

Canadian Society for
Civil Engineering



Société canadienne
de génie civil

2021 ANNUAL REPORT

As presented at the
2022-05-27 AGM

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2021 Annual General Meeting (AGM) Minutes

Wednesday, June 16th, 2021 at 13:00 – 14:00 Eastern Time

Virtual meeting

Head Panel

Catherine Mulligan, President

Brenda McCabe, President Elect

Mark Scanlon, Honourary Treasurer

1. Call to Order – C. Mulligan
 - 50 voting members in attendance plus four panelists – quorum of 33 achieved

thanked for their leadership and contributions

2. Adoption of the Agenda – C. Mulligan

Motion to accept the agenda

Moved by W. Zwicker

Seconded by M. Scanlon

No discussion

Vote Results: Yes=38; No=0;

Abstain=0

Motion to accept the President's report and all reports, except for the financial statements and the nominating committee report

Moved by M. Khouday

Seconded by W. Zwicker

Discussion

The President was thanked for her dedicated service during this challenging year of the pandemic.

3. Approval of the Minutes of the 2020 AGM on June 9, 2020 held online– C. Mulligan

Vote Results: Yes=41; No=0; Abstain=3

Motion to approve the Minutes of the June 9, 2020 AGM

Moved by M. Khouday

Seconded by B. McCabe

No discussion

Vote Results: Yes=36; No=0;

Abstain=3

5. Honourary Treasurer's Report – M. Scanlon

Motion to receive the 2020 financial statement for information

Moved by Mark Scanlon

Seconded by Peter Langan

Discussion

4. President's Report – C. Mulligan

The President overviewed the year per her annual report. Retiring Board and committee members were identified and

- Concern was expressed about the loss of \$150,000 in 2021 and what actions were taken to mitigate it. CSCE took full advantage of government grants, especially the

Canada Emergency Response Benefit (CERB).

- It was asked if there was any explanation for the reduction in membership. Some of the reduction is due to companies attempting to control their own costs during the pandemic and therefore not supporting membership fees as they used to.
- It was asked whether the 2021 virtual conference was profitable. Unfortunately, it takes several months to compile the costs after a conference, but we should know by fall.
- The Honorary Treasurer was thanked for his service in these trying times.

Vote Results: Yes=36; No=3;
Abstain=4

Motion to appoint Baker Tilly auditors for 2021 fiscal year

Moved by M. Scanlon
Seconded by B. McCabe
No discussion

Vote Results: Yes=39; No=2;
Abstain=3

6. Report of the Nominations Committee
– C. Mulligan

Motion to accept the Nominations Committee Report

Moved by M. Khouday
Seconded by W. Zwicker

No discussion

Vote Results: Yes=40; No=1;
Abstain=3

7. Passing of the Gavel and presentation of President's Pin by Out-going President Mulligan to In-coming President McCabe.
8. Words from new CSCE President B. McCabe

B. McCabe gave a brief overview of her experience with CSCE, then outlined her objectives for the upcoming year.

9. Motion to Adjourn

Moved by W. Zwicker
Seconded by P. Langan
Vote Results: Yes=44; No=0;
Abstain=0

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Report of the President

Brenda McCabe, PhD, FCSCE, FEIC

This report covers the year spanning June 16, 2021 to May 27, 2022. I won't lie – it has been a challenging year as you'll see throughout this annual report. At our first Board meeting on June 19, 2021, the Executive Director (ED) demonstrated that CSCE was in financial distress. Between 2016 and 2020, the CSCE spent \$647,000 more than it brought in. Our liabilities exceeded our assets, and there was no record of the Board approving the debt load.

Like an old car that doesn't work properly, there's probably more than one thing wrong with it. So, this year, the Board addressed as many components as it could starting with our foundational documents. The formation of a Governance Review Committee showed renewed interest in separating oversight and management functions (see Governance Review Task Force Report). A draft of the proposed new bylaws has been shared with the membership for feedback. You will see this effort continue in the coming year to draft policies and procedures manuals.

To better understand the CSCE's fiscal situation, our ED asked the annual auditors to provide a Management Letter, addressed to the Board, that outlined their opinions about our internal practices. Within one week of the receipt of that letter, the Board approved the appointment of a forensic accounting firm to examine our finances. You can read about other actions related to finances in the Report of the Honorary Treasurer. Some of these items may seem common practice, but they had been lost at the CSCE since the departure of our previous Executive Director.

On the positive side, several advances were made in stabilizing revenue streams. This fall we signed the CSCE – ISI Partnership

agreement to accelerate the use of Envision® in Canada. See more about this program in the Report of the Vice President, Program Coordinating Committee - Technical Programs.

The Ontario Region undertook a major project in partnership with McMaster University through Ontario's Skills Development Fund to deliver sustainable, climate resilient infrastructure training. This effort supports our ISI partnership. Read more about it in the report from the ONTARIO REGION.

The Tech Talk Webinar Task Force (report on page 36) was especially active, providing our membership across the country with technical presentations on a broad range of topics. I sincerely thank them for this great initiative.

The History Committee has for many years supported public visibility on significant civil engineering works (report on page 33). I hope that in the near future, we'll have a robust program that engages schools and families in visiting these sites thereby generating greater appreciation of our country's civil infrastructure.

The President's Task Force on Accessibility remains not just active but is expanding with new members being recruited. The group envisions developing guidelines that educate and support designers and the general public with prioritized lists of ways in which a infrastructure can be adapted or constructed using accessible best practices. This is an important initiative that will provide information not often included in engineering education.

There is still work to do. For example, membership statistics since 2018 (page 50) indicate declines in membership. Sadly, our member records are difficult to use and in disrepair. However, we did move

to an online accounting system – a first step in enhancing our access to financial reporting.

The CSCE was fortunate to have an Executive Director, David Innes, and a Board of Directors who appreciated the situation we were in and were willing to take steps to address it. On behalf of the CSCE, I extend my sincere thanks to them all. I am astounded at how much was achieved this year and how that high level of engagement resulted in a dramatic

directional change aimed to bring us back into fiscal balance.

These successful endeavors didn't just happen! They were driven by volunteers like yourself with passion and dedication to improve our Society. As with all volunteer organizations, we depend on the good will, energy, and support of our members. I hope that you get involved during this upcoming year, either as a leader or a participant. The CSCE is a great organization – it is worth fighting for.

Report of the Executive Director

J David Innes, M.Eng, P.Eng, FCSCE, FEIC

It has been an extraordinary year for the Canadian Society for Civil Engineering. In fact, the CSCE has had what Queen Elizabeth once referred to an *annus horribilis* but despite its challenges we are finishing the year with some important advances.

I began my role as CSCE's Executive Director on May 31, 2021. At that time, I understood that the CSCE had operated without an Executive Director since 2017 and that this experiment in administration was being questioned. As a Past President, I believed then that my familiarity with and interest in the CSCE combined with my work experience could be helpful to the CSCE in finding a way forward. In my naivete, I believed that with a good and thoughtful strategic plan, the CSCE could be up and running on a good path in a few months.

That premise was quickly abandoned as we discovered that the situation was more dire and the need for action more urgent than previously thought. The evidence was and is in plain sight. We had moved in a few years from a position of being financially solid into a position where we owed a significant amount of money. Further, our losses were increasing, and it was clear that our level of spending was not sustainable. There was no explanation for our administration costs and it was apparent that there was an immediate need to understand our accounts and our spending.

By October, the services of our two employees were no longer available to the CSCE. The circumstances of their parting is being disputed and thus will not be discussed further.

The fact of the matter though is that for a few weeks we had no employees. We had two conferences in the works and a society to administer. We became aware of Karma-Link and the services they provided to the Canadian Geotechnical Society and we reached out to them. In December 2021 with Board approval, the CSCE entered into a contractual arrangement with Karma-Link and they undertook both conference support as well as bookkeeping and administrative support duties on behalf of the CSCE.

Since that time, the operations of the CSCE have been returning to normal at a sustainable cost level. The conferences agenda of the CSCE is progressing well and functions like registration are returning to normal. The speed of our progress is limited by the fact that everything is new to the support staff and our procedures and software environment needs updating. There is lots of room for improvement in our work and I am confident that this will happen in the fullness of time.

Over the year, the CSCE has spent an extraordinary effort in accounting services. It was necessary to obtain a good understanding of the money spent in the past and to establish a good accounting system for the future. As well, there was a considerable number of accounts that were outstanding and in need of attention. While the need for continued frugality is evident, much progress has been made and the CSCE is now moving towards a solid financial position.

In the midst of much turmoil, the CSCE made significant progress. Two undertakings have provided value to our community as well as provided immediate financial gain and promise for the future for our society.

The Institute for Sustainable Infrastructure and the CSCE signed a contract and announced the launch of Envision Canada on March 23, 2022. The Envision Canada website is EnvisionCanada.com.

Envision provides a consistent, consensus-based framework for assessing the sustainability and resilience of existing and new infrastructure. Currently, the CSCE is promoting more qualified people as Envision Sustainability Professional (ENV SP) and encouraging public infrastructure owners to adopt the Envision framework.

Over the past year, Phase 1 of the Ontario Skills Development Fund project was completed. This project was undertaken by the CSCE in conjunction with McMaster University and the Government of Ontario. At this point, the agreement for Phase 2 of the project has been signed and we are looking forward to the future success of the program.

These projects are adding value to our community and to the CSCE and Michael Benson and Peter Calcetas deserve much recognition for the success of these projects.

Also, the work of the CSCE Board of Directors in redefining the governance structure of the CSCE was an important part of the progress made this year. The new governance structure will strengthen the CSCE and sharpen the focus of the

Board of Directors on providing oversight to the organization. This should ensure that the CSCE never gets as close to the brink as we have been in the immediate past. Effective governance is vital to any organization and the CSCE will greatly benefit from this initiative.

While it has been a tumultuous year, it has been an important year of progress for the CSCE. It has been a year in which we changed the financial trajectory of the organization.

The progress made took a much effort by many people. I would recognize and thank Lisa Reny, Bill Reny and Emily Fournier of Karma-Link for stepping in to help us when we really needed help. Their level of effort was substantial and that effort enabled us to continue. Where would we have been without them?

I wish to recognize the important contribution that the whole Board of Directors made to the successes of the past year. In particular, I recognize the extraordinary contribution made by our President, Dr. Brenda McCabe whose time and personal effort was substantial and necessary. Her leadership and level of effort were outstanding.

Finally, I wish to recognize and thank the membership of the CSCE for their continued confidence during these challenging times.

Report of the Senior Vice President

Gopal Achari, P.Eng, Ph.D, FCSCE

It has been an honour and privilege to serve as the Senior Vice President of the CSCE for the past one year. The past couple of years including this one, has been challenging with the pandemic and with all meetings and discussions being held through electronic means. However, this has also provided opportunities to meet and discuss more often.

The SVP portfolio comprises of four committees: the Regional Coordinating Committee (RCC), the International Affairs Committee (IAC), the Student Affairs Committee (SAC) and the Young Professionals Committee (YPC). We held regular monthly meetings between the Chairs of the committees and the regional vice-presidents. These open-discussion meetings provided regional vice presidents as well as committee chairs to bring forward ideas and suggestions to the national level and seek solutions to local challenges. I thought these were very useful as it gave everyone an opportunity to talk about all the activities going on at the region and section levels.

One such idea that came out of these meetings was to hold a workshop on membership structure and how to enhance membership in CSCE. Subsequently a workshop was held in October, facilitated by MacKenzie Walker, VP Western Region. Amongst the topics considered was the need to strengthen the linkages between regions and national office. I congratulate the Regional VP's and the Chairs of SAC, YPC and IAC, who have been doing an outstanding job of advancing the CSCE agenda and promoting it to fellow members. Details of the activities by the regions and committees are provided below.

Beyond what is mentioned above, the SVP also supports CSCE by being a member of the CSCE National Management Committee (NMC) and the CSCE Board. Over the past year, the number of Board and NMC meetings have been enhanced to ensure the smooth running of the society. I take this opportunity to encourage our members to get more involved in the activities of CSCE, be it mentorship, conference or symposium organization, or any of the items in the CSCE roster of activities. Feel free to contact any of the section, region, or national office leaders with your interests. I look forward to meeting everyone in person soon!

INTERNATIONAL ACTIVITIES

Bing Chen, VP International

The Vice-President (VP) International is a member of the CSCE Board of Directors and serves as an advocate for CSCE's international activities as a member of the Board. The VP International is also responsible for: Leading the International Region Council (IRC) and its operations; oversight of the International Affairs Committee (IAC) and assisting its activities and projects; overseeing and supporting Branch operations, developing Branch policy, and planning the development of new Branches; overseeing and undertaking international membership recruitment; advocating and developing services to international members; and overseeing the International Region and representing the interests of the International Region on the Regional Coordinating Committee and the Conference Committee. The IRC, IAC and Branches report to the VP International.

The IRC falls under the auspices of the regional structure of the CSCE and carries out the duties defined by the CSCE By-Law. It particularly plays a leading role in CSCE's recruitment and retention of international membership and institutional members international (IMIs), development and growth of overseas branches, services to international members and IMIs, representation of international members on other CSCE committees and decision making processes, and working with IAC and overseas branches in developing other overseas activities. It has been established in 2020.

The IAC handles all CSCE's foreign and international activities and projects related to the technical disciplines of CSCE. The exceptions include the sponsorships of some international and foreign conferences which may be handled directly by the appropriate Technical Divisions, the activities undertaken by the National Office in response to requests for information, and the activities of any CSCE Branch in a foreign country if outside specific bilateral agreements of cooperation. With the support from the IRC, the IAC develops, promotes, and implements agreements of cooperation with foreign, national, and international societies. Formed in the 1980s, IAC has been one of the CSCE's most active committees and played a leading role in the international affairs of CSCE.

The CSCE Hong Kong Branch (HKB), the first and only overseas branch established in 2007, has been promoting the objectives of CSCE and Canadian practice of civil engineering in Hong Kong and its vicinity through organizing diverse professional and educational activities, growing partnerships with local government, industry and communities, and contributing to local civil engineering and profession.

Overview

Bing Chen (VP International) has been closely working with the IRC, IAC and HKB to promote CSCE and grow our international membership and partnerships. We have established 28 international agreements with foreign societies and associations and recorded 12 Institutional Members International (IMIs) in total. The detailed information is available on the CSCE International Region website.

Due to the travel restrictions and health concerns, the pandemic continuously caused significant impact on our society's international operation and activities in the past year. A number of the planned conferences, symposia, seminars, overseas visits, professional development workshops, student exchanges, and other promotion and training activities were cancelled or postponed. One of many examples is our Ambassador program which was on hold due to the travel restrictions worldwide. It is expected to resume the activities in the second half year of 2022; the annual visit to the HKB was also cancelled as well as the visits to other partner organizations (e.g., Chinese Society of Civil Engineering in Beijing); the planning of overseas technical courses (e.g., the one on UHPC and FRC previously planned in Hong Kong) was on hold.

