



What's on the Horizon?

The Next Five Years and Beyond:

An Environmental Scan

New Zealand Police

February 2011





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Feedback

Comments on this environmental scan are invited, as are suggestions of material for future scans.

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ISBN [978-0-477-10341-1]



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Executive Summary

This environmental scan describes major drivers likely to shape New Zealand over the next five years and beyond. It aims to inform the development of New Zealand Police's strategies and its performance, assurance, planning and policy activities.

Before moving to matters of a more immediate and direct nature in regards to New Zealand Police, the scan acknowledges a wider set of pressures acting on New Zealand. Three 'mega' forces in particular are likely to override or drive all others across the globe in the first half of this century:

- **A historic shifting of power and wealth**
- **The multi-faceted imperative to get 'more from less'**
- **The technology revolution.**

The level of turbulence caused by these mega-trends is redefining what is meant by a 'stable' operating environment. They are also framing the public policy challenges for New Zealand over the coming decades. Against this backdrop of change, challenge and opportunity, the scan looks at what the next five years may hold – and how New Zealand Police can thrive – through seven features of the operating landscape:

Ongoing constrained fiscal environment and upward cost pressures

New Zealand Police is anticipating significant longer-term pressures on publicly-funded services in New Zealand. Leading into the 2020s, the main driver of the demand for public services is expected to be the ageing population. On the supply side, the primary source of cost pressures for delivering these services will be personnel-related.

Demographic changes in relation to migration, and the population's age profile and ethnic mix

People are moving about, to, from and through New Zealand more than ever. And like most other developed countries, the replacement rate of New Zealand's population is declining. As a result of these trends, the country's population is changing structurally, which will affect future demands for service and the makeup of New Zealand Police's workforce.

Rapid advances in technology which are redefining privacy, authorship participation and personalisation

Advances in existing technologies and the emergence of new technologies are changing people's lives faster than anything else. More than ever, individuals are shaping their worlds directly, from the goods and services they consume, to



the governance of nations. These technologies are allowing businesses to interact intimately with customers on a massive scale, challenging traditional notions of privacy, and enabling the emergence of new types of crime.

Increasing expectations of transparency in relation to public institutions' decision-making

There is a major shift towards the transparency of public institutions' and governments' data and decision-making processes, with citizens and other commentators increasingly expecting to be informed as a matter of course. This shift is significant for New Zealand Police. It has an interest in New Zealand being corruption-free, but in performing its functions and meeting its obligations, some secrecy is necessary.

Complex problems requiring multi-player solutions

A simpler time of public institutions unilaterally solving problems has passed, and sophisticated mechanisms of cooperation and accountability, plus means of testing solutions as problems emerge, are now necessary. By its nature, New Zealand Police's work is influenced by the actions of others and at times is accomplished through others. This network must address intractable, complex public problems by providing solutions that are enduring and fair, while avoiding the burdens of excessive administration and bureaucracy.

Changing demand for police services and changing expectations about the nature and quality of public services

The demands for police services are changing as populations become more diverse and the operating environment more complex. Expectations about the nature and quality of these services are changing too, and demands on New Zealand Police are no longer defined by this country's borders. For New Zealand Police, in many ways the impacts of the other drivers described here culminate in this one.

Challenges in countering globalised, technology-enabled crime

In committing their offending, organised criminal syndicates and terrorist groups continue to find new ways to exploit the movement of people and advances in technology. Combating these people and their crimes requires overcoming challenges of interoperability, coordination and governance.

The scan concludes with the phenomenon of unforeseen, one-off events regularly changing the course of history, and necessarily introducing uncertainty into any long-range perspective.



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Chapter 1: Context

About this environmental scan

- 1.1 This environmental scan describes **major drivers likely to shape New Zealand over the next five years and beyond**. It aims to inform the development of New Zealand Police's strategies and its performance, assurance, planning and policy activities. It builds on past environmental scans, and uses narrative to complement the sound sets of hard data New Zealand Police already has. Finally, this document creates a central store of internal and external 'futures' materials.
- 1.2 The scan doesn't seek to replicate excellent recent work done elsewhere. Footnotes to references are provided throughout, and a full list of source material is appended. This collection represents the most detailed level at which this scan can be used; for the time-poor or information-hungry, flicking through the report and taking in the **phrases in bold will give an overview**, although little context. For the more leisurely, the text and excerpts will hopefully create a narrative about what's happening in the world and in New Zealand which can be retold and re-mined.
- 1.3 Before moving to matters of a more immediate and direct nature in regards to New Zealand Police, it's important to acknowledge a wider set of pressures acting on New Zealand. We therefore turn first to a **summary of the main current and likely future global forces** at work, for which small open countries like ours are at best 'future takers' rather than 'future makers'.¹

Global forces at work

- 1.4 Derek Gill and colleagues opened a recent paper with the following:

Powerful global forces will reshape the context for New Zealand over the next few decades. They include **increasing international connectedness, geopolitical power shifts, rapid technological developments, demographic changes, climate change, growing resource scarcity and changing values**. Some of these changes have been in train for several decades; others have come to the fore more recently. Together they are **creating a world that is fast-paced, heterogeneous, complex and unpredictable**. Within this context, New Zealand also faces some policy choices that are both unique and significant – for example, concerning the recently extended exclusive economic zone, and the completion of the Treaty of Waitangi claims settlement process.²

¹ Derek Gill and others, 'The Future State', Institute of Policy Studies Working Paper 10/08, (2010a) <<http://ips.ac.nz/publications/files/3790f871257.pdf>> [accessed 10 May 2010] (p. vii)

² Derek Gill and others, 'The Future State Project: Meeting the Challenges of the 21st Century', *Policy Quarterly*, 6.3 (2010b), 31-39 (p. 33)



- 1.5 **Three 'mega' forces** in particular are likely to override or **drive all others in the first half of this century**: a historic shifting of power and wealth primarily from developed to developing countries, the multi-faceted imperative to get 'more from less', and the technology revolution. These are examined more closely here.

Economic and geo-political considerations: the historic shifting of power

- 1.6 Writing after last November's G20 summit, Australian commentator Alan Kohler explained that the world is reverberating from 'a tectonic shift'³ as the poor accelerate their efforts to buy and sell their way out of poverty through globalised trade:

Just 20 years ago, the richest 20% of the world's population consumed 80% of the world's goods and services, and growth in the GDP of developing countries was only slightly faster than that of the developed.

From 2001, after China entered the WTO, that changed dramatically... between 2002 and 2011 the growth rate of the poor nations more than doubled to 5.9% while that of the rich countries halved to 1.1%. **Now, the world's rich people – one billion of them – consume less than the six billion who are trying to get rich.**

The poor countries – mainly, but not only, China – are enriching themselves through exports, based on low wages and pegged currencies holding prices down, and the result of that has been more production in the world than consumption. That is, **China's output has not been incremental: it has replaced output in the advanced nations** and created huge external deficits, especially in the US... **a historic transfer of wealth is taking place** that can't be, and shouldn't be, stopped.

... If the world's poor were to become wealthier at a rate that caused no pain for the rich, then it would be too slow. There **has to be some diminution of wealth in the rich countries**, which is what's happening in the UK and other European nations that have introduced austerity programs.

The US is trying to dodge it by printing money, but... the result of this is that the American rich are getting richer while the poor get poorer. In other words, **the adjustment required to get China out of poverty is being borne by America's poor.**⁴

- 1.7 At its highest level, this mega-trend is about the shift in the size of the respective GDPs of the current G20 (dominated by the 'G7' - **US, Japan, Germany, UK, France, Italy and Canada - but also including Spain, Australia and South Korea**) relative to the size of the seven largest emerging market economies, referred to collectively as the 'E7' (**China, India, Brazil, Russia, Indonesia, Mexico and Turkey**), **as well as South Africa, Argentina, Saudi Arabia, Nigeria and Vietnam.** While acknowledging the

³ Department of Labour, 'Workforce 2020: Forces for Change in the Future Labour Market of New Zealand' (2008) <<http://www.dol.govt.nz/PDFs/forces-for-change.pdf>> [accessed October 2008] (p. 5)

⁴ Alan Kohler, 'Kohler's Week: G20, Chinese Inflation, My Optimism, PIGS, Banks, Frocks', *Eureka Report*, 13 November 2010, <www.eureka-report.com.au> [accessed 21 November 2010]



inherent uncertainties in any long-term projection, it's predicted that **this latter group will make up the core of the 'new' G20 by the middle of this century.**⁵

More from less: money, resources and the environment

- 1.8 Our second mega-trend is no less significant. Last year, Australia's national science agency identified interrelated trends and shocks likely to redefine how people live. One of the most significant trends, 'more from less: a world of limited resources', was defined thus:

The world has finite natural resources which are being consumed rapidly. At the same time population growth and economic growth are **creating increased demand for dwindling resources.**

Humanity is responding via the **invention of ways to extract more value from fewer resources.** Coming decades will see an imperative for environmental efficiency. There will be **new technologies, new government regulations and new markets.** We believe there will be a major global effort to extract more from less.⁶

Indeed, the World Economic Forum predicts that **demand for water, food and energy will rise by 30-50% in the next two decades**, and explains that failures in their respective security create chronic impediments to social stability and economic growth.⁷ The authors of *Future Agenda - The World in 2020* add to this, citing the claim that **energy is the resource over which many recent wars have been fought.**⁸

- 1.9 **Climate change compounds the 'more from less' mega-trend**, and the big issue dominating world leaders' discourse before the global financial crisis will demand attention again. The Australian Academy of Science expects:

Global warming and associated changes will continue if greenhouse gas levels keep rising as they are now. It is very likely there will be significant warming through the 21st century and beyond....

