IN THE MATTER **of the Resource Management Act 1991**

AND

IN THE MATTER of **Proposed Combined Far North District Plan**

Hearing Stream 16 – Subdivisions

JOINT STATEMENT OF EVIDENCE OF

GRAEME MCCARRISON FOR

SPARK NEW ZEALAND TRADING LTD

AND

ANDREW KANTOR FOR

CHORUS NEW ZEALAND LTD

AND

COLIN CLUNE FOR

ONE NZ GROUP LTD AND FORTYSOUTH

14 OCTOBER 2025

1. EXECUTIVE SUMMARY

1.1 Spark, One NZ, Fortysouth, Connexa and Chorus submitted a jointly to sections of the Proposed Plan (Joint Submitter 282) relevant to telecommunications. However, in specific regard to the subdivision chapter, Chorus (Submitter 278) and Spark and Vodafone New Zealand Limited (now One NZ) (Joint Submitter 517) have lodged separate submissions regarding the subdivision chapter. Since lodging the submission Spark, One NZ, and Chorus have agreed a position on the requirements for telecommunications connections under SUB-S6.

1.2 Spark, One NZ, Fortysouth, Connexa and Chorus, invest significantly every year in our networks to ensure New Zealanders have access to essential and world class digital services. New Zealanders and businesses expect and depend on access to these networks, as set out in the joint evidence presented in Hearing 11.

1.3 New Zealanders and businesses expect properties and premises to have access/connection to a telecommunications network (fixed line and wireless) of their choice. As communities grow and urban environments intensify, reliable connectivity becomes essential for well-functioning development.

1.4 Both private and public infrastructure serve essential public functions and are supported by enabling frameworks and standards. Communities rightly expect to have access to electricity, telecommunications, water services and transport networks - regardless of ownership – given their critical role in supporting everyday life and economic activity. Telecommunication connections, like other essential utilities, should be included as a standard requirement for subdivisions.

1.5 The Far North District Council's digital strategy, "Nothing But Net," promotes improved connectivity which stands in contrast to the reporting planner's recommendation on SUB—S6 to remove the requirement to provide telecommunications connectivity. The Digital Strategy's vision of universal connectivity and digital equity relies on robust infrastructure being available to every household, regardless of location. By requiring telecommunications connections as part of subdivision development, Council would be directly implementing the strategy's goals—ensuring that new developments contribute to closing the digital divide and enabling access to essential services, education, and economic opportunities for all residents.

1.6 The decision to remove the requirement for telecommunications connections for new lots, as originally notified in the proposed district plan, appears to have been made without consultation with telecommunications network providers. This is concerning, given the importance of connectivity in modern developments. The responsibility for confirming the availability of telecommunications services at the time of subdivision lies with the developer, and engaging network operators to confirm this in writing is a reasonable and practical step. It is likely that future property owners or tenants who are unable to connect to a telecommunications network will turn to Council for resolution, rather than the developer. This outcome would effectively shift the burden of connectivity issues onto Council.

1.7 Far North and the rest New Zealand depends on the construction and provision of resilient telecommunication networks. Telecommunications networks, along with the other critical networks such as electricity have proven to be resilient. It is critical that the network operators have information about new large developments in order to achieve the direction provided under the NPS-UD.

1.8 As critical infrastructure stakeholder we have been involved and engaged during:

a. the long process to develop the proposed district plan including multiple workshops on telecommunications in the Far North.
b. supporting the development of the Far North Digital Strategy.
c. most recently (2024-2025) the Te Pātukurea - Spatial Plan for Kerikeri–Waipapa.
d. Resource consent applications and certificates of compliance for new telecommunications network.

It is regrettable that telecommunications infrastructure is not being given the same consideration as other essential networks, such as electricity or the public networks, despite its critical role in supporting connected communities.

1.9 Chorus, Spark and One NZ while submitting separately have agreed appropriate amendments to SUB-S6 as outlined in paragraph 11.1 to support telecommunications connectivity requirements that will help ensure future developments and subdivisions are equipped to meet customer demand for reliable network access.

2. INTRODUCTION

2.1 Details of our qualifications and experience were set out our joint corporate evidence presented for Hearing 11.

Graeme McCarrison

2.2 My full name is Graeme Ian McCarrison. I am the Engagement & Planning Manager at Spark New Zealand Trading Limited ("Spark"), a position I have held since February 2015. I am authorised to give this evidence on Spark's behalf.

2.3 I hold the qualification of Bachelor of Regional Planning (Honours) from Massey University. I am a Fellow of the New Zealand Planning Institute.

Colin Clune

2.4 My full name is Colin William Clune. I am the Resource Management Manager at FortySouth, previously I held a similar a position at One NZ/Vodafone since October 2014. I advise FortySouth and One NZ on resource management and government matters. I am authorised to give this evidence on FortySouth and One NZ behalf.

2.5 I hold the qualifications of Bachelor of Urban Planning and Master of Planning from the University of Auckland.

Andrew Kantor

2.6 My full name is Andrew Robert Kantor. I am the Environmental Planning and Engagement Manager at Chorus, where I have been employed since 2015. I am authorised to give this evidence on Chorus' behalf.

2.7 I hold the qualification of Master of Science (Environmental Science) from the University of Auckland and am an associate member of the New Zealand Planning Institute.

Focus of this evidence

2.8 This evidence briefly covers the essential nature of telecommunication networks and connectivity to the Far North and in response as relevant to the assessment of the need for telecommunications connectivity in the s42A report of Mr Baxter in regard to the Hearing 16 Subdivision Topic, and Ms Sarah Trinder regarding the Urban Zones from Hearing 14 which also addresses telecommunications connections. This statement of evidence covers the following areas:

a. Digital connectivity underpins essential services
b. Responsibility for the Provision of Connectivity
c. Connectivity Resilience
d. Far North Digital Strategy 2023
e. NPS-UD
f. Te Pātukurea – Kerikeri-Waipapa Spatial Plan
g. National Connectivity Trends and Far North
h. Telecommunications Connectivity Recommendations
i. Practical Implementation of SUB-S6 - Telecommunications

3. DIGITAL CONNECTIVITY UNDERPINS ESSENTIAL SERVICES

3.1 Digital connectivity and services, delivered through the networks operated by Spark, One NZ (supported by Rural Connectivity Group (RCG) and the tower companies Connexa and Fortysouth) and Chorus, are foundational to modern life in the Far North and across New Zealand. These networks enable a wide range of essential services provided by local and central government, health providers, and businesses, including:

(a) Emergency communication, including access to111 services
(b) Remote working and communication whether working from home, a vehicle, the back of the farm or while enjoying recreational activities
(c) Access to Education or specialist programmes not available locally
(d) Remote health consultations including appointments with specialists located outside the Far North
(e) On-line access to government services such as updating a passport or engaging with social services
(f) Monitoring and management of smart home systems including security features and remote air conditioning.
(g) Remote environmental sensing such as early fire detection in forests or high risk areas.. This includes 360-degree cameras and IoT sensors supported by Artificial Intelligence ("**AI**") analytics providing valuable real-time data on air quality and ground temperature. Warning data is transmitted to Fire and Emergency New Zealand who can then act if appropriate.
(h) Use of smart payment apps and services, including payWave and other mobile payment platforms.

(i) Infrastructure management, including monitoring traffic flow, water, electricity and other utility services including waste services – providing real-time data to customers and operators.

(j) Real-time monitoring and reporting of air and water quality, including swimmability, drinking water safety and flood warning accompanied with real-time mapping and predictions.

(k) Use of drones for monitoring in hazardous environments, such as during forest fires or floods and for search and rescue operations or mapping forests for carbon credit assessments.

