**THE TREASURY'S LIVING STANDARDS FRAMEWORK**

February 2018

The Treasury has released new material on its Living Standards Framework, in particular a Treasury Paper and related discussion papers that describe the different components and dimensions of intergenerational wellbeing in the Living Standards Framework.

The Treasury continues to make the historical material in this document available to support researchers interested in the development of the Framework since 2012.

Please refer to the current Living Standards Framework material listed at
http://www.treasury.govt.nz/abouttreasury/higherlivingstandards

Office of the Chief Economic Adviser
The Treasury

# Living Standards Background Note: 'Social Infrastructure'

## The purpose of this note[1]

The Treasury's vision is to be a world-class Treasury working for higher living standards for New Zealanders (Treasury, 2012b). This means thinking beyond economic growth and considering the broader range of human, social and environmental factors that contribute to wellbeing. Accordingly, the Treasury released its working paper outlining the Living Standards Framework including four capital stocks most central to the Treasury's core business when providing policy advice (Treasury, 2011).

More recently the Treasury released a Living Standards policy tool to highlight the five key dimensions that we think are fundamental for us to consider when providing policy advice consistent with our vision (Treasury 2012). Each of these five dimensions is important in its own right, but on occasions government will need to be advised of the way they interact - either strengthening each other or coming into tension. The Treasury's overall advice should strive to identify options that strengthen all dimensions of living standards across a broad set of policies.

This background paper considers social capital specifically as one of the four types of capital stock identified in the Treasury's Living Standards Framework as underpinning living standards. And social infrastructure, which we have defined as the enabling environment for the creation of social capital, is one of the five key dimensions we have identified as fundamental when considering higher living standards for New Zealanders. When we think about social infrastructure, the Treasury focuses on increasing possibilities for shared values, social networks and co-operation to add value to the lives of New Zealanders.

This paper is intended to complement the Treasury's background note "A Short Guide to Social Infrastructure" (Treasury, 2013), which outlines several theoretical social capital constructs as well as listing questions to consider when evaluating the impact policy decisions are likely to have on social infrastructure and stocks of social capital. This is not an exhaustive review of the literature and the New Zealand statistics, but is intended to highlight the key aspects and stimulate consideration of facets of social capital that may be important when attempting to formulate policy advice in this area.

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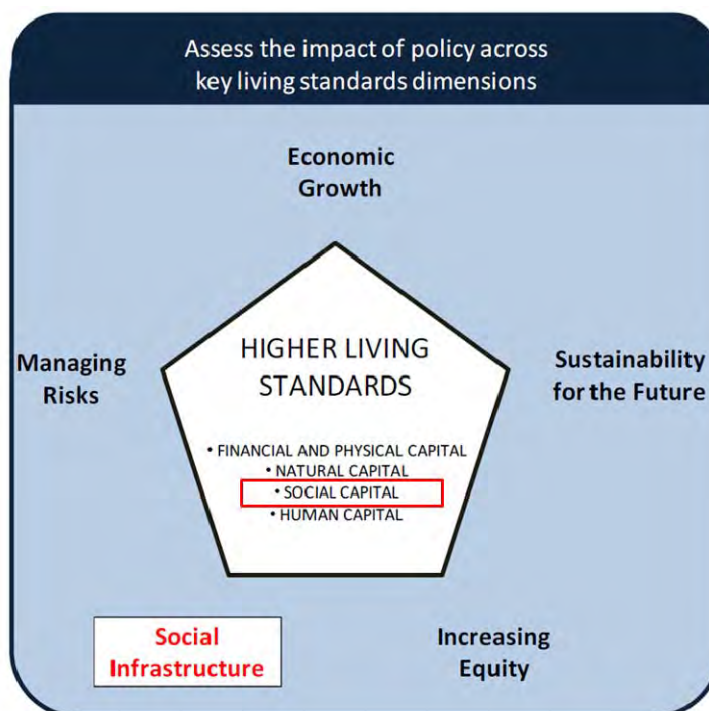
[1] This note was largely written by Carsten Grimm while he was a summer intern at Treasury in 2013.

# Executive summary

**Social capital refers to the interconnectedness of individuals within society.** This interconnectedness leads to a flow of value to individuals and institutions in society through the level of trust in a society and the ability of people to work together for common purposes.

**Social capital is a multi-dimensional, multi-level construct.** The field acknowledges three distinct types of social capital; bonding, bridging, and linking. Social capital exists at the individual level in terms of attitudes of trust, and at the community or state level in terms of resilience and culture.

**Social infrastructure is the environment in which social capital is created.** In the policy context, it is:

▸ those decisions which may impact on the level of social capital through enhancing or undermining people's relationships with each other and with key institutions, and

▸ social norms such as the rule of law, the culture of trust or distrust, and the feelings of fairness or disadvantage.

If the environment is positive then this can enable the accrual of social capital. The effect of social infrastructure investment is complex and research is needed to uncover more of the causal pathways from social infrastructure initiatives to social capital returns.

**Social capital accrues slowly and is eroded quickly.** It can take years for networks to become fully effective and once trust is eroded it can be difficult to recoup. An element of protective consideration should be applied to the social infrastructure that enables social capital.

**Social capital is not distributed equally.** Social capital has been shown to operate differently across and within even similar societal groups. Bridging and bonding connections do not provide equal advantages across all levels of society—those with lower incomes may face more barriers to participation by being unable to translate connections into access to resources such as job offers, or informal help from experts. Sensitivity to how social capital operates at the micro-level is therefore necessary when evaluating policy decisions.

**There is no clear best-practice for social capital measurement.** Social capital measurement is best considered as a set of related constructs. While many different indicators exist, bonding, bridging, and linking social capital are useful categories for analyses in their own right.

**Current measurement indicators suggest New Zealand has social capital strengths and weaknesses.** Linking social capital is high in New Zealand in terms of the lack of perceived public sector corruption. Bridging social capital is also strong, as shown by New Zealand exhibiting strong volunteerism in terms of the time given on average to helping others. However, New Zealand rates poorly on some indicators of bonding social capital, particularly on family violence.

**Attention to sub-national data is required to identify important social trends.** Aggregated data can mask important social trends within traditional survey clusters. Sufficient granularity of measurement is required to track social capital stocks and ensure future sustainability.

# The structure of this report

This report covers three key areas: social capital themes; key measures; and examples from the Christchurch earthquake.

**Part one** gives emphasis to the key themes within social capital theory highlighted in the Treasury analyst note on social infrastructure[2] that are relevant to the current understanding of social capital from a wide body of literature. This is not an exhaustive review but is intended to stimulate consideration of some aspects of social capital which are important when attempting to formulate policy advice in this area. This section offers a framework for considering the complexities of social infrastructure, social capital, and the benefit flows from being high in social capital.

**Part two** identifies key measures and statistics that are currently used to capture and track social infrastructure and capital stocks. These are at the level of international comparison across the OECD and at the sub-national level within New Zealand as a whole, considering not only national averages but also levels of social capital within different societal groups. Key recommendations are provided following this analysis in part three.

**Part three** uses the experience of the 2010/11 Canterbury earthquakes to look at how social capital impacted on the resilience of the community and the effectiveness of the government's response.

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[2]   Available on the Treasury website
      http://www.treasury.govt.nz/abouttreasury/higherlivingstandards/hls-ag-socinfr-jan13.pdf

# Part one: Key themes within social capital theory

### *Social capital has many definitions...*

Social capital has experienced an explosion of research interest and literature attention over the past 10-15 years. Figure 1 shows the exponential increase in number of articles per year on social capital; as at February 2013 there were 12,101 academic articles with the topic 'social capital' (sourced from Web of Science). Given this meteoric rise in interest in the field, there are numerous definitions of social capital.

Figure 1: Number of articles per year with the topic 'social capital'.
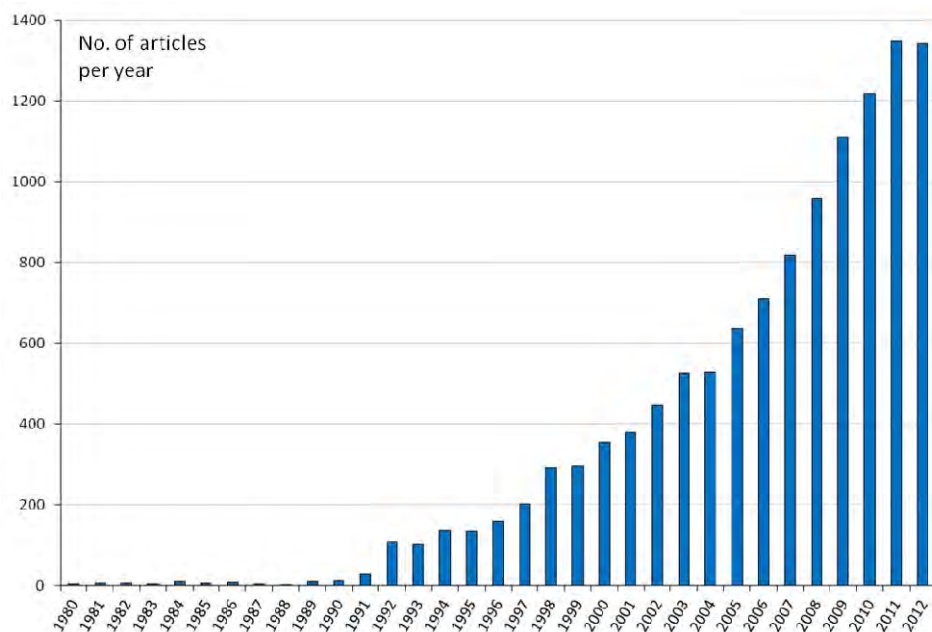


Source: Web of Science

### *...but the key ideas are interconnectedness, social norms and trust.*

At its most fundamental social capital refers to the "interconnectedness of individuals and organisations within society" (Taylor, Wells, Howell, & Raphael, 2012). Statistics New Zealand defines social capital as the "relationships among actors (individuals, groups and/or organisations) that create a capacity to act for mutual benefit or a common purpose" (Statistics New Zealand, 2001). The OECD (2001) defines it as "the networks, together with shared norms, values, and understandings which facilitate co-operation". The World Bank initiated the Social Capital Initiative (SCI) in 1996 to advance the understanding of how to measure and monitor social capital including how social capital contributes to development: social capital according to the SCI refers to the "degree of trust in a society and the ability of people to work together for common purposes" (World Bank, 2001).

At the heart of what is being discussed are societal interactions such as family relationships, neighbourhood interactions, workplace connections and government interactions. Given the pervasiveness of these relationships there is considerable benefit to be gained from ensuring they remain nurtured and functional. The idea that these relationships have value is central to an understanding of social capital.

*Social capital is complex. It is what an individual experiences, but also applies to the properties of a community or a nation...*

There has traditionally been considerable confusion in the literature on social capital as to whether it refers primarily to an individual attribute (e.g. attitudes of trust) or a property of collectives (e.g. community resilience). Despite concerns over the 'conceptual creep' of definitions of social capital, the field now acknowledges it refers to *both* private and public phenomena, and social norms and institutional settings can impact on both levels. Therefore, a multi-level understanding is required when considering social capital. We should think about individuals (and their networks) nested within areas (like neighbourhoods and states) that vary with respect to their levels of social capital (Kawachi, Kim, Coutts, & Subramanian, 2004).

*...and it has different dimensions - Bonding, Bridging and Linking Social Capital.*

A useful conceptual distinction is drawn within the social capital literature between bonding, bridging, and linking, relating to close relationships, acquaintances, and linkages to those in authority.

**Bonding** is the direct close relationships experienced between friends, family, whanau or iwi. This type of social capital is necessarily inward-looking, in-group specific, and exclusive of those outside of the reference group.

Bonding networks are particularly important for individual well-being, as they provide vital social and psychological support (Putnam, 2000). Usually high bonding social capital is beneficial but this is not always the case. Terrorist networks such as Al Qaeda are excellent examples of tight bonding, enabling their participants to accomplish goals they could not accomplish without that network (Putnam, 2007). One possible consequence of strong in-group bonding is out-group hostility and antagonism towards outsiders (Putnam, 2000). The cultures of some networks can encourage behaviours that disconnect their members from participation in wider society. For example gangs are facilitated through strong bonding, which serves to isolate their members from bridging and linking networks. Encouraging the types of social capital that are socially desirable is therefore a key consideration for policymakers.

**Bridging** by contrast is the network of colleagues, acquaintances, and wider friends and loose associates that a person has within a society. Bridging social capital has advantages to individuals that are similar to bonding. a multitude of research on the health benefits of social connections of both types. (Kawachi, 2008) Summarising this Robert Putnam identifies the following rule of thumb: "If you belong to no groups but decide to join one, your risk of dying over the next year is cut in half" (Putnam, 2000, pp. 331).

Bridging networks are also better for connecting individuals to assets and opportunities than bonding relationships. In a landmark sociological study in the United States, Mark Granovetter (1974) demonstrated that 'weak ties' (bridging networks) are more valuable than the close ties of relatives and friends when seeking employment, as the ability to connect with people from a diverse social background offers more opportunity than one's own sociological niche. This has now been replicated in several other studies around the world. In 2004 the United Kingdom Labour Force Survey revealed that nearly 30 percent of those who had commenced employment in the previous three months had heard that the job was available from someone who worked there—this was more than those who reported learning of the vacancy through advertising (Brook, 2005).

