Dec. 2005 Update

Titles Mapping Project Summary

A joint initiative between Alberta Municipal Affairs, the Alberta Association of MDs and Counties (AAMD&C), the Alberta Urban Municipalities Association (AUMA), Spatial Data Warehouse (SDW) and AltaLIS was launched in 2001 to create a titles mapping database for the province of Alberta (excepting Calgary and Edmonton). Titles mapping depicts the extent of ownership as indicated in the Certificates of Title registered at the Alberta Land Titles Office (LTO). Over 1,000,000 titles, including 300,000 metes and bounds descriptions have been mapped. Funding for the project came from Alberta Municipal Affairs.

Background

The provincial cadastral products (formerly the urban MISAM and rural PARCEL datasets) were started over 25 years ago by the Alberta provincial government. The cadastral products depict township, section, subdivisions, lot, block, plan, right of way, dimensions and other information found on plans of survey registered at LTO.

In 1996 when the Government of Alberta discontinued funding and managing the cadastral mapping products, the responsibility shifted to Spatial Data Warehouse (SDW). SDW is a not-for-profit organization whose core purpose is "to maintain and promote the broadest possible distribution of provincial digital mapping that meets the immediate needs of the Alberta market place and preserves the mapping systems for the long-term benefit of Albertans."

SDW entered into a joint venture arrangement with AltaLIS to handle the day-to-day management of the mapping datasets. Since April 1998 AltaLIS has been performing the continued updating, re-engineering, storage, distribution, value-added redistribution and general management of specific provincial mapping data sets.

Since the cadastral mapping data does not show information related to ownership or title, many municipalities were creating and maintaining their own titles data. The titles mapping initiative was designed to give municipalities access to a standard titles mapping product at a low price and thereby avoid having to maintain this data themselves. Over a three year period starting in 2001, the more than 1,000,000 titles in the province were mapped. Surveyors were used to interpret and help map the metes and bounds descriptions registered at LTO.

Project Benefits

The creation and maintenance of a provincial titles mapping product has produced data that is:

- in a standard format and structure
- in sync with the cadastral mapping
- linked to the LTO certificate of title through the "LINC" identifier
- current, reliable and readily available
- low cost and less than the cost of municipalities maintaining their own data
- GIS ready data that can be the basis for other value added applications such as property tax assessment, addressing and emergency response systems

User Involvement

An important aspect of the titles mapping initiative was to develop a product that would meet the needs of users. During the project, seven municipal workshops were held in various locations across the province to inform municipalities about the titles mapping project, let them see some sample data and solicit their feedback on the proposed product.

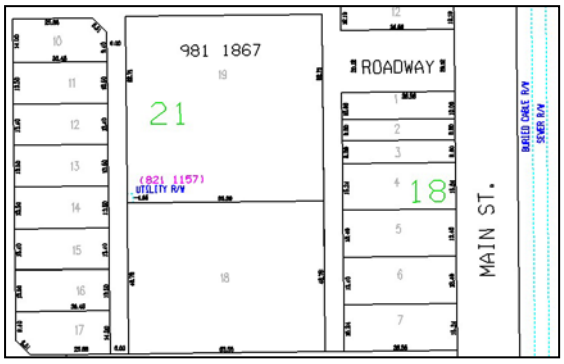
Feedback from users had a significant impact on the type and format of data now available. In addition to the standard CAD mapping products, an ESRI SHP file format and a municipal data base product were also made available. A viewer was made available with the initial data delivery to allow municipalities to start using the data right away.

An external advisory group of cadastral and titles mapping users meets on a regular basis to discuss issues and concerns related to the products. Workshops are held from time to time to acquire additional stakeholder perspectives. The latest workshop was held in conjunction with the 2005 GeoAlberta conference.

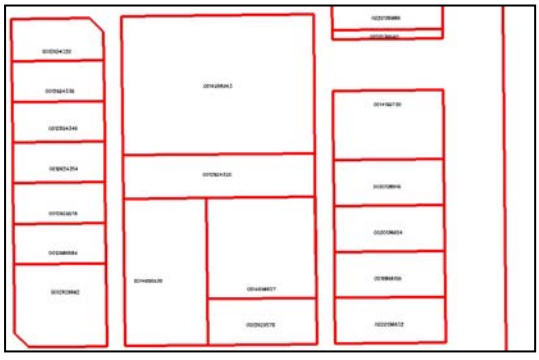
In 2001 both AAMD&C and AUMA became members of SDW. By having seats on the SDW board, the municipal associations are part of the decision making process not just for title mapping but also for the other mapping products licensed to SDW by the provincial government.

The Titles Mapping Products

The titles mapping data is available in MicroStation Design File (DGN), Autocad (DWG), and GIS (ESRI SHP) file formats. There is also an MS ACCESS database available for municipalities, which contains the following information: LINC Number, ATS (Section, Twp, Range, M), Short Legal, Long Legal, Certificate of Title number, Owner name and mailing address, PID (polygon identifier), polygon creation date, and date LINC received from LTO.



Cadastral Mapping – linework depicts plans of survey registered at LTO.



Titles Mapping – represents the extent of ownership as defined by the certificate of title.

Municipal Use of Titles Mapping

The annual subscription cost to a municipality is a small fraction of what it would cost them to maintain and update their own titles data. As an example, the city of Red Deer pays an additional $348 a year for their titles mapping subscription or a total of only $1,044 a year for regular updates to both cadastral and titles mapping.

Currently 121 municipalities are titles mapping subscribers:

57	MDs & Counties (including Special Areas)
9	Cities
43	Towns
12	Villages
121	Total Municipalities

Here is what some of the municipalities who attended SDW's workshop at the 2005 GeoAlberta conference had to say about the titles mapping product:

- "Excellent base data. Cadastral and Titles is relatively inexpensive, well maintained and very current. I like it."
- "Provides a link to our own data and allows for accurate representation of our land base and its ownership."
- "Don't have to maintain land base ourselves. Standard data available."

Other Titles Mapping Accomplishments

In addition to the compilation of all historical titles, the titles mapping project also produced:

- shapes for all untitled parcels (public lands, roadways and water bodies), resulting in polygon coverage for the entire province
- enhancements to MIMS (Municipal Infrastructure Management System) to allow MIMS users to take advantage of the titles mapping data
- a template for rural addressing that is available to municipalities through AAMD&C
- mapping of additional geo-admin boundaries
- successful testing of the concept of online plan submissions

Current Status

1,051,071 titled parcels and 602,627 untitled parcels currently reside in the titles mapping dataset. The titles mapping data is continually being updated in conjunction with the cadastral updating process. This process is both cost effective and timely. Typically over 95% of all land titles are mapped within 5 days of registration. Municipal subscribers can access this near real time data online as they require.