A Vision for the Future of the Surveying Profession in Canada


By the National Task Force of the Future of the Profession, formed and facilitated by Canadian Council of Land Surveyors, representing the 11 Professional Surveying Associations in Canada.

1. Abstract

The status quo is not acceptable: Current demographics are a threat to the future viability of our profession. The profession has evolved into 11 different Canadian versions of the cadastral surveying profession with fewer than 3000 individual surveyors. The profession is fractured without an efficient cohesive voice to respond to the profession’s key users in government, industry and the public. Lack of meaningful interaction with the broader professional community results in lost opportunities for all.

There is a sense of urgency locally, nationally and globally: Issues of demographics, pressures on associations to fulfill their mandates, and volunteer burnout have been recognized and discussed at the membership and council levels within the associations. These issues have been discussed nationally amongst all associations leading directly to this initiative. Several presenters at the October 2-5, 2007 international geo-conference in Quebec City focused on the need to address future issues of the broad profession. Task force research shows that professional surveyor organizations in the European Union, New Zealand, Australia and The United States are struggling with the same issues.

A strategy for change:

- To examine the definition of professional surveying including core competencies and potential opportunities which build on the core exclusive practice, and encourage value added and related competencies and disciplines to be recognized as part of the profession at the national level.

- To develop a national association of professional surveyors that is member driven, has the wellbeing of the profession as its prime purpose, does not affect the rights and responsibilities of the regulating associations, and develops a stronger, more inclusive and relevant profession in Canada.

- To develop national professional recognition, build a strong, cohesive, influential and broad profession of land professionals and para-professionals.

2. Introduction

2.1. The Canadian Council of Land Surveyors

The Canadian Council of Land Surveyors was created by the presidents of the surveyors’ associations in the mid-seventies to provide a national network for their associations. They wanted a forum to continue the discussions they had at annual meetings, and a structured means to follow through on the ideas generated at those forums. Today all eleven surveyors associations in Canada are part of this national forum.
2.2. A brief history of this initiative

In 2006 a President’s forum in Nova Scotia discussed the need for change to better address issues which all professional surveying bodies are having throughout Canada, the U.S. and abroad. Later that month CCLS formed a Future Task Force to continue the discussions. In 2007, the task force sponsored a discussion involving all associations following the AOLS AGM resulting in a framework for a future initiative. A number of senior practitioners from across Canada were then brought together under the leadership of Mike O’Sullivan. That group developed a vision for the future that was presented to CCLS Directors in October 2007 and gained unanimous support for continued development. This vision has been presented to the 11 CCLS member association councils and is now being presented to broader audiences such as association memberships and other groups such as CIG and CHA.

3. A National Vision

It must be remembered that this presentation is a vision – a concept. There is much work yet to do in developing specific plans, building a business case and moving to implementation and this will happen only after support has been obtained from the surveying community. The support and involvement of the 11 Canadian regulating bodies, and others such as CHA and CIG, is fundamental to move to the next stage. The presentations are to present the vision, stimulate discussion, and solicit feedback so that support can be gauged and next steps planned accordingly.

The following comment is over 3 years old and from an American writer; however, it easily applies to Canada.

“Present trends will continue, with a quiet decline of surveying. More and more of the work and decision making in the spatial information infrastructure will be assumed by other groups. The internal divisions within the larger profession will prevent any long-term solution to this erosion of the surveying profession. Voices may cry in the wilderness, but the future is largely decided already, because it has been in the profession's hands for decades.”


A fundamental key to resolving these issues is a national vision, a resolve to determine our own future as a profession and a realization that the world is moving quickly into a global economy.

Only Canada, the U.S. and Australia have regionally mandated survey organizations. We all need to harmonize and work together nationally in order to flourish in an increasingly global economy.

4. The Canadian Context: Why the status quo is not acceptable.

The following paragraphs discuss the current reality of the surveying profession in Canada.

