

Our Community

Thorndon/Pipitea is one of New Zealand's oldest and most historic residential suburbs with significant heritage value.

It is bounded by the communities of Kaiwharawhara and Wadestown to the north, Wilton and Northland to the west, with Kelburn and Wellington Central CBD on the southern boundary.

The 2013 census gives the population of Thorndon-Pipitea as 4,266 usual residents but this number swells by perhaps three times with commuters and students flowing in from throughout Wellington region for work and school during the week.

Pipitea comprises the Parliamentary precinct as well as part of the campus of Victoria University. On the harbourside of Pipitea there is the port, including two Cook Strait ferry terminals, the railway yards and Railway Station, and the Wellington Regional Stadium (Westpac Stadium).

The geographic and infrastructure characteristics of Thorndon/Pipitea are likely to provide challenges for those within the area, or needing to return to their homes here, following a serious event. The area is at the nexus of the Wellington Fault, the Wellington Urban Motorway, the main trunk railway, key water and energy infrastructure, and the Cook Strait ferry terminals.

Although both the National Crisis Management Centre (below the Beehive) and WREMO are situated within this area, neither will be of specific use during any significant emergency response to the Thorndon/Pipitea community, or to the many people who may be immobilised in the area. The national and regional control centres will be dedicated to setting-up and dealing with overarching responsibilities focused on the region, and on controlling the national response.

There are five schools operating in the area. This involves about 3,650 school children and teachers. Additionally there will be students on Victoria University's Pipitea campus, and there are early childhood centres with young children separated from parents (see list in Section "Community – Critical Needs").

The western residential side of Thorndon is next to the Wellington Fault. Other parts of the suburbs are on raised and reclaimed harbour-bed or old stream beds, which increase the likelihood of failure of key infrastructure and buildings in this area. Disruptions could be extreme; people trying to depart the city may be initially impeded from doing so, and the ability for assistance to enter the city is likely to be limited in the immediate aftermath.

During business hours it should be assumed that many people would try to evacuate the CBD, some making their way toward the more open spaces in places in Pipitea and

Thorndon. The numbers of displaced people likely to move through Thorndon/Pipitea soon after a major event could overwhelm the local community.

Our Community Values

At the start of each CRP process stakeholders are asked to identify the things they value most about their community. The following is a summary of the values the 2015 stakeholder working group felt encapsulates the special qualities of the Thorndon Community, which they would want to preserve and protect during any recovery:

- The heritage aspect and collection of old buildings and homes
- The history associated to the area – parliament, cathedrals, etc.
- Historic pubs and eating establishments
- Primary and secondary schools as well as childcare centres
- The active Residents' Association
- Historic parks and greenery
- Tinakori Village shops and community
- The business/government precinct with a significant daytime population
- The mix of demographics, covering all age groups and several ethnic groups
- Proximity to CBD and the city's amenities

What could happen here

Hazards facing Thorndon/Pipitea are those facing many parts of the Wellington Region - earthquakes, floods, liquefaction, landslides, storms, tsunamis, as well as man-made hazards such as chemical spills and electrical failure. With its reasonably high-density living and number of schools and office blocks in the area, a pandemic could have a high impact.

The most likely hazard to quickly isolate Thorndon/Pipitea is a large earthquake that damages roads and causes landslides and liquefaction. To a lesser extent a long distance tsunami, or a prolonged power cut could have a similar impact on the community.

A significant earthquake event could have multiple effects happening at once, including ground shaking, liquefaction, slope failure, and a local source tsunami. In turn this will lead to multiple adverse impacts: landslips, damaged roads, building failure, motorway bridge collapse, lifeline (power, gas, water, sewage) failure, fires, and people trapped, injured, displaced or killed.

Fire is a particular concern for Thorndon, especially following a widespread event such as an earthquake that would see emergency services' priorities diverted elsewhere. Old wooden houses built close together could allow fire to spread rapidly, especially in windy conditions. Although not the danger it once was, for example in San Francisco in 1906 or Napier in 1931, because of better water supplies and sprinkler systems, if a fire took hold there would be little the community could do to extinguish the conflagration. Disruption of water systems is likely after a serious event and the use of barbecues and open fires would also exacerbate the risk. The community needs to be aware of fire safety, possible fire routes and potential fire breaks, and be prepared to evacuate.

The picture below shows the Wellington Fault passing through Thorndon and how the suburb is a funnel to arterial/main roads and motorways to the Hutt Valley and Ngauranga Gorge and beyond. This will be where Wellington's entrance and exit point is impeded and buses, trains and ferries as well as other commuter foot and road traffic will all be affected. Any cause that results in the evacuation of the Wellington CBD will affect Thorndon because of its position at the bottleneck for exit routes.