Despite all the challenges and impacts in the past year, VPI, IRC and IAC have tried various efforts on sustaining our international partnership and memberships, providing benefits to foreign members, introducing new opportunities back to Canada, exchanging information with partner associations, and promoting Canadian civil engineering and civil engineering profession worldwide mainly through remote/online communications such as emails, tele/video-conferences and virtual events. The details are summarized in the sections below.

Considering the recent development of the pandemic and the growing vaccination and community immunity, we expect and hope to gradually resume our international activities back to the normal level in the coming year. Our special efforts will be given to grow our international partnership and membership particularly in the following aspects: 1) continuation of new overseas branch development (e.g., West Africa, India and the Middle East); resumption of the Ambassador Program and overseas PD workshops; development of co-organized conferences with foreign partners (with or without financial commitments); 3) promotion of the new International Student Membership; exchange of knowledge and expertise with overseas partners especially through webinars and virtual meetings; and introduction and creation of overseas research and business opportunities for Canadian civil researchers and engineers/firms.

International Region Council

The IRC falls under the auspices of the regional structure of the CSCE. IRC and IAC work closely in parallel and support each other under the leadership of VPI. The functions of IRC more focus on the internal issues on how the society recruits and serves its international members.

The membership of the IRC consists of Chair (Bing Chen, VPI), Deputy VPI (Ronald Dorse, former IAC chair and current member), Representative of IAC (Jeanne Huang, IAC Chair), Representative of Overseas Branches (TC Kan, HKB Chair), Treasurer (TBC), Secretary (TBC), and 1-2 members (representatives of International members). VPI is recurring the remaining members with several candidates identified.

In the past year, despite the impact of the pandemic, the IRC chair and members have closely worked with the VPI, IAC and HKB and made continuing efforts in the

following aspects to operate and promotion CSCE international region: identify and recruit new members to sustain a healthy IRC; provide advice to VPI about overseas branch development; provide advice to IAC and HKB; recruit and sustain international members and IMIs and provide benefits to them; promote cooperation with other foreign learned engineering societies in terms of information exchange and event co-organization and promotion; etc.

An important ongoing effort of the IRC is to work with IAC to organize the "International Perspective Webinars". The first webinar has been jointly hosted with the "National Tech Talk". Invited by VPI (Bing Chen), the first speaker was Professor Van-Thanh-Van Nguyen (IAC Member) who gave the talk on "Linking Global Climate Change to Impact and Adaptation Studies at Regional and Local Scales: Advances and Challenges in Developing Engineering Technical Guidelines" on March 21, 2021. Another speaker, a foreign civil engineer with extensive experience in civil projects globally, has been identified and invited to give a talk about international project management to be scheduled in early 2022. The details will be announced later on by the National Office.

Operation of IAC and HKB

Our IAC has been chaired by Jeanne Huang since March 2019 along with Sadegh Kazemi as the Deputy Chair. The implementation of IAC's plan in the past year was strongly affected by the Covid-19 but the members made continued efforts in maintaining active as much as possible through diverse activities.

The Executive Committee of our HKB has been chaired by TC Kan since January 2019 with Ben Chan as the Vice-Chairman. The HKB faced significant challenges due to the influences of the pandemic causing the cancellation and suspension of their planned activities.

The leadership and members of IAC and HKB made various efforts in sustaining the activities in the past year, which are commendable. The detailed descriptions of their activities are presented below.

Overseas Partnership Development

Despite the impact of the pandemic, Bing Chen (VPI) and IAC continued their efforts in strengthening our existing international partnerships and developing new ones in the past year.

Efforts have been made through IAC to collect and organize all the past international agreements and a database has been established and will be kept updating. IAC has been tasked to identify two lists for follow-up actions: 1) develop more collaborative activities with the active partners (e.g., China Civil Engineering Society, Chinese Hydraulic Engineering Society, Bahamas Society of Engineers, and Institution of Engineers Malaysia); 2) reactivate the inactive partners identified as priorities (e.g., Australia, France, Brazil, South Korea, and New Zealand); and 3) identify the expired agreements and reconnect the corresponding partners to renew or terminate the agreements based on the mutual interest.

CSCE's agreement with the Chinese Hydraulic Engineering Society (CHES) has been expired. We have recognized the past fruitful partnership between the two organizations and also confirmed the strong interest in continuing the partnership from both sides. The renewed agreement in both English and Chinese has been drafted and reviewed by the IAC and will be signed off by both organizations in early 2022.

Bing Chen (VPI) successfully reactivated the partnership with the Chinese Society for Environmental Sciences (CSES). CSES participated in the CSCE/ASCE/ICE Triennial Conference on May 25-26, 2021. During the event, two speakers, Bin Peng

(CSES Deputy Secretary General) gave a keynote speech and introduced CSES and achievements in China as well as their interest in collaborating with CSCE. Another invited keynote speaker from CSES, Denghua Yang (Director and Professor of Department of Water Resources, China Institute of Water Resources and Hydropower Research), gave a technical presentation on "A Theory Improving Resilience of Infrastructures under Climate Change - Nature Enriched and Attributes Coordinated Watershed". They also invited CSCE leadership to visit CSES and attend their annual conferences in China. Discussions were ongoing on how to enhance collaboration and bring benefits to the memberships of each other.

CSCE continuously took an active role in co-organizing conferences overseas with our partners. For example, we co-hosted the 7th International Conference on Integrated Land-Use Transport Modeling (ILUTM-7), June 18-19, 2021, Xi'an in China, and the 6th International Conference on Transportation Information and Safety (ICTIS), October 22-24, 2021, Wuhan in China, with the Wuhan University of Technology. This was the sixth time in co-hosting the ICTIS along with several other events since the MOU signed in 2009. Jeanne Huang (IAC chair), Andrew Liu (IAC member) and other CSCE members (Ming Zhong and Liping Fu) played key roles in organizing these conferences. We also supported the 90th Anniversary and 2021 Annual Conference of the China Hydraulic Engineering Society on October 25-26, Beijing in China (CHES 2021). CSCE had various technical cooperation and exchanges with CHES in the past decades. CSCE President Catherine N. Mulligan and Brenda McCabe provided congratulatory letters to these three conferences. Brenda McCabe also provided video greetings to the ICTIS 2021 and CHES 2021, which were recognized by the news released by both societies.

VPI continued their efforts on developing new overseas branches. There are three targeted countries and regions based on the identified interests: in Nigeria, a champion was identified, Ben-Osy Okoh with extensive experience in civil practice and a CSCE foreign member and a fellow of Nigerian Society of Engineers (NSE) and American Society of Civil Engineers (ASCE). VPI provided guidance to them with detailed advice. The first meeting of local CSCE foreign members to develop an overseas branch was held on September 22. In the Middle East and India, communications and efforts continued with several CSCE members in both Canada and Egypt and India respectively in the last year but with interruptions by the Covid-19. The discussions focused on the details about the leadership, management, responsibilities, visions, and finance of the potential branch and relationships with the society.

CSCE INTERNATIONAL AFFAIRS COMMITTEE

Jeanne Huang, PhD, PEng, FCSCE, IAC Chair and IAC members.

Overview

IAC's activities include both foreign projects and domestic activities within Canada. The IAC is mandated to plan and carry out CSCE's international activities, undertake its international development projects, and keep CSCE members aware of civil engineering research, practise, opportunities and major projects in foreign countries. IAC interacts with foreign organizations to foster relations that will lead to joint meetings, conferences, other professional events and work projects for CSCE members and foreign organizations or clientele. IAC assists other arms of the CSCE with respect to hosting and protocol associated with visiting foreign delegates from engineering societies. IAC's mandate, however, excludes sponsorship of international and foreign conferences, which are usually handled directly by the

IRC and/or appropriate Technical Divisions; activities undertaken by the National Office in response to requests for information, and; the operation of any CSCE Branch in a foreign country if outside specific bilateral agreements of cooperation. Information on IAC can be found on the committee's web pages, which are regularly updated with support from the National office.

Technical Delivery Activities Overseas

Due to the pandemic COVID-19, many places were closed down for the whole year of 2021, travel was restricted. It brought many challenges for IAC activities. During the difficult time, IAC members worked together and still made some progress.

- IAC members made contributions to the theme of the Civil Engineering Triennial Summit 2021. Jeanne Huang introduced the Civil Engineering Triennial Summit 2021 to the World Federation of Engineering Organizations (WFEO) and Jeanne Huang also facilitate CSCE President, Catherine Mulligan to invite Prof. GONG Ke, the president of WFEO, to give a speech at Civil Engineering Triennial Summit 2021
- IAC (especially Jeanne Huang) actively participated in and provided support on behalf of CSCE to the CHES 90th Anniversary and Annual Conference on October 25-26, Beijing in China. CHES invited our President Brenda McCabe to give an address at their 90th Anniversary Ceremony. Brenda McCabe's congratulatory letter and video greetings were recognized and appreciated by the CHESb which expressed the strong interest in continuing and enhancing the collaboration between the two societies. The renewed agreement is currently being processed and waiting for final sign off.
- Jeanne Huang developed efficient contact with and re-established the link with Institution of Civil Engineers UK

(ICE) through its Beijing Branch. ICE also offered to give a speech by ICE Fellow, Geoffrey Mill, in the coming "International Perspective Webinars" (jointly held with "National Tech Talk").

- The other IAC members made continuous efforts on developing contacts and activities and promoting CSCE and Canadian civil engineering in the other countries, including Brian Burrell (former VP International) as Liaison Officer for Hong Kong, Macau and Taiwan Philippines, Sadegh Kazemi (the Deputy Chair) as Liaison Officer for Iran, Van-Thanh-Van Nguyen as Liaison Officer for Southeast Asia, Ron Droste as Liaison Officer for Malaysia and Mongolia, Rishi Gupta (former IAC Chair) as Liaison Officer for India, etc.

CSCE Hong Kong Branch

The following summary highlights the major activities of the CSCE Hong Kong Branch (HKB), reported by the Chairman of HKB (TC Kan, MCSCE) and the HKB Executive Committee members.

Hong Kong has undergone an adverse impact of the prevailing worldwide COVID-19 epidemic in the past year which rendered all the activities of the HKB planned in 2021 to have been suspended or cancelled due to the HKSAR's statutory policy on the enforcement of social distancing to prevent the spread of the new coronavirus in the community. Unfortunately, such worldwide epidemic situation turns severe and Hong Kong is facing another round of virus outbreak right at the beginning of 2022. In this connection, the Government of HKSAR has implemented more rigorous measures to restrict social gathering in various aspects. To cope with the prevailing Government's policy, HKB has been facing more challenges than the past years to plan in advance the activities and programs in 2022 due to a number of uncertainties in front of us.

In this regard, the Executive Committee of HKB trends to adopt a pragmatic approach focusing on those activities not involving social gathering such as the internal issue of strengthening of our membership drive including members of student chapter in 2022 and will closely keep in view the Government's policy on the control of COVID-19 to revisit in mid-2022 the feasibility of organizing some professional seminars/ technical talks to promote civil engineering and the Annual Dinner 2022.

Concluding Remarks

2021 was another difficult year defined by many impacts of the pandemic. However, our CSCE International Region also made good progresses and achievements through the continued and dedicated efforts by the VPI, IRC, IAC and HKB as well as our foreign members, international student members, and partners. Together, we overcame many challenges and contributed to the growth of CSCE membership and impact overseas and the promotion of Canadian civil profession across the world. Our sincere thanks go to our society's leadership group and national office, and many other committees, regions/sections, and member volunteers for their support and help in sustaining our international activities and programs during the difficult time. With the improving situation of the pandemic, we will resume our international operations and be active again in growing our society, partnering with foreign organizations, and benefiting our members in Canada and beyond.

ATLANTIC REGION

Mike Benson, Vice-President - Atlantic Region

The Atlantic Council is pleased to report a successful year supporting our members and preparing to bring new opportunities to the industry in 2021. While COVID19 has restricted our ability to hold in-person

events, the Council has maintained regular virtual meetings and continues working on important items for the industry. Many sections are undergoing changes in leadership positions, but our succession planning is strong and all four sections in the area remain active.

Most notably, the Council has finalized a new scholarship for undergraduate civil engineering students in Atlantic Canada. This scholarship will award students who demonstrate leadership in their profession, community, and industry, and who will lead the next generation of civil engineers.

Behind the scenes, the Council has prepared a new set of Terms of Reference to provide the appropriate governance and structures. The Terms of Reference will also help with succession planning. As new members enter the Council, the document will serve as an important reference to understand everyone's roles and responsibilities. The Terms also introduce a new process by which the Council will elect its chairperson, who also sits on the CSCE Board of Governors. All CSCE members in Atlantic Canada can now nominate and elect the representative of their choice. Stay tuned for next year when the Council announces the nomination process and begins seeking leadership candidates.

Lastly, the Atlantic Region is proud to have the 2023 CSCE Annual National Conference being held in Moncton, NB. The East NB & PEI Section and Local Organizing Committee are hard at work preparing for this event. Planning has already begun, and it aims to be one of the best yet. We look forward to welcoming the civil engineering community right here in the Maritimes.

Western NB Section

Coady Cameron, Section Chair - West NB

The Western New Brunswick Section has entered a rebuilding phase after becoming dormant during the COVID-19 global

pandemic. The section executive now consists of Coady Cameron (Chair), and Brandon Searle (Past-Chair). Through the slower winter months, the executive took the time to reflect on past events and review initiatives other sections from across Canada were taking to engage and provide value to their membership. The next step will be identifying members of the local civil engineering community to serve on the executive, and with that said the section is actively seeking to connect with individuals who may be interested.

The Section is seeking to have positions filled by mid to late spring, with a target of restarting public events in the late summer / early fall. The interim time will enable the new team to gel with several months of planning to build out an event schedule for the remainder of the year. While the hope will be to focus on in-person events, the executive recognizes the importance of being agile during these uncertain times and will be ready to continue virtual or hybrid events as Public Health guidelines permit.

Another key focus for the rebuild will be closely integrating with the UNB CSCE Student Chapter which has historically been extremely active for many years. This will provide key networking opportunities for the membership, but also ensure the sustainability of the Section with the hope that graduating students will see the value CSCE brings to the local community and choose to transition from the Student Chapter to roles on the Section executive.

Nova Scotia Section

Eric Tynski, Section Chair – Nova Scotia

The Nova Scotia Section has had a slow start re-establishing itself in the civil engineering community in the province because of the COVID-19 pandemic. The ability to host in-person events was limited because of gathering restrictions for most of 2021. The section executive consisted of Eric Tynski (Chair), Sarah Hansen (Vice

Chair) and Hanna Korn (Student Liaison, President of Dalhousie CSCE Student Chapter).

Although events were not held, steps were taken to help set up the section to be present in the community over the long-term. The section has had contact and formed a partnership with the Dalhousie University (Halifax) CSCE Student Chapter and hopes to be able to help students to connect with professional engineers in the province and to help them access any available CSCE resources.