- Trends indicate that the membership will decline to below critical levels in some regions if the profession does not take steps. Declining membership trends apply to the cadastral discipline and the lack of a cohesive and national approach to non-cadastral disciplines has severely hampered plans to grow the membership through growth in capabilities and services offered by all surveyors.
• There are currently **11 different versions of the cadastral survey profession** in Canada with fewer than 3,000 surveyors. The profession is fractured with no cohesive voice to key users in government, industry and the public. Our profession’s small size and focus on one discipline impedes progress, keeps the profession in the background, often viewed as a technical service, which detracts from our image as professionals and our ability to attract new professionals.

• The **administrative costs** in running 11 different associations are high given the size of the membership. Some jurisdictions, due to their small size, have difficulty keeping up with basic administration.

• Some associations are complaining of **volunteer burnout** as numbers decrease and workloads increase. The demand for cadastral services will continue in pace with the general growth of the country. But this alone will not grow the profession sufficient to provide a critical mass of new members and age demographics will continue to affect our associations.

• There is no national agreement on an **expanded profession** model; existing models have not been a success. There is a tendency, unique to the cadastral discipline, to focus locally. Few cadastral surveyors focus provincially, nationally or internationally and this inhibits consistency and harmonization. Regulators themselves have a geographic focus that must be maintained and regional legislation has been slow to address common standards.

• **Current fiscal and governance model** of CCLS is not sustainable. CCLS as an organization of organizations is very much restricted to being a consensus forum – it is hamstrung by ongoing review and re-decision making as member’s agenda’s change and evolve. It is seen as an organization for the cadastral discipline only and is unable to have a direct relationship with professionals, new graduates, and students.

• **Lack of interaction** between the surveying and GIS/LIS communities results in lost opportunities for both. Organizations such as URISA and GITA have grown and prospered while the surveying community has failed to develop a direct relationship with them. Growing our membership requires growth in our member’s capabilities and services. We cannot rely on government mandates or cadastral services alone to prosper as a profession. There are many other opportunities out there.

• **Mixed messages** are creating confusion with key national clients, diminishing credibility, influence, and professional status. (For example, standards related to products such as Real Property Reports, Subdivision Surveys, etc. result in inconsistent products.) In our own view, surveying is essentially the same in all jurisdictions, even in Quebec despite its civil code system of law. However, our clients, users of our services see different services, different types of plans, different prices etc. Our profession send mixed messages to increasingly mobile and national clients.

• **The labour mobility trend**, including the national Agreement on Internal Trade(AIT), the Trade, Investment and Labour Mobility Agreement (TILMA) between the AB and BC governments, and recent legislation enacted by the Ontario and Manitoba governments to ensure better mobility of foreign trained professionals, is a reality. The public and governments are demanding improved inter-provincial mobility in order to meet current
and future demands. This is a trend being instigated by governments but should be coming from the professions themselves.

Non-cadastral disciplines should be able to easily move towards national recognition. The cadastral discipline needs to focus first on national standards, academic entrance requirements, and certification requirements. There is an excellent article by Francis Plimmer was published by FIG concerning mutual recognition of professional qualifications.

5. **Simply Put**

Action must be taken to address the profession nationally - not just the growth (or decline) of the 11 regulating bodies.

The bottom line motivating this future vision is that the status quo is not working to move the profession towards its full potential. We have less than 3000 individuals in 11 regulatory bodies.

We need to take action as a profession nationally.

6. **The Proposal: Focus on a Solution**

Address the profession of surveying with a national association that can put the well-being of the profession as its **prime** purpose.

The regulating associations, by their very nature as regulators of exclusive services, must have the well being of the Public they serve as their prime purpose. Resolution of the issues facing the profession today requires an organization that is national and has the well-being of the profession as its prime purpose. The role of the protection of the public will remain the primary focus of the regulatory bodies. Nothing in this proposal changes the structure of the associations in that regard. It adds a distinct separate national voice for the profession.

