Solving Digital Divides Together

An InternetNZ position paper



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Summary

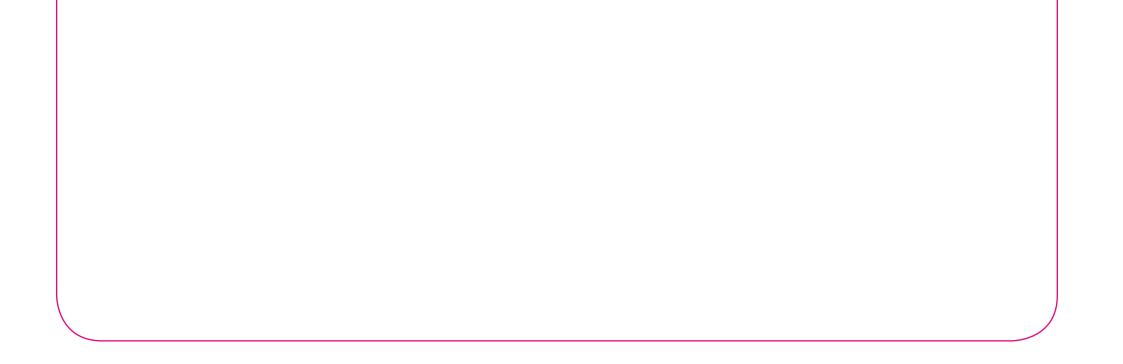
The Internet has the potential to transform people's lives, and we need to harness this potential for the benefit of everybody.

InternetNZ believes that the Internet's power to connect people to each other, deliver goods and services, provide access to information, and enable people to be creators is transformative, and can be scaled up to uplift New Zealanders. All New Zealanders should be able and empowered to participate fully online.

Some New Zealanders are experiencing digital divides, and are excluded from meaningful use of the Internet. We are failing our most vulnerable by not ensuring everyone can benefit from the Internet.

InternetNZ has released this position paper **to call for a target for New Zealand of Universal Access** and as a starting point to encourage action and collaboration from government, civil society, business, academia and the technology sector, to work together to reduce the effects of digital divides in New Zealand.

Now is the time to take ambitious, effective action to close digital divides, by collaborating as New Zealanders to find and intervene in digital divides across New Zealand. This paper is intended to guide, inform and support this work, helping lay the groundwork for more digital inclusion interventions from all over the country in 2018.

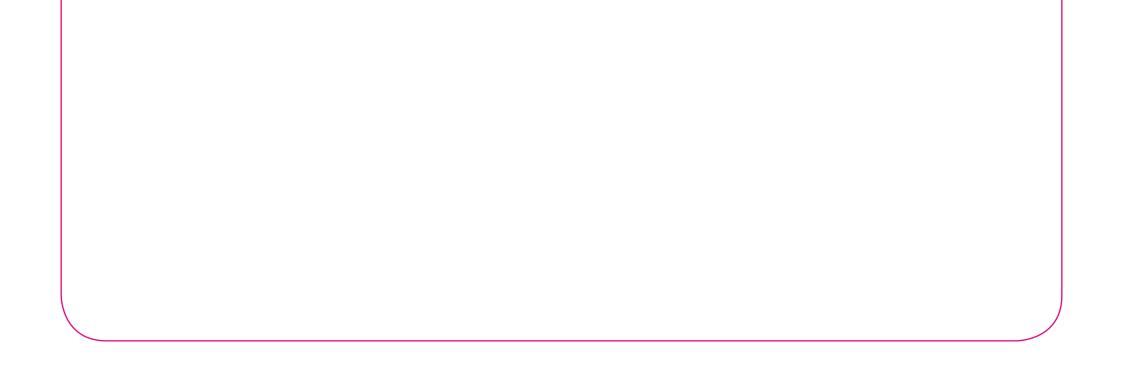


Purpose of this paper

The purpose of this paper is to articulate New Zealand's digital divides, including why they matter, and propose next steps for New Zealand to trial and implement digital inclusion initiatives across the country. This paper is written for members of civil society, the public sector, academia, business and communities wanting to understand how to approach digital inclusion.

InternetNZ believes that now is the time to catalyse ambitious, effective action to close digital divides, by collaborating across all sectors to find and intervene in digital divides across New Zealand. This paper will outline a path forward.

This paper does not look at how digital enablement can improve outcomes for government or for businesses. Rather, it focuses on what digital divides exist and how addressing them can empower New Zealanders to be able and willing to participate fully in the digital world.



Why are we talking about digital divides?