In the upcoming year, the Nova Scotia Section hopes to fully establish itself as a functioning section with a full executive team and financial resources available. The section hopes to co-host in-person networking events for students and professionals, have a speaker from the province present a national online technical talk, and possibly establish a Nova Scotia-focused version of the national technical talks. Re-establishing a CSCE Section during a pandemic has been challenging so far, but with new connections and resources from the Atlantic Region, 2022 should be a productive year for the Nova Scotia Section.

Eastern NB & PEI Section

Jérémie Aubé, Section Chair - Eastern NB & PEI

Once again, the year 2021 has been a challenging one! The on-going global pandemic greatly limited the ability of the East New Brunswick and Prince Edward Island Section to maintain the usual busy year we are all used to. Nonetheless, we were able to offer some benefits to our membership by sharing through our social media platforms the various CSCE Webinar Tech Talk Series offered by National Office, and we even contributed to the webinar series in March by hosting a session on the City of Moncton's public pools project. We were fortunate to host an in-person recruitment session with the Université de Moncton students in September, just

before the pandemic forced us to return to virtual activities once again. As well, we held section executive meetings at an average interval of two (2) months instead of the regular monthly interval, mainly due to our level of activity being lower than usual.

For the past year, the executive section consisted of Jérémie Aubé (Chair), Mélissa Losier (Vice-Chair) François Duguay (Treasurer), Gilles Hébert (Secretary), Serge Desjardins (Student Advisor), Crystel Gauthier (Student Representative), Dani LeBlanc (Coordinator, Social Media & Communications / Young Professional Representative), Nicholas Arseneau (Director), Gérard Poitras (Director) and Natasha Horsman (Director).

Our section is looking forward to the new year and to organizing in-person activities again, enabling this type of connection with our membership, whether it is by hosting various technical presentations, host our job shadowing signature event or organize new and fun activities such as micro-brewery tours. Our executive cannot wait to pick up where we left off back in 2020 and to being active in the society by organizing, hosting and promoting multiple activities throughout the year!

Newfoundland Section

Baiyu (Helen) Zhang, Section Chair – Newfoundland Section

The Newfoundland and Labrador (NL) Section executive section consists of Baiyu Helen Zhang (Chair), Susann Hickey (Treasurer), Joseph A Daraio (Student Advisor), Sam Hanrahan (Student Representative), Gordon Jin (Director), Bing Chen (Director) and Scott Batt (Director). The NL executive committee has been continuously active during the past year to raise the profile of the CSCE, grow local membership, and particularly support and cultivate our next generation of civil engineers within the province and beyond.

The Section has continued its close working relationship with Department of Civil Engineering at Memorial University to support local member and student activities through diverse approaches and events. We co-host several student events, co-sponsor student travels for participating in CSCE events outside the province (e.g., CSCE AGM, YP meetings, and national capstone project competition). In the past year, the Section has offered four scholarships and awards, including CSCE Convocation Award, CSCE Prize for Best Projects, Tiller Engineering / CSCE NF & LAB Section scholarship, and Ann (Mooney) Bridger / CSCE NF & LAB Section scholarship. The Section has also supported CSCE-MUN student chapter to host events such as Civil Night and Engineering Open House. This is the first time that the Section hosts the virtual Engineering Open House together with Memorial Department of Civil Engineering. The Section executive committee members serve as the presenters and panelists. The 1-day event has attracted over 100 attendees. Moreover, the Section has held several seminars for students and local members.

The Section has kept supporting national initiatives of CSCE during the past year such as promoting CSCE series national webinars, contributing to the Workshop activities and National Board Meetings. The Section executive committee member, Dr. Joseph A Daraio, gave a CSCE National Tech Talk Webinar entitled "Scenario planning for climate resilient storm water infrastructure in small communities in Newfoundland and Labrador" on February 10, 2021. Moreover, the Section contributed an article to the Spring Issue of Civil Magazine, introducing the Centre for Sustainable Infrastructure at Memorial University and its role in making our communities resilient.

The Section has kept enhancing beneficial relationships with other professional

societies and networks such as Professional Engineers & Geoscientists of NL (PEGNL), NL Environmental Industry Association (NEIA), Canadian Association on Water Quality (CAWQ) and Persistent, Emerging and Organic Pollution in Environments (PEOPLE) network. Executive committee members of the Section and the student chapter have been actively involved in Memorial hosted events. For example, on November 2-3, 2021, the Virtual Symposium on Water Quality Research was organized in St. John's. The symposium was co-chaired by Dr. Bing Chen (CSCE VP International) along with the organizing committee members, presenters and attendees from CSCE-NL and CSCE-MUN.

PRAIRIE REGION

Vaibhav Banthia, VP – Prairie Region

The primary focus of the three Sections within the Region during this unprecedented reporting period was to remain relevant within the local civil engineering community as well as participate in different CSCE's task groups to rejuvenate the Society.

With still no to very little potential to organize traditional in-person events, the nucleus of the Sections is still to ensure that the notifications from the National office reached to all their respective constituents and, if possible, encourage their participation. Of prime importance was not only to promote "Tech Talks" but also to identify and then host speakers and presenters from the Region for these bi-weekly webinars to further enhance involvement. During this reporting period, this platform has provided two great presenters from the Region an amazing platform to showcase local projects to national (and some international) audience.

The Region also had its share of challenges with the continued loss of momentum,

combined with the downward trend that have plagued the Sections since last period. This pessimism has really saddled the entire executive team. The Manitoba Section is without a Chair since last year, which requires filling that void, hopefully, during the coming period. Majority of the new executives are young engineers doing their best to make peace with the new hybrid work policies as well as trying their best to give back to the profession through CSCE. The forthcoming few periods will define and hopefully establish how the Sections can still remain relevant and then return to better times when normalcy returns.

ONTARIO REGION

Peter Calcetas, VP Ontario Region

The Ontario Region took a very active role supporting our CSCE objectives in working to make the world a better place. The Ontario Team participated, collaborated and, when the need was identified, took active leadership to create decisive action that improved the lives of our Members and the General Canadian Population. I submit for consideration the following initiatives which the Ontario Region contributed to.

Sustainable Climate Resilient Infrastructure: Skills Development Fund

Funding Team composed Dr. Greg Zilberbrant (Program Lead), Mrs. Latifa El Ayachi (Strategic Marketing Lead) and I (Region Lead / Board member) pursued several opportunities resulting in the Award by the Skills Development Fund with the following statistics.

- 1) Funding: Up to \$1 M = \$592,000 Year 1 Awarded + \$500,000 Year 2 in Progress.
- 2) Program Design: Sustained Value for Participants
 - a) Certificate: Low Impact Development [LID] by McMaster University & The CSCE

- b) Certificate: Sustainable Design + Engineering [D+E] by McMaster University & The CSCE
 - c) Credential: ENVISION® Sustainability Professional [Post Nominal: ENV SP] by the Institute for Sustainable Infrastructure
- 3) Program Delivery: Dr. Greg Zilberbrant, P.Eng., Ph.D., MCSCE
 - a) Participants = 151 earning the LID or D+E Certificates of Completion
 - b) Participants = 100 earning the ENVISION Sustainability Professional
 - c) Delivery Partners: W Booth School of Engineering Practice and Technology, McMaster University, developed with Program Lead
 - i) Low Impact Development Certificate of Completion delivery partner STEP [Sustainable Technologies Evaluation Program] created by Toronto and Region Conservation Authority, Credit Valley Conservation and Lake Simcoe Conservation Authority.
 - ii) Design + Engineering Certificate of Completion with delivery partner ISI [Institute for Sustainable Infrastructure].
 - 4) Strategic Marketing: Mrs. Latifa EL AYACHI, M.Eng., MBA, MCSCE
 - a) Establishment of the CSCE Ontario LinkedIn page intended market outreach.
 - i) 8 Posts/month
 - ii) Max: 15,000 views/post; average 3,000 views/post
 - b) Coordinated Linked Posts
 - i) ISI: 8 Posts/month
 - ii) STEP: 8 Posts/month
 - iii) HKC Construction: 3 Posts/month
 - c) Total Combined Market Outreach:
 - i) Views: 500,000 + over 5 months
 - ii) Posts: 150+; Monthly average 20 to 40 combined
 - d) Industry supporters:
 - i) HKC: Primary Industrial Endorser of Skills Development needs for the Skills

- Development in the Design, Development and Construction sectors of the Ontarian and Canadian Economy.
- ii) RVA: Professional Services Endorser of skills development in sustainable design for horizontal infrastructure
- iii) Metrix: Manufacturer of Building Integrated Photo Voltaic [BIPV] Technologies.

Summary: The CSCE Ontario's foray into the conception, development and delivery of the Certificates of Completion resulted in the achievement and in several metrics, surpassing of the contract Key Performance Indicators [KPIs] established in the restricted funding from the Governments of Ontario and Canada. With admiration and respect, I am proud of what the CSCE can create through inspiration, courage, dedication and leadership. Many thanks to our participants, Small/Medium and Large Enterprises, all levels of Government, Academia and the wonderful support from key members of the CSCE Board of Directors. Without your investment in sustainability and innovation, this first of its kind opportunity would not have crossed the finish line. Thanks for helping move the needle on progress.

CSCE and ISI Exclusive Partnership: ENVISION® Sustainable Infrastructure Guideline and Credential

As a member of and in collaboration with the Asset Management Committee, we are pleased to be instrumental in the conception, development and successful negotiation of the Exclusive Partnership between the CSCE and ISI to promote ENVISION® in Canada. The synergy created between the development of the Sustainable Climate Resilient Infrastructure Certificates and Credentialling and the rollout of ENVISION® in Canada allowed both programs to achieve early successes. Enhanced services to current CSCE Members, attraction of new members, promotion of sustainable

infrastructure and relevance to all Canadians were accelerated by both initiatives in coordination together with the Sustained Earnings Committee which is also chaired by the Ontario Region VP.

Webinar: National Tech Talks, Section Webinars

Thanks to the Webinar Committee and the commitment from collaborators from across the country, to making Civil Engineering and Sustainable Infrastructure relevant to all Canadians. The Ontario Region contributed presenters and content at the Regional and National scale. Even during these unusual times of restraint, the spirit to connect with others has inspired the generosity of so many to organize, create and deliver relevant information and insight to topics of lasting import.

Time for Change

This marks the end of my 2nd term as VP of the Ontario Region and Board Member. It was always my mission to help move the needle and pass the baton to my successors. I worked hard at achieving a higher level of sustainable business models resulting in enhanced services for the CSCE, its current and prospective membership along with the General Canadian Population. The journey was sometimes unconventional but innovation requires a little spice to bring out the flavour. I have been extremely fortunate to be able to meet, collaborate, inspire and be inspired by many through the CSCE. I hope those of you reading this, explore the unpredictable benefits of engaging with such a diverse, multifaceted, diverse and brilliant group as the colleagues I have encountered here. I hope to meet more of you as we make the world a better place together. Cheers!

RÉGION DU QUÉBEC

Frédéric Brunet, Vice-président, MSCGC

La région du Québec comprend trois sections professionnelles (Montréal, Québec et Sherbrooke) et six chapitres étudiants (ÉTS, Polytechnique, McGill, Concordia, Laval et Sherbrooke). Le conseil régional du Québec est composé du vice-président de la région du Québec, de la vice-présidente du conseil, du trésorier, et de trois représentants des sections. Cette année, Jean-Luc Martel a succédé à Frédéric Brunet en tant que vice-président de la région. Exceptionnellement, ce dernier a occupé ce poste seulement pour les mois de mai à septembre, puisqu'il a été nommé par les membres du conseil d'administration (CA) pour remplacer le trésorier honorifique qui a démissionné de ses fonctions. Compte tenu que ce dernier ne pouvait pas occuper deux postes au même moment au sein du conseil d'administration, il a été convenu qu'un membre du conseil régional du Québec devrait le remplacer. Les membres du conseil ont donc voté à l'unanimité pour élire à nouveau Frédéric Brunet à titre de vice-président par intérim. Son mandat se terminera à l'assemblée générale de 2022.

Section de Québec

Hamza Abdel-Aziz, Président de la Section de Québec

Le président de la section de Québec est Hamza Abdel-Aziz, son mandat a été renouvelé. Au total, le comité est composé de douze membres provenant entre autres de firmes d'ingénierie, du ministère du Transport du Québec, de fabricants de produits et de l'Université de Laval. Également, des représentants du chapitre étudiant ont siégé au comité de la section. Cette collaboration entre professionnels et étudiants contribue à maintenir un lien solide et facilite la rétention des membres étudiants. Elle permet également à la section de s'assurer que le chapitre étudiant a en sa possession tous les outils et le support pour bien fonctionner et être actif tout au long de l'année.

Comme pour la grande majorité des chapitres et sections, la pandémie a forcé l'annulation de plusieurs événements prévus par la section de Québec. Or, une fois que la situation s'est stabilisée, les membres du comité exécutif ont travaillé à organiser des conférences virtuelles. Ainsi, au total ce sont quatre (4) conférences en 2021 qui ont été offertes aux membres. Celles-ci ont porté sur divers sujets :

- Le centre de biométhanisation de l'Agglomération de Québec et les défis rencontrés de génie civil. Cette conférence a eu lieu le 20 janvier 2021, présenté Carl Desharnais. Il est ingénieur et directeur des projets industriels et de la valorisation de la ville de Québec. On a eu 42 participants.
- Passerelles en aluminium au canal Lachine. Cette conférence a eu lieu le 19 février 2021, présenté Benoit Cusson. Il est ingénieur et concepteur de ponts et structures chez WSP. On a eu 58 participants.
- Détection de venues d'eau dans les barrages. Cette conférence a eu lieu le 17 mars 2021, présenté Marc Smith. Il est ingénieur chez WSP. On a eu 20 participants.
- Le rôle de l'ingénieur vis-à-vis l'augmentation des risques d'inondation. Changements climatiques et inondations. Cette conférence a eu lieu le 14 avril 2021, présenté Brian Morse. Il est ingénieur et professeur titulaire du Département du génie civil et des eaux à l'Université Laval. On a eu 63 participants.

Le comité a fait des tests pour déterminer la plage horaire qui rejoignait un plus grand nombre de participants. Les résultats ont montré que la formule midi-conférence était la meilleure. Également, dans le cadre de l'initiative nationale du comité des webinaires, la section de Québec a tenu un Tech Talk. Cette conférence présentait la détection de venues d'eau dans les barrages.

La section de Québec en collaboration avec le chapitre étudiant de la société canadienne de génie civil (SCGC) de l'Université Laval a aussi offert aux étudiants et étudiantes de génie civil et de génie des eaux la 13e édition du forum carrière en 2021. Lors de cette conférence virtuelle, trois conférenciers ont partagé leur parcours, de leur expérience acquise sur différents projets, les défis qu'ils ont eus à faire face ainsi que leur implication dans leur milieu. Le but de cette conférence est de présenter aux futurs ingénieurs les différentes possibilités de cheminement de carrière dans le domaine du génie civil et du génie des eaux. Toute fois le taux de participant est plus élevé en présentiel, comme objectifs pour 2022, la section de Québec prévoit faire cette activité en collaboration avec la section de Montréal et Sherbrooke afin de maximiser la participation des étudiants.