A first step to ensure national consistency is to develop national model definitions for **Professional Surveyor** and **Professional Surveying**. This is not unlike the branding developed by McDonalds or Holiday Inn – no matter where you are you know what the product or service will be. We need a common brand.

The terms surveyor and surveying are used on purpose. The terms do not cover everything that is called ‘geomatics’ but should include what surveyors do, should do and are qualified to do. This is bigger that what the surveyor is exclusively licensed to do.
A new Association is proposed as an umbrella for traditional cadastral role and also for the related geomatics professionals who together with cadastral surveyors form the entire surveying profession. The current regulators maintain their jurisdictional regulatory roles while members of the new organization have better access to developing new services and/or new clients. Those regulators currently offering licensing or certification in non-cadastral fields will continue to do so, at least until members are comfortable with a national home versus a provincial one. (Particularly AOLS, ACLS and SLSA)

Harmonization and consistency is enhanced as the new national association facilitates and supports the expansion of the definition and professional ownership of the core surveying products. The non-cadastral, non-exclusive disciplines immediately have a new and national professional home. This would be the first step in expanding the professional surveyor brand and taking ownership of that larger circle illustrated above. The emphasis is on a comprehensive package of surveying related work and on a professional as one who has the ability to accept professional responsibility for the services provided.

The paper FIG 2014 describes the surveyors taking professional responsibility for certifying the spatial extent of all rights and restrictions related to real property in a true cadastre. This is now done by a mix of surveyors, lawyers and others but could become part of the definition of what professional surveyors do best.

7. **A New Association: “Professional Surveyors of Canada”** *(Suggested name only)*

Here is the proposal – A broad brush vision. What we are looking for here is a discussion of the vision, the concepts, and a mandate to move forward into more intensive study to develop a business plan. Nothing proposed in this presentation can move forward without participation of the CCLS member associations.

These are some of the general concepts for the national body being proposed.

- The new association would replace the CCLS.
- It would gradually provide *non-regulatory* services nationally that are now provided through the associations, and it would potentially consolidate some existing roles of other organizations.
- National education standards would be in place such that graduates from accredited universities would immediately receive the “Professional Surveyor” * designation. The accreditation referred to is not the specific accreditation program currently in place to facilitate licensing, but a broader program based on the broader national definition of professional surveying. * Suggested name only
- There would be no restrictions to practice in related geomatics disciplines other than professional ethics. This is not an exclusive license but non-exclusive, ethics based profession similar to the project managers or property evaluators.
- Non-cadastral disciplines would be subject to peer review in the way that cadastral discipline is now through most associations.
- Professional recognition includes responsibility for activities in related surveying disciplines but not for cadastral (legal) surveying.
• Members practicing cadastral (legal) surveying must meet the specific requirements of each property rights system and be overseen by the regulatory bodies. In other words, licensed surveyors will remain under the jurisdiction of the regulatory bodies but are also eligible to be individual members of the national association.

• The new organization would be ethics based.

• Common certification requirements for professional surveying would be encouraged across jurisdictions. A first step could be to form regional chapters for example Prairies and Atlantic.

• Resources would be consolidated to take advantage of economies of scale for association services that may be duplicated across jurisdictions, such as public/career awareness, continuing professional development, etc. Again, nothing changes the core legislative responsibility of the regulatory bodies.

• A move towards common standards would be encouraged.

• Alliances would be sought with appropriate organizations such as CHA, CIG, URISA and GITA. Business associations such as GIAC would also be consulted but must remain at arms length given that they represent companies versus individuals.

Professional Surveyors of Canada could, in time, supplant the existing models for the expanded profession and become the logical home for professionals in the non-regulated geomatics disciplines in Canada. The new organization’s members would be individual professionals, defined through the expanded definition of professional surveying discussed earlier, rather than the surveyors associations whose members are for the most part the licensed surveyors. Initially non-cadastral members in associations such as AOLS and ACLS may wish to retain their provincial designations but in time and with recognition of a national designation, the provincial designations for non-cadastral professionals may become redundant.

