
Earthquake-Prone Priority Buildings

Identifying High Traffic Routes
and Emergency Transport Routes

Statement of Proposal - October 2018



Glossary

The following terms are commonly used in this consultation document and have the following meaning:

Priority Building

Priority buildings include:

- Buildings classified as a priority building under the Act (eg. buildings such as hospitals, buildings supporting emergency services, emergency shelters and most education facilities)
- Any part of an unreinforced building that could fall from the building in an earthquake and fall onto a high traffic route (public road, footpath or other route)
- Any building that could impede an emergency transport route (in terms of an emergency response) if it were to collapse.

Unreinforced Masonry or URM

Buildings originally constructed of masonry (brick, block or stone) without any form of reinforcement or independent lateral support. This includes buildings that may have been strengthened to earlier structural standards, and buildings of any construction type with a significant original unreinforced masonry section or part. (Page 9 EPB Methodology).

New Building Standard or NBS

The New Building Standard or NBS is the current standard of performance for new buildings. Buildings constructed today must meet at least 100% of NBS.

Earthquake prone building or EPB

A building, or part of a building, is earthquake prone if it will have its ultimate capacity exceeded in a moderate earthquake, and if the building or part of the building were to collapse would likely cause injury or death in or near the building (or any other property), or damage to any other property. A building is considered earthquake prone (EPB) if it is assessed as being below 34% NBS.

In this paper, when we refer to EPBs, this includes *potential* EPBs. When we set high traffic and emergency routes this includes consideration of known potential EPBs.

In determining whether a potential EPB is *actually* an EPB, a specific methodology prescribed by central government is used. It allows territorial authorities to identify, assess and make decisions on potential EPBs. More information on the EPB methodology can be found on www.building.govt.nz

Remediate

Carrying out building work to ensure that the building, or part of the building, is no longer earthquake-prone. Remediating an EPB can involve either strengthening to 34% NBS or above or demolishing the building (or parts of the building that are earthquake-prone).

High Traffic Routes

A term used to describe a street, road or other thoroughfare that has sufficient vehicle or pedestrian traffic to warrant prioritising the identification and remediation of any unreinforced masonry buildings along those routes (to reduce the risk of injury and death from falling debris in an earthquake).

Emergency Transport Routes

A term used to describe a transport route of strategic importance (in terms of an emergency response). For example, a route identified as important to allow emergency services to operate in an emergency situation and for emergency services to distribute initial supplies after an earthquake event.

Table of Contents

Glossary	2
Introduction	4
Executive Summary	5
How to have your say	6
• Key questions	6
• Key dates	6
Background to Earthquake-prone Priority Buildings	7
• New risk zones for strengthening	7
• Timeframes for assessing and strengthening have changed	8
• Who identifies priority buildings	9
High Traffic Routes	10
• Criteria for identifying high traffic routes	10
• MBIE Criteria for determining high traffic routes	10
• Application to Wellington	11
• Identifying high traffic routes	11
• Proposed high traffic routes	12
• What will be required from building owners	14
Emergency Transport Routes	15
• How we identified emergency transport routes	15
• Proposed emergency transport routes	15
• What will be required from building owners	16
Support for building owners	17
• Council financial support	17
• Other council support	18
Questions and answers	19
Background information	21
Appendix 1 (High traffic route maps)	22
Appendix 2 (Emergency transport route maps)	29

Introduction

Earthquakes are a natural and common phenomenon in New Zealand, and they have shaped many of Wellington's unique features - its hills, valleys and its harbour.

While living with active fault lines can be very challenging and result in additional costs for building owners, each time there's been a major earthquake in New Zealand, there's also been a leap forward in scientific and engineering knowledge, and an urge to turn the challenge posed by earthquakes into a positive legacy for future generations.

- The 1855 earthquake raised the seabed around the central city waterfront enabling extensive reclamation that is now part of the CBD and also gave us the iconic Basin Reserve.
- The 1931 Napier earthquake prompted a review of building codes and lifted building standards across New Zealand
- The 1942 Masterton earthquake resulted in the formation of the NZ Earthquake Commission.
- The 2011 Christchurch earthquakes and the 2016 Kaikoura earthquake gave New Zealanders the motivation to improve their resilience.

The recent earthquakes have resulted in this generation's leap forward. This is currently underway and can be seen in the prioritisation of significant investment in strengthening both horizontal infrastructure and vertical infrastructure in Wellington to make the city safer.

Horizontal infrastructure

In terms of horizontal infrastructure, Council is investing many hundreds of millions of new funding over the next ten years to improve water, stormwater, and wastewater infrastructure. Central government is working with councils to improve the region's transport infrastructure with significant projects

like Transmission Gully already underway, and future projects like Let's Get Wellington Moving in the planning stages.

Other network infrastructure providers like Wellington Electricity are also investing in their network to make the city and region more resilient.

Vertical infrastructure

All of this investment is aimed at ensuring that vertical infrastructure - the city's buildings - can be a platform for our city to respond to and recover from a natural disaster.

The city's buildings are the places where we work, live and play. Importantly, they are the places from where our economy functions. Moreover, the built environment also plays a significant contribution in the identity of the city.

Our investment in pipes and cables is to ensure that our buildings can function after our inevitable earthquake. Just as Council, central government and network companies are investing in strengthening horizontal infrastructure, there is a requirement for building owners to strengthen their buildings.

Infrastructure is interdependent, and for the city to take a significant jump forward in resilience, both horizontal and vertical infrastructure needs to be strengthened.

This consultation document outlines the requirements under legislation to identify priority buildings, and to ensure those buildings are strengthened or demolished as a priority.

This initiative is essential work and we encourage you to have your say.

Executive Summary

Earthquakes are one of New Zealand's biggest natural hazard risks, with the greatest risk to public safety coming from building failures during an earthquake.

While building owners will incur costs in making their buildings safer, it will also save lives in the event of a moderate or major earthquake affecting Wellington.

The Building Act 2004 sets out the requirements for identifying and strengthening earthquake-prone buildings.

Wellington is a seismic city, something Wellingtonians have been aware of since the city was first built. The Council has been proactive in strengthening buildings as well as identifying at-risk buildings in the city and in encouraging strengthening work. Over 5,000 buildings have been assessed since 2006, and just over a 1,000 have been identified as earthquake-prone¹.

In 2016, the Building Act was amended in response to the findings of the Royal Commission into the 2011 Christchurch earthquake, which highlighted the risks that earthquake-prone buildings pose to public safety. Collapsing unreinforced masonry features contributed to 39 deaths and over 100 injuries in Christchurch.

The amended Act introduced the concept of 'priority buildings' which are certain types of buildings that are considered to present a higher risk because of their construction type, their use, or their location in the city.

The Act requires Wellington City Council to identify and notify all earthquake-prone priority buildings by 31 December 2019, and all remaining earthquake prone buildings by 30 June 2022.

Under the Act priority buildings in Wellington must be remediated within seven and a half years after they are notified by Council. Owners of other earthquake-prone buildings have 15 years to remediate their buildings.

Some priority buildings are prescribed in the Act. For example, hospitals and medical facilities needed in an emergency, buildings that will be used as an emergency shelter, any buildings that support emergency services to carry out their functions, and most buildings used for education purposes.

Other priority buildings are identified by the Council in consultation with the community. This is achieved by consulting with the community and stakeholders to identify *High Traffic Routes* and *Emergency Transport Routes*. Any part of an unreinforced masonry building that could fall onto high traffic routes, or any building that could fall in an earthquake and impede an emergency transport route is a priority building.

Wellington has high vehicle and pedestrian traffic in the inner city and along key arterial routes, and because of its unique topography, has limited options for emergency services to take in the event of an earthquake.

Reflecting those circumstances, Wellington City Council is proposing to identify much of Wellington's CBD and many arterial roads as emergency transport routes or high traffic routes for purposes of the Building Act 2004.

Many building owners in Wellington have already carried out earthquake strengthening or are working to a timeline to remediate their building that ensures they will not be affected by the amended Act and this proposal.

However, we do recognise that the new legislation and this proposal will have significant implications for some building owners of earthquake-prone and URM buildings along these routes as the timeline for when they need to be strengthened or demolished could be brought forward.

There are often significant costs associated with remediating buildings and this consultation document includes a brief overview of the support mechanisms that the Council currently has in place for owners of EPBs. We also recognise that heritage EPBs are protected under the District Plan which can make it more challenging. We will seek to work closely with all EPB owners to help support them to remediate their buildings.