The benefits that the Internet can unlock for individuals and society are immense

Digital technology and the Internet have allowed many of us to transact, interact, learn and grow faster than ever before. The Internet has created the potential to restructure education, government, and the economy to be user centred, to create an abundance of digital resources, and to enrich and better people's lives.

An indicative study from 2015 estimated that closing digital divides in the United Kingdom would be worth \$3.7 billion dollars per year for the economy by enabling people to save time, communicate online, learn new skills and increase their employability and earning potential, and interact with government easily online.¹

In a New Zealand context, this value would be approximately \$280 million per year. This number is convincing, but it is the transformative possibility of the Internet that closing digital divides will enable.

New Zealand needs to be prepared for the future

Globally, emerging technologies are being integrated into governments and businesses.² New Zealanders need to be in a position to adapt to this future. By enabling an individual to be digitally included, we are enabling the acceleration of digital transformation in a way that can improve everyone's lives.

But not all digital access is equal, and the divides between those who can experience meaningful digital inclusion and those who cannot are deepening, and the negative impact for those missing out is growing.³

A significant minority of New Zealanders are being left behind

New Zealand is one of the most digitally advanced nations in the world. We are a member of the "D7 Nations", we have world-class fibre networks, we have fast 4G mobile Internet.⁴ We live in a society where you can fill in an online passport application and receive your passport in less time than it takes Amazon to send you a book. Online engagement is the preferred form of customer assistance for large corporations and government

departments. Branches of banks and other community touchstones are closing across the country and customers and clients instead told to "go to our website".⁵

1. Tinder Foundation and GO ON UK, "The economic impact of Basic Digital Skills and inclusion in the UK" (2015) https:// www.goodthingsfoundation.org/sites/default/files/research-publications/the_economic_impact_of_digital_skills_and_ inclusion_in_the_uk_final_v2.pdf

2. World Economic Forum, "The Fourth Industrial Revolution" (2016), https://www.weforum.org/agenda/2016/01/the-fourthindustrial-revolution-what-it-means-and-how-to-respond/

3. Tinder Foundation.

4. "Leading Digital Nations put Digital Rights at the Heart of Their Agenda" (22 February, 2018) https://www.beehive.govt.nz/ release/leading-digital-nations-put-digital-rights-heart-their-agenda

5. NZ Herald, "Pahiatua shocked at closure of town ANZ" (November 2017) https://www.nzherald.co.nz/the-country/news/ article.cfm?c_id=16&objectid=11948318 But some New Zealanders are not on the Internet.⁶ They cannot get to that website. In a society where jobs are advertised on Seek and TradeMe, how easily can a person who cannot use the Internet really get a job?

Digital divides are one of the looming social divisions and inequalities facing our country. We need to figure out how to bridge these divides and how we can help all New Zealanders use the Internet to enrich their lives.

Universal Access to the Internet for all New Zealanders is desirable and **achievable**.

Government has made a commitment to closing the digital divide by 2020

The Government has made closing the digital divide a priority. We welcome its target and we want to be a part of a broader solution.

The government has announced the development of a blueprint for digital inclusion, with the support of the newly appointed Digital Economy and Digital Inclusion Ministerial Advisory Group.⁷ One of the questions posed to this group was "what will it take to close digital divides by 2020?".

We think the answer to this question will involve action from across the diverse skills, experiences and perspectives of New Zealand as a whole. This paper is InternetNZ's first contribution to answering this question. We hope it will assist not just the official Advisory Group, but all New Zealanders towards a goal of Universal Access.

InternetNZ calls for a nationwide target for Universal Access for all New Zealanders

Ensuring that all New Zealand communities, families and citizens have access to to the Internet, and can use it to support their personal growth in the information age is important, and will require effort and collaboration across sectors.

6. World Internet Project NZ, "The Internet in New Zealand 2015" p 35. World Internet Project NZ, "The Internet in New Zealand 2015" p 35. https://workresearch.aut.ac.nz/__data/assets/pdf_file/0003/71328/WIPNZ-Report-060515.pdf

7. "Digital advisory group to be established" (December 2017), https://www.beehive.govt.nz/release/digital-advisory-group-be-established