(l) Health and safety monitoring, including GPS tracking and sensor-based alerts.

(m) Communication in all its forms from calls, texts and social media to video conferencing (e.g. Microsoft Teams, Zoom) to emerging 3D collaboration platforms such as MeetinVR.

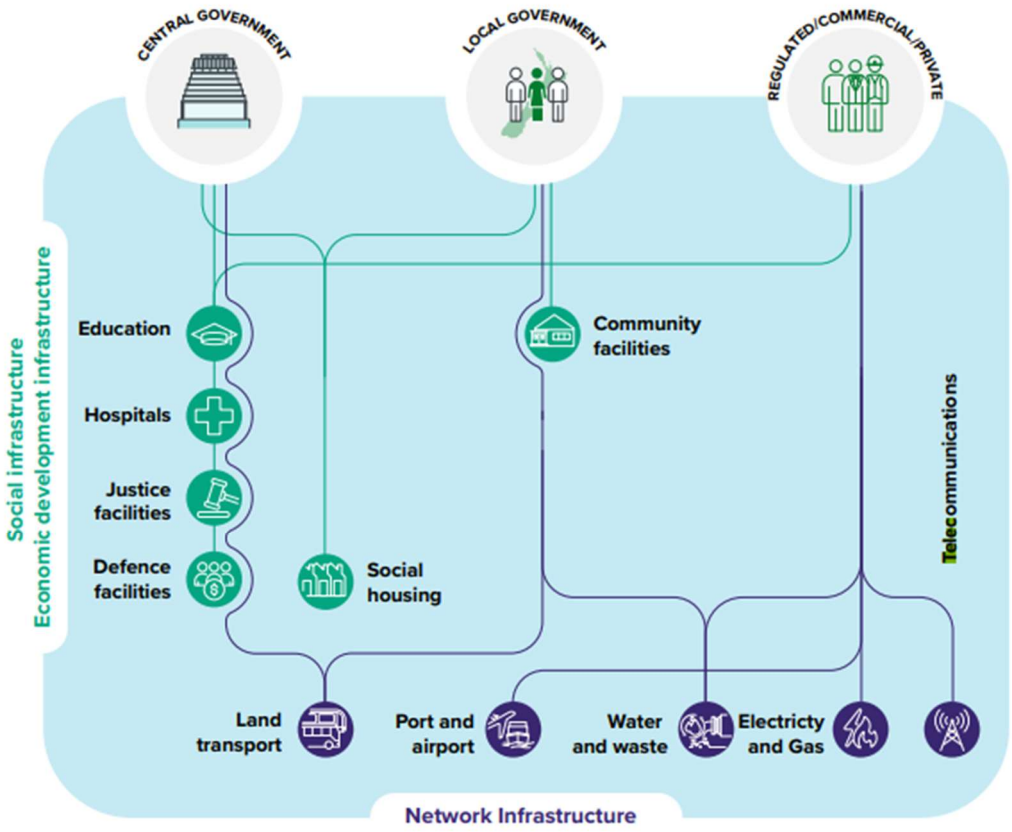
3.2 Telecommunications infrastructure is critical and essential to a modern economy and connecting the 'system of systems' that supports New Zealand's economy and wellbeing of people and communities. Telecommunications plays an important role in national resilience, demonstrated most recently through our national response to Covid-19, as recognised by the Infrastructure Commission[1].

3.3 Telecommunications connectivity provides access to services that are essential, critical and relied on by our modern society and the economy. Infrastructure is a system that includes telecommunications networks (fixed line and wireless) that is integrated with and also dependent on different types of infrastructure and technologies, as illustrated in the diagram below by New Zealand Infrastructure Commission, draft National Infrastructure Plan 2025.[2]

[1] https://www.tewaihanga.govt.nz/assets/Uploads/Telecommunications-State-of-Play-December-2020.pdf
[2] https://tewaihanga.govt.nz/national-infrastructure-plan

Infrastructure includes many layers of connected assets and networks

Figure 1: Mapping different types of infrastructure



Source: New Zealand Infrastructure Commission. (2025).

4. RESPONSIBILITY FOR THE PROVISION OF CONNECTIVITY

4.1 New Zealand telecommunications network infrastructure is largely customer-funded. Spark, Chorus and One NZ each has different ownership and funding arrangements. The Infrastructure Commission observation is that the overall costs of providing telecommunications services should be passed through to customers[3]. However, central government has provided financing, and in some cases grant funding for programmes of work to construct telecommunications network where it is not commercially viable for the network operators.

4.2 Like many sparsely populated and largely rural areas in New Zealand, the Far North has historically been commercially challenging to construct a significant wireless telecommunications networks beyond the main settlements. Recognising this, Central government has committed over $2.5 billion, primarily through the

[3] https://tewaihanga.govt.nz/national-infrastructure-plan

Telecommunications Development Levy, to deliver world-class communications infrastructure. This investment has been supported by a range of connectivity programmes including:

- the Ultra-Fast Broadband (UFB) programme
- the Rural Broadband Initiative phases 1 and 2 (RBI1 and RBI2)
- the Mobile Black Spot Fund (MBSF)
- the Rural Capacity Upgrade Programme (RCU)
- the Marae Digital Connectivity Programme
- Remote Users Scheme.

4.3 A good example of a programme that has significantly benefited the Far North and Northland is the Rural Broadband Initiative (RBI). RBI has provided faster internet to hundreds of thousands of rural homes and businesses outside Ultra-Fast Broadband (UFB) areas. The initiative was funded through the Telecommunications Development Levy[4], which is collected from telecommunications network operators. The levy recognises the need for government intervention to ensure rural and remote areas of New Zealand have access to fast broadband and mobile services. Over $430 million in grant funding from the Levy has been allocated to support the RBI.

4.4 The Rural Connectivity Group (RCG)[5] is a joint venture between Spark, One NZ, and 2degrees, established in 2017 to deliver mobile and broadband services to rural New Zealand. It was appointed by the government under the Rural Broadband Initiative Phase Two (RBI2) and the Mobile Black Spot Fund (MBSF). Each RCG site uses technology that allows Spark, 2degrees and One NZ to provide mobile and broadband services. This shared model is a world-first and enables cost-effective deployment in remote areas. RCG is responsible for:

- Building and maintaining over 500 mobile cell sites across rural NZ, see appendix 1 for a map of sites Far North (25) and Northland.
- Providing 4G wireless broadband**,** VoLTE (HD calling**)**, and 3G mobile service.
- Extending coverage to 30,000+ rural homes and businesses**,** 1,000 km of state highways, and 100+ tourist hotspots.

4.5 Spark, Chorus and One NZ are expert in building world-class telecommunications networks and digital services that connect New Zealanders. In the Far North, Top Energy - owned by local power consumers through the Top Energy Consumer Trust

[4] Digital Connectivity | National Infrastructure Funding and Financing | New Zealand
[5] RCG Network - Rural Connectivity

- provides the electricity distribution network relied upon by residents and businesses. Council does not have regulatory oversight over the design, resilience or standards of the Top Energy network; these responsibilities rest with Top Energy's technical experts.

4.6 The use of various central government telecommunications programmes has been essential to the rollout of world-class connectivity in small settlements and rural areas. Local government including the Far North District Council has played a key role in evaluating areas of need - such as state highway blackspots and communities without reliable connectivity - and in securing funding for local projects. This includes initiatives like the deployment of 25 RCG sites and the extension of Chorus fibre to smaller settlements.

5. CONNECTIVITY RESILIENCE

5.1 We recognise that New Zealand relies on the construction and maintenance of resilient lifeline telecommunication networks, especially during and after emergencies.. Like other private and public network operators, we are responsible for locating, designing, constructing, upgrading and maintaining our networks to support communities across New Zealand.