Climate change will have significant impacts on our society and environment, both directly and by altering the impacts of other stresses....⁹

⁵ PricewaterhouseCoopers, 'The World in 2050 – the Accelerating Shift of Global Economic Power', (2011) <http://www.pwc.com/en_GX/gx/world-2050/pdf/world-in-2050-jan-2011.pdf> [accessed 16 February 2011] (p. 4)

⁶ Stefan Hajkowitz and James Moody, 'Our Future World', (2010) <<http://www.csiro.au/files/files/pw2c.pdf>> [accessed 6 May 2010] (p. 4)

⁷ World Economic Forum, 'Global Risks Report 2011 Sixth Edition', (2011) <<http://riskreport.weforum.org/global-risks-2011.pdf>> [accessed 26 January 2011] (p. 7 and p. 28)

⁸ Tim Jones and Caroline Dewing, *Future Agenda – the World in 2020*, (Oxford: Infinite Ideas, 2010), p. 19

⁹ Australian Academy of Science, 'The Science of Climate Change: Questions and Answers', (2010) <<http://www.science.org.au/reports/climatechange2010.pdf>> [accessed 27 August 2010] (p. 3)



These significant impacts include extreme weather and environmental events that test infrastructure and the preparedness of emergency services, and result in the displacement of people, often across borders. In *Crime and Policing Futures*, this mega-trend as an influencer of future crime is discussed:

Climate change and global demand are likely to **drive future resource-related crime as oil, water and forests become scarce....**

Extreme **climatic shifts will challenge law and order**, particularly in fragile states, and endanger local environments....¹⁰

- 1.10 In case there's any doubt, the two mega-trends of 'historic shift' and 'more from less' are deeply interconnected:

The **central challenge for the future of people and the planet is how to raise more of us out of poverty** – the slum dwellers in Delhi, the subsistence farmers in Rwanda – **while reducing the impact each of us has on the planet.**

Sometime in late 2011, according to the UN Population Division, there will be seven billion of us.... With the population still growing by about 80 million each year, it's hard not to be alarmed. Right now on Earth, water tables are falling, soil is eroding, glaciers are melting, and fish stocks are vanishing. Close to a billion people go hungry each day. Decades from now, there will **likely be two billion more mouths to feed, mostly in poor countries.** There will be billions more people wanting and deserving to boost themselves out of poverty. **If they follow the path blazed by wealthy countries** – clearing forests, burning coal and oil, freely scattering fertilizers and pesticides – they too will be stepping hard on the planet's natural resources. **How exactly is this going to work?**¹¹

The technology revolution: innovation, information and connectivity

- 1.11 Humanity's response to the question of 'how exactly is this going to work?' is **one of invention and technology.** Although opinions vary on how successful this strategy will prove, the OECD for one states that '**innovation is the means of dealing with global and social challenges**', and 'global challenges need to be addressed collectively through global solutions and bilateral and multilateral international co-operation'.¹² For New Zealand's part, if the effects of climate change are to be ameliorated, **it will be through technological solutions, not via the masses individually adjusting their lifestyles.**¹³

¹⁰ Strategic Alliance Group (SAG) Criminal Intelligence Committee Futures Working Group, 'Crime and Policing Futures', (2008) (p. 8)

¹¹ Robert Kunzig, 'Population 7 Billion', *National Geographic Magazine*, January 2011, <<http://ngm.nationalgeographic.com/2011/01/seven-billion/kunzig-text>> [accessed 17 January 2011] (unpaginated)

¹² Organisation for Economic Co-operation and Development (OECD), 'The OECD Innovation Strategy: Getting a Head Start on Tomorrow - Executive Summary', (2010a) <<http://www.oecd.org/dataoecd/3/14/45302349.pdf>> [accessed 28 January 2011] (p. 14)

¹³ John Key, 'New Zealand in the World', Speech to the New Zealand Institute of International Affairs, 31 August 2010, Victoria University of Wellington, Wellington



- 1.12 Only time will tell whether the 'tech revolution' will allow the Earth's populace to overcome the challenges of getting 'more from less' while the 'historic shift' takes place. In the meantime, technology changes that began long ago continue today, albeit at an exponentially accelerated pace.¹⁴ As with other revolutions, this one is double-edged – **revolutions are disruptive, uneven and their effects are only partially understood in advance**. Although these characteristics define this mega-trend more than single sub-trends, many of these are significant in their own right:

The **technology landscape has continued to evolve rapidly**. Facebook, in just over two short years, has quintupled in size to a network that touches more than 500 million users. More than 4 billion people around the world now use cell phones, and for 450 million of those people the Web is a fully mobile experience. **The ways information technologies are deployed are changing too**, as new developments such as virtualization and cloud computing reallocate technology costs and usage patterns while **creating new ways for individuals to consume goods and services** and for entrepreneurs and enterprises to dream up viable business models.... The rapidly shifting technology environment raises **serious questions for executives about how to help their companies capitalise on the transformation under way**.¹⁵

Managing in this kind of future

- 1.13 The level of turbulence caused by these mega-trends means **redefining a 'stable' operating environment**. For businesses:

Even the most formidable market position [will be] vulnerable to technological disruptions, upstart competition, shifting capital flows, new regulatory regimes, political changes, and other facets of a chaotic and unpredictable business environment.¹⁶

and creating 'the way forward' by **anticipating the source and shaping the impact of change will be more important than ever**.¹⁷

... Strategy became relatively formal in the 1960s for two reasons. The first was an **increasing amount of available data** on business costs, prices, and operational performance. The second reason was **uncertainty, and the anxiety** that went with

¹⁴ Ian Morris, 'Why the West Rules – For Now: the Patterns of History and What They Reveal About the Future', Speech to the Carnegie Council, 28 October 2010, <http://www.carnegiecouncil.org/resources/transcripts/0331.html/res/id=sa_File1/Why_the_West_Rules_For_Now.pdf> [accessed 16 February 2011] (unpaginated)

¹⁵ Jacques Bughin and others, 'Clouds, Big Data, and Smart Assets: Ten Tech-Enabled Business Trends to Watch', *McKinsey Quarterly*, (2010) <http://www.mckinseyquarterly.com/Clouds_big_data_and_smart_assets_Ten_tech-enabled_business_trends_to_watch_2647> [accessed 15 September 2010] (p. 1)

¹⁶ Cesare Mainardi and Art Kleiner, 'The Right to Win', *Strategy and Business*, 61 (2010), 36-49, <http://www.strategy-business.com/media/file/sb61_10407.pdf> [accessed 8 December 2010] (p. 40)

¹⁷ Gill and others, 2010b, p. 35



it. The economic stability of the early 1960s dissolved into the turbulence of the 1970s and '80s, striking **different components of society with different degrees of prosperity and calamity**. No company could ever be sure it would remain on top... [and] ... **global economies were highly interconnected** (although it wasn't always quite clear how they might interact)....¹⁸

1.14 Public management has not been immune from rising levels of turbulence and the commensurate need to become adept at managing in a changeable operating environment. **Four key challenges for public policy development** in New Zealand have been identified for the coming decades:

1. **Affordability**, which requires the ability to achieve step change in policy design and delivery
2. **More complex problems**, involving many players, which require the capability for leadership of issues, co-design and co-production
3. A more diverse and differentiated population which requires the capability for **differentiated responses**, and
4. **A world of faster, less-predictable change** which requires the capability for constant scanning and learning the way forward.¹⁹

1.15 At a glance, these seem generic and timeless – hasn't the future always been about greater complexity, differentiation and diversity, the quickening pace of life? Ian Morris, historian, archeologist and social scientist:

But – big but – my feeling is a lot of these books are written by people who ... tend to see the future as being just like the present but shinier, bigger, and richer.... It seems to me that the one thing **we can be absolutely confident** about is that **the 21st century is not going to be the 20th century but shinier....**

I have this numerical index for measuring social development which runs through [my] book. On this index, **the amount of change in the next 100 years, if 20th century rates continue, will be four times as much as the amount of change in the last 15,000 years**. This is absolutely mind-boggling.²⁰

1.16 It's against this backdrop of change, challenge and opportunity that we now look at what the next five years may hold for New Zealand, the public sector, and policing generally, and how New Zealand Police can thrive as the future unfolds.

¹⁸ Mainardi and Kleiner, p. 41

¹⁹ Gill and others, 2010b, p. 33

²⁰ Morris, unpaginated



Summing up: key points from this section

- ★ Three 'mega' forces are likely to override or drive all others in the first half of this century
- ★ A historic transfer of wealth and power - broadly from developed to developing countries - is taking place
- ★ Natural and financial resources will come under increasing pressure, with the Earth's population passing eight or even nine billion people, and climate change significantly impacting societies and environments. This will give new meaning to 'more from less'
- ★ The technology 'revolution' is accelerating the pace of change, and its effects are disruptive, uneven, and only partially understood as they unfold
- ★ The level of turbulence caused by these mega-trends is redefining a 'stable' operating environment.



Chapter 2: The Next Five Years and Beyond

2.1 Having set the scene with our three mega-trends, in this chapter we examine in detail **forces likely to act on New Zealand Police's operating environment for at least the next five years**. These features of the landscape are:

- Ongoing constrained fiscal environment and upward cost pressures
- Demographic changes in relation to migration, and the population's age profile and ethnic mix
- Rapid advances in technology which are redefining privacy, authorship, participation and personalisation
- Increasing expectations of transparency in relation to public institutions' decision-making
- Complex social problems requiring multi-player solutions
- Changing demand for police services and expectations about the nature and quality of public services
- Challenges of interoperability in countering globalised, technology-enabled crime.

These drivers interact with one another and are in turn shaped by the trends outlined in Chapter 1 ('historic shift', 'more from less', and 'the tech revolution'). Because of their individual natures, each of the seven components receives a slightly different treatment.

Ongoing constrained fiscal environment and upward cost pressures

2.2 It will startle few that the ongoing constrained fiscal environment, and the accompanying upward pressure on costs, feature early in this scan. Continuing to draw on recent, local research, Gill and others observed that:

Compounding the immediate fiscal pressures generated by the global recession during 2008-09, **New Zealand, like many other countries, faces significant longer-term pressures on both the demand for, and the cost of, publicly-funded services**. These will exacerbate the government's fiscal difficulties. The cost pressures will arise because government services are generally labour-intensive and, in particular, are high users of skilled labour, and the cost of which is likely to continue to rise. **On the demand side, the ageing population will provide the key driver**. Responding to these challenges simply by 'doing more with less' will not be sufficient – **the gap is too large for efficiencies alone to bridge**.²¹

²¹ Gill and others, 2010b, p. 33



2.3 From the Government's point of view, this is how **the country's finances stood in December 2010**:

Budget 2011 will be delivered against a backdrop of a New Zealand economy that is well down the path of recovery having recorded five successive quarters of growth. Unemployment peaked in late 2009 and is now falling. Core inflation and short-term interest rates remain low. Our key trading partners are also growing, although that growth is uneven.²²

2.4 In describing how New Zealand's economy will be better balanced and more able to **meet the sizeable future costs associated with the country's changing population structure** in time for the early 2020s, the Minister of Finance has outlined the Government's fiscal objectives:

- Manage the Crown's balance sheet and **return the operating balance to surplus** as soon as practical, and no later than 2015/16
- Once surplus is attained, **continue to constrain public spending** so debt and interest that is accumulating now can be paid off
- Ensure that net debt remains under 40% of GDP and is brought back to **a level no higher than 20% of GDP by the early 2020s**
- Lift productivity levels in the public sector by making a series of ongoing, potentially significant choices about **which services the government funds and how these are provided**
- **Realise significant change in all major departments** over the next four years, with no new funding or capital injections for most departments for several years.²³

What's it like elsewhere?

2.5 The purpose of next examining the global economy is two-fold: it's useful to remember that New Zealand's small, open economy tends to be **buffeted by volatility abroad more than most**, and that we need to pay attention to what's happening elsewhere. It also reminds us that **individual countries' systems are — more than ever — deeply integrated with global ones**. We've seen this dramatically with the **contagion effects of the global economic crisis**, and it features regularly elsewhere: take as examples the **impact of volcanoes and snow storms on the movement of people between continents**; and the predicted **impact of recent flooding in Australia on China's economy** specifically, and the international economy more widely. This **integration is causing the multiplication and magnification of the effects of single events on humanity as never before**.²⁴

²² Bill English, 'Budget Policy Statement 2011', (2010a)

<<http://www.treasury.govt.nz/budget/2011/bps/bps11.pdf>> [accessed 12 January 2011] (p. 1)

²³ English, (2010a), pp. 9, 10, and 12

²⁴ Jones and Dewing, p. 268



- 2.6 Alan Kohler, from whom we first heard in Chapter 1, recently outlined the state of the international economy:

America is borrowing \$US40 billion a month to pay for its expensive lifestyle; **China is making \$US25 billion a month from the US** and stashing the dollars away – not giving it to the people to help their lifestyle but hoarding it. America's currency should collapse to even things up but China and the oil exporters are propping it up by recycling surpluses back into dollars and, anyway, China is pegging its currency to America's, basically stopping it from adjusting as it should.

