

2019 ANNUAL REPORT

ASSOCIATION OF CANADA LANDS SURVEYORS ANNUAL REPORT FOR THE YEAR ENDING ON DECEMBER 31ST, 2019





Contents

- 02 Executive Summary
- 03 ACLS
- 03 Vision
- 03 Mission
- 03 Welcome to the Land of Surveying
- 04 Council Members 2019-2020
- 05 David Thompson Awards
- 06 NSC 2019: Halifax: Historic Gateway to Canada
- 07 NSC 2020: International and Indigenous Perspectives for Sustainable Land Governance
- 08 Act Amendments
- 09 The Canadian Hydrographer Certification Program
- 10 GeoEd Distance Learning Portal
- 11 Scholarship Winners
- 12 Pathways to Credential Recognition of Foreign Trained Land Surveyors
- **13** Complaints and Discipline
- 13 Canadian Board of Examiners for Professional Surveyors (CBEPS)
- 14 Towards an online degree in surveying/geomatics
- 15 ACLS Exam Enhancement Project (EEP)
- 16 New Book on the CLS Profession



Executive Summary

The **Association of Canada Lands Surveyors** has realized its vision as the national leader in the surveying profession and is playing a major role internationally.

The most important roles of the ACLS is to maintain the integrity of the survey cadastral fabric of Canada Lands and protect the Canadian public from professional misconduct or incompetence within the Canada Lands Surveyors profession.

The ACLS received one complaint in 2019. After investigation by the Complaints Committee, it found that there was no evidence to support a finding of professional misconduct or incompetence, so the complaint was dismissed.

In 2017, the ACLS began the **Pathways to Creden**tial Recognition of Foreign Trained Land Surveyors project and this was completed in June 2019. The objective was to implement a new streamlined process for assessing and guiding Foreign Trained Land Surveyors (FTLS) to become **Professional** Land Surveyors in Canada.

FTLS's wishing to enter the surveying profession in Canada now have access to a single point of contact and are able to start the process from their home country. It provides the candidate with more certainty about the process before immigrating to Canada.

The new process to assess the qualifications of FTLS's was developed in collaboration with all 10 Canadian Professional Land Surveying regulatory bodies and the six universities that offer Geomatics programs. The varied experience of foreign trained professionals will be of immense benefit in building our profession.

In 2018 all land surveying associations and the 6 surveying/geomatics degree granting educational institutions started a project to examine the future of surveying education. This preliminary work has taken us to a point where we are all in agreement on a direction and the need for funding to move forward.

A request for funding has been submitted to Employment and Social Development Canada (ESDC) in April 2019. ESDC confirmed in February 2020 that our concept was accepted. The initiative has three objectives:

- **1.** Update the National Educational Syllabus to meet changing societal needs and priorities, and adapting to a future driven by technological change;
- **2.** Update the university and college accreditation and exemptions process;
- **3.** Develop a clear path to an online Canadian surveying/geomatics engineering degree.

This last objective is our ultimate goal. Once the National Syllabus is up to date and the accreditation and exemption process updated, the next logical step is to move towards a Canadian online degree in surveying/geomatics engineering.

As there is already one university in North America already doing so, we understand that this is possible. Especially with the collaboration of all land surveying associations and of the current degree granting academic institutions, we are confident that we can achieve the development of a process to get to an online degree.



2

ACLS:

The Association of Canada Lands Surveyors (ACLS) is the national licensing body for professionals that survey in the three Canadian Territories, in the National Parks, on Aboriginal Reserve lands, including above and below the surface of Canada's oceans. The exclusive title attributed to these professionals is that of a Canada Lands Surveyor (CLS).

Vision:

ACLS will be a leader and valued partner in advancing the survey profession in Canada.

Mission:

We will achieve our vision by upholding our commitment to society and our role in supporting Canadian social and economic sustainability.

