

Organisational effectiveness in times of seismic risk.

Lessons for Wellington
Tuesday 18 October 2011

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Rebuilding our future

Presenters: Pat Walsh (Chair), [Colin James](#), [Ian Athfield](#), [Roger Sutton](#)

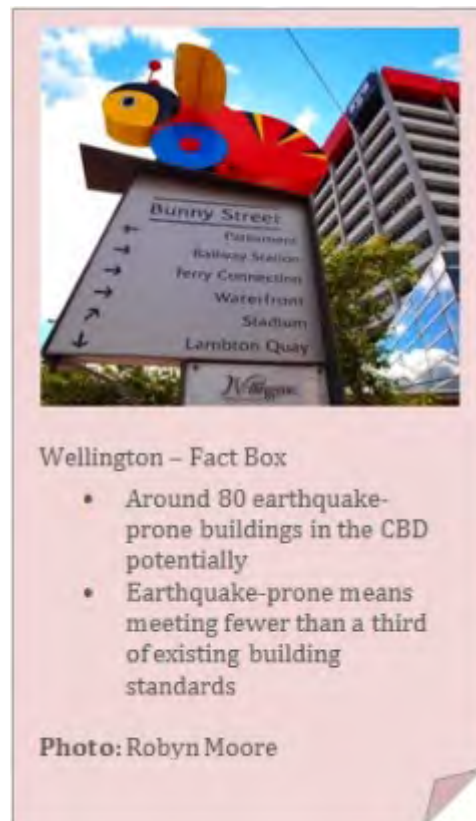
Additional commentary: Dr Helen Anderson, Margaret Jefferies, Peter Townsend and Jacki Johnson. Speakers are identified in **bold** type.

Theme 4 - *Rebuilding our future: Is an earthquake required?*

Presenting in the first session on [Building resilience](#) (Theme 1), some of the observations by **Dr Helen Anderson** are relevant here. This section begins with her comments on re-thinking the status of buildings.

Already, there are changes in the commercial landscape, especially round Wellington's CBD. These changes are going to be, and already are, driven by insurers increasing their premiums – and linking those increases to the status of the building and its percentage of the new building standards. Insurers, tenants, schools, board members, many of us, are rethinking what it means when a building is not 100 per cent of code in respect to earthquake. We're seeing a change in the market that may lead to some buildings not being economically viable. This will present challenges, especially for smaller businesses – if you were going to trade-off low rent for the safety of yourself and your staff, maybe you should think differently.

Margaret Jefferies is the Chair of *Project Lyttelton*. This grass-roots community group is working together to achieve their vision of a vibrant, sustainable community. She emphasises the most human elements around rebuilding the future, describing some of *Project Lyttelton's* notable successes.



We set up the first Time Bank in New Zealand. It is going really well and has played a significant role in rebuilding our future after the February 2011 earthquake. People share their skills with one another – measuring by the hour, not the dollar. And everyone's time is regarded as equal. Civil Defence was called into action too – they didn't normally have a presence in Lyttelton. The Time Bank is about sharing skills, hour on hour. We have a population of 3000, with over 400 people registered. So we have a system that works – we might send out broadcasts saying that we need people to take a chimney down, whatever the need – it is strongly coordinated. We link with other services too.



Farmers markets create a sense of community

We also have a farmers market. It creates a sense of community, provides a meeting place and provides food. While you may bump into the odd person you know at a supermarket, you can do a lot of your local networking at your farmers market – always building on the sense of community and building relationships. Relationships are key.

Welcome bags are another fabulous project, such a tiny thing – but fabulous. Everyone new to Lyttelton gets a welcome bag. The bag is sewn by Time Bank members, with new people coming to our notice through neighbours or real-estate agents. In the bags are useful things like bus timetables, details about the time bank, the community garden, and there'll be some fresh home baking too. It's about going to your new neighbours' door and saying *welcome to our community*. It touches people.

A lot of people ask about online communities, but if a beam falls on top of you, it's not your online community that's going to save you - it's going to be your neighbour.

Communications is another important project. We are lucky to have a monthly insert in one of the free newspapers. So we are building relationships all the time, and we are doing it from an appreciative inquiry point of view. We're not moaning, we are being positive and saying good things about what we're creating. We have a [website](#), Facebook, all of the usual mediums to easily connect. Just don't forget the personal touch – to talk and connect. That's what I've loved since the earthquake – all the random hugs.