The Eurozone as a whole is recovering quite well, thanks to the low euro and Germany's export strength, but there are big differences within Europe. Specifically [Portugal, Ireland, Greece and Spain] are struggling to turn around their budget deficits, which is in turn caused by the fact that **their economies are fundamentally uncompetitive**. Ireland and Greece especially are in trouble. Unemployment remains very high and the governments are facing enormous political pressure against spending cuts designed to reduce their deficits.

Meanwhile, **Europe is at a crossroad**. Its own governing elites must decide whether to deepen the integration between the countries that make up Europe in order to save the idea and reality of the European Union. That would involve the **rich countries continuing to pay for bailing out the poorer ones** – a sort of ongoing welfare system between states – or to stand back and let the basket cases sink or swim, with the inevitable result that at least Monetary Union crumbles and probably the EU itself, eventually.

The new framework for economic governance and crisis resolution, agreed over the past few weeks and focused on financial assistance to Ireland and Greece, is **a clear step towards deeper integration**.

The problem is that the leaders of the rich countries at the core of Europe are reluctant and tentative about it, with the result that bond markets are not convinced. The size of the European Financial Stability Fund (EFSF) has not been increased, and **there is no consensus, private or public, about how to address the longer-term issues**; that is, how to come up with a comprehensive solution that deals with both short-term liquidity problems and the long-term solvency of Ireland, Greece, Spain, Portugal and Italy.²⁵

- 2.7 In keeping with the second of our three mega-trends ('more with less') then, every developed country is experiencing similar challenges to New Zealand in relation to the cost of providing public services. Although the rate and magnitude of the response to these challenges is varied, **inevitably the cost of public policing is under scrutiny**. Perhaps the most widely publicised, relevant instance of this is happening in the United Kingdom.
- 2.8 In October 2010, HM Treasury announced decisions in relation to Spending Review 2010 - a process to allocate resources across all departments according to government priorities for the four years from April 2011 to March 2015.²⁶

²⁵ Alan Kohler, 'Kohler's week: US, China, Europe, Australia, Wikileaks, Adelaide Oval, Soccer', *Eureka Report*, 11 December 2010, <www.eurekareport.com.au> [accessed 11 December 2010]

²⁶ HM Treasury, 'An Introduction to Spending Review', (2010a) <http://www.hm-treasury.gov.uk/spend_spendingreview_introduction.htm> [accessed 19 January 2011]



The Review aims to hold the United Kingdom's baseline constant, resulting in a **decline in spending in real terms of 8.3% (or £81bn)** as it cuts or reallocates funds, and departments absorb upward cost pressures. For police, it means:

- **Central government police funding will reduce by 20 per cent in real terms by 2014-15.** If Police Authorities were to choose to increase [the police part of] council tax at the level forecast..., the Spending Review settlement means that on average police budgets would see real term reductions of 14 per cent over the next four years.
- In order to protect key priorities, police forces will need to focus on driving out wasteful spending, reducing back office costs and improving productivity. The Government will support this by **ending central targets** and cutting out time wasting bureaucracy that hampers police operations. It will also introduce better technology, and **modernise pay and conditions**.
- Police forces will become more accountable to the communities they serve, through the **introduction of directly elected Police and Crime Commissioners**. This will ensure that police forces focus their resources on tackling the crime and anti-social behaviour which matters most to local communities.
- **By 2014/15, the Home Office will reduce overall resource spending by 23% in real terms, and capital spending by 49% in real terms.**
- A new National Crime Agency will help combat organised crime, protect the UK's borders and provide services that are best delivered at a national level. **The National Policing Improvement Agency will be abolished** and some of its functions will be absorbed into the National Crime Agency, saving at least £50 million.²⁷

2.9 For the Ministry of Justice, faced with similar-sized cuts, it means an **ambitious target of 3,000 fewer prisoners** by the end of the Spending Review period – if successful, the first fall in the prison population for two decades.²⁸ Reforms will focus on the sentencing framework, closing of courts, increasing the use of mediation and other alternatives to court where possible, and the legal aid system.²⁹

What does all of this mean for New Zealand Police?

2.10 In New Zealand, although we are fortunate that less radical action has been proposed for closing the gap between public revenue and spending, the underlying cause of our shortfall is similar: New Zealand's nominal (ie., including inflation) **economic growth averaged 5.2% a year in the 15 years to 2009**. During the same period, **public spending increased by 6.3% per year: in relation to justice, the figure was 7.0%**. For a good

²⁷ HM Treasury, 'Spending Review 2010 Chapter 2: Departmental Settlements,' (2010b) <http://cdn.hm-treasury.gov.uk/sr2010_chapter2.pdf> [accessed 19 January 2011] (pp. 54-55)

²⁸ Dominic Casciani, "Spending Review' Cuts 'Mean 3,000 Fewer Inmates'", *BBC News*, 20 October 2010, <<http://www.bbc.co.uk/news/uk-11586371>> [accessed 21 October 2010]

²⁹ HM Treasury, 2010b, pp. 55-56



proportion of these 15 years, New Zealand ran a significant surplus, but when the most recent recession took hold, the government's tax-take declined, the cost of borrowing from abroad increased abruptly and the imbalance between public spending and income was fully revealed.³⁰

- 2.11 The **biggest spend for Government by a considerable margin is on social security and welfare** (\$21.2 billion or 33%), followed by health (\$13.1 billion; 20%) and education (\$11.8 billion; 18%). The next category is that of core government services, and then comes law and order. **New Zealand Police's budget makes up 43% of the government's \$3.3 billion annual spend** in this area, which in turn constitutes 5% of the Crown's total core expenses of \$64.8 billion (all figures are those forecast for 2010/11).³¹ Of the main agencies from which governments purchase law and order services, **New Zealand Police's budget is forecast to be flat until 2014**, the Ministry of Justice's is set to rise and then decline to current levels, the Department of Corrections' will increase due to capital expenditure, and Customs' will rise by some 18%. The **biggest police-related fiscal risk** to the Government is future funding for continued expansion of the digital radio network (estimated to be around \$150 million in May 2010).³² Looking back:

Spending in the justice sector doubled in inflation-adjusted terms, from 1994 to 2009. The **increase in spending has not been linked to recorded crime rates**, which have been broadly stable over the same period. Rather, **cost growth has been driven primarily by the decisions of governments**.³³

- 2.12 The **biggest proportion of New Zealand Police's 2009/10 budget of \$1.41 billion was personnel costs at 73%** (ie., \$1.03 billion).³⁴ This was an overall rise of 5% from the previous decade: in the 2000/01 financial year, New Zealand Police's budget was \$792 million, and personnel costs were 68% of its total budget (ie., \$536 million).³⁵ As a direct consequence of New Zealand's recent recession, the attrition of the largest group of New Zealand Police's staff – its constables – is just starting to lift from a two-year period of historic lows. Although the attrition rate for constables is likely to drift towards the century-long average of around 6%, its dip will impact Police budgets for years to come.^{36,37}

³⁰ The Treasury, 'Challenges and Choices: New Zealand's Long-Term Fiscal Statement', (2009) <<http://www.treasury.govt.nz/government/longterm/fiscalposition/2009/lfs-09.pdf>> [accessed 24 May 2010] (p. 9)

³¹ Bill English, 'Budget 2010 Economic and Fiscal Update', (2010b) <<http://www.treasury.govt.nz/budget/forecasts/befu2010/befu10-whole.pdf>> [accessed 24 May 2010] (p. 149)

³² English (2010b), p. 89

³³ The Treasury, p. 41

³⁴ New Zealand Police, '2009/10 Annual Report', (Wellington: New Zealand Police, 2010a), p. 61

³⁵ New Zealand Police, 'Report of the New Zealand Police for the Year Ended 30 June 2001', (2001) <<http://police.govt.nz/resources/2001/annual-report/annual-report.pdf>> [accessed 24 February 2011] (p. 88)

³⁶ Tony Ryall, 'Speech to Public Service Association Congress', (2010) <http://www.psa.org.nz/Libraries/PSA_Document_2/Hon_Tony_Ryall.sflb.ashx> [accessed 21 September 2010] (unpaginated)

³⁷ English, 2010b, p. 152



- 2.13 Of the other 27% of Police's budget, approximately 15% is asset-related (ie., associated with vehicles, property, and information and communications technology), and the remainder is accounted for by operating expenditure on forensic services, Crown solicitor expenses, telecommunications, etc.³⁸
- 2.14 As well as influencing the internal workings of New Zealand Police, the state of **the economy is affecting the profile of crime types both here and abroad**. The consequences, for example, of growing international demand for oil on the ways people choose to travel, and in turn road safety, is flagged in the Ministry of Transport's *Safer Journeys* road strategy to 2020 – see pages 6 and 7 for more.³⁹ Elsewhere, see the *Crime and Policing Futures* chapter on crime and the altering geopolitical and economic landscape (pages 3–5), and the chapter on policing futures (pages 12–15). See also the World Economic Forum's latest global risks report, in which an 'illegal economy' nexus of risks formed by organised crime, corruption, illicit trade and weak states, and exacerbated by macroeconomic conditions, is outlined on pages 21–25. Finally, on a slightly different tack, for a short description of the effects of 'budget issues' on resourcing public versus private policing, see *The USA: The Next Big Thing*.⁴⁰
- 2.15 The trend of ongoing fiscal constraint and upward cost pressures is **about more than getting the books to balance** every year: as it continues to play out in the USA, Europe, Asia, Australia and the Pacific, **there will be a range of consequences for New Zealand**. It's likely to affect our relationships with future economic powerhouses as others jostle to get around their tables, our support of nations with whom we have special relationships but which are struggling financially, our earning potential specifically, and our place in the world generally. These factors in turn will have **consequences on aspirations** to see New Zealand rise in OECD league tables, 'catch up' to Australia, and **to improve the quality of the lives of our citizens**.

³⁸ New Zealand Police, 2010a, p. 71

³⁹ See <http://www.transport.govt.nz/saferjourneys/towardsasafesystem/> [accessed 20 February 2011]

⁴⁰ John Crank and others, 'The USA: the Next Big Thing', *Police Practice and Research*, 11.5 (2010), 405–422



Summing up: key points from this section

- ★ Leading into the 2020s, the main driver of the demand for public services in New Zealand is expected to be the ageing population
- ★ On the supply side, the primary source of cost pressures for delivering these services will be personnel-related
- ★ The Government is currently borrowing from offshore to fund public spending, and intends to pay a significant proportion of this debt back in the latter half of this decade. Its next objective is to then ready the country for the fiscal challenges associated with the ageing population, compounded by declining fertility rates
- ★ Law and order makes up 5% of the Crown's current expenditure
- ★ The biggest proportion of New Zealand Police's 2009/10 budget of \$1.41 billion was taken up by personnel costs at 73% (ie., \$1.03 billion).