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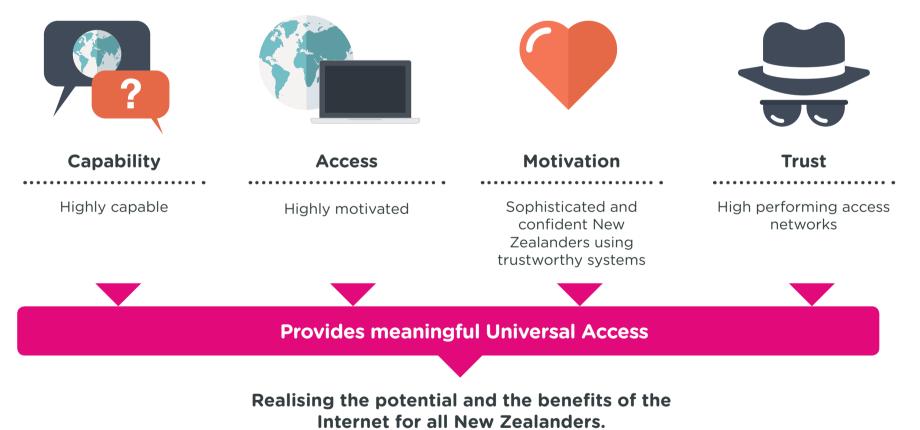
What do we mean by Universal Access?

At its most basic, Universal Access is ensuring that all people within a society have the ability, accessibility, and affordability, to get online.⁸ These foundations enable the development of skills to use the Internet in a meaningful way. The United Nations supports Universal Access to the Internet as it is a key enabler of human rights, including the right to the freedom of expression.⁹

Having a goal of Universal Access for New Zealand is a commitment to understand and work to address digital divides as they impact New Zealanders.

As we get closer to Universal Access, the task of addressing digital divides gets harder, because the remaining people will have complex divides and are likely to have fewer touchpoints with community services and government.

We believe that Internet access will shortly become a core necessity (similar to housing, sustenance, clothing, medical care and necessary social services) to stay a connected member of society. If we are to continue to grow as a country we all need access to the Internet and the ability to use it. This means we all need to work together to solve digital divides and work towards Universal Access, so all of New Zealand experience the benefits of the Internet.



8. International Telecommunication Union, "Universal Access: An Overview", http://www.ictregulationtoolkit.org/toolkit/4.1

9. United Nations General Assembly, "Report of the Special Rapporteur on then promotion and protection of the right to freedom of opinion and expression", A/HRC/17/27 (16 May 2011), http://www2.ohchr.org/english/bodies/hrcouncil/ docs/17session/A.HRC.17.27_en.pdf

Defining Digital Divides in 2018

What is a Digital Divide?

Digital divides are the gaps between those who:

- a) have access to the Internet, and those who do not
- b) can afford an Internet connection and devices, and those who can not
- c) have the capability and skills¹⁰ to use the Internet, and those who do not
- d) are not limited by impairment online, and those who are
- e) have the capability, motivation and trust to use the Internet to enrich their lives and their social connections, and those who do not.

Traditionally the digital divide has been defined as whether someone has Internet access or not, but as the Internet matures, we need to consider all the factors required for people to meaningfully use and benefit from the Internet.

Digital divides are the barriers that keep anyone from being able to fully participate as a digital citizen.

The barriers to digital inclusion, the "divides", are experienced differently depending on who the person is, where they live, and the other identities put upon them. Age, socioeconomic wellbeing, education level, gender, ethnicity, impairment and language may all be obstacles to inclusion, and some of these categories will overlap and exacerbate one another.

A digital divide reflects a gap between those who have, and those who lack, the access, capability, motivation, and trust needed to meaningfully benefit from the Internet. These gaps have shrunk rapidly as more people recognise the potential of the Internet and are motivated to get online, and infrastructure reaches deeper into New Zealand. However, as more services move online and the Internet becomes such an important tool in many people's lives, the effects of the digital divide become more severe. Digital divides are some of the modern indicators of poverty and social deprivation.

10 In this framework, 'Capability' is the broad term to cover skills and accessibility needs. Someone who has accessibility needs does not necessarily lack skills, but lacks tools.



Who is most at risk?

As is expanded on in "The Pulse of Our Nation",¹¹ the groups of New Zealand society most at risk of digital divides are:

- People living in rural communities
- People with disabilities
- Migrants and refugees with English as a second language
- Families with children in low socio-economic communities
- Māori and Pasifika Youth
- Offenders and ex-offenders
- Seniors and older New Zealanders.

These groups often interrelate with each other, and **many of these identities intersect**. **Many of the at risk groups here include people who experience multiple obstacles to full digital participation**. Experienced at the same time, these obstacles combine to exacerbate the disadvantage the person faces.

One size will not fit all

Someone who is highly skilled, but has no access to connectivity, is disadvantaged just as someone with very little skill, but can readily access the Internet, is. However, these individuals need vastly different tools and assistance to overcome their digital divides.

InternetNZ believes that Universal Access for all New Zealanders is achievable. However, there will not be one national solution to New Zealand's digital divides. We can instead develop a framework for addressing the obstacles faced by different New Zealanders, which we will explore further on in this paper.

