

Lessons learned from one of New Zealand's most challenging civil engineering projects: rebuilding the earthquake damaged pipes, roads, bridges and retaining walls in the city of Christchurch 2011 - 2016.

Hays NAWIC Excellence Awards 2015 submission: Category: Helen Tippett Award

Story: Women in Construction

Theme: People and Culture

An award submission nominating SCIRT Women in Construction (SWIC) for the Hays NAWIC Excellence Awards 2015: Category: Helen Tippett Award.

This document has been provided as an example of a tool that might be useful for other organisations undertaking complex disaster recovery or infrastructure rebuild programmes.

For more information about this document, visit www.scirtlearninglegacy.org.nz

















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Some of the SCIRT Women in Construction (SWIC) members

Standing (I-r): Marianne Rogers, Project Manager; Tesh Lange, Traffic Controller; Jane Taylor, Site Traffic Management Supervisor; Kiri Ward, Senior Traffic Controller; Monique Berry, Site Traffic Management Supervisor; Kate Hood, Estimator.

Seated (I-r): Frances Adank, Senior Communication Advisor; Ruth Bullen, Project Manager; Fritha Bevin-McCrimmon, Site Engineer; Kimberly Jupp, Project Engineer, Marcia Beuth, Senior Project Manager; Belinda de Zwart, HR Manager.

Hays NAWIC Excellence Awards 2015

CATEGORY: HELEN TIPPETT AWARD

Nominee: SCIRT Women in Construction Group (SWIC)



Biography / CV Summary (1 page)

Greater Christchurch has experienced over 13,000 earthquakes since September 2010. The most devastating in February 2011 caused the loss of 185 lives, irreparably damaged around two thirds of the city's commercial buildings and liquefied about a third of its land area. Entire suburbs have since been disestablished with a massive rebuilding programme underway both above and below ground.

This inevitably created a sudden and unprecedented demand for construction industry labour. It also created significant opportunities to address gender diversity in the civil design and construction industry with only a 13% representation of women in professional engineering roles (IPENZ 2011) and markedly less in crew or trades level numbers, estimated to be 1%. Overall, New Zealand Construction industries are 86.4% male. (2013 NZ Census data). But to link supply to demand in Christchurch, perceptions and unconscious biases needed to be challenged. To respond to the earthquake repairs was not a 'business as usual' situation so 'out of the box' thinking to address the labour shortage was both possible, and required.

One organisation challenged to think differently around labour shortage was the Stronger Christchurch Infrastructure Rebuild Team (SCIRT). A competitive/collaborative alliance between five large civil construction companies (City Care, Downer, Fletcher, Fulton Hogan and McConnell Dowell) and three government 'client' organisations (Christchurch City Council, Canterbury Earthquake Recovery Authority (CERA), New Zealand Transport Agency), SCIRT is rebuilding the earthquake damaged horizontal infrastructure – the publicly owned pipes, roads, bridges and retaining walls.

This involves over 2.5 billion dollars of work over 600 projects in 5.5 years. It would also take 2,000 team members seconded from over 100 organisations of different sizes and natures (eg professional services organisations such as Opus, Beca, GHD, URS, Aecom, Jacobs, MWH, Auercon etc through to small to medium civil contractors). SCIRT's purpose is: "Creating Resilient Infrastructure that gives people security and confidence in the future of Christchurch". SCIRT's establishment is also a rare opportunity to leave positive legacies after December 2016 when the SCIRT work finishes and SCIRT will cease to exist.

One of SCIRT's Mind Sets/Values is to be "open to new ways and other perspectives". Demonstrating that value, its strategy in early 2012 to fill the labour gap of 900 resources included targeting women. A catalyst for further action came with the findings of the May 2013 "Building Back Better" research from the Ministry for Women. The research was the result of a survey of 500 under and unemployed Canterbury women. It found an untapped pool of labour – half of whom said they would explore rebuild jobs (such as civil construction) but had not in the past as they were viewed as "jobs for men".

After sharing the findings with the wider SCIRT team, the response saw the SCIRT Women in Construction (SWIC) working group established in August 2013. Its aim being to: "Raise the visibility and enable women working in construction across the SCIRT programme". The objectives were to challenge biases, provide role models and explore ways the industry could be more welcoming of women.