**Bonding**, in summary, is good for 'getting by' whereas bridging is good for 'getting ahead'. A well-connected individual within a well-connected society is more productive than a well-connected individual in a poorly connected society. Even a poorly connected individual will incur some positive spill-over effects of living in a well-connected society (Putnam, 2000) which illustrates the multi-level nature of social capital operating at both the individual and collective level.

**Linking** social capital describes connections with organisations, institutions and relationships across power boundaries. Whereas bridging social capital is 'horizontal' in nature between individuals of essentially equal standing, linking social capital is 'vertical' in nature and encompasses ''norms of respect and networks of trusting relationships between people who are interacting across explicit, formal or institutionalised power or authority gradients in society'' (Szreter & Woolcock, 2004, pp. 655). Linking networks connect individuals, groups, and institutions to authority and facilitate the movement of ideas vertically across boundaries of power (Treasury, 2012). How the government structures access to its institutions can influence the development of linking capital. For instance, the Boards of Trustees system for New Zealand school governance has the potential to increase linking social capital as parents are linked to the formalised institutional system for the running of their child's school, which in turn is linked through to central government.

A cohesive society is one where citizens have a high degree of confidence in their governmental institutions and public administration (OECD, 2013). Linking social capital has been identified as important to institutional trust and the implementation of policy within societies.

Linking social capital effects the implementation of policies aimed at poverty alleviation, economic development, and service provision to the poor (Szreter & Woolcock, 2004). Those who are at the lower end of the institutional power-gradient within society need to trust that their best interests are being served by those at the higher end in order to not resist change attempts. Providing room for local initiative in the design and delivery of public services via consultation and engagement is one way of cultivating valuable linking social capital (Helliwell, 2006).

### *Social capital takes time and effort to build...*

Once appropriate conditions exist for social capital to be supported it will often naturally accumulate. Unlike physical capital, but like human capital, social capital accumulates as a result of its use. Through more interactions between individuals or groups, stronger relationships can be established which in turn can then facilitate even more goodwill and 'stock' for future social transactions. Social participation and networks create norms of trust and reciprocity. These norms increase social trust, which in turn works to increase the intensity and density of the networks of trust and reciprocity, resulting in a virtuous circle (Putnam, 1993). Of particular relevance to the government, the way in which systems are designed (such as the level of individual participation in decision-making, the type of interactions required within the community, and the extent to which the individual is linked to the wider decision-making process) can influence the level of social capital in a community.

Similar to other forms of capital, social capital is not costless to produce. It requires an investment—in terms of time and effort, if not money—that can often be significant and prone to being overlooked (World Bank, 2001). The trusting relationships among the members of a sports club or professional organisation often require years of meeting and interacting to develop. Analyses of civic associations in Italy show how social capital can take *generations* to build and to become fully effective (Putnam, 2000).

*...but it is fragile, and easily undermined.*

However, social capital is fragile and susceptible to erosion by policy that undermines the necessary conditions for it to exist. As the many examples of civil conflict around the world testify, trust is more easily destroyed than built. There is therefore a distinct maintenance expense to social capital, usually in the form of time. The key attribute of social capital, however, is that it is an accumulated stock from which a stream of benefits flows. The view that social capital is an asset—that it represents genuine capital—means that it is more than just a set of social organisations or social values (World Bank, 2001).

## Social capital matters because it impacts on all aspects of life:

*It impacts on individual well-being...*

Positive healthy social relationships are central to individual well-being. The benefits of having a population that is well supported is perhaps the best evidenced area within the field of social capital. Research connecting bridging and bonding as a social support mechanism to positive well-being outcomes within societies is vast and expanding:

> *"Social capital has been empirically linked to improved child development and adolescent well-being, increased mental health, lower violent crime rates and youth delinquency, reduced mortality, lower susceptibility to binge drinking, to depression, and to loneliness, sustained participation in anti-smoking programmes, and higher perceptions of well-being and self-rated health. Where urban neighbourhoods and rural communities (and particular sub-populations) are demonstrably low in social capital, residents report higher levels of stress and isolation, children's welfare decreases, and there is a reduced capacity to respond to environmental health risks and to receive effective public health service interventions."*
> **Szreter & Woolcock, 2004, pp. 651.**

*...it impacts on the economy...*

Research is also establishing the value to the economy of high social capital in the form of trust and norms of reciprocity. Economic activities that require people to trust the future actions of others – a feature of strong bridging social capital – are cheaper to produce in high-trust environments:

> *"Individuals in higher-trust societies spend less to protect themselves from being exploited in economic transactions. Written contracts are less likely to be needed, and they do not have to specify every possible contingency. Litigation may be less frequent. Individuals in high trust societies are also likely to divert fewer resources to protecting themselves—through tax payments, bribes, or private security services and equipment—from unlawful (criminal) violations of their property rights. Low trust can also discourage innovation. If entrepreneurs must devote more time to monitoring possible malfeasance by partners, employees, and suppliers, they have less time to devote to innovation in new products or processes"*
> **Knack and Keefer, 1997, pp. 1252-1253.**

In their seminal work in this area Knack and Keefer (1997) examined the relationship of generalised trust and civic cooperation[3] to GDP growth across 29 countries from the World Values Survey. They found a strong positive relationship: Across nations a 10 percent rise in trust was associated with a rise in GDP of 0.8 percent; an eight percent rise in civic cooperation across nations was associated with half a percent increase in GDP.

New Zealand's relatively high standing on indicators of trust and ethical behaviour may be a source of comparative advantage in this regard, making New Zealand a potentially more desirable investment location than other, less ethically trustworthy locations (Rea, 2010).

### ...and it impacts on the functioning of the state.

Being a country with high linking social capital has many benefits for improving outcomes for communities, reducing the reliance on state resources, and for improving the functioning of the state overall.

> *"Empirical studies indicate that social capital has a profound impact in many different areas of human life and development: it affects the provision of services in both urban and rural areas; transforms the prospects for agricultural development; influences the expansion of private enterprises [...] and can compensate for a deficient state. More generally, it helps alleviate poverty for individuals and for countries as a whole."*
> **World Bank, 2001, pp. 21**

Examples from the recent Canterbury earthquakes of communities working with government agencies to facilitate a more effective response illustrate the value of linking across institutional boundaries.  In the review of the Civil Defence Emergency Management response to the 22 February 2011 Christchurch Earthquake, new structures were recommended to better link the emergency response to the community and community organisations (McLean, Oughton, Ellis, Wakelin, & Rubin, 2012). This was in response to the "significant contribution" of spontaneous self-organising volunteer organisations such as the Student Volunteer Army and recognises the value of cohesive partnerships.

Similarly, NGOs may have better relationships with target community groups than government agencies, which allow for better community outcomes. High social capital is crucial for NGO effectiveness with many NGOs being able to operate over and above government funding levels by relying on high levels of volunteerism and extensive goodwill. In 2004, it was estimated that there were 97,000 non-profit institutions in New Zealand and that 90 percent did not employ paid staff. The number of people who volunteered for one or more non-profit institutions is estimated to be 1,011,600 for the year ended March 2004 and volunteers gave more than 270 million hours of unpaid labour. Non-profit institutions contributed $3.64 billion to GDP in 2004; this was 2.6 percent of New Zealand's total GDP (Statistics New Zealand, 2007).

With non-profit institutions in health, sport and recreation, social services, education, culture, emergency response, and conservation, unpaid work for these organisations is a vital part of the New Zealand social fabric (Statistics New Zealand, 2008). The vital role community groups play was recently acknowledged through the signing of the *2011 Kia Tūtahi –*

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[3]  Norms of civic cooperation were assessed from responses to questions about whether the following 'could ever be justified': a) claiming government benefits which you are not entitled to, b) avoiding a fare on public transport, c) cheating on taxes if you have the chance, d) keeping money that you have found, e) failing to report damage you've done accidentally to a parked vehicle (Knack and Keefer, 1997).

*Standing Together Relationship Accord* by Cabinet on 13 June 2011. Guidelines currently exist for how government agencies can more successfully engage with community groups, build networks and relationships (Office for the Community and Voluntary Sector, 2011). Enhanced linkages between community and the social institutions that serve them is a central aspect of nation building and participative democracy (Wildschut, 2007).

## Social Infrastructure as an enabler of social capital

### The term "social infrastructure" can have many meanings...

Within the Treasury's Living Standards Framework the distinction is made between social capital stocks and social infrastructure within New Zealand. Other people use this term differently, and in some contexts social infrastructure is referred to as 'soft infrastructure' and includes institutions and organisations that accommodate social services. This can include the health, justice, and education systems, which in New Zealand is almost exclusively provided by central or local government (or related entities such as district health boards and universities).

Motu Economic and Public Policy Research has defined social infrastructure more broadly as "the provision, both by the public and private sectors, of areas for actors to connect to others and develop the interpersonal linkages which are regarded as the essence of social capital... Examples of social infrastructure in New Zealand include community facilities, leisure facilities, parks and other landscapes areas, and regional networks such as the Auckland Chamber of Commerce or the Christchurch City Community Boards" (Roskruge, Grimes, McCann, Poot, 2010, pp. 6).

### ...but in this context social infrastructure is the environment surrounding the development of social capital.

In the context of the Treasury's Living Standards Framework, social infrastructure is the enabling environment that either helps or hinders the accrual of social capital. It is therefore the area that is more likely to be amenable to policy intervention as it covers the physical environment, the institutions (e.g. NGOs, community groups), the institutional rule structures (e.g. the infrastructure of law and local government regulations), and the general environment to which the government contributes. The demarcation of social capital and social infrastructure is between attitudes and relationships (e.g. trust and networks) and the environment which might influence their creation or depletion.

Figure 2 pulls together the complex relationships between social infrastructure, social capital, and the benefits to society flowing from high social capital. Three particular examples of many benefits that flow are given to illustrate the framework: benefits of strong bonding flowing to greater individual well-being; benefits of strong bridging facilitating economic performance; and benefits of linking social capital facilitating enhanced state functioning.

This framework draws the distinction between what is able to be influenced directly through policy decisions—social infrastructure—and the resulting outcome on social capital. In reality the situation is more complex than Figure 2 suggests:

▸ The level of social capital (such as trust in government) will determine the success the government can have in establishing the type of social infrastructure that can exist. At the same time social norms or expectations may also limit the options the government can expect the community to embrace.

▸ Social capital itself is often considered as an amalgam of both an ends and means (Aldridge, Halpern, & Fitzpatrick, 2002)—for example a high degree of generalised societal trust can simultaneously be considered as a desired outcome (ends) and as a resource to draw on (means).

▸ The outcomes of the social capital (greater well-being; more innovation etc) will in themselves provide positive or negative feedback into the subsequent level of social capital.

Figure 2: Framework for understanding social infrastructure, social capital, and the flow of benefits associated with high social capital
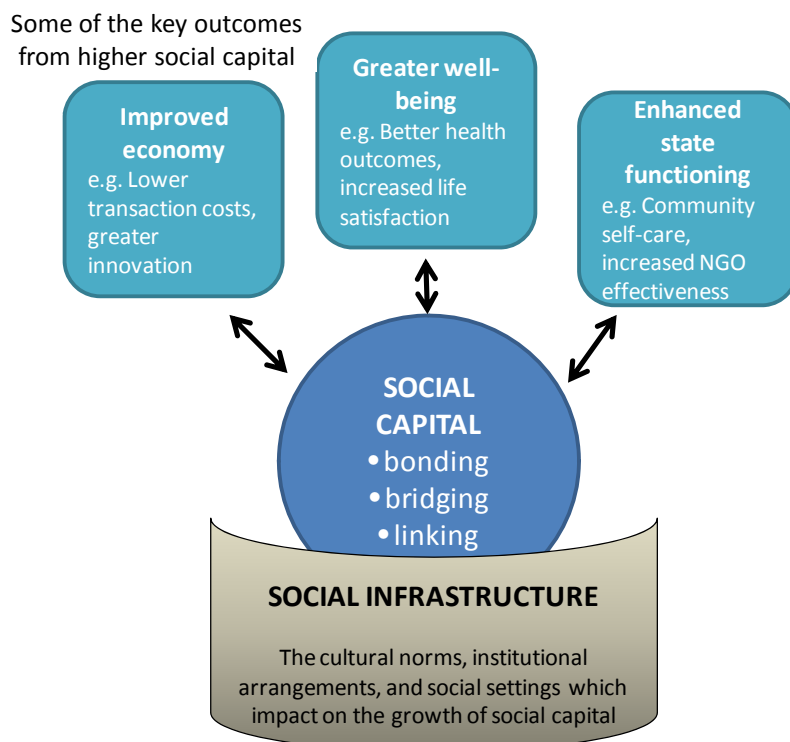


In order to make progress with this considerable complexity, the framework focuses on social infrastructure as the route to grow social capital, which then provides for positive outcomes. It is from the accumulated stocks of social capital that benefits flow: strong bonding within society contributes to greater well-being; high levels of bridging capital in terms of trust and reciprocity contribute to lower transaction costs; and having effective linking capital contributes to more effective community self-care and an NGO sector more able to affect positive social outcomes.