11. Ministry of Business, Innovation, and Employment "The Pulse of the Nation" (May 2017) http://www.mbie.govt.nz/infoservices/science-innovation/digital-economy/digital-new-zealanders-the-pulse-of-our-nation-may-2017.pdf

Thinking beyond infrastructure

Fibre networks are important but not sufficient for digital inclusion.

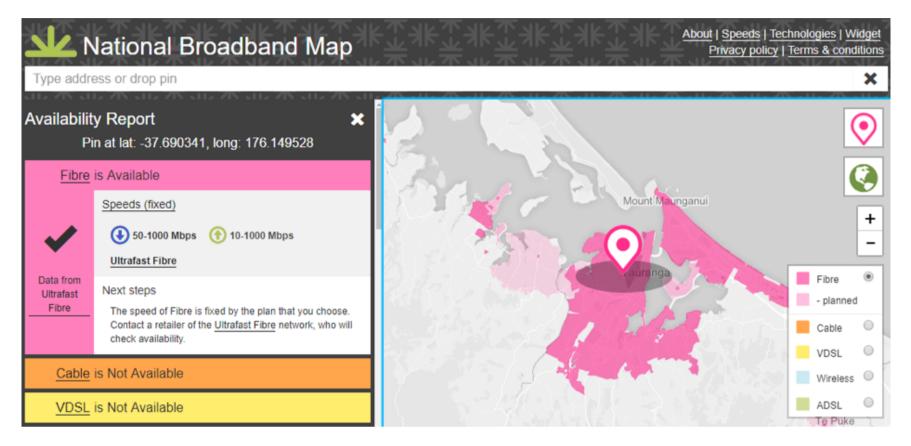


Image from the national broadband map (https://broadbandmap.nz)

New Zealand's connectivity infrastructure is expanding rapidly, however some people remain cut off from being able to fully participate in the digital world. Internet access is an enabler of social and economic well being throughout New Zealand, as individuals are more easily able to connect to their communities, transact with government, access educational resources, and unlock business and employment opportunities. As such, the time is right to decide what the future of digital inclusion looks like for our nation.

Today, infrastructure access is no longer the primary access issue for New Zealanders. 93% of Kiwis tell us they have the Internet.¹² The infrastructure, be it fibre, copper, cable or fixed wireless, is there. By 2025, 99% of New Zealanders will have access to broadband speeds of at least 50Mbps.¹³ We need to turn our minds to the non-infrastructure digital divides, ensuring people can afford Internet access, and have the skills, motivation and trust in

the Internet to make the most of it. By the time the Ultra Fast Broadband and the Rural Broadband Initiative roll outs are complete, it is projected that there will only be 16,000 households and businesses still lacking access to broadband of at least 20 Mbps download.¹⁴

12 UMR, "Consumer Perceptions of the Internet" p3, https://internetnz.nz/sites/default/files/Final%20-%20Report%20 Internet%20NZ%20Research%20June%202017%20From%20UMR.pdf

13 Beehive, "Ambitious target set for rural broadband", (7 October 2015). https://www.beehive.govt.nz/release/ambitious-target-set-rural-broadband

14 Best estimate after RBI2 and UFB2. See Crown Infrastructure Holding's latest report here: https://www.crowninfrastructure. govt.nz/wp-content/uploads/2018/03/UFB-and-RBI-programmes-fact-sheet-7-March-2018.pdf We acknowledge that there are still issues. E.g.:

- The gaps in rural connectivity during the rollout period of UFB and the RBI through the 2022
- We need practical solutions to connect the 16,000 households that will remain unable to access connectivity infrastructure after 2022
- An ongoing vision for ever improving connectivity for rural areas beyond RBI2.

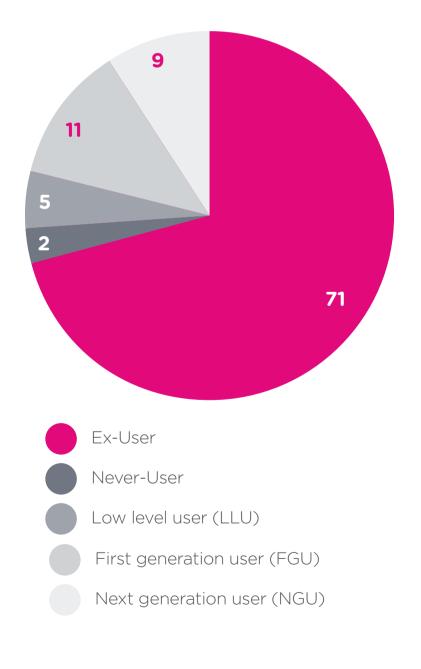
What about people who choose to not use the Internet?

