# **I** ♥ Christchurch

# Jayne PERRIN, New Zealand

**Key words**: aftermath, challenges, frustration, renewed sense of community, opportunity and hope, earthquake, Christchurch

#### **SUMMARY**

Christchurch to many New Zealanders is ... the biggest South Island city that was wrecked by earthquakes in 2010 and 2011. And 'why haven't they fixed it yet?' And 'surely people aren't still living in caravans?'

Christchurch to fellow South Islanders is ... evidence that mother-nature should not be taken for granted. It's also a city that has consumed copious volumes of construction resources – both manpower and materials.

Christchurch to locals is ... a city persevering with never-ending road works; entire suburbs of bare land where houses and homes once stood; a wish-list of facilities delayed due to bureaucracy increasing construction costs; a shadow of its former self, a city that has potential to be fabulous.

My husband, five year old daughter and dog moved to Christchurch from Napier in March 2015 for new job opportunities. Between us, we had been part of major earthquake events in 2011 and the multitude of aftershocks. We weren't concerned for our safety moving to the 'shaky city' and we have high expectations of the new Christchurch will look like and what it will offer.

In this paper I will explore and explain what it's been like to move to Christchurch post-earthquake. What goes on in a community that experienced a significant event, and is still grappling with the aftermath, the challenges, frustration and the renewed sense of community, anticipation, opportunity, and hope.

## **I** ♥ Christchurch

# Jayne PERRIN, New Zealand

#### 1. INTRODUCTION

It's terrifying finding out that your closest family members have had the ground ripped from under them and that a city as strong as Christchurch has in parts been reduced to rubble, impassable bridges and portable toilets. And that 185 innocent people didn't survive the February 2011 event. The television media reports couldn't help me locate my husband in the broken CBD, nor could they explain why Christchurch had been struck with such severe force.

Everyone has a story. Some folk are lucky to be alive or simply lucky that their property or business survived the extraordinary events of September 2010, February, June and December 2011. I've sat with people while they recall their stories of being close to folk who didn't survive, losing their homes, ongoing battles with insurers, frustrated at the delay of rebuilding the city. As a newcomer to the city only 12 months ago sometimes it's hard to comprehend or appreciate.

I've lived in several different towns and cities across the North and South Islands of New Zealand, but never before have I moved to a city experiencing such an extent of destruction and rebuild, and both at the same time. Despite frequent visits to Christchurch since the earthquakes, I was unprepared for the experience of moving to Christchurch, the nice people that I would meet with awful earthquake stories, the volume of physical work completed in the four years and the scale of the work not yet agreed on or started.

There are hundreds of people with different encounters, ideas and beliefs. There are endless facts and figures related to the earthquakes and aftershocks. The following are experiences and knowledge of myself and Cantabrians that I have spoken to since my move to Christchurch in March 2015. This is not intended to a full account of the situation.

#### 2. AFTERMATH

Following the February 2011 earthquake, the central business district of Christchurch was cordoned off for more than 2 years – held secure for part of this duration by the New Zealand Defence Force under 'Operation Christchurch Quake'. To date, this is the largest operation on New Zealand soil; involving over 1700 personal from NZ Army, Royal NZ Navy, and Royal NZ Air Force.

This space became known as the 'CBD red zone' and also included several residential streets. Businesses were forced to relocate and it wasn't uncommon that they could only take minimal, or no, records with them because entry to their buildings was prohibited. Businesses have moved to locations not designed to for the resulting increased traffic volumes, staff and visitor parking

requirements, lunch supplies, etc. It gradually shrank in size until the last cordons were removed on 30 June 2013, 859 days after the earthquake.

CERA (Canterbury Earthquake Recovery Authority) was established by the NZ Government as the agency to lead and coordinate the ongoing recovery effort following the devastating earthquakes. As a vibrant and strategic centre for the whole of the South Island, Cera said it's important for Christchurch to recover from this disaster, adapt to ongoing seismic activity and enable a stronger and more resilient community and region.

