The Ontario Digital Cadastre Corporation – The Road Forward

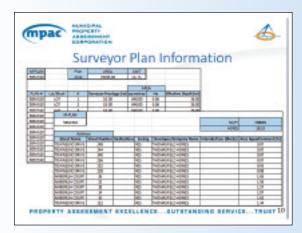
By Mike Power, O.L.S., O.L.I.P.

hile many would never have guessed that it would have taken this long, there are others who didn't believe it would ever happen at all...the creation of a for-profit, wholly owned subsidiary of the Association of Ontario Land Surveyors established for the purposes of creating and marketing a collaborative collection of data sets that will ultimately result in a surveyor maintained digital cadastre for the Province of Ontario. And it has the necessary ingredients to keep everyone happy; new found revenue for the surveyors from customers that haven't been served, whose interest in data and plans from Rainy River is just as great as it is in downtown Toronto, a profound benefit to the public from even just the few early commercial clients we've engaged, a legacy to the youth in our profession who have embraced the utility of collaborating on digital data ahead of most of us, and an opportunity to expand the model across the country. While this would normally be the time you'd poke the naysayers in the eye with a pointed stick, I contend that they are to be thanked as ardently as the dyed in the wool supporters, for without their position as the devil's advocates, we may never have been prodded and challenged to reach the conclusion that the Ontario Digital Cadastre Corporation (ODCC) was needed at all.

So now what? How can a shell of a company, with no staff, funding or even its own phone number get us to the finish line? I'm glad you asked, because the Road Forward is even more exciting than the one we've been on for the past two years. It is one that will allow us the opportunity to prove ourselves to client communities that questioned our commitment and to surveyors who couldn't see the forest for the trees. First and foremost, of course, the task at hand is to address the data needs of those commercial clients whose confidence in the membership moving down the digital cadastre path was steadfast from the beginning!

Those who attended the Annual General Meeting (AGM) in Ottawa watched a compilation of video vignettes of surveyors and commercial clients alike, discussing the progress and success of the now legendary 100-Day Projects. The follow-up presentations made by Antoni Wisniowski, the President and CAO of the Municipal Property Assessment Corporation (MPAC) and Frank Seguin, the Manager of Mapping and GIS at Union Gas, gave the audience the opportunity to listen to prospective new clients discuss how they could benefit from a deeper partnership with the Association and how such a relationship would yield financial benefits to surveyors.

MPAC, much to everyone's surprise, found instant value in



accessing a simple excel table of property dimensions of new lots and Antoni openly shared with those in attendance how it drove benefits and efficiencies to MPAC's land parcel operation. He stated "We want MPAC staff focused on valuation of land, not on transcribing data from plans." He went on to say "surveyors have the data we need. It's clearly in the surveyor's interest, it's clearly in MPAC's interest and most importantly it's in the public's interest." On the 20 excel submissions made during the 100-Day Project, MPAC found inaccuracies in their data that resulted in changes in assessment to a number of properties and a net increase of almost \$60,000 in annual property taxes...each year...forever! And that from a pilot project to prove feasibility. And so what did sharing those excel sheets with MPAC ultimately yield; timely and accurate assessments of property to new homeowners, new found tax revenues to municipalities perhaps driving a new community centre program or longer pool hours and the first dollar of new revenue to participating surveyors.

And best yet, this isn't an all or nothing proposition. MPAC recognizes that it will take time to see full adoption of delivery of the 'Property Dimension Report' to ODCC and then to themselves and they're prepared to be patient...for a while. Because the Property Dimension Report is only the first set of data in which they have an interest. Fortunately for us, a shopping list is being developed as you read this, for if the Property Dimension Report can correct their data and avoid the errors associated with area calculations, draft plans could be used to flag the change of status in a vacant parcel of land, grading plans could disclose builder models and square footage, Surveyor's Real Property Reports (SRPRs) could reveal easements affecting a property's use and the building footprint to help determine changes made by comparing it to the

aerial image. And without looking too far downstream, could there be a day where surveyors assigned the Assessment Roll Numbers or even updated the assessment parcel fabric to the benefit of MPAC and municipalities alike? Perhaps best said by Antoni Wisniowski at the conclusion of his presentation, "Our business is assessment; yours is surveying. Why don't we do what we do best and leave you to do what you do best? You have the data we need." Expect to hear from the ODCC on how your firm can participate with the MPAC opportunity going forward.

If the MPAC project was an exercise in simplicity, an excel table delivered as an email attachment, the Union Gas project swung to the opposite extreme. By the time the 100th day had elapsed, six survey firms had participated, almost 30 'draft' plans had been uploaded to an FTP site and integrated into Union Gas' GeoMedia GIS system from Hamilton, Burlington, Milton, Sudbury and Cornwall. Six firms, multiple versions of two CAD systems, differing layering conventions, line weights and symbology, different datums and projections, some plans georeferenced and some not, all transformed seamlessly to meet the CAD and GIS standards set by Union's environment.

The software, which took less than an hour to reconfigure per survey firm, did not require the adoption of a single CAD standard, did not require a common set of drafting conventions and did not require any firm to make any change to any of their plans. A simple disclosure of the internal conventions that were used to create the plan allowed the software to be configured accordingly and facilitate importing the draft plans to a common environment. From there, following some automated error checking, the plans were transformed and dropped into position on the Union Gas land base.

Of course draft plans, at some point before the final approval state, find their way to Union Gas's Parcel

AOLS - Union Gas - Site / Draft Plan - 100 Day Project Process Flow PME ETL Workstation CAD File Source CAD File
DRING
DRING
Geoffelconsor D Data Cleanup Projection / Datum FTP / Cloud Drive Feature Grouping Easy Drop Off / Pickup n Drophical Protoner Dursput CAD Dark Theme Grouping Microstation vil Theme Grauging Using Layer Name for Graphic Feetures Using Layer Name & Test Strings in Yest Jelon See Lamber Union Gas Feature / Level & Symbology Mapping Output GIS but a

Mapping group for integration at no extra cost to them, or any other utility. But there is something to be said for an earlier notification, a seamless maintenance environment and one which could tighten up their land base over time. And best yet, one of the thirty plans tested in the project had yet to make it through to their group, providing an early warning and an opportunity to commence planning infrastructure and personnel.

According to Frank Seguin, Manager of Union Gas's mapping environment, "there are great short and long term benefits to Union Gas, eliminating the complexity of receiving submissions from multiple sources and in multiple formats, earlier awareness for planning and improving planning and responsiveness to customers."

And what if a reliable supply of draft plans could be assured; is it possible that utility companies would focus on their engineering responsibilities and disband their own land base group in favour of a surveyor maintained environment?

While these are the two most advanced initiatives falling out of the 100-Day Projects, others are underway with the probability that they'll attain similar levels of success.

And so the next steps;

- Reach a consensus with the users on the price of the initial feed of data
- Establish a license agreement between the ODCC and interested Survey Firms
- Establish a license agreement between the ODCC and MPAC expanding to Union Gas
- Facilitate the delivery of the data and provide a single point for support
- Remit royalties to those who participate

And before you start polishing your resume to become the first employee of the ODCC, the objective is to avoid spending your membership dues on people, or brick and mortar just yet. Let's start the revenue flow, satisfy the needs

of several key stakeholders and early adopters and establish the complete business case for the entire cadastral program. For as a good friend of mine will tell you, nothing turns a critic into a convert faster than money. And what's in front of us today is a multi-year commitment to a report many of you create as a by-product to your work, and one for which there is truly a provincial requirement. What a great way to draw the latent adopters among us out from the shadows.

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