Finalement, un des objectifs 2021 que le comité avait pris avant que la pandémie ne survienne, était d'élargir le public cible pour ses conférences. À cet effet, la tenue de conférences virtuelles a permis d'atteindre facilement cet objectif. La section vise donc, pour les prochaines années, à offrir ses conférences en mode virtuel et présentiel. Cet objectif s'inscrit dans la direction stratégique de la SCGC de bonifier les services aux membres.

Section de Montréal

Jennifer Tran, Chair of the Montreal Section

The executive committee was presided over by Jennifer C. Tran while Sara Rankohi occupied the position of vice-president. The committee consisted of six professionals from consulting and general contracting firms. Rami Mansour is a member of the Montreal Section Committee as well as the Young Professionals Committee Chair, which allowed the Montreal Section to update our members on the YP's activities.

The Montreal section has continued to be active in the National Webinar Committee's initiative to provide weekly online tech-talks. These webinars were offered, as in the past year, in lieu of the six in-person technical conferences that were regularly hosted on the last Monday of the month. Not only did this offer more frequent events to the members, it also showcased a more varied selection of topics. While a few webinars were about Montreal-based projects and research, our members were presented with projects from across the country and from a more diverse array of professional civil engineering fields than previous years.

Participation and feedback on these webinars were positive and as a result, the Montreal Section has discussed plans to broadcast future in-person conferences online once these events can be safely hosted again.

While the committee continually reassessed the feasibility to host the annual Career Conference in person, it was deemed too risky due to the pandemic and will be postponed until next year. This event is usually hosted by CSCE Montreal in January with four notable guests to present their career paths and lessons they wish to impart on the civil engineering students or young professionals, followed with a networking cocktail.

Section de Sherbrooke

Maxime Bourdeau, Président de la Section/Chapitre de Sherbrooke

Durant l'année 2021, la SCGC n'a pas pu organiser d'activités telles que des conférences, visites de chantier ou autres en raison des mesures sanitaires en lien avec la Covid-19. Au cours de la session d'automne 2021, la SCGC s'est concentré sur l'organisation de la compétition de canoës de béton et de ponts d'acier qui aura lieu à Sherbrooke du 13 au 15 mai 2022. De plus, un nouvel étudiant s'est

ajouté à l'équipe qui compte maintenant trois membres.

Pour l'année 2022, nous prévoyons relancer progressivement les activités en commençant à la session d'hiver 2022 par une conférence portant sur l'histoire des ouvrages d'art au Québec. Elle sera animée par Monsieur Gaétan Couture, ingénieur et vice-président adjoint chez Structure EXP Québec. Par la suite, une seconde conférence portera sur les matériaux composites et sera donnée par le professeur de l'Université de Sherbrooke Radhouane Masmoudi. Plusieurs autres conférences sur des sujets variés seront organisées au cours de l'année, toujours dans le respect des consignes sanitaires. En ce qui concerne la compétition à venir, l'équipe va collaborer avec les dirigeants de la SCGC pour planifier l'évènement.

WESTERN REGION

MacKenzie Walker, VP - Western Region

The Western Regional Council met three times throughout 2021 and had participation from all five sections in the region. The priority of the regional council was to share resourceful solutions to challenges of the pandemic. During our meetings the section representatives were in favour of and advocating for reinstatement of rebates to sections for membership renewal fees. These funds support operations, allow sections to deliver value to membership, and encourage membership recruitment and retention at the grassroots section level. The region is also seeking improved communication and transparency between the national office and the broader society.

The upcoming CSCE National Conference is in Whistler from May 25-28, 2022 on the traditional and unceded territories of the Squamish and Lil'wat people. The Local Organizing Committee (LOC), which is chaired by Rishi Gupta from the University

of Victoria, consists of volunteers from across BC's sections who have come together virtually to plan a great program. We are truly looking forward to gathering again in person after two years at a distance.

As a region we've had mixed results throughout this past year. We have many successes to build upon but also work to do in order to rebuild some momentum and connections that have been lost throughout this pandemic. On a regional level, we've been encouraged by the collaboration between sections such as the cross advertising of virtual events, particularly between the Edmonton and Calgary sections.

Calgary Section

Candice Lukaszewicz, Chair - Calgary Section

The Calgary section continued its virtual presentation series throughout 2021 with a total of seven events that covered a wide range of practice areas. The program also included young professional focused events such as speed mentoring, the graduate student poster competition, and the popsicle bridge competition - this continues to be a highlight of the program. The section successfully restarted their sponsor program and have secured support from five sponsors for this year. The executive for the section had healthy natural turnover in positions while still seeking more volunteers to fill vacant roles.

Edmonton and North Alberta Section

Frank Hui, Chair - Edmonton and North Alberta Section

The section delivered a full slate of seven presentations through a virtual format with events scheduled both over lunch hour and during dinner. Efforts were made to host in-person activities which weren't able to proceed due to public health orders, but which will be resuming in early 2022. The section's sponsorship program and their relationship with the community of practice

continues to be outstanding. In 2021 they secured support from twenty-one sponsors.

The executive for the section also continues to provide excellent examples for others in the country including their “presentation menu”, delivered to your inbox in the early fall with the full lineup of presentations which allows local members to plan their lives well in advance. Their section newsletter also continues to provide a wealth of information to members, both on section activities as well as other noteworthy news and updates from the industry.

Northern British Columbia Section

Jianbing Li, Chair - Northern British Columbia Section

Our region and society have grown in the last year with the addition of the Northern British Columbia section based out of Prince George and being led by faculty in Engineering at the University of Northern BC. The section officially launched with their inaugural meeting in October after drafting bylaws, recruiting volunteers, and establishing accounts. They are now meeting to plan events for this fall when we are (hopefully) more reliably able to gather in person.

Vancouver Section

Hermilo Atayde, Chair - Vancouver Section

The Vancouver section held two virtual presentations throughout the year which were both well attended. The number of events in the program was notably smaller than in past years due in part to virtual event fatigue.

The section has retained a strong group of volunteers who are meeting again and seeking to resume activities in late spring or after the Whistler conference. The virtual format continues to provide opportunities to reach a broader audience. This is in part due to the elimination of travel times which

makes it difficult to select event locations that was convenient for membership. The geographic reach of the Lower Mainland (e.g. it is a 1 – 1.5 hour commute between the two student chapters at UBC and BCIT). As a result of the successes of the virtual format, the section anticipates moving forward with it as well as in-person or possibly hybrid events.

Vancouver Island Section

Jonathan Reiter, Chair - Vancouver Island Section

The section executive has been involved in regional affairs of the society as well as actively participating in the organizing of the upcoming CSCE National conference in Whistler. The section has otherwise been dormant throughout 2021 while waiting to restart their dinner presentation series until social gatherings are viable.

The highlight of the year was the University of Victoria student chapter hosting their first industry night this past June for the first time in many years. It was held through a virtual format with breakout rooms for discussion between industry professionals and interested students.

CSCE YOUNG PROFESSIONAL COMMITTEE

Rami Mansour, Chair

The mandate of the Young Professionals (YP) Committee is to provide services and programming for students and young professionals that will assist them in the development of their careers. This mandate supports the CSCE’s Strategic Direction 2, which is dedicated to the promotion of Civil Engineering to all.

In the past few years, the focus of the young professional committee has shifted from supporting in-person events to digital events. This includes sitting on the task force for the CSCE Tech Talks program, and regularly contributing to support section

lead events, while also creating YP specific talks.

In May 2021, the CSCE YP committee organized a tech talk panel discussion exploring topics on how young professionals can manage expectations, stress, and succeed in new positions. In November 2021, the YP committee organized a CSCE tech talk panel discussion on how to provide excellent drawing markups. Both events were a resounding success with many young CSCE members in attendance.

In 2022, the CSCE YP committee is planning on contributing regularly to the CSCE tech talk committee and hosting numerous talks. Planned talks include a discussion by young professionals on whether dams are sustainable, taking meeting minutes, archiving calculations, resumes and cover letters, managing volunteers effectively, and more.

In addition to these digital events, the YP committee will restart supporting local section events across the country, promoting events that focus or provide good benefits to young professionals.

Table 1 - 2021 CSCE YP Committee Members

Name	Position	Email	Region
Board Members			
Rami Mansour	Chair	rmansour@systra.com	Board
-	Secretary - Vancouver	-	Board
-	Treasurer - Vancouver	-	Board
Section Representatives			
Sarah Faithful	Calgary	Sarah.Faithful@wsp.com;	Western
Dani LeBlanc	East New Brunswick/PEI	dani.leblanc@royconsultants.ca	Atlantic
Spencer Mccann	Edmonton	samccann@hotmail.ca	Western
Tucker Morton	London	tmorton@dillon.ca	Ontario
Rami Mansour	Montreal	rmansour@systra.com	Quebec
Matt Glynn	Nova Scotia	glynnm@halifax.ca	Atlantic
Eric Tynski	Nova Scotia	etynski@cbcl.ca	Atlantic
Laird Ferguson	PEI	a334e@unb.ca	Atlantic
Hamza Abdel-Aziz	Quebec	Hamza.Abdel-Aziz@snclavalin.com	Quebec
-	Saskatoon	-	Prairie
Giuseppe Del Gobbo	Toronto	Giuseppe.Del-Gobbo@arup.com	Ontario
Joe Salkeld	Vancouver Island	jsalkeld@seng.ca	Western
-	West New Brunswick	-	Atlantic
Lorelei Magdzik	Northern BC	lmagdzik@tidewatermidstream.com	Western

The young professional articles in the Canadian Civil Engineer continue to bring attention to important topics that are relevant to young professionals. In 2021, the YP articles have explored Why Risk is a

Fundamental Part of Civil Engineering, The Challenging Transition from School to Work, and Moving Towards a More Sustainable Future. These articles are one of the many forums being used by the

committee to provide outreach to young professionals, while also adding value to CSCE membership.

Each year, the YP committee continues to expand its footprint by recruiting section representatives from all over Canada. The current committee consists of members from 12 different sections, from Vancouver Island to Prince Edward Island. The full list of current membership is provided on the following page. The committee has a conference call each quarter to discuss the various opportunities for young professionals at each section. Section representatives are able to use these calls as a forum to share, learn and be inspired on how to better engage with young professionals. These meetings are also used to gain feedback on how the CSCE can better engage young professionals, which can be shared with the CSCE organization as a whole.

Guided by the Strategic Directions of the society, our committee will continue working towards our goals including increasing the number of local YP section events and bridging the gap between student members and associate members.

STUDENT COMPETITIONS COMMITTEE (CNCCC & CNSBC)

Dylan Dowling & Ellen Chen - Co-chairs

Like every other event that went virtual, the 2021 Canadian National Concrete Canoe and Steel Bridge online competition was unprecedented, but equally valuable for both students and committee members alike.

Continuing with the committee's decision from 2020 to organize a simplified, online competition, we modified the rules such that all deliverables can be evaluated completely virtually. While we could not include the hands-on component of the competition, students had the opportunity

to evaluate prototypes from previous competitions and propose improvements, which would benefit the teams tremendously for upcoming traditional competitions. Although a full year of online learning presented significant challenges to students to collaborate on the project and stay connected, the committee was able to organize a successful virtual competition, as we saw new names on the podium and many schools that consistently participated in previous competitions were able to stay engaged. One of the concrete canoe teams also participated for the first time and already managed to impress the judges. We salute the winners for their outstanding performance, but even more so the persistence and dedication demonstrated by every single team!

The transition process occurred in September after a quiet summer. While the host school for the competition the following year is typically selected at least a year prior to the competition to allow for plenty of time for venue booking, the agreement between CSCE and Université de Sherbrooke was finalized later than usual in October. We are very thankful that the local committee was still willing to host the competition despite potential challenges with coordination and uncertainties surrounding travel and indoor gathering restrictions. Nonetheless, the committee continued to plan for an in-person competition while keeping potential contingency plans in mind. This decision was not taken lightly but involved significant team and faculty advisor input. Despite the late start on event planning, the committee is currently on target to host the competition in mid-May in person at Sherbrooke.

Although 2021 continued to be full of uncertainties and challenges, we are encouraged to see that provinces are slowly lifting restrictions and we are getting closer to the light at the end of the tunnel. Like the students, all of us on the committee are just

as eager to see an in-person competition take place again. Having gone through two years with fairly limited interaction, it is essential to bring the spirit of the competition back and to support the continuous professional development of young civil engineers.

We deeply appreciate the support that CSCE has continued to provide to the

committee, from introducing us to the vast network of professionals to advising us during each step of the planning process. We also could not have hosted a successful competition without the generosity of our sponsors. The Student Competitions Committee looks forward to continuing collaborating with everyone in the upcoming years.

Report of the Honorary Treasurer

Jean-Luc Martel, PhD, PEng

To start my report, it is worth mentioning that I (Vice-President of the Quebec Region for the year 2021) was appointed by the Board of Directors to act as Honorary Treasurer as interim replacement for Mark Scanlon who stepped down due to work-related commitments. I would like to thank Mr. Scanlon on behalf of the Board of Directors for his time and commitment to CSCE over the past years, as well as Frédéric Brunet, Quebec Vice-President 2017-2021 for accepting the interim Quebec Vice-President position during this time.

For the better part of a decade, CSCE has been experiencing significant financial imbalances, as presented in its annual financial statements. This situation was exacerbated with the departure of our Executive Director in 2017. Indeed, excluding the profits earned by the 2018 Short and Medium Span Bridges specialty conference (held once every four years), CSCE has generated an average annual operating loss exceeding \$200,000 between 2017 and 2020. The COVID-19 pandemic has only made matters worse with an additional load of uncertainty looming over our activities, especially the National Conferences which typically generate significant revenues. This difficult situation resulted in a group of dedicated but rightly concerned, CSCE volunteers, Fellows and Past-Presidents to write a letter to the Board of Directors encouraging it to consider the hiring of an Executive Director and to develop a plan to address the pressing concerns facing the CSCE. This led to a hiring process of an Acting Executive Director in mid 2021 to better support the Board of Directors and the National Management Committee (NMC).

We are very fortunate that David Innes, 2003-2004 President of the CSCE, accepted the position of Acting Executive Director and started to work for CSCE in June 2021. His extensive knowledge of the CSCE, as well as his large experience notably as the Chief Executive Officer of the Fredericton International Airport, allowed Mr. Innes to quickly improve our situation by recommending multiple actions aimed at improving our financial situation, which were approved by the Board of Directors:

- Undertaking a forensic audit to do a deep dive on the CSCE finances and to understand the real financial status of CSCE. The services of a forensic auditor were retained to advise us where are now and best practices to adopt to avoid this position in the future.
- Declaring a moratorium on travel not related to its obligations with the American Society for Civil Engineers (ASCE) and the Institution of Civil Engineers (ICE), as well as requesting that the International Affairs Committee develop a policy and budget on International Travel going forward.
- Maintaining a work from home policy for its employees and to take actions to extricate the CSCE from its current rental obligations.
- Adopting multiple best practices in finance management, such as one up approval and separation of expense generation and payments.

