



NZSEE Annual General Meeting, 19th April 2023

President's Report

I am very pleased to present the President's report for the New Zealand Society for Earthquake Engineering activities over the past year. It has again been a particularly challenging year as we navigated the cancellation of the 2022 in-person conference and were forced to move into an online format. There have also been several notable events throughout the year, including the released of the revised Nationals Seismic Hazard Model and the sad news of the passing of two former Administrative Secretaries.

Passing of Michael Brice and Graham Quirke

It was with great sadness that we learnt in late 2022 of the passing to two former NZSEE Administrative Secretaries – Michael Brice and Graham Quirke.

Michael Brice was a Life Member of NZSEE and served as the Administrative Secretary (the role now referred to as the Executive Officer) from 1989 until 1998. Michael worked for the New Zealand Portland Cement Association and became the New Zealand Prestressed Concrete Institute's secretary/manager when it was incorporated in 1964. He served in this role until his retirement in 1992. Michael was conferred with Life Membership of NZSEE for the significant contributions that he made to NZSEE and the wider profession over his lifetime of service. Michael will be remembered with great respect, affection and appreciation of his contribution to NZSEE, which went well beyond his core duties.

Graham Quirke served as Administrative Secretary to the Society between 1998 and 2002, following on from Michael Brice. Graham was a professional company secretary and brought those generalised skills to the administration of the Society in both accounting and general secretarial and administrative activities. He was very much a behind-the-scenes administrator who set about modernising the Society's accounting and administrative practices. One important role undertaken was the necessity to amend the Society rules so as to maintain our charitable status in accordance with subtle but significant changes in the Charitable Trust regulations.

Michael and Graham together made significant contributions to the running of the Society over an extended period of time. Their passing warrants particular note to recognize their service and commitment to the Society.

Covid-19 and the 2022 NZSEE Conference

The 2022 NZSEE Annual Technical Conference originally scheduled to be held at Te Papa Tongarewa in Wellington was cancelled due to the Omicron outbreak and the corresponding shift to the red traffic light setting. This cancellation was the second time in as many years where the Conference Convenor and Management Committee was forced to enact the "last undesirable" outcome when faced with extraordinary circumstances. A special mention must be made to the Annie Scott, who excelled in her role as Conference Convenor and showed remarkable tenacity and dedication to plan both the original in-person event and the revised online format.

The decision was made to offer reduced-cost options to sponsors and exhibitors to reflect the lower exposure that they would receive in an online format. In addition, a Platinum sponsorship option was offered that included unlimited registrations from staff at the sponsoring organisations. This latter sponsorship option proved especially popular for the major consultancies, as it offered them an option to both have some brand exposure and offer their staff professional development opportunities at a time when these opportunities were otherwise quite limited.

These factors lead to over 700 registrants for the 2022 NZSEE online conference, which is well in excess of the roughly 420 registrants that we normally get for our in-person conferences. Overall, the approach enacted ensured that we reached a greater proportion of the industry, had great online participation, and avoided what might have otherwise been a significant financial loss. While we are very grateful to the support we received from sponsors and exhibitors, and very pleased with the outcome under difficult circumstances, we look forward to putting the pandemic behind us and moving forward with more certainty in regard to event planning and being able to meet together again at in-person conferences.

Financial Report

The final financial reports for the financial year ending 30 September 2022 was audited in late 2022 and received an unqualified audit report on the financial statements in early 2023. The total revenue for the financial year was \$606,942 and the total expenditure was \$602,683, giving a Net Operating Surplus of \$4,259. This outcome is actually a remarkable result given the challenges faced due to the cancellation of the 2022 in-person conference and other challenges related to the pandemic. The Society remains in a strong financial position, despite the significant challenges faced in recent years, mainly in related to conference organisation.