5.2 The telecommunication companies have obligations under the Civil Defence Emergency Management Act 2002 (CDEMA) to provide resilient infrastructure. Following each emergency, comprehensive reviews are conducted, and recommendations are formulated. For example, The '*Strengthening the resilience of Aotearoa New Zealand's critical infrastructure*'[6] system discussion document outlines why a resilient critical infrastructure system matters for our country and people. We recognise the growing importance of planning and designing infrastructure in areas that are sensitive or vulnerable to climate change and natural hazards. This focus has become increasingly prominent within local and central government plans. In May 2023 the telecommunications sector released its plan for enhancing network resilience:. "Enhancing resilience in telecommunications - industry plan and suggested areas for collaboration with government."[7]

5.3 In addition, under the Telecommunications Act, the Commerce Commission and MBIE have various regulating and reporting responsibilities, including oversight of pricing,

[6] https://consultation.dpmc.govt.nz/national-security-group/critical-infrastucture-phase-1-public-consultation/user_uploads/discussion-document--strengthening-the-resilience-of-nzs-ci-system.pdf

[7] https://s3.documentcloud.org/documents/23854635/telco-resilience-plan-17p-may-2023.pdf

access terms, competition and transparency in the telecommunications market for the benefit of consumers. The "New Zealand 111 Contact Code" requires service providers to offer these customers an alternative, cost-free way to contact emergency services during a power failure, ensuring their safety and access to help. This provision is particularly important for individuals at risk such as those with medical conditions, disabilities, or experiencing family violence, who may not have a reliable way to call during a power outage.

5.4 In the corporate evidence provide for Hearing 11 under section 3 titled '*Critical and Essential nature of telecommunications*' we outlined the value of our wireless and fixed line networks which enable people and businesses to stay connected. The Telecommunications Forum annual report 2025[8] states *Telecommunications is now the backbone of Aotearoa's future economy, supporting activities we could only have dreamed of a decade ago. The Ultra-Fast Broadband initiative remains one of our most successful public-private partnerships, transforming how New Zealanders connect across the country. Uptake of Low Earth Orbit (LEO) Satellite services is now 3% of total market share, and makes up 19% of rural connections.*

5.5 The industry is progressing toward the shutdown of the 3G networks end of 2025 with the proposed decommissioning of the copper network by 2030. This transition reflects a broader shift toward faster, more reliable connectivity, and more sustainable infrastructure. Phasing out legacy technologies is essential and continued access to wireless and fibre networks is remains critical for ensuring resilient and future-ready communications.

5.6 Technology is central to Aotearoa's transition toward a high-productivity, low-carbon future enabling all New Zealanders to thrive in a digital world. Each company contributes differently; at Spark, , Toitū Sustainability is embedded into the business strategy, supporting Economic Transformation, Digital Equity and a Sustainable Spark.

5.7 Emergency communication is primarily voice-based. Text-to-111 services are restricted to users who are deaf, hearing-impaired, or speech-impaired. The sender's mobile number must be registered with NZ Police; otherwise, texts will not be delivered.

5.8 The Public Safety Network is a new critical communications service for frontline emergency responders, integrating cellular, land mobile radio, and personal alerting.

[8] https://www.tcf.org.nz/news/tcf-annual-report-2025

In 2022, Cabinet approved a $1.4 billion investment over 10 years. Hourua—a Spark and One NZ joint venture—delivers cellular priority and roaming, enhancing coverage and resilience via a multi-network solution. Hourua enables emergency services to monitor mobile outages in real time and up to two weeks ahead. While it strengthens emergency response, it does not improve public access to 111 calling or texting..

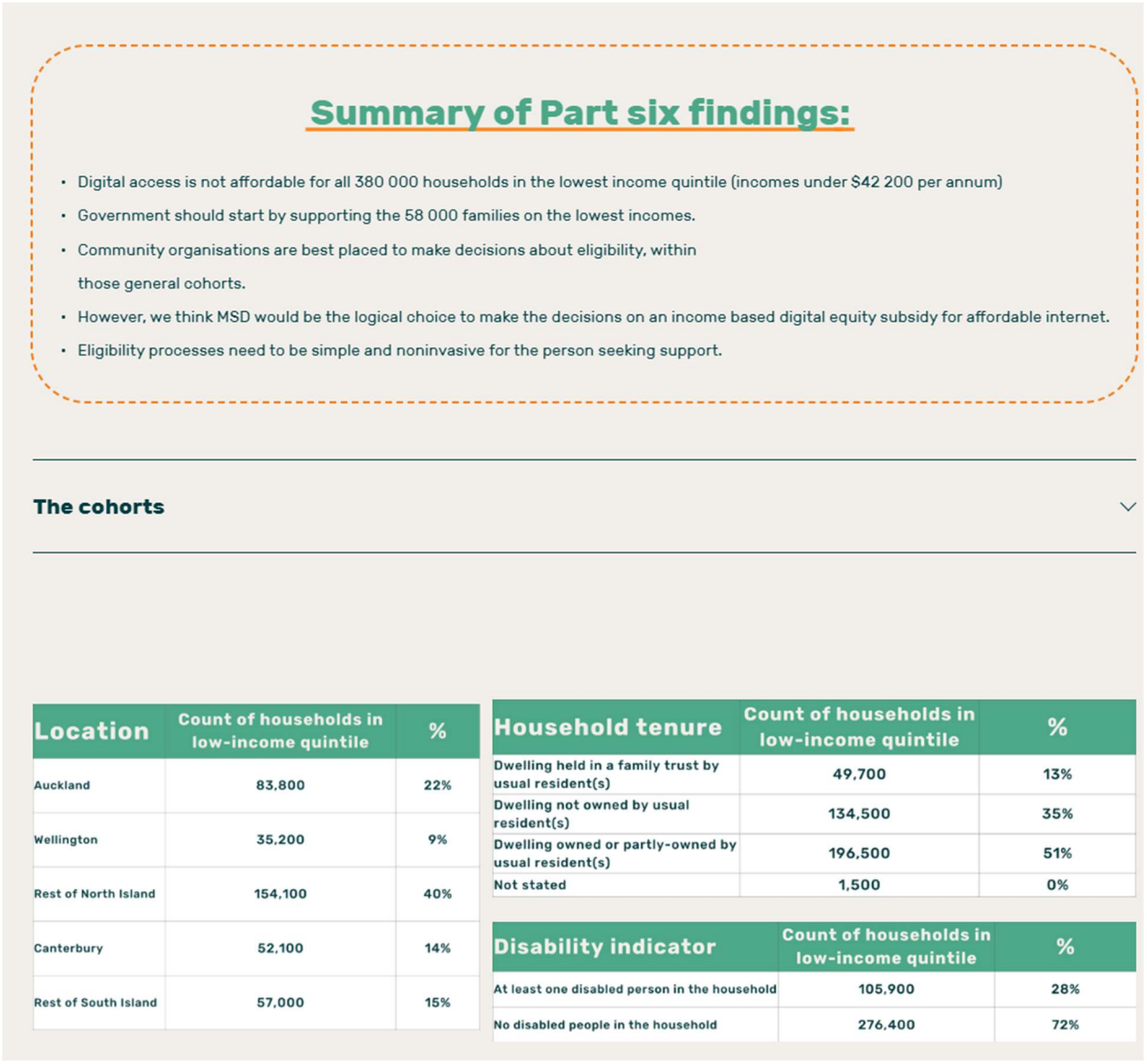
Digital equity

5.9 Access to telecommunications connectivity is essential for Far North and all of New Zealand to realise a positive digital future. An estimated 1 in 5 New Zealanders face some form of digital exclusion, with 130,000 households lacking internet access[9]. Without connectivity, digital equity gaps widen. Digital equity begins with access to the internet and devices, but also requires digital skills trust in the digital world, and the motivation to participate. Spark Foundation alongside partner community organisations supports access to wireless broadband services, devices and education. To avoid deepening digital inequity, subdivision standards and consents should require developers to demonstrate connectivity to telecommunications networks. Spark, Chorus and One NZ cannot delivery digital equity programmes without broadband infrastructure.