Furthermore, to avoid similar financial difficulties going forward, I have worked in establishing a Finance Committee, whose purpose is to exercise financial oversight on the operations of the CSCE on behalf of the Board of Directors. To do so, the Finance Committee shall:

- Review regular finance reports prepared by the CSCE National Office.
- Review the annual budget prepared by the Executive Director, which can then be presented to and adopted by the Board of Directors.
- Present a summary report at each Board of Directors meeting and more frequently if requested by the Board of Directors.
- Be responsible for the annual audit of the Canadian Society for Civil Engineering

The Board of Directors also reintroduced the rebate payments to regions and sections starting in 2022 – an action that is considered essential to supporting local activities for the membership. To ensure an optimal distribution of these rebates, a taskforce led by Samuel Richard, past Atlantic Vice-President, has the mandate to provide recommendations on the revenue-sharing programs for CSCE Sections and Regions. A Regional Finance Committee with all the Regions treasurers and myself was also established to facilitate better, open communication between the National and Regional levels.

As the Honorary Treasurer, I have also taken part in the oversight committee of

the Sustainable Infrastructure Training Program financed by the Skills Development Fund (SDF) of the Ontario Ministry of Labour, Training and Skills Development (MLTSD) and led by Peter Calcetas, Vice-President of the Ontario Region, and its team. I am pleased to report that the project has been an overwhelming success, exceeding all of its key performance indicators while remaining within budget. It will be financed by the MLTSD for a second year.

The 2021 year being an important transition year has also generated significant deficits that can be explained with decreased membership and corporate revenues mainly due to COVID, and additional expenses to get us going in this important transition. With better financial oversight, a new partnership with the Institute for Sustainable Infrastructure (ISI) splitting revenues from the Envision program in Canada, the return on in-person conferences with our Annual Conference in Whistler as well as the Short and Medium Span Bridges specialty conference in Toronto, the CSCE is heading in a much better financial situation for 2022 and going forward.

Report of the CSCE Foundation

Randy Pickle, P.Eng., FCSCE, FEC, FEIC
Senior Trustee, CSCE Foundation

CSCE Foundation Financial Position	Year					
	2015	2016	2017	2018	2019	2020
Income						
Interest, dividend income and valuation gains	\$7,852	\$19,120	\$15,069	(\$11,142)	\$42,262	\$32,666
Donations	\$7,246	\$8,778	\$11,795	\$11,386	\$7,720	\$5,807
Expenses						
Awards, administration, publications	\$4,499	\$1,818	\$11,818	\$4,397	\$19,617	\$12,531
Net Change	\$10,599	\$26,080	\$15,046	(\$4,153)	\$30,365	\$25,942
Net Assets						
Foundation Fund						
History Program Fund	\$5,118	\$5,569	\$6,211	\$5,698	\$4,294	\$3,364
Shanly Award Fund	\$13,207	\$14,365	\$14,979	\$15,101	\$16,826	\$18,083
General Fund	\$155,196	\$168,827	\$178,329	\$179,781	\$198,091	\$211,884
Donald Jamieson Fund	\$111,046	\$121,887	\$126,175	\$120,961	\$132,693	\$144,513
Total Net Assets	\$284,567	\$310,648	\$325,695	\$321,541	\$351,904	\$377,844
Percent Growth from Previous Year (Net)	-3.1%	9.1%	4.8%	-1.3%	9.4%	7.4%
Second Century Fund						
Assets	\$159,650	\$89,170	\$90,634	\$98,071	\$104,681	\$106,064
Percent Change from Previous Year	-	-44.1%	1.6%	8.2%	6.7%	1.3%

The CSCE Foundation is a registered charity whose purpose is "to acknowledge contributions of a civil engineering nature made by people for the benefit of society, and to recognize outstanding civil engineering works which have contributed to the development of Canada." The CSCE Foundation includes the Canadian Society for Civil Engineering Foundation Trustees General Fund, the Shanley Award Fund, the History Program Fund, the Donald Jamieson Fellowship Fund and the Second Century Fund. Although the Foundation is independent of the Society, its financial statements are included for information in this Annual Report. The following table summarizes the financial position of the Foundation as of December 31, 2020.

The Trustees established two primary goals for the Foundation, going forward:

- Actively seek to grow the funds of the Foundation,
- Provide additional funds for member recognition through awards.

In 2018, to support the goal of growing the funds of the Foundation, the Trustees revised the Investment Policy, in consultation with RBC Dominion Securities. The investment objective of the CSCE Foundation is to earn a return of approximately 4% in excess of all administration costs, investment management fees and inflation. With this in mind, the target minimum rate of return required to meet these objectives is approximately 7%. In order to achieve the required rate of return the target asset allocation of the Portfolio should be: Cash

- 5%, Fixed Income - 35%, Equities - 60%. As market conditions dictate, the asset allocation may be adjusted within the following ranges in order to manage risk and to accomplish the investment return objective of 7%.

The Trustees continue to be guided by RBC Dominion Securities for ongoing fund management. Further, an annual letter to Fellows of the Society encouraging them to donate to support the awards programme.

Asset Class	Minimum	Target	Maximum
Cash	0	5	40
Fixed Income	20	35	50
Equity	50	60	70

All members of the Society are urged to consider making donations to the Foundation for which official receipts will be issued for income tax purposes. Members are also encouraged to include bequests to the CSCE Foundation or to a specific award.

Trustees (2021)

Michael Bartlett, London, ON
 Daniel Burns, Calgary, AB
 David Innes, Fredericton, NB
 Gordon Jin, St. John's, NL (Chair, Honours and Fellows Committee)
 Randy Pickle, Windsor, ON
 Mark Scanlon, Edmonton, AB (Honourary Treasurer)
 Patricia Ricci (CSCE Controller) (ex-officio)

Report of the Vice President – Administration Coordinating Committee

Peter Langan, P.Eng., F.CSCE

The Administration Coordinating Committee (ACC) consists of the Administration Vice President, the Honorary Treasurer and the Chairs of all the Committees reporting to the Administration Vice President:

Communications, Conference, Corporate Engagement, National History, Honours & Fellowships, Membership Services, National Lecture Tours and Tech Talk Webinars.

The ACC is responsible for the overall financial management of the Society, the delivery of services to the membership, as well as other duties assigned by the Board of Directors, such as participating on the Bylaw Task Force.

The following are the reports of each ACC Committee.

NATIONAL CONFERENCE COMMITTEE REPORT

Graham Sterparn, P.Eng., F.CSCE

With the changes to the CSCE National Office and the impacts that the Covid – 19 pandemics had on the last two conferences (Saskatoon 2020 cancellation and Niagara 2021 Conference change to a virtual format) the purpose and goals of the National Conference committee should be reviewed and modified to enable the committee to fulfill its original purpose.

Annual National Conference

Committee activities in coordination with the National Office included:

- National Office was reviewing and updating the 4-year conference calendar. Status: to be confirmed
- National Conference Guide was last update in August 2020. Guide to be reviewed and updated annually to include issues that have arisen during the past conference and resolutions that can be helpful to Local Organizing Committees (LOC's) for future conferences.

National Conference Schedule

- 2020 Prairies, Saskatoon, SK. – conference cancelled due to Covid-19 pandemic
- 2021 Ontario, Niagara on the Lake, ON. – Converted to virtual conference
- 2022 Western, Whistler, BC.
- 2023 Atlantic, Moncton, NB.
- 2024 Special (Ontario), Niagara on the Lake, ON. – due to contractual obligations

Revised National Conference Schedule

The conference rotation was reviewed and updated to revise the Regional rotation due to the cancellation of the 2020 Saskatoon Conference and the contractual requirement to hold the 2024 conference in Niagara on the Lake. The rotation was revised as follows:

- 2025 Prairies (Winnipeg, MB) Region was to have presented on the preferred location to the National Board in November of 2021. Status: to be confirmed

- 2026 Quebec – Quebec City
- 2027 Western – Calgary
- 2028 Atlantic – St. John’s
- 2029 Ontario – Ottawa
- 2030 Prairies – Saskatoon
- 2031 Quebec – to be confirmed
- The Quebec Region is to present the selected host City for the 2026 Conference to the National Board in November 2022.
- Stand-Alone Regional Symposiums / Technical Conferences
- One of the mandates of the Conference committee is to develop an initiative for the creation of Regional One-Day Symposiums and Stand-Alone Technical One Day Conferences to attract attendees that would not be able to attend the National Conference for whatever reason.
- Initial development of the procedures and guidelines commenced and was to be reviewed by the members of the committee.
- Possible Policy Coordination between National & Regions for One-Day Symposiums / Conferences
- Questions regarding the legal authority of Regions or Sections to enter into contracts using the CSCE name and logo are to be discussed further by National Office. Status: to be confirmed.
- Financial risk mitigation has been touched on and needs further discussion at the National Office level to develop a policy. Status: to be confirmed.

Committee Tasks

- Re-initiate the Conference Committee quarterly meetings to re-evaluate the committee’s purpose and goals.
- One-Day Symposium / Conference planning document outline to be completed in 2023, Status: To be re-initiated if the significant amount of incoming new committee members are willing to participate in finalizing the framework.
- Regional One-Day Symposium
- Other than the Edmonton Section hosting a One-Day Symposium in late 2018, there has been limited interest by the Regional and Technical VP’s to promote the Stand-Alone concept.

With the significant turn-over in committee membership in 2022, perhaps the concept can be re-initiated and promoted.

The Edmonton Section may look at holding a One – Day Symposium in spring or fall of 2023 after more of the lingering affect of Covid-19 have settled further.

Stand-Alone Technical One-Day Conferences

Building on Gopal Achari’s initial statement regarding the Stand-Alone Technical Conferences, discussions have taken place during meetings and teleconferences to develop a framework to guide Technical Divisions to conduct Stand-Alone Conferences, if new conference committee members are willing to participate in finalizing the framework. Status: to be re initiated.

Discussions on the proper time and geographical separation of Stand-Alone Conferences vs National Conference to be finalized. Possible policy to be developed. Status: to be re-initiated.

Status of Committee Plans

With the significant turn over in the committee membership occurring in 2022,

re-establish the National Conference Committee, in coordination with Lisa Reny and the incoming National Board members to achieve committee purpose and goals.

Tasks to be included:

- Review and refresh the Conference Committees purpose and goals.
- Update National Conference Guide.
- Review and update definitions of the National Conference, Regional One-Day Symposiums and Technical One-Day Conferences.
- Upon completion and acceptance of the updated National Conference Guide; develop the Stand-Alone Conference Guide for Regional and Technical Stand-Alone Conferences. Status ongoing.
- Continue to encourage the Regional and Technical Chairs to develop a program of One-Day Regional Symposiums and Technical Conferences to augment the National Conference. Status ongoing.

CORPORATE MEMBERSHIP REPORT

Peter Langan, P.Eng., F.CSCE



JOINING US MAKES GOOD BUSINESS SENSE!

CORPORATE MEMBERSHIP

- Society of Civil Engineers
- International Network
 - Historic legacy
- Excellent value for the price
- Business development opportunities
- Scalable partnering opportunities with the credibility of a National association behind your marketing initiatives
- Corporate and personnel recognition programs
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What can I do for my CSCE?

When you join the Canadian Society for Civil Engineering (CSCE/SCGC),

You become a member of one of the leading engineering societies in the world.

You become affiliated with an organization committed to furthering and supporting the engineering community and development industry worldwide as well as the people and companies working in it.

CSCE's strength and credibility are based on its membership, the quality and relevance of its advocacy work, development of leading practice and sharing of knowledge.

Communication Report

Jim Gilliland will be taking on this activity in the near term to help grow and support the needs of Corporate Members.

CSCE NATIONAL HISTORY COMMITTEE REPORT

Michael Bartlett, Ph.D., F.ACI, F.CSCE, F.IABSE, P.Eng.

The CSCE National History Committee (NHC) includes 24 members from BC, Alberta, Saskatchewan, Manitoba, Ontario, Québec, New Brunswick and Nova Scotia, two Section Representatives, and one student member. Eight regular Zoom Meetings have been held throughout the year. Moving forward, we would particularly welcome additional Section Representatives.

It is a pleasure to report the appointment of two new Vice Chairs of the NHC in 2021: Ali Mahmood as Vice Chair (Annual Conference Activities) and Wes Wilson as Vice Chair (Projects and Communications). We are also grateful to Bruce Higgins for

his continuing service as the NHC Secretary.

Creating and monitoring CSCE Civil Engineering Historic Sites remains a mainstay of the NHC's activities. In the past year:

- Plaques for two previously recognized National Historic Sites, the Middle Road Bridge (2009) and the Niagara Power Generating Stations (2004) were unveiled virtually at the 2021 Annual Conference. Papers describing their historic significance were presented at the 2021 Annual Conference.
- Two sites have been approved for recognition at the CSCE 2022 Annual Conference: David Thompson's Surveying and Mapping of Northwest North America, joint with the American Society of Civil Engineers, and the Kinsol Trestle. Papers are being prepared to describe their historical significance for presentation at the 2022 Annual Conference.
- A second cycle of monitoring the condition of the historic sites and plaques has been initiated. Two plaques have never existed (Lethbridge Viaduct, Bridges of Niagara), two have been forcibly removed (Ottawa River Canals, Albert Street Memorial Bridge), and two are, at least temporarily, lost (Grand Rapids Tramway, Hamilton Pumping Station). The Red River Floodway plaque in Winnipeg has been moved to an accessible site at Duff Roblin Provincial Park. An initiative to relocate the Victoria Bridge Plaque at a more appropriate site at Parc Jean Drapeau in Montreal is underway.
- Revised online descriptions of the 78 Civil Engineering Historic Sites were uploaded to the CSCE website over the December Break in 2020. The result is most unsatisfactory: the image quality online is much worse than the materials

submitted, the latest versions of the files were not uploaded, and no action has been taken concerning the 16 pages of corrections requested on 25 February 2021. The site has since deteriorated, markedly. We look forward to the resolution of the present website deficiencies in 2022.

- The revised online descriptions have been used to develop short "This Week in Canadian Civil Engineering History" articles for the CSCE e-Bulletin since October 2020.

In partnership with six other Engineering Societies and the Engineering Institute of Canada (EIC), an initiative to research, record and transcribe oral histories of eminent Canadian engineers has commenced. Each member society has agreed to pay \$750 per year for two years, and both the EIC and MITACS have matched these funds to create a total project budget of \$45,000. A Master of Arts in Public History Intern was hired in the summer of 2021, who interviewed nine male and five female engineers. One additional male has since been interviewed. The civil engineers interviewed included Susan Tighe and Nick Isyumov (recommended by CSCE), Sarah Devereaux (recommended by the Canadian Society of Senior Engineers), Kwan Yee Lo (recommended by the Canadian Geotechnical Society) and Peter Lighthall and Denise Leahy (recommended by the Canadian Dam Association). Sufficient funds are available to hire two Interns in the summer of 2022, when it is hoped to conduct 30 interviews.