Demographic changes in relation to migration, and the population's age profile and ethnic mix

New Zealand's changing population

- 2.16 Our second factor is one that has long shaped New Zealand: the changing composition of its population. As the spectrums of social inequality, social cohesion, and geographical mobility lengthen and widen, the cumulative effect is that of deep structural shifts.⁴¹ To quote *The Future State* again:

In the first 150 years of New Zealand's European colonisation, immigration favoured people from Anglo and European countries. Over time, **New Zealand has changed from 'Colonesia' to 'PolynAsia' as the source of migrants shifted to include western Polynesia** (for example, Fiji, Samoa, Tonga, and the Cook Islands) and new arrivals from the Indian subcontinent and eastern Asia (for example, India, China, Korea, and the Philippines). The proportion of New Zealanders with Māori, Asian, and Pacific affiliations is projected to continue to increase because of migration and higher (but **still declining**) **fertility rates** compared with the rest of the New Zealand population. Movement across the country's boundaries is significant. New Zealanders have a **high and increasing propensity for international travel** and migration both inwards and outwards. Around one-fifth of New Zealanders are overseas at any one time, which proportionally is **one of the largest expatriate populations** in the developed world. A relatively large proportion of the population was born overseas... and New Zealand has **one of the highest through-migration rates** of any OECD country.⁴²

- 2.17 Ian Pool adds this texture to this assessment:⁴³

New Zealand has moved over recent years from trends and patterns of population dynamics and patterns that **were essentially growth-driven** - the volumes of people being born, dying and migrating - **to one of change being composition driven**.

Population changes now will come increasingly from structural shifts rather than from growth *per se*. The **most important structural change is the age-structural transition** New Zealand is facing. This is the **product primarily of shifts in Pakeha fertility** over past decades, reinforced to a limited degree by migration.

New Zealand as a **society is increasingly being split in two**. Over time, the **economic power is concentrating in the largest metropoli, and above all Auckland**.

New Zealand is [also] dichotomising **into have and have-not regions**. Indeed, it has almost **trichotomised** into those **regions which gained demographically**, and in terms of human capital, **those that stood still**, and finally **those that became**

⁴¹ Ian Pool and Sandra Baxendine, 'Population Trends, Convictions and Imprisonment: Demographic Convergence, Dichotomy and Diversity', University of Waikato Population Studies Centre Discussion Paper No 61, (2006) <http://www.waikato.ac.nz/data/assets/pdf_file/0006/74166/dp-61.pdf> [accessed 15 February 2011] (p. 2)

⁴² Gill and others, 2010a, pp. 20-21

⁴³ Pool and Baxendine, pp. 1, 2, 5, 6, 15



disadvantaged. These **patterns are also reflected in trends in social inequality**, in factors like education, health, income and employment patterns, and social cohesion, including need for benefits and imprisonment.

...Cultural diversity [...] is definitely going to shape every aspect of our national life, and certainly the way we approach social policy. In public perceptions, diversity is a more manifest issue than dichotomisation discussed earlier, **yet of the two factors the latter is probably the more important, especially for question of social cohesion, the concern that the justice system must mediate.**

... Diversification barely extends beyond Auckland and Wellington. In every other region 90 percent or more of the population in 2001 were either Māori or Pakeha. The ethnic distribution for Auckland has, of course, a disproportionate effect on that for the whole of New Zealand.

See the excellent chapter in the Ministry of Social Development's annually-released *The Social Report* titled *People* for the latest facts and figures (pages 10-21).⁴⁴ You'll find New Zealand's population size and growth, components of population change, people born overseas, fertility, geographical distribution, ethnic composition, age and sex structure, household composition, children, housing, languages, disability and sexual orientation.

The changing age profiles of populations generally

- 2.18 In 2009, The Treasury estimated that **25% of government spending was on the 12% of the population over 65 years** of age.⁴⁵ And the World Economic Forum predicts that age-related future liabilities of developed countries will dwarf the short-term costs of current economic stimulus packages.⁴⁶ The changing age profile of populations will lead to more than affordability problems for governments though:

The number of people aged 60 and over in the world tripled over the past 50 years; it will more than triple again over the next 50 years, but the proportion of older people within countries and regions is not equally distributed. In general, **more developed countries have larger proportions of older people** than less developed regions have. Europe has the largest proportion of older people, with 37% of the European population projected to be aged 60 or over in 2050. In contrast, only 10% of the population of Africa is projected to be aged 60 or older in 2050. Many of the accounts of ageing populations highlight the 'fiscal burden of ageing', referring to the combination of **reduced labour force participation, increased pension or social welfare entitlements, and increased healthcare costs.** In contrast, the bulges of juvenescent populations, in a crescent from the Andean regions of Latin America, across sub-Saharan Africa, the Middle East, and the Caucasus, and into the northern parts of South Asia, have been referred to as an '**arc of instability**', **associating**

⁴⁴ Ministry of Social Development, '2010 The Social Report', (2010), <<http://www.socialreport.msd.govt.nz/tools/downloads.html>> [accessed 5 January 2011]

⁴⁵ The Treasury, p. 17

⁴⁶ World Economic Forum, p.17



populations with large proportions of young adults with the emergence of political violence and civil conflict.⁴⁷

Migration and ethnic mix generally

- 2.19 People are moving about the Earth on a phenomenal scale, and **by the end of this year the globe will be home to 7 billion** people – 5.25 billion more than a single century ago.⁴⁸ Some of the potential consequences of these changes are captured below:

Although economic incentives, conflict and war will continue to drive legal and illegal migration, environmental pressures and climate change will become more critical. Between 1990 and 2000, the number of refugees and migrants in the world increased by 14 percent to approximately 175 million. This figure is expected to increase to 230 million by 2050. **More migrants are moving from developing to developed countries than ever before, at a current rate of 2.4 million per year.** This trend is expected to continue and will be fuelled by globalisation, developments in information, and communications technology and labour demands. Demographic change will strongly influence source and destination countries in the future. While the world's cities grew rapidly during the 20th century, **the next few decades will see unprecedented urban growth, particularly in the developing world.**⁴⁹

The **advent of bigger, denser cities and future 'mega-city-states'** have their origins in the three mega-trends in Chapter 1, and will come with a **tangle of quality-of-life** (poverty, health) **and logistical** (energy, transport) **problems.**⁵⁰

- 2.20 Some of the pressures from these changes and the problems they are presenting for governments are neatly captured in this example:

Germany's attempt to create a multicultural society has “utterly failed,” Chancellor Angela Merkel said on Saturday, adding fuel to a debate over immigration and Islam polarising her conservative camp....

Merkel said allowing people of different cultural backgrounds to live side by side without integrating had not worked in a country that is home to some four million Muslims....

Merkel has tried to accommodate both sides of the debate, talking tough on integration but also telling Germans that they must accept that mosques have become part of their landscape.

⁴⁷ Gill and others, 2010b, pp. 12-13

⁴⁸ U.S. Census Bureau, 'Historical Estimates of World Population', <<http://www.census.gov/ipc/www/worldhis.html>> [accessed 18 December 2011]

⁴⁹ SAG, p. 6

⁵⁰ Jones and Dewing, pp. 231-33 and 243-45



She said on Saturday that the education of unemployed Germans should take priority over recruiting workers from abroad, while noting **Germany could not get by without skilled foreign workers....**

Labour Minister Ursula von der Leyen (CDU) raised the possibility of **lowering barriers to entry for some foreign workers** in order to fight the lack of skilled workers in Europe's largest economy.

Yet Horst Seehofer, chairman of the Christian Social Union (CSU), the CDU's sister party, has rejected any relaxation of immigration laws and said last week there was **no room in Germany for more people from "alien cultures"**.⁵¹

What's the impact on crime and policing?

- 2.21 Inevitably, these trends are shaping crime. *Crime and Policing Futures* points to criminals **exploiting the movement of people** (illegal people movement is the third largest source of profit for organised crime after drugs and guns; the World Economic Forum estimates human trafficking is worth \$US30 billion annually), **hardship for migrants** in destination countries continuing to be a source of social stress, victimisation and crime, and rapid urban growth resulting in **new or more crime environments** that are, even if only temporarily, **un-policed while law enforcement agencies 'catch up'** (see pages 6 and 7 of *Crime and Policing Futures* for more).^{52,53}

- 2.22 **New Zealand's changing demographics is affecting the nature of the work New Zealand Police is likely to encounter.** One source of more information on this is *Addressing the Causes of Offending: What is the Evidence?* which has chapters on children, parenting, education, families, young people, victims and offenders.⁵⁴

What's the impact likely to be on New Zealand Police as an organisation?

- 2.23 For New Zealand Police, the effects of New Zealand's ageing population are **manifesting internally particularly quickly**. By 2020, for example, New Zealand Police will have a quarter fewer constables under the age of 40 years than it did in 2000, even though there will be a greater number of constables overall. This is due to a combination of one-off recruitment of large groups of constables, other **historic recruiting decisions** (including those in relation to the age of recruits), and the **drop of attrition rates** in line with the recent recession. The **average tenure of staff is also increasing** - driven in part by the recession - with the **retention of knowledge and experience being an upside**, and the associated **fiscal expense** being a downside.

⁵¹ Reuters, 'Merkel: German Multiculturalism Has Failed', 18 October 2010, <<http://www.stuff.co.nz/world/europe/4243459/Merkel-German-multiculturalism-has-failed>> [accessed 18 January 2011]

⁵² World Economic Forum, p. 23

⁵³ Pool and Baxendine, p. 6

⁵⁴ See *Addressing the Causes of Offending – What is the Evidence?*, ed. by Gabrielle Maxwell (Wellington: Institute of Policy Studies, 2009)



2.24 *Policing Directions in New Zealand for the 21st Century* describes the principle of **a public police's workforce being representative of its community as at the heart of trust and confidence, legitimacy, and popular support for policing**.⁵⁵ This principle has seen the New York Police Department making progress towards its workforce more closely mirroring the overall ethnic makeup of the city. At the end of 2010, the department's minority ethnicities summed to 53% of employees, with the final 3% of gains being made in the last four years.⁵⁶ Of New Zealand Police's employees today:

- **29.3% are female** (17.3% of constables are female);
- **11% identify as New Zealand Māori** (compared to 14.6% of the New Zealand population according to the 2006 census, and **projected to be 16% of the population by 2026**; and worth considering alongside the proportion of victims and offenders who identify as New Zealand Māori)
- **4.8% identify as Pacific people** (compared to 7.5% of the New Zealand population according to the 2006 census, and **projected to be 10% of the population by 2026**);
- **2.1% identify as Asian people** (compared to 9.3% of the New Zealand population according to the 2006 census, and **projected to be 16% of the population by 2026**).^{57,58}

Broadly speaking, the Māori and Pacific proportions of New Zealand Police's constables are growing at the same rate as their respective proportions of the overall population; the gap between the respective proportions of Asian peoples is widening; and slow progress is being made towards a more even ratio of male to female constables. In terms of levels of position, Māori and female proportions of the workforce are more evenly spread over levels of seniority (although numbers are small), whereas Pacific and Asian proportions of the workforce are seen in relatively greater numbers at levels associated with shorter tenure, because of more recent active recruiting of these groups off a very low base.