We will carry out the objects of the Association as set out in the Canada Lands Surveyors Act. Acting with integrity in all things, we will:

- 1. Regulate members and ensure expertise by maintaining up-to-date national standards, qualifications and association governance;
- 2. Advance our profession by promoting the contributions of our members in building and maintaining the lands and offshore property fabric that is the foundation of Canada; and
- **3.** Foster cooperative relationships with other organizations and governments.

ACLS.AATC

Welcome to the World of Land Surveying

Cadastral Land Surveying involves measurement or the creation of new boundaries or the retracement of existing boundaries between contiguous (or adjacent) parcels of land.

Surveyors apply mathematics, property law and the latest measurement technology to real-life situations. These professionals are enablers of industries that invest billions into the Canadian economy annually. Because of their expertise, land surveyors are required whenever there is a need to establish boundaries of new parcels of land, establish boundaries of tenure on parcels of land or to re-establish these boundaries.

As per Section 6 of the Canada Lands Surveyors Act, the objects of the Association are:

(a) to establish and maintain standards of qualifications for Canada Lands Surveyors

(b) to regulate Canada Lands Surveyors

(c) to establish and maintain standards of conduct, knowledge and skill among members of the Association and permit holders

(d) to govern the activities of members of the Association and permit holders

(e) to cooperate with other organizations for the advancement of surveying; and

(f) to perform the duties and exercise the powers that are imposed or conferred on the Association by this Act.

Council Members 2019–2020



Robert Pinkerton President *Calgary, AB*



Dominique Fecteau Past President *Mont-Tremblant, QC*



Bob Halliday 2nd Year Councillor *Massey, ON*



Leona Irons Appointed by the Minister *Curve Lake, ON*



Jim Christie Vice President Vancouver, BC



Max Putnam 1st Year Councillor Corman Park, SK



Jean Gagnon Surveyor General *Ottawa, ON*



Philippe J. Breau 3rd Year Councillor Néguac, NB



Geoffrey Connolly Appointed by the Minister Cornwall, PEI



Jean-Claude Tétreault Executive Director Ottawa, ON

David Thompson Awards

For over 13 years, the David Thompson National Geomatics Award has been awarded to surveyors in an effort to nationally acknowledge their achievements and excellence in the field of geomatics in Canada. The program was developed to recognize projects that exemplify the innovation and contribution to society that surveyors make every day to bring successful projects about for the betterment of all Canadians. The program has the two following categories:

- 1) Challenging Cadastral Survey Project
- 2) Challenging Non-cadastral Survey Project

The awards were presented during the National Surveyors' Conference in Halifax on May 2nd, 2019.

Challenging Cadastral Survey Project

In the category *Challenging Cadastral Survey Project*, the winner was David Attwood of Attwood Surveys Ltd. for the project entitled: "Louisbourg Harbour Survey", Louisbourg, Cape Breton Island, NS

In his project David displays some challenges and unique history dating back to pre confederation. The plan also shows the survey of the federal water lot grants and the survey of the pre-confederation provincial water lot grants.

While only one submission was made in this category, the project received evaluation by the judging panel and found to merit the award.



Challenging Non-cadastral Survey Project

In the category Challenging Non Cadastral Survey Project, the winner was Tyler Mikkelson of Caltech Surveys Land Surveying BC Ltd. for the project entitled: "Old Fort Landslide Survey"

Tyler's project was amidst a natural disaster in Old Fort. Caltech submitted daily video fly-throughs, bare earth and full feature surfaces, and orthorectified imagery providing critical insight to decision makers as the emergency unfolded. Once the situation was stable, monitoring of the slide movement began and provided timely accurate data to the emergency response decision makers, which in turn, allowed families to return to their homes. Ongoing monitoring system were installed to alert residents of any changes in the future.

Runners up for this award were David Andrews of Global Raymac Surveys Inc. for the project entitled: "Drones for Mining Stewardship in Northern Canada" and Rob Yates of McElhanney for the project entitled: "Data capture & modelling of the Coquitlam reservoir".

The David Thompson National Geomatics Awards Program is open to all commissioned surveyors who are members of a Canadian surveying association, submitting projects that have been completed within the last three years. The deadline for submissions is March 15th, 2021.