In the very long term it is also possible that this national framework could become the home of cadastral professionals as government trends like TILMA and fair access for foreign trained professionals evolve and mature.

An example for consideration: Since its inception in 1970 the Project Management Institute gained worldwide recognition for it’s non-exclusive certification of Project Managers who must pass stringent requirements, adhere to specific codes, maintain CPD and so forth. Today, as a result of user demand, the Institute has more than 240,000 certified members in 160 countries.

8. Benefits of the Proposed National Model

The following paragraphs list the various benefits of a national approach and a national, member based organization that encompasses a broad national definition of professional surveying. In considering these benefits, it must be recognized that while the regulatory bodies’ primary role is to protect the public, which is impossible without a strong profession.

**Improved service and protection for the public through a stronger profession:**

• Improved professional recognition

• A stronger more cohesive profession

• Improved communication and relationships with key users
• Improved public relations and marketing
• More efficient delivery of services, reduced duplication
• Increased recruitment

**National Professional Recognition:**
• One national model for the profession recognized by all levels of society
• Improved mobility across jurisdictions
• Protection of the public through recognized common standards for all disciplines

In these areas the national association plays a facilitation role in areas that are regulatory, not unlike what CCLS does now with accreditation, harmonization and labour mobility, and a direct role in other areas.

**A Stronger More Cohesive Profession:**
• A national education curriculum relevant to evolving client needs
• Increased recruitment
• Reduced operational costs and volunteer burnout
• More access to continuing education opportunities

**Improved Communication and Relationships with Key Users:**
• A cohesive consistent voice for the profession
• Improved communications to government and other key clients

**Improved Public Relations and Marketing:**
• Building the Canadian Surveyors Brand
• Improved national and international public exposure to the profession
• Improved marketing opportunities, particularly to offshore clients

**A National Home for Related Geomatics Professionals:**
• Recognition immediately upon graduation
• Increased ability for new graduates to immediately participate in association activities
• International recognition as having met the Canadian standard for academic qualification and geomatics project management
• Access to continuing education
• Well defined and consistent track into provincial practice

9. **Governance of a new national association ...**

The new national association, tentatively named the Professional Surveyors of Canada, is envisioned as an ethics based national home for geomatics professionals in related disciplines, with the governance resting solely in the hands of the individual professional members. Membership would include all existing professional surveyors, including licensed cadastral surveyors and related disciplines) and would be open to all new graduates of accredited post secondary programs. Associate membership categories are envisioned for associations such as the regulatory bodies, CIG, CHA, etc. providing a link to regulators and other associations. Links to government, corporations, and academic institutions may also be created.
10. **Potential Milestones for Implementation**

The following paragraphs describe potential milestones for the new national organization to work towards in order to bring this vision for a strong viable surveying profession into reality. The list is not prioritized and is based on general concepts at this point. Significant progress on some of these milestones has already been made through the surveyors associations facilitated by the CCLS forum. Decisions on further implementation would be through the governance of the organization. Again, anything related to regulatory functions would be through facilitation of discussions amongst the associations, similar to the current function of the CCLS.

- Full implementation of a national board of examiners (CBEPS) with nationally accepted base academic requirements. This is underway with 5 of the associations already being full members, AOLS and ANBLS having reached agreements to join, the other Atlantic associations discussing the issue and OAGQ expressing interest.

- Harmonization of entrance requirements for surveyors. Harmonization of academic requirements is underway with the current work of the national harmonization task force and CBEPS. Harmonization of articles and professional exams is a consideration for the future.

- Consolidation of public awareness campaigns. The regulating associations currently spend in excess of $250,000 per year on public awareness campaigns – much of which could be overlap.

- Consolidation of continuing professional development (CPD) (perhaps under the CIG). There are opportunities to share many CPD programs and courses.