Tourism businesses have felt the impact of the earthquakes – many hotels and motels around the city were badly damaged and as a result the number of beds available is hugely reduced. Maybe visitors weren't keen to visit immediately after the events but five years on hotels are being repaired, rebuilt or relocating and visitors have returned to the city.

Staff worked around the clock to minimise disruption when carrying out repair and protective work. An example of this was the night-time installation of a double-height container wall for rock fall protection several of these are still in place today.

Employers had to be understanding and considerate of everyone's situation – some staff needed time off to clear their homes and property of liquefaction; leave to seek treatment for physical or emotional illness; leave to meet with lawyers, insurers, contractors; and tried their best to arrive at work on time despite the appalling road conditions, bridge closures and detours.



1. The line of shipping containers imposes on access to and from popular Sumner Beach but protects road users from rock fall

I'm aware of some staff who had to be sent home to ensure their life was in order – they were encouraged to fix their own situation and focus on their work commitments after. One employee was living in house where he couldn't lock the front door, had liquefaction in the shower and after each big shake had to clear the liquefaction again and again yet he kept coming to work. Perhaps the routine and normality of work was his way of coping. One employer was generous by offering each staff member \$500 travel voucher so they could escape Christchurch for a few days.

Statistics NZ reported in Feb 2012 that the number of businesses in Christchurch has remained relatively constant since the earthquakes and as expected, the post-earthquake changes in businesses and employees were more pronounced in some industries than in others - there were fewer cafes/bars and increased construction related businesses.

During the 4 September 2010 earthquake over 1300 people were injured in the event or aftermath. The 22 February 2011 earthquake caused 185 fatalities and over 4,500 people were injured in the

event or aftermath. It has been reported that psychosocial recovery after a disaster can take five to ten years and the main reason for this is that the shock and effects of the disaster itself are followed by secondary, recovery-related issues. (Bellamy)

Small aftershocks would remind residents to check their vehicles were filled with petrol, check their barbeques had sufficient gas supply in case of powercuts and restock their emergency water supplies. Electricity was restored to 75% of the city within three days and water supply to most of the city within two weeks. Sewerage systems took longer for a number of areas, with several suburbs having to rely on using portable toilet on the street berm for months following the earthquakes.

An interesting consequence of these earthquakes is the education of people. Liquefaction, the complex geotechnical land classification systems, and resilience are examples of words and phrases that became common usage vocabulary. Home and business owners needed to become conversant with legal jargon relating to insurance policies and construction contracts and I've met plenty who are still fighting those battles today.

The social effects of earthquakes have hit the Canterbury community hard with some residents unexpectedly feeling guilty their loss or damage is not as great as others. It has been well documented and reported that occurrences of mental illness such as depression, post-traumatic stress disorder and anxiety has risen in the Canterbury region since the earthquakes. The constant niggling in the mind of 'when will the next shake come?' and 'how devastating will it be?' must be hard to live with. Colleagues tell me they would look for exits in buildings and mentally assess the

likely failure mechanisms of buildings if another big one were to strike.

In the early days after the earthquake events, families fled Christchurch and many have chosen not to return. Conversely, thousands of people have been drawn to Christchurch from all parts of the globe – and not all as workers associated with rebuilding the city of Christchurch.

The most obvious consequence of those disastrous events is the suburbs of desolation. They no longer resemble war zones with abandoned buildings, inaccessible roads, roadside piles of liquefaction and collections of portable toilets that I witnessed on earlier visits to the city. Now they are grassed areas complete with original street signs, backyard trees still standing, service connections boxes remain at the boundary but nothing else. These scenes are almost as unnerving as the destruction was. A neighbouring territorial authority in the same situation has recently released a consultation document to transform abandoned suburbs into recreation areas, cemeteries and rural land.



2. Light poles and street signs stand proud despite houses and people no longer present.

On the flip side is the rapid residential movement to outer limits of Christchurch. Subdivisions previously only at concept-level planning stages have been fast-tracked and are filling up with multi-density residential development, purpose-built community facilities such as combined medical centres, strips of green belt and stormwater detention basins, and playgrounds. We considered buying a house in one of these developments but couldn't get past the mix of high-density living next door to the 'house and yard' living that we desired.