This self-governing group of women has representatives from all parts of SCIRT including HR, communications, design engineers, project managers and crew operational team members. All five head civil construction companies are represented, along with a professional services organisation and a representative from the Council. The 15 member group meets monthly to collaborate on ideas and determine strategy, tactics and actions to achieve the group's aim. Such is the success, momentum and tangible impact of the group that three members continue to attend, even though they are no longer part of SCIRT.

Part of this success comes from the philosophy of profiling and emphasising the positive rather than roadblocks. This has helped the group grow in numbers, awareness, regard and respect industry-wide. The model is also working towards being sustainable beyond the life of SCIRT.

The team members of SWIC are:

Kimberly Jupp, Project Engineer, McConnell Dowell; Jeanette White, Civil Engineer, Auercon; Belinda de Zwart, HR Manager, SCIRT; Frances Adank, Senior Communications Advisor, SCIRT; Marcia Beuth, Senior Project Manager, Hawkins; Jane Taylor, STMS Supervisor, City Care; Monique Berry, STMS Supervisor, Fletcher; Kiri Ward, Traffic Management Coordinator, Downer; Kate Hood, Estimator, Fulton Hogan; Cherie Leckner, Construction Manager, Fulton Hogan; Ruth Bullen, Project Manager, Downer; Fritha Bevin-McCrimmon, Site Engineer, Fulton Hogan; Marianne Rogers, Project Manager, McConnell Dowell; Tesh Lange, Traffic Controller, Fletcher; Angela Kleehammer, HR Advisor, Christchurch City Council.

Overview (2 pages)

Influencing without being in a senior position with authority - 'Leading From Where You Are'

The SWIC story is about "leading from where you are". These women prove you don't need to be in a senior position with authority to make change happen. By putting aside the competitive environment of the different organisations they work for, they come together to collaborate to deliver on their self-determined mandate: "raise the visibility and enable women working in construction across the SCIRT programme." Whatever their organization or role, their collective influence and commitment is about delivering beyond boundaries and structures and connecting more women to an industry that they are proud to be part of.

These are not hollow words. That mandate is backed by a solid list of actions, tactics, achievements and measurable objectives. As one SWIC member says, "The perception is that it looks a blokey industry – we need to remove this and visibly showcase the great women we have in the industry – get them also to share their experiences/ learnings, fun at the workplace alongside our men, so that it is an integrated approach and shows how we work together."

Only one woman in SWIC is in a Senior Management position however everyone influences in their 'corner' of SCIRT. One corner that SWIC determined there was a gap was visibility at the SCIRT governance level. In response, SWIC now has a regular agenda slot on the SCIRT monthly Board meeting to update the Board on SWIC progress and initiatives. A Board member was also requested to be the SWIC champion at the Board table. Roger McRae, Managing Director of McConnell Dowell quickly accepted the post and has been active in his duties since.

This level of endorsement and commitment has put SWIC in a position of influence to work pro-actively with the top leadership of the eight Alliance partners and all the organisations that are part of SCIRT. The activities, targets and results of the group are communicated to the Board via the SCIRT monthly operational report. The SWIC activities are also regular agenda items at the SCIRT monthly HR Operational forum (15 organisations represented) and the bi-monthly SCIRT Strategic HR Forum (six General Manager level representatives). SWIC works to influence those in senior positions and challenge them to make a difference where they are – just as they themselves role model.

Encouraging and Empowering Women in Construction: many activities from many angles.

The tactics and activities to deliver on the SWIC mandate since inception have been varied. They come from the women in SWIC who are empowered by their peers and endorsed by the SCIRT Board. Open discussions, research statistics and knowledge/experience sharing have led to a number of activities with different SWIC members taking the lead. These activities can be summarised in the following groupings:

Find out the facts of the present: Look to the future

- SWIC worked with Alliance partners' HR divisions to measure the number of women in construction across SCIRT. The results in December 2013 found: 21% of women in the SCIRT workforce and 10% of women in operational/in demand roles (roles traditionally filled by men).
- SWIC put a challenge to the Strategic HR forum to raise that 10% to 13% by December 2016 and asked the five construction Alliance partners to set their own organisational goal they did.
- The metrics are captured yearly and the December 2014 comparisons have been shared each competitor organisation knows how they are doing compared to others and last year.
- Regular SCIRT Board metrics reporting on women in SCIRT helps maintain top of mind visibility.
- In the monthly SWIC meetings, members share what is happening in their 'corner'.
- Three SWIC members attend the quarterly Ministry for Women led Canterbury Women in Construction working group. They share and capture what is happening, and take that back to the monthly SWIC group who in turn take it back and share it in their 'corner of influence'.