### There is limited evidence about how investing in social infrastructure can increase social capital...

The social capital literature primarily bases recommendations on how to increase social capital on theoretical grounds. Future research effort will be required to establish the empirical linkages between interventions and social capital outcomes. This knowledge would greatly advance the ability of government to formulate policy around raising social capital. Some initial attempts are being made in New Zealand to provide clarity around the mechanisms of social capital formation, which are revealing considerable subtleties.

A pioneering study by Motu Economic and Public Policy Research provides initial support for the relationship between local government (regional council) social infrastructure spending and levels of social capital. Two common proxies for social capital taken from World Values Survey were used; generalised trust and participation in community groups. The results were subtle and complex. Expenditure on regional social infrastructure was shown to play no significant role in predicting trust at the broadest level. However, expenditure on social infrastructure was shown to increase the range of activities amongst those who were involved in community activities, whereas the decision to participate or not was itself negatively correlated with the level of social infrastructure expenditure. One possible explanation was that local governments in areas with low social capital may already be attempting to increase participation rates by raising social infrastructure levels. However, in doing so, these councils increase the range and intensity of participation for those already participating, but do not appear to influence a shift by people from being a non-participant to a participant in community activities (Roskruge, Grimes, McCann, & Poot, 2010).

Motu have also investigated the linkages between the rates of homeownership and linking social capital in the form of participation in the Boards of Trustees process (both voting and actual participation). Homeowners have been shown to be more politically active than renters and have higher voting rates in political elections, possibly because they are less mobile and have invested a large financial stake in their own property, and are therefore more incentivised to improve the quality of their neighbourhood (Roskruge, Grimes, McCann, & Poot, 2011).

Homeownership had no discernible effect on the parental voting turnout once other factors such as school size and decile ratings were controlled for. However, homeownership did predict the chance that primary schools proceeded to a school Board of Trustee election because the number of willing candidates exceeded the number of available positions. One possible explanation was that homeownership increases owners' sense of community and therefore increases their willingness to stand as a candidate for the board. However, this behaviour did not carry through to intermediate and secondary schools, which generally service larger communities (Grimes, Stillman, & Young, 2011). Homeownership was therefore found to have a limited effect on linking social capital in terms of influencing parental participation in school Boards of Trustees' processes.

These examples illustrate that the ability to influence social capital formation via social infrastructure investment is complex and further research might continue to uncover more of the causal mechanisms.

> *"Investing in social capital is more difficult than investing in human capital, where a number of time-tested approaches are available (building schools, training teachers, developing appropriate curricula, and so forth). Equivalent recommendations for investing in social capital have not yet emerged."*
> **World Bank, 2002, p. 25.**

The advantages of being high in social capital are more clearly understood however, and high stocks of bonding, bridging and linking social capital are shown to have differing benefits to society.

### ...and because the existing distribution of social capital is not even, the impact of interventions may also be uneven...

It is widely acknowledged that social capital is not distributed equally, is complex in how it works within and across social groups, and may provide structural barriers to participation in wider society.

There is evidence that the cultural composition of New Zealand may lead to variations in social beliefs and attitudes that could influence social capital formation in subtle ways (King & Waldegrave, 2003). For example, Motu research found Māori and Pacific communities reported lower levels of trust but higher levels of participation in community activities (Roskruge, Grimes, McCann, & Poot, 2010). Geography and location have also been identified as important considerations for social capital formation.

Social capital formation in rural areas is different from that in urban areas, with more bonding rather than bridging social capital in evidence in the former. In the case of New Zealand, there is a geographical break between the North Island and the South Island. While the land mass of the South Island is larger than that of the North Island, it is more sparsely populated, with only 24 percent of the New Zealand population, and also much more ethnically homogeneous, with 90 percent of the population primarily identifying themselves as being European, as compared with only 71 percent in the relatively more urbanised and densely populated North Island (Statistics New Zealand, 2006). The Motu report identified that both the South Island and rural areas reported experiencing greater levels of general trust.

Human capital has also been shown to have a determining effect on social capital formation. Both post-secondary education and higher level occupations are significantly and positively related to trust as is household income (Roskruge, Grimes, McCann, Poot, 2010).

Linking social capital in particular is not distributed evenly. Overseas studies demonstrate that for those in poor communities it is the nature and lack of trusting ties to representatives of formal institutions (e.g. bankers, law enforcement officials, social workers, health care providers) that has a major bearing on their welfare (Szreter & Woolcock, 2004). For example research in Sweden found for both men and women the highest risk of chronic heart disease was found in neighbourhoods with low linking social capital (Sundquist, Johansson, Yang, & Sundquist, 2006).

### ...and the complexity of social settings can mean similar circumstances have very different outcomes.

Greater sophistication in the treatment of theoretical social capital concepts is providing evidence that social capital can operate in very diverse ways within a society. This is beginning to illuminate complex interaction effects both across and within social groups. In one study examining 200 African-American families in 39 Baltimore neighbourhoods, researchers found that for children living in poor areas having a mother with low community attachment was associated with lower levels of behavioural and mental health problems. However, for children living in more affluent areas having a mother with low levels of community attachment was related to higher rates of such problems (Caughy, O'Campo & Muntaner, 2003).

Social capital has also been shown to operate differently even within groups of similar socio-economic status. In an analysis of the causes of the more than 700 fatalities due to the 1995 heat wave in Chicago, two matched, poor districts showed polar-opposite responses to the crisis. A disproportionately high death-rate in the suburb of North Lawndale was associated with a high incidence of living alone and with the absence of any social contacts. This led to many deceased elderly men being found locked in their own apartments due to the chronic state of fear in the neighbourhood. By contrast, adjacent South Lawndale (also a poor area in which many homes similarly lacked air conditioning) benefited from a vibrant Latino community in which people felt relatively safe in public spaces. It exhibited starkly contrasting, disproportionately low mortality during the heat wave (Klinenberg, 2003).

*One of the key features that differ is the type of networks...*

The types of connections people and groups have can clearly vary greatly across society. An individual's 'portfolio' of social relationships—the characteristics of bonding, bridging, and linking relationships—is an important proxy of the resources an individual has access to through their network (Szreter & Woolcock, 2004). Additionally, the more connections an individual has in their network the more likely they are to receive similar feedback from multiple sources. This can have a powerful influence on behaviour. Research is empirically revealing the power of networks to influence—for good and for ill—an extremely diverse range of outcomes, from how emotions are contagious to how health behaviours can spread across several remote connections of people (Christakis & Fowler, 2009).

The amount of diversity within a network also speaks to the amount of bridging across divisions within society. For this reason, the Australian Bureau of Statistics (2009) asks participants what proportion of their friends were of a similar age, of the same ethnic background, and had roughly the same level of education. Of particular concern is the formation of certain homogenous geographical enclaves within communities. These may promote strong within-group support structures but risk forming structural divisions between different socio-economic or ethnic groups.

Future work will provide insight into the composition of New Zealand's networks. The 'social networks and support' supplement to the 2014 GSS is expected to allow for a comprehensive examination of bonding and bridging capital in New Zealand. The ability to identify sources of social support will give policymakers valuable clues on how to understand the nature and effect of social networks in people's lives. The identification of pockets of homogenous, highly limited networks may illuminate risk areas brought about by extremely low bridging social capital. Figure 3 shows the framework for the measurement of social networks and support within the 2014 GSS.

Figure 3: Framework for the measurement of social networks and support
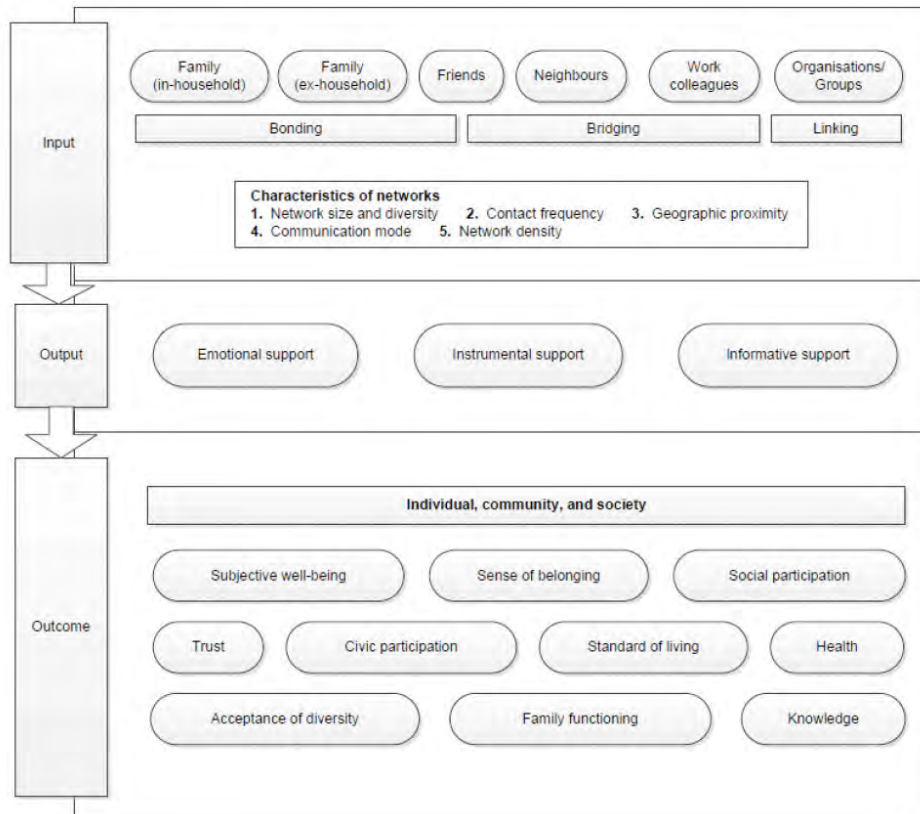


Source: Statistics New Zealand, 2012

*... even if individuals have the same type of network, the results can be very different because of other factors.*

The way social capital operates with respect to bonding and bridging can provide structural barriers to participation in employment and in wider society. For example, those living on very low incomes tend to develop strong bonded connections to those within their immediate family and friendship networks, but consequently have few, if any, bridging connections to other resource-rich networks. There is not much New Zealand research on this point, but an analysis of inner-city ghettos in the United States revealed tight but very truncated networks of bonding social capital that effectively cut some members off from wider society. These networks also encouraged certain cultural styles that impeded the ability to participate in mainstream employment (Portes, 2000). Additionally, bridging capital is more likely to translate into employment opportunities for those who are already in professional or managerial employment. In some cases a lack of bonding can also be disproportionally worse for lower income families. Not having family to rely on to assist with childcare can be a significant barrier to employment and to participation in informal social networks if other childcare resources are beyond financial reach (Boon & Farnsworth, 2011).

Having social capital connections by themselves does not necessarily translate into access to resources, and this translation of connections into benefits is also not distributed equitably in society (Portes, 2000). Those living on very low incomes may be unable to take advantage of the social connections they do have because they cannot meet the societal norms of reciprocity involved. For example, by not being able to 'return the favour'—by being unable to afford to reciprocate childcare arrangements, gift giving, or other social interactions, those on

low incomes—though they have social connections—may be unable to make use of them in the same way that more affluent members of society take for granted.

The distribution of social capital and the way it affects opportunities in society is complex and dependent on a variety of factors. An appreciation of the structural issues of how social capital works at the micro-level is necessary for insight into the subtle influences on societal participation. Sophistication is therefore required when interpreting aggregated data on social capital which may mask important social problems within sub-populations clustered together within traditional survey groups.

### *As a unique society, we also need to be careful when applying international examples.*

Social and cultural norms are particularly important in enabling social relationships, for example the psychological rules that drive reciprocity, abstaining from criminal offending, looking after someone in distress, or behaving in a trustworthy manner. These norms can set up the structure around how social capital operates within a society. Official social statistics on common norms and values is due to be collected in 2014 and this should inform our understanding of how policy might affect cohesion within New Zealand society.

New Zealand's culture is unique and careful consideration should be applied to how international examples of social capital interventions could be adapted for use here. Even amongst our nearest cultural relatives (e.g. Australia and the United Kingdom) New Zealand has subtle variations on key cultural dimensions (for international comparisons see the Hofstede Centre, 2013). Within New Zealand the degree to which people are culturally individualistic or collectivistic can vary significantly across ethnic groups.

# Part two: Key measures

***Social capital is a set of related concepts...***

This section reports what indicators of social capital and social infrastructure are currently being used at different levels of measurement. Rather than being a single measure, social capital is better thought of as a set of related concepts. As the underlying stock of social capital is unobservable, researchers must look for suitable alternative measures in order to estimate social capital stocks at various levels. The result has been the adoption of a broad range of measures that attempt to proxy the underlying stock of bonding, bridging, and linking social capital (Roskruge, Grimes, McCann, Poot, 2010). For example, in the study of the relationship between chronic heart disease and linking social capital in Sweden, linking social capital was operationalised as voting in local government elections (Sundquist, Johansson, Yang & Sundquist, 2006). In a study of the relationship between social capital and mortality in New Zealand, social capital was operationalised as the degree of reported volunteerism in the 1996 census (Blakely, Atkinson, Ivory, Collings, Wilton & Howden-Chapman, 2006)[4].