The next thing to mention is local food production. We realised that without connection, no tunnel, the roads cut off, food was an issue – where would it come from? I'm excited that Lyttelton is now looking into improving food security in light of the earthquake. We

have Crown funding to set up as a co-op and get the whole community into business together.

A key lesson – have a good time while you're doing it all. You want people to come on-board and people won't respond to a doomsday thing. They won't respond if they're in a state of fear.

We have a lot of fun while we're doing these projects. It's also important to have compassion and realise that people react in different ways. Even if you have every system in place, people can still feel anxious.

Peter Townsend is CEO of the Canterbury Chamber of Commerce. He sets out a vision for the rebuilding of Christchurch:

It's not just about torches, batteries, ropes and first aid kits. It's about the real issues facing business. So Christchurch's future – we have a Draft Plan now, Christchurch City Council presented it. There's a lot of work being done. I'm confident that we are going to end up with a fantastic offering in Christchurch.

It is going to be an iconic city. It is going to be a green city. It will be framed by our four Avenues that our forefathers had the foresight to put in place all those years ago.

This will be interspersed with high quality housing, high quality accommodation, high quality iconic retail offerings, and high quality office space. You will all see a completely different central city Christchurch. It will be a city that faces the future, in the same way that 150 years ago our forefathers laid down this city that has looked after us so well in the past. But it's going to be different, it's going to take time, it's going to take an enormous amount of perseverance from the Christchurch community and the rest of New Zealand.

Jacki Johnson leads insurance company IAG in New Zealand. She comments on the Plan for rebuilding Christchurch:

The recently released Central City Plan presents a vision for a rebuilt Christchurch. We are seeing some groups raise concerns. The requirement for higher-spec building is of real concern to developers. Architects think the proposals are too restrictive. I understand that the business community supports the principles of the Plan. Clearly more detail, science and economic work are needed. Nevertheless, the Plan provides a starting point for thinking about the future and building confidence in a new central city.

Roger Sutton is CEO of CERA. He describes the role of CERA, and what the priorities are for rebuilding Christchurch.

CERA – we don't do everything, we're a coordinating organisation. We're the guys who try to ensure that things can happen, that the bits of society that need to come together and make the recovery, can happen. We also have the role of making sure that things

like orders in Council get written, because we have this role of government. The CERA legislation gives us all sorts of special powers.

We were originally going to be a 'skinny' organisation – of 50 people or so. Over time, the job gets bigger and bigger. In particular, all the land issues – the damage to the land is enormous, and we need people managing that.

We've got ourselves established in an office in the CBD, in an eleven-storey building. I'm getting an office on the top floor, and we're getting handles fitted from the ceiling just like you've got in a bus, that way you know if things start rocking you're not going to fall over.

I'm not joking actually.

I'm not. Just talking about it though, maybe when I'm talking to people about the size of the event, it can be hard for people to get a feel for how big was the physical event. A 7.1 magnitude earthquake was equivalent to dropping a thousand of the world's largest oil tankers from about 500 meters above the ground, onto the ground. That's the sort of energy released. That's enough energy to make a pot of tea for every single person in the world. And that's the hard thing, because nature gives us so much wonderfulness, but in the September 4th quake, and on February 22nd – just in a few seconds, it took away so much, and it's going to take 5, 10, 15 years to pull it back together again.

Talking about our priorities, the first priority is around the land.

There's never been an earthquake event anywhere in the world that's done so much damage to land as we've had in Canterbury. So at the moment there's something like 6000 properties where we've said it's not going to be economic to rebuild again.

Associated with those 6000 properties, we're trying to bring more land to market more quickly, and that's not a small job. We're talking about the fact that we need to keep communities together, that we need to try to engage with communities. It's very difficult to engage with people, when 6000 people know they have to move, and on top of that there's another 8000 properties that are what we call orange – we don't know whether they're going to be red or green? And then there are another three or four thousand properties in the Port Hills, and we don't know what's going to happen to them.

So, we have these fantastic powers to ride over the [RMA](#) and other planning processes, trying to get land to market more quickly. Rather than sitting in Mr Brownlee's office with big felt pens, drawing circles on maps and saying, "Well that looks like a jolly nice place to have another subdivision." What we're trying to do is speed up the process by using what has already been through the conventional consenting process. Land that was, in general, getting held up by appeals put by other developers that hadn't wanted a particular development to happen.