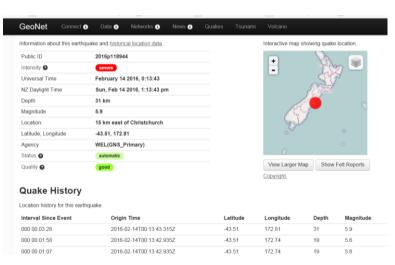
Recovery take time and costs a lot of money. Time is something that the public can tolerate to a limit, after that feelings of distrust and disappointment develop. There is no endless pot of money to reach into for repairs, rebuilds, and improvements. These earthquakes have cost the New Zealand Government, the nearby Territorial Authorities, local business, communities and residents large sums of money.

On 22 February 2011 my husband was away from home working in Christchurch. He vividly remembers the office violently shaking and damage reports immediately flooding in from staff based around the city of a 6.3 magnitude earthquake. He managed to retrieve his belongings before the hotel was condemned and hired the last available campervan which he shared with a colleague for two days as the ground continued to rock and roll.

My parents were fortunately both absent from work at 12.51pm on that February day. They had both been unwell and will be forever thankful they were together when the ground moved. They have been lucky that their property suffered only minor damage and the suburb they live in was spared the inundation of liquefaction.

Some considerable time after the February event I discovered that my brother had delivered the refrigerated containers to the Burnham Army Base to form a temporary morgue. He witnessed the lineup of plastic bags and I'm sure those images and the sensation of being part of that activity will stay with him a long time.

Although not present for those main events, I visited Christchurch on many occasions with my young daughter and felt more sizeable aftershocks than I can remember. Some aftershocks made the twostory townhouse wobble sideways, some were loud rumbling sounds before the movement arrived, but all were terrifying for those who had been present during the main events. A frequented website since September 11 2010 is



3. A popular shortcut on work or home computers is to Geonet website

I ♥ CHCH – a Personal Journey Amongst the Re-build Rubble (8134) Jayne Perrin (New Zealand)

FIG Working Week 2016 Recovery from Disaster Christchurch, New Zealand, May 2–6, 2016 <u>www.geonet.org.nz</u> – the official geological hazard information website dedicated to reporting seismic events.

Thanks to earthquake awareness education at school my daughter knows to 'hide like a turtle' under a table or similar when she feels an earthquake. Interestingly, our house is a result of the earthquakes – there was no reinforcing in the previous house concrete foundation so it simply broke into pieces and completely destroyed the home. The previous owners have moved out of town and the house rebuild was by another person. The ground conditions mean we have a specifically engineered foundation design and we no longer feel aftershocks depending on the nature of the movement. The 2010 waves that rippled through our cul-de-sac also meant that half the street are rebuilds. Demolition for the latest rebuild in our street started the month after we moved in.

For months on end there were media updates, reports, facts and interviews with quake-affected people. One current affairs television show dedicated many evenings to reporting on the dire situations in Christchurch. This provided the rest of NZ a chance to see what appalling conditions some residents were living in, how many buildings had been demolished and how tough the insurers were being. But did the senses get dulled as the months went on?

#### 3. CHALLENGES

The Canterbury earthquakes of 2010 and 2011 have had a major economic and fiscal impact on the region itself and on New Zealand as a whole. The earthquakes rank as one of the most costly natural disasters for insurers worldwide, since 1950. Treasury estimated the rebuild will cost the equivalent of around 10 percent of Gross Domestic Product (GDP), which represents a 'very large shock' in relative terms. As a comparison, the March 2011 earthquake and tsunami in Japan is estimated to have caused damage equivalent to around 3 to 4 percent of Japan's annual GDP. (Emma Doherty)

An extensive infrastructure rebuild programme, new suburbs being developed faster than natural expansion rates and the considerable numbers of houses to be repaired put a strain on the local construction industry. Not just personnel resources, but material resources, too. A phenomenal amount of rubble has been removed from Christchurch and nearby towns that required controlled dumping at nominated sites. Demolition material has also been utilized to reclaim approximately eight hectares of land at Port of Lyttelton and other sites around the district. The import of steel, cement and essential other building materials has increased by an estimated four times preearthquake levels and allegedly NZD100 million is spent each week on earthquake related construction.