***...and as yet, there is no clear set of agreed measures for these.***

There currently remains no clear 'best-practice' in terms of which social capital indicators should be measured and monitored – reflecting the only-recent interest in measuring social capital as well as the reliance on secondary sources of data originally intended for other purposes (Kawachi, Kim, Coutts & Subramanian, 2004). Research efforts are under way to attempt to empirically justify which measures are most reflective of different types of social capital. For example in one study the Australian Bureau of Statistics found five latent variables – support, community involvement, trust, feelings of safety, and network type which together explained participant responding to 32 survey questions on social capital (Australian Bureau of Statistics, 2009).[5] While there is a degree of overlap in measurement frameworks, there is also considerable variation in what different researchers and organisations use and consider to be most important (see Annex A for a comparison of different social capital measurement frameworks).

Despite the lack of agreement on a common set of indicators, the field is increasingly in agreement that each of these three varieties of social capital are important in their own right— this section therefore considers metrics with respect to their relevance to bonding, bridging, and linking social capital stocks.

Two levels of analysis are examined in this report to capture the 'best available picture' of New Zealand's social capital profile. The first level is New Zealand's relative position internationally on indicators of aggregated social capital, predominantly drawn from within the OECD's Better Life Index. The second level of analysis is of sub-national averages of groups across sectors of society. This area relies mainly on data from Statistics New Zealand General Social Survey (GSS), the Statistics New Zealand Sustainable Development Approach, and the Ministry of Social Development's Social Report.

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4    No association of neighbourhood volunteerism with mortality was found in New Zealand.
5    Australian Bureau of Statistics (see Annex A).

# New Zealand in an international perspective

The OECD Better Life Index is based upon recommendations from the *Commission on the Measurement of Economic Performance and Social Progress* (aka 'The Stiglitz, Sen, Fitoussi Report'). The Better Life Index uses 11 broad categories to group measures considered to be essential to well-being. Two of these categories, community and civic engagement, include statistics directly related to social capital. Within the 'community' dimension are measures related to bonding and bridging: social support network (bonding), time spent volunteering (bridging), and willingness to help strangers (bridging). Within the civic engagement dimension are measures related to linking social capital: trust in political institutions, voter turnout, and consultation on rule making. While not considered specifically within the Index, data on New Zealand's relative position within the OECD on generalised trust and work-life balance are also considered with other bridging dimensions. Overall New Zealand performs well against other OCED countries on the Better Life Index and is ranked sixth overall on 'community' and fourth overall on 'civic engagement' (OECD, 2013).

## *Bonding Social Capital*

At the aggregated level of comparison across nations, New Zealand performs favourably on bonding social capital. Within New Zealand, 95 percent of people believe that they know someone they could rely on in a time of need, higher than the OECD average of 91 percent. There is little difference between men and women on this dimension, as 96 percent of men believe they have this kind of social support, compared with 95 percent of women. The level of social support is also similar across society regardless of people's education and income, where around 96 percent of the bottom 20 percent of income earners report having someone to count on for help in times of need, compared to over 94 percent for the top 20 percent. New Zealand is one of only four OECD countries where the bottom 20 percent report stronger social networks than the top 20 percent.

Figure 4: OECD Quality of Social Support Networks: Percentage of population reporting they have someone to rely on in a time of need
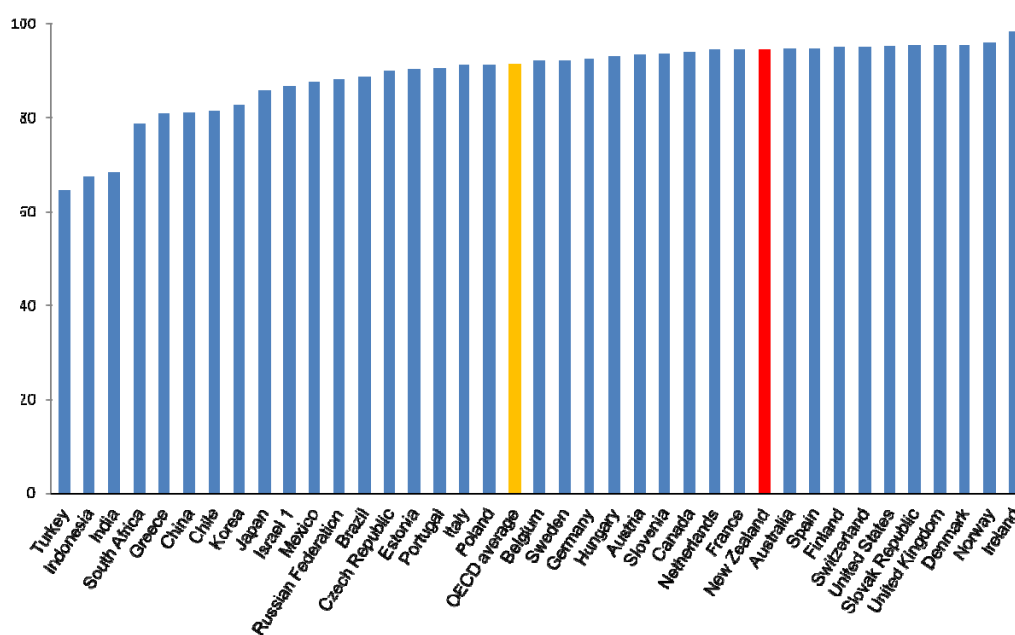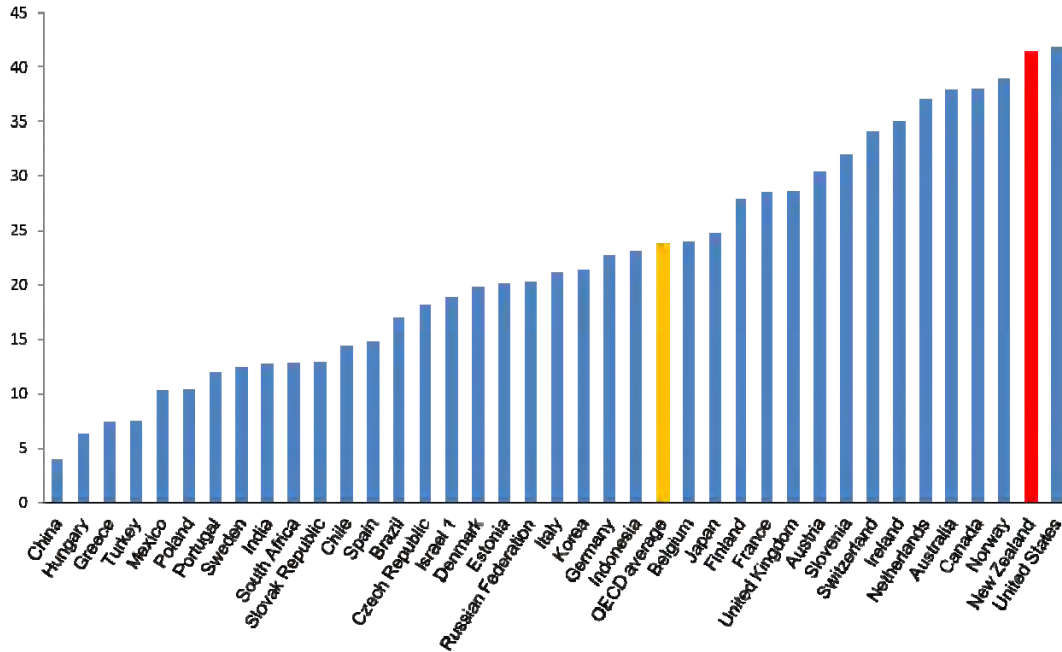


Source: OECD Factbook 2009.

*Bridging Social Capital*

New Zealand performs particularly well on measures of bridging social capital in the OECD index. On average, people in New Zealand spend 13 minutes per day in volunteering activities, which is the highest of all nations in the OECD where the average is 4 minutes per day. Figure 5 shows percentage of population reporting volunteering their time where New Zealand is ranked second behind the United States. Additionally, nearly 64 percent of people reported having helped a stranger in the last month, much higher than the OECD average of 47 percent.

Figure 5: Percentage of Population that Reports Volunteering their Time



Source: OECD Factbook 2009

## Trust

While not included within the Better Life Index, generalized trust has been shown to be a critical component of all varieties of social capital. In terms of expressing high levels of trust in others, New Zealanders rank ninth behind predominantly Scandinavians; however New Zealand's average annual ranking has been trending up over a nine-year period. New Zealand's relative position within the OECD is shown in Figure 6.

Figure 6: Percentage of people expressing high levels of trust in others (left), and average annual percentage change (right)
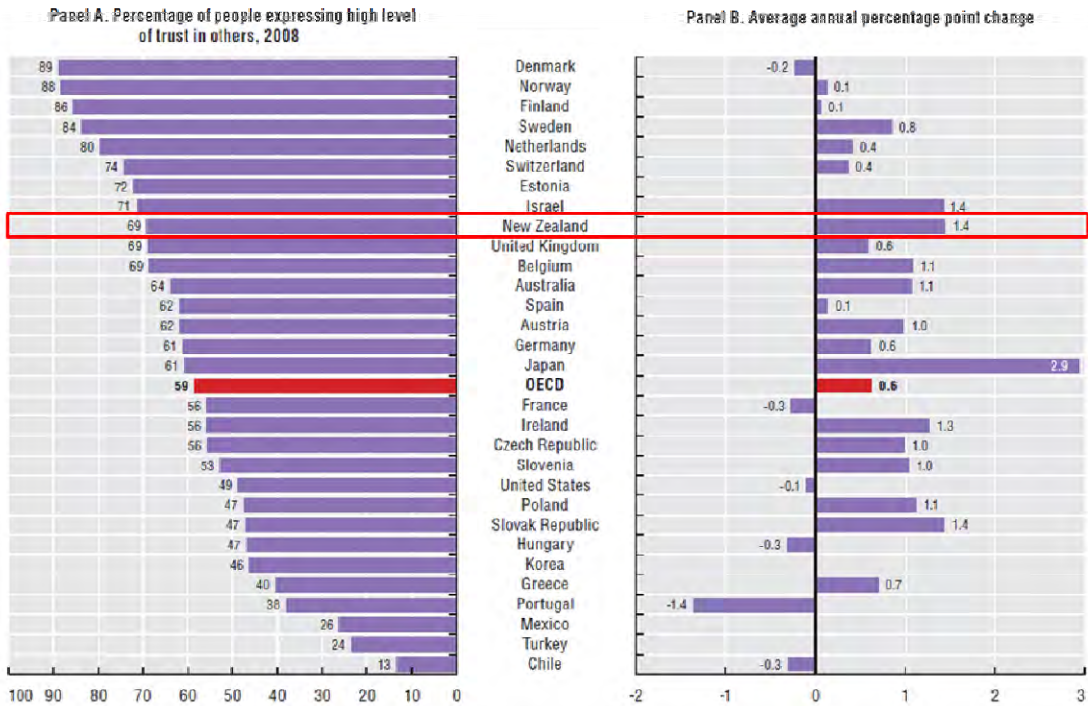


Source: OECD Social indicators 2011

## *Work-life Balance*

The amount of time a person has to spend on discretionary activities—non-work or 'leisure' behaviours—the more likely they are to be able to invest in relationships and networks, for example through participating in community activities and groups. In New Zealand, some 13 percent of employees work very long hours, higher than the OECD average of 9 percent—
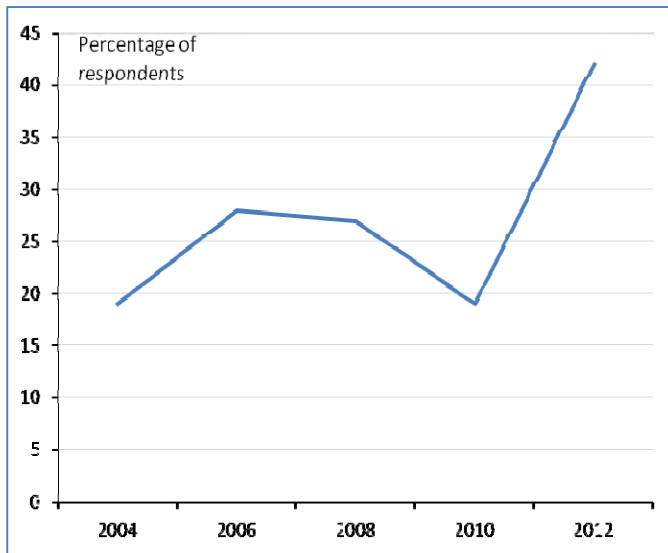


a potentially large barrier to the cultivation of relationships for this demographic. Overall, men spend more hours in paid work; 20 percent of men by income work very long hours, compared with 7 percent for women (OECD, 2013).

The Quality of Life Survey of the main centres of New Zealand asks respondents for the main reason they do not feel a sense of community. In the most recent survey cycle there has been a sharp rise in the number of respondents reporting being too busy as the main barrier to feeling a sense of community.