The infrastructure – I could talk for hours about infrastructure. There's three or four billion dollars worth of work to be done there. It's maybe a 5, 6, 7, maybe an 8 year programme. Already, we're doing work at two or three times the rate you would normally see in Christchurch. The scale of it is quite extraordinary.



Brick building - Wellington CBD. Courage is needed to make the hard decisions around these types of buildings.

Then there's the demolition. There's something like 1200 buildings to bring down in the CBD, that's about half of all the buildings inside the CBD, and about 600 have come down so far. Someone said today that the Wellington City Council building is at 14% of code – is that true? That's outrageous. Extraordinary, I really think that is extraordinary.

Christchurch has really struggled to get their city going again, and their Council buildings were pretty much up to code. Just all the light fittings and that type of thing fell down. The whole notion is that you can run a recovery, as long as your City Council has a response centre. And Christchurch had that. So I guess the question for Wellington is: have you got facilities for your 1000, 1500 staff to work in a week later? Have you got somewhere that is completely up to code?

I guess I'm just a bit cynical about some of the local bodies' ability to make hard decisions. It would have been better in Christchurch if Christchurch City Council had more courage around brick and masonry buildings a long time ago. But I don't remember the last time a City Council in New Zealand did something really gutsy around those earthquake buildings. It's the nature of local bodies. But the demolition thing is a really, really big issue. We've got the CBD cordon down to about half the size it was, but it's not going to be down completely until roughly April of next year. The time frames are pretty extraordinary.

We're writing a recovery strategy. And one of the key things is around the speed of recovery. We can have a conversation with the people of Christchurch, and say look, the recovery can take 3 or 4 years, and we'll fill the town up with people from Ireland, Indonesia, the Philippines.

We'll fill the town up and do it in 3 or 4 years. We'll have maybe 20 or 30 thousand extra workers. Or we'll do it over a longer time period – 7 or 8 years and it will be a bit flatter, what do you want? They might say "Oh, we'll have it in 2 or 3 years, please." And that's the thinking, educated people.

There are two dimensions to the speed of recovery. The first one is how thoughtful you're going to be in making it happen. Are you going to get proper architects involved? Are you just going to draw lines on map, depending where your mood takes you? How many people are you going to throw at this issue, and to what extent you are going to create opportunities for your own people?

Or are you just going to bring a lot of people in – with the associated social issues? That's a conversation we haven't yet started in Christchurch. If left up to the pure political process it might just be – let's throw lots of resources at it, really quickly. So one of my roles as the guy who runs CERA, is trying to get the key leaders in Christchurch to start talking to a common theme – we have to make this a calmer, slower more considered recovery and avoid the riskier top-down approach.

Getting everybody wanting to row their waka at a more considerate pace won't be easy. I don't for a moment say, people who are living in squalor shouldn't get out of that squalor quickly. Because there are literally thousands of people living in badly broken houses at the moment, and we have to get them out – fast. And if necessary, we've got to bring pre-built houses from China, or wherever. We should do that, but we've also got to be more considered about how fast we rebuild.

The last of what we do is around communication. At the moment, there are a lot of communication messages that we're not getting out there. So one of my roles is trying to coordinate all the players, to make sure they are communicating with the people, so people have confidence. So they can see the milestones. They can see where we've got to, where we're going, and when we're going to get there. That's a key thing. We must get people believing that we are eventually going to get there. We will get there, but it will take longer than two or three years – it's going to be much longer than that.

One of the guys I hired has come down from Wellington, he talks about the fact that when he came down, he was starting in the afternoon, he came via Uncle Trevor – and his name really is Uncle Trevor – and I'm not really sure where he lives in Christchurch, but Mike got to Uncle Trevor's place at 10 o'clock in the morning. And Uncle Trevor's in his 70's, and Uncle Trevor was still sitting on the end of his bed in his underpants at 10 o'clock in the morning.

So, when I talk about CERA, about how we have demolition to do, infrastructure to rebuild and all those sort of things, we're not really doing enough, if Uncle Trevor in a year's time, is still sitting at the end of his bed in his underpants, at 10 o'clock in the morning. At the end of the day, this recovery is about the people. It's about giving people a sense that things are going to get better, we are going to be stronger, and that it all has a purpose. So we say – what have we done today to try to make Uncle Trevor's life better? What have we done to try to make communities that support Uncle Trevor stronger? So they can give support to him.