The impacts on the roading network have been a challenge – the traffic pattern has changed since a lot of eastern residents and businesses have moved out. This has put unprecedented stress onto the remaining city roading network. Add in road works and detours and this can easily cause frustration to commuters, not to mention the transport industry, taxis and courier operators. The flat topography of Christchurch means it has always been a city to easily traverse by bicycle and lately the Council and New Zealand Government have been focused on improving and increasing the cycleway network.

Local surveyors have been exceptionally busy working in challenging situations for the past five years. In the days immediately following the earthquakes many Christchurch surveyors were within the Red Zone cordon monitoring verticality of buildings assisting the assessment of building demolition priority, monitoring critical city assets and later reestablishing height control for construction projects. Laser scanning tools have been invaluable in these scenarios – providing accurate data capture of damaged buildings at a safe distance or data capture of internal structures where traditional surveying would not have been possible, even prior to the seismic movements. Since the quakes, several special pieces of legislation were enacted relating to the cadastre and boundary definition where land had been affected by earthquake movements. Some of the legislation still requires lobbying and review by land professionals.

The local Beca workforce became spread over the city in at least five different locations, ranging from hotel conference rooms to portable cabins at the city's wastewater treatment plant. A few staff were allowed to return to the office late February 2011 to retrieve must-have items – they had 20 muntes to do a supermarket dash style 'raid' of colleagues desk and files. Much later on the offices were properly cleared of files and personal belongings. In July 2011, Beca consolidated to two offices, one of which I currently work in. With our new office in the centre of town currently under construction, and the staffing levels constantly on the rise, we now have the challenge of working in

cosy work station configurations while we patiently wait for our new work home.

A challenge to the local demolition crews, land owners and historians is the removal of historic building and their decorative facades. Some buildings are registered with the Historic Places Trust which determines the extent and manner in which they must be repaired. Usually buildings are not listed and can be dealt with as the owner and insurer agree. There are still numerous facades in the CBD being held in place by supporting structures.

Rebuilding a city is complicated. I'm impressed that a selection of contractors and consultants and government agencies combined to form SCIRT (Stronger Christchurch Infrastructure Rebuild Team) to formulate and implement a complex and essential citywide repair and rebuild programme for roads, fresh water, wastewater and storm water networks. As of early February 2016 SCIRT is



4. Containers are not just for shipping – a common use around the city is as temporary support of historic facades

86% through the programme of works. December 2016 is the target that contractors and consultants are striving towards to be substantially completed.

A regular work day involves me dropping off my daughter at school then driving across town to work. This sounds normal, but it's very easy to forget that there are still schools across Christchurch that are waiting for repairs or rebuilds. One school, nestled in a very supportive community, has been closed by the government due to risk of rockfall from nearby cliff faces. The community does not agree with the risk assessment and they continue to fight to re-open the school.

Halswell School is ironically 150 years old but brand new. It was damaged beyond repair following the earthquakes and fortunate to be the one of the first primary schools in Canterbury to be completely demolished and rebuilt. This school was one of several that couldn't continue teaching on site and temporarily merged or shared with another school. Another example of temporary sharing sites to find a way to continue providing education services is Burnside High School – secondary school by day, university lecture space at night.

A positive for the new schools being built across the city is the opportunity to have purpose-built classrooms. Some are moving to open plan learning style – several teaching classes within one larger space and multiple break-out spaces. The teachers and students have had to adjust to this unfamiliar environment and Halswell School has hosted many curious local and international education experts to see the classes in action.

After school my daughter attends gymnastic sessions – previously these were held at Queen Elizabeth II multi-use stadium, built for the 1974 Commonwealth Games. The space they train is now is not purpose-built, several sessions run concurrently and they improvise with the limited space available for each discipline and session. I'm sure there are hundreds of other examples across the city where community activities are making the best of the situation. The main question is: for how much longer?