Figure 7: Percentage of respondents reporting the main reason for not feeling a sense of community as being 'too busy'. Source: Quality of Life Survey 2004-2012

## *Linking Social Capital*

New Zealand again performs favorably on certain measures of linking social capital –
performing particularly well on measures of perceived corruption. High voter turnout is a proxy
measure of public trust in government and of citizens' participation in the political process.
Voter turnout in New Zealand was 79 percent of those registered (in the most recent elections
for which data was used); this is higher than the OECD average of 73 percent. While voter
turnout has been declining in New Zealand, this is part of an international pattern, and
New Zealand's decline is about the OECD average. There are some differences between men
and women concerning participation in elections—men outvote women by more than
3 percent.

Income can also have a strong influence on voter turnout. New Zealand is one of the few
OECD countries where voter turnout for the bottom 20 percent of income earners in the
population is higher than that of the top 20 percent, by 7 percent. On average in OECD
countries, voter turnout for the top 20 percent is 7 percent higher than for the bottom
20 percent (OECD, 2013).

Figure 8: Relative standing of New Zealand on voter turn-out indices compared to OECD countries
(left), and change in voting rates (right)
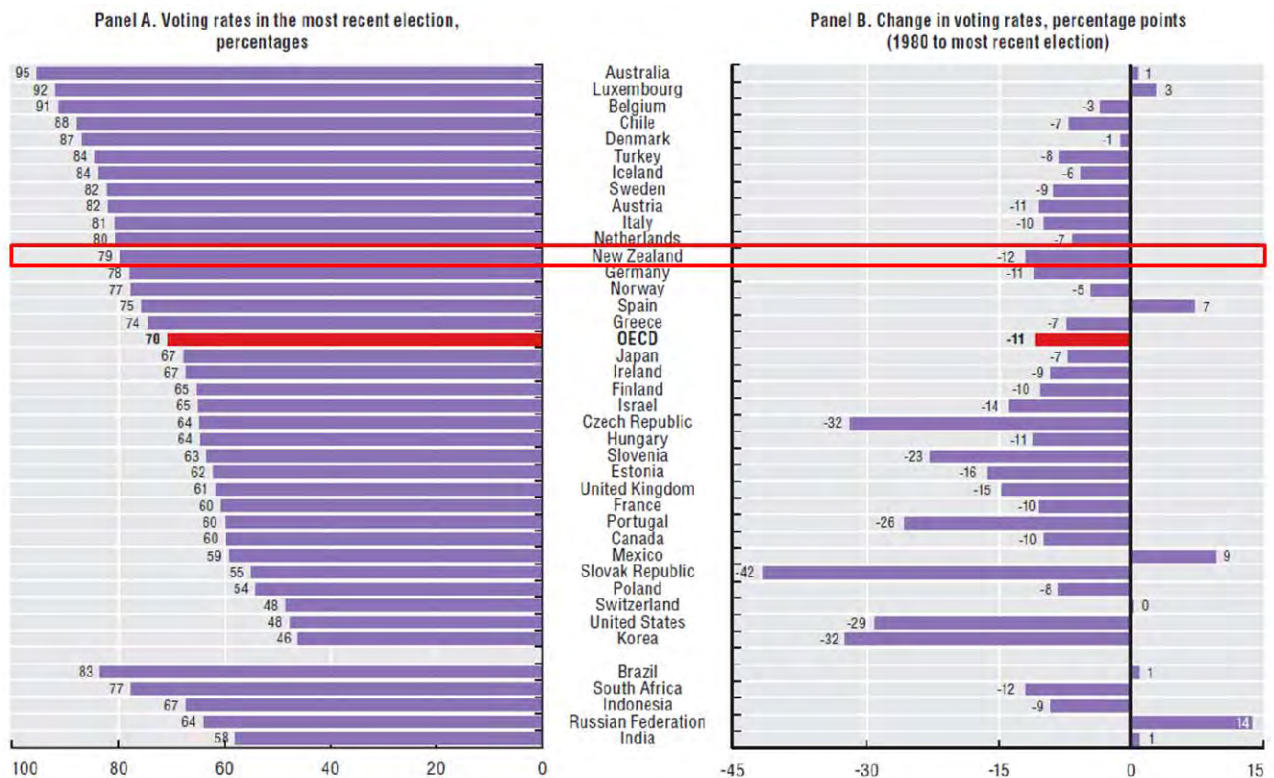


Source: OECD 2009

In terms of institutional capital and trust, New Zealand does very well relative to other nations.
In New-Zealand, 67 percent of people say they trust their political institutions, higher than the
OECD average of 56 percent. New Zealand ranks eighth out of 36 nations on the OECD index
of the level of government transparency when drafting regulations. An independent
assessment by Transparency International ranks New Zealand as first-equal in the world with
Denmark and Finland on the degree of perceived lack of public sector corruption
(Transparency International, 2012).

*Summary of the international comparisons*

Overall New Zealand compares favourably with OECD nations at the macro-level on several dimensions of aggregated social capital.

▸ New Zealand ranks as a world-leader (with Denmark and Finland) in terms of the public perception of a lack of corruption.

▸ The high level of volunteering in New Zealand is an important source of bridging social capital and is a particular strength compared to other nations, reflected also in Statistics NZ data on the large number of NGOs and volunteer-hours in New Zealand (see Statistics New Zealand, 2007).

▸ Voting rates are high in New Zealand though they are also declining, which is similar across most other OECD nations.

New Zealand is one of the very few countries without a social gradient on some bonding and linking measures ('knowing someone to rely on in a time of need' and voter-participation) when comparing the bottom 20 percent of income earners to the top 20 percent within society.

# Sub-national indicators

Within New Zealand there are currently several attempts to track and measure social capital and social infrastructure. As is true of the wider field of social capital measurement, there is no agreed upon series of metrics and several different lines of research contribute different perspectives to the social capital picture. Several indicators are presented to provide a snapshot of bonding, bridging, and linking social capital within New Zealand. These are taken from a variety of sources, including: Statistics New Zealand's Sustainable Development Approach and the report 'Social Cohesion in New Zealand' from the 2008 GSS; The Ministry of Social Development 2010 Social Report; and the Quality of Life Survey 2004-2012 (a partnership project between Auckland, Wellington, Christchurch and Dunedin city councils).

## Bonding Social Capital

Four interconnected areas help inform the view of bonding social capital in New Zealand. These are the satisfaction with:

▸ the amount of contact people have with their family and friends
▸ the amount of contact between children and their parents
▸ the degree of reported loneliness
▸ the prevalence of domestic violence within New Zealand.

While New Zealand has a positive standing within the OECD on some measures of bonding, a closer examination reveals considerable subtlety amongst different social groups. Māori are the least likely to report being satisfied with the amount of contact with family or friends. Satisfaction with the amount of contact between young people and their parents appears to be in decline, notably contact with fathers and particularly for female students. Feelings of isolation appear to be most pronounced for those within Asian sub-populations. Indicators of domestic violence in New Zealand are the worst in the OECD.

### *Contact with Family and Friends*

Healthy relationships are built through both the quantity and quality of time spent together. Staying in touch with family and friends who live elsewhere helps maintain social connectedness between households and across geographical boundaries. In 2008, 60

percent of people aged 15 years and over said the amount of contact they had with family and friends who don't live with them was 'about right'. People aged 65 years and over were the most likely (76 percent) and people in the 25–44 years age group were the least likely (54 percent) to feel the amount of contact was about right. Māori were the least likely (52 percent) and Asians were the most likely (63 percent) to report that contact was about right. Unemployed males reported the lowest satisfaction on this measure of any examined category with less than half of respondents (47 percent) saying their amount of contact with others was sufficient.

### Contact between Young People and their Parents

Having a close and caring relationship with a parent is one of the most important predictors of good health and well-being for young people (Adolescent Health Research Group, 2008). In 2007, 57 percent of secondary school students reported that they get enough time with at least one parent most of the time, which represents a decline on this measure since 2001 (62 percent). Less than half of the students (46 percent) felt they get enough time with their mothers most of the time, considerably fewer students (39 percent) felt they get enough time with their fathers. The proportion of female students reporting they get enough time with their parents fell between 2001 and 2007 (from 61 percent to 50 percent), but there was very little change for male students over this period. The most common reason reported was that the parent was at work, perhaps reflecting OECD statistics on New Zealand's work/ life balance.

Figure 9: Proportion of secondary school students who said they get enough time with their parent(s) most of the time, by sex, 2001 and 2007
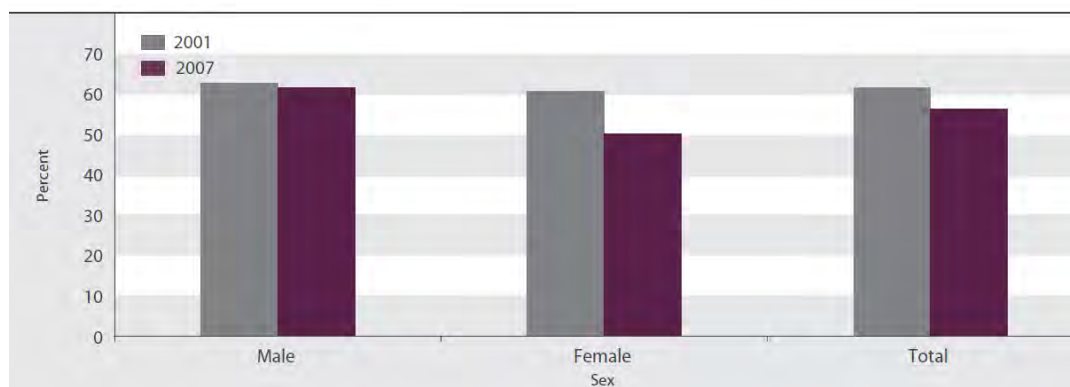


Source: MSD Social Report (Adolescent Health Research Group, 2008)

New Zealand European students were the most likely to report that most of the time they get enough time with Mum and/or Dad (61 percent), followed by Māori and Asian students (51 percent), with Pacific students least satisfied with the amount of contact with their parents (49 percent).

### Loneliness

Self-assessed loneliness is a proxy indicator of social support. Loneliness contributes to poor health outcomes due to an eroded capacity to deal with stress, anxiety or depression: Economist Robert Lane has called this the *malnutrition model* of social isolation (Lane, 2000).

Loneliness is most prevalent among females, particularly among those aged 15–24 years (23 percent), followed by females aged 25–34 years (20 percent) and also those aged 65 years and over. Levels of loneliness were lowest among males aged 55–64 years, males aged 65 years and over (both 12 percent) and females aged 55–64 years (13 percent).

Figure 10: Proportion of people experiencing loneliness, by age and sex, 2008
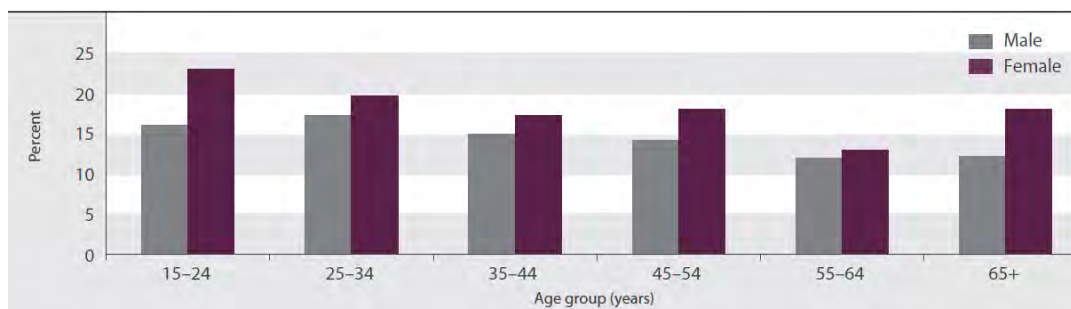


Source: MSD Social Report (from Quality of Life Survey 2008)

Europeans reported the lowest rate of loneliness with 15 percent reporting they had felt isolated or lonely in the last 12 months. In comparison, 18 percent of Māori, 23 percent of Pacific peoples and 24 percent of Asian peoples reported having felt isolated or lonely in the past year.

### Domestic Violence

Another important indicator of the state of bonding relationships within New Zealand is the rate of domestic violence and abuse. Unfortunately the reported rate this is increasing in New Zealand. The number of Family Violence Reports completed by NZ Police increased from 56,380 in 2005 to 85,617 in 2010—a rise of 52 percent (The New Zealand Family Violence Clearinghouse, 2012).[6] Thirty percent of New Zealand women reported experiencing physical violence from an intimate partner during the period 2000 to 2010. This is the worst ranking within OECD countries. New Zealand women also suffer from high levels of sexual violence committed by an intimate partner. Of the OECD countries with data on this question, New Zealand reported a higher rate than any other, with 14 percent reporting having experienced sexual violence between 2000 and 2010 (UN Women, 2011).

## Bridging Social Capital

Several indicators are presented here to inform New Zealand's current bridging social capital stocks. As with bonding, an examination of the contours of bridging social capital in New Zealand reveals much variation. Pacific peoples are most likely to be involved with voluntary work as are those with higher educational attainment. Reported levels of trust were lowest in Manukau and Asian people were over three times as likely as New Zealand Europeans to report a high fear of crime. Asian people were also three times as likely to report being discriminated against as New Zealand Europeans.