In this consultation document we explain the basis on which we have proposed high traffic routes and emergency traffic routes. Given the potentially significant implications for some building owners, we ask that you carefully consider the proposed routes, and provide us with your views.

¹ Not all remediation of EPBs results in strengthening or demolition. At times, the Council is provided with new/more detailed information about the building which actually means no building work is needed.

How to have your say

To have your say you can:

- Go online to wcc.govt.nz/priority-buildings
- email your submission to policy.submission@wcc.govt.nz, or
- send a written submission to Priority Buildings 259/1001, Freepost 2199, Wellington City Council, P O Box 2199, Wellington.

You can get more copies of this statement of proposal at wcc.govt.nz/have-your-say/consultations, the Council Service Centre, libraries, by emailing policy.submission@wcc.govt.nz, or by phoning 499 4444.

If you wish to make an oral submission to councillors, please indicate this on the submission form and ensure you have included your contact details. We will contact you to arrange a time for you to speak. The dates for oral hearings are outlined below.

This consultation is being conducted according to the special consultative procedure requirements set out in sections 83 and 86 of the Local Government Act 2002.

Key questions

In this document we explain the basis on which we have proposed high traffic routes and emergency traffic routes.

We are keen to understand what you think about these routes: have we got it right; is there anything else we need to consider?

The questions posed below are intended to help guide your submission. They are a guide only and all submission points are welcome. You do not have to answer all the questions.

- Do you agree with the proposed high traffic routes? Why?
- Do you agree with the proposed emergency transport routes? Why?
- Do you think we have been over-inclusive in some areas, or left out areas which should be included?
- How can the Council best support building owners to meet requirements for remediating their buildings?
- Is there anything else we need to take into account in setting these routes?

Key dates	Activity
19 October	Written submissions open
23 November	Written submissions close
6 December	Oral hearings
Feb 2019	City Strategy Committee considers submissions
March 2019	Council decides whether to adopt the proposal
April 2019	Proposal becomes operational

Background to earthquake-prone Priority Buildings

In response to the Christchurch earthquakes, central government passed the Building (Earthquake-Prone Buildings) Amendment Act in 2016 which introduced a new system and process for managing earthquake-prone buildings across New Zealand.

The Amendment Act amended the Building Act to introduce three seismic risk areas for New Zealand. Wellington falls under the 'high' seismic risk area which has implications for when buildings must be assessed and remediated.

New Risk Zones for Strengthening



Timeframes for assessing and remediating have changed

The Act now requires that, for high risk areas like Wellington, all EPBs must be identified by 30 June 2022. All EPBs (except for those that are also priority buildings) must be remediated within 15 years of the date of the notice from Council.

The Act also requires the Council to identify which of those EPBs are *priority buildings*. Priority buildings either pose a higher risk to public safety or are critical to recovery in an emergency and therefore must be identified by 31 December 2019 and remediated within 7.5 years from the date of the EPB notice specifying that the building is also a priority building.

Key timeframes

Seismic risk area	Timeframes within which TAs must identify EPBs		Timeframes within which owners of EPBs must carry out seismic work (or demolish)	
	Priority buildings	Other	Priority Buildings	Other
High Risk Areas (Wellington)	31 Dec 2019	30 June 2022	7.5 years of the date of an EPB notice from the TA also specifying the building as a priority building	15 years of date of an EPB notice from the TA
Medium Risk Areas	30 June 2022	30 June 2027	12.5 Years of receipt of an EPB notice from the TA	25 years of receipt of an EPB notice from the TA
Low Risk Areas	N/A	30 June 2032	N/A	35 years of receipt of an EPB notice from the TA

In this document, we have referred to a timeframe of a 7.5 years for remediation of earthquake-prone priority buildings. We note that for existing section 124 notices (ie buildings which have already been notified as earthquake-prone), under Schedule 1AA

of the Building Act we must determine whether the priority building timeframe of the existing deadline for remediation is applicable, based on whichever is the shortest.

Who identifies priority buildings

Some priority buildings are determined by central government, while others Council identifies in consultation with the community and stakeholders.

There are three ways priority buildings are identified:

1. Buildings supporting emergency services and education

These include most hospitals (or parts thereof eg. emergency departments), buildings supporting emergency services (such as police stations), emergency shelters, and most buildings used for education and training purposes, including early childhood education and care centres, schools, private training establishments and tertiary institutions.

These are prescribed by the Act.

2. Buildings on High Traffic Routes

Any building that has unreinforced masonry elements that could fall in an earthquake onto a high traffic route thereby causing injury or loss of life is a priority building.

High traffic routes are identified by Council in consultation with the community.

3. Buildings on Emergency Transport Routes

Any building that could fall in an earthquake on a emergency transport route and impede an emergency response is a priority building.

Emergency transport routes are identified by Council in consultation with the Wellington Regional Emergency Office, other emergency services providers and the broader community.

High Traffic Routes

Criteria for Identifying High Traffic Routes

The Act does not define or give criteria for identifying “public roads, footpaths or other routes with high pedestrian or vehicular traffic to warrant prioritisation”. However, the Ministry of Business Innovation and Employment (MBIE) has published criteria for Councils to use for this purpose².

MBIE Criteria for determining high traffic routes

High Pedestrian Areas (People not in vehicles)		
Note: high pedestrian areas are those areas where people are concentrated or routes with high foot traffic.		
Description of use	Description of area	Example of application to city or metropolitan area
Areas relating to social or utility activities	Areas where shops or other services are located	City or suburban areas with shops, cafes, restaurants, bars, theatres, and malls
Areas relating to work	Areas where concentrations of people work and move around	Areas around office buildings or other places of work where there is a concentration of workers
Areas relating to transport	Areas where concentration of people access transport	Areas around transport hubs, train stations, bus stops, car parks
Key walking routes	Key walking routes that link areas where people are concentrated	Routes from transport hubs or other areas relating to transport to areas where shops, other services or areas people work are located.
High Vehicular Traffic Areas (People in motor vehicles / on bikes)		
Description of use	Description of area	Example of application to city or metropolitan area
Key traffic routes	Key traffic routes regularly used by vehicles including public transport	Central business district streets, well trafficked suburban streets, arterial routes, heavy use bus routes
Areas with concentrations of vehicles	Areas where high concentrations of vehicles build up	Busy intersections where traffic builds up at peak hours

² 'Priority Buildings: A Guide to the earthquake-prone building provisions of the Building Act', Ministry of Business Innovation & Employment, July 2017.

Application to Wellington

Wellington has a high concentration of employment in the central city with around 82,000 people travelling per day (morning peak) to the central city from surrounding suburbs and neighbouring cities.

Wellington also has many cultural attractions and a vibrant nightlife and therefore many people also travel into the city from the suburbs and neighbouring cities in the evenings and during the weekends.

These numbers are going to increase as the city and wider region grows. By 2043 we expect up to 280,000 people will be living in the city and many more will be coming in from neighbouring cities to work, learn and play. Because of Wellington's unique geography these people all travel along a limited number of transport corridors into the city.

The central city and key arterial routes leading into and out of the city are where most of the city's earthquake-prone buildings are located.

These are the city's most used routes. Giving priority to these routes is therefore likely to bring greatest benefit in terms of public safety in the event of a moderate earthquake.

Identifying High Traffic Routes

We collect data on traffic movements through a system of 'cordon counts' in key parts of the city and then use modelling to identify traffic movements along nearby streets and roads. We also monitor pedestrian counts - particularly in the inner city.

The proposed high traffic routes identified below have been guided by MBIE criteria and included a review of the volumes and concentrations of pedestrian and vehicle traffic data in the city, consideration of the new bus routes, areas of employment, and areas of concentration because of social and cultural activities.