Thirty years ago, I would travel to Christchurch with my family for a day of visiting relatives, shopping or exciting activities that rural Canterbury didn't offer, and in later years my visits to Christchurch were for business or family reasons. We would often park in the 8-level carpark building near Ballantynes (Christchurch's premier department store), we would turn right at the police station and I would attend meetings on the 13<sup>th</sup> floor of the Price Waterhouse Coopers building – all of these structures have since been demolished and the current bare sites are part of the changed face of the city. No longer is it possible to navigate the city using the familiar and reassuring presence of heritage buildings and structures. Nor can modern positioning tools such as Google Maps, NavMan or TomTom cannot be completely relied on for currency or accuracy – the landscape changes faster than updates are released.



5. The familiar multilevel Lichfield St Car Park now a bare site waiting for its next occupation. Beside it, a rebuilt portion of Ballantynes has access affected while building construction on both sides of the road is under way.

A personal challenge I have discovered since moving to the city is knowing what to ask and how to respond? Is it ok to ask someone about their story? Perhaps they lost a close friend or family in the February quake, or perhaps they were part of the search and rescue effort that day. Are they comfortable talking about their experiences? There is a saying that a man's house is his castle. But many people have had their castle ripped from them either by the quake or by lack of insurance or other tragic circumstances.

## 4. FRUSTRATION

A major cause of frustration to Christchurch businesses soon after the earthquake events was being denied access to their buildings to retrieve equipment and records. Access was restricted, buildings were condemned and demolished and progressed to repair or rebuild phases, and some are still boarded-up while insurers and offshore owners are at a stalemate. For several months after the quake events equipment, property and files could be seen abandoned on desks through broken windows while blinds and curtains flapped wildly in the breeze. In some instances owners were denied access despite their building being safe and the route to access it also safe.

Businesses in the CBD that survived the earthquakes experienced reduced clientele as previous customers transferred to distant suburbs. Other businesses were forced to relocate or even close their doors permanently. Insurance cannot always cover everything so there have been challenges for businesses all over the city to manage unexpected cash flow demands to fund relocations, replacing necessary equipment, etc.

In later periods the frustration has shifted caused by delays to key buildings and facilities. The city is unable to host major international conferences without a convention centre. There are not enough hotel beds for tourists and business delegates. Land owners adjacent to these key projects are unable

to move forward until more certainty of these key projects and buildings is known. The media articles still report uncertainty around these major projects.

For a while the demolition and construction industry was tainted with tradesmen arriving into town and setting up business and in the process providing poor workmanship at very low rates. Locals desperate for repair or rebuild work didn't need this challenge – the best marketing for any trade are testimonials from happy customers.

One doesn't have to go far or talk to many people before strong feelings of frustration become evident. Mostly they are personal frustrations related to property repair. Usually it is frustration at the time taken to negotiate with insurers about repair methodologies, the act of having to negotiate with insurers, dealing with incompetent contractors, and disruption caused by temporary

accommodation and renovation or rebuild.

A school mum informed me of a frustration I hadn't recognized - the extent that community activities had been reduced or merged. As a result of buildings being destroyed or damaged in the earthquakes or discovered to be below building code requirements, services facilities that were not shut down have relocated. Relocation means facilities are now often in locations not designed for the new use, access and parking is less than adequate and in some instances located in a suburb across the other side of town forcing the public to consider whether they make the effort to attend. Of course, there are instances where the activity is no longer viable. An example of this is the absence of a 50m swimming pool – without an Olympic size pool, professional swimmers are unable to train and now reside in other towns and cities where there are suitable facilities.



6. Roadworks – you can't beat it, you've just got to go with

Another big frustration is road works. Constant or recurring road works outside your property or on your regular travel routes is frustrating. People joke that orange cones seemed to breed in Christchurch. On my first day of work in Christchurch I encountered a drainage repair project that lasted eight weeks. For eight wintery weeks the local primary school, medical centre and pharmacy, and scores of residents had access to their properties blocked. They persevered with noisy excavation and drainage equipment rumbling and vibrating outside while through-traffic was forced to detour through narrower residential streets not designed as arterial routes. Fortunately, my return journey was unaffected and I was able to pass through the roadworks and assess, inspect and applaud the contractor's progress. An unexpected gift was the alternative route I discovered that

runs alongside a river with established trees and beautiful houses. It's slightly longer in distance with minimal difference in time so it's become a regular journey for me and I love it – what a wonderful way to start a work day.