2.25 Not as easily visualised is New Zealand Police's future workforce. It will be increasingly diverse, but **questions arise** out of the short study we've undertaken here, and there are many others besides:

- What will all this mean **operationally** - will an older workforce want to do shift work or to move geographically as the organisation needs them to?
- What does it mean for **superannuation** in the future? For **health, safety and other welfare** concerns?

⁵⁵ New Zealand Police, 'Policing Directions in New Zealand for the 21st Century', (Wellington: New Zealand Police, 2007), pp. 18-19

⁵⁶ Tamer El-Ghobashy, 'Minorities Gain in NYPD ranks' *Wall St Journal*, 7 January 2011, <<http://online.wsj.com/article/SB10001424052748704415104576066302323002420.html>> [accessed 4 February 2011]

⁵⁷ New Zealand Police, 2010a, p. 29

⁵⁸ Ministry of Social Development, p. 16



- How will the upcoming **world-wide competition for workers** (brought about by shrinking workforces in developed countries) play out for New Zealand Police and New Zealand generally?
- How will **counter-trends** manifest? Will we see an extension of the tenure spectrum, from a bulge in those who view policing as a short career amongst many, to the record for the longest tenure being challenged as Police employees work for longer?
- What will increasing diversity do to New Zealand Police's workforce's **cohesiveness, values and identity** - traditional strengths and weaknesses in a public police?

2.26 A final comment before moving on. The characteristics of a population can be cut in an infinite number of ways, and we have largely focused here on the denominators of age, ethnicity and migration. Organisations such as New Zealand Police are interested in much more than these, especially when one of its responsibilities is, to the extent that a public police is able, to prevent crime. David Bayley writes in *Police for the Future*:

Crime experts generally accept that the **best predictors of crime are factors such as employment status, income, education levels, gender, age, ethnic mix and family composition.**⁵⁹

Breakdowns of these data are a mouse-click away. See *The Social Report* for outcomes and indicators on safety, paid work, economic standard of living, civil and political rights, cultural identity, health, knowledge and skills, leisure and recreation, social connectedness and life satisfaction. Pages 6-7 explain the indicators that have been used, pages 127-146 summarise trends along gender, ethnic, socio-economic and international lines, and a host of references and technical details are appended at the back.⁶⁰ Statistics New Zealand publishes oceans of data, and internally, district and service centre environmental scans and intelligence products capture a range of information.

2.27 Leaving the theme of demographics there, we next turn to technology and transparency-related trends.

⁵⁹ David Bayley, *Police for the Future*, (New York: Oxford University Press, 1994) p. 10

⁶⁰ <<http://www.socialreport.msd.govt.nz/tools/downloads.html>>



Summing up: key points from this section

- ★ Deep structural changes in New Zealand's population are not being caused by growth in overall numbers, but by lengthening and widening spectrums of age, urbanisation and social inequality
- ★ In 2009, 25% of government spending was on the 12% of the population over 65 years of age and this will increase
- ★ Age-related changes are manifesting internally for New Zealand Police particularly quickly, and have operational and fiscal implications
- ★ People are moving about the Earth more than ever before, and multiculturalism and the settling of migrants are bringing a host of challenges for governments
- ★ Cultural diversity will continue to shape New Zealand, but very unevenly, and mostly in Auckland
- ★ New Zealand Police's progress towards its constables being more representative of the population it polices is slow.



Rapid advances in technology which are redefining privacy, authorship, participation and personalisation

- 2.28 **Advances in existing technologies and the creation of new technologies are changing our lives faster than anything else, and have started to radically transform the way societies function.**⁶¹ In this section, we'll rattle through some of the main components of this trend, and look at what the New Zealand government is doing to take advantage of the opportunities on offer.

Advances in technology: some sub-trends

- 2.29 Certain types of technology are converging and others are emerging. At its extreme, **convergence has created an online, parallel digital universe** of social interactions, information systems, transactions and sensory systems.⁶² Some technologies are converging and miniaturising in a relatively linear fashion (for instance, phones hosting the internet has been a logical step), but the implications of the **newest emerging technologies - genetic, robotic, and nano**, for example - are much less understood on their own, and in terms of how they interact with one another and other facets of modern life.⁶³ One consequence of the pace of change, combined with this lack of understanding, is that **'what is possible' is being created 'faster than legislative and regulatory processes can respond to'**.⁶⁴
- 2.30 Developments in technology are **accelerating the break-down of physical, organisational and geographical boundaries** that has accompanied globalisation. This trend is not a new one (technology has enabled - and followed - human movement for eons); what is new is the sheer rate at which it's happening.⁶⁵ McKinsey Quarterly predicts radical changes in the workplace:

We believe that the more porous, networked organisations of the future will need to **organise work around critical tasks rather than molding it to constraints imposed by corporate structures....** Management orthodoxies still prevent most companies from leveraging talent beyond full-time employees who are tied to existing organisational structures. But **adhering to these orthodoxies limits a company's ability to tackle increasingly complex challenges.** Pilot programs that connect individuals across organisational boundaries are a good way to experiment with new models, but incentive structures must be overhauled and role models established to make these programs succeed. In the longer term, networked organisations will focus on the **orchestration of tasks rather than the "ownership" of workers.**⁶⁶

⁶¹ Gill and others, 2010a, p. 8

⁶² Hajkowicz and Moody, p. 13

⁶³ Hajkowicz and Moody, p. 12

⁶⁴ Gill and others, 2010b, pp. 34-5

⁶⁵ Morris, unpaginated

⁶⁶ Bughin and others, p. 4



- 2.31 **Computing power and capacity are less and less of a barrier to human ambition.** Rapid increases in mobile computing power and capacity, and in the speed at which information can be transmitted has been matched by plummeting prices.⁶⁷ **Universal data access is on the way**, and it's increasingly likely that the first experience of the internet by future consumers of technology will be through a mobile device rather than a PC.⁶⁸
- 2.32 The massive growth in service industries (currently adding up to more than two thirds of New Zealand's economy, for example), overlaid with advances in technology, is enabling the **customisation and personalisation of offerings for customers**, and their **participation in the design and delivery** of these services like never before.⁶⁹ More and more, people can demand and get what they want; in turn, businesses are rewarded with precious loyalty.
- 2.33 **Personalisation** is taking the 'user pays' model to a much more finely-grained level, and not just for individuals.⁷⁰ In the ICT world, engagement of external service providers is replacing capital expenditure in an example of service provision and personalisation on a phenomenal scale. The divestiture of equipment via cloud computing - where computing resources (networks, servers, storage, applications, and services) **are remotely-located and shared rather than individually owned** - is gathering speed, and governments have been the most enthusiastic adopters to date.⁷¹ The Obama administration, for example, is moving federal agencies and contractors towards cloud computing (see www.apps.gov) and the New Zealand government is considering its possible benefits.⁷² So, **owning some hardware is not so important any more, but owning new types may become incredibly important.** In terms of new, potentially ubiquitous hardware, 3D production machines are beginning to be used for high-end individualised manufacturing (eg., for hearing aids). In the near future, these machines could be in homes and offices everywhere, enabling a peer-to-peer design revolution that massively alters traditional manufacturing, the consumer economy, and humanity's carbon footprint.⁷³
- 2.34 **Participation** in the form of 'open source mode[s] of communal contribution to development, innovation and problem solving' is now well-established.⁷⁴ A recent **example of 'communal contribution' sitting alongside technology-**

⁶⁷ Department of Labour, p. 12

⁶⁸ Jones and Dewing, p. 38

⁶⁹ Gill and others, 2010a, p. vii

⁷⁰ Bughin and others, p. 4

⁷¹ Mel Duvall, 'White House Proposes Cloud Security Standards', *Information Management Online*, 4 November 2010 <<http://www.information-management.com/news/White-House-Proposes-Cloud-Security-Standards-10019047-1.html?msite=cloudcomputing>> [accessed 4 November 2010]

⁷² Anthony Doesburg, 'Big Shake Up has Govt Looking into the Clouds', *New Zealand Herald*, 31 January 2011 <http://www.nzherald.co.nz/technology/news/article.cfm?c_id=5&objectid=10702335> [accessed 31 January 2011]

⁷³ Gill and others, 2010a, p. 10

⁷⁴ Gill and others, 2010a, p. 9



enhanced state emergency management was seen during the recent floods in Queensland:

As Queensland Police work around the clock to keep the public informed on the movement of flood waters, they have also turned to [social media] to **publish updates and combat myths and rumours**, as **citizens post photos, updates and words of encouragement** to one another.

... Some web services have been disrupted with Brisbane City Council's flood flag map unable to cope with the high demand for updates on road closures and evacuations. As a consequence, **Facebook and Twitter have become a crucial lifeline as Queensland Police** publish regular bulletins about the flood waters, warnings of road closures, and evacuation procedures.

... Desperate requests for new information on affected areas are being **answered by those with firsthand knowledge**, while others have offered lodgings to evacuees, and posted messages of support and advice on everything from which bridges are closed to safe locations for leaving evacuated pets....

Other **posts caused unnecessary panic** in the afternoon after relaying false information, leaving Queensland **Police to undertake a mythbusting exercise... Other Twitter users also attempted to stem the panic....** In spite of the confusion, most tweets that were posted sought to help rather than hinder....⁷⁵

The flood response showed evidence of this participation trend going both ways: citizens seeking services and advice were redirected by some public agencies' websites to one being run by tech-savvy volunteers, for example.

- 2.35 In keeping with the 'tech revolution' being one of our overarching mega-trends, technology is changing and **challenging our traditional notions of privacy and authorship**. The September 2008 edition of Scientific American was dedicated entirely to the subject of privacy and examined the topic from a range of angles. Its articles talk of the **unmistakable erosion of privacy**, 'the internet never forgetting', and teens being bullied on a global scale through social media. But some salient points are also made: **privacy gets confused and tangled up** with security, health, insurance and self-representation issues; people are gaining effective tools to control what information they want to give out and to whom; and greater openness is a two-way street between individuals, institutions and business - see the next part of our scan for more on this.⁷⁶

- 2.36 Finally then to **authorship**: it's never been easier to **say what you want about whatever you want whenever you want**, and social network streams are allowing users to broadcast their views to a wide range of people without

⁷⁵ Louise Hearn, 'Flock to Facebook for Flood Updates', *Sydney Morning Herald*, 11 January 2010 <http://www.smh.com.au/technology/technology-news/flock-to-facebook-for-flood-updates-20110111-19mfr.html> [accessed 31 January 2011]

⁷⁶ Scientific American, September 2008; see for example, Esther Dyson, 'Reflections on Privacy 2.0', pp. 50-55, and Daniel Slove, 'The End of Privacy?', pp. 101-06



interruption or intrusion.⁷⁷ The closely-watched **newsgathering and distribution process is undergoing deep changes** and provides an excellent case for examining how fast-changing technology is driving many of the sub-trends we've looked at here.⁷⁸ **Decentralised and distributed co-creation, blurring of lines between author and reader, personalisation, customisation and convergence are all evident:**

Many promising forms of news creation and distribution are being experimented with, some of which are empowered by increasing technological sophistication and **resulting decentralised forms of content creation and broad-based participation.**