So long as people really are genuinely choosing not to use the Internet - then that's their choice. However, it is important that this is a genuine choice, which does not result from barriers to access, capability, or trust. Universal Access would mean that these factors are not persistent barriers to New Zealanders benefitting from the Internet. This will become increasingly more important as traditionally in-person transactions move online, like banking, commerce and government interaction.

Government's services are being rapidly transformed to be digital first. Soon it will be the default to interact with Inland Revenue, Work and Income NZ, Identity and Passports and

many other contact points, online. Digitising services can enable cost reduction and staff reduction, which is positive for government, but may reduce access for digitally excluded New Zealanders.¹⁵

The World Internet Project highlights these differences. The 3% of respondents who are ex-users are less likely to be experiencing a digital divide than the 5% of people who have never used the Internet. Many of these ex-users would have made choices not to use the Internet that have nothing to do with affordability, capability or motivation and everything to do with personal agency and personal views.



We can aim for Universal Access and digital inclusion, while understanding that there will always be a small portion of New Zealanders who have opted out of Internet access.

15 World Internet Project NZ, "The Internet in New Zealand 2015" p2, https://workresearch.aut.ac.nz/__data/assets/pdf_ file/0003/71328/WIPNZ-Report-060515.pdf

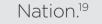
What do we know about digital divides already?

This paper draws upon and reflects on the excellent work already done on digital divides in New Zealand. Current interventions, as well as similar work being done internationally.

There is other research from academia, business, government and community organisations which can also help increase our understanding of digital divides in New Zealand, and a key step to working towards Universal Access for New Zealand is to share what we know across sectors.

Key documents

Who	Title	Summary
World Internet Project (WIPNZ)	The Internet in New Zealand 2015. ¹⁶	A longitudinal survey investigating New Zealanders' usage of, and attitudes towards the internet. It is a part of an international project that compares the survey results of more that 40 other countries.
Innovation Partnership	Digital Inclusion in New Zealand: Assessing Government policy approaches and initiatives. ¹⁷	A comprehensive review of research locally and abroad on digital inclusion, with recommendations to help achieve government's goal of ensuring all New Zealanders can fully participate in the digital world.
20/20 Trust	Manifesto for Digital Inclusion. ¹⁸	Released in the lead up to the 2017 New Zealand election, this manifesto set out bold recommendations for digital inclusion for all New Zealanders.
Digital Inclusion Group (MBIE)	Digital New Zealanders: The Pulse of Our	Commissioned by MBIE in 2017, this report sets out recommendations for enabling all New Zealanders to be digitally included.



16 World Internet Project NZ's 2017 report is being released alongside this paper. Go to https://workresearch.aut.ac.nz/ current-research/surveys/world-internet-project-nz/reports to find the latest data from the WIP.

17 Innovation Partnership, "Digital Inclusion in New Zealand: A Call to Action" https://innovationpartnership.co.nz/app/ uploads/2016/07/Soper-2017-Digital-Inclusion-Fellowship-Summary-Paper.pdf

18 20/20 Trust, "Manifesto for Digital Inclusion" (August 2017), https://2020.org.nz/manifesto/

19 Digital Inclusion Research Group (2017) "Digital New Zealanders: The Pulse of Our Nation" http://www.mbie.govt.nz/infoservices/science-innovation/digital-economy/digital-new-zealanders-the-pulse-of-our-nation-may-2017.pdf

Digital Inclusion will look a little different for every New Zealander



Capability

- I have the skills to be able on the Internet
- I have the digital tools to suit my needs.



Access

••••••

- There is Internet infrastructure where I live
- I can afford an Internet connection that meets my needs.

Motivation

••••••••••••••••••••••••••••••

- I have a meaningful purpose or reason to use the Internet
- I know the reasons why using the internet can be beneficial for me.



Trust

- I know how to best protect myself from crime, privacy or security breaches and who to contact when things go wrong
- I have faith in the technology I use.



Managing Information

 I can use a search engine to find information about courses of study or job vacancies, e.g. SEEK

 I can consult authoritative online resources using basic search and navigation features of a web

PDF

Communication

 I use the Internet and common digital devices and software to connect with other users and devices, e.g. email, messaging,

texting, forums,

social media

 I can manage email attachments and know how to download

Transaction

- I can use Internet banking to manage my money
- I can purchase and sell goods online.

Creating

- I use online tutorials to extend my learning and solve problems
- I can access health portal ManageMyHealth
- I can fix simple problems occurring on digital devices and do not have to rely on others.

Problem Solving

• I can share digital photos with family and friends

- I can collaborate in the production of shared documents
- I can create new code to manage computer functions.