5.10 Foundation North[10] highlights digital equity is a key issue. While the proportion of Northland residents living in NZ Deprivation Index deciles nine and ten has decreased since 2006,it still represents over half the region's population and two thirds of the population in the Far North.

5.11 Research on digital equity in Aotearoa highlights the need for targeted action[11]. The following information is a summary of some of the findings. It is worth noting in the North Island outside of Auckland and Wellington digital access was unaffordable for 40% of households

[9] https://www.spark.co.nz/content/dam/spark/documents/pdfs/sustainability/the-economic-benefits-of-digital-inclusion-and-connectivity.pdf
[10] https://www.foundationnorth.org.nz/report/key-trends-community-insights
[11] https:/Resilience /www.digitalequity.nz/affordableconnectivity2023/#intermediary_approach



Summary of Part six findings:

- Digital access is not affordable for all 380 000 households in the lowest income quintile (incomes under $42 200 per annum)
- Government should start by supporting the 58 000 families on the lowest incomes.
- Community organisations are best placed to make decisions about eligibility, within those general cohorts.
- However, we think MSD would be the logical choice to make the decisions on an income based digital equity subsidy for affordable internet.
- Eligibility processes need to be simple and noninvasive for the person seeking support.

The cohorts

Location	Count of households in low-income quintile	%
Auckland	83,800	22%
Wellington	35,200	9%
Rest of North Island	154,100	40%
Canterbury	52,100	14%
Rest of South Island	57,000	15%

Household tenure	Count of households in low-income quintile	%
Dwelling held in a family trust by usual resident(s)	49,700	13%
Dwelling not owned by usual resident(s)	134,500	35%
Dwelling owned or partly-owned by usual resident(s)	196,500	51%
Not stated	1,500	0%

Disability indicator	Count of households in low-income quintile	%
At least one disabled person in the household	105,900	28%
No disabled people in the household	276,400	72%

6. FAR NORTH DIGITAL STRATEGY 2023

6.1 Far North District Council is one of few councils that has developed and implemented a digital strategy[12]. The strategy has the vision of 100% connectivity. The mission is *Supporting our people to use digital connectivity for their own and collective benefit*.

6.2 Far North District Council[13] in March 2023 launched a campaign that aims to eliminate the district's digital divide. *"The campaign is fronted by Bay of Islands-Whangaroa Community Councillor and Chair of the Strategy and Policy Committee, Rachel Smith: "Nothing But Net is a community-driven approach to strategy development. Our digital future is a topic people are really passionate about and we are the first New Zealand government organisation to use this new, interactive video application."*

[12] https://www.fndc.govt.nz/__data/assets/pdf_file/0016/24037/nbn_farnorthdistrict_digitalstrategy.pdf
[13] https://www.fndc.govt.nz/tr/your-council/News-story-archive/archive/2023/Campaign-seeks-collective-response-to-digital-divide

6.3 *Councillor Smith says the current COVID-19 lockdown has highlighted the existing digital divide in Northland. "We know we have digital challenges, but there are also opportunities out there. Our communities – the people who live here – are the best to identify these."*

6.4 Given the ongoing challenges with connectivity, it's reasonable for Council to seek assurance at the subdivision stage that adequate telecommunications access will be available by the time of s224c certification. If connectivity is unavailable - meaning a resident cannot secure a contract with a retail provider due to lack of network capacity or availability, then potential property owners or tenants should be informed. Private networks are expected to deliver connectivity wherever people live and work, but building or upgrading infrastructure is costly and complex. Network operators have national build programmes and allocated budgets that do not have the flexibility to reprioritise to accommodate a new subdivision or development without impacting on services in other locations. Our experience, especially for the wireless networks is unless applicants/developers are required to design their developments to include provision for telecommunications, it will not be provided. This is particularly the case for wireless telecommunications. Consequently, when there is demand from new residents and businesses, we need to retrospectivity acquire a location to build. This is most likely be in the road berm and in front of dwellings, which is not ideal, but permitted under the NESTF 2016.

6.5 Developers should engage with network operators early to confirm service levels. In larger developments, this may include providing sites for wireless facilities or contributing to infrastructure costs—such as fibre installation and shared poles for mobile equipment. Co-location supports customer choice and strengthens network efficiency. Reliable fibre and wireless connectivity also adds value to developments, offering a strong selling point. Collaboration between Council, developers, and operators ensures communities have access to essential telecommunications services.

6.6 In urban areas, wireless connectivity is generally achievable due to multiple providers. However, it is critical that open-access fibre is installed during subdivision—alongside electricity and three waters—while trenches are open. Like electricity, telecommunications networks are privately owned but serve a public good. Both are essential for modern living, yet Council policy appears to prioritise electricity. Ensuring fibre is installed at the outset avoids costly retrofits and supports equitable access to digital services.

7. NPS-UD

7.1 The NPS-UD now clearly contemplates consideration of infrastructure other than roads and 3-Waters in urban growth provision. Telecommunications networks (fixed-line and wireless) fall under Clause (e) of the definition of "additional infrastructure" under the NPS-UD as follows:

> **additional infrastructure** means:
>
> (a) public open space
>
> (b) community infrastructure as defined in section 197 of the Local Government Act 2002
>
> (c) land transport (as defined in the Land Transport Management Act 2003) that is not controlled by local authorities
>
> (d) social infrastructure, such as schools and healthcare facilities
>
> (e) a network operated for the purpose of telecommunications (as defined in section 5 of the Telecommunications Act 2001)
>
> (f) a network operated for the purpose of transmitting or distributing electricity or gas

7.2 NPS-UD requires Tier 1, 2 and 3 local authorities to engage with the providers of development infrastructure and additional infrastructure to achieve integrated land use and infrastructure planning. Under Part 3: Implementation - Clause 3.5 is:

> **3.5 Availability of additional infrastructure**
>
> (1) Local authorities must be satisfied that the additional infrastructure to service the development capacity is likely to be available.

8. TE PĀTUKUREA – KERIKERI-WAIPAPA SPATIAL PLAN

8.1 Te Pātukurea - Spatial Plan for Kerikeri–Waipapa was approved June 2025. Spark and Chorus were engaged with as infrastructure stakeholders. We provided feedback on out infrastructure needs for each of the growth scenarios. In addition, Spark provided submissions on the proposed spatial plan 28 November 2024 and 22 April 2025. Spark presented a verbal submission on 2 May 2025.

8.2 Mayor Moko Tepania commented, "*As Kerikeri and Waipapa continue to thrive as economic and cultural hubs, we face the challenge of balancing urban change with the preservation of what makes this area special. Te Pātukurea addresses this*

challenge by providing a clear direction for where and how we grow, ensuring our environment is protected, our infrastructure is resilient, and our community thrives."

8.3 Spark in its submissions and verbal feedback in various forums has highlighted several key concerns:

a. The current and future residents and businesses of Kerikeri-Waipapa rely on access to both electricity and telecommunications to support economic development, deliver essential services and enhance everyday life.

b. Spark remains neutral on the proposed growth scenarios But notes that each presents challenges for deploying new wireless infrastructure due to the proposed District Plan rules.