I recently found an anonymous quote that has proven a constructive tool to cope with stressful life changes such as selling and buying property, relocating to a new city, finding new employment and adjusting to new routines: "Don't be afraid to change. You may lose something good, but you may gain something better". They are not the same stresses as narrowly surviving a deadly earthquake, spending months living in temporary accommodation using portable toilets, or spending years

fighting insurers and bureaucracy for payouts but the sentiment of the quote still applies irrespective the scale of your change.

Something to ease the frustration around the CBD construction sites I've noticed is viewing portals in many site fences allowing the passing public a chance to see what is going on. This helps put the banging, vibrating, dust, cranes, crossing trucks into perspective. Not every construction site has viewing windows but for those that do it's



7. Some construction public viewing windows are simply holes in the safety fence while others are graced with more artistic flair

really interesting to sneak a look to check on progress – especially if you are interested in concrete reinforcing and structural steel!

#### 5. RENEWED SENSE OF COMMUNITY

An important part to the vitality of the CBD city mall area is the Re:START mall - a little oasis of colour and vibrancy within the damaged and demolished wasteland of the central city Red Zone. At the time of opening in October 2011 it was a shopping built from shipping containers originally planned for 6 months. Four years the mall has relocated to make way for inner office construction but has expanded to over shops and businesses. Since opening, Re:START has been the cornerstone for the tourism industry in Christchurch and has 8. Not just another coffee shop or clothing boutique - the retail in the Lonely Planet Guide to the 'must



on city 50

and

helped rocket Christchurch to number six experience is something for all the senses to enjoy at Re:START mall

I ♥ CHCH – a Personal Journey Amongst the Re-build Rubble (8134) Jayne Perrin (New Zealand)

FIG Working Week 2016 Recovery from Disaster Christchurch, New Zealand, May 2-6, 2016

visit' places to visit in the world.

Pop-up shops and cafes and bars with unconventional or non-traditional styling are accepted more than ever expected. Many of these spaces provide a vibe or feeling that the customer is part of the overall experience — not just sitting at table drinking a cappuccino.

As a result of the CBD demolition the amount of dead space in CBD has been reduced — many blocks had narrow buildings difficult to repurpose but the vast expanse of open space allows the city to find new uses for old buildings



9. A favourite morning coffee escape from the office, including a street busker on Thursday mornings! These hardly souls are known to happily brave the winter weather for a good coffee. Who knows how long before construction will start on this commercial site?

and plan to use the spaces more effectively. New office blocks ready for occupancy early 2017 has the CBD community excited. The CBD will once again be a hive of business and commercial activity.

The Christchurch City Council has worked hard at consulting and liaising with communities and there is now evidence of contemporary town planning, an extended network of cycleways, modern below-ground infrastructure, new purpose-built public spaces and much much more.

The regular calendar festivals have continued and many more have emerged. There is now variety of activities taking place around the city every weekend – you just need to know where to look. Personal favourites of ours are the winter garden light show and the food trucks in Cathedral Square. A memorial installation is the 185 white chairs across the road from the CTV building site where many lives were lost in February 2011. I visited this again recently and watched a group of dedicated citizens repainting the chairs to make them look their best.

Council and government are not just spending money on repairing and replacing infrastructure and buildings, they are now spending money on art and cultural facilities and spaces. A new playground paying homage to a local children's author is a drawcard to the CBD for young children, and a somewhat controversial art installation in the Avon River is an example of how the cultural heart of the city is emerging.

An easy way to instill some positive feelings back into the city is the reopening of buildings and complexes that have been closed for long periods. The Christchurch Art Gallery opened late December 2015 after five years of closure and repair work.