How it could affect us

A Community Impact Assessment was undertaken using the scenario of a significant earthquake (magnitude 7.5) on the Wellington fault affecting the Thorndon area, i.e. about the worst possible event. If the epicentre is in or near Thorndon, sideways land movement of up to four metres could be experienced and intensities of up to X on the Modified Mercalli Scale, defined as *“Extreme: some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.”*

Injured, trapped & needing urgent assistance

Some homes could be extensively damaged by shaking and liquefaction (loss of ground support for foundations). Many people could be injured or trapped in buildings, needing rescue, medical treatment or alternative accommodation.

With few Thorndon-based facilities access to hospitals, local medical facilities and pharmacies will be limited. Outside working hours the situation would be worse. Damaged or blocked roads also will impede access.

Many residents will have limited means or capacity to look after themselves when normal support services are no longer working, and some more vulnerable people (e.g. the elderly, disabled, medically unwell) will need to be checked on and may require urgent assistance to survive.

Overwhelmed or uncoordinated Emergency Response

Reliance cannot be placed on locally based emergency services and council staff. They will try to respond to protect or rescue people but could be quickly overwhelmed or delayed by the scale of the event. The emergency services located in the suburb have responsibilities to cover the city and will be called away (although in this scenario, Thorndon/Pipitea would be among the worst-hit areas).

Loss of communications channels could make it difficult for local emergency services to effectively prioritise their efforts. However, responses will be coordinated and directed in the first instance through centralised systems rather than local community coordination as much as possible. The community needs to have a realistic expectation of the very limited services emergency services will be able to provide in the immediate aftermath of a large scale event.

Access/Communications

A large earthquake could leave a lot of debris throughout the city and region. State Highway 1 and State Highway 2 access routes in and out of the city could be closed for two weeks or more, and within the city roads may become impassable by vehicle. Rail, port and airport facilities will all be affected. Initially they will stop operating to check for damage and following a large event

closures are likely to be long term.

Thorndon sits on the edge of Wellington City so it will be used as a thoroughfare by large numbers of people passing through, most likely on foot, to get home to their suburbs. Many of these will be commuters who usually use State Highways 1 (up the Ngauranga Gorge) or 2 (to the Hutt Valley). Damage to roads, tunnels and bridges will exacerbate the congestion.

Telephone and cell phone networks are likely to be damaged, disrupted or quickly overloaded following a large earthquake.

Welfare of Displaced People

The damaged road and rail networks could isolate many commuters for several days. They could be left stranded and in need of food, water, medical help and shelter from the community. The volume of people needing help and the number of casualties could be a burden on the Thorndon Community and community planning should take this into account. Other categories of displaced people are tourists, house-sitters, visitors and guests.

Parents working outside the Wellington CBD may struggle to pick up their children from the schools within Thorndon. There are approximately 3,650 school children in Thorndon during the week and more in child care centres, only some of whom will live within walking distance of their school. Beyond 24 hours some local schools and child care centres could need assistance looking after children.

Some houses could be rendered unsafe to live in, requiring urgent evacuation, or some people may be left too upset and fearful to want to continue living alone.

A tsunami threat could result in self-evacuation from Wellington CBD up towards Thorndon, adding to the demand for local support and shelter, etc.

Food

The damaged road network and power failure could make food supply impossible or funds to purchase food unobtainable. Thorndon has one supermarket, there is also a supermarket within the Railway Station in Pipitea, and several smaller grocery stores in the area, all with limited capacity to supply food and goods to the community for longer than a couple of days. Access to these stores could be impeded or they could be in "lock down" and the stores themselves could become hazard zones with fallen shelves and broken glass.

Food could become a scarce resource that may require protection and controlled distribution.

Water

Slips and ground shaking will likely affect the ground water table, stream and river flow paths

and overall water quality throughout the city. Power and gas mains are also vulnerable to failure in a large earthquake and could take some time to repair.

Water could become a scarce resource throughout Wellington City, including Thorndon. Households should continue to be encouraged to store emergency water, and the Community Emergency Hub should try to ensure that water available to the public is distributed in a controlled manner.

Sanitation

A lack of clean water, curtailed access to toilet facilities and spilled sewage will increase the risk of sickness and disease without good sanitation techniques and a clear understanding of the best ways to self-manage urine and excrement disposal. This is especially true for those who live in apartment buildings and have no backyard in which to build temporary sanitation facilities.

Animal Welfare

Animals and pets will require care and control. Some people may be unwilling to evacuate unsafe homes if they cannot find their pets. It is residents' responsibility, wherever possible, to restrain and look after their own animals.