Proposed High Traffic Routes

Based on MBIE criteria and the above data, we propose to identify the following streets, roads and lanes as high traffic routes:

Abel Smith St	Aro Valley	Duncan Tce	Kilbirnie
Aro St	Aro Valley	Evans Bay Pde	Kilbirnie
Boston Tce	Aro Valley	Kemp St	Kilbirnie
Palmer St	Aro Valley	Kilbirnie Cres	Kilbirnie
Adelaide Rd	Berhampore	Onepu Rd	Kilbirnie
Rintoul St	Berhampore	Rongotai Rd	Kilbirnie
Charlotte Ave	Brooklyn	Te Whiti St	Kilbirnie
Cleveland St	Brooklyn	Troy St	Kilbirnie
Mills Rd	Brooklyn	Apu Cres	Lyll Bay
Mornington Rd	Brooklyn	Onepu Rd	Lyll Bay
The Ridgeway	Brooklyn	Maupuia Rd	Maupuia
Todman St	Brooklyn	Broadway	Miramar
Washington Ave	Brooklyn	Brussels St	Miramar
Middleton Rd	Glenside	Caledonia St	Miramar
Evans Bay Pde	Hataitai	Hobart St	Miramar
Hataitai Rd	Hataitai	Ira St	Miramar
Moxham Ave	Hataitai	Maupuia Rd	Miramar
Waipapa Rd	Hataitai	Park Rd	Miramar
Waitoa Rd	Hataitai	The Ridgeway	Mornington
Brighton St	Island Bay	Adelaide Rd	Mount Cook
Derwent St	Island Bay	Belfast St	Mount Cook
Humber St	Island Bay	Drummond St	Mount Cook
Reef St	Island Bay	Hanson St	Mount Cook
The Esplanade	Island Bay	Rugby St	Mount Cook
The Parade	Island Bay	Sussex St	Mount Cook
Centennial Highway	Johnsonville	Taranaki St	Mount Cook
Johnsonville Rd	Johnsonville	Tasman St	Mount Cook
Hutt Rd	Kaiwharawhara	Thompson St	Mount Cook
Kaiwharawhara Rd	Kaiwharawhara	Brougham St	Mount Victoria
Eagle St	Karori	Hawker St	Mount Victoria
Fancourt St	Karori	Kent Tce	Mount Victoria
Karori Rd	Karori	Majoribanks St	Mount Victoria
Messines Rd	Karori	Roxburgh St	Mount Victoria
Botanic Gardens	Kelburn	Centennial Highway	Newlands
Dekka St	Khandallah	Adelaide Rd	Newtown
Khandallah Rd	Khandallah	Constable St	Newtown
Bay Rd	Kilbirnie	Hanson St	Newtown
Coutts St	Kilbirnie	Mansfield St	Newtown

Mein St	Newtown	Courtenay Pl	Te Aro
Owen St	Newtown	Cuba St	Te Aro
Rhodes St	Newtown	Dixon St	Te Aro
Riddiford St	Newtown	Egmont St	Te Aro
Rintoul St	Newtown	Eva St	Te Aro
Stoke St	Newtown	Feltex Lane	Te Aro
Zoo internal area	Newtown	Fifeshire Ave	Te Aro
Abbott St	Ngaio	Frederick St	Te Aro
Awarua St	Ngaio	Garrett St	Te Aro
Kaiwharawhara Rd	Ngaio	Ghuznee St	Te Aro
Khandallah Rd	Ngaio	Haining St	Te Aro
Ottawa Rd	Ngaio	Holland St	Te Aro
Centennial Highway	Ngauranga	Leeds St	Te Aro
Garden Rd	Northland	Lorne St	Te Aro
Northland Rd	Northland	Lukes Lane	Te Aro
Bunny St	Pipitea	Manners St	Te Aro
Davis St	Pipitea	Marion St	Te Aro
Hutt Rd	Pipitea	Martin Sq	Te Aro
Lambton Quay	Pipitea	Swan Lane	Te Aro
Molesworth St	Pipitea	Taranaki St	Te Aro
Sar St	Pipitea	Tennyson St	Te Aro
Thorndon Quay	Pipitea	The Terrace	Te Aro
Coutts St	Rongotai	Tory St	Te Aro
Kingsford Smith St	Rongotai	Vivian St	Te Aro
Mamari St	Rongotai	Wakefield St	Te Aro
Rongotai Rd	Rongotai	Wigan St	Te Aro
Tirangi Rd	Rongotai	Willis St	Te Aro
Evans Bay Pde	Roseneath	Hawkestone St	Thorndon
Grafton Rd	Roseneath	Hill St	Thorndon
Monorgan Rd	Strathmore Park	Hobson Cres	Thorndon
Collins Ave	Tawa	Hobson St	Thorndon
Main Rd	Tawa	Molesworth St	Thorndon
Victory Cres	Tawa	Mulgrave St	Thorndon
Abel Smith St	Te Aro	Murphy St	Thorndon
Allen St	Te Aro	Pipitea St	Thorndon
Arthur St	Te Aro	Tinakori Rd	Thorndon
Barker St	Te Aro	Wadestown Rd	Thorndon
Blair St	Te Aro	Sar St	Wadestown
Buckle St	Te Aro	Wadestown Rd	Wadestown
Bute St	Te Aro	Balance St	Wellington Central
Cambridge Tce	Te Aro	Boulcott St	Wellington Central
Claytons Ave	Te Aro		

Bowen St	Wellington Central
Customhouse Quay	Wellington Central
Hunter St	Wellington Central
Jervois Quay	Wellington Central
Lambton Quay	Wellington Central
Maginnity St	Wellington Central
Rosina Fell Lane	Wellington Central
The Terrace	Wellington Central
Willis St	Wellington Central
Woodward St	Wellington Central

For maps of high traffic routes please see Appendix 1.

What will be required from building owners

Once the Council has identified high traffic routes in the city in consultation with the community, the Council must notify those owners of earthquake-prone priority buildings on high traffic routes that they are a priority building and have up to 7.5 years to complete any remediation work. Remediation relates to URM elements on the priority building that could fall in a moderate earthquake onto the high traffic area and cause injury or death, not the entire building. Notification will be sent by 31 December 2019.

Emergency Transport Routes

After any earthquake, it is essential that emergency services can get to and from their bases to areas of need, and can reach key facilities such as hospital emergency departments. It is also very important that equipment can be brought to key points in the city and distributed to help with the initial response phase³.

We consider there are buildings in Wellington that could impede emergency transport routes (in terms of an emergency and initial response phase) if they collapsed in an earthquake. We therefore seek your views on the emergency transport routes for the purpose of prioritising EPBs along these routes.

EPBs that impede access along an emergency transport route could slow or stop the emergency response. Therefore we consider any EPB along such a route should be a priority building. Priority buildings along emergency transport routes need to be identified by 31 December 2019 and the whole building must be remediated within 7.5 years from the date of the EPB notice from Council specifying that the building is also a priority building.

How we identified emergency transport routes

The Wellington Regional Emergency Management Office (WREMO) has worked with the Council and emergency services to identify a staged approach to reopening transport routes in the region and within Wellington after an earthquake event taking into account the likely viability of routes being available following an event⁴. In Wellington, roading corridors will be reopened in four separate stages.

Stage 1 (and stage 1 alternate) are the most important and includes the 'strategic spine' encompassing north-south routes connecting Porirua to Wellington airport via the Wellington central business district, CentrePort and Newtown Hospitals.

These are the routes that emergency services are most likely to use following an earthquake or other natural disaster. They provide access to strategic services such as the airport, hospital, and the sea port, and provide a clear regional route to and from the city in order to distribute food and water supplies after an earthquake.

Stage 1 and stage 1 alternate are proposed emergency transport routes for the purpose of identifying priority buildings.

The remaining streets and roads (stages 2-4) to other suburbs and outlying areas will be reopened in a phased way⁵.

The proposed emergency transport routes

The emergency transport routes are mainly in the central business district, but are also in suburban areas including Rongotai, Kilbirnie and Newtown, as well as the north western suburbs of Thorndon, Wadestown, Chartwell, Crofton Downs, Ngaio, Khandallah, Broadmeadows, and Johnsonville.

Wellington City Council proposes to designate the following streets, routes, and motorway sections as emergency transport routes.

Abel Smith St	Aro Valley
Brooklyn Rd	Aro Valley
Willis St	Aro Valley
Rintoul St	Berhampore
Burma Rd	Broadmeadows
Brooklyn Rd	Brooklyn
Johnsonville-Porirua Motorway	Churton Park
Churchill Dr	Crofton Downs
Johnsonville-Porirua Motorway	Glenside

³ The Council is not required under legislation to identify emergency transport routes (as a means to identify priority buildings), but has chosen to do so. The rationale for this is that while some cities have multiple route options for emergency services and first responders to take after an earthquake event to reach key emergency facilities, this is not the case in Wellington. Wellington has unique topography which means there are limited route options in the city that can link emergency services to key emergency facilities (such as hospitals). We have therefore included emergency transport routes in this Statement of Proposal as a means to identify priority buildings.