Temporary sporting stadiums have been created and these generally serve the purpose well but the community is very much looking forward to the day when state-of-the-art and international level stadiums and facilities are once again open for business. A prime example of a temporary stadium

being well attended is the international cricket ground established at Hagley Park. This project continues to see groups lobbying against the development but from my experience cricket fans from near and far enjoy the opportunity to sit close to the action on a green grassy embankment. Most stadiums these days no longer have the grassed embankment; instead they have fixed seating in stands or concrete tiered structures. It is a fabulous feeling kicking off your shoes and laying back on the lush grass to cheer on the home team!

The Student Volunteer Army (SVA) is a student movement born from a Facebook page started following Christchurch earthquakes. It is focused on facilitating community action through youth engagement, preparing disasters and service. In the days immediately following September 4 Christchurch earthquake, 21-year-old Sam Johnson used social media and invited friends to join with him in assisting local residents with non-lifesaving tasks, in particularly cleaning up liquefaction residue on streets and gardens of the city. Johnson invited 200 friends to the event which soon grew to have over 2500 volunteers contributing to the cleanup.



10. Student Volunteer Army in action while waiting for lecture theatres to be assessed for damage

the

the

for

the

Five years on, the majority of Christchurch residents appear to be living life as normal. The infrastructure works is nearing completion, traffic cones are not dominating the road network like they used to and facilities are reopening across the city. The eastern suburbs were hit hard by liquefaction and many streets have been completely stripped of houses. This area is again starting to flourish with recent construction of a major supermarket and rebuilding of new schools nearing completion. While the population of this area has decreased there is still a strong presence of life there.

A memorial wall is currently being built on the banks of Avon River to commemorate the earthquake events that changed the city of Christchurch forever. Earthquake anniversary ceremonies and fun runs are a couple of ways the community joins together to remember and regroup. For my family this is the opportunity to show support and a cue to familiarise ourselves with emergency procedures.



our

the

11. A mother and son stop to strike a pose during the annual Run to Remember

## 6. OPPORTUNITY AND HOPE

An obvious impact on the construction business is the influx of international workers. It's not uncommon now for large work sites to have several accents at the lunch table. I'm certain these employees have learnt a lot while on the job and hope that Christchurch continues to offer them enough to keep those skills in the city.

I ♥ CHCH – a Personal Journey Amongst the Re-build Rubble (8134) Jayne Perrin (New Zealand)

FIG Working Week 2016 Recovery from Disaster Christchurch, New Zealand, May 2–6, 2016 There is still plethora of buildings not started or with no planned course of action. Two prominent Christchurch landmarks on stuck between parties with differing opinions are the Christ Church Cathedral and the town hall. I'm not emotionally attached to these landmarks but for the sake of progressing the city's recovery I hope they find a common goal soon.

The future for Christchurch is very strong – not many cities in the world will have the opportunity to build a new CBD, new public spaces, new commercial buildings and residential development combined with replacement of aged drainage systems and new roading and cycle networks. The latest technologies have been able to be utilized and installed and the public have had multiple opportunities along the way to have their say. This will undoubtedly become the most modern city in NZ and who wouldn't want to be part of that?



12. A brand new CBD street has fresh asphalt, dedicated cycle lane, latest technology street furniture and essential fixtures, and landscaping

"Communities are talking more" – that's what a friend of mine said. After the earthquake they chatted while they queued for drinking water and regularly checked that everyone was coping. They still chat when they meet at the mailbox and they still knock on the door from time to time. I'm fortunate that my cul-de-sac has that close neighbourhood environment too. It's not overbearing where everyone knows all of our business but we know that the kids are safe on the street as they go between houses to play. This wasn't something we could have discerned in our 30 minute to purchase the house but what a pleasant discovery when we moved in. It's not too much to ask for other communities about the city to be like ours, but it takes time to develop relationships and effort by all parties.

With change comes opportunity. Generally, it's not considered healthy to dwell on the 'how' or 'why' the change has eventuated but more importantly focus on the opportunity, potential and possibilities that will present themselves.

My husband and I love the South Island and our short-medium term plan was to return to the South Island. Christchurch was always the preferred destination that could offer the best for our careers and provide important family interaction. What wasn't in the plan was the earthquakes, a city that needed to rebuild itself, nor the chance to live through it and embrace those changes along the journey.