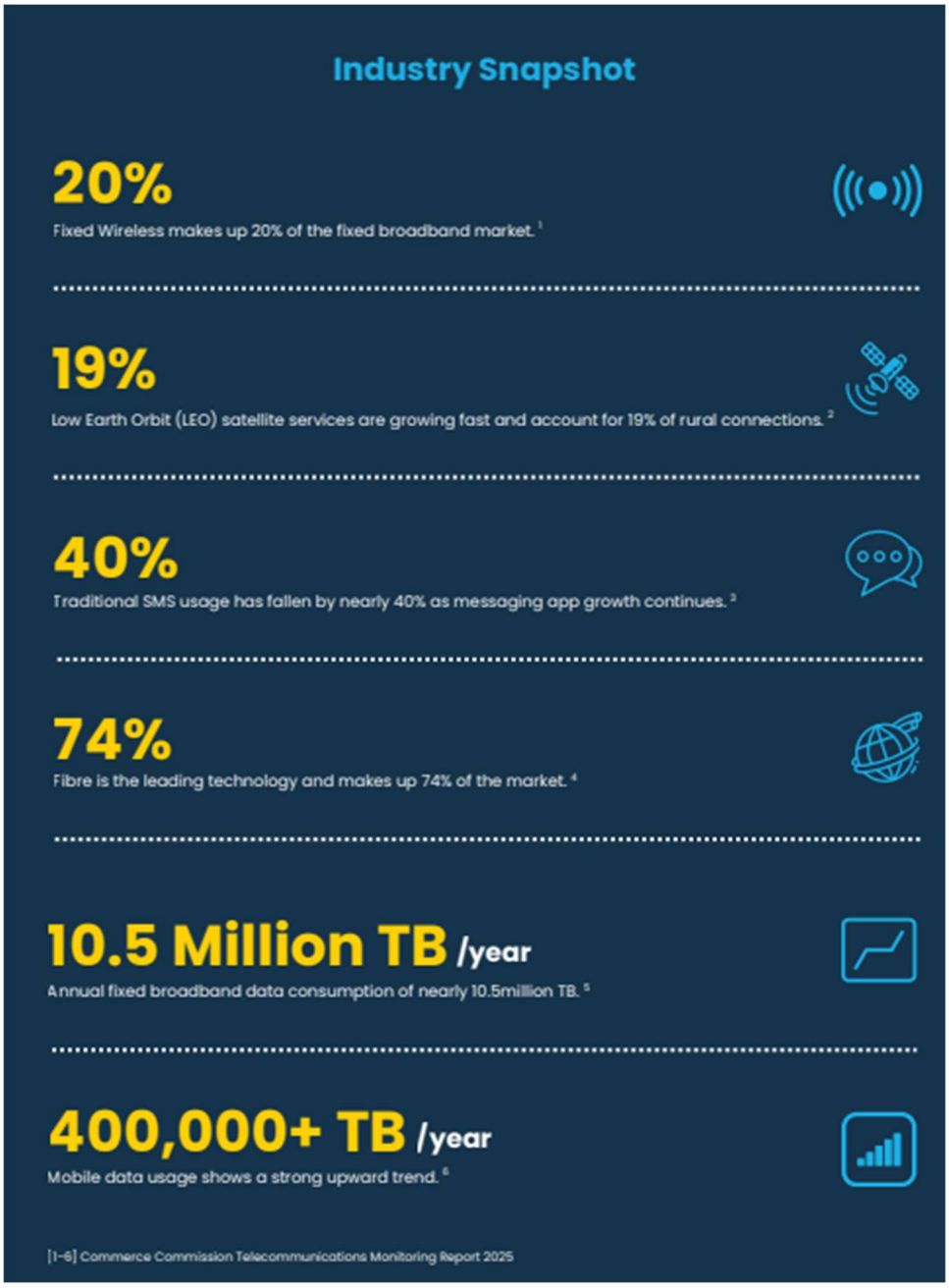
c. As part of the implementing the Spatial Strategy, Spark encourages the Council to proactively facilitate conversations been the community, developers and network operators to ensure critical infrastructure is designed and provided in the right locations for each network operator.

d. Spark has also noted that, in many cases, new wireless facilities (such as cell-sites) will be required to locate in the road berm outside dwellings. This is often because developers do not design wireless facilities to be integrated as part of their developments leading to reactive and less ideal placement of essential infrastructure.

9. NATIONAL CONNECTIVITY TRENDS AND FAR NORTH

9.1 The following snapshot highlights statistics and trends in New Zealand telecommunications[14]. The table highlights that in urban areas fibre connections remain dominant but that wireless connections are continuing to increase.

[14] https://www.tcf.org.nz/wp-content/uploads/TCF-Annual-Report-2025-Final-1.pdf



9.2 Rapid advances in technology are driving transformational changes as our products and services become increasingly important in the daily lives and businesses of New Zealanders. These advances have seen the telecommunications industry collectively investing on average $1.6 billion each year to deliver new services and network technology. The Commerce Commission industry monitoring report[15] shows the industry has invested $15.7 billion over the past decade. At the same time, fierce competition is delivering more value to consumers at lower prices, meaning New Zealand is now in the enviable position of having world-class networks and services, at below OECD average prices, for both fixed and mobile communications

15 https://comcom.govt.nz/__data/assets/pdf_file/0033/361959/2023-Telecommunications-Monitoring-Report-15-August-2024.pdf

9.3 In mobile services, Spark, One NZ and 2degrees are the three major mobile network operators who each compete for customers over their own networks, utilising poles and cabinets owned by Connexa and FortySouth, and radio spectrum licensed from Central Government. Sometimes we can co-locate our equipment on another operator's facility to save the cost of building a separate facility. Additionally, Spark, One NZ and 2degrees established and jointly own Rural Connectivity Group ("**RCG**"), a wireless network that is extending mobile and wireless broadband coverage to remote areas of rural New Zealand as part of the Government's Rural Broadband Initiative and other dedicated funding sources.

Ultra-fast Broadband

9.4 National fixed-line networks are owned by wholesale providers such as Chorus. In the Far North District, Chorus is the primary provider of fixed-line connections. Retail service providers like Spark, and One NZ deliver connectivity to customers via both fixed, and wireless networks.

9.5 Chorus owns the national copper network, and most of the fibre network built in cities and towns under the Government's Ultra-Fast Broadband ("**UFB**") programmes - UFB 1 and UFB 2. Chorus continues to expand the fibre network.