Optimism. Am I optimistic about Christchurch? I am optimistic about Christchurch. I'm optimistic for three reasons. The first reason is insurance. New Zealand is well-insured. Christchurch is really well-insured. We're lucky that 98% of houses are insured, and their land is largely insured. Businesses largely have insurance – so insurance is the first reason for optimism.

The second reason is physically, it's still a great place. We have our wonderful parks, the mountains are just down the road, they're a bit further away because of the way that the fault is. The Port Hills are still there, they're a bit higher than they were – that's a good thing. But seriously, Christchurch is still very much a great place, physically.

The last reason for optimism are the people – Christchurch is very much a community. All the key people have each other's cell phone numbers. Everybody wants to work together, everyone has largely the same common vision, and I think we're lucky in that way – we're not so big that we can't pull everyone together.

Ian Athfield, a prominent NZ architect. He talks about Christchurch, past, present and future – and offers some lessons for Wellington.

Before these earthquakes, I had always thought of engineering as a science. We have a building in Christchurch, which has heritage order and after 4th of September, we went straight back in. After February 22, the engineers said "this is perfectly good - you can go back into the building." So we went back in and everyone said, "It was a bit of a bloody shake you know."

Anyway, we have a woman called Jane in the office and she's got a fairly large frame, she's tall and bears 10 pound babies. She was leaning against the wall in the middle of the office, and Ashley said, "The bloody wall's moving Jane!" And she said, "You mean like that?" And all of a sudden the building started creaking and the glass started moving right throughout the building. The engineers came straight away and said it was 20% of the code – that's 10% of the Wellington code – and we were out within one hour. A good example of engineering as a creative art?

To talk about the future of any settlement, one must look at the past. Here we have the Edward Gibbon Wakefield plan. Like many New Zealand cities, Christchurch was designed in Britain. They drew it up on the other side of the world. Luckily, they never ran up against hills. Woodward Street in Wellington was supposed to go out to Karori! But in Christchurch, they could go anywhere, never meeting a hill or a sea, and they just kept on going!



So this is a plan, about 1877, and the only thing that happened differently was they put a diagonal through the orthogonal plan drawn in England, mainly to get people from the Port through to the churches and back out to the sewerage system.

And if we look at the pattern of growth in Christchurch, we trace it through 1886, 1926, 1946 and 1976, and like most new cities of the world, developed cities, it was based on that suburban model. Car driven, subdivision driven, maximum lot size, set-backs, and based on the nuclear family – 2 adults, 2 children and a guaranteed vote. Christchurch of all the cities, barring parts of Auckland, was one of those places that developed closely along these lines.

One of the interesting things which developed along with the suburban area, was the train system. As a kid, I remember going into the square - and the most important things about the square were the seven picture theatres, two milk bars, and the men's toilet right in the centre. And the settlement patterns were based around a transportation system, which assisted the city up until the mid-1950s.



Here we have an image of Christchurch, from Cathedral square looking down High street. This is early 1900's. I can still remember these scenes from the 1950's, and one thing that happened in 1947. Dad worked for Whitcombe and Tombs. My mum would send us up by tram from Sydenham to get the staff discount. From outside

Whitcombe and Tombs, we watched the fire engulf Ballantynes. We saw people going out the windows, and for 10 years I got up every night, dreaming of fires. The last 13 months, I've changed those fire dreams to earthquakes, and thank God, in the last month, I've stopped thinking about them, and now get a decent night's sleep.

Straight after the February 22nd earthquake, Richard Ballantyne approached us and said, "Would you be prepared to talk, and work with the owners in the Cashel Mall area?" We knew that they had a start-up program with Buchan Group and Warren and Mahoney, but we felt it was important to talk to people and try to get them to work together for the future of this sort of area.

So we spent a lot of time with them, we talked about those areas, we talked about amalgamating sites, and we talked about how we should inform the Council in the new District Plan. And to do that, we started talking about the bigger issues – to make them feel comfortable about the particular issues we were looking at for them. And so we have a plan, with Hagley Park on one side. We said, “Get rid of the one way street systems. Get rid of all that transport through town, and start thinking about how you will develop housing around small ‘pocket’ parks. Think about how those parks can be used collectively by children safely, and how the streets can also become children’s playgrounds.” We had the opportunity of 10 minutes to present to Council – and it was like presenting Roman Catholicism to Destiny Church.