⁴ This was based on a vulnerability and risk assessment undertaken by Opus International Consultants and included consideration of buildings, structures, ground conditions and slope stability.

⁵ Stage 2 includes increase access around Wellington Airport, through Wellington CBD and to the southern landfill; stage 3 is focused on providing access to major suburbs; and stage 4 will open remaining key network links.

Johnsonville-Porirua Motorway	Grenada North	Whitmore St	Pipitea
Takapu Rd	Grenada North	Coutts St	Rongotai
Johnsonville-Porirua Motorway	Grenada Village	Tirangi Rd	Rongotai
Crawford Rd	Hataitai	Johnsonville-Porirua Motorway	Takapu Valley
Burma Rd	Johnsonville	Johnsonville-Porirua Motorway	Tawa
Helston Rd	Johnsonville	Takapu Rd	Tawa
Johnsonville-Porirua Motorway	Johnsonville	Arthur St	Te Aro
Moorefield Rd-West	Johnsonville	Buckle St	Te Aro
Moorefield Rd	Johnsonville	Cambridge Tce	Te Aro
Box Hill	Khandallah	Karo Drive	Te Aro
Burma Rd	Khandallah	The Terrace	Te Aro
Cockayne Rd	Khandallah	Victoria St	Te Aro
Khandallah Rd	Khandallah	Vivian St	Te Aro
Evans Bay Pde	Kilbirnie	Wakefield St	Te Aro
Coutts St	Kilbirnie	Webb St	Te Aro
Kilbirnie Cres	Kilbirnie	Willis St	Te Aro
Salek St	Kilbirnie	Grant Rd	Thorndon
Rongotai Rd	Kilbirnie	Little Pipitea St	Thorndon
Wellington Rd	Kilbirnie	Molesworth St	Thorndon
Adelaide Rd	Mount Cook	Murphy St	Thorndon
Buckle St	Mount Cook	Park St	Thorndon
Dufferin St	Mount Cook	Tinakori Rd	Thorndon
Ellice St	Mount Cook	Barnard St	Wadestown
Rugby St	Mount Cook	Blackbridge Rd	Wadestown
Sussex St	Mount Cook	Grosvenor Tce	Wadestown
Kent Tce	Mount Victoria	Lennel Rd	Wadestown
Constable St	Newtown	Wadestown Rd	Wadestown
Riddiford St	Newtown	Customhouse Quay	Wellington Central
Rintoul St	Newtown	Jervois Quay	Wellington Central
Khandallah Rd	Ngaio		
Ottawa Rd	Ngaio		
Waikowhai St	Ngaio		
Oriental Pde	Oriental Bay		
Johnsonville-Porirua Motorway	Paparangi		
Featherston St	Pipitea		
Hutt Rd	Pipitea		
Lambton Quay	Pipitea		
Molesworth St	Pipitea		
Mulgrave St	Pipitea		
Thorndon Quay	Pipitea		

For maps of Emergency Transport Routes please see Appendix 2.

What will be required from building owners

Once the Council has identified emergency transport routes in the city in consultation with the community, the Council must notify priority EPB buildings on these routes by 31 December 2019. Owners of those buildings will have up to 7.5 years to complete any remediation works from the date of the EPB notice also specifying their building is a priority building. Remediation relates to the whole building.

Support for building owners

Building owners are expected to complete the required earthquake strengthening work. However, because of the public safety benefits of strengthening buildings, there is Council assistance available.

Council Financial support

The Council offers incentives to strengthen earthquake-prone buildings, including:

Rates remission when a building is empty during strengthening work

If the building is unable to be occupied (it is not fit for purpose) while it is being strengthened, the building owner can apply for a rates remission. In this case, rates remission (ie rates reduction) refers to commercial, industrial and business sector, base sector targeted and downtown levy targeted rates. The building does not need to be on Wellington City Council's Earthquake-prone Buildings List to be eligible for this incentive.

Rates remission when a building is removed from the earthquake-prone buildings list

If the building owner has completed strengthening work or demolition, and the building is no longer on the Council's Earthquake-prone Buildings List, they can apply for remission of applicable rates for a period of 3 years. If the building is listed on the District Plan Heritage List, then the rates remission period is 5 years. This is extended to 10 years if the building is also identified by Heritage New Zealand as a Category I on the New Zealand Heritage List or 8 years if it is identified as a Category II. Applicable rates are general rate, downtown levy, targeted sector (base or commercial) rates, stormwater and sewerage rates.

Building consent subsidies for strengthening works

Building owners can apply for a building consent fee rebate if your building is on the Earthquake-prone Buildings List and the strengthening costs are significant.

The subsidy calculation is 10% of the Wellington City Council charges up to a maximum of \$5,000 per consent. It does not cover third party charges we collect on behalf of, such as the Building Research Levy. The consent fees claimed must be for work done to strengthen the building to remove it from the earthquake-prone buildings list.

Built Heritage Incentive Fund

Heritage buildings are those that, individually or as part of a collective community, hold historical value for our society. Buildings with heritage value are classified in various ways: they are scheduled under the District Plan; are covered by a conservation area or special character zone under the District Plan; and/or are registered under the Historic Places Act 1993. The Council believes the survival of heritage buildings should be actively promoted. The Council does not want to see strengthening work adversely affect the intrinsic value of these buildings. If a detailed structural assessment confirms a building is earthquake-prone, the Council will work with the owners to develop a mutually-acceptable solution. We can also provide funding support through the Council's Building Heritage Incentive Fund (BHIF) which provides grants to owners of heritage buildings to help with repairs and maintenance.

Owners of earthquake-prone heritage buildings can also apply for funding support from the Ministry for Culture and Heritage through their HeritageEquip incentive programme.

There are no restrictions on building owners applying - and receiving - financial support through multiple schemes listed above.

Other Council support

In addition to the Council's regulatory role and funding support, we seek to work closely with EPB owners to explore what options may be available to help strengthen the building.

The Council's earthquake resilience team provide advice and guidance for building owners to get the necessary planning and/or building approvals for construction, strengthening and refurbishment of the building.

When strengthening options are not viable, the Council will try to help the owner with the regulatory process necessary for demolition.

The Earthquake Resilience Team at Council is also available to help facilitate meetings between adjoining building owners to explore the possible benefits of strengthening both buildings at the same time. The team can also help owners plan a strengthening programme and determine what work should be prioritised to improve the earthquake-resilience of the building.

Questions and answers

What is an earthquake-prone building?

The Building Act 2004 defines an earthquake-prone building as any building, or part of a building, that will have its ultimate capacity exceeded in a moderate earthquake, and which would be likely to cause injury or death to people in or near the building or on any other property, or damage to other property. A moderate earthquake is an earthquake that generates shaking one-third as strong as the shaking that would be used to design a new building on the same site.

This definition means that buildings strengthened to comply with the minimum earthquake-prone building standards may still be at risk of collapse in a strong or severe earthquake. They are not likely to be able to withstand earthquakes as well as buildings that comply with modern building standards.

Any building that is declared earthquake-prone will have to be strengthened to at least 34% of New Building Standard.

Under the amended Act all earthquake-prone buildings have to be identified by 30 June 2022 and strengthened or demolished within 15 years of receiving notice from Council to remediate their building.

Note: In identifying priority buildings Council has to include all *potential* EPBs into its considerations. In determining whether a potential EPB is actually an EPB a specific methodology prescribed by central government is used. The methodology allows territorial authority engineers to identify, assess and make decisions on potential EPBs. More information on the EPD identification methodology can be found on www.building.govt.nz

What is a *priority* building?

Priority buildings include:

- Buildings classified as a priority building under the Act (eg. buildings such as hospitals, buildings supporting emergency services, emergency shelters and most education facilities)
- Any part of an unreinforced building that could fall from the building in an earthquake and fall

onto a high traffic route (public road, footpath or other thoroughfare) that has high vehicle or pedestrian movement to warrant making the URM feature a priority for remediation

- Any building that could collapse and impede an emergency transport route.

All *priority* buildings must be identified by 31 December 2019 and must be remediated within 7.5 years of the date of notice from Council advising that the building is both a priority building and earthquake prone.

What is unreinforced masonry?

A building originally constructed of masonry (brick, block or stone) without any form of reinforcement or independent lateral support. This includes buildings that may have been strengthened to earlier structural standards, and buildings of any construction type with a significant original unreinforced masonry section or part.