Enabling strategies: Encouraging employers to engage women in construction

- A SWIC member presented to the SCIRT Board the poor picture that only one New Zealand construction company had signed up to the UN Women Empowerment Principles (UN WEPs). The eight leaders around the table were challenged to do the same. To date, three have done so.
- SWIC has linked the construction organisation in SCIRT with the highest percentage of women to the Ministry for Women for role modelling opportunities.
- SWIC provided SCIRT construction women as keynote speakers for the Canterbury Employers Chamber of Commerce and Ministry for Women's workshop on innovative resourcing strategies for Christchurch Construction Employers in November 2013.

• SWIC members and the HR people they influence played a key role in working with the Ministry for Women to create a handbook for employers - "Growing your trades workforce: how to attract women to your jobs". They then partnered with the Ministry in November 2014 to launch the handbook alongside new women's work gear (see below).

Enabling strategies: Celebrating and lifting visibility of women in construction

- SWIC members attended the Hays Women in Construction Awards in March 2014.
- The SWIC Communication team member ensured the story of the tradeswoman winner at these awards was profiled, photographed and shared widely via SCIRT internal and external channels.
- Two SWIC members met with Hays suggesting a partnership with NAWIC to encourage wider participation in future awards.
- An application for a SCIRT Woman in a Leadership role was submitted by a SWIC group member for the Westpac "Women in Leadership" awards.

Enabling strategies: Implementing initiatives on behalf of women already in construction

- One of the most significant and high profile representations of SWIC's leadership was an event in the Christchurch city mall in November 2014 to launch the new women's Personal Protection Equipment (PPE) clothing in conjunction with the Ministry for Women's employers handbook.
- The PPE for women initiative was in partnership with NZSafety after gaining feedback from women
 in the field that there wasn't a female fitting hi-visibility vest or traffic compliant shirt on the New
 Zealand market. Women were allocated men's PPE clothing which did not always fit well.
- SWIC member and SCIRT Engineer Kimberley Jupp, was the driving force behind the gear which she said would fit properly to help women feel more comfortable and more equipped for their jobs when on site. SWIC used its collaborative influence (representing seven key industry employers and links to a powerful Board) to challenge a PPE supplier to join the initiative to make a difference.
- Kimberley spoke at the public launch event, along with other speakers, Duncan Gibb (the then Executive General Manager of SCIRT), Roger McRae (Managing Director of McConnell Dowell and SWIC SCIRT Board Champion) and Louise Upston (Minister for Women). Speakers at this level at this well attended event helped to significantly raise the profile of women in construction, both amongst those attending and the subsequent media coverage.
- In March 2015, SWIC hosted a breakfast workshop for Women in Construction roles across the SCIRT programme. It provided a networking opportunity for over 40 women from crew/trades roles from different organisations. The workshop also asked for their ideas on how SWIC could further meet its aim. SWIC team members moved through the group to capture these ideas which will become the SWIC's focus for 2015. It is planned that these breakfast workshops will be quarterly.

Overarching strategy: You can't be what you can't see - more visibility of role models

- Since its inception SWIC members have worked to get more images and profile stories in the public to challenge perceptions, create a 'new norm' and provide role models.
- With only one image of a woman in construction in the SCIRT image library 18 months ago, this has intentionally been grown to a number too large to count for this award submission.
- SCIRT Women in Construction have been profiled in the internal newsletter and importantly, images of women in construction working alongside men have been used in operational communication material to help 'normalise' women in construction (eg, SCIRT work notices, newspaper/magazine advertising, brochures, posters and other presentation material).
- Stories of SCIRT Women in Construction have been seen in CERA rebuild newsletters and in magazine publications (Avenue Magazine, March 2015 "Women in Neon").