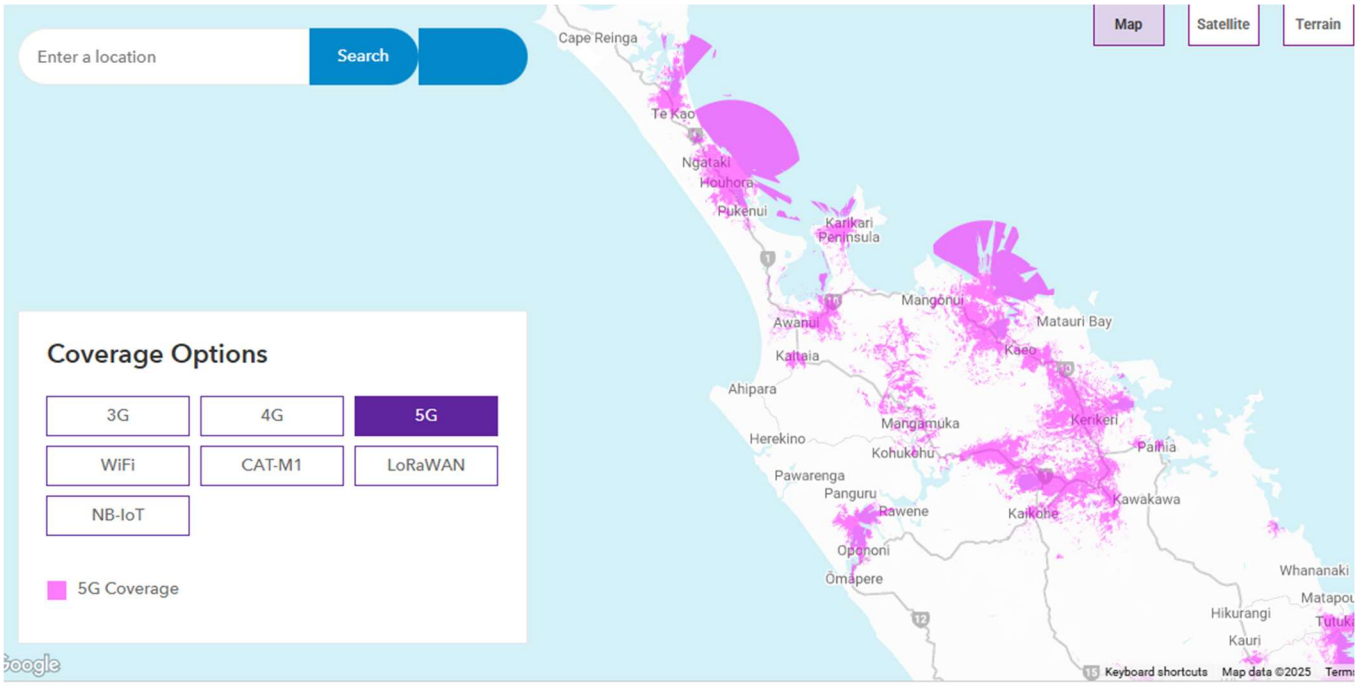
9.6 The Chorus Ultrafast Broadband (UFB) network includes cables, ducts and cabinet or exchange-based electronics that support GPON (Gigabit Passive Optical Network) technology. This infrastructure connects end users to the Point of Interconnect ("**POI**"). Multiple cables emanate from GPON locations to clusters of end users within a geographic area. The fibre roll-out has included more than 20 towns and settlements in the Far North District.

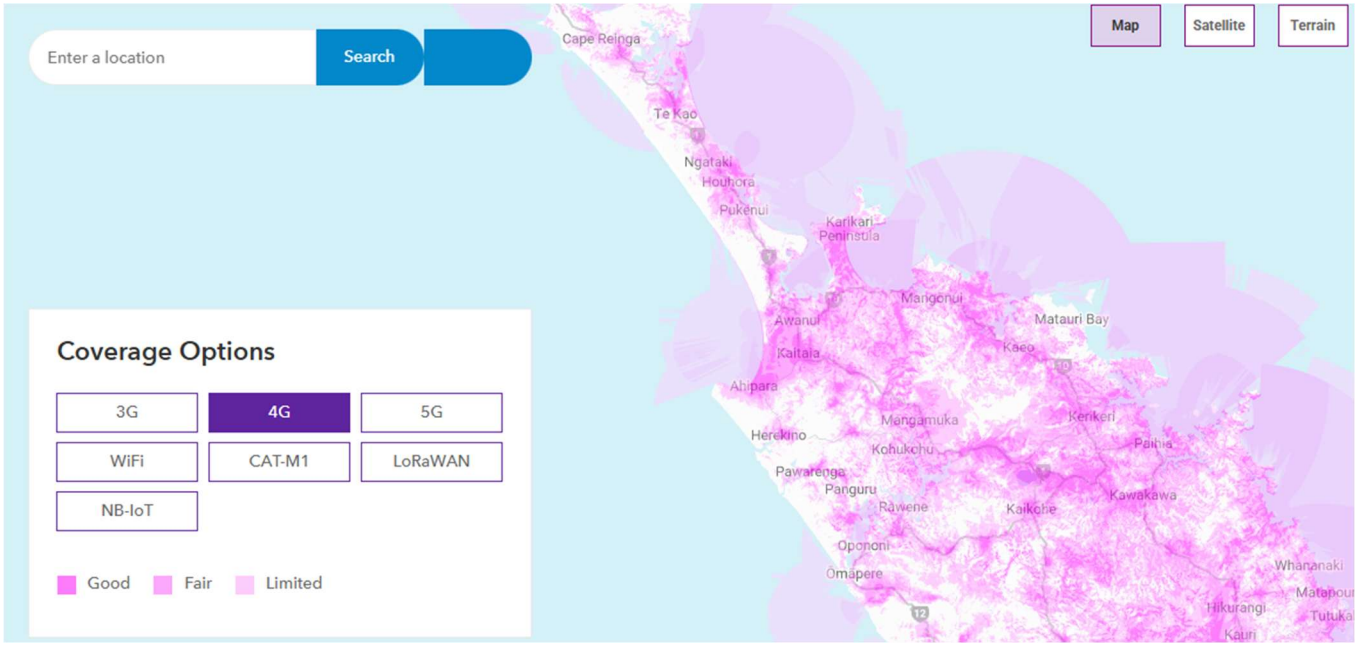
9.7 The UFB network is an open access network, which allows a variety of internet service providers and resellers to operate off the fibre network infrastructure, ensuring end users have a variety of choice as to the ISP as well as packages, pricing and service levels on offer. Fibre is a future-proofed technology that offers a scalable, low-cost pathway to major ongoing performance upgrades. The UFB network is continually developed and expanded to meet demand within the existing coverage area and grown to meet demand where commercially viable.

Wireless telecommunications networks

The rollout of 5G and the digital technology that it enables is critical to a well-functioning urban environment. It is widely expected to transform our cities and the

ways in which we use other kinds of infrastructure. 5G into rural communities enables access to the 600Mhz band, which is particularly important for rural areas given its ability to provide 5G connectivity over greater distances, including 3.5GHz. Spark's 5G and 4G coverage in the Far North are shown in the following maps.





9.8 Coverage maps are only indicative and should not be relied upon as confirmation of service availability. The proposed removal of telecommunications requirements under

SUB-S6 was made without consulting network operators, and is based on the incorrect assumption that connectivity will always be available. In reality, service providers like Spark cannot offer contracts where network capacity does not exist, due to obligations under consumer protection laws such as the Fair Trading Act. Without guaranteed infrastructure, residents may be left without access to essential services.

9.9 While satellite-to-mobile services are emerging—such as One NZ's Satellite TXT service and Spark's upcoming partnership with a U.S. provider—these technologies are supplementary. They are designed to extend coverage to remote areas, not replace fibre or ground-based wireless networks. Satellite connectivity has limitations, including reduced indoor performance and finite capacity, making it unsuitable as a primary solution for most developments.

9.10 Mobile operators continue to invest in new cell sites and upgrades across Aotearoa, reaching 99% of populated areas. However, satellite services cannot replace the reliability and capacity of fibre and terrestrial mobile networks. Fibre remains the backbone of high-speed connectivity, and its absence in new developments leads to costly retrofits, delays in service availability, and reduced quality of life for residents..

9.11 To ensure future-proofed infrastructure, developers—especially in urban and growth areas—should be required to demonstrate telecommunications connectivity at the time of subdivision and s224(c) certification. Without this, new residents may move into homes without access to high-speed broadband, undermining efforts to promote the Far North as a place to live and do business. Council has a responsibility to support digital inclusion, as outlined in the national Digital Strategy and endorsed by the Northland Digital Enablement Group (DEG). It is both practical and reasonable for developers to request confirmation of service availability from providers such as Chorus, Spark, and One NZ. In growth areas, collaboration between developers and operators enables proactive infrastructure planning, such as identifying future cell site locations with tower companies like Connexa and Fortysouth. Without this, operators may be forced to install infrastructure in road berms directly outside new dwellings—an inefficient and disruptive solution.