Unreinforced masonry was often used in older buildings for construction of facades, parapet walls, verandas, balconies, decorative ornaments, chimneys, and street signs. If they are not secured, these features can collapse or fall during an earthquake, posing a significant risk to public safety.

How will I know if my building is earthquake-prone?

Either the Council will have already given you notice that your building is earthquake-prone and needs to be strengthened to required standards, or you will be given a notice by 30 June 2022. If you own a priority building you will be given notice by 31 December 2019.

If your building has already been identified as earthquake-prone, you'll have been notified, a yellow or orange notice will have been placed on your building, and the building will have been listed on MBIE's **Earthquake-prone Building Register** (EPB Register).

Are private homes and other residential buildings affected?

Most private homes and residential buildings will not be affected by this proposal. However, apartment buildings, some townhouse complexes and most (or possibly all) hostels, boarding houses and other specialised accommodation may be affected.

The earthquake-prone buildings provisions in the Building Act 2004 (section 133AA) do not apply to residential buildings unless the building is two or more storeys tall and either contains three or more household units or is a hostel, boarding house or other specialised accommodation.

What happens to existing notices and timeframes?

The amended legislation specifies 15 years as the maximum time for remediation of EPBs, and new notices will be issued to reflect this. This time frame will usually start from the date of the original notice.

Notices with a time frame of less than 15 years will not change unless the building is also identified as a priority building. Priority buildings must be remediated within 7.5 years. This could mean that, for EPBs which are also priority buildings, existing deadlines could be brought forward.

What if I have already completed remediation work?

This Statement of Proposal is focused on EPBs and potential EPBs. If you have already completed remediation work on your building, it is no longer considered earthquake prone by Council, and we have had your building removed from the national EPB Register. This Statement of Proposal does not impact you unless further information becomes available that indicates the building may be earthquake-prone.

Is there any way these shorter timeframes can be extended?

Owners of heritage buildings listed as a Category 1 historic place on the New Zealand heritage list, or included on the National Historic Landmarks, may apply in writing to Council for an extension of up to 10 years to complete remediation work. This would then be considered by Council taking into account the issues and risks with the building.

Can building owners challenging a Council decision on a building's priority status?

Once Council has made a final decision on high traffic routes and emergency transport routes and identified priority buildings, if you disagree with Council's decision on being identified as a priority building, it is important talk to us first to try and resolve this.

You can also apply to MBIE for a determination (a legally binding ruling) about nearly all the decisions territorial authorities make regarding earthquake-prone buildings including being identified as a priority buildings. However, you can't challenge the Council if it takes enforcement action against you because you haven't strengthened or removed your building by the deadline given in the EPB notice.

How does this proposal fit with the Hurunui/Kaikoura Earthquake Recovery (URM) Order 2017?

Following the 2016 Hurunui/Kaikōura earthquake, the Government issued an order requiring owners of dangerous street-facing unreinforced masonry buildings on certain Wellington streets to secure the building to reduce or remove the danger of masonry falling into the street. The order required that this work be completed by 31 March 2018. This was subsequently extended to September 2018.

Following that order the Council identified relevant buildings, and has been working with building owners to make sure the required work is completed. Even once the URM work is completed, if the building is still earthquake-prone and is designated as a priority building, further earthquake strengthening may be needed.

Background information

The following links provide background information on the regulations that underpin this proposal.

Building Act 2004

legislation.govt.nz/act/public/2004/0072/latest/DLM306036.html

MBIE guidance on earthquake-prone buildings

www.building.govt.nz/managing-buildings/managing-earthquake-prone-buildings

Priority Buildings: a guide to the earthquake-prone building provisions of the Building Act

<https://www.building.govt.nz/building-code-compliance/b-stability/b1-structure/priority-buildings-earthquake-prone/>

Methodology to identify earthquake-prone buildings

<https://www.building.govt.nz/building-code-compliance/b-stability/b1-structure/methodology-identify-earthquake-prone-buildings/>

Wellington City Council guidance on earthquake-prone buildings

www.wellington.govt.nz/services/rates-and-property/earthquake-prone-buildings

www.wellington.govt.nz/services/community-and-culture/funding/council-funds/built-heritage-incentive-fund

Appendix 1: Proposed high traffic routes

The proposed high traffic routes identified below have been guided by MBIE criteria and include a review of the volumes and concentrations of pedestrian and vehicle traffic data in the city, consideration of the new bus routes, areas of employment and areas of concentration because of social and cultural activities.



Sourced from the LINZ Data Service and licensed for re-use under the Creative Commons Attribution 4.0 New Zealand licence

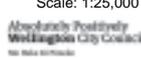
Central City

High Traffic Areas

Property boundaries, 20m Contours, road names, rail line, address & title points sourced from Land Information NZ. Crown Copyright reserved. Property boundaries accuracy: +/-1m in urban areas, +/-30m in rural areas. Census data sourced from Statistics NZ. Postcodes sourced from NZ Post. Assets, contours, water and drainage information shown is approximate and must not be used for detailed engineering design. Other data has been compiled from a variety of sources and its accuracy may vary, but is generally +/- 1m.

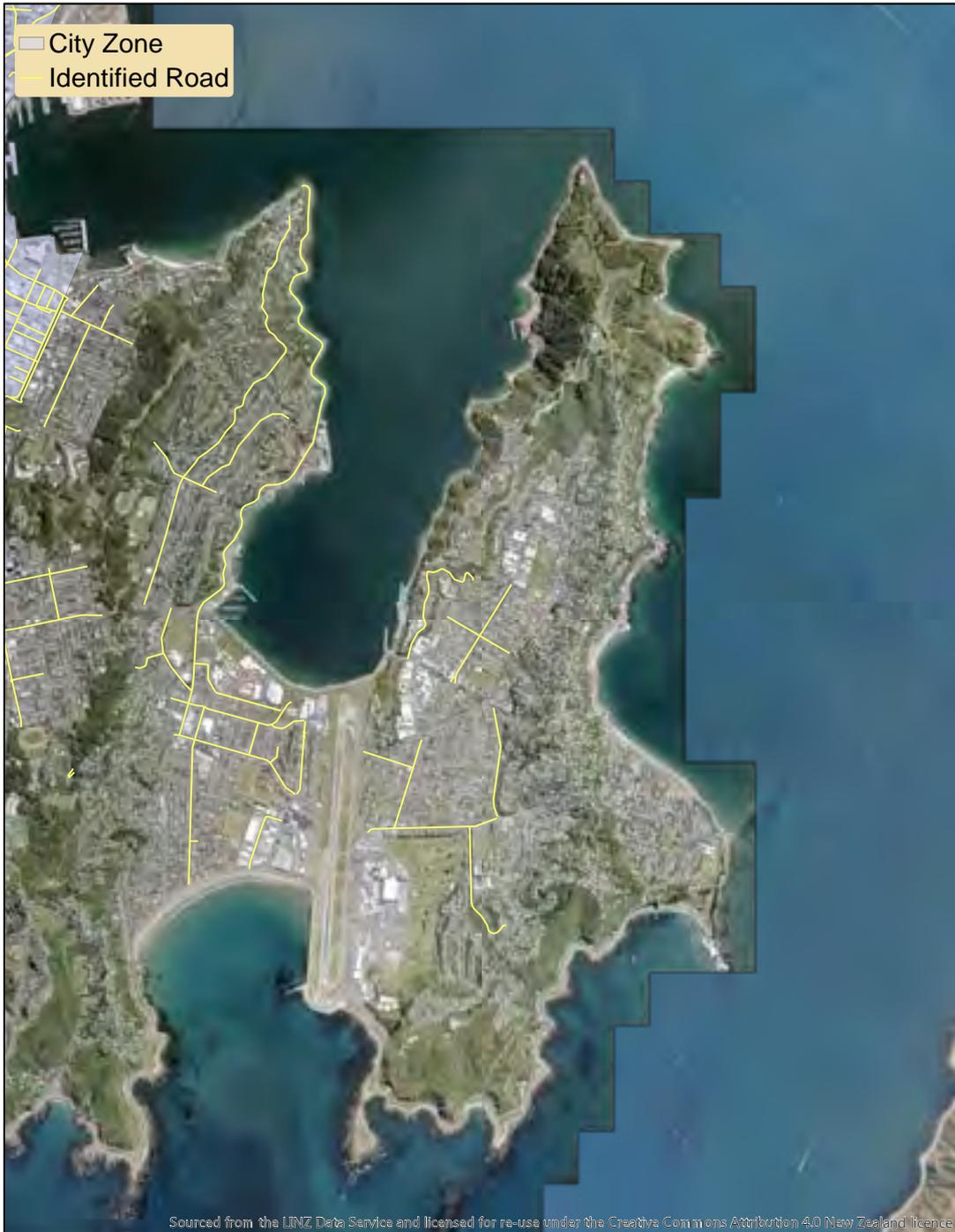
MAP PRODUCED BY:
Wellington City Council
101 Wakefield Street
WELLINGTON, NZ