The city went their own way and produced some pretty pictures. They also produced another set of regulations, compounding the frustrations of people – like permanent buildings, no less than 3 storeys in height, and no more than 7 storeys. The architects went out and did exercises. Finally, after they talked to their insurers and realised that it’s going to be more expensive to upgrade the buildings than to redo them. So we have a city now that has a density less than Berlin at end of the Second World War.



We have to look at our heritage buildings differently.
(Image R Moore)

So in Wellington, what are the lessons? We have to look carefully at our heritage structures. We have to look at them quite differently. If we have no business plan for a building, we have no building in the future. We actually have to look at the adaptive reuse. This particular building might have housing in it, on unit titles, so it has to be strengthened on the outside. So that is going to change the way the building looks, and if you want to keep it, then you have to think differently about it.

And then those important buildings within our city, which need quite a bit of work to bring them up to code, and one of the realisations which you will realise in Christchurch is that we are seeing many modern buildings coming down. An example is Gallery Apartments - completely intact, but with very poor foundations and on liquefied ground. If it had pile foundations and base isolation, it would remain there, but this is the sort of building that we are going to see come down in Christchurch, and we have so many of them. Around us we have six multi-storey buildings, five of them are now being demolished, and that’s outside the red zone.

I think for the future, we have to get our Territorial Authorities talking to each other, working together. Now, before an earthquake. We have to deal with the country, the

urban area and the suburban area, all together, as one. We won't get the answer by dealing with one aspect in isolation. Thank you.

Colin James is a political journalist commentator and analyst. He has the last word in this post on rebuilding our future, with the suggestion that we need a more solid core that will lend us better capacity to emerge from seismic shifts.

The economy has the advantage that exports are based principally on products and services for which demand can be expected to grow. But that advantage is not an immutable given. To make the most of it over time, we will need constantly to innovate and to reset policy to facilitate or promote an innovative capacity, so that earned incomes rise through higher-value activities.

If we don't do that successfully, we will be more vulnerable to the globalisation of labour and talent and to the congregation of elites in certain offshore cities and locations. We would, as now, need to import human and financial capital to compensate for those who leave and that is a potential cost to social harmony, which is a core ingredient in economic success.

If we are to be resilient through the next 15 or 30 years, we could usefully start now to think through the policy frameworks we will need to perceive, develop and exploit human potential.

That is, we need to agree what our core is and secure it. We need a strong core to be secure in the new world order that will emerge from the seismic shifts in geopolitics and geo-economics. No one yet knows what that new order will be. Our relationship with China is interesting but still formative. Our relationship with India is formative, but based on shared goodwill, though we take too much for granted from cricket and our shared (though different) imperial history and we don't study Indian history, heritage and language.

It's those international connections we need, in addition to a strong core, and intelligent flexibility. That is because power shifts often in unpredicted and sometimes in sudden ways. Managing foreign policy, including trade policy, over the next 15 or 30 years is going to require suppleness and skill. It might also drive us close in to Australia (and vice-versa) but it is far too early to guess at that.

Then there are man-made and natural shocks. The Rena incident reminds us that it is not only tectonic plates that jolt and holes in the ground that go on fire.

At one level there has been a failure of foresight in not updating our subscription to international conventions, a failure to keep the enveloping materials in top condition. At another level, the backbiting and anger in the media and among residents reflect a

corrosive lack of trust in authorities, which undermines effective governance and management. That suggests the core is not solid and there is work to do.

The flexible, elastic, compressible and adaptable envelope is mostly in place, as the country's relatively light damage from the great financial crisis indicates, though there is work to do on domestic economic policy and there is other maintenance work needed, as the inadequacy of safety measures at Pike River, the leaky regulatory environment which allowed leaky homes to be built, the permits to build houses in areas of Christchurch known to be at risk of liquefaction and the failure to update maritime disaster conventions. There is work to do on the core. As a people, a nation, we need to be able to constantly innovate, and be able to reset policy to facilitate or promote innovation and capacity.

Summary

The response, recovery and rebuild following the Christchurch earthquakes has not been a smooth, steady pathway. Uncertainty is the new norm, with continually changing plans, ongoing disruptions. Rebuilding our future requires intelligent flexibility and foresight, within a strong core, and as **Fran Wilde** observed in her [summary](#), "That's a pretty good recipe for organisational effectiveness. It's a recipe for the big challenges in this world, where the speed of change just keeps increasing."

