REMARKS BY

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ONTARIO MINISTER OF NATURAL RESOURCES

TO THE ANNUAL MEETING OF
THE ASSOCIATION OF ONTARIO LAND SURVEYORS
HILTON INTERNATIONAL HOTEL, TORONTO, ONTARIO
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GOOD MORNING. It's a real pleasure for me to be here today, addressing an organization that has a very special historical relationship with the Ministry of Natural Resources.

Ontario surveyors have come under the auspices of my ministry for more than two hundred years. Since those early days, we have shared a dedication to Ontario's lands and a recognition of their tremendous importance to the life of the province.

But while our common goals have never changed, our methods of achieving them certainly have - and that's something we both share with people in virtually every line of work. Rapid technological advances are making it possible for all of us to do our jobs better and more efficiently all the time.

Look at your own profession. Remember the old transit and tape? Some of you may still be using them in your surveying work. But I'll bet that many more of you are using an electronic distance measuring device, or a total station.

Before long, I understand, those methods will be replaced too - by a global positioning system. In fact, I understand some of your colleagues may already be using it.

Imagine! From a transit and tape to a system that employs 18 satellites - both used in the span of our lifetime.

At the Ministry of Natural Resources, the technological leap has been just as dramatic. Like the rest of our modern information society, my ministry has had to cope, in recent years, with an unprecedented amount of data. It seems to come at us from every direction. Every 20 years our knowledge base doubles.

And like others, we have had to make a choice: either allow ourselves to be buried alive by all that data or harness the latest technology and manage the information to our advantage.

We have chosen to harness technology. As most of you know, the Government of Ontario - and my ministry in particular - has been working for more than a decade now on a geographic information system. This digitized system will pull together all of our knowledge about our lands and how we use them. It will help us make informed decisions on how to manage those lands.

The data will be available to both the public and private sectors. In just a moment, I'll be talking about what a geographic information system will mean to people in various lines of work - especially what it could mean to you. But first, let me explain what it means to the Ministry of Natural Resources.

For us, this system will be an invaluable tool in fulfilling our mandate: the care and management of lands and forests, fish and wildlife, waters and wetlands for the people of Ontario.

Once the system is established, we will have comprehensive resource information. We will have a means to update that data quickly. And we'll have help in analysing the information so that we can make the best decisions possible for managing land use.

We've come a long way in my ministry since our humble beginnings almost a century ago. Back in those days, we were known as the Ontario Fish and Game Commission, and resource management meant making decisions with little supporting information.

Many parts of the province were inaccessible. Some had never been properly surveyed. There were no central records. There was very little expertise. It's not surprising that resource planning back then took the single-interest, single-solution approach - say, allowing hunting without taking into account how it would affect, or be affected by, other resource uses.

Gradually, as Ontario's frontiers opened up and our knowledge and technological abilities grew, we were able to adopt a far better approach. It has become one of the guiding principles behind our work. We call it integrated resource management.

It means that all uses of a resource must be carefully considered before management plans are made. Think of the challenge of managing the forests on Crown lands for instance. They are vital to our thriving forest industry but they are just as important to tourism and to the countless species of plant and wildlife that inhabit them.

As you can imagine, integrated resource management is a big job and it requires a lot of co-operation - between conflicting resource interests, between the public and private sectors, between government ministries.

It also requires as much up-to-date resource information as we can get our hands on.

A hundred years ago, we couldn't do it. Today we can, because the new information technology is there to help us. And we believe that a geographical information system will bring together the best technology to enable us to do the job.

It will also be a great asset to those in many other lines of work. Not only will it save them time, money and effort - all valuable commodities - but it could also help them do a better job.

Imagine being a farmer and having a province-wide crop inventory or soil analysis or an accurate record of climate and environmental changes - all at your fingertips.

Think of how much easier it will be to plan a subdivision or highway. A planner will be able to sit down at a computer terminal, punch up an accurate map of the area in question, then overlay information such as the location of sewer systems, telephone and power lines, or the condition of the soil.

In your case, imagine having ready access to the most up-to-date land registry information - without having to leave the office.

Still, that's only a small part of what the geographical information system could mean to the surveyors of Ontario. It also represents opportunity - an excellent opportunity, in my view - for surveyors to offer valuable input into the ongoing process of resource and land management in Ontario.

To begin with, surveyors are well equipped to become involved with the system. You know how to set out a framework for surveying. So you're in a position to help establish the geographical information system's actual framework, a network of fixed reference points essential to the gathering of information.

Later, surveyors could also play an integral part in establishing the actual information base.

As I said before, we'll be relying heavily on technology too. For example, a digital topographic data base will be founded on the Ontario Base Maps being produced now. A great range of different information can be superimposed on these basemaps - highways can be highlighted in relation to wildlife populations, for example.

There's another area of new technology I should mention because it complements the digitized mapping program. It's RADARSAT - the proposed Canadian remote sensing satellite.

It could also, depending on international support for it, play a prominent role in the future. The Ontario Centre for Remote Sensing, which falls under the jurisdiction of my ministry, is responsible for developing new applications for remote sensing.

It's an exciting project that will create opportunities and jobs in the private sector. Remote sensing of information is nothing new. Surveyors, in my ministry, first sketched maps while seated in the open cockpit of a Curtiss flying boat.

Today we still use planes but we also use satellites to provide even more data. We map landcover and gather data on damage to our forests by insects, disease and fire. Other government ministries use remotely-sensed data in programs ranging from geological mapping to the monitoring of water quality.

Future applications of remote sensing - and their implications for the land information system - are almost mind boggling in their scope.

Mind you, technology alone can't gather all the information we'll need. Remote sensing will give us an overview from space but it won't give us a close-up look. At least, not yet.

We need people like you - professionals who can gather information on the ground, who know the land and are dedicated to enhancing our understanding of it.

People using technology - that is our vision of how a land information system should work. And we believe the surveyors of Ontario should be among those people helping to collect and manage the data that the system will store, analyse, correlate and distribute to people across the province.

By the way, I'm not just referring to the collection and management of surveying data. I believe that as the horizons of the new technology expand, so too can yours. You can take part in gathering and managing a tremendous range of land information.

In fact, you might say I'm advocating a return to the old way, a century ago.

In those days, when surveyors went out to establish boundaries, they found themselves gathering and distributing a lot of other information - information on wildlife habitat, forest conditions, geological deposits and the people they met along the way.

The times were changing quickly then, as our young province moved towards the 20th century. And surveyors were intimately involved in recording those changes.

In just the same way, you can be involved now. The land information system, and your input into it, will help move this province into the next century. It will help our resource-based industries compete in the global marketplace. And it will help us effectively manage our province's natural riches as the demands upon them grow.

I can't think of a better way for the Ministry of Natural Resources and the Association of Ontario Land Surveyors to continue their old and special relationship.

There's no better way for Ontario surveyors to strengthen relationships with other information gatherers: for example, the ministries of Municipal Affairs, Northern development and Mines, Agriculture and Food, and Revenue. And to strengthen ties with private industry.

Personally, I look forward to working with them - and with you - on a land information system. Some of the ground we'll be covering together will be familiar; much will not. But the common goal of my ministry and your association will, I trust, remain the same as always: developing a land information system of lasting benefit to the people and resources of Ontario. •

LAND RELATED INFORMATION SYSTEMS

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