ORIGINAL MAP SIZE: A4
AUTHOR: robert2a
DATE: 3/10/2018
REFERENCE:



0 500 1,000 Meters

Scale: 1:25,000



Sourced from the LINZ Data Service and licensed for re-use under the Creative Commons Attribution 4.0 New Zealand licence

Eastern Suburbs

High Traffic Areas

Property boundaries, 20m Contours, road names, rail line, address & title points sourced from Land Information NZ. Crown Copyright reserved. Property boundaries accuracy: +/-1m in urban areas, +/-30m in rural areas. Census data sourced from Statistics NZ. Postcodes sourced from NZ Post. Assets, contours, water and drainage information shown is approximate and must not be used for detailed engineering design. Other data has been compiled from a variety of sources and its accuracy may vary, but is generally +/- 1m.

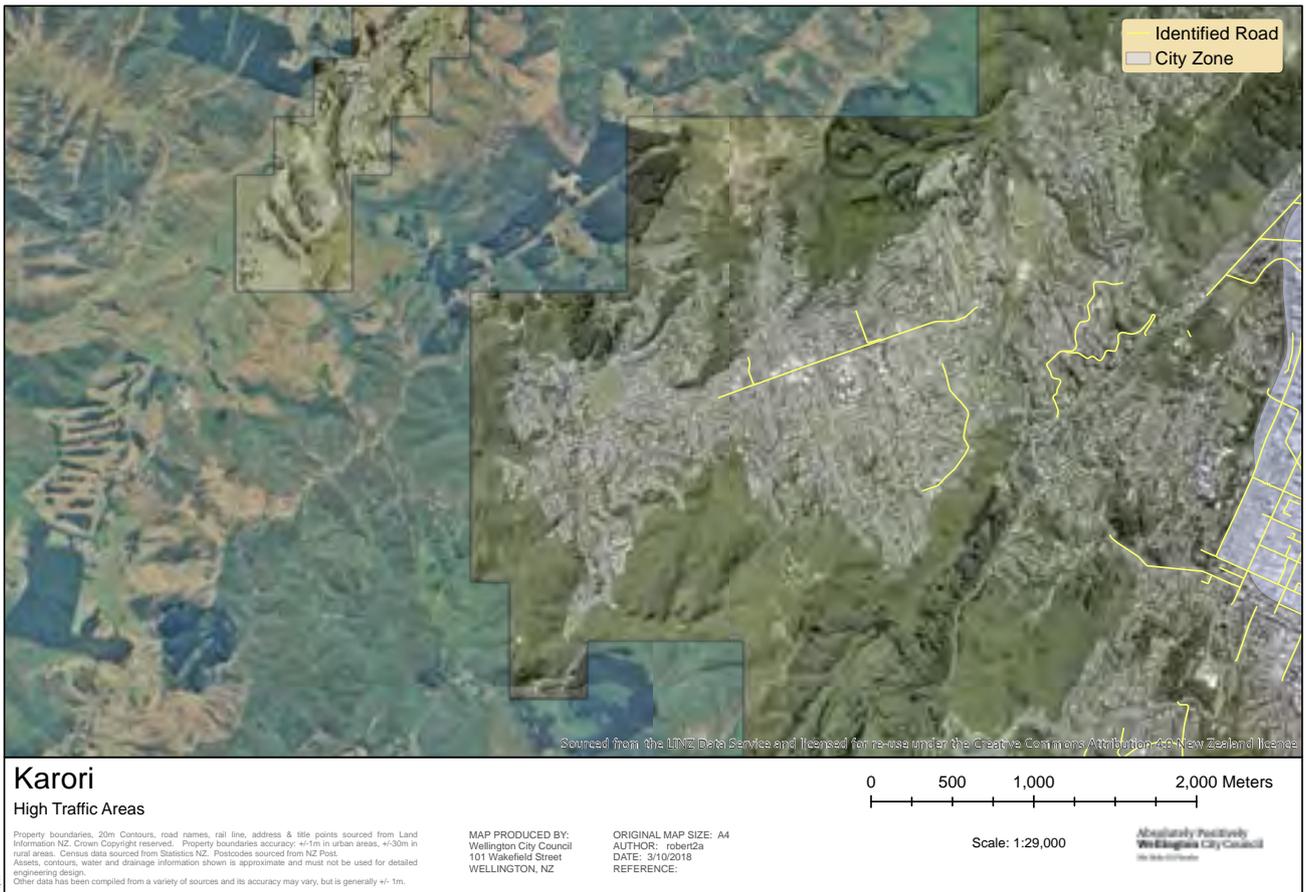
MAP PRODUCED BY:
Wellington City Council
101 Wakefield Street
WELLINGTON, NZ

0 500 1,000 Meters

ORIGINAL MAP SIZE: A4
AUTHOR: roben2a
DATE: 3/10/2018
REFERENCE:

Scale: 1:34,000

Absolutely Positively
Wellington City Council
We Make It Happen





Ngauranga/Johnsonville High Traffic Areas

Property boundaries, 20m Contours, road names, rail line, address & title points sourced from Land Information NZ. Crown Copyright reserved. Property boundaries accuracy: +/-1m in urban areas, +/-30m in rural areas. Census data sourced from Statistics NZ. Postcodes sourced from NZ Post. Assets, contours, water and drainage information shown is approximate and must not be used for detailed engineering design. Other data has been compiled from a variety of sources and its accuracy may vary, but is generally +/- 1m.

MAP PRODUCED BY:
Wellington City Council
101 Wakefield Street
WELLINGTON, NZ

0 500 1,000 Meters

ORIGINAL MAP SIZE: A4
AUTHOR: robert2a
DATE: 3/10/2018
REFERENCE:

Scale: 1:35,000

Absolutely Positively
Wellington City Council
We're Not Just Possible



Sourced from the LINZ Data Service and licensed for re-use under the Creative Commons Attribution 4.0 New Zealand licence

Southern Suburbs

High Traffic Areas

Property boundaries, 20m Contours, road names, rail line, address & title points sourced from Land Information NZ. Crown Copyright reserved. Property boundaries accuracy: +/-1m in urban areas, +/-30m in rural areas. Census data sourced from Statistics NZ. Postcodes sourced from NZ Post. Assets, contours, water and drainage information shown is approximate and must not be used for detailed engineering design. Other data has been compiled from a variety of sources and its accuracy may vary, but is generally +/- 1m.

MAP PRODUCED BY:
Wellington City Council
101 Wakefield Street
WELLINGTON, NZ

0 500 1,000 Meters

Scale: 1:27,000

ORIGINAL MAP SIZE: A4
AUTHOR: robert2a
DATE: 3/10/2018
REFERENCE:

Absolutely Positively
Wellington City Council
No Nuts or Peas



Tawa High Traffic Areas

Property boundaries, 20m Contours, road names, rail line, address & title points sourced from Land Information NZ. Crown Copyright reserved. Property boundaries accuracy: +/-1m in urban areas, +/-30m in rural areas. Census data sourced from Statistics NZ. Postcodes sourced from NZ Post. Assets, contours, water and drainage information shown is approximate and must not be used for detailed engineering design. Other data has been compiled from a variety of sources and its accuracy may vary, but is generally +/- 1m.

