

Dave Brunson, Director



Specialisations

- ◆ Strategic Project Co-ordination
- ◆ Infrastructure Risk Management
- ◆ Emergency Management Planning
- ◆ Business Continuity Planning
- ◆ Rescue Engineering
- ◆ Post-Disaster Building Evaluation

Overview

Dave draws upon a wide range of experience across the building, infrastructure, emergency management and research sectors. The majority of his work involves the co-ordination of complex multi-agency projects within and across these sectors, including a number at the interface between Earthquake Engineering and Emergency Management.

His areas of technical specialty include infrastructure risk management and operational arrangements, and the review and exercising of Emergency Response and Business Continuity Plans. He has been responsible over the past decade for developing and implementing NZ's national post-disaster building safety evaluation and rescue engineering arrangements, and assisted Christchurch City Council with the co-ordination of the building safety evaluation process following the 4 September 2010 Canterbury earthquake, and was involved in the USAR response following the 22 February 2011 earthquake. Since October 2010 he has led the Engineering Advisory Group for the Department of Building and Housing, developing technical guidance for the assessment, repair and reconstruction of the built environment in Canterbury.

Dave has maintained strong linkages with the research sector through his various project roles. He has been the principal author or editor of more than 100 papers, reports and articles on subjects including lifelines engineering, emergency management, business continuity, rescue engineering, earthquake reconnaissance, and earthquake risk buildings.

Qualifications

Bachelor of Engineering (Hons) (Civil), University of Canterbury, 1980

Master of Engineering (Distinction) (Civil), University of Canterbury, 1984

Professional Memberships

Chartered Professional Engineer, New Zealand

Fellow - Institution of Professional Engineers, New Zealand

Life Member and Past-President - New Zealand Society for Earthquake Engineering

Honorary Member – New Zealand Urban Search and Rescue Search Dog Association

Member - Institution of Engineers Australia

Member - New Zealand Society for Risk Management

Member - International Association of Emergency Managers

Professional Awards

Freyssinnet Award 1986 - Institution of Professional Engineers, New Zealand

Otto Glogau Award 1986 - NZ National Society for Earthquake Engineering

Professional Commitment Award 1996 - Institution of Professional Engineers, New Zealand

Technical Award: Multi-disciplinary 2002 – Institution of Professional Engineers, New Zealand

Maclean Citation 2010 - Institution of Professional Engineers, New Zealand, for exceptional and distinguished service

Key Positions Held

- Chair of the Department of Building and Housing Engineering Advisory Group following the September 2010 Canterbury Earthquake
- Leader of the NZ USAR Engineering team and member of NZ USAR Task Force 1
- Chair, New Zealand Lifelines Committee (1999 to present)
- Project Manager of the Wellington Lifelines Group (1993 to 2012)
- Leader of the NZ Society for Earthquake Engineering Building Safety Evaluation Working Group (1996 to 2010)
- Leader of the NZ Earthquake Assistance Team that undertook building safety evaluation following the Padang, West Sumatra earthquake for NZAID and UNDP (2009)
- Member of the Building Research Association of NZ Board (1999 – 2005)

Key Projects

Emergency Management

Strategic Planning and Advice

- Chair of the Department of Building and Housing's Engineering Advisory Group developing guidance for the assessment, repair and reconstruction of residential and commercial buildings
- Commissioned by the Chief Executives of the Wellington region to identify future structures and arrangements for CDEM (2009/10)
- Member of the Kestrel project team that prepared an assessment of the capacity and capability of the CDEM sector to respond to a disaster impacting the Auckland region, and the subsequent business case (2006)
- Advised the *Ministry of Economic Development* on the establishment of pandemic reporting arrangements for the infrastructure sector (2006)
- Member of the Kestrel project team enhancing the disaster management capability of Samoa (2005 to 2007)
- Strategic adviser to the *NZ Urban Search and Rescue Steering Committee* (2000 to 2008)
- Member of the Government's Independent Review Team following the February 2004 Floods

Operational Response

- Led the NZ USAR Engineering team during the four week response following the February 2011 Christchurch earthquake, including working as part of the USAR operations management team
- Co-ordinated the building safety evaluation process on behalf of Christchurch City Council following the 4 September 2010 Canterbury Earthquake
- Led the NZ Padang Earthquake Assistance Project team of ten NZ engineers undertaking building safety evaluation for NZ AID and UNDP following the 30 September 2009 Padang, West Sumatra earthquake
- Responded following the December 2007 Gisborne earthquake with NZ USAR Task Force 1, and co-ordinated the building safety evaluation operation for the CBD
- Undertook co-ordination of lifeline utilities following the 2004 lower North Island floods in the National Crisis Management Centre, and established the Infrastructure Recovery Task Group with the Manawatu-Wanganui CDEM Group

Exercise Management and Evaluation

- Development and delivery of *Exercise Ruaumoko*, a national volcano eruption simulation exercise held from November 2007 to March 2008.
- Facilitation of a disaster response simulation for the gathering of FRANZ partner representatives from France, Australia and New Zealand for *NZAID* in September 2007.
- Adviser to the *Ministry of Health* for *Exercise Cruickshank*, a national pandemic simulation exercise held in May 2007.
- Development and delivery of *Exercise Capital Quake '06* – a major earthquake simulation exercise for the *Ministry of Civil Defence and Emergency Management*, November 2006.
- Development and delivery of *Exercise Taurus* - a whole-of-government Foot and Mouth Disease simulation exercise for the *Ministry of Agriculture and Forestry*, April 2005.
- Development and delivery of the National Gas Outage Contingency Plan exercises for the Gas Association of New Zealand, September 2003 and November 2004.

Emergency Response Planning

- Leader of the project to update the national Building Safety Evaluation Guidelines for the New Zealand Society for Earthquake Engineering and the Department of Building and Housing (from 2004)
- Development of Emergency Response Plans for a range of organisations including Watercare Services Ltd, the Auckland Regional Public Health Service and Greater Wellington Regional Council Water Group.

Infrastructure Resilience

- Contributor to a review and gap analysis of energy and ICT resilience policy for the *Ministry of Economic Development* (2008)
- Facilitator of Infrastructure Resilience workshops involving industry and government representatives for the *Department of Prime Minister and Cabinet* (2008)
- Reviewed the risk and emergency management planning processes and arrangements undertaken by *Watercare Services* and *Auckland International Airport*
- Worked with MCDEM, MED and the Ministry of Transport to define response co-ordination arrangements for Lifeline Utilities (incorporated in 2009 update of the Guide to the National CDEM Plan)
- Participated in infrastructure risk assessment of Auckland for *MFAT* prior to the 1999 APEC meeting, and established 24/7 operational co-ordination arrangements that were in place during the event

Risk Management

- Co-ordination of a national structural and glazing survey of all primary and secondary schools for the Ministry of Education, including the establishment of appropriate standards and advice on the implementation of mitigation measures (1996-2000).

Research and Development

- Chair of the Research Steering Committee overseeing the *Resilient Organisations* project being undertaken by the University of Canterbury, University of Auckland and Kestrel Group (2004-2010)
- Reconnaissance of the 1989 Newcastle, 1993 Guam, 1995 Kobe and 1999 Taiwan earthquakes on behalf of the NZ Society for Earthquake Engineering, including the compilation of detailed reports