There are two history sessions scheduled at the CSCE 2022 Annual Conference. One session, organized jointly with members of the ASCE History and Heritage Committee to commemorate the 80th Anniversary of the Construction of the Alaska Highway, will feature an online information portal hosted by the Yukon Transportation

Museum in Whitehorse. The other is an open paper session, for which nine abstracts have been accepted.

Other initiatives, in brief, are as follows:

- The Historic Bridge Task Group met eight times in 2021. It has developed a template for classifying historic bridges using the following fields: Name; Location; Owner; Designer; Builder; Date of Construction; Structural Engineering Information; Feature Bridge; Current Historic/Heritage Designation; Original/Current Use; Potential for Re-use; Historic Significance; and, Online Links, and has classified 20 bridges using these fields. In addition, 31 concrete bowstring trusses in Ontario have been classified.
- The Canada 150 posters commemorating civil engineering achievements were recently shipped to Prince George, where they will be displayed to commemorate the creation of the new Northern British Columbia CSCE Section, and will continue on to the 2022 Annual Conference at Whistler.
- The History Committee coordinated two CSCE Tech Talk Webinars, on Sept. 11 and Dec. 1, and held a tripartite ASCE/ICE/CSCE webinar on May 11.
- A new Publications Subcommittee was approved in principle in November.
- The Gordon Plewes Award Selection Committee has again been active in 2021.

The Committee wishes to express its thanks for the Society's financial contribution to the History Program and also thanks for the contributions that continued to be received throughout the year to the History Program Fund within the CSCE Foundation.

In closing, I would like to pay tribute to all Committee members who, over many years, have been enthusiastic and outstanding contributors to the success of the committee. At the 20 January 2022 National History Committee meeting, the motion "That the Annual Report of the CSCE NHC for 2021 be adopted (Shrive, Perks) passed unanimously.

HONOURS AND FELLOWSHIPS COMMITTEE REPORT

Jim Gilliland, P.Eng., F.CSCE,

The Honours and Fellowships Committee is responsible for the review and processing of all nomination packages for the recognition of eligible members of the Society for Fellowships in the CSCE and through various selection committees, that report directly to the Honours and Fellowships Committee, identifies the recipients of up to nine career awards, two organizational awards, one graduate student fellowship, one Young Professional Award and five "Best Paper" awards. The CSCE Honours and Fellowships Committee is also responsible for organizing and conducting the awards ceremony at the CSCE Annual Conference.

The 2020 CSCE Annual Conference, was cancelled and the 2021 Conference was held virtually due to the COVID-19 pandemic. A decision was taken to defer Awards until the 2022 Conference in Whistler, and award winners were notified of this intention. CSCE wishes to recognize award winners in a proper manner at the Whistler Awards Gala.

The Honours and Fellowships Committee is also responsible for a high-level review of the nominations for Fellowships and other senior awards of the Engineering Institute of Canada.

The Honours and Fellowships Committee continues to monitor the nominations for

Fellow, and the career awards, to mitigate deficiencies in the diversification and to ensure that nominations better represent the demographics of the Society.

NATIONAL TECH TALK WEBINAR TASK FORCE REPORT

*Michael Bartlett, Ph.D., F.ACI, F.CSCE,
F.IABSE, P.Eng*

The CSCE National Tech Talk Webinar Series was initiated in September 2020 as a new service for our members in the current Covid-19 climate. As restrictions ease, the plan is to continue the online service for CSCE members, particularly those living in locations without access to CSCE Region or Section in-person activities. We will also use the webinars to engage civil engineering students to promote CSCE student memberships, and to generate videos that can be archived online for CSCE members in good standing to view.

In 2021, we held 20 weekly webinars between January 20 and May 19, one on July 28 and an additional eight, typically one per fortnight, between September 8 and December 8. Four of these webinars were presented in French.

The webinars have been planned and co-ordinated by a Task Force consisting at various times of: Tina Abedi, Lois Arkwright, Vaibhav Banthia, Mike Bartlett, Hazel Battad, Peter Calcetas, Rami Mansour, Paris Mylonas, Sam Richard, Brandon Searle, and MacKenzie Walker (observer).

Moving forward, the plan is to transition from a Task Force to a permanent Tech Talk Webinar Coordination Committee, as part of the portfolio managed by the Vice President Administrative Coordinating Committee, in the Fall of 2022.

GOVERNANCE REVIEW TASK FORCE REPORT

Peter Langan, P.Eng., F.CSCE

A Governance Review Task Force was initiated by the Board in 2021. The Task Force reviewed the current Bylaws with a view of updating to help ensure good governance by separation of management activities (NMC) and oversight activities (Board).

The Task Force is also reviewing opportunities to simplify the Bylaws by moving items into Policy that is to be developed. By having items moved into Policy gives the Board flexibility to revise Policy without the need to revise and re-file the Bylaws.

As CSCE is the Canadian Society FOR Civil Engineering, (not *of* Civil Engineers) there is a goal to modernize the membership categories to for CSCE to be seen as a more welcoming Society to colleagues of all stripes in civil engineering.

Other items being explored include an Independent Board Director to improve our public interface to show an outward looking CSCE. A two year Presidency is also under consideration which may provide more consistency and ability to implement changes and advance causes or programs to benefit the Society.

The draft Bylaws were circulated to the Membership and a membership pole was conducted to test some of these changes and most items were found to be generally favorable by the membership that responded. Membership input is important.

Further work will be undertaken and any changes to the Bylaws will need to be approved by vote of the Membership.

We are very pleased to discuss this initiative with any interested Members.

Report of the Vice President, Program Coordinating Committee – Technical Divisions and Committees

Farnaz Sadeghpour, PhD

2021-2022

It was my honor to be selected as the VP Technical Divisions and Committees in the past year. The year 2021 continued to be unprecedented and tainted by the pandemic despite our hopes and disbeliefs. We did not get an opportunity to meet in person as a family in 2021. However, our Technical Divisions were active and offered great contributions to the Civil Engineering practice in Canada. Below are the reports from these Divisions. I encourage everyone to contact Division chairs and to participate in Division activities or bring forward new initiatives. Looking forward to another productive year ahead of us and looking forward to seeing and reconnecting with many of you in Whistler conference.

CONSTRUCTION DIVISION

Chair: Dr. Mazdak Nick-Bakht

Vice Chair: Sara Rankohi

2021 was a good year for the construction division. Following the successful 2021 Construction Specialty Conference, joint with CRC, the division has been working with the Canadian Journal of Civil Engineering, on a special issue "Automation and Digital Transformation of Construction", based on the selected papers from the conference. In its 2021 annual meeting, the Construction Division received (and approved) the proposal for a "Ralph Haas Award" as life-long pre-eminent achievement in the area of asset management for sustainable and resilient

civil infrastructure, in a bi-annual basis. Also, following passed motions in our 2021 meeting, we have been establishing new procedures for keeping the records of the division members, as well as forming a "Construction Division Editorial Board" to help the local organizing committee with the review and selection process of the biannual Construction Specialty Conference. Furthermore, the construction division worked with the Offsite Construction Research Center at the University of New Brunswick and is organizing a conference on "Transforming Construction with Reality Capture Technologies" in Fredericton-NB, in August 2022.

ENVIRONMENTAL DIVISION

Chair: Dr. Kelvin Tsun Wai Ng, PEng

In 2021, the Environmental division was involved in the organization of the 19th International Environmental Specialty conference. The virtual conference included 12 sessions and 57 presentations. We would like to thank the following ENV session moderators and student competition judges: Dr. Zoe Li, Dr. Jinkai Xue, Dr. Richard Zytner, Dr. Kelvin Tsun Wai Ng, Dr. Baiyu Zhang, Dr. Chunjiang An, Dr. Onita Basu, Dr. Bing Chen, Dr. Catherine Mulligan, Dr. Kerry McPhedran, and Dr. Jianbing Li.

Congratulations to our 2021 student paper winners:

1st Place: (Paper 227) Brienne Nelson (University of Guelph) "Mitigating fugitive methane emissions from closed landfills: A case study"

2nd Place: (Paper 187) Amy Richter (University of Regina) "Optimizing waste management regions spanning inter-provincial boundaries"

3rd Place: (Paper 56) Khaled Zoroufchi Benis (University of Saskatchewan) "Assessment of agricultural waste products for cost-effective and eco-friendly treatment of arsenic contaminated waters"

The 2021 Environmental Division general meeting was postponed to in-person Whistler conference in May 2022. In 2021, the division coordinated with the South Saskatchewan Section and co-hosted a CSCE Tech Talk webinar in the beginning of the year. The title of the webinar was "How does the COVID-19 change our waste generation and recycling behaviors?" The talk was delivered on February 3rd, 2021 by Dr. Kelvin Tsun Wai Ng. The division also hosted a second Tech Talk webinar on November 10th, 2021. Dr. Amy Richter delivered a talk entitled "Regionalization of Waste Management Systems in Saskatchewan and Manitoba". Both webinars were well received by the audience.

Kelvin Ng has agreed to chair the 20th Environmental Specialty conference in 2022. With the help from our reviewers, over 18 conference themes were identified. The Division received over 61 abstracts by the end of December 2021. A focus of the Division in 2022 will be sustaining our leadership in sustainability practices. The Division will support our members by disseminate and share knowledge through organizing workshops and contributing articles to the Canadian Civil Engineer Magazine. The division will also support the initiative on development of the CSCE "Tech Talk" webinar series.

HYDROTECHNICAL DIVISION

Chair: **Dr. Manas Shome, P.Eng., FCSC**

The major activity of the Hydrotechnical Division in 2021 was the 25th Canadian Hydrotechnical Conference held in conjunction with the last year's virtual Annual Conference. At the conference, more than 40 papers were presented covering the broad areas of hydraulic and hydrological engineering both from practice and academia. 16 papers were submitted for student award competition. As a part of the hydrotechnical specialty conference, a well-received special Panel discussion on Climate Risk and adaptation in the Power generating Industry was also held.

The annual meeting of the Hydrotechnical Division Council was held on June 9, 2022, and a discussion was held on promoting hydrotechnical engineering among students and others by organizing various events both virtually and in person. In addition, suggestions were made at the meeting to improve female representation within the Council. The current Council consisting of 19 members including 5 regional representatives across Canada and 9 members-at-large. Three new female members were included as members-at large in 2021 and we hope to increase this number further in the near future.

ENGINEERING MECHANICS AND MATERIALS (EMM) DIVISION

Chair: *Dr. M. Shahria Alam, P.Eng.*

The mission of the Engineering Mechanics and Materials (EMM) Division is to contribute to maintaining high standards of the civil engineering profession through promoting the exchange of knowledge between researchers and engineering professionals working in the area of engineering mechanics and materials. In

line with CSCE's Strategic Direction, Leadership in Sustainable Infrastructure, the division promotes exchanging new initiatives and ideas pertaining to sustainable materials. Serving a dynamic and evolving area of civil engineering, the members of the Division use various avenues to share their expertise and findings with the engineering profession in Canada. Within its mission, the major activities of the Division include: (i) organizing international specialty conferences in the area of engineering mechanics/materials, (ii) developing and offering short courses covering specialized topics, (iii) disseminating and sharing knowledge through guest editing special issues of the Canadian Civil Engineer Magazine, (iv) promoting collaboration between researchers at the national and international levels, and (v) enhancing the engagement of young engineers and engineering students through poster and paper presentations during the specialty conferences.

EMM Division Membership

Dr. Muntasir Billah, Secretary of the EMM division of CSCE is actively working on boosting the membership. EMM division has already introduced several sub-committees and their corresponding leads earlier to further increase its memberships and their relevant activities and make substantial contributions to the engineering profession and society. This year, we have added 20+ new members.

EDI Consideration

The committee is actively working to promote the division activities among the underrepresented group including women, Black and indigenous people.

CSCE EMM Conference 2021

The Division actively worked last year to organize the 8th International Specialty Conference on Materials (2021 CSCE Annual Conference) which was held virtually from May 26 to May 29, 2021. All

the relevant activities took place including Keynote Speeches, EMM Division Meeting, and three best student presenter awards. However, undergrad student travel grants were postponed since no travel was required.

Keynote speakers

Keynote 1 (Structures/Materials): Title: Resilient Wood Buildings for Community Resilience to Natural Hazards, Date: May 27th, 2021. Speaker: John W. van de Lindt, PhD, FASCE, Professor, Department of Civil and Env Eng, Colorado State University, Fort Collins, Colorado, Harold H. Short Endowed Chair Professor; Co-Director, Center of Excellence (COE) for Risk-Based Community Resilience Planning (NIST), Colorado

Keynote 2 (Materials/Structures): Title: Recent Canadian Developments related to FRP Reinforcement for Concrete Structures, Design Codes, and Applications in Buildings and Bridges; Speaker: Brahim Benmokrane, PhD, PEng, FRSC, FACI, FCSCE, FIIFC, FCAE, FEIC, FBEI, Professor, Department of Civil and Building Engineering, University of Sherbrooke, Sherbrooke, Quebec; Tier-1 Canada Research Chair in Advanced Composite Materials for Civil Structures; Senior NSERC Industrial Research Chair in Innovative FRP Reinforcement for Concrete Structures

Keynote 3 (Materials): Title: Pathway to a Sustainable and Durable Infrastructure, May 28th, 2021; speaker: Claudia P Ostertag, PhD, Professor, Civil & Environmental Engineering Department, University of California, Berkeley, CA; Vice-Chair of the Department; T.Y. Lin Endowed Chair of Engineering at UC Berkeley

Best Student Paper Winners

1st Place: (Paper 49) Tamanna Kabir, Abimbola Grace Oyeyi, Hanna Al-Bayati, Daniel Pickel and Susan Tighe "Porous Rubber Pavement – In situ performance

evaluation of stiffness and friction in Canada”

2nd Place: (Paper 109) Md. Jahidul Islam, Nishat Tabassum Borsha, Nishat Naila Meghna and Rahi Bin-Te Enam “Mechanical and Durability Properties of Fly Ash Blended Concrete with Galvanized Iron Fiber”

3rd Place: (Paper 132) Adrien Sparling, Dan Palermo and Usman Khan “Climate Change Adaptation of CSA Standards for Masonry Connectors”

EMM Division Collaborative Activities (New)

CSCE’s EMM Division has collaborated with CSCE’s other divisions and also with other organizations. Collaboration between EMM and Structures Division: EMM Division jointly organized two keynote speeches with Structures Division last year. Besides, a Special Publication in the Canadian Journal of Civil Engineering was published last year in collaboration with EMM and the Concrete Structures sub-committee:

Alam, M. S., & Saatcioglu, M. (2021). Advances in reinforced concrete. Canadian Journal of Civil Engineering, 48(11), v-vi. <https://cdnsiencepub.com/doi/full/10.1139/cjce-2021-0288>

EMM Division collaborated with American Concrete Institute (ACI)’s ACI 441 (Reinforced Concrete Column Committee) and ACI 341 (Earthquake Resistant Concrete Bridges) and organized two special sessions at the ACI Fall Convention 2021.