MAP PRODUCED BY:
Wellington City Council
101 Wakefield Street
WELLINGTON, NZ

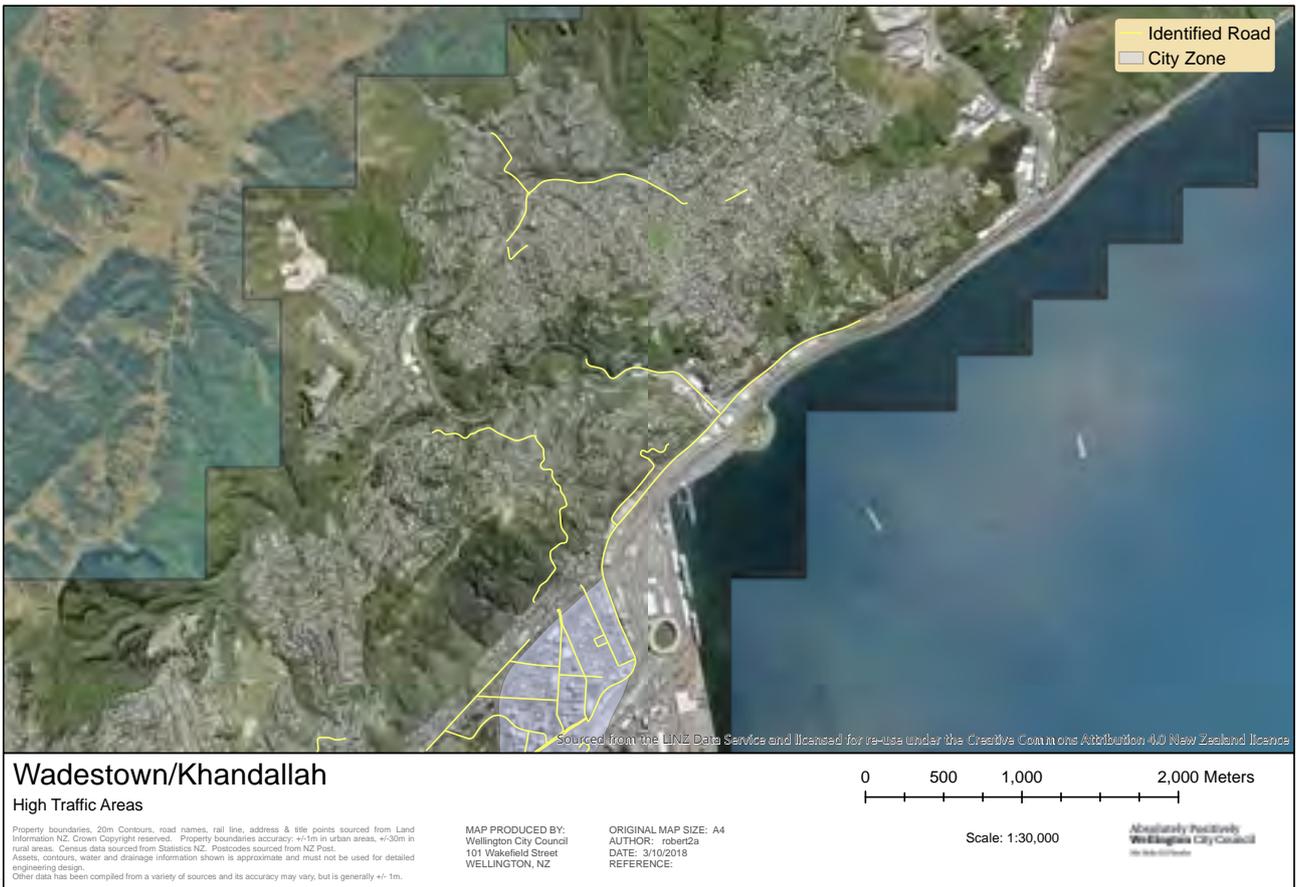
0 475 950 Meters

Scale: 1:22,000

ORIGINAL MAP SIZE: A4
AUTHOR: robert2a
DATE: 3/10/2018
REFERENCE:

Absolutely Positively
Wellington City Council
We Make It Possible

Figure 8



Appendix 2: Proposed emergency transport routes

The Wellington Regional Emergency Management Office (WREMO) has worked with the Council and emergency services to identify a staged approach to reopening transport routes in the region and within Wellington after an earthquake event.

Stage 1 (and stage 1 alternate) outlined on the following pages are the most important and include the ‘strategic spine’ encompassing north-south routes connecting Porirua to Wellington airport via the Wellington central business district, CentrePort and Newtown Hospitals.

These are the routes that emergency services and first responders are most likely to use following an earthquake or other natural disaster.

Stage 1 and stage 1 alternate are proposed emergency transport routes for the purpose of identifying priority buildings. The remaining streets and roads (stages 2-4) to other suburbs and outlying areas will be reopened in a phased way.



- Ambulance
- EOC/Council Centre
- Fire service
- Fuel
- Police
- Port
- Rail
- Telecommunications
- Water
- General Practices
- Private Hospitals
- Public Hospitals
- Major substations
- Water Reservoirs
- Emergency Transport Routes**
- Stage 1
- Stage 1 Alternative

Central City
Emergency Transport Routes

0 500 1,000 Meters

Scale: 1:25,000

Property boundaries, 20m Contours, road names, rail line, address & title points sourced from Land Information NZ. Crown Copyright reserved. Property boundaries accuracy: +/-1m in urban areas, +/-30m in rural areas. Census data sourced from Statistics NZ. Postcodes sourced from NZ Post. Assets, contours, water and drainage information shown is approximate and must not be used for detailed engineering design. Other data has been compiled from a variety of sources and its accuracy may vary, but is generally +/- 1m.

MAP PRODUCED BY:
Wellington City Council
101 Wakefield Street
WELLINGTON, NZ

ORIGINAL MAP SIZE: A4
AUTHOR: robert2a
DATE: 3/10/2018
REFERENCE:

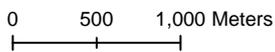


Photo: [unreadable]



- + Airport Facility
- Ambulance
- Depot
- Fire service
- Port
- X Rail
- * Telecommunications
- General Practices
- H Private Hospitals
- H Public Hospitals
- Major substations
- Water Reservoirs
- Emergency Transport Routes
- Stage 1
- Stage 1 Alternative