If we can create an environment where everyone has the access, capability, motivation and trust to flourish online, whether their aims are to communicate with family, run a business online, or collaborate on a project, each New Zealander will be able to use the Internet to reach these goals.

20 From the UK digital inclusion strategy: https://www.gov.uk/government/publications/government-digital-inclusionstrategy/government-digital-inclusion-strategy

Let's address digital divides together

What can be done & where to from here?

While we are missing some data on what digital divides look like in New Zealand, there are plenty of opportunities for easy and effective interventions. We believe that the New Zealand Internet community and Government together can:

Pilot, experiment, innovate, codesign and collaborate to solve digital divides across New Zealand.

InternetNZ wants every New Zealander to have the ability to be digitally included if they choose. The obstacles to this goal can be analysed and solved. We can know where the problems are, what they look like, and what could be done.

As a nation, we need to develop measures and targets for digital inclusion, and collect the necessary data to track these targets. We need to know where digitally excluded people are, and the divides they face. To build this knowledge we need:

A New Zealand target for Universal Access, supported by civil society, government and New Zealanders. The government has announced an intention to close the digital divide by 2020. We support the development of targets and measures to track digital divides in New Zealand.

Better measures of digital capability, and skills. InternetNZ released the Digital Divide Map in 2017, and one of the key findings we had is that strong co-ordinated data on digital skills in New Zealand is needed.

To reach out to communities and get them involved in addressing their digital divide challenges. To uncover the lived experience of digital divides, and to get everyone invested in overcoming digital divides, any work will require local community action, and require listening to the needs of people who experience digital divides.

A focus on accessibility for all users. Providers of web-based services need to understand the reasons for, and principles of accessibility. We need to make this as simple as possible to achieve so providing tools and frameworks as well as targets will be important.

We can collectively push the indicators on digital divides to create better outcomes for everyone. We have taken a close look at a few divides we believe we can close below, with some ideas on how to get started.

Here are some examples of digital divides, potential solutions that could be explored and piloted and measured.



There are plenty of New Zealanders without a home Internet connection who live in communities where there is an abundance of networks. By the time the UFB fibre rollout is complete, 87% of New Zealanders will have fibre access, with most having access to VDSL, ADSL and fixed wireless as alternative choices.

The ability to afford these connections will continue to be, for some, the major hindrance. Options for addressing the urban affordability divides include:

- 1. The Ministry for Social Development (MSD) could partner with Internet Service Providers (ISPs) to implement subsidised Internet connections (e.g. Spark Jump or other low-cost Internet provision initiatives).
- 2. Housing New Zealand could provide subsidised Internet connections to their premises.
- **3.** ISPs could develop payment structures that allow for sustainable access to customers despite lack of access to credit.

There are organisations in New Zealand who are actively trying to bridge the affordability gap for New Zealand families. (e.g Chorus and Network for Learning build in Christchurch for school children).²¹ However, there are gaps in efforts to connect adults who are not in education, employment, or training, people without school aged children, and seniors.

Access

What to do about the most remote 1%?

As we have mentioned, the vast majority of New Zealanders will be provided with high quality Internet infrastructure by the end of the UFB2 and RBI2 projects (the next phases of the fibre network rollout and rural broadband builds. However, there will be some 16,000 households that will not be covered by a high speed Internet network. InternetNZ will continue to advocate for Infrastructure options that mean that all New Zealanders can

access the Internet, and use it to make the most of their potential.

We think that the New Zealanders in these most remote households deserve the benefits, communities and access to the rest of the world that the Internet can bring.

21 Chorus, "Chorus reveals technology upgrade for schools and students" (November 2017), https://news.fuseworksmedia. com/2423daca-d192-4350-a7ff-3b5a82aabfd3/24ced541-d3d7-435c-b39a-b2f3a0c2a360

As a back-stop while we think of terrestrial solutions, subsidised Satellite Internet is a viable option to offer to our more remote fellow New Zealanders. A basic Satellite Internet connection costs between \$135-\$139/month. A publicly funded \$70 subsidy (<50%) for 8500 homes would cost \$1,200,000/month or \$14,200,000 a year.

The other cost associated with satellite Internet is that installation can cost \$700-\$1,000. Therefore installation for all 16,000 households would represent an upfront cost of \$12,000,000-\$17,000,000.

While not insignificant, this level of expenditure indicates that, for a relatively small amount of money, the goal of Universal Access could be addressed at an infrastructure availability level.

Such a subsidy would also enable local and central government agencies to more easily identify where remote households could be reached and connected to the Internet at lower costs than subsidised satellite.

Access for the most remote New Zealanders could be addressed for \$17 million up-front (installation costs) and a further \$14.2 million per annum. The Government should trial satellite subsidies to understand the demand, use and benefits.