9.12 There is an assumption that fibre, wireless and mobile coverage and capacity will be available and not required to be provided by the developer. This is not always going to be the situation when the investment plans of the network operators have not provided for new development. Consultation with the network operators will at least

enable conversations that will support network investment planning including capacity and coverage modelling. Potential benefit for the applicant/developer include:

a. Integration of wireless/mobile assets into the development potentially reducing the visual amenity impacts of infrastructure.
b. Marketing of the development with the knowledge that residents will have choice of telecommunication connectivity and service provider.

9.13 Subdivision rules may remain in place for 10 to 15 years. To be fit for purpose, they must require telecommunications infrastructure—particularly fibre—wherever practicable. Assuming connectivity will be available without planning risks leaving communities disconnected and undermines long-term regional development goals.

10. TELECOMMUNICATIONS CONNECTIVITY RECOMMENDATIONS

10.1 In paragraph 464 of the reporting planner's assessment, it is suggested that requiring telecommunications connectivity in all zones would be overly onerous. However, the rationale for this conclusion is not clearly explained. In the Urban Zones s42A report prepared for Hearing 14, Ms Trinder recommends that the Proposed Plan excludes rules relating to connections to private infrastructure, citing a number of associated risks as set out below[16]:

[16] Para 254, Urban Zones s274 Report

The inclusion of private infrastructure in urban zones lacks certainty, is not consistent with the requirements of the NPS-UD and would go against this premise. There are several risks involved with the requested amendment including:

a. Limited Oversight & Maintenance: Private infrastructure may not meet public standards, leading to long-term maintenance issues that the council may eventually need to address.

b. Equity & Accessibility Concerns: Private infrastructure can create disparities in service quality, potentially disadvantaging certain residents.

c. Integration Challenges: Coordinating private infrastructure with public systems (e.g., roads, water supply, drainage) can be complex and costly.

d. Legal & Liability Issues: If private infrastructure fails, councils may face pressure to intervene, even if they were not responsible for its development.

e. Financial Risks: Future costs may arise if private infrastructure deteriorates and requires public investment for upgrades or replacement.

f. Economic inefficiency: private systems can rely on a low capital cost high maintenance cost model, which is unfavourable if ratepayers are required to take over the system. In addition, where reticulated systems or capacity becomes available landowners may be required to connect and pay contributions to do so, increasing costs and making existing systems redundant.

10.2 The telecommunications companies dispute the claim in the Urban Zones s42A report that including regulated private infrastructure—specifically telecommunications—in district plans lacks certainty or is inconsistent with the National Policy Statement on Urban Development (NPS-UD). On the contrary, the NPS-UD explicitly supports well-functioning urban environments through integrated land use and infrastructure planning. Telecommunications infrastructure is essential to achieving this and its regulated nature mitigates many of the risks commonly associated with private systems.

10.3 Specific responses to the identified risks of including telecommunications infrastructure are outlined below:

a) Limited Oversight & Maintenance

Telecommunications infrastructure is subject to robust regulatory oversight under the Telecommunications Act 2001. The Commerce Commission monitors service quality,

fault management, installation timeframes, and customer service. Licensed operators are responsible for maintenance, reducing the risk of long-term issues falling to councils.

b) Equity & Accessibility Concerns
Rather than creating disparities, regulated telecommunications infrastructure enhances digital equity by ensuring access to essential services across all communities. Inclusion in district plans enables proactive deployment in growth areas, avoiding service gaps and supporting inclusive development.

c) Integration Challenges
Telecommunications infrastructure is increasingly co-located with public assets such as roads and underground utilities. Including it in district plans facilitates coordinated delivery, minimises disruption, and ensures efficient use of public space. Planning for integration at the outset is far less complex and costly than retrofitting infrastructure post-development.

d) Legal & Liability Issues
Clear inclusion in district plans provides certainty for all parties, reducing the likelihood of disputes or public pressure in the event of service failure. Regulated providers are responsible for their networks, and councils retain the ability to set conditions through the planning process.

e) Financial Risks
Excluding telecommunications infrastructure increases the risk of reactive public investment if infrastructure is missing or inadequate. Early inclusion allows alignment with growth strategies and funding mechanisms, avoiding future costs associated with retroactive installation or emergency upgrades.

f) Economic Inefficiency
Telecommunications infrastructure is a strategic investment that supports New Zealand's digital economy. Including it in district plans ensures efficient, future-proofed deployment aligned with urban growth. It avoids the inefficiency of redundant systems or costly transitions when reticulated services become available.

10.4 Local government in New Zealand has never held responsibility for the provision or regulation of telecommunications networks. Since the establishment of the Post and Telegraph Department in 1881 (see Appendix 2), telecommunications have evolved into a competitive, privately owned sector. The 1990 sale of Telecom marked a shift to market-led infrastructure delivery, which has enabled New Zealanders to access world-class services. Today, multiple providers—including Spark, One NZ, and

Chorus—offer fixed-line, wireless, and satellite connectivity, with expanding service options across the country.

10.5 Electricity distribution networks, such as Northpower, operate under similar models, with ownership structures ranging from consumer trusts and local councils to fully private entities. Despite differences in ownership, both electricity and telecommunications networks are essential public-good services that communities rely on for modern[17].

10.6 Telecommunications infrastructure is designed, constructed, and maintained by licensed operators such as Chorus, Spark, and One NZ (via Connexa and Fortysouth), using professional engineering advice to address natural hazards and ensure resilience. These networks are repaired promptly when damaged and support critical services, including emergency calling (e.g. 111), through diverse and redundant systems..

10.7 Telecommunications networks also support public asset management, including streetlights, water infrastructure, and flood monitoring. Integration with other utilities is managed under the National Code of Practice for Utility Operators' Access to Transport Corridors, mandated by the Utilities Access Act 2010. This framework ensures coordination between corridor managers and utility operators, minimising conflict and enabling efficient infrastructure.

10.8 Council engineering standards guide infrastructure design and placement for subdivisions and developments. However, these standards—like those of many councils—were developed without consultation with the telecommunications industry, missing an opportunity to align with modern connectivity needs and national digital strategies.

10.9 The proposed district plan and amendments to the NESTF (2025) are likely to further enable the construction of the wireless telecommunications. Noting that the construction the fibre network in the road and customer connections is already enabled in the NESTF and district plan.

10.10 Removing the requirement to provide telecommunications connectivity will potentially deliver the following outcomes:

a. Reduced access to digital services, including fibre and wireless.

[17] Electricity Authority Website

b. New roads/footpaths being dug up post-development to retrofit fibre services. It is most effective and cost efficient to lay the fibre at the same time as other services.

c. Increased risk of damage to existing services when retrofitting.

d. Inadequate service levels, potentially affecting access to digital services essential to our modern life, including the inability to use the 111 emergency services.

e. Cell-sites (at some future point of time) being constructed in the road environment outside new homes instead of being integrated into the development.

f. Increased complaints to Council about poor connectivity – contrary to the goals of the Digital Strategy.

10.11 We conclude that there is no substantive evidence to support the statements made in paragraph 454 of the Urban Zones s42A report prepared for Hearing 14 by Ms Trinder, which were used to justify removing the requirement for telecommunications connectivity under SUB-S6. On the contrary, the inclusion of regulated telecommunications infrastructure in district plans is essential to achieving the outcomes sought by the NPS-UD. It supports equitable access, efficient integration, and strategic investment—while directly addressing the risks identified. We recommend that the District Plan explicitly enable and support the deployment of telecommunications infrastructure, including the installation of open-access fibre wherever practicable and wireless solutions where relevant..