Behavior, Design, Analysis and Construction of Nonconventional/Atypical Reinforced Concrete (RC) Columns/Piers, Part 1 of 2, ACI Spring Convention 2022, March 28, 2022 (8:30 AM to 10:30 AM, EST).

Behavior, Design, Analysis and Construction of Nonconventional/Atypical

Reinforced Concrete (RC) Columns/Piers, Part 2 of 2, ACI Spring Convention 2022, March 28, 2022 (11 AM to 1 PM, EST).

CSCE EMM Conference 2022

The EMM Division has been actively working this year to organize the 9th International Specialty Conference on Engineering Materials (2022 CSCE Annual Conference) which is going to be held in Whistler, ON Canada, from May 25-28, 2022. As a part of this conference, the division is planning to organize several special sessions including academics and practicing engineers. We have received a good number of papers and we completed the review process. Each paper had high quality reviews. We have 49 accepted papers along with 9 rejects. The conference proceedings will be published by Springer.

The EMM Division, like the previous years, will be continuously supporting its members by providing awards and grants (to cover registration fees).

Best student presenter awards: Three best student paper awards will be given out at this year’s CSCE Annual Conference.

Undergrad student grants

Six grants @ \$500 will be awarded to undergraduate students to present their papers at the EMM conference. Faculty members (CSCE membership required) will be nominating their students. In order to get nominated, the undergraduate students need to be the lead authors and presenters and should be CSCE student members.

Note that EMM Division is now the champion of specialty conferences occurring every year at the CSCE Annual Conference. The conferences alternate between Engineering Mechanics and Materials, and Materials only. The latter was initiated at the 2016 Annual Conference.

STRUCTURES DIVISION

Chair Ashraf El Damatty, FCAE, FEIC, FCSCE

The Structures division has more than 100 active members and 10 technical committees. A new committee, Existing Structures Committee, was established in 2021. A position of Secretary of the Division was established in 2021 and was filled by Dr. Ahmed Elshaer. Also in 2021, the division took charge of organizing the Structures Speciality Conference, which took place virtually May 26-29 as part of the CSCE General Conference.

In 2012, the division was responsible of organizing the CSCE Structures Specialty Conference in Whistler, BC. The conference was co-chaired by Dr. Ashraf El Damatty and Dr. Ahmed Elshaer. The program of the conference included 159 papers, and 35 reviewers were involved in the reviewing process. 23 sessions are included in the conference involving 25 moderators. A student competition is organized as part of the conference with 74 students participating in the competition and is judged by 8 judges. The organization of the student competition is led by Dr. Niel Van Engelen. The reports of various committees are provided below.

Fire Behaviour and Safety of Structures Committee

Chair Dr. John Gales

A roll call of active membership will take place in September 2022 when it is forecasted that full return to campuses and offices will occur. The committee is aware of two specific themes which will be governing the advances in the 2025 codes cycle. This focuses on timber structures (a large-scale test will be performed in Ottawa in June, a multi-paper and national fire dynamics test was produced by Arup and these publications will appear in June as well) and the safety of existing buildings undergoing changes, more specific to the committee the role of heritage structures

and fire safety. These priorities will have effects on Canadian consultancy industry. Currently Canadian universities are well aligned to these initiatives. A large multi-university consortium for timber based research especially for fire has been submitted for nserc consideration and both Carleton and York Universities are active on research for adaptation of existing buildings for fire safety.

Wood Structures Committee

Chair Dr. Asif Iqbal

Committee activities continued to be somewhat limited over the last year due to pandemic-related changes in work environments. Communications within the committee members and with external colleagues, however, have been continued throughout and some progress in planning and organization have been achieved. The committee now has Dr. Joshua Woods of Queens University, taking up the place of Dr. Jeffery Erochko. The most recent committee meeting happened on March 23, 2022 to discuss activities over the last year and plans for this year. Committee members, either individually or in smaller groups, have continued to represent CSCE and contribute in different professional forums and activities such as Canadian Wood Council's Academic Curriculum Development Workshops and development of Advanced Wood Design Manual. Members are also involved with additional research facilitation and code development forums such as committees for updating NBCC and CSA O86: Engineering design in Wood. The activities are planned to be extended in the coming year, particularly in outreach and communication. Discussions are currently underway for a special issue of Canadian Journal of Civil Engineering on Wood Structures. Efforts to seek opportunities for active cooperation with other committees on 'Hybrid' structures combining wood with concrete and/or steel will be continued. Current Committee members: Dr. Shahria Alam, Dr. Zhiyong

Chen, Dr. Ahmed Hamada, Dr. Asif Iqbal, Dr. Cristiano Loss, Dr. Mohammad Mohammad Dar. Marjan Popovski, Dr. Sam Salem, Dr. Thomas Tannert Dr. Joshua Woods

Steel Structures Committee

Chair: Dr. Charles-Darwin Annan

Members: Dr. Jeena Jayamon; Dr. Ali Imanpour; Dr. Saber Moradi; Dr. Ian MacPhedran; Dr. Ayman EL Ansary; Dr. Mahmoud M. Hassan; Dr. Kaveh Arjomandi.

The Steel Structures Committee has a key mandate in coordinating educational, scientific and practical activities relating to steel structures and construction within the CSCE Structures Division. One of the key action items from last year was for the committee to play a key role in renewing partnership between the CSCE and the Canadian Institute of Steel Construction (CISC) in the organization of the CSCE Canadian National Steel Bridge Competition. The CSCE-CISC Canadian National Steel Bridge Competition provides design and management experience, opportunity to learn fabrication processes, and the excitement of networking with and competing against teams from other universities. The committee's chair, Dr. Annan, participated in several high-level meetings and discussions between CSCE and CISC to revive the partnership between the two entities that led to the CISC offering \$25,000 in support of the 2022 Canadian National Steel Bridge Competition. The competition was recently held (May 13-15, 2022) at the University of Sherbrooke, Québec, involving 14 universities.

In the year 2022, the committee will commit to recruiting young/junior members (both faculty and practitioners) to revive other aspects of the committee's mandate. We will continue to increase engagement with civil engineering students through competitions and training (using

Q&A online platform where students can ask their steel-related questions and be answered by professionals and academics) to increase students' interest in steel structures, and engaging with the CISC to initiate joint collaborative research reviews and training. We will also commit to increasing participation of committee members in both national CSA and international technical and scientific committees. In the coming months, the committee will be organizing a discussion forum/platform on the opportunities and limits of modular steel construction. Division members with interest are encouraged to participate in this discussion.

Masonry Structures Committee

Chair Dr. Khaled Galal

Dr. Galal was active in collaboration with the masonry contractors' and producers' associations in the Canadian Provinces. Committee members were in continuous communication and coordination with the Canada Masonry Centre (CMC) and the Canada Masonry Design Centre (CMDC). Recently in early 2022, the CMDC opened an office in Montreal, the office will be working with both CMDC Ontario and the AEMQ (Association des Entrepreneurs en Maçonnerie du Québec) to help promote the research programs in Quebec both within the masonry industry and for the design community in general. The CMDC and CCMPA (Canadian Concrete Masonry Producers Association) continue to support masonry research throughout Canada."

Existing Structures Committee

Chair Dr. Tom Morrison

The existing structures committee was established following the 2021 virtual conference. Since then the committee has worked to establish a set of clear objectives and mandates, as well as taken part in creating one of the conference sessions. For the upcoming year the committee is in early discussion of how we

will support our members in developing publications, how we can do additional workshops and conference sessions, and early planning to undertake a joint code symposium on existing buildings with multiple existing buildings organizations (CAHP, APTi, ICOMOS Canada, Carleton University Heritage Engineering and growing). To quote our new mandate "The purpose of the Existing Structures Committee of the CSCE is to inform and investigate engineering practices with existing structures".

Concrete Structures Committee

Chair Dr. Shahria Alam

A Special Publication in the Canadian Journal of Civil Engineering was published last year. Alam, M. S., & Saatcioglu, M. (2021). Advances in reinforced concrete. Canadian Journal of Civil Engineering, 48(11), v-vi.

<https://cdnsciencepub.com/doi/full/10.1139/cjce-2021-0288> Two new members joined the committee. The current committee chair's term is ending. Dr. Muntasir Billah has kindly agreed to serve as the committee chair.

Structural Dynamics Committee

Chair Dr. Girma Bitsuamlak

The current committee chair's term is ending. Dr. Ayan Sadhu has kindly agreed to serve as the committee chair.

Bridge Committee

Chair Dr. Adel Zaki

The committee has a key mandate in coordinating scientific and practical activities relating to bridge structures, mainly short and medium bridges, within the CSCE Structures Division and Highway Bridge Design Code CSA-S6. Two special publications were prepared. The first paper was published in the Construction Tech Review Magazine regarding modern Accelerated Bridge Construction Techniques (ABC). This method is

currently being implemented by many government agencies responsible for bridge rehabilitation, replacement, and new construction around the world. The second published article was presented to the CHBDC CSA-S6 regarding Climate Changes and its impact on bridges. A set of guidance were presented by Adel Zaki who participated in several high-level meeting between CSCE and CSA-S6 standard, and contributed to a first draft for a separate implementation for the CSA-S6 Code, 2025 edition.

Buried Structures Committee

Chair Dr. Hany El Naggar

In collaboration with the Transportation Geotechnics committee of the Canadian Geotechnical Society, the committee presented a lunch and learn event in June 2021. The committee was involved in the organization of two technical sessions in the Structural Speciality conference in 2021 and one session in the 2022 conference.

Short and Medium Span Bridges, SMSB Report 2022

Dr. Khaled Sennah

The preparation for the 11th International Conference on Short and Medium Span Bridges is moving very well. Based on the paper review, it is expected to have about 290 presentations during the conference. Two technical tours to iconic bridges in the Greater Toronto Area (GTA) will be included in the conference program along with 6 short technical courses. The conference website (<https://smsb2022.ca/>) includes the information of three keynote speakers, 20 confirmed sponsors, and 33 confirmed exhibitors for 35 booths. The conference will be entirely in person.

TRANSPORTATION DIVISION

Michel Khouday, PhD, P.Eng.

The last year was tainted again partially by the Covid-19 virus. Hopefully, in subsequent years we can go back to our previous lives, holding in-person conferences and meetings. But, it didn't stop the Transportation division from being heard, seen and active.

CSCE transportation leaders were invited more than once to the Chief Engineers Panel of the Transportation Association of Canada (TAC) to share best practices and learn from other Societies and Associations in the industry.

An organization like CSCE thrives on member input and participation and we always look forward to newer ideas and taking on newer initiatives.

The mission of the Transportation Division is to contribute to maintaining high standards of the civil engineering profession by promoting the exchange of

knowledge between researchers and engineering professionals working in transportation.

Even throughout our social distancing, we focused on our domains of expertise and the number of papers received for our technical committee and program was adequate for the conference.

The Transportation division in the next few years will try once again to focus on the recruitment of new dynamic members and this recruitment for the Transportation division will follow the CSCE strategy's new initiative of inclusion and diversity. Equity, diversity, and inclusivity (EDI) are current and important topics and priority for the recruitment of new members in our division.

I encourage members to contact the Transportation Division Chair and to participate in Division activities.

Report of the Vice President, Program Coordinating Committee - Technical Programs

Dr Gord Lovegrove, P.Eng. (Civil, BC), MBA, PhD

2021-2022

It is my honor to have served CSCE this past year in capacity as VP – Technical Programs. My job was made easy by the great support from CSCE HQ, Interim ED David Innes, fellow Board members, and Chairs of reporting committees, thank you all. My goals for this year included:

1. Emerging CSCE technical issues, including:
 - a. Supporting great work by Michael Benson, Chair of the Asset Mgmt Committee and CSCE in negotiating, signing, and implementing the Agreement with ISI to promote Envision (sustainable infrastructure rating tool) as a CSCE Best-Practise
 - b. Chairing the 2021 Transportation Speciality Conference
 - c. Recruitment of Indigenous youth recruitment into civil engineering (ongoing)
 - d. Facilitating CSCE’s role as lead consultant to the federal government on Canada’s upcoming National Infrastructure Assessment Report Card
 - e. Facilitating CSCE’s active involvement in and support for the CSCE President’s priorities for 2020/21, including (among others) Universal Access, and Climate Action.
2. I welcome your comments and help if any of these goals / committees appeal to you, all the best in the coming year!
3. Technical Team Leads

Asset Management Chair	Mike Benson
Canadian Journal of Civil Engineering Editor	Nihar Biswas
Education and Research Chair	Elena Dragomirescu
Engineering Practice Chair	Mark Scanlon
National Lecture Tour Coordinator	James Garland
Technical Publications Chair	Farnaz Sadeghpour

Despite our global Covid19 pandemic, progress has been made.

1. Engineering Practise – no report
 2. Education & Research – no report
 3. Asset Management – The Asset Management Committee (AMC) is pleased to report an incredibly active and successful year supporting infrastructure management professionals and decision-makers across Canada. Our key achievements include:
 - a. Partnership agreement with ISI to advance Envision in Canada.
 - b. Response to the Government of Canada’s National Infrastructure Assessment (NIA) response.
 - c. Proposal to FCM Municipal Asset Management Program (MAMP).
 - d. Envision in Canada Partnership
- a. ISI Partnership - The AMC’s marquee achievement this year has been the execution and

announcement of a Partnership Agreement with the Institute for Sustainable Infrastructure (ISI) to advance the use of the Envision sustainable infrastructure rating system in Canada. Envision, which has been implemented on more than 100 billion dollars' worth of infrastructure in the US and Canada, is a proven tool to enhance societal health and wellbeing, protect the natural environment, and address the climate crisis. It gives civil engineers a new tool to promote sustainable design and construction practices and can help identify opportunities for infrastructure owners to lead on our new goals.

- b. National Infrastructure Assessment (NIA) Response - In 2021 the Government of Canada initiated a National Infrastructure Assessment to assess Canada's infrastructure needs and establish a long-term vision, improve coordination among infrastructure owners and funders, and determine the best ways to fund and finance infrastructure. As part of the assessment the federal government requested responses from Canadian organizations on how best to proceed. The AMC authored the CSCE's response to this request and are pleased with the response received. In summary, our response highlighted 8 recommendations for the government:

- Champion a service-focused asset management approach
- Standardize data management and reporting practices
- Ensure federal infrastructure dollars promote sustainability
- Identify tomorrow's infrastructure needs today
- Lengthen infrastructure planning horizons
- Facilitate alternative project delivery, training, and procurement models
- Enable private sector financing

- Improve public awareness of infrastructure benefits
- c. FCM MAMP Application - The AMC submitted a significant funding application in response to FCM's Municipal Asset Management Program (MAMP). FCM was seeking organizations to serve as partner organizations to deliver a series of capacity building projects to local governments across Canada and to help FCM achieve its desired outcomes of improving asset management maturity in the municipal sector. The AMC prepared and submitted a funding application which would see the update and refresh of the InfraGuide infrastructure management guidelines. Our proposal included three main deliverables:

- AM Guidelines (InfraGuide 2.0) - develop simple and easy-to-understand technical guidelines to perform foundational asset management planning activities for core assets. With FCM and the National Research Council's permission, guidelines will be branded as "InfraGuide 2.0".
- Pilot Studies with Municipal Partners - validate guidelines through five (5) pilot studies with municipalities who are in the early stages of their AM journey. Pilot studies will serve as case studies for the training program.
- Online Training Modules - Develop comprehensive and accessible online training modules for municipal staff to learn how to apply AM guidelines in their communities.