Dominique Fecteau (left) presenting the award to David Attwood (right)



Dominique Fecteau (left) presenting the award to Tyler Mikkelson (right)



NSC 2019: Halifax: Historic Gateway to Canada

The Association of Canada Lands Surveyors and Professional Surveyors Canada united to hold a conference in Halifax, Nova Scotia from May 1st to 3rd, 2019 at the Delta Halifax Hotel. The theme of the conference was: "Halifax: Historic Gateway to Canada" 150 delegates from across Canada attended the conference.

A special workshop entitled "Responding to Change – The Evolving Boundaries of Practice" was a great success. Cadastral systems and the association management of lands are undergoing significant change in Canada and around the world. The workshop presented a snapshot of the current and potential impact of changes in technology, society and governance on cadastral systems across Canada and compared the Canadian situation to recent strategic initiatives internationally.

A key goal of the workshop was to open a national and pan-community dialogue leading to the articulation of a strategic vision for the management and delivery of the next generation cadastral system to Canadians.

6











NSC 2020: International and Indigenous Perspectives for Sustainable Land Governance

Each year, to comply with the statutory requirements for the ACLS annual general meeting and the continuing professional development (CPD) of its members, the Association provides seminars in conjunction with the National Meeting. While the intent is to provide informative sessions to the ACLS members, the ACLS does open these sessions to surveyors from provincial surveying jurisdictions as well as students currently enrolled in the field of surveying. It is a great opportunity to network, learn and discuss survey related issues and accomplishments from each other's region of practice.

The 2020 edition of the National Surveyors Conference (NSC) was to be held in Mont-Tremblant, Quebec from May 19th to 22nd, 2020. The theme for this one was: *International and Indigenous Perspectives for Sustainable Land Governance*. Unfortunately, as the COVID-19 virus continues to spread globally the ACLS decided to **cancel the National Surveyors Conference**.

The 2020 edition was going to be an international event. In addition to collaborating with Professional Surveyors Canada, the following groups were going to contribute to both the technical program and the number of delegates:

- The Working Party on Land Administration (WPLA)
- Canadian Geomatics Engineering Conference (CGEC) and
- Canadian Council on Geomatics (CCOG)

The overall goals of the WPLA are the promotion and improvement of land administration and land management in the United Nations Economic Commission for Europe (UNECE) region. Its members are the national land administration authorities and related authorities from UNECE member states.

The Canadian universities that have a geomatics engineering program were planning to hold their second Canadian Geomatics Engineering Conference.

The Canadian Council on Geomatics (CCOG) is the major federal-provincial-territorial consultative body for geographic information management. CCOG meets twice a year to discuss programs, developments, legislation, and issues relevant to geomatics.



Act Amendments

Proposed amendments to the Canada Lands Surveyors Act were initiated in 2012.

The proposal would modernize the Act by:

Improving the complaints and discipline processes through greater transparency;

Transferring administrative responsibilities from Regulations to By-laws;

Aligning with Labour mobility provisions with the Canadian Free Trade Agreement;

Amend incompatibilities between the English and French versions of the Act. All through the years 2017 to early 2020, the ACLS By-laws and Legislations Committee and some members of the NRCan Surveyor General Branch staff worked on preparing a working document explaining the modifications to the Act that the Committee thinks are necessary to address the topics listed above.

The project is now in the hands of the Federal Government for next steps.

The Canadian Hydrographer Certification Program

The ACLS has developed a certification model for hydrographers and offshore surveyors, which has been officially recognized by the IHO/FIG/ICA International Board of Standards and Competence for Hydrographic Surveyors and Nautical Cartographers (IBSC). Currently, 4 people have been awarded Certified Hydrographer Level 1 status. The ACLS program is the second internationally recognized scheme in the world.