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Capability What to do about skill-based divides

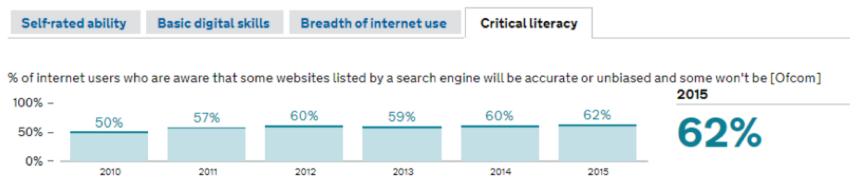
Having access to Internet infrastructure, and being able to afford a connection are important prerequisites for being digitally included, but this means nothing unless people know what to do with their internet-connected digital devices.

Measuring skill-based divides

We need benchmarks and measurable goals for digital skills in New Zealand. The United Kingdom government and NGO community have been working on this for their own citizens and have developed some tools that we would be wise to emulate.

Skills and confidence

People are gaining skills and confidence to use the internet



Digital Inclusion Dashboard, GovUK

A Digital Inclusion dashboard is hosted on the gov.uk website, and tracks key indicators "about progress towards a digitally inclusive society".²²

The UK's Go ON UK (which was rebranded as Dot Everyone in 2017) has developed a "Basic Digital Skills Framework" which shows a standard of what citizens and organisations need to achieve to participate fully in the digital world, and how to get there. It was designed in collaboration with academia, the public, private and non-governmental organizations NGOs).²³ The five areas of capability they have deemed essential are:

- Managing Information: Find, manage and store digital information and content
- Communicating: Communicate, interact, collaborate, share and connect with others
- Transacting: Purchase and sell goods and services; organise your finances; register for and use digital government services
- Problem solving: Increase independence and confidence by solving problems and finding solutions using digital tools
- Creating: Create basic digital content in order to engage with digital communities and organisations.

Safety and security are addressed within each capability, recognising confidence and justified trust as crucial to success. By defining the goal of what a digitally skilled citizen looks like, we can better build the roadmap to digital inclusion. By focusing on these outcomes, we are not limiting how, and with what technology, they can be achieved (for example, we would not frame a digital skill around being able to use a mouse, as it would exclude those who cannot use a mouse due to impairment).

Much of the work done in the UK is directly relevant to the experiences of skill-based divides in New Zealand and we can use this framework as a way to create goals for Universal Access.

22 UK Government Digital Service, "Digital Inclusion Dashboard", https://www.gov.uk/performance/digital-inclusion 23 Tech Partnership UK, "Get Digital basic skills framework", https://www.thetechpartnership.com/globalassets/pdfs/basicdigital-skills-standards/basic_digital_skills_framework.pdf

Addressing skill-based divides

The New Zealand government has committed to reinstating funding for Computers in Homes, an initiative from 20/20 Trust which provides digital skills training, technical support, computers and subsidised home internet to students' families in low-decile schools and, since 2004, to refugee families. Families receive 20–30 hours of free training, a refurbished computer or other digital device, 12 months' subsidised Internet and technical support.

Computers in Homes to Internet in Hands?

Computers in Homes has had a positive impact on many families to date, and we would like to see it evolve into its next iteration when its funding is restored by the New Zealand Government, as announced as part of the Labour and New Zealand First coalition agreement.



Capability Working towards a more Accessible Internet

Universal Access goes beyond delivery of skills and tools. It is also about ensuring the Internet is built for a wide range of people with different needs.

The capability divide does not just affect those who lack the skills and knowledge to participate online, but to people with accessibility barriers. Visual, auditory, or motor impairments can all hinder someone's ability to participate on the Internet in a meaningful way. There are assistive technologies to aid people, like screen readers for the visually impaired. But these tools only work if content created for the Internet is built with explicit attention to those needs.

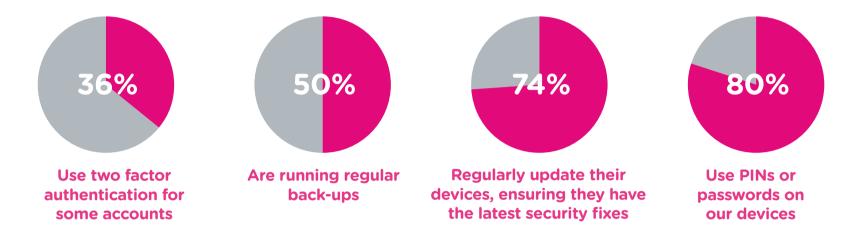
The New Zealand Government does have a Web Accessibility Standard, to set guidelines for how web pages should be built to enable access for the largest range of people.²⁴ This Standard is mandated for all public service departments, so if someone with accessibility needs is engaging with a government service, they should be equipped to do so online. We can continue to improve this standard, and help non-government organisations and commercial companies to meet the same standards.