### Voluntary Work

While New Zealand does well on international standings of volunteerism (see OECD figures, above), volunteering within New Zealand differs not only by ethnicity but also by age and educational background. In 2008, one in three New Zealanders aged 15 years and over (33 percent) had done voluntary work for a group or organisation in the last four weeks (lower than that reported by OECD [41.5 percent). Voluntary work was slightly more prevalent among older people. Pacific peoples (42 percent) were significantly more likely than Asian people (28 percent) and people in the mainly European group (32 percent) to report doing voluntary work in the past four weeks. The rate for Māori was 34 percent. The difference between the rates for Māori and Pacific peoples was not statistically significant.

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6    Family Violence Reports are completed by police when they attend a family violence situation.

Figure 11: Proportion of people aged 15 years and over who had done voluntary work in the last four weeks, by age group and sex
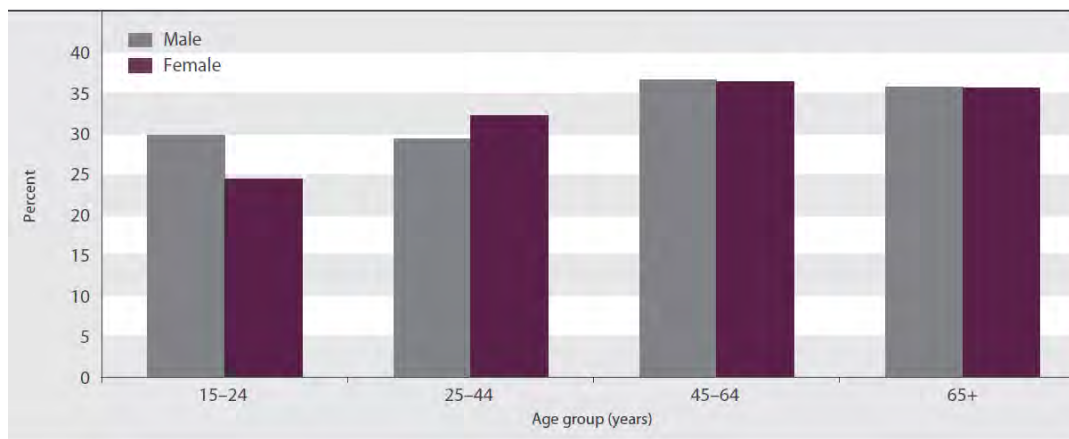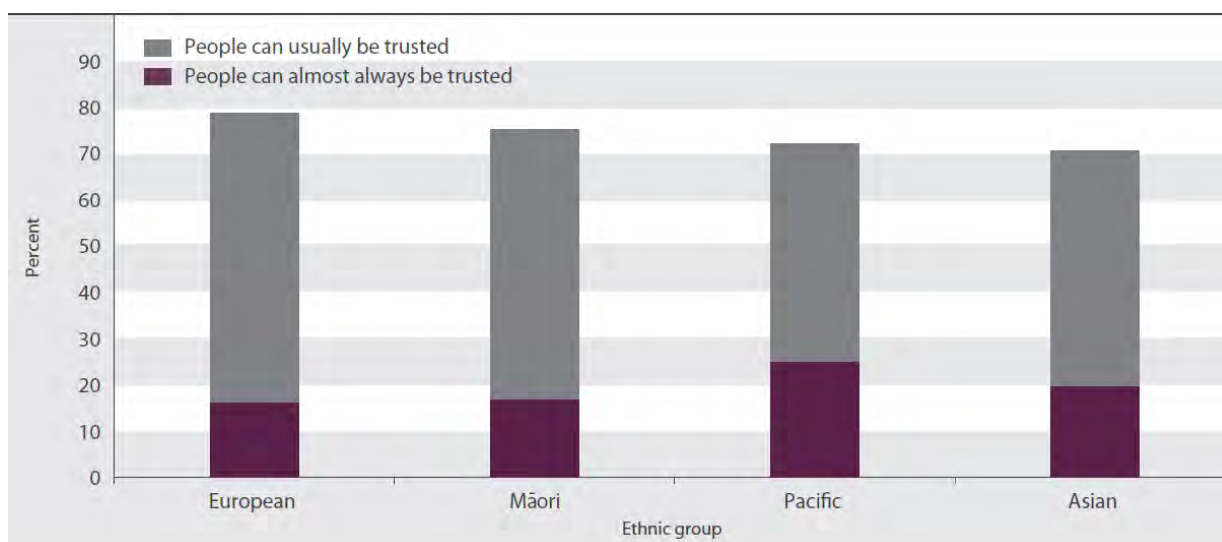


Source: MSD Social Report (from GSS 2008)

Volunteering also increased with educational level. Twenty-six percent of those with no qualifications did voluntary work in the last four weeks compared to 30 percent of those with a Level 1–4 certificate, 38 percent of people with a Level 5–6 diploma and 42 percent of those with a bachelor's degree or higher qualification.

## *Trust in Others*

Trust in others is an important indicator of how people feel about members of their community. High levels of trust facilitate cooperative behaviour among people and contribute to people's ability to develop positive relationships with others. As also identified in research by Motu, people of European ethnicity reported higher levels of trust in people (79 percent) than Māori (75 percent), Pacific peoples (72 percent) and those of Asian ethnicity (71 percent).

Figure 12: Proportion of people reporting that people can be trusted, by ethnic group and level of trust



Source: MSD Social Report (from Quality of Life Survey 2008)

Across all New Zealand's big cities, a large majority of New Zealanders indicated that people can be trusted. Reported levels of trust were highest in Wellington (87 percent) and lowest in Manukau (68 percent).

### Impact of Fear of Crime on Quality of Life

Fear of crime affects how safe people feel. It can influence social connections by affecting the way people conduct their lives and undermining their sense of well-being. The community safety findings from the Ministry of Justice's 2006 New Zealand Crime and Safety Survey (included under Statistics New Zealand's Sustainable Development Approach) found that 60 percent felt crime had a minimal impact, 33 percent felt crime had a moderate impact, and 7 percent felt crime had a high impact.

Figure 13: Proportion of people whose fear of crime had a moderate-to-high impact on their quality of life
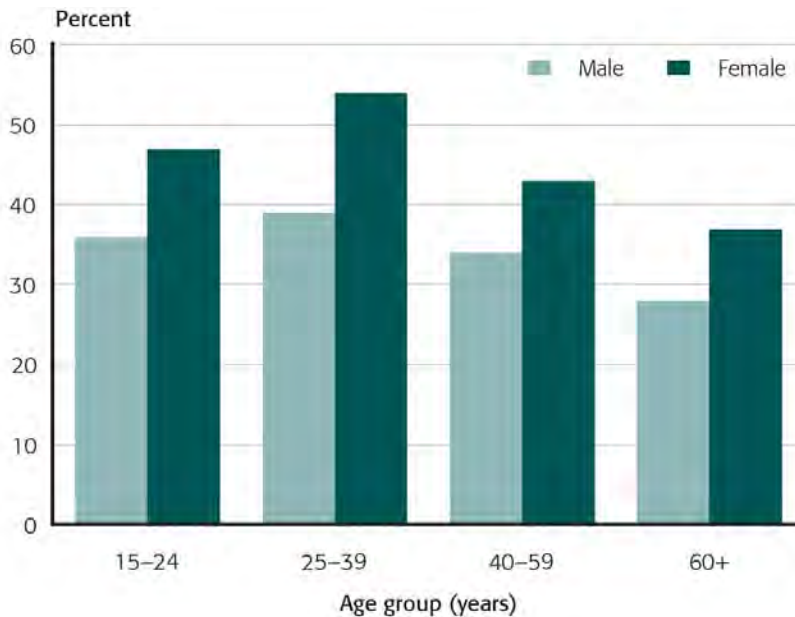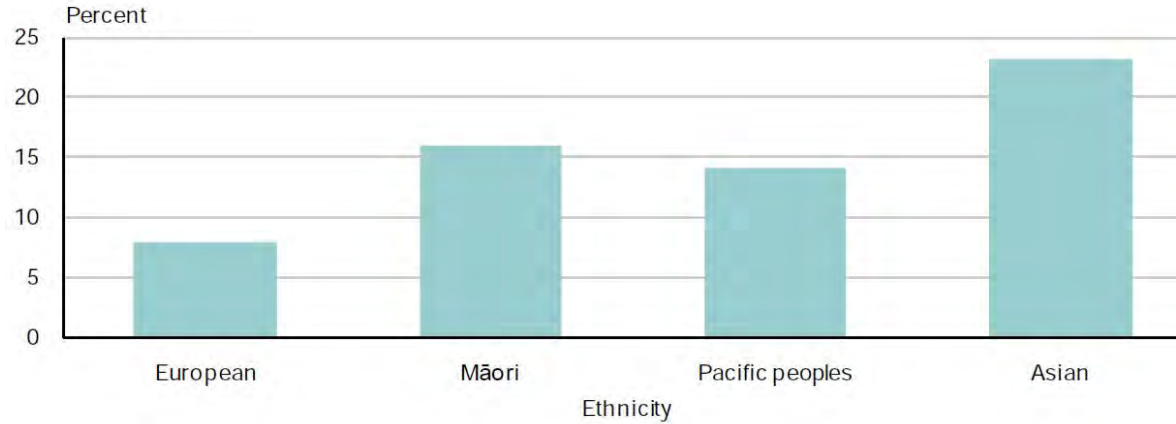


Source: Statistics New Zealand's Sustainable Development Approach (from Ministry of Justice 2008)

Eight percent of women reported a high fear of crime compared with 6 percent of men. Eighteen percent of Asians and 13 percent of Pacific peoples reported a high fear of crime. Twice as many Māori (10 percent) as Europeans (5 percent) reported a high fear of crime.

### Discrimination and Attitudes towards Diversity

Level of perceived discrimination is taken from the Statistics New Zealand report *Social Cohesion in New Zealand* (2008). People were asked if they had been treated unfairly or had something 'nasty' done to them because of the group they belong to, or seem to belong to, in the last 12 months. Asian people (23 percent) and Māori (16 percent) are two-to-three times more likely to report discrimination than Europeans (8 percent). The most common reasons given for perceived discrimination that occurs in the street or a public place of some kind are 'my nationality/race/ethnic group' (55 percent), 'my skin colour' (40 percent), 'my dress/appearance' (24 percent), and 'the language I speak' (14 percent).

Figure 14: People who experienced discrimination in the last 12 months April 2008- March 2009



Source: Statistics New Zealand (GSS 2008)

Discrimination has an impact on overall life satisfaction; both males (12 percent) and females (17 percent) who experience discrimination are more likely to report being dissatisfied or very dissatisfied with their lives overall compared with males (5 percent) and females (6 percent) who did not experience discrimination in the past 12 months.

Related to discrimination are feelings towards New Zealand's increasing diversity. The Quality of Life Survey asks respondents how they feel about the fact that New Zealand is becoming home to an increasing number of people with different lifestyles and cultures from different countries.

Figure 15: Perception of the impact of greater cultural diversity



Source: Quality of Life Survey 2006-2012. http://www.qualityoflifeproject.govt.nz/
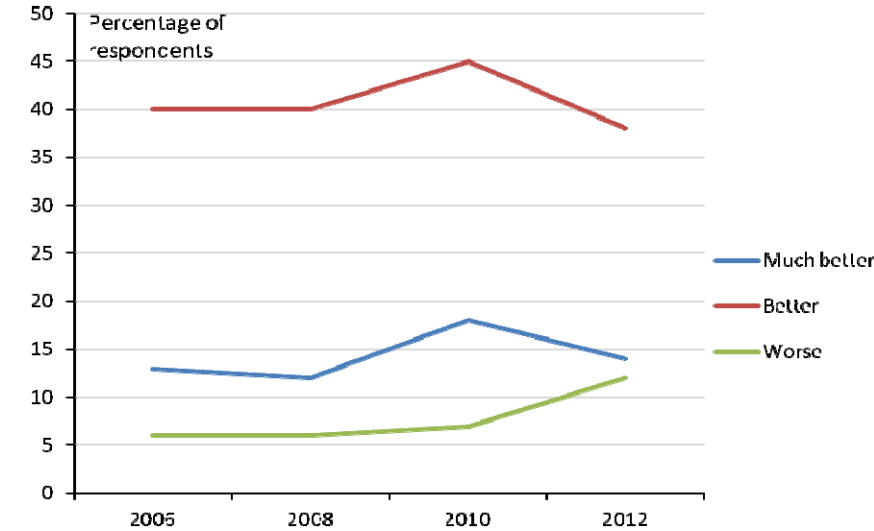
The majority of respondents feel that diversity makes their area either 'better' or 'a much better' place to live. However, since 2006 the proportion of people who feel that increasing diversity makes their area 'worse' has doubled from 6 percent to 12 percent.

## Networks

There is evidence to suggest that the composition of people's networks are changing in New Zealand, with a decline in connections to traditional groups and the rise of new networks through the use of social media.