Certification by a hydrographic or offshore surveyor is desirable because:

- Certification provides a formally recognized and structured career path for the hydrographic or offshore surveyor.
- Establishes the hydrographic or offshore surveyor's level of expertise and competency.
- Ensures the hydrographic or offshore surveyor is aware of the changing technologies in these sectors.
- Provides the certificate holder with an enhanced profile within their industry.
- Prepares the hydrographic or offshore surveyor for the next global expansion in these sectors.







GeoEd Distance Learning Portal

Recognizing the geographically diverse nature of surveyors across Canada, the ACLS is enhancing the delivery of continuing professional development through distance learning initiatives. This includes courses offered through partnership with sister associations, academic institutions, government, and private companies and all available through the GeoEd portal.

The GeoEd portal is currently being filled by on-line courses on a variety of topics that are available at a click of the mouse. At this time there are over 200 courses available on GeoEd. These courses include live, interactive webinars but most courses are on a self-study format with recorded video and other digital materials. Surveyors are able to sign up for any course and complete it at their leisure.

GeoEd is well on its way to becoming the tool that surveyors across Canada will use to make educational opportunities as easy and accessible as possible. Please visit GeoEd at: www.geoed.ca.



Scholarship Winners

Every year ACLS Foundation awards scholarships of \$1,750 to students enrolled in a post-secondary institution in the field of Geomatics. This year, the committee chose the following recipients from many promising applications. Congratulations to the winners and thanks to all applicants!

2019 Winners of the ACLS Foundation Scholarship in alphabetical order:

Andreas Brown

4th year at the University of Calgary *Geomatics Engineering*



David Borja 2nd year at the BCIT *Geomatics Engineering Technology*



Cody DeRoach NSCC COGS Geomatics Engineering Technology



Kara Sanford University of New Brunswick *3rd year bachelor of Science in Engineering*



Visit our website at https://www.acls-aatc.ca/students-home/scholarships/ for additional information about the Geomatics Scholarship Program and eligibility requirements.

Pathways to Credential Recognition of Foreign Trained Land Surveyors



Canadian professional land surveyors are made up of 11 self-regulated professional land surveying associations across Canada, each with its own legislation and legal responsibilities. As a result, there was a variety of processes to assess the competence of Foreign Trained Land Surveyors (FTLS's) but no Canadian central point of contact for a FTLS's to obtain information and apply for credential recognition as a professional land surveyor in Canada.

The ACLS obtainined funding from Employment and Social Development Canada through the "Foreign Credential Program" and has successfully completed this project and the Canadian Board of Examiners for Professional Surveyors (CBEPS) has started receiving applications from Foreign Trained Land Surveyors (FTLS) since the summer of 2019 under the new regime. FTLS's wishing to enter the surveying profession in Canada now have access to a single point of contact and are able to start the process from their home country. It provides them with more certainty about the process before immigrating to Canada. There is now a real possibility that an Internationally Trained Professional arrive in Canada with many requirements completed, which may assist them in contributing to Canadian society in a shorter time.

The new process to assess the qualifications of FTLS was developed in collaboration with all 11 surveying regulatory bodies and the six universities who have a geomatics degree program, and is managed by the Canadian Board of Examiners for Professional Surveyors.

ODEN

Canada

This project is funded by the Government of Canada (Foreign Credential Program).

ODEN NORRKÖPING

Complaints and Discipline

The most important role of the ACLS is to protect the Canadian public and the survey cadastral fabric.

The Association received one complaint in 2019. The complaint was received on January 20th, 2019.

The committee met on March 4th and requested additional information. The requested information was received March 8th. The committee met for a 2nd and final time on March 11th. The committee unanimously agreed that there was no evidence to support a finding of professional misconduct or incompetence. The complaint was dismissed.

Canadian Board of Examiners for Professional Surveyors (CBEPS)

The ACLS continues to provide the administration and registrar services for the Canadian Board of Examiners for Professional Surveyors. The ACLS has a strong core competency in the fields of candidate management and examinations and wants to continue to make these resources available to the whole surveying community.