2022 NZSEE Webinar Series

Following on from the strong interest and positive feedback received from webinar series in recent years, NZSEE organised a series of Webinars in late 2022. This webinar series was intended to provide opportunities for professional development and a forum for the exchange of ideas outside of the cycle of our normal annual conference. The format for these webinars was a mix of online-only events, as well as some hybrid events where an in-person event was held in a main centre and the event was also live-streamed. This hybrid format was selected to both provide an opportunity for much-needed in-person social interactions in the wake of Covid restrictions, while also providing an opportunity for those outside of the main centres to engage with the presenters and the content presented.

Some notable events within this series include the international presenter, Professor Juan Carlos de le Llera, who presented in Auckland as part of this trip to Aotearoa New Zealand to deliver the Distinguished Lecture at the 2022 QuakeCoRE Annual Meeting. We also partnered with the New Zealand Tunnelling Society for a hybrid seminar/webinar on underground structures in November 2022.

Overall, I feel that this seminar/webinar series was a great success and I would like to extend my sincere thanks to all presenters, organisers, and to all members who engaged with this seminar series.

A summary of the webinars and links to the recordings (where available) are included in the following table.

Event Date	Presenter(s)	Title	Recording Link
August 25 th 2023 Hybrid in-person and live-streamed event	Juan Carlos de la Llera Pontifical Catholic University of Chile	Resilience, Innovation, and Implementation: A Chilean perspective on challenges and opportunities implementing seismic protection systems	https://youtu.be/i4teQNQVMbl
29 th September 2023	Jan Stanway (WSP) and Jitendra Bhatta (Beca)	Design and Seismic Performance of Non-Structural Elements	https://youtu.be/fXQcm2bsldA
7 th November 2023	Brendon Bradley, University of Canterbury	An introduction to Seismic Hazard Analysis	https://youtu.be/DsZs_5QAN50
14 th November 2023	Matt Gerstenberger, Anna Kaiser, Sanjay Bora, GNS	NZ NSHM “A look under the hood”	https://youtu.be/W-LU8Bj7SJk
November 23 rd 2023	Andy Dodds (Arup) and Wataru Okada (WSP)	Seismic Design of underground structures	Event not recorded

The release of the National Seismic Hazard Model

In early October 2022, the revised National Seismic Hazard Model was released by GNS, which was definitely one of the most significant milestones for the profession over the last year. This new hazard model was long anticipated and there was certainly some nervous anticipation of what the results of the model might mean for changing seismic hazard in parts of the country. In the immediate wake of the release of the model, NZSEE partnered with the Kindred Technical Societies of SESOC and NZGS to organise a seminar series in the three main centres of Auckland, Wellington, and Christchurch. The presenters were Ken Elwood (MBIE), Andrew Thompson (Holmes), Mark Willard (Ministry of Education), and Sjoerd van Ballegooy (Tonkin+Taylor).

There were over 200 registrants for each of these in-person events, and the Christchurch event was also live-streamed around the country, attracted more than 750 online registrations. The recording has been viewed more than 1,100 times and can be accessed at: <https://youtu.be/Su6k5CNVnas>.

This NSHM seminar series seemed to be well received and helped to provide some insight around what the NSHM release meant for engineering practice in the short-term, as well as the potential longer-term implications. The NSHM and the potential changes to loading standards in the coming years remains extremely topical and is included as a key part of the technical sessions at this year’s conference. I wish to extend my sincere thanks to SESOC and NZGS for their collaborative approach to organising these events, and to MBIE for their financial contribution towards the organising costs.

Technical Advisories:

In August 2022, in anticipation of the impending release of the National Seismic Hazard Model, NZSEE joined with the Kindred Technical Societies of SESOC and the New Zealand Geotechnical Society (NZGS) to publish an advisory for engineers on Designing for Seismic Uncertainty. This advisory reminded engineers of the importance of the most fundamental aspects of good seismic design practice and how robust seismic design can provide a level of insensitivity to potential changes in seismic hazard. The advisory can be accessed at:

https://www.nzsee.org.nz/db/PUBS/Earthquake-Design-for-Uncertainty-Advisory_Rev1_August-2022-NZSEE-SESOC-NZGS.pdf

The Resilient Buildings Project:

This year saw the continuation of the NZSEE-led Resilient Building Project, which is funded by Toka Tū Ake EQC. This project seeks to define societal expectations of building performance, to help inform future decisions on tolerable impacts of earthquakes. The focus over the past year has been interpreting the 2022 societal expectations research, to determine tolerable/intolerable impacts and the countervailing performance objectives. The report with these findings will be published on the NZSEE website in the near future, along with all the earlier reports that can be access at the following links:

Full Report:

https://www.nzsee.org.nz/db/PUBS/RBP_SocietalExpectationsReport-FINAL-for-Release.pdf

Policy Brief:

https://www.nzsee.org.nz/db/PUBS/Policy_Brief_Resilient_Buildings_FINAL110422.pdf

Detailed Report on Focus Groups:

<https://www.nzsee.org.nz/wp-content/uploads/2022/07/Focus-Group-Report-final.pdf>

Detailed Report on Interviews:

<https://www.nzsee.org.nz/wp-content/uploads/2022/07/Interviews-Report-FINAL.pdf>

Learning from Earthquakes (LfE)

The most significant event in this last year has been the devastating earthquakes to hit Turkey in February 2023. The Management Committee had sought to collaborate with the American Concrete Institute (ACI), the US National Institute of Standards and Technology (NIST), and the American Society for Civil Engineers (ASCE) in their reconnaissance mission that departed for Turkey in late March. However, with the significant organisational work currently going into the conference, annual awards, AGM and other initiatives, we did not have the ability to co-ordinate a response in time to be part of this mission.

It is clear that these earthquakes in Turkey are very significant and represent some of the strongest recorded motions records in urban areas for many decades. Despite potential differences in building typologies and construction practices, it is clear that there are many lessons that can be learnt from these earthquakes. The Management Committee is dedicated to working with collaborating organisations to pursue joint reconnaissance opportunities in the coming months, as they might arise.

Relationships with other Technical Societies

Our relations with our Kindred Technical Societies of SESOC and NZGS remain very strong. We regularly attend each other's management committee meetings to ensure a strong level of engagement and to identify opportunities to collaborate on key issues. As noted above, we have collaborated on several key initiatives over the past year and will seek to continue this approach going forward. A special mention goes to Michelle Grant, who finished her term as SESOC President in February 2023. Michelle facilitated excellent engagement between NZSEE and SESOC and was very active in her Presidency. We look forward to working with Nic Brooke as the new SESOC President, continuing to work with Eleni Gkeli as Chair of NZGS, as well as the wider Management Committees of both Societies.

Engineering New Zealand

Engineering New Zealand continues to provide NZSEE with excellent administrative support and works as a central facilitation agency for industry issues. We have representation on their Programme Challenge Group which helps steer projects Engineering NZ manages for MBIE.

Toka Tū Ake EQC

Toka Tū Ake EQC and NZSEE share objectives for promoting earthquake research and increased awareness about seismic resilience. EQC provides essential financial support to NZSEE including for the cost of publishing the Bulletin, sponsorship of the jointly managed Ivan Skinner award, and sponsorship at our annual conference. In 2022, we renewed our Memorandum of Understanding (MoU) and Sponsorship Agreement with Toka Tū Ake EQC, which also includes a provision for support for Learning from Earthquakes reconnaissance missions. Toka Tū Ake EQC are also currently providing support for the Resilient buildings project. I would like to acknowledge and thank Toka Tū Ake EQC for their continued strong support of NZSEE. We simply could not achieve everything that we do within NZSEE without this significant ongoing support.

Ministry of Business, Innovation, and Employment (MBIE)

As noted previously, we have worked collaboratively with SESOC, NZGS, and with MBIE to support messaging within the profession, and to the general public in relation to the release of the National Seismic Hazard Model. We appreciate the collaborative and constructive relationship that we currently have with MBIE Building System Performance.

NZSEE has representation on several MBIE work streams, including the Seismic Risk Working Group (SRWG) and in the Joint Committee for the Seismic Assessment of Existing Buildings (JCSAEB). A renewed MoU was signed in later 2022 between MBIE, EQC, NZSEE, SESOC, and NZGS. This MoU includes provision for the training related to revised assessment guidelines. The initial planning of this training is beginning soon as we scope out the best mode of delivery and develop training materials in the months ahead. More information will be available to members once the training information and method of delivery is finalised.