The **rise of the Internet and other technologies radically changes how news is produced and diffused.** It enables the entry of new intermediaries that create and distribute news, including online news aggregators, online news publishers, **mobile news actors, citizen journalism** and many more. Information providers with very different trajectories (TV, newspapers and Internet companies) are now **competing head-on in a global online news environment....**

Individuals are [...] confronted with an **ever-increasing availability of diverse news....** The way news is consumed is also radically different on line. Online news readers get a variety of news from different sources, allowing them to mix and **compile their own personalised information....**

The question is **how the different actors in the eco-system contribute to citizen engagement and to democracy generally....** One extreme is that online and other new forms of more decentralised news will **liberate readers** from partisan news monopolies which have tended to become more concentrated and to dominate the production and access to news. The other extreme is that the demise of the traditional news media is with us (partially caused by the rise of the Internet), and with it an **important foundation for democratic societies is at risk....** The question is being debated **what potential roles government support might take** in supporting a diverse and local press without putting its independence at stake.⁷⁹

For its part, *The Future State* points to 'a new wild west' where the dynamics of social media and open participation will see the demise of newspapers and free-to-air television as new internet models take over.⁸⁰ For a different take altogether on the future of news and its distribution, and from an Australasian point of view, see *Life in the Clickstream II: The Future of Journalism*.⁸¹

⁷⁷ trendwatching.com, '11 Crucial Trends for 2011', <<http://trendwatching.com/trends/pdf/trendwatching%202010-12%2011%20TRENDS%202011.pdf>> [accessed 10 January 2011] (p. 7)

⁷⁸ OECD, 'The Evolution of News and the Internet', (2010b) <<http://www.oecd.org/dataoecd/30/24/45559596.pdf>> [accessed 20 December 2010] (p. 6)

⁷⁹ OECD, 2010b, p. 6

⁸⁰ Gill and others, 2010a, p. 10

⁸¹ Media Entertainment and Arts Alliance, 'Life in the Clickstream II: the Future of Journalism', (2010) <http://www.thefutureofjournalism.org.au/foj_report_vii.pdf> [accessed 20 December 2010]



What might these trends mean for New Zealand?

2.37 The examples above illustrate many of the game-changing opportunities and problems that the 'tech revolution' is presenting. **In thinking about the nature of public work** - it's labour-intensive, requires highly skilled employees and is therefore expensive; actors increasingly need to work together to solve complex public policy problems - **it seems technology must have plenty to offer**. Making the most of it though **feels risky, slow and hard**, and it's useful to ask why this is.

2.38 **New Zealand received a mixed report card** in 2008 in terms of economic development, innovation, investment in research and development, and information and communication technology indicators.⁸² Although the public sector's dependence on labour means less scope for improving productivity through technological advances than elsewhere, **there is room for gains to be made**. Last year the New Zealand government was advised that:⁸³

The 2008 survey of government use of ICT indicated that the current **\$2 billion annual ICT spend in government is fragmented, infrastructure is duplicated**, and many agencies have not yet redesigned their business models to **use the online channel for more efficient service delivery**.⁸⁴

The government's subsequent *Directions and Priorities for Government ICT* describes a 'future state' where, amongst other objectives:

- Government delivers services as a seamless customer experience
- Customers and innovators outside government are helping to improve our services
- New and innovative ideas and resources are pooled and built on, and
- [There is] greater ICT literacy in the State Services workforce.⁸⁵

Speaking on the eve of taking up responsibility for seeing this future state realised, the government's new Chief Information Officer summed up thus:

We're pretty **rich in online government information** but we have a **long way to go in terms of the integration of the information and provision of online services**.

⁸² Ministry of Economic Development, 'Major Policy and Implementation Issues – Promoting Investment in Broadband and Mobile Networks', (2009) <http://www.med.govt.nz/templates/MultiPageDocumentPage_40169.aspx#A0> [accessed 1 February 2011]

⁸³ The Treasury, p. 33

⁸⁴ Cabinet Economic Growth and Infrastructure Committee, 'Directions and Priorities for Government ICT EGI (10) 226', 17 September 2010, <<http://www.dia.govt.nz/About-us-Our-Organisation-Directions-and-Priorities-for-Government-ICT>> [accessed 20 February 2011] (p. 3)

⁸⁵ Department of Internal Affairs, 'Directions and Priorities for Government ICT', 17 September 2010, <<http://www.dia.govt.nz/About-us-Our-Organisation-Directions-and-Priorities-for-Government-ICT>> [accessed 20 February 2011]



That's the hard bit because that requires you to work across government agency boundaries.⁸⁶

- 2.39 Another 'hard bit' is the readying of police organisations around the world to respond to, and take advantage of, these technology trends. The **general consensus in answering the question 'Are we ready?' seems to be 'No'**.⁸⁷ Proficiency in technology-related topics, constraints on budgets, failures in past technology investments, the non-negotiable priority of infrastructure which supports emergency management, concerns about perceptions internally and externally, and cultural ideals seem to prevent police agencies from making the most of technology. This **caution sees spending on technology projects with questionable returns-on-investment avoided** - but at the same time **foregoes potential gains**.
- 2.40 A third and final 'hard bit' is increasing expectations from multiple corners of transparency in relation to public institutions' decision-making. We examine this special aspect of the 'tech revolution' as it relates to New Zealand Police in the next of our seven themes.

Summing up: key points from this section

- ★ Advances in existing technologies and the creation of new technologies have started to radically transform the way societies function
- ★ Developments in technology are accelerating the break-down of physical, organisational and geographical boundaries that has accompanied globalisation
- ★ 'What is possible' is being created faster than legislative and regulatory processes can respond to
- ★ The massive growth in service industries is enabling the customisation and personalisation of offerings for customers, and their participation in the design and delivery of these services like never before
- ★ Technology is changing and challenging our traditional notions of privacy and authorship
- ★ New Zealand received a mixed report card in 2008 in terms of development, innovation, and information and communication technology indicators
- ★ Police organisations are assessed generally as not being ready for the 'tech revolution'.

⁸⁶ Doesburg, unpaginated

⁸⁷ Crank and others, p. 418



Increasing expectations of transparency in relation to public institutions' decision-making

- 2.41 Citizens **increasingly expect to be to be informed about the decision-making of public institutions as a matter of course**. In this part of our scan, we take a particular interest in what the drive for greater transparency could mean for a public police.

Increasing expectations of transparency

- 2.42 There is little doubt that we are witnessing a major shift towards the greater exposure of public institutions' and governments' data and decision-making processes. **Records are being digitalised and posted at a phenomenal rate**, from the meticulous records kept by the Nazis about their prisoners during the Second World War, to the record of every mine inspection carried out in the USA since 1978.^{88,89} The realities of these shifts are captured by the World Bank's Chief Information Officer:

What we're saying now is something very different, which is that **this needs to be a porous institution, with porous walls**. We want information to be available as a public good in a way that all of our constituencies can use. It's a real change and clearly requires a shift in mind-set. This is an area where **the rules are all changing, and in some ways we're rewriting them and doing our best to navigate the new landscape**.⁹⁰

- 2.43 Here in New Zealand, the Law Commission's current review of the Official Information Act 1982 and related legislation provides an ideal platform from which to launch further into this topic:

The way documents are created and stored has changed almost beyond recognition over the past thirty years....

This has proved a **two-edged sword**. On the one hand it is now sometimes easier to retrieve documents, but on the other there are **likely to be many more** of them, including emails and earlier drafts of documents. Information technology also has **great potential for the proactive publication** of information by government agencies on their websites and great strides have already been made in this direction. There is now a **much stronger expectation of openness and availability of information than in the past**. People have become more suspicious of any government

⁸⁸ See www.its-arolsen.org

⁸⁹ See www.data.gov

⁹⁰ Aamer Baig, 'Transforming Public-Sector IT: an Interview with the World Bank's CIO', *McKinsey Quarterly*, (2010) <<https://www.mckinseyquarterly.com/PDFDownload.aspx?ar=2710>> [accessed 18 December 2010] (p. 4)



activity that takes place in secret. Citizens expect to be able to find out how, why, and by whom government decisions are made.⁹¹

- 2.44 The move towards greater openness has been given the hurry-up by WikiLeaks. Alan Kohler writes:

... the reason everyone is so interested [in WikiLeaks] is that we can see the world changing before our eyes ... this is not simply the emergence of a new anarchist hero bringing down the world order, but a **further inevitable development in the internet's destruction of power, control and wealth.**

...There are hundreds of similar websites, but the publicity that WikiLeaks has received lately means that it is not only the most prominent of those, but suddenly the most significant news organisation in the planet. **It is changing the world on its own**, and the reaction of the authorities to the latest leaks - hunting down and arresting its titular head in an incredible blaze of publicity - has only made sure that happens.

Underlying it, though, is stage two of the Gutenberg Revolution. Printing made information much more widely available; the world wide web and internet protocols are making it totally available, instantly and freely.

We knew that was happening to news, entertainment, shopping and so on, but now **it includes state secrets as well.** As companies have found out already, **if information means power, transparency means less power.**⁹²

- 2.45 Countering **predictions of greater transparency leading to a domino effect of digitally-enabled leaderless uprisings throughout the non-democratic world** are commentators such as Clay Shirky. He points to the limitations of social media (including the internet) as mass-liberator:

As the **communications landscape gets denser, more complex, and more participatory**, the networked population is gaining greater access to information, **more opportunities to engage in public speech, and an enhanced ability to undertake collective action.** In the political arena... these **increased freedoms can help loosely coordinated publics demand change.**⁹³

Shirky goes on to say:

The **use of social media tools** — text messaging, e-mail, photo sharing, social networking, and the like — **does not have a single preordained outcome...** [although they] have become coordinating tools for nearly all of the world's political movements, just as most of the world's authoritarian governments (and, alarmingly,

⁹¹ Law Commission, 'Summary - The Public's Right to Know: a Review of the Official Information Act 1982 and Parts 1-6 of the Local Government Official Information and Meetings Act 1987', (2010) <http://www.lawcom.govt.nz/sites/default/files/publications/2010/09/pdf_final_summary_300910.pdf> [accessed 14 January 2011] (p. 2)

⁹² Kohler, 13 November 2010, unpaginated

⁹³ Clay Shirky, 'The Political Power of Social Media - Technology, the Public Sphere and Political Change', *Foreign Affairs* 90.1 (2011), 27-41 (p. 29)



an increasing number of democratic ones) are trying to limit access to it.... **Authoritarian governments stifle communication** among their citizens because they fear, correctly, that **a better-coordinated populace would constrain their ability to act without oversight....**

It was a shift in the balance of power between the state and civil society that led to the largely peaceful collapse of communist control. **Communications tools during the Cold War did not cause governments to collapse**, but they helped the people take power from the state when it was weak....

Political freedom has to be accompanied by a **civil society literate enough and densely connected enough** to discuss the issues presented to the public... mass media alone do not change people's minds.