In 2012 participants were almost as likely to report being connected to an online network (46%) as to be connected to a work or school network (47%). This increase in online connectivity is up from just 17 percent in 2006.
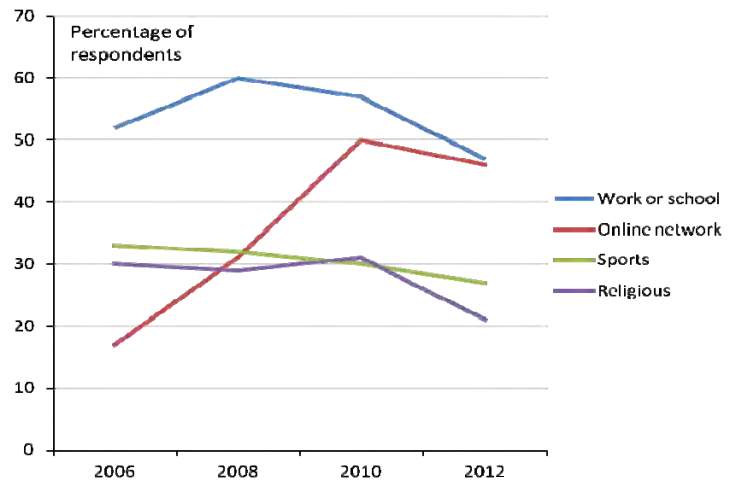


Figure 16: The most common network
participants report belonging to. Source: Quality of Life Survey 2006-2012 (data for 2004 unavailable).

## Linking Social Capital

Three measures serve as proxy indicators for the current level of linking social capital within New Zealand; trust in government institutions, voter turn-out at local elections, and representation of women in Parliament. New Zealanders are largely neutral about trust in institutions and this data does not break down by ethnicity or other social category. The rate of representation of women in Parliament had increased and voter participation at local elections follows similar trends across the OECD of declining voter turn-out.

### Trust in Government Institutions

Trust in government encourages people to engage with institutions and participate in government processes. People who trust government institutions are more likely to use the services they are entitled to, provide information about themselves for government institutions to deliver effective services, and be more willing to pay taxes, user charges, and license fees (Statistics New Zealand, 2008). Results from the survey 'Public Satisfaction with Service Quality 2007' (States Services Commission, 2008) found that 29 percent of respondents had trust in public services, 49 percent were neutral when asked if they had trust in public services, and less than a quarter expressed distrust towards public services.
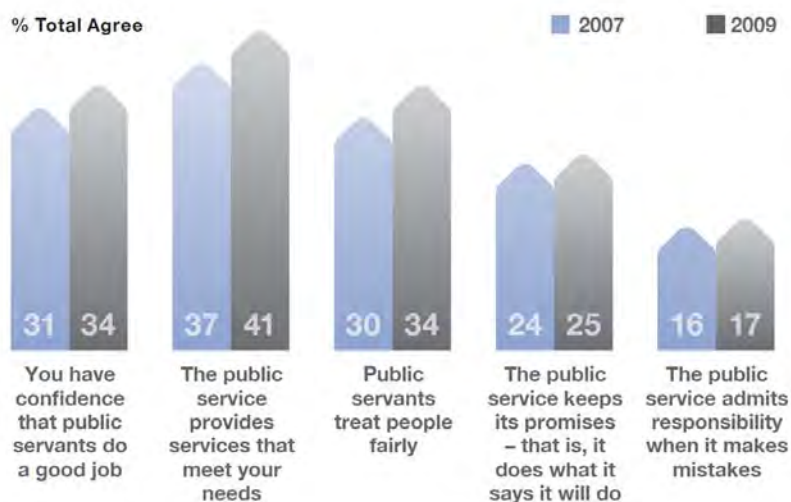
Figure 17: Trust in public services
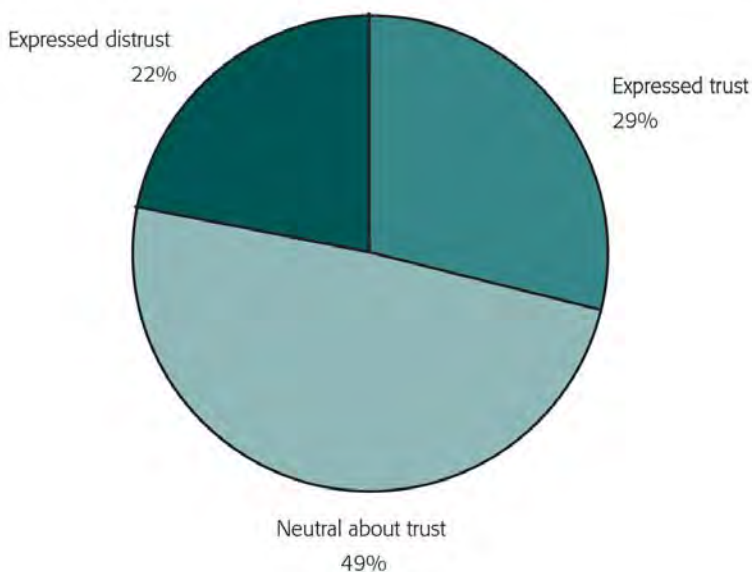


Source: Statistics New Zealand's Sustainable Development Approach (from State Services Commission 2008)

Performance across five key drivers of state sector trust showed positive improvement over the survey period 2007–2009 as shown in figure 18.

Figure 18: Performance of public service on drivers of trust 2007-2009



Source: State Services Commission 2009

In the 2012 round of the survey 'New Zealanders' Satisfaction with State Services', trust in the public service was slightly above the private sector with 42 percent of respondents giving a four or five out of five rating where 1 is '*do not trust them at all'* and 5 is '*trust them completely'* (State Services Commission, 2012).

### *Voter Turn-out*

Voting in the democratic system is the principal way most people express their political opinions and political action. Voting behaviour can therefore measure how engaged people are with the governance process, how effective they think government is, and how representative the democratic process is. It also reflects people's sense of connection with

wider society (Statistics New Zealand, 2008). As OECD figures demonstrate, voter participation rates are declining for general elections and this trend is mirrored at the level of local body elections. Voter turnout has been declining internationally, and New Zealand's decline is about average for the OECD.

Figure 19: Voter turnout at selected local elections
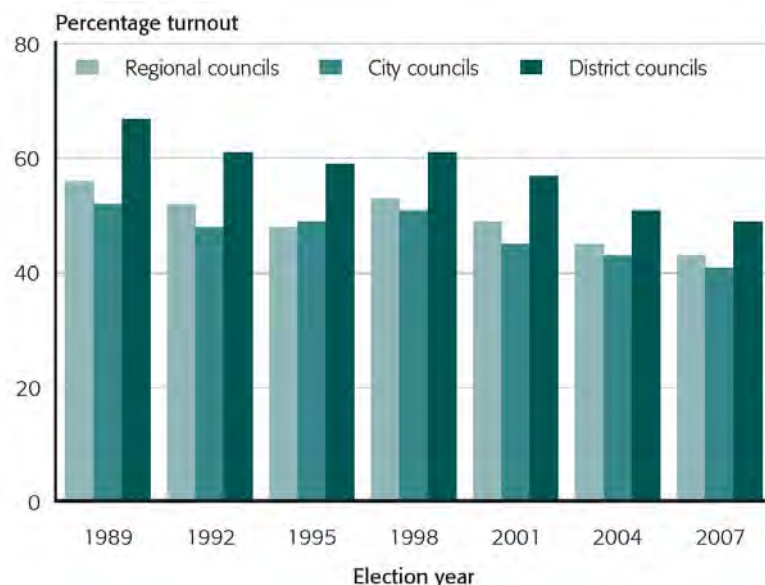


Source: Statistics New Zealand's Sustainable Development Approach (from Department of Internal Affairs 2008)

### *Representation of Women in Parliament*

Political representation that mirrors the population, for example in terms of gender and ethnicity, is more likely to reflect the issues and interests of various groups within society. It may also enhance fairness. This indicator measures one aspect of political representation – women in Parliament (Statistics New Zealand, 2008).

Figure 20: Representation by Women in Parliament
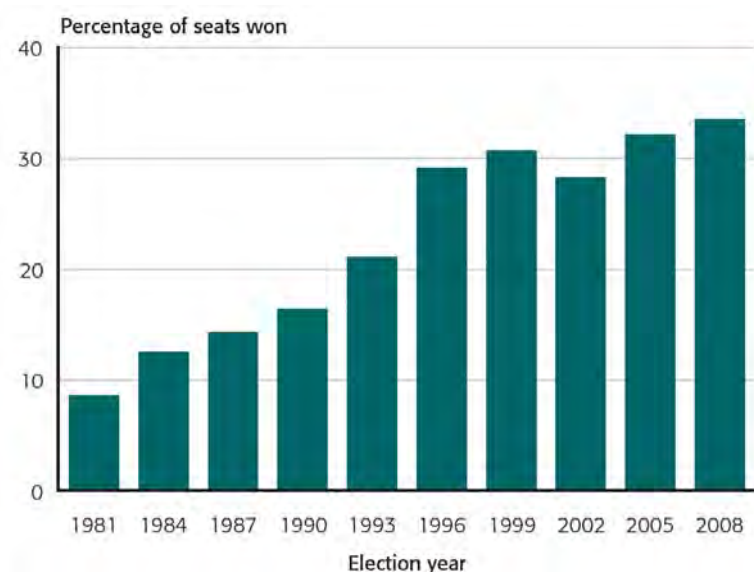


Source: Statistics New Zealand's Sustainable Development Approach (from New Zealand Parliamentary Service)

Further work is underway in this area. Transparency International also looks at the countries governance systems, and people's view of it. They are currently conducting a National Integrity Survey to evaluate the key "pillars' in a country's governance system both in terms of their internal corruption risks and their contribution to fighting corruption in society at large. This is also assessing the wider quality of governance in New Zealand with a focus on ensuring that power is exercised in a manner that is true to the values, purposes and duties for which it is entrusted to, or held by institutions and individual office-holders. Results from this research are expected late in 2013.

## Summary

The measurement of social capital and infrastructure within New Zealand is currently in a state of evolution and is heavily influenced by international trends (e.g. OECD, UN). Given the only relatively recent interest in social capital monitoring and the quickly shifting preferences for various indicators, there is a lack of longitudinal data on how most measures have been trending over time. Nevertheless, a cross-section of New Zealand's social capital profile reveals a diverse distribution of strengths and weaknesses. In terms of linking social capital New Zealand is a world-leader on the lack of perceived public sector corruption. New Zealand also leads the way on volunteerism in terms of the amount of time given on average to helping others. Additionally, on some measures of bonding (perceived social support) and bridging (voter participation) a lack of lower rates for lower socio-economic groups sees New Zealand rate favourably amongst OECD countries.

However, New Zealand rates poorly on other measures. In terms of bonding social capital the incidence of domestic violence is a blight on New Zealand's record. The declining satisfaction with the amount of contact between young people and their parents—possibly related to unfavourable work/life balance statistics—also poses a potential risk factor for future social capital.

A closer examination of sub-national statistics reveals that highly aggregated macro-level data often masks important social phenomena. For example, while New Zealand scores high within the OECD on measures of trust, Pacific peoples and those of Asian ethnicity report the lowest levels of trust in others. Reported trust is also lowest in Manukau, New Zealand's 3rd largest district and home to over 170 different ethnic groups (Statistics New Zealand, 2009). Attention to sub-national social trends is important to ensure for social capital sustainability.

# Part three: A case study of social capital and its impact on resilience in the face of the Canterbury Earthquakes

This section provides additional explanation to the theoretical and quantitative focus of this paper by summarising the role of social capital in the aftermath of the Canterbury earthquakes, and particularly the level of community resilience in the face of a disaster. The significance of social infrastructure in the form of local community facilities as venues for the accumulation of social capital has been the subject of much research investigation and is also discussed.

On 4 September 2010, a magnitude 7.1 earthquake struck Christchurch, with the most significant damage to follow on 22 February 2011. Many lives were lost, homes and businesses destroyed, and thousands of people within communities faced emotional hardships. The Christchurch community response to the earthquakes affords numerous examples of social capital brought to bear in an extremely positive way in the face of hardship.

The benefit gained from being a country high in social capital can often be underestimated. However it is apparent that a complex network of social and cultural capital is what makes a city resilient in the wake of a disaster (Vallance, 2011). However, resilience was also impacted by the way in which government and other organisations interacted with the community. This had the potential to either reinforce or undermine the overall resilience of local communities.

> *"Our research identified four common influences on community resilience:*
> - *pre-existing community connectedness and community infrastructure*
> - *community participation in disaster response and recovery*
> - *community engagement in official decision-making*
> - *external support from organisations and authorities outside the community"*
>
> ***(Thornley, 2013)***

Research following the September earthquake has identified bridging social capital—weak ties, or latent connections—as being central to the resulting community resource and intelligence that was typically able to be utilised.[7] Research participants identified the 'generic connectedness of individuals' as being critical to community resilience and not necessarily connectedness created through formal existing groups, many of whom never met or activated in the aftermath of the earthquake.

> *"It seemed that things only got sorted if you knew someone who had contacts."*
> ***Marnie Kent, Sumner Community Hub***

Spontaneous interactions, connections, and a culture of sharing were seen as crucial to the community spirit that the research participants highly valued. It appeared that the processes were largely organic, unplanned and unpredictable, driven from within the community, for the community (Paton, Mamula-Seadon & Selway, 2012). Street level caring and sharing took many forms: cooking breakfast and making cups of tea for others on their barbeque, dismantling damaged chimneys, securing homes and digging exit paths through the liquefaction (Vallance, 2011).