The lessons for Wellington are clear. Build resilience now. Make our CBD safer. Make solid, but adaptable Business Continuity Plans, and test them. Connect people in organisations - and have people who know other people's jobs. Connect organisations with their local communities. Drive community engagement and be positive about messages, wherever possible. Provide the collaborative and informed environment that will ensure we can make and support the considered decisions that are required – to build a better prepared, more resilient, confident and effective Wellington.

Related articles

- [Building resilience](#) (Theme 1: thefaultlineforum.com)
- [Restoring confidence and effectiveness post-earthquake](#) (Theme 2: thefaultlineforum.com)
- [Leading people post-earthquake](#) (Theme 3: thefaultlineforum.com)

Next, is a roundup of the Rotary Forum, entitled *Lessons for Wellington*, presented by Fran Wilde (Chair, Greater Wellington Regional Council):

Lessons for Wellington - A Summary of the Forum

by Fran Wilde  (Chair, GWRC)
(Abridged)

The topic of this forum is **Organisational Effectiveness in Times of Seismic Risk**. We're seeking good ideas, anchored in other people's experience and reality – ideas that will help our various organisations to be effective in their own delivery and in assisting others, before and after a seismic event.

Scientists believe that a major event on the Wellington fault will recur perhaps every 750 years, with the most recent rupture 300 years ago. So maybe we've got a bit of time, maybe we haven't. Let's hope we do. In the Wairarapa, where a magnitude 8 event seems to be the likely number – a little bigger than Wellington - the return period is 1200 years. And the most recent big earthquake was in 1855. So there's a sporting chance that it won't happen again in our lifetime. But as we've seen in Christchurch and in Japan, ignoring risk doesn't make it go away – it pays to prepare.

Let's look at the Wellington fault and what's expected from a major quake here. Lateral and vertical movement will be similar to what happened in Canterbury, with all the accompanying impacts of liquefaction and because we are hilly, we'll also be dealing with landslides. Notwithstanding that, most our houses are timber with corrugated iron roofing, not brick and masonry. Most of the new buildings in Wellington CBD are well designed and well-grounded, some with base-isolated bearings. Notably, these safer buildings are mainly government ones.

The bad news is that our potential problems after an event of the same size and depth as Canterbury are much more severe. We know that many of our CBD buildings are not seismically sound and the construction density in the CBD means that during the event, as well as building collapse, a massive volume of glass will be spewed into the streets. And much of the Wellington CBD and Petone and Hutt will liquefy.

We expect significantly more fatalities and injuries than occurred in Christchurch. We can also expect serious fires (as noted by Bill Butzbach of the NZ Fire Service), because of our articulated gas system and compact wooden housing. It's worth noting that the fires following Japan's Kobe earthquake resulted in about the same number of fatalities as the quake itself.

In Wellington's CBD where about 70,000 of us work each day, we depend on key infrastructure passing through the narrow Kaiwharawhara fault. There could be significant damage to these 'lifelines'. Our topology is an issue. Should an event occur on a week day, access routes could be cut off for tens of thousands of workers and emergency and relief services may be unable to get through to stranded people.

<http://thefaultlineforum.com/2011/11/26/rebuilding-our-future/>
<http://thefaultlineforum.com/lessons-for-wellington/>

Wellington's CBD area at sea-level faces major liquefaction and the danger of Tsunami – particularly if we have a subduction earthquake event close to our shores.



By way of example, the 1855 Wairarapa quake generated ten metre waves. A subduction quake - like Japan had this year – would be much bigger, with massive water displacement. Effective evacuation plans are crucial – we'll need to reach higher ground – fast.

In terms of recovery, restoration of essential services will take longer than it did in Christchurch because of the nature of our topography. Current estimates for supply to be restored for bulk water, maybe not fully, but intermittently, are about 40 - 90 days for water and waste water. Local networks may take longer; 20 days for electricity because you can string up aerial lines, and around 40 for gas.



Cellphone towers and other services atop buildings could take some time to restore. As regards cell phone towers and transmitters, many are on the top of buildings, so they may not be accessible for a while. And refilling generators could pose a problem. It could take 180 days for rail to be restored, 120 days for road services, 10 days for sea and 5 for air. The cavalry won't be arriving in a hurry.

