel mapping data can be used, in conjunction with a municipality's GIS system to assist the city in land use planning – for example, the parks and recreation department, or where to locate a new housing development.

In addition, as a result of the company's earlier successes in automating the land registry offices, Ontario municipalities have been able to build on this framework. For example, more than

two million land registration documents were registered electronically in Ontario through the Teraview gateway offered through Teranet.

Location, location, location

Much of municipal business has to do with location says Wyman. As a result, almost all business areas within the City of Ottawa are using its enterprise GIS system and therefore make use of parcel data, even though its use is transparent.

"The power of an enterprise system is that it starts to link a whole bunch of business areas together; it becomes a much more transparent way of the city managing its business," he notes.

Clearly, the use of parcel data is important in business areas such as Bylaw Enforcement; Building Permits, Approvals and Inspections, Planning Applications and so on. It's all about land. But the importance of accurate – and easily accessible – land parcel information stretches right across the business area spectrum.

What is really integral to success is the speed at which municipal business can operate with the land parcel information forming the backbone of the enterprise GIS system.

Ottawa's call centre routinely utilizes the land information. For example, the member of the public calls in for information or to complain about a pothole or report that a tree has fallen. The GIS system logs the call and when the operator takes the call, the address is entered and linked into the system. That address (land parcel) falls within a maintenance district, so that call needs to be routed to that district. Prior to the GIS system, a wall map would have been consulted to try and figure out where the address was and then it would be hand entered as to what

district the complaint or problem fell into. If the boundaries of the maintenance district changed, the maps would have to be redrawn.

Even reuniting a dog running loose with its owner benefits from accurate land parcel information – feeding in the animal's dog-tag registration number pops up its owner's address and that of the nearest shelter, for example.

Substantial cost savings

The information that Teranet provides (land data) is one important piece of many pieces that make up the whole enterprise system," says Wyman.

"We've become very blasé over the years [about the land mapping data]," says Wyman. "But the fact that we were willing to pay $300,000 a year is an indication of how valuable getting the land parcel data is to our experience here in the Ottawa area."

What is true is that it would cost Ottawa substantially more to have that parcel data available if it did not receive it from Teranet he says. "Cities are the authority for issuing addresses, we manage the land, but the registry office is where all the land is identified and registered as far as legal ownership is concerned.

"While we can track that – and we actually ran some pilots to track it, even when we were spending the $300,000 – we would actually have had to spend two to three times that amount to capture and track that information ourselves than to get it from Teranet. So really the provision of the data task comes at a massive cost savings to us." ⋀⋀

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