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[7] For more information see Paton, Mamula-Seadon, and Selway (2012), Exploring Resilience: Learning from Christchurch communities, in Ministry of Civil Defence & Emergency Management, *Tephra, Vol 23.*

Commentators on the earthquake response have also made specific reference to the "Kiwi can–do" attitude which allowed for extensive cooperation. Similarly, a strong sense of community ownership of local areas – central to the Māori understanding of *kaitiakitanga,* or guardianship – provided a sense of commitment to work collectively in recovering and rebuilding the local infrastructure. This stock of social capital was able to be drawn on in order to produce favourable outcomes for individuals and communities. It is often the cultural dimension of resilience which can prove to be one of the strongest assets in creating mutual support in times of hardship (International Federation of Red Cross and Red Crescent Societies, 2004).

### *Lyttelton*

The Lyttelton community response was particularly strong following the February 2011 earthquake, due in large part to its physical isolation from Christchurch, but also due to its historically strong social capital. Lyttelton had a population of 3075 in the 2006 census (Statistics New Zealand, 2006) but has 80 community groups (consisting of 27 community organisations, 2 sports groups, 23 recreational/ leisure groups, 4 faith based organisations, 4 residents' groups, 2 business associations and 18 community meeting venues; Christchurch City Council, 2012).

In the immediate aftermath of the earthquake many of these organisations provided a mechanism for coordinating a rapid response – the recreation centre became the Civil Defence base, the St John Ambulance volunteers had a first aid centre established within minutes, and the local volunteer fire brigade set to work on making the buildings safe. In the next few weeks these local initiatives were reinforced by government and regional decisions such as setting up the recreation centre as a one-stop shop. In summarising their research Thornley stated that:



Figure 21:  Pre- and post-earthquake Lyttelton community analysis (Source: Christchurch City Council, 2012).

> *"Participants believed a culture of volunteerism and 'do-it-yourself' ethic had helped the community to adapt. They explained that Lyttelton had a history of community action and self-reliance. As a result, community leaders and community members expected to play an active part in the disaster response and recovery, rather than waiting for help from outside agencies... However there was considerable frustration about 'red tape' getting in the way of community action and business recovery. In particular, there was a perception that the City Council was unnecessarily inflexible in applying rules and regulations and was not communicating well about decisions."*
> *(Thornley, 2013)*

In a pre- and post-earthquake assessment of the natural, economic, physical, and social environment of Lyttelton, the only area to have performed favourably is the social environment— which has not just been maintained from decline over the earthquake period but has increased in strength, as seen in Figure 21.  This increase in social capital as a result
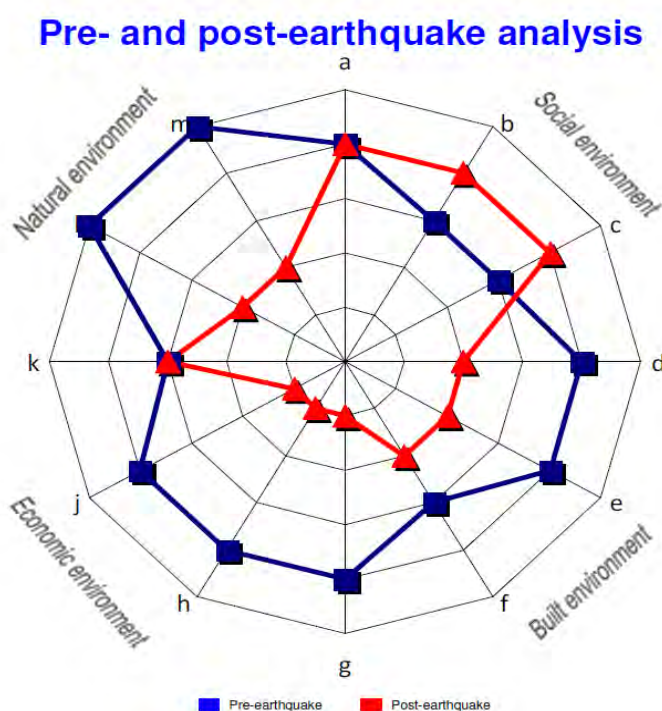
of the high levels of interaction between parts of the community during the earthquake response highlights how 'stocks' of social capital differ from other traditional stocks—social capital tends to increase with use.

### Shirley[8]

Shirley is a suburb of around 7,000 people about 5 kilometres north-east of the Christchurch city centre. While the September 2010 earthquake had some impact on the area, the February 2011 earthquake caused significant damage to land, property, and services. Liquefaction was a significant issue and caused ongoing issues.

Shirley had a significant lower median personal income, and a high proportion of single person and sole parent families. It also had a relatively low number and reach for community organisations, with only four community organisations and five meeting venues.
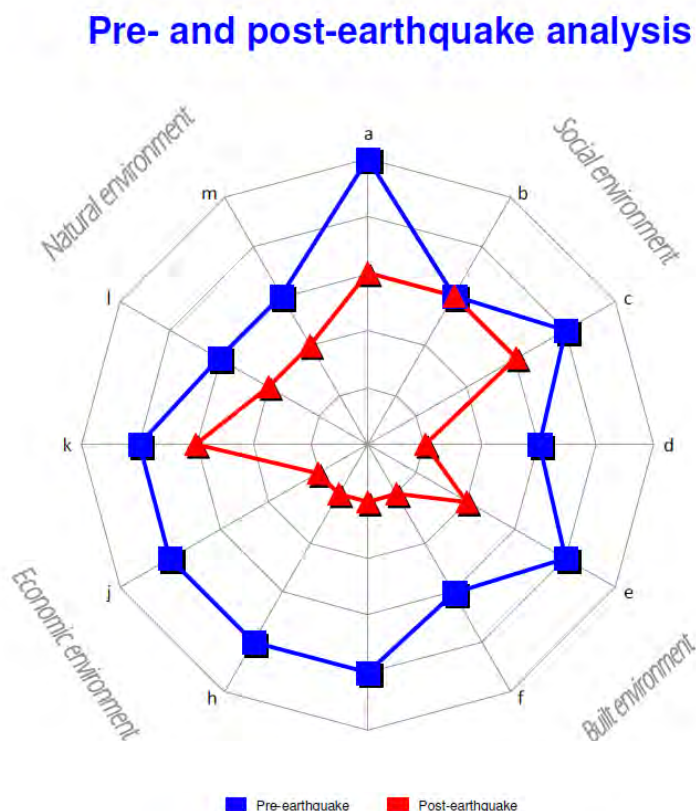


Figure 22: Pre- and post-earthquake Shirley community analysis (Source: Christchurch City Council, 2012).

In the immediate aftermath of the earthquake, people gave assistance to their neighbours and "the Hub", a local support group, provided information and acted in an advocate role for members. Despite the fact that there was a low level of community connectedness, there was a general feeling that social connectedness increased in the immediate aftermath. However this did not persist, partly because of the high level of outward migration, but also because of a lack of community engagement. For instance the research stated

*"Although the Hub broadened its scope after the earthquakes, engaging with the wider community proved to be challenging. The same participant explained:*

*"We tried all sorts of things, hoping that different things would engage different people, but that's not what happened. When we had engagement it was with the same people all the time."*
**(Thornley, p. 85)**

This situation was not helped by the perception that Shirley had been overlooked by the authorities, to the extent that it was felt this undermined the local community networks.

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8    This case study is drawn from Thornley (2013).

> *"Another community leader expressed her disappointment and frustration at what was perceived as an unwillingness to engage and communicate with the Shirley community. She said: 'I understand they [the authorities] felt under siege, but a bit more openness from them would have made a big difference'. This example illustrates how attendance at a community meeting (or not) by a high-level official can impact on a community's sense of empowerment (or disempowerment)."*
> *(Thornley p. 87)*

The result was that the overall assessment of the social environment declined in Shirley as the infrastructure provided by local, regional and government entities was unable to cope.

### The role of new social networks

It is also worth noting how the changing landscape of networks in New Zealand helped to facilitate the earthquake response. The importance of connectivity via social media was shown to play a major role in the coordination of the Student Volunteer Army. The speed and reach of social media allowed for the coordination of over 1800 volunteers, resulting in over 100,000 hours of voluntary labour and the clearing of over 65,000 tonnes of liquefaction silt (Johnson, 2012). This change in networks types and structures in New Zealand is a considerable strength when leveraged in an appropriate manner.

### CanCERN: Leveraging Existing Social Infrastructure to Assist the Government Response

Within a week of the September 2010 earthquake, some community members had started to become known as spokespeople for their street or neighbourhood. These community members were of different ages, genders, socio-economic backgrounds and political beliefs. Often their only common characteristic was the capacity to care about the people they knew in their communities. Many community members soon realised they knew important information that would be valuable to disseminate to their wider neighbourhood and to officials. These individuals then self-organised, organically, requiring no resourcing from local or central government in order to identify and disseminate community priorities to official decision makers. Key qualities identified in these emergent leaders included connections within the community, the "can-do" attitude, availability, and a strong sense of commitment to helping others (Paton, Mamula-Seadon, & Selway, 2012). One such organically originating community group, CanCERN, arose to advocate strongly for Christchurch neighbourhoods adding considerable efficiency to the recovery and rebuild efforts.

> *"Among us were people who knew a lot about engineering, law and other professions, and many had contacts with people of influence in local and central government. We figured we had the capability to help officials understand what needed doing, to challenge misconceptions, highlight the consequences of bad decisions, and choose better policies and actions for outcomes that local people needed. We set to work identifying where the quakes had cut off water supply, where food was short, and where sewage and drains had failed. We then made sure the authorities knew the facts."*
> *Tom McBrearty, CanCERN Chairman*

CanCERN quickly became a valuable source of knowledge for government agencies, because of its strength of bridging capital, and an important resource for communities because of its ability to link across decision-making levels. The Ministry of Social Development and Civil Defence had weekly meetings with CanCERN to collaborate and share information—representative of engagement and the strengthening of linking social capital. CanCERN led the identification of needs for temporary accommodation and pursued rental subsidies for residents made homeless in collaboration with the Ministry of Social Development. During community meetings with Civil Defence, EQC, and insurance companies, CanCERN helped to

facilitate a neighbourhood voice in response to the official understanding of the community situation.

> *When officials declared a street or area had been fixed, we got all the people from that area to stand up and raise their hands if they agreed things were indeed fixed.*
> **Tom McBrearty, CanCERN Chairman**

Despite difficult and frustrating circumstances, CanCERN members exhibited an extremely high level of goodwill and willingness to cooperate with government agencies—both bridging social capital and linking social capital across power boundaries. This resource allowed the central agency response to be more effective, targeting those who needed help most. This subsequently allowed for the strengthening of institutional trust as community members saw a positive response from government agencies that was both sympathetic and insightful to their idiosyncratic needs. The subsequent review of the Civil Defence Emergency Management Response to the 22 February 2011 Christchurch Earthquake has recommended new structures to better link central agencies to the community and community organisations (McLean, Oughton, Ellis, Wakelin, & Rubin, 2012).

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**Measures and Dimensions of Social Infrastructure/Social Capital**

| Level of Analysis | LSF | International Comparison | | NZ National Measures | | | | Community Measures |
|---|---|---|---|---|---|---|---|---|
| Framework/ Report | Treasury: Living Standards Framework 2011 | OECD: Better Life Index | Australian Bureau of Statistics (GSS 2010) | Statistics NZ: Sustainable Development Framework | Statistics NZ: Social Cohesion Report (GSS 2008) | MSD: Social Report 2010 | Statistics NZ: Social Networks & Support Supplement (GSS 2014) | Community Profile: Social Capital Mapping (Christchurch City Council) |
| Measures of Social Capital | Trust | | Trust & acceptance | | | Trust in others | | |
| | | | Type of contact | | | Telephone and internet access in the home | | |
| | | Spending time with others in social settings | | | | Contact with family and friends / Contact between young people and their parents | Contact with family and friends / Household relationships | |
| | | Social support/having someone to rely on in an emergency | Support | | | Loneliness | Social support / Support during a significant life change | |
| | | Time spent volunteering | | Formal unpaid work outside the home | | Voluntary work | | Volunteering |
| | | Voter participation | | Voter turn-out at general and local elections | | Voter turn-out | | |
| | | Trust in political institutions | | Trust in government institutions | | Perceived corruption | | |
| | | | | Representation of women in government | Discrimination | Perceived discrimination | | |
| | | | Network type / Community Involvement | | | | Characteristics of social Network / Strength of social network / Effectiveness of social network / Diversity of social networks | Connectedness / Community development organisations / Participation |
| | | Willingness to help strangers | | | Tolerance of diversity / Sense of belonging / Ability to express own identity | | | Resilience |
| Associated Measures | Leisure time | Work-life balance | | | | Satisfaction with work-life balance / Leisure and recreation | | |
| | Security | Safety | Feelings of safety | Rate of death from assault | | Safety | | |
| | Subjective well-being | Life satisfaction | | Impact of fear of crime on quality of life | | Life satisfaction | | |