Social media can compensate for the disadvantages of undisciplined groups by **reducing the costs of coordination...** but both the empirical and the theoretical work suggest that **protests, when effective, are the end of a long process, rather than a replacement for it.**⁹⁴

- 2.46 The aforementioned *Life in the Clickstream II: The Future of Journalism* examines WikiLeaks and dimensions of this 'frontier organisation's' work, including those of **credibility, authenticity, the use of 'crowds' and traditional media organisations to sift through masses of data and report on findings, and accountability for accuracy and subsequent consequences of data release.**⁹⁵

New Zealand's public institutions

- 2.47 For governments, trust and trustworthiness are important for the sake of credibility, authenticity and accountability:

Good government requires the trust and confidence of citizens. That trust and confidence flows from the perceptions people have about the **trustworthiness of officials - elected, appointed and employed.** A substantial proportion of public services in New Zealand are provided by State Services agencies. **The trustworthiness of those agencies and the people who work in them influences the public's trust and confidence and, in turn, good government.**⁹⁶

New Zealand is perceived as one of the least corrupt countries in the world along with Denmark and Singapore, and findings from the most recent survey of its State employees suggests improvements continue to be made in our integrity and conduct.^{97,98} **New Zealand Police has a vested interest** in

⁹⁴Shirky, pp. 29, 30, 32, 34 and 35

⁹⁵Media Entertainment and Arts Alliance, p. 37

⁹⁶State Services Commission, 'New Zealand State Services Integrity and Conduct Survey: Summary of Findings 2010', (2010a) <http://www.ssc.govt.nz/upload/downloadable_files/integrityandconduct-survey2010-findings-summary.pdf> [accessed 19 August 2010] (p. 2)

⁹⁷Transparency International, '2010 Corruption Perception Index', (2010)

<http://www.transparency.org/policy_research/surveys_indices/cpi/2010/results> [accessed 15 February 2011]

⁹⁸State Services Commission, 2010a, p. 5



seeing New Zealand and itself remain relatively corruption-free, both in reality and in perception. Countries which are corruption-free, have strong law enforcement and good governance, are **more hostile to threats to national security and state stability** (see the World Economic Forum's *Global Risks 2011* for more).⁹⁹ See also *Policing Directions in New Zealand for the 21st Century* on how important the **balance between openness and secrecy is for engendering trust and confidence** in police.¹⁰⁰

2.48 Mindful that the 'tech revolution' is enabling and driving demand for transparency, *Directions and Priorities for Government ICT* proposes:

- Plans to **increase the availability** of non-personal government data and information
- An increase in contributions by the public, communities and business to **policy development through online channels**
- Using ICT to provide **greater transparency of government** processes and decision-making
- Five directions to which agencies must align their ICT management and investment, including 'support open and transparent government'.¹⁰¹

2.49 The point of raising all of this is to highlight the tension between increasing expectations of transparency, and the commensurately **increasing need for evidence-based decision-making for which individuals are accountable and which can readily be explained**. This sentiment is one shared not only by citizens, but also it seems by employees of public institutions. The same pressure for greater transparency is being exerted on businesses and charities – see *The Future State* for more.¹⁰²

Complexities to acknowledge

2.50 There are **complexities here which need to be acknowledged**. It's **largely private, USA-headquartered firms who 'own' the networked public sphere** by virtue of the social media tools currently in vogue.¹⁰³ This sits uncomfortably next to traditional notions of privacy and confidentiality, and **has increased demand for governments to create stronger systems to protect information from improper use**.¹⁰⁴ Elsewhere, in the United Kingdom the move to see local communities elect their Police and Crime Commissioners bypasses central government altogether, yet the aim of greater transparency in policing remains.¹⁰⁵ Perhaps of more direct relevance to New

⁹⁹World Economic Forum, pp. 22-25

¹⁰⁰New Zealand Police, 2007, p. 22

¹⁰¹Cabinet Economic Growth and Infrastructure Committee, pp. 1-2

¹⁰²Gill and others, 2010a, p. 14

¹⁰³Shirky, p. 41

¹⁰⁴Hajkowicz and Moody, p. 7

¹⁰⁵HM Treasury, 2010b, pp. 54-55



Zealand Police is the increasingly routine public examination of its use of force when carrying out its functions – the topic of the remaining part of this section.

- 2.51 Police officers have the special ability to use coercive force on behalf of the state whenever the occasion demands it.¹⁰⁶ Technology is enabling an ever-brighter spotlight to be turned on **police actions and the reporting and accountability of this use and these occasions**:

Another good example of Twitter as journalism, also from the UK *Guardian*, is the investigation by journalist Paul Lewis of the death of Ian Tomlinson, a newspaper vendor who collapsed and died during the G-20 summit protests in London after being struck by a police officer. Lewis used his sizeable **Twitter presence to gather evidence of the incident**, and those who had witnessed the event tweeted **eyewitness accounts and footage straight to him instead of the police** (whom many of the protesters did not trust). News eventually reached a New York-based funds manager who had been in London on business the day of Tomlinson's death, who discovered **he had captured the assault on camera**. The footage, published by *The Guardian*, prompted a criminal inquiry into the event by the UK's Independent Police Complaints Commission.¹⁰⁷

- 2.52 Here in New Zealand, we've seen minor local examples of 'dobbing' in of police employees by members of the public, with photos of officers talking on cell phones in marked cars being sent into media outlets, who in turn have encouraged others to contribute 'evidence' to the snowballing story.¹⁰⁸ There is a more serious undertone to this though. Andrew Goldsmith talks about **police visibility being a good thing, functionally speaking, provided that individuals are doing the right thing in the eyes of the public**. If they are not, then **disproportionate damage can be wrought**. He also points out that **recent changes in technology have dramatically eroded the choice for police about where to strike the balance between openness and secrecy**, and that the dump of raw data online from multiple quarters doesn't provide a 'ready means for resolving differences of perception and thus reaching clear judgments of priority or impropriety'.¹⁰⁹ Goldsmith also studied the death of Ian Tomlinson, and amongst other conclusions notes:

The **capacity of these technologies to produce unfocused doubt and distrust** as well as contribute to forensic accuracy leaves the **police vulnerable for reasons often beyond their control**. Ongoing management of these situations will become more important for police organisations....

For oversight agencies, as we have already begun to see, things are only likely to get busier....

¹⁰⁶New Zealand Police, 2007, p. 21

¹⁰⁷Media Entertainment and Arts Alliance, p. 47

¹⁰⁸Anna Leask, 'Cellphone Cops Make 'Joke' of Law', *New Zealand Herald*, 31 January 2011, <http://www.nzherald.co.nz/anna-leask/news/article.cfm?a_id=638&objectid=10703141>[accessed 31 January 2011]

¹⁰⁹Andrew Goldsmith, 'Policing's New Visibility', *British Journal of Criminology*, 50 (2010), 914–934, p. 921



One can predict [...] even greater public scepticism towards the police investigating police and **demands for more robust civilian oversight mechanisms** capable of conducting independent investigations of notorious incidents, especially those involving apparent brutality, **sooner and more thoroughly than in the past.**¹¹⁰

- 2.53 For New Zealand Police, the **trend to greater transparency has implications both internally and externally**, from circumstances relating to individual employment matters, to spending of taxpayers' money and decision-making in high-pressure operational settings. It's likely the topic of transparency will need to be **visited and revisited as expectations continue to evolve**. This is not a matter in which New Zealand Police is or will be alone: our more densely networked world sees us working more and more with others. Mindful of the opportunities and challenges that go with this, we turn to the next driver in our operating environment – that of complex problems requiring multi-player solutions.

Summing up: key points from this section

- ★ There is a much stronger expectation of openness and availability of information
- ★ As populations become more networked and have greater access to information, they have more opportunities to engage in public speech and undertake collective action
- ★ More data online does not necessarily mean more freedom or more uprisings – mass media alone do not change people's minds and other conditions (for example, food and energy scarcity or insecurity) are necessary triggers for unrest
- ★ The dump of raw data online doesn't help individuals make up their minds about whether something is right or wrong, nor does it help resolve differences of perception
- ★ New Zealand Police may need to reweigh the balance between openness and secrecy as expectations continue to evolve.

¹¹⁰Goldsmith, p. 931



Complex problems requiring multiplayer solutions

- 2.54 By its very nature, New Zealand Police's work is influenced by the actions of others and at times is accomplished through others. The passing of the Policing Act 2008, and the change in title from its predecessor, entailed formal recognition that New Zealand Police is one of a number of actors with a role to play in policing. Section 10 in particular:

Acknowledges the roles of individual citizens, and agencies and bodies other than the Police, in the performance of the functions of the Police.¹¹¹

From the social sector through to the justice, transport, and security, defence, external and foreign affairs sectors; and from individual citizens to non-government organisations, private enterprise and other countries, **policing outcomes are achieved via a network**. This section of our environmental scan looks at the trend of increasing complexity generally, the types of systemic problems New Zealand Police and others grapple with in achieving safer communities, and the challenges of intricate coordination and cooperation.

Increasing complexity generally

- 2.55 Our world is a complicated place. Solutions to public policy problems need to be fiscally sustainable, decision-making needs to be transparent, demographic changes are putting new angles on old problems, expectations about the nature and quality of public services are certainly not diminishing, and increasing interconnectedness means unforeseen events in completely different countries affect New Zealanders. While many of these trends have upsides for New Zealanders, some of their **less attractive impacts are more administration, greater bureaucracy and more detailed regulation**. Meanwhile, **solutions must also be enduring, and cognisant of unintended consequences**.¹¹²
- 2.56 An example of increasing complexity is provided by the **recent jump in the volume of primary legislation passed each year**, not just here but also in countries like the United Kingdom. Although the most vocal opponents of increasing regulation are often from the business quarter, more criminal laws are being passed in the United Kingdom and more offences are being created:

It is estimated an average of 2,685 new laws were added every year under Blair, **a 22% increase** from the average of 2,196 per year for the preceding ten... Critics of the Blair Government claim it has been marked by its love of new legislation and a willingness to burden businesses with "red tape". **This has been most marked in**

¹¹¹Policing Bill 195-1 (2007), Clause 10 Explanatory Note, p. 7

¹¹²World Economic Forum, p. 31



areas such as criminal law, where 40 Criminal Justice Acts have been introduced since 1997, and in employment law.¹¹³

- 2.57 More complexity increases demands on training and on maintaining the currency of New Zealand Police's employees' knowledge. It also has **consequences for capturing the attention of the public.**

Complexity in achieving safer communities

- 2.58 Often the most intractable and complex of the problems addressed in a policing network are social in nature and origin, and are **ones which a public police cannot solve alone**, because of limitations to both its reach and mandate. This scan doesn't attempt to assess whether the following are good or bad in themselves, but notes **international trends of**:
- The **criminalisation of social problems**
 - Public police (reluctantly or otherwise) taking a **lead role in breaking intergenerational cycles** of violence and crime, and in preventing 'upstream' criminogenic factors from presenting in society
 - **Moving police boundaries** in relation to the raising and educating of children, caring for the mentally ill, counter-terrorism, surveillance, and protection of the state.^{114,115}

Back the other way, managers of prisons are being asked to get into the game of crime prevention, with the justifications that crime occurs in prison, and ex-prisoners commit crime post-release.