FCM is currently reviewing applications received and we are eagerly awaiting their response.

- d. Envision in Canada Partnership - The AMC led the creation of the Envision Steering Committee which spearheaded this partnership. The partnership will provide CSCE

members with exclusive access to Envision materials and directly supports our strategic goal to be a leader for sustainable and resilient infrastructure in Canada. A portion of revenues generated from all Envision related activities will be re-invested directly into our membership to help promote and advance sustainable infrastructure.

4. Technical Publications – no report
5. **Editor, The Canadian Journal for Civil Engineering (CJCE).** Published since 1974, the CJCE is the official journal of the CSCE and the only journal presently affiliated with the CSCE. The CJCE is published by the not-for-profit company, Canadian Science Publishing (CSP), located at 1840 Woodward Dr Suite 1, Ottawa, ON K2C 0P7.

(<http://www.nrcresearchpress.com>). CSCE members may subscribe to the electronic and print versions of the CJCE to CSCE members at rates substantially below non-member subscription rates. The CJCE attracts around 800 manuscript submissions per year, with about 48% coming from Canada, followed by US, China and the rest of the world. The overall rate of acceptance is 20%. A survey of authors indicates that there is a satisfaction of 97% with the quality of the peer review process. The CJCE has initiated a program called 'Early Career Editorial Board Member' to encourage the next generation of journal editors and promote diversity on the CJCE editorial board. The aim is to give a few early career researchers an opportunity to participate on the editorial board under the mentorship of a current Associate Editor or Editor-in-Chief. The CJCE Editors, Dr. Amir Fam and Dr. Nihar Biswas, are grateful for the tremendous support received from the Associate Editors, Assistant Editor, Ms. Brenda Tryhuba, Managing Editors, Drs. Celia Charron and Kyle Kortelainen, the staff at CSP, and the reviewers, whose hard work helps in maintaining a very high standard of the journal.

NATIONAL LECTURE TOUR COORDINATOR REPORT

James Garland, P.Eng., F.CSCE

National Lecture Tours (NLT's) are a vehicle for sharing technical information of interest to civil engineers with CSCE members across Canada. These are often in the form of a lunch or dinner lecture presented to Section Meetings. The topics are selected in consultation with Sections regarding interests and Technical Divisions and other expert groups regarding available speakers. With COVID-19 protocols preventing in-person events during most of 2020, 2021 and 2022 to date, there are no plans to offer an NLT until Sections ramp up in-person activities.

In the absence of in-person Section events, a CSCE team led by Michael Bartlett has continued to organize online lunch time Tech Talk presentations on a range of civil engineering topics. Tech Talks are discussed in the Vice President – Administration Coordinating Committee portion of this Annual Report.

The most recent CSCE NLT, Climate Change: Current Issues for Civil Engineers, was presented by Jean-Luc Martel in 18 of 20 planned Canadian cities before the COVID-19 shutdown in March 2020.

NLT's align directly with Strategic Direction 1 – Enhanced Services to Members. Expanding delivery to Student Chapters when feasible, or selecting Section venues accessible to students, provides services aligned with Strategic Direction 2 – Growing with Youth. Strategic Direction 3 – Leadership in Sustainable Infrastructure can be supported when NLT topics are chosen.

Members are encouraged to contact the NLT Coordinator, James Garland, or the CSCE National Office to provide suggestions for topics and speakers.

Report of the Nominating Committee

The Nominating Committee of the Board of Directors of the Canadian Society for Civil Engineering has provided, for approval by the members, the following nominations to the Board of Directors for 2022 – 2023.

Position	Incumbent	Proposed	Term
Past President	Mulligan, end of term	Brenda McCabe	1 yr
President	McCabe, end of term	Wade Zwicker	1 yr
President-Elect	Zwicker, end of term	Gopal Achari	1 yr
Senior Vice-President and Chair, Regional Coordinating Committee	Achari, end of term	Jeff Rankin	1 yr
Honorary Treasurer	Martel, Interim	Jean-Luc Martel	2 yrs
Vice-President, Administration Coordinating Committee	Langan, finishing 2nd yr	Peter Langan	1 yr
Vice-President, Technical Divisions and Committees	Sadeghpour, finishing 1st yr	Farnaz Sadeghpour	1 yr
Vice-President Technical Programs	Lovegrove, finishing 4th yr	Shahria Alam	2 yrs
Vice-President, Atlantic Region	Benson, finishing 1st yr	Mike Benson	1 yr
Vice-President, Quebec Region	Brunet, finishing 5th yr	Zohra Alaoui	2 yrs
Vice-President, Ontario Region	Calcetas, finishing 4th yr	Alexander Andrenkov	2 yrs
Vice-President, Prairie Region	Banthia, finishing 3rd yr	Vaibhav Banthia	1 yr
Vice-President, Western Region	Walker, finishing 2nd yr	Candice Lukaszewicz	2 yrs
Vice-President, International Region	Chen, finishing 4th yr	Rishi Gupta	2 yrs
Member at Large representing Corporate Members	Rankohi, finishing 1st yr	Sara Rankohi	1 yr
Member at Large representing Heads and Chairs	Svecova, finishing 1st yr	Mohamed Meguid	2 yrs

In addition to the above elected Director positions, which are voting positions on the Board, there is one non-voting position on the Board appointed by others:

Position	Incumbent	Proposed	Term
Representative - Canadian Geotechnical Society (non-voting)	Ian Moore	Ian Moore	1 yr

Rapport du Comité des Candidatures

Le Comité des candidatures du conseil d'administration de la Société canadienne de génie civil a soumis les candidatures suivantes au conseil d'administration pour approbation par ses membres 2022-2023.

Poste	Titulaire	Candidat	Durée
Ancien président	Mulligan fin de mandat	Brenda McCabe	1 an
Président	McCabe, fin de mandat	Wade Zwicker	1 an
Président désigné	Zwicker, fin de mandat	Gopal Achari	1 an
Premier vice-président et Président, Comité des régions	Achari, fin de mandat	Jeff Rankin	1 an
Trésorier honoraire	Martel, par intérim	Jean-Luc Martel	2 ans
Vice-président, Comité de coordination de l'administration	Langan, fin de la 2 ^e année	Peter Langan	1 an
Vice-président, Divisions techniques et comités	Sadeghpour, fin de la 1 ^{ère} année	Farnaz Sadeghpour	1 an
Vice-président, Programmes techniques	Lovegrove, fin de la 4 ^e année	Shahria Alam	2 ans
Vice-président, Atlantique	Benson, fin de la 1 ^{ère} année	Mike Benson	1 an
Vice-président, Québec	Brunet, fin de la 5 ^e année	Zohra Alaoui	2 ans
Vice-président, Ontario	Calcetes, fin de la 4 ^e année	Alexander Andrenkov	2 ans
Vice-président, Prairies	Banthia, fin de la 3 ^e année	Vaibhav Banthia	1 an
Vice-président, Ouest	Walker, fin de la 2 ^e année	Candice Lukaszewicz	2 ans
Vice-président, International	Chen, fin de la 4 ^e année	Rishi Gupta	2 ans
Représentant les entreprises membres	Rankohi, fin de 1 ^{ère} année	Sara Rankohi	1 an
Représentant le Conseil des chefs de départements de génie civil canadiens	Svecova, fin de 1 ^{ère} année	Mohamed Meguid	2 ans

En plus des administrateurs élus ci-dessus, des candidats sont nommés par d'autres organisations pour les deux postes suivants (sans droit de vote):

Poste	Titulaire	Candidat	Durée
Représentant la Société canadienne de géotechnique (sans vote)	Ian Moore	Ian Moore	1 an

Membership Statistics

Comparative Statistics	2021	2020	2019	2018
Members	751	835	1002	1273
Associate Members	93	64	134	86
Technologist/Affiliate Members	20	14	10	16
Retired Members	15	22	19	24
SUB TOTAL	879	935	1165	1399
Life Members	272	276	290	226
SUB TOTAL	1151	1211	1455	1625
Students	3017	2492	2567	4733
TOTAL	4168	3703	4022	6358
Fellows	283	286	299	188

Membership by Region	2021
Atlantic	111
Quebec	141
Ontario	407
Prairie	98
Western	323
SUB TOTAL in Canada	1080
Outside Canada	71
TOTAL	1151

Financial Statements- unaudited

Management Report

Canadian Society for Civil Engineering
For the period ended December 31, 2021

Prepared by
MNP LLP Lower Mainland

Prepared on
May 25, 2022

For management use only

Profit and Loss

January - December 2021

	Total
INCOME	
40010 Dues - Exempt	9,450.00
40020 Current Fees Members	172,936.35
40152 Sustaining Members	11,977.77
40220 Certificates - Taxable	306.00
41020 Sponsorships	20,911.10
41150 Corporate memberships / Sponsors	25,800.00
42250 Webinars and Tech Talks	4,675.00
43000 CSCE Merchandise	196.26
43100 Insignia - Taxable	5.00
45110 Publication - Exempt	4,974.00
45260 Website & E-Bulletin Revenue	500.00
46050 Management Fee	35,000.00
47000 Sundry Income	25.30
48000 Competition Revenue	
BT9 Competition Net	-16,470.73
Total 48000 Competition Revenue	-16,470.73
49000 Annual Conference Revenue	
ACMBS 2020 Sherbrooke	19,013.66
Niagara Falls 2021	90,367.08
Saskatoon 2020	3,064.03
Triennial - Niagara Falls	-9,670.83
Total 49000 Annual Conference Revenue	102,773.94
Total Income	373,059.99
COST OF GOODS SOLD	
50180 Membership Administration	3,553.82
54570 Conference Expense	6,645.00
55010 Student Competitions	16,514.08
57110 Publications	10,930.85
Total Cost of Goods Sold	37,643.75
GROSS PROFIT	335,416.24
EXPENSES	
51080 PD - Course Development	3,000.00
59590 Student Affairs	110.00
60010 Consulting Fees – Executive Director	35,000.00
60050 Salaries	205,155.95
60052 RRSP expense	16,000.00
60055 CSST expense	1,282.67
60070 Q.P.P. - Expenses	7,178.04
60080 E. I.	1,959.25
60090 R.A.M.Q. - Expense	4,338.40
60100 QPIP - Expense	1,041.61
60150 Administration Services – External	6,500.00
60200 ER/EE -	-1,076.16
60210 EE - Fringe Benefits - 30%	-3,568.50

	Total
60220 EE - LTD Benefits - 100%	-520.66
71720 Accounting Fees	31,500.00
71725 Accounting - Forensic	40,312.85
71730 Audit Fees	22,987.99
71740 Legal Fees	31,095.35
71750 Translation - General	12,873.16
71760 Marketing - CSCE	6,800.00
71770 Merchant fees	15,822.98
71800 Donation	500.00
72010 Postage & Courier & Webma	2,174.98
72020 Telephone & Internet	8,087.45
72030 Moving Exps.	17,395.08
72070 Office Stationnery & Supplies	2,124.18
72100 Office Equipment - Leased	853.32
72110 Taxes & Licences	36.56
72120 WebSite & Admin Site	23,856.25
72130 Insurance	24,226.95
72140 Rent	37,350.00
72185 Software Expense	2,540.90
72210 Travel & Accomodation Expe	1,801.74
72220 Subscription/Dues	1,430.04
72280 Credit Card Carrying Charges	2,121.77
72300 Bank & Interest Charges	24,169.39
73530 Construction Renovations	34,163.06
73540 Eng. Mechanics/Materials Div	1,010.00
75010 B.O.D. Travel & Accomodatio	9,151.12
76510 Annual Report	2,750.00
79600 Business Development	9,000.00
Total Expenses	642,535.72
OTHER INCOME	
46310 Interest Revenue	448.38
46700 Other Revenue	294.82
46800 COVID - CEWS	53,895.98
46900 COVID - CERS	4,893.64
Total Other Income	59,532.82
OTHER EXPENSES	
99000 Cleanup entries from prior years.	-48,849.05
99999 Ask My Accountant	2,389.95
Total Other Expenses	-46,459.10
PROFIT	\$ -201,127.56

Balance Sheet

As of December 31, 2021

	Total
ASSETS	
Current Assets	
Cash and Cash Equivalent	
10300 BMO USD - #4796-736	280.38
10400 BMO Chequing 679 - CSCE	-489,879.00
10900 Restricted Cash - reSecond Century Fund	106,065.20
Total Cash and Cash Equivalent	-383,533.42
10425 Term Deposit	293,969.46
12420 Advance - Whistler 2022	37,665.40
13100 Prepaid - Student Competitions 2022	500.00
Total Current Assets	-51,398.56
Non-current Assets	
Property, plant and equipment	
13050 Office Furniture	7,893.46
13060 Acc. Dep - Office Furniture	-6,765.52
13150 Computer Equipment	22,536.66
13160 Acc. Dep - Computer Equipm	-22,403.32
13250 Software	84,236.23
13260 Acc. Dep. - Software	-69,525.25
13300 Website Costs.	30,400.00
13305 Acc. Dep. - Website Costs.	-10,280.00
Total Property, plant and equipment	36,092.26
Total Non Current Assets	36,092.26
Total Assets	\$ -15,306.30
LIABILITIES AND EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable (A/P)	
20000 Accounts Payable (A/P)	102,306.01
Total Accounts Payable (A/P)	102,306.01
Credit Card	
20010 Diner BMO	29,553.50
Total Credit Card	29,553.50
20070 A/P Second Society - CGS	-2,062.14
20150 A/P - Foundation	9,077.76
20160 A/P - Foundation History	9,017.89
20200 A/P - Jamieson Fellowship	2,983.00
20201 A/P - Jamieson Fellowship - A	-5,675.00
20202 A/P - Jamieson - Capital Fund	1,670.00
20203 Donald Jamieson Award Fund	6,000.00
20230 A/P Second Century Fund	93,621.10
20290 Loan - Covid19	60,000.00
21300 Deferred Revenue	28,345.77
21600 Accrued Wages - David Innes	22,500.00
22050 Quebec Payable	886.73

	Total
22200 Tax Payments Made	-26,938.94
23100 GST/HST - Payable	-12,426.03
23150 GST/HST - QST Filed	1,287.29
23400 QST Payable	5,640.58
24000 Loan Pay. - current portion (2nd century)	1,355.82
Total Current Liabilities	327,143.34
Non-current Liabilities	
26041 Adj. to Second Century Fund	1,382.93
26100 BMO Loan	100,000.00
Total Non-current Liabilities	101,382.93
Total Liabilities	428,526.27
Equity	
Retained Earnings	-242,705.01
Profit for the year	-201,127.56
Total Equity	-443,832.57
Total Liabilities and Equity	\$ -15,306.30