11. PRACTICAL IMPLEMENTATION OF SUB-S6 - TELECOMMUNICATIONS

11.1 Spark, Chorus and One NZ support the following amendments to SUB-S6.

SUB-S6	Telecommunications and power supply	
All zones and all Special Purpose Zones ~~General Residential zone Kororāreka Russell Township zone Mixed Use zone Light Industrial zone Heavy Industrial zone Settlement zone Rural Residential zone Horticulture Processing Facility zone~~	Connections shall be provided at the boundary of the site area of the allotment for: 1. telecommunications i. Through an open access fibre network where it is reasonably practicable to do so; ~~Fibre where it is available~~; or ii. Where connection to an open access fibre network is not reasonably practicable ~~available~~ Mobile/Wireless, which includes satellite; ~~or~~ and iii. The applicant shall provide with any subdivision consent application ~~of~~ written confirmation from a telecommunication network operator confirming that a suitable connection can be made; and iv. At the time of subdivision, sufficient land for telecommunications, transformers and any associated ancillary services must be set aside. For a subdivision that creates more than 15 lots, proof of consultation with the telecommunications network utility operators ~~may~~ will be required. 2. Electricity supply through the local electricity distribution network. **Note:** This standard does not apply to allotments for a utility, road, reserve or for access purposes.	**Matters of discretion are restricted to:** a. alternative provision of telecommunication and electricity supply. b. Consent notice on title where service is not reasonably able to be provided

Green = wording from Chorus submission

Red = wording from Spark/submission

Blue – Chris Horne additional suggestions

11.2 We recognise that a wide range of network operators provide connectivity. As highlighted above, new urban areas require both open access fibre and reliable wireless connectivity to support well-functioning communities. It is essential that developers include fibre infrastructure in urban areas wherever practicable, ensuring residents have access to high-speed, future-proofed services from the outset. In addition, for the larger developments – particularly those in the new growth areas promoted in the Kerikeri-Waipapa Spatial Plan - wireless connectivity may also be a challenge. To address this, land should be set aside for co-locatable cell-sites, positioned away from residential frontages and designed to ensure efficient delivery of connectivity services.

11.3 Whether a development is greenfield or brownfield, it is essential that developers to engage with network operators at the outset to determine existing coverage and assess whether sufficient capacity is available to support the proposed number of dwellings or units being built. Where coverage or capacity is lacking, developers should be required incorporate telecommunications infrastructure into their design and allocate appropriate land or space to enable future network deployment. Where deployment is not practicable, this should be clearly noted on the property title to inform prospective purchasers that telecommunications connectivity is unavailable.

GRAEME MCCARRISON, COLIN CLUNE, AND ANDREW KANTOR

14 October 2025

APPENDIX 1 - RCG CELL-SITES

Appendix 2 – History Telecommunication in Aotearoa

New Zealand Telecommunications Sector Timeline

1862

New Zealand's first telegraph line connects Lyttleton and Christchurch.

First undersea cable linking New Zealand to Australia.

1876

1906

The first domestic radio transmission takes place.

1987

Subscriber Toll Dialing (STD) is introduced, allowing direct long-distance calls without operator assistance.

1950s

Telecom New Zealand formed out of New Zealand Post Office. First mobile service launches.

1989

Telecom sold, Kiwi Share introduced, Clear Communications launches.

1990

New Zealand gets first international link to join "the internet".

1993

rst ADSL broadband services launches with speeds of around 256kbit/s.

1999

Text messaging arrives in New Zealand.

Bell South launches in New Zealand, later becomes Vodafone New Zealand.

1993

2000

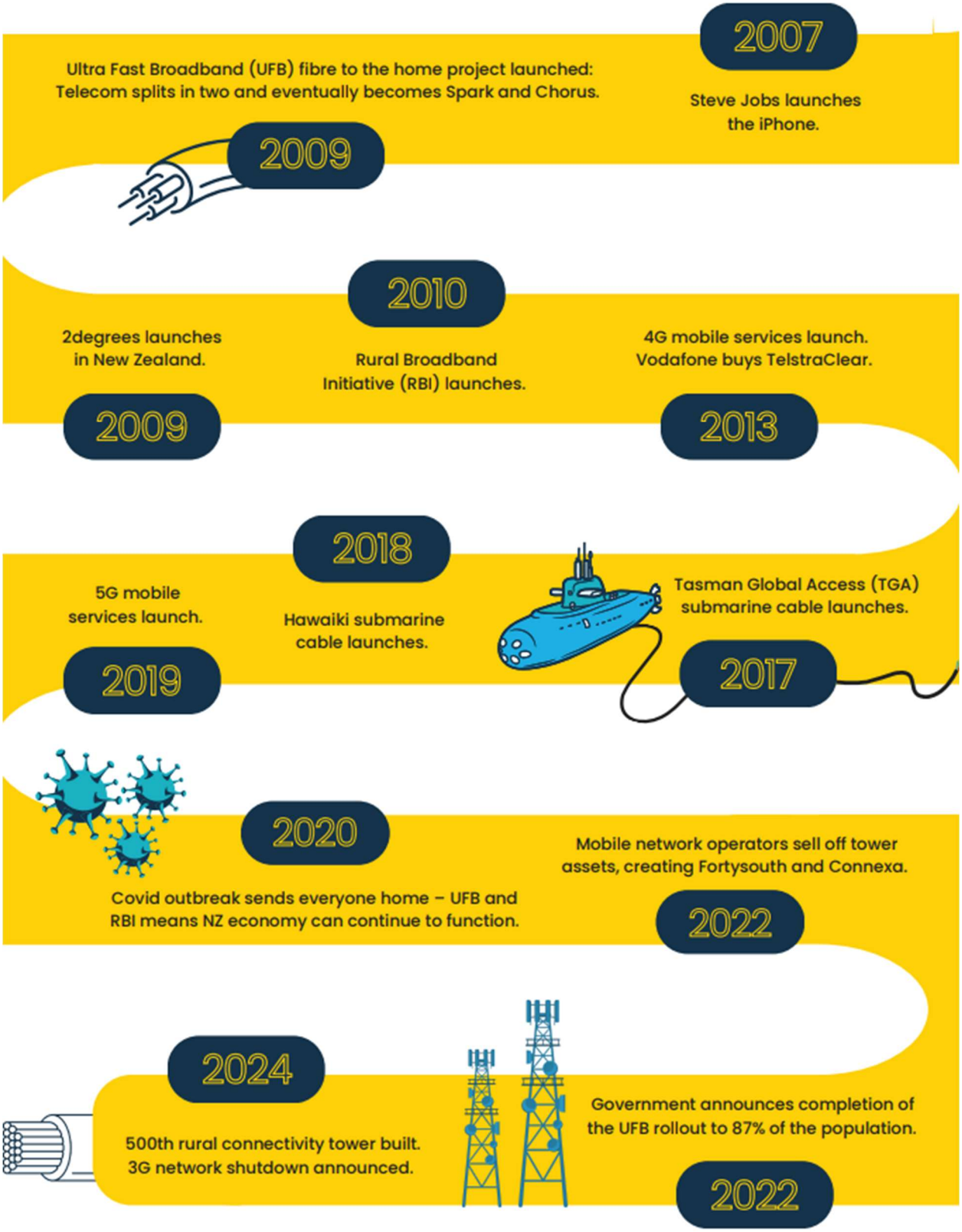
Southern Cross Cable Network launches.

Telecommunications Act introduced to New Zealand, the TCF created.

2001

2007

Telecom ordered to operationally separate to enable competition.



New Zealand Telecommunications Sector Timeline