



BREAKING NEW GROUND: PIONEERING ELECTRONIC LAND REGISTRATION IN ONTARIO, 1987 – 2010

BACKGROUND

In 1987, Ontario's land registration system was overwhelmed. Budget constraints and a surge in property sales strained the Canadian province's paper-based operation. The provincial Ministry of Consumer and Commercial Relations had been working to computerize its land records, but it lacked funds and technical capacity. A public-private partnership (PPP) that leveraged private sector investment and expertise offered an opportunity to make digitization work.

Computerizing Ontario's land administration system was a massive undertaking. The partners had to convert records covering an estimated 4 million properties and spread across more than 50 registry offices—both from paper to digital and in some cases from a deeds system to titles. Complicating the task, the province had little experience with joint, public-private financing models; there were few examples of digital land registration systems; and political leaders, registry staff, and real estate professionals all had concerns about the proposed partnership.

REFORM STRATEGY

Given the scale of the project and the lack of experience with PPPs, it was essential to clearly demarcate the roles of the government and the private partner, create targets and monitoring systems, establish coordination mechanisms, and overcome potential political opposition. The two prospective partners also had to agree on key aspects of the business model, such as revenue sharing and ownership of systems and data.

In early 1990, after two years of bidding, the government created the Strategic Alliance Liaison Office to negotiate the final deal. The office set requirements for the PPP, including 50/50 ownership, a major financial investment from the private partners, government ownership of the data, and project completion in less than 15 years.

KEY ISSUES

- Leveraging private investment
- Structuring concession agreements
- Digitizing records and processes
- Converting deeds to titles

In the same year, the provincial parliament approved legislation that regulated the use of electronic records and authorized the conversion of properties in the deeds system to titles.

To ensure the support of a newly elected provincial government, the consortium of private investors bidding on the project agreed to take on unionized public sector employees.

Teranet, a joint venture between the provincial government and a private consortium, was officially established in May 1991. Under the partnership, the private operator gained the right to collect all transaction fees and received a 10-year exclusive license to use the data, enabling the company to repackage land data into new products. The government would receive a share of payments and continue to set the fees for registration services.

ACTIONS TAKEN

The Ministry of Consumer and Commercial Relations and Teranet collaborated on staff transfer, records digitization and conversion, and a pioneering electronic land registration system. In 1992, the two partners had to overcome an early crisis and find a new private investor.

Fully converting Ontario's property records took until 2010, but by 1995, almost half of the records had been converted and Teranet launched software that enabled users to search and view records remotely.

Next, Teranet's product development team, the provincial government, and real estate attorneys worked together to develop the Electronic Land

Registration System, or ELRS, which allowed buyers and sellers to transact online.

With the ELRS ready to launch in 1999, Teranet and the province had to get users on board. The law society and the bar association played key roles in explaining the system to members. The province made electronic registration mandatory gradually, giving users time to adjust. A close relationship with the law society was vital in responding to concerns about title theft and mortgage fraud. After several high-profile cases in the mid-2000s, the province and Teranet worked with the law society to reduce identity theft risks.

Teranet developed products that used property data in new ways, but as it did so, privacy became increasingly important. Teranet and the provincial government established a committee to approve new products and review them for their adherence to privacy legislation—an example of the governance structures used in managing the relationship.

As the project progressed, the partners established several joint management committees to support collaboration and coordination. The partnership eventually culminated in the sale of the government's ownership stake in 2003.

RESULTS

In 2016, Teranet's pioneering electronic registration system was in widespread use. 99.9% of properties had been converted and digitized by 2010, and in ministry-conducted surveys, Teranet consistently received high marks for customer satisfaction—averaging around 85%.

The partnership also made money for Ontario. The government contributed C\$29 million in equity at the beginning of the project. In 2003, it sold its 50% stake for C\$370 million. Assuming the government bore 50% of the C\$391 million in implementation costs reported by the provincial auditor for 1991–2002, it still would have made a profit of more than C\$140 million on the sale. After Teranet's 2006 initial public offering, the provincial government received C\$573 million because of a requirement in the 2003 sale agreement that it share in the value of future sales.

The two partners formed a lasting relationship. In 2010, Teranet paid Ontario C\$1 billion for a 50-year concession to continue operating the ELRS and agreed to make annual royalty payments beginning in 2017.

LESSONS LEARNED

- **Designing a successful PPP.** The public–private partnership between Ontario and private joint venture company Teranet facilitated greater investment in innovative technology. Close collaboration, the use of existing government capacity, and strong governance structures were crucial for maintaining an effective working relationship—even after the government sold its stake in Teranet in 2003.
- **Challenges of converting deeds to titles.** Creating a new form of title and setting precedents for the handling of unusual properties helped speed the conversion from a deeds to a titles system. But despite efficiency gains, the process remained time- and resource intensive.
- **Stakeholder relations.** A close relationship with entities such as the law society and a gradual rollout of new technology eased real estate professionals' acceptance of electronic registration. Later, those relationships played a key role in measures to prevent fraudulent transactions.
- **Private versus nonprofit incentives.** As a for-profit company, Teranet had an incentive to focus on commercial, value-added products after developing the electronic registration system. In contrast, British Columbia's nonprofit Land Title and Survey Authority reinvested its revenues in its registration and mapping systems.

For related interviews and in-depth analysis of Ontario's land agency, Teranet, read the full case study:

<https://successfulesocieties.princeton.edu/publications/breaking-new-ground-pioneering-electronic-land-registration-ontario>.

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