Impact: Making a difference that goes beyond SCIRT

- In one year women in SCIRT have grown from 21% to 22%. In that same year the number of women in trades roles has grown by a significant 50%. While women in trades are only at 6% in SCIRT, it is moving in the right direction and upwards from the national 1%. Four New Zealand construction organisations now espouse to the UN WEP's compared to one before SWIC's influence. Four (one acting) of the 10 SCIRT Management Team are women, vs two a year ago.
- As a huge endorsement of SWIC's work and impact beyond SCIRT, the Ministry for Women recently asked a SWIC member to go to Japan to tell the story of Women in Construction post the Christchurch Earthquake at a world conference on disaster recovery in Sendai.

Since the start of SWIC, the support for the group at the highest level has seen it grow in strength, attendance and credibility. SWIC is not a 'talkfest'. SWIC gets things done.

APPENDICES

SWIC initiative: launch of new women's Personal Protection Equipment (PPE) in the Christchurch city mall generating public interest and media coverage



SWIC member and SCIRT, Engineer Kimberly Jupp, speaking at the launch.



SWIC member and SCIRT Engineer Kimberly Jupp (left) with some of her SCIRT colleagues who are wearing the new women's PPE. Louise Upston, Minister for Women (third from left) spoke at the launch.



Some of the media coverage of the launch included Radio NZ (left), The Press, CTV, and various popular social media sites (right).

SWIC initiative: more images/profiles of women in construction to create a 'new norm'

Women in SCIRT regularly feature in SCIRT newsletters and other public facing material:



SCIRT regularly features its team members in newspaper advertising to show 'the face of SCIRT' – this increasingly includes SCIRT women 'everyday SCIRT people on the job':



SWIC initiative: networking breakfast with SCIRT women to meet and share ideas

Sharing ideas and initiating discussions helps to develop tactics and actions to achieve SWIC's goals.



SWIC endorsement: Ministry of Women asks a SWIC member to attend and speak at the APEC world conference on disaster recovery in Sendai, Japan on women in construction following the Canterbury earthquakes

Excerpt from the Conference handout:

Asia Pacific Economic Cooperation workshop

"Good Practices of Women's Entrepreneurship in Local Communities

in the Process of Disaster Reconstruction"

18th March, 2015 14:00·17:00 (@L-Park Sendai, Japan)

Organized by Ministry of Foreign Affairs, Cabinet Office, Reconstruction Agency

In cooperation with APEC, Gender Action Platform

Supported by Ministry of Economy, Trade and Industry, OECD Tokyo Centre, OXFAM Japan

In the process of post-disaster reconstruction after the Great East Japan Earthquake, a number of cases were observed, where women played active roles as change agents and entrepreneurs. This workshop aims to share such good practices in Japan, together with similar experiences of other APEC member economies that have suffered from serious damages caused by natural disasters. The workshop will also hold panel discussion focused on ①the importance of women's role in the inclusive reconstruction of resilient community and economy after natural disaster, ②factors for success as well as impediments in women's empowerment and entrepreneurship, and effective supporting measures.

15:45 -16:45	This session will discuss ①the importance of women's role in the inclusive reconstruction of resilient community and economy after natural disaster, ②
	factors for success as well as impediments in women's empowerment and
	entrepreneurship, and effective supporting measures.
	Speakers(TBD)
	Mr. Yoshiyuki KANEZASHI, Director, Gender Equality Division, Reconstruction
The second time of the second ti	Agency
	Ms. Kiyoko TAKAHASHI, Program Manager, NPO OXFAM Japan
	Ms. Jainey BAVISHI, Executive Director, R3ADY Asia Pacific
	Ms. Ravadee PRASERTCHAROENSUK, Director, Sustainable Development Foundation (Thailand)
	Ms. Belinda de ZWART, HR & Peak Performance Manage, Stronger Christchurch
	Infrastructure Rebuild Team (New Zealand)
	(Moderator: Ms. Yumiko MURAKAMI, Head, OECD Tokyo Centre)
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	Q&A