
8 Cellular network infrastructure

■ Summary

- › While all main cities and towns are covered by New Zealand's cellular network, large parts of rural, and some tourism-specific, areas are not.
- › It can be difficult and expensive to provide cellular coverage to uneven terrain. The Government's \$50 million Mobile Black Spot Fund's aim is to address key black spots in the network.

8.1 Cellular network infrastructure demand

Information on tourist use of the New Zealand cellular network is currently limited. However, overseas visitors are increasingly using mobile devices. About 63 per cent of overseas holidaymakers surveyed in 2015 carried a smart phone while visiting New Zealand. The number of tourists carrying smart phones has tripled since 2010/11.²⁷

Some recent technologies which allow the tracking of locations of mobile phones may be useful in the future. Algorithms can be used to identify tourists through movement and user behaviour, but more work is required. Also, information would not be available for areas without coverage of the cellular network.

8.2 Cellular network infrastructure supply

The cellular network in New Zealand is largely operated by two providers – Chorus and Vodafone.

Figure 37 shows the estimated level of cellular coverage across the country. This coverage is indicative and in some cases may not reflect actual coverage available.

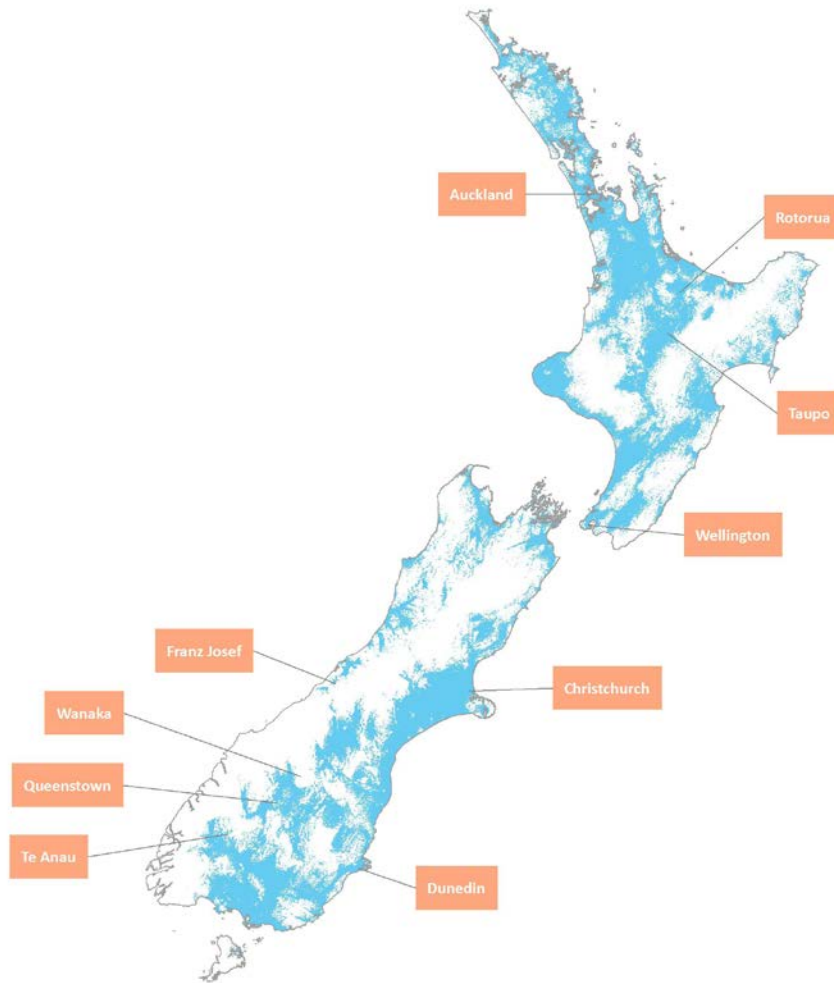
The prediction of cellular coverage in New Zealand indicates that urban areas of the country are covered by at least 3G technology. While all main cities and towns are covered by the cellular network, large parts of rural New Zealand, including key highways and some tourism-specific areas, are not.

A key black spot in the network is a 200-kilometre stretch between Fox Glacier and Makaroa through the Haast Pass on the West Coast. The route from Te Anau to Milford Sound also does not have good cellular coverage. Northland and the East Coast are also poorly served high-tourism regions.

It can be very difficult and expensive to provide cellular coverage to areas with uneven terrain. Last year the government put aside a \$50 million 'Mobile Black Spot Fund' that enables companies and communities to nominate black spots and key tourist areas that need better mobile connectivity.

27 Tourism New Zealand. (2015). *Visitor experience*. Retrieved from <http://www.tourismnewzealand.com/markets-stats/research/infographics/visitor-experience/>

Figure 37: Map of estimated cellular coverage in New Zealand



Source: Radio Spectrum Policy and Planning, MBIE