A local monthly publication listed five positive changes to Christchurch five years on, which I think are hard to beat:

• "The Environmental Factor – With the opportunity to rebuild our city and homes comes the chance to make a smaller footprint on the environment. By creating green space in the

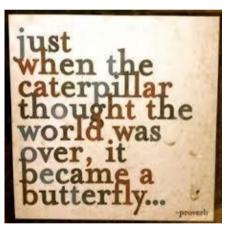
- central city, adding solar panels to our homes and making retail spaces from containers we have put Christchurch on the map as an eco-friendly city.
- Home Renovations With the millions of dollars spent on EQC repairs we have the country's most newly renovated homes.
- New Places to Visit Be it restaurants, shops, or playgrounds, each month in Christchurch we have a new location to visit.
- International First The Transitional Cathedral is an international first. Designed by architect Shigeru Ban and seating around 700 people, the structure is made entirely of cardboard and shipping containers.
- Upgraded Facilities with the redevelopment of public spaces has come an upgrade in facilities from those in technology, buildings and interiors. By the time the rebuild is completed Christchurch will have some extraordinary public spaces." (Style Magazine)

#### 7. CONCLUSION

Moving to a city that was rebuilding itself after a major earthquake and still experiencing aftershocks was never a worry for me. We love that the city will receive \$150 million for new cycle ways, that it has a beach safe for swimming, has a respected University, that has striking new buildings popping up all over the city, and that the temporary gap fillers are still around to remind ourselves of the fun and vibrancy that a city can offer.

Napier has embraced the 1930's art deco architectural style resulting from it's earthquake rebuild. Christchuch is unlikely to be renowned for a particular architectural style but I'm excited by what this city will offer in 5 years, in 10 years and in 20 years. It has the potential to be a fabulous place to do business, to live and to visit. And I love it.

In my opinion, Christchurch is a city that has tragically lost people, places and buildings but the new look is invigorating and captivating. The change is sometimes at a snail's pace but that teaches us patience. Perhaps the time spent persevering with civic libraries half the size they used to be, tolerating dusty and potholed car parking lots, and accepting the relentless increase in Council property rates will make the end result much sweeter. Would we move here all over again? You bet. I ♥ CHCH



13. Proverb reminding us that positive things can come from change.

### REFERENCES

http://www.ceismic.org.nz/news/operation-christchurch-quake

I ♥ CHCH – a Personal Journey Amongst the Re-build Rubble (8134) Jayne Perrin (New Zealand)

FIG Working Week 2016 Recovery from Disaster Christchurch, New Zealand, May 2–6, 2016 http://cera.govt.nz/recovery-strategy/overview

http://restart.org.nz/contact-about

http://www.teara.govt.nz/en/interactive/32121/aftershocks-22-february-2011-to-11-february-2012

Style, page 5, February 2016, Christchurch, Star Media

 $Bellamy,\ P,\ Research\ Services\ Analyst,\ \underline{http://www.parliament.nz/en-nz/parl-support/research-papers/00PlibC51211/social-effects-of-the-canterbury-earthquakes}$ 

Doherty, E, Research Services Senior Librarian, <a href="http://www.parliament.nz/en-nz/parl-support/research-papers/00PlibCIP051/economic-effects-of-the-canterbury-earthquakes">http://www.parliament.nz/en-nz/parl-support/research-papers/00PlibCIP051/economic-effects-of-the-canterbury-earthquakes</a>

#### **BIOGRAPHICAL NOTES**

Jayne is a Registered Professional Surveyor and has been a member of New Zealand Institute of Surveyors since 1999. She has been a licensed cadastral surveyor and practiced in the land development discipline across New Zealand. Jayne transferred her skills into project management and her first project was the design, procurement and construction of a wastewater treatment plant in Napier. Jayne relocated to Christchurch with her family in autumn 2015 and is currently a project manager in the Water section at Beca predominately managing earthquake repairs at the Christchurch Wastewater Treatment Plant.

### **CONTACTS**

Mrs Jayne Perrin Beca 410 Colombo Street Christchurch NEW ZEALAND Tel. +64 3 366 3521

Email: jayne.perrin@beca.com Web site: www.beca.com