Creators of online content should strive to build in accessible tools ,like subtitles and audio descriptions. These should be available in online and other digital entertainment services. Apps to access radio services should be required to be fully accessible. These are shared cultural touchpoints for most New Zealanders, and by building them for everyone, digital divides will be more easily overcome.

24 Department of Internal Affairs, "About the Web Accessibility Standard" (June 2016), https://webtoolkit.govt.nz/guidance/ about-the-standards/about-the-web-accessibility-standard/



Risks and concerns about the Internet can be a barrier to accessing its benefits. Overall, almost all New Zealanders view the Internet as a good thing. 88% think the overall benefits of the Internet outweigh the negatives.²⁵ That said, New Zealanders do have concerns about the Internet, and are interested in what they can do to stay safe online. Most take at least some steps to protect themselves and their data.



CERTNZ, NetSafe, InternetNZ and other organisations are working to help protect New Zealanders online. Good guidance can help guide people to take effective steps to be safer online.

CyberSmart week, run by CERT NZ and ConnectSmart, was successfully run in 2017 for the first time, replacing previous public awareness campaigns about cybersecurity in Cyber Security Awareness Week and ConnectSmart Week. We see a public awareness campaign as one important way of addressing digital divides relating to trust.

25 UMR Research, "Consumer perceptions of the Internet", (June 2017) https://internetnz.nz/2017-internet-research

Conclusion

We are calling for a nationwide target for Universal Access to the Internet.

To get there, we need collaboration across New Zealand, including Government and civil society, to remove the systemic obstacles that are keeping people from progressing on their journey towards digital inclusion. This paper includes recommendations for us all to start this work together in 2018.

New Zealand needs political responsibility for success; and a collective target of Universal Access.

We think that closing digital divides is the best investment government can make. We want to see responsibility and accountability from central government, and the support of civil society and local communities.

Together, we need to find digitally excluded people:

We want to use InternetNZ's digital divide map²⁶, reach out to communities, and find people who are excluded.

We need to collect and curate data on digital divides:

Like the example of the UK Digital Inclusion dashboard, New Zealand should be tracking digital divide indicators closely, so we can see if meaningful change is occuring.

We all should be piloting initiatives which close digital divides, and scaling up successes:

Below are a few projects we would like to see piloted by government and civil society.

26 The map is online at https://digitaldivide.nz. For more information on the map, and how we will be improving it over time see our Mapping Digital Divides in New Zealand report.







Access infrastructure



• Awareness campaigns from local organisations to get their communities engaged about the benefits of the Internet.

Infrastructure

- Government should be looking at the future of rural connectivity, and making a plan for the last few thousand underserviced households
- Trial satellite broadband programmes which subsidise satellite connections for rural people in need.



Access affordability

Affordability

- Ministry for Social Development partner with ISPs to trial subsidised Internet connections
- Housing New Zealand explore and trial cost-sharing or subsidised Internet connections for its properties
- Expand projects like Spark Jump to be more accessible for families, and open them up to families without school age children
- Trial projects that target non-school age children and adults
- Internet Service Providers should work with communities to look at enabling payment methods that work for all New Zealanders. Ensure that credit card ownership and credit checks are not barriers for Internet access.



- Collect robust longitudinal data on digital skills in New Zealand, which can be disaggregated by region, gender, age, and other indicators
- The Computers in Homes programme should be re-funded and reformulated to centre on users needs in 2018 and beyond
- Build the skills and awareness of the technical and business community to build an accessible Internet
- Build training and educational capability that is not focused on one-size-fits-all tools, methods, and skills but focuses on multiple ways to achieve specific outcomes
- The Government Web Standards should be extended beyond the Public Sector organisations to apply to other government, local government and territorial bodies (e.g. Environmental Councils, DHBs etc)
- Development of digital services must include people with accessibility needs, to ensure the Internet we are creating is built for everyone.



Trust

- Facilitate work with existing, trusted organisations such as Citizens' Advice Bureau NZ
- We recommend that additional funding is provided to CERT NZ to scale up CyberSmart Week with a focus to getting 95% of New Zealanders using two factor authentication, running regular back-ups, patching and protecting devices with PINs.



Level 11 80 Boulcott Street Wellington 6011

P.O. Box 11-881 Wellington 6142 New Zealand

Free phone: 0800 101 151 **Phone:** +64 4 472 1600

www.internetnz.nz



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