In Christchurch, Alan Bollard tells us that half the banking services were open by the end of the week. Here in Wellington, and particularly in the CBD and in other areas that have suffered liquefaction, tsunami, or perhaps major landslide, under current circumstances – assuming we do nothing, it could be much longer for retail and business services to get up and running. That is apart from people being rescued which is, you know, the biggest consideration for us.

In saying all that, I have to say that this has been an astonishingly positive seminar. It's been a tribute to humanity and to collectivism and I don't want to dwell on the eminently depressing side. There was much crossover in different sessions today, so having given you a kind of snapshot of status quo, I want to try to pick up on some of the key themes.

Planning is crucial to building resilience. Bruce Glavovic of Massey University's Disaster Research Centre reminds us that it's too late after the event. We must make wise decisions beforehand. For organisations, whatever type, strong and flexible business continuity plans (or BCPs) are needed.

Telstra Clear's Alan Freeth said, "Accept that an event can happen" - That's useful. Pre-event, he said, some people thought the back-up plan was a way of extracting more money from them. Business Continuity Plans (BCPs), he said, must be based on reality and take account of human behaviour - great advice. Part of BCP is a need to look at

physical infrastructure. Richard Ballantyne is building to 100% of code - well done Richard - and Ballantynes have also realised the importance of staff knowing how safe their environment is, and what to do in an event.

Geoff Bascand from the NZ Fire Service and others spoke of the lessons learned from the first earthquake. One aspect that struck me and I know many businesses did this: setting up robust remote access facilities for staff that also helped them through the second quake on February 22, 2011.

Another thing is the aftershocks – that’s one of the biggest things we’ve realised from Christchurch. It is not just one event. The aftershocks - they go on for a long time. Something else to think about: small businesses may not have all the capacity to do all this type of BCP and may need some help. That’s something we as a community need to think about.

Now let’s consider local government. Roger Sutton said it’s critical that local government makes hard calls – starting with the obvious area of building regulations. Helen Anderson of BRANZ suggested identification of earthquake prone buildings is a real concern. As a result of Christchurch, Wellington’s Territorial Authorities (TAs) are being asked if they’re speedy and stringent enough in their approach to earthquake prone buildings. Roger has posed the question “is local government being stringent enough in its approach, not just to the region’s buildings, but to its own buildings?” I think the answer from some of our speakers, and certainly from me, is a resounding “no” on both counts.

With Canterbury raising consciousness around this issue for Wellington, perhaps this is an area where central government could help out by raising the bar in terms of definitions, policy approaches, and timing. I suspect there would be significant support for change of this nature.

Urban design hero Ian Athfield makes a plea for good urban design and spatial planning for Wellington, dealing with urban and rural areas as one, not as individual units. An editorial comment - governance is a pressing issue for Wellington. No local government entity has the legal mandate to execute regional spatial planning at present. It’s one of Roger’s (CERA) hard calls for local government, because it involves saying no and making choices, and some legal substance is called for.

Moving on, another planning responsibility for local government is infrastructure provision. Notably, this is carried out in partnership with the private sector. Both Helen Anderson and David Middleton (of the Canterbury Chamber of Commerce) touch on this. David talks about roads and other vulnerable lifelines, and a related area, supply chain robustness.



Get people together *before* a seismic event

Lifeline restoration and recovery times for city services in Wellington could be described as work-in-progress. I think we'd all agree that the timings indicated, which are the current consensus, are just not acceptable for our community. Let's look at water, which is a basic necessity. Even if a building is okay, it's not OK to occupy it if there is no water in the pipes. Things might be okay for a day or so, as people use bottled water for drinking - but it's not going to work for us in the long-term. So we're investigating how to mitigate those 40 or 50 days with no bulk supply – by increasing reservoirs around the region for example. While the extra reservoirs won't replace the bulk supply, they may give residents sufficient water to refill their containers.

Roads - Four months to restore road access! We have just the two big main roads out of Wellington. Four months is too long. Transmission Gully - which is now at least going through the planning and consenting process - will help. To me that was always about route reliability. But, the Gully is not sufficient on its own. That's a huge issue for us. Not surprisingly, our lifelines group, which comprises all the infrastructure providers, has had a burst of energy. If there are any CEO's or senior managers in this room who's organisations are involved in the lifelines group, I urge you to take a personal interest in what's going on in that critical collaboration. Don't just leave it to your technical people. And if you're not in the group and think you should be, please get in touch with [me](#).