Towards an online degree in surveying/ geomatics

In 2018 all land surveying associations and the 6 surveying/geomatics degree granting educational institutions through the Canadian Board of Examiners for Professional Surveyors (CBEPS) started a project to examine the future of surveying education. This preliminary work has taken us to this point where we are all in agreement on direction and need funding to move forward.

To continue to make the surveying profession more responsive, open and welcoming, it has become clear throughout the work on the Pathways to Credential Recognition of Foreign Trained Land Surveyors project (see page 12), that the National Syllabus must be updated. Several components are now out of sync with the real world of surveying using the technologies available today.

Updating the national syllabus will then take the surveying profession closer to its avowed goal of setting-up an online degree in surveying/geomatics.

We also need to develop a new and improved accreditation process for current and future learning institution programs leading to a degree in surveying/ geomatics that would be more efficient and in line with national and international trends. An online degree in surveying/geomatics is an innovative way to access specialized knowledge that will benefit many groups. For example, mature Canadian students find it nearly impossible to quit work and move to where a degree is being taught at university – they have many obligations and often times they also have a family. It would also assist foreign trained land surveyors interested in immigrating to Canada as they could undertake to fill in the gaps in their knowledge from their country of origin reducing the time required to attain their goal of being licensed land surveyors in Canada.

A request for funding has been submitted to Employment and Social Development Canada (ESDC) in April 2019. ESDC confirmed in February 2020 that our concept was accepted. A detailed submission with proposed budget will be presented to ESDC in June of 2020. We are waiting for a response sometime in the summer of 2020.



ACLS Exam Enhancement Project (EEP)

In January of 2018, the ACLS started a project dedicated to improving the quality of efficiency of its current examination system. There were three objectives in achieving a more efficient examination system through the ACLS Examination Enhancement Project (EEP). These objectives were as follows:

- To provide a mechanism to allow candidates to prepare and succeed in writing the necessary examinations.
- To update study material and fill in the gaps in the French material.
- To eliminate the biannual face-to-face sitting of the examinations for candidates who do not hold a provincial surveying commission and provide greater flexibility to this entire candidate stream.

This project has been completed in March of 2020.

Labour Mobility candidates had access to an on-line exam separated into 4 modules since the Spring of 2018 and now those candidates who do not have provincial licence to practice have access to 3 on-line on demand exams eliminating the 2 face-to-face exam sittings.



New Book on the CLS Profession

In November 2018, the Association of Canada Lands Surveyors Council decided to proceed with the production of its first book on the CLS profession to be written by acclaimed author, Charlie Wilkins.

Charlie Wilkins's foregoing reputable publications include the Association of Ontario Land Surveyors' book, *Great Lengths: A Celebration of the Surveyors of Ontario*.





GREAT LENGTHS

A CELEBRATION OF THE SURVEYORS OF ONTARIO

CHARLES WILKINS



The prime focus of this ACLS publication will concern the areas of Canada lands which are relevant to the Association, such as Canada's oceans, Northern Territories, National Parks and Indigenous Lands.

In addition, this publication will delve into the crucial role that women play within the realm of Canadian land surveying.

The historical component of the ACLS and its predecessors of the Dominion Land Surveyors will be explored, dating back as far as the great Dominion Land Survey of the mid-late 1800s up until present day Indigenous land claims and National Park systems throughout the nation.

The overall objective of this publication is to provide a captivating and varied experience for its readers. Through the delivery of a variety of independent inviting elements that are relevant to the interests of the Association, each reader can expect to immerse themselves into a book that will satisfy their curiosity and enlighten them from start to finish.

At this point, Charlie finished his interviews and is focusing on writing the text. He was to present a sample of his work at the National Surveyors Conference in Mont-Tremblant, but the event was cancelled.

This new publication will be available in the spring of 2021.





2019 ANNUAL REPORT

ASSOCIATION OF CANADA LANDS SURVEYORS

900 Dynes Road, suite 100E Ottawa, Ontario, Canada K2C 3L6 1-613-723-9200

www.acls-aatc.ca