Eastern Suburbs
Emergency Transport Routes



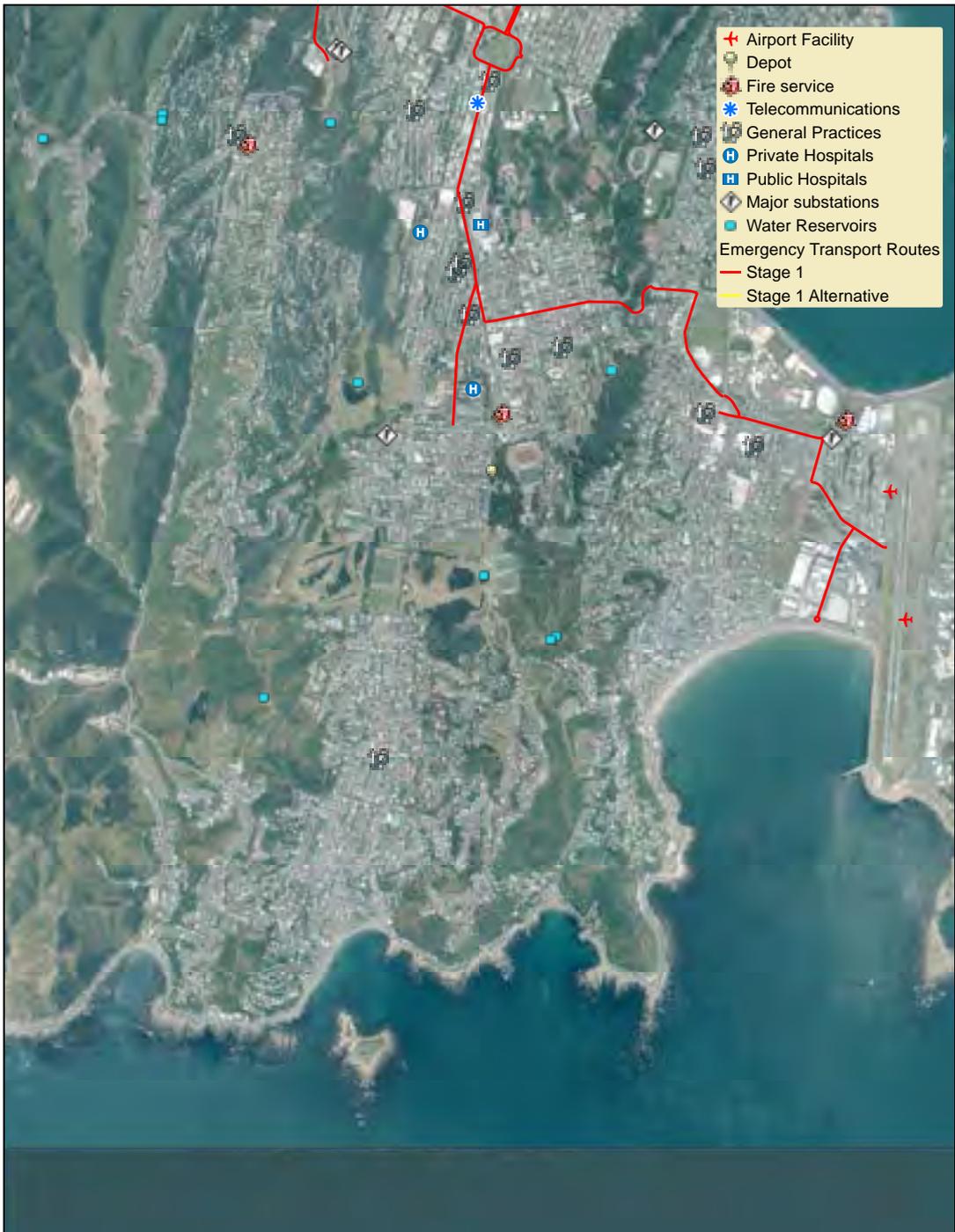
Scale: 1:34,000

Property boundaries, 20m Contours, road names, rail line, address & title points sourced from Land Information NZ. Crown Copyright reserved. Property boundaries accuracy: +/-1m in urban areas, +/-30m in rural areas. Census data sourced from Statistics NZ. Postcodes sourced from NZ Post. Assets, contours, water and drainage information shown is approximate and must not be used for detailed engineering design. Other data has been compiled from a variety of sources and its accuracy may vary, but is generally +/- 1m.

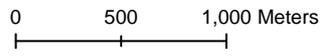
MAP PRODUCED BY:
Wellington City Council
101 Wakefield Street
WELLINGTON, NZ

ORIGINAL MAP SIZE: A4
AUTHOR: robert2a
DATE: 3/10/2018
REFERENCE:





Southern Suburbs
Emergency Transport Routes



Scale: 1:27,000

Property boundaries, 20m Contours, road names, rail line, address & title points sourced from Land Information NZ. Crown Copyright reserved. Property boundaries accuracy: +/-1m in urban areas, +/-30m in rural areas. Census data sourced from Statistics NZ. Postcodes sourced from NZ Post. Assets, contours, water and drainage information shown is approximate and must not be used for detailed engineering design. Other data has been compiled from a variety of sources and its accuracy may vary, but is generally +/- 1m.

MAP PRODUCED BY:
Wellington City Council
101 Wakefield Street
WELLINGTON, NZ

ORIGINAL MAP SIZE: A4
AUTHOR: robert2a
DATE: 3/10/2018
REFERENCE:



REVISION:





- Broadcast
- EOC/Council Centre
- Fire service
- Fuel
- Gas
- Prison
- Water
- General Practices
- Major substations
- Water Reservoirs
- Emergency Transport Routes**
- Stage 1
- Stage 1 Alternative

Ngauranga/Johnsonville
Emergency Transport Routes

0 500 1,000 Meters

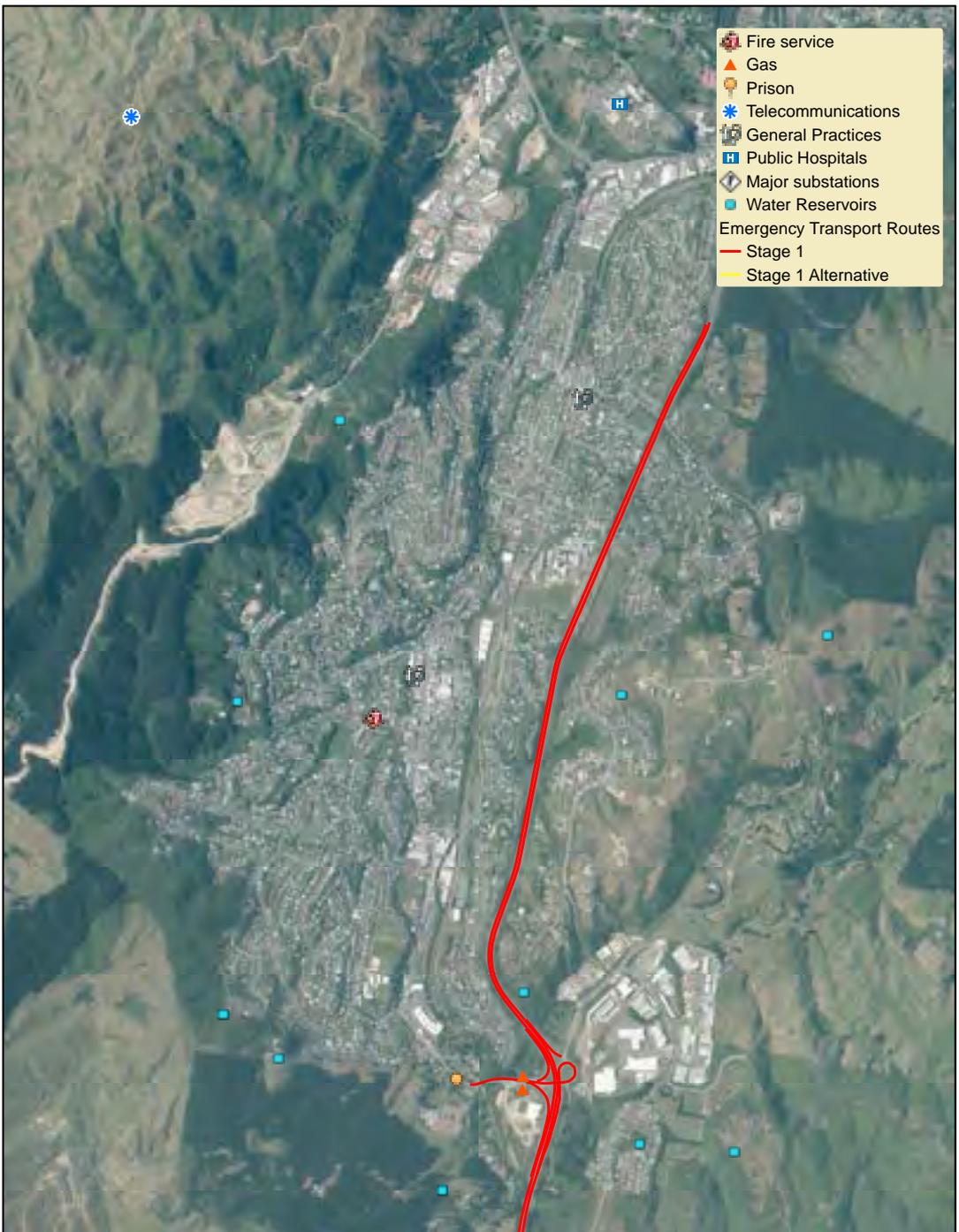
Scale: 1:35,000

Property boundaries, 20m Contours, road names, rail line, address & title points sourced from Land Information NZ. Crown Copyright reserved. Property boundaries accuracy: +/-1m in urban areas, +/-30m in rural areas. Census data sourced from Statistics NZ. Postcodes sourced from NZ Post. Assets, contours, water and drainage information shown is approximate and must not be used for detailed engineering design. Other data has been compiled from a variety of sources and its accuracy may vary, but is generally +/- 1m.

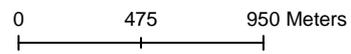
MAP PRODUCED BY:
Wellington City Council
101 Wakefield Street
WELLINGTON, NZ

ORIGINAL MAP SIZE: A4
AUTHOR: robert2a
DATE: 3/10/2018
REFERENCE:

Absolutely Positively
Wellington City Council
We Make It Possible



Tawa
Emergency Transport Routes



Scale: 1:22,000

Property boundaries, 20m Contours, road names, rail line, address & title points sourced from Land Information NZ. Crown Copyright reserved. Property boundaries accuracy: +/-1m in urban areas, +/-30m in rural areas. Census data sourced from Statistics NZ. Postcodes sourced from NZ Post. Assets, contours, water and drainage information shown is approximate and must not be used for detailed engineering design. Other data has been compiled from a variety of sources and its accuracy may vary, but is generally +/- 1m.

MAP PRODUCED BY:
Wellington City Council
101 Wakefield Street
WELLINGTON, NZ

ORIGINAL MAP SIZE: A4
AUTHOR: robert2a
DATE: 3/10/2018
REFERENCE:

Absolutely Positively
Wellington City Council
Be Bold Be Braver