Te Hiranga Rū QuakeCoRE

We continue to value our strong relationship with Te Hiranga Rū QuakeCoRE as a national research Centre of Research Excellence (CoRE) dedicated to earthquake resilience. We continue to jointly run the NZSEE/QuakeCoRE Emerging Women Leaders in Earthquake Engineering award. The winner will be announced at conference.

Membership

Membership numbers are currently just over 1,000 which is a slight increase over the same time last year. In recent years, we have seen growth across all membership classes, though the biggest growth has been with student membership. We are encouraged to see a lot of younger members which signals a healthy future of the Society.

Diversity in Earthquake Engineering

A notable event over the last year was the Advancing Women in Engineering and Construction (AWEC) Symposium that was held in November 2022. This event attracted a large group of female participants from around Aotearoa and received very strong positive feedback. NZSEE partnered with SESOC to offer travel grants and sponsored tickets to facilitate attendance at this event by women who might not otherwise have had support to attend. I would like to extend my sincere thanks to the core organising team of Charlotte Toma, Annie Scott, Elly Rishworth, and Patrick Cummiskey for their outstanding work organising this great event for the good of the profession.

We recognise that diversity within our profession is an ongoing challenge and that diversity is far more than just gender. We are encouraged to see other industry efforts to foster understanding of diversity, such as the Te Tiriti o Waitangi module recently launched by Engineering New Zealand. We will continue to seek to identify areas where NZSEE can contribute to activities to support the creation of a more diverse workforce.

The Bulletin

At the 2022 AGM, we indicated we would survey members to identify whether each member would like to receive a hard copy of the Bulletin, or would prefer to receive the Bulletin in an electronic format only. There have been a number of issues to work through in the background to update the Bulletin production processes to incorporate these changes. As such, the member survey has taken longer to roll-out than previously planned. However, that survey will be sent out to members in the very near future and each member's chosen delivery method will be implemented for the June 2023 issue.

We are giving each member the opportunity to make their own selection of how they would like to receive the Bulletin. Anyone who still wishes to receive a hard copy will still be posted one every quarter.

As there are significant fixed costs in the production of the Bulletin and these costs are covered primarily from Toka Tū Ake EQC sponsorship (rather than from membership fees), we are not seeking to offer different levels of membership fees for domestic members based upon their choice of whether they receive a hard copy of the Bulletin. The administrative costs associated with implementing a multi-tier membership process is likely to outweigh cost savings from producing fewer physical copies of the Bulletin. However, we will seek to use any cost savings to limit any increases to membership fees that might be needed as a result of rising costs in the current inflationary environment.

Future update to the NZSEE Constitution

The Incorporated Societies Act 2022 was passed on 5 April 2022 and will require the NZSEE Constitution to be revised to meet the new act. These changes include aspects such as formally documenting dispute resolution procedures. SESOC have already updated their rules to adhere to the new act. The Management Committee will need to work over the coming year to fully understand what revisions will be needed to meet the new act and propose changes to the NZSEE Constitution. We anticipate that legal advice will be needed to support us through this process.

Any proposed changes will be clearly communicated to members well ahead of time and a Special General Meeting will be convened (likely aligned with the 2024 AGM) to pass the revised constitution. No immediate action is required and the current constitution remains in place, but I wish to clearly forewarn members that this change will be coming at some point in the future and to explain why the changes are needed.

Management Committee

The next agenda item will confirm the Management Committee for the 2021/2022 year. The new Management Committee will meet following this AGM.

Finally

I want to thank all members, the Management Committee and Executive Officer for your support of the Society over the course of this past year. It has been a very busy and challenging year, but I think we can look back fondly on what was achieved across the profession under difficult circumstances.

Thank you for your ongoing support of NZSEE,

A handwritten signature in black ink, appearing to read 'Geoff Rodgers'.

Geoff Rodgers
NZSEE President