- Implementation of national standards for cadastral surveys and greater harmonization of national certification and regulation. A member based national association can help facilitate these milestones by first ensuring individual member buy-in and facilitating discussions amongst the regulatory bodies and academia, government and industry.

- Peer review for geomatics disciplines

- International representation (FIG, Comité de liaison des géomètres Européens, NAFTA, etc.). Current Canadian representation in FIG is by CIG. There is discussion about ACLS joining as a second Canadian member association. Neither of these options provides international representation for all professional surveyors in Canada.

- Grouping of jurisdictions (prairies, Atlantic) for licensure of cadastral (legal) land surveyors. Grouping of licensing jurisdictions is a long term possibility if labour mobility trends continue and may be dictated by governments. The profession should be proactive in these discussions.
11. Obtaining “Buy-In”

This process needs to be more fully defined and the input of the surveying associations, other national associations such as CHA and CIG, and the surveying community is needed. Right now we have a concept and a vision developed by the national task force and endorsed by the CCLS Board. We need buy-in to a willingness to engage in productive discussion in order to move forward. With a broad national constituency, many different groups, and limited resources, this will not be easy.

- A draft report was prepared and presentation to the CCLS AGM October 2, 2007.
- The report was revised based on input from CCLS members by end of October 2007.
- The next draft report was presented to Association Councils for feedback at first available opportunity. This process was completed in March 2008.
- The report is now being presented to Association annual meetings as opportunities arise.

Endorsement has been received to continue investigations and develop more detailed plans from the regulatory associations based on presentations to each of their councils. The next steps will be to build high level business case and governance model so that the vision can be further discussed and refined. At this time a process is being developed to facilitate these discussions, ensure input from all stakeholders, and move forward with the vision.

12. Recommendations

1. That a national association of surveyors, tentatively called the Professional Surveyors of Canada Association (PSCA), be operational by December 31, 2010, supplanting CCLS.

2. That the members of the PSCA be the individuals who work as surveyors across Canada, meaning that the PSCA would not be a federation of surveying associations in the same way as the Canadian Council of Land Surveyors (CCLS).

3. That the CCLS champion the formation of the PSCA over the next three years by

   - Developing a business case;
   - Consulting with all surveying associations;
   - Liaising with other groups such as the CIG, post-secondary geomatics programmes, provincial and federal government departments, and international surveying organizations (such as FIG); and
   - Arranging articles of incorporation pursuant to the Canada Corporations Act.

4. That the 11 member associations of CCLS divest themselves of a significant part of their current responsibilities beginning January 1, 2011. Such responsibilities may include:

   - attracting new members
   - liaising with other professional groups
   - lobbying industry and regulatory groups, marketing products and services
   - providing continuing professional development
• facilitating inter-provincial mobility
• developing standards
• examining candidates

This will be a gradual transition and will not include any regulatory changes. The regulatory responsibilities of the surveyors associations will remain with those associations.

13. Conclusion

To repeat the ‘why’ behind this initiative in positive terms, this is the vision that we have.

Surveying in Canada prospers by establishing a cohesive, member-driven, ethics-based national association for professional surveyors that offers a united voice, economies of scale, and a solution to the fragmentation of the 11 current surveying associations.

In order to move forward, these next steps have been identified and will be facilitated by the CCLS.

• Acquire national support from current professionals and prospective members including students
• Prepare a governance model
• Prepare a business plan
• Establish priorities and schedules
• Search out funding assistance

14. Authors

This paper was prepared by the National Task Force of the Future of the Profession formed and facilitated by Canadian Council of Land Surveyors representing the eleven Professional Surveying Associations in Canada. It is based on the initial discussions of a working group brought together in February 2007 by the task force to brainstorm on the future of the surveying profession in Canada. Many individuals were involved and contributed to the vision outlined. The following list, in alphabetical order, contains those individuals most directly involved in the initiative. Input was gratefully received by all CCLS directors, member association presidents and council members, and many other individuals within the profession. Each had a hand in the creation of this paper, and will continue to influence the direction this initiative takes.