Another area of local government planning arising from the experiences of Christchurch, more critical, and possibly just as undercooked – is preparing, enabling and supporting the community. Margaret Jeffries gives us an urgent call to action. Now is the time she says to start building resilience in our communities today. Margaret speaks about getting people together as a community, using tools such as appreciative enquiry, mind maps, and local community events so people get to know one another before the seismic event occurs. What a good idea. Wellington City has recently formally decided that it should be promoting this very idea - good on the Council for that. I know that other councils are starting to think about it, but we want more of that action.

There are existing networks of residents associations, community boards, and other sorts of groups. We should be embracing, informing and empowering them, as the basis for building the sort of community resilience that will get us through in times of crisis, seismic or otherwise. Somebody described climate change the other day as a slowly happening crisis, and it probably is.

Turning to post-event, immediate response, Reserve Bank Governor, Alan Bollard said robust and durable processes are critical, and most important are capability, competency

and leadership. Leadership can take surprising forms in a crisis, say our speakers. We hear a well-considered, well-informed conclusion that leadership doesn't necessarily mean the top person in the organisation making all the decisions.

Empowerment was a major theme from speakers focusing on the long-term, but also from leaders whose organisations were heavily involved in the immediate post-event work. Trust and empowerment are required within well-defined and robust frameworks. Alan Freeth talked about having people who knew the job of the person above and below them, and of letting people make decisions within the strong framework. More than one speaker cited the need to control heroes - interesting.

IAG's Jacki Johnson recommends strong policy frameworks that are not over-prescriptive. Partnerships, relationships and connectedness are emphasised in some way by all speakers. The people category is the most challenging aspect of all – restoring the psycho-social health of the community. Bruce Glavovic and Charles Waldegrave offer very good counsel. Not just physical and economic recovery is important; it's an integrated whole, human, cultural and social.

Some speakers talk about the risks and costs of human flight. People are in fact drifting back to Christchurch and it's good to hear that. But there are huge challenges for everyone, and indeed the physical and infrastructure restoration seems almost easy, compared to the human side.



Promoting calming – Image Charles Waldegrave

“We need to promote safety, calm, self and collective efficacy, connectedness, and hope.” And that leads really into longer-term recovery.

Charles Waldegrave gave us a sobering overview of this, advocating the need for good therapeutic responses to avoid re-traumatisation - focus on strengths, on stories of survival, important family and social connections and symbols and places of meaning. Charles reminded us it is easy to re-traumatise, and this is something we should all bear in mind - community and business leaders, politicians and the media. Charles said,

Lessons for Wellington? I thought this was aptly summed up by Bruce Glavovic. He suggested we in Wellington should focus on building social capital, so that in the event of a disaster we can build on those strong relationships to start again. This is complex and long-term. It starts with pre-event planning, and needs meaningful, authentic, community collaboration. Only then, can we get into meaningful recovery actions, we need to lay the ground beforehand. And that means a shared understanding of risk, and that's something pretty important I think - we do need to talk about that. As well as the four “R”s most of us are familiar with, in terms of Civil Defence and Emergency

Management, Bruce came up with the four “L”s which I thought were useful - Legitimacy, Leadership, Localisation and Linkages.

Roger Sutton (now CEO of CERA) calls for slow, calm and considered recovery. Clearly, there are two other strong messages from Christchurch. Things will not be the same. That’s important for us to remember, all of us. Keeping connected with the rest of New Zealand is also critical. We’re a small country. We can learn from and support one another.

Our closing speaker, Colin James, suggested, that as a people, as a nation, we need to be able to constantly innovate, and be able to reset policy to facilitate or promote innovation and capacity. We need a strong core, intelligent flexibility, and foresight – that’s a pretty good recipe for today’s topic. For that matter, it’s a recipe for any of the big challenges in this world, where the speed of change just keeps increasing.

END

Forum co-hosted by [Rotary Club of Wellington](#) and [Victoria University of Wellington](#)

Thanks to Geonet: <http://www.geonet.org.nz/earthquake/historic-earthquakes/> for information and historic images in regard to the Wairarapa/Wellington earthquakes, June and August 1942. [More historic images](#).

Questions, comments, corrections, additions?

Contact Project Coordinator, [Richard Norman](#) ([Victoria Management School](#)) or the project’s research writer/web editor [Robyn Moore](#). Their details are on the [Faultlineforum website](#).