- 2.59 The policing web is not just at the national level, but also via **intricate interactions at the workgroup and individual level**, within New Zealand Police and between it, other policing agencies, other public sector entities and across geographical borders. It's clear that **the law and order picture in New Zealand and in other developed countries is becoming denser and the brushstrokes finer**. To illustrate further, we turn back to the example of legislation: the UK's Law Commission recently examined this largely external driver of complexity in policing and asked "Is there simply too much criminal law?" and concluded "the simple answer to this question is 'yes'":

[W]e will briefly examine three very different areas in which **criminal law is used, to varying degrees, to support or to implement a regulatory strategy**. These areas

¹¹³Sweet and Maxwell, 'Tony Blair's Legacy: 20% Jump in Amount of Legislation Introduced Per Year' (2007) <<http://www.sweetandmaxwell.co.uk/about-us/press-releases/010607.pdf>> [accessed 14 January 2011], p. 1

¹¹⁴Crank and others, pp. 410-413

¹¹⁵See for example Mike Webb, 'Policing in a Changing World: Key Issues Facing New Zealand Police', pp. 139-145, and Michael Rowe, 'Policing and 'Cracking Down on Crime': Tough Questions and Tough Answers', pp. 185-192, both in *Addressing the Causes of Offending – What is the Evidence?*, ed. by Gabrielle Maxwell (Wellington: Institute of Policy Studies, 2009)



involve: (a) **targeting parents to reduce truancy by their children**, (b) **targeting employers to reduce the employment of workers not entitled to work in the UK**, and (c) **targeting businesses to improve the safety of consumers**.¹¹⁶

Multiplayer solutions

- 2.60 *The Future State* talks about complex 'multi-actor' policy problems requiring co-production and co-leadership. It expands as follows:

Many of the policy outcomes that will be front-of-mind for government (e.g. reducing obesity levels in the general population) **cannot be achieved with the provision of public services alone** but will require the active contribution of citizens, businesses and other actors (co-production). For some complex issues (e.g. breaking cycles of dysfunction...), **no one actor, including government, has all the knowledge or the ability to effect change independently**.

In the past, government doing things for or to citizens may have been sufficient. **Achieving outcomes in the face of 21st-century challenges** will depend on the **actions of many players** and will therefore increasingly require governments to do things with citizens (or even enable citizens to do things for themselves).¹¹⁷

- 2.61 As one of the three main agencies that constitute the criminal justice system, **New Zealand Police's aim** of preventing more crime, resulting in less recorded crime and fewer prosecutions, is **central to the justice sector's strategy to reduce the social and the economic costs of law and order**. The constrained fiscal environment requires that investments in solutions work, not just for the sake of individual agencies' outcomes, but for cross-sector outcomes. This means others are dependent on, and in turn will need to contribute to, the achievement of New Zealand Police's aims of **13% less recorded crimes and a 19% reduction in non-traffic prosecutions by 2014/15** (off 2009/10 figures).¹¹⁸ The 'management by outcomes' philosophy reinforces **overt engagement at the systems level** – undoubtedly an approach that is needed – but it does make attribution of one agency's efforts to collective outcomes more difficult to assess and **makes performance monitoring more complex and more costly**.
- 2.62 It's this overt engagement at the systems level which marks the departure of the Ministry of Transport's *Safer Journeys: New Zealand's Road Safety Strategy 2010-2020* from previous road safety strategies. This strategy is centred on a single 'key design factor' – that of the human body's tolerance to crash forces – and **coalesces the behaviour and responsibilities** of road users, vehicle manufacturers, central and local government, road controlling authorities and

¹¹⁶The Law Commission, 'Criminal Liability in Regulatory Contexts', Consultation Paper No. 195, (2010) <http://www.lawcom.gov.uk/docs/cp195_web.pdf> [accessed 28 September 2010] (p. 37)

¹¹⁷Gill and others, 2010b, p. 33

¹¹⁸New Zealand Police, 'Ambitious Work Forecasts Drop in Crime', (2010b) <<http://www.police.govt.nz/blog/2010/12/10/ambitious-work-forecasts-drop-crime/26340>> [accessed 10 December 2010]



employers around this point.¹¹⁹ It's hoped that this approach will produce **the next, long-awaited step-change in reducing New Zealand's disproportionately high road toll and incidence of serious injury from crashes**. It may also prove to be a model for tackling other complex problems (notwithstanding that systems approaches have been used before to examine and address crime in New Zealand with mixed results).

- 2.63 Picking up on another of the points in the excerpt above, governments and government agencies of the future are likely to need to **alter power sharing arrangements** (including ceding some of their own power) if they and their citizens are to be best equipped for dealing with complex problems. There has been an explosion in **governments' interest in social innovation funds**, often in partnership with philanthropic foundations, and with seed money being awarded to non-profit organisations with track records of success. Commentators caution that problems lie not in lack of good ideas, but in **speed and scale of execution of ones that work**, and **resistance of established entities** to the emergence of new players; in spite of this, the interest in social entrepreneurs is not likely to diminish.¹²⁰
- 2.64 In New Zealand, **there are examples of experiments with power-sharing and power-ceding in the economic, legal and social realms**, some of which can be broadly judged to have worked, and others which significant numbers of people judge as having not. The Closer Economic Relations (CER) agreement with Australia, and the bringing to justice of the Rainbow Warrior bombers on the international stage, might be considered cases where power sharing has been hard, but has 'worked'. The success of future arrangements, and the speed of transfer of resources and power to those who can best effect solutions, are **critical factors to New Zealand as a whole being able to do 'more with less'**. This leads to our last section for this part of the scan – that of networks within networks in our increasingly joined-up world.

Networks within networks

- 2.65 The networks within which New Zealand Police performs its functions exist within bigger networks, and restrictions or limitations in those networks naturally shape ours. *The Future State* assesses the 'current state of the state' thus:

While New Zealand was well served by its public management system in the latter part of the 20th century, the evidence suggests that **the system is less well designed for the challenges of the 21st century**. Globally and locally, populations and their priorities and values are more diverse and issues are more interconnected.

This makes **gaining and maintaining consensus on policy directions over the long haul more difficult**. For many of the challenges (e.g. water management and

¹¹⁹See <http://www.transport.govt.nz/saferjourneys/towardsasafesystem/> [accessed 20 February 2011]

¹²⁰The Economist, 'Let's Hear Those Ideas', 14 August 2010, pp. 55-57



governance; growing obesity levels), there are **no simple answers or widely agreed and proven solutions** and in some areas (e.g. climate change) **even problem definitions are contested**. At the same time, the public expects **increased speed, accessibility, customisation, transparency and user engagement in public services**. If the public sector is to respond effectively, the public management system will need to support a broader range of approaches and practices than currently.¹²¹

- 2.66 Many of these points are raised in this scan. It's important to remember that the **current drivers at work have many consequences which are far from negative**. Technology, for example, means more people will be able to participate in the political process through new channels, offsetting declining interest in more traditional means of participation.¹²² It is certain, however, that **the simpler times of solving problems unilaterally are behind us**. Sophisticated mechanisms of cooperation and accountability, plus means of testing solutions as problems emerge, will be needed. Public sector reform, and referenda on the modes of forming governments, for example, may become more regular features of New Zealand's political landscape. It also seems certain that tackling **intergenerational, intractable problems will require sustainable solutions which transcend individual government and agency regimes** - 'more from less' at its finest perhaps.
- 2.67 Two topics remain for us to consider: changing expectations about the nature and quality of public services, and beyond that, how crime affecting New Zealanders is defined less and less by our geographical border.

Summing up: key points from this section

- ★ New Zealand Police operates as part of an increasingly dense network that addresses increasingly complex and at times intractable problems
- ★ One consequence of this is a continuation of the widening and deepening of the 'police mission'
- ★ Other drivers in the operating environment (for example, rapidly changing technology and strain on budgets) complicate this driver
- ★ Governments cannot, and will not, be able to provide solutions to looming social and environmental problems by themselves
- ★ Systems thinking, social entrepreneurship, and other ideas have merits and drawbacks, but history suggests co-produced solutions to public problems are possible.

¹²¹Gill and others, 2010b, pp. 32-33

¹²²Gill and others, 2010a, p. 10



Changes in demand for police services and expectations about the nature and quality of public services

- 2.68 Overlaying and complicating the exhortation for public service organisations to do 'more with less' in the current and likely future fiscal environment, are changing expectations about the nature and quality of public services generally, and changing demands for New Zealand Police's services specifically.

Demands for public services

- 2.69 Demands for public services can be defined in broad trends. **In developing countries** high fertility rates, not enough food (contrasting with too much in the West), and a shift to non-communicable diseases and accidents as the leading cause of death are weighing on governments. **In developed countries**, populations are spreading more thinly over longer and wider spectrums. The health epidemics which governments face, for example, range from obesity in children and mental illness in teens, to Alzheimer's and longer time in care for the elderly. In those countries where the first of our mega-trends ('historic shift') are most evident, **middle classes are emerging on a scale** and at a rate that is causing pressure on consumption of energy, water and raw materials, and increased production of waste.¹²³
- 2.70 In New Zealand, **demands for public services are broadly rising, although unevenly** across various agencies. As signaled elsewhere in this scan, the **single biggest driver of demand on public services** in the next two decades is expected to be **the ageing population**.

Expectations about the nature and quality of public services

- 2.71 Under the influence of the 'tech revolution' mega-trend in particular, the **demand for a personal touch** and the personalisation of services is increasing.¹²⁴ **What this means in practice is the understanding and servicing of the intimate needs of individuals en masse.** After surveying information technology executives, for example, McKinsey and Company cited **shifts in customer expectations as being the biggest cause for concern** in relation to future technology or information-based disruptions to their business.¹²⁵ One downside of trying to meet the needs of all customers is that **organisations are less able to 'turn off' old means of service provision** when new ones come along. We see from the most recent Kiwis Count research, for example, that:

¹²³Hajkowicz and Moody, p. 10

¹²⁴Hajkowicz and Moody, p. 10

¹²⁵McKinsey & Company, 'How IT is Managing New Demands', <<https://www.mckinseyquarterly.com/PDFDownload.aspx?ar=2702>> [accessed 19 November 2010] (p. 2)



These results clearly show that **there is no single preferred means of accessing information or dealing with public services**, although the Internet is becoming the most popular way of finding information about public services. **With no one preferred way of accessing services, agencies need to ensure that they can provide a range of options, all of which work well.** When New Zealanders were asked what would encourage them to use public services over the Internet, **ease of use and assurance of privacy and security** emerged as the two main areas for improvement.¹²⁶

This research also contains valuable (and sometimes stereotype-breaking) insight into **different groups' uses and preferences for alternative service channels**, and analyses implications for service delivery in the future. Related research identifies, amongst other drivers of satisfaction, **'the service experience' as being more important than the outcome, and the need to admit and fix mistakes**: see the State Services Commission website for more. It seems **just as important that multiple 'service channels' are maintained within organisations**. New Zealand Police employees want modern information and communications technology at work, for example, while continuing to receive hard copies of internal news magazines.

How are governments responding?

- 2.72 While being important for satisfaction with public services, the maintenance of **multiple service channels complicates the need to streamline back-offices** and realise more from less. In instances where the public books are in distress though, hard decisions are being made: the United Kingdom, for example, **will cease the public provision of forensic science services** in 2012.¹²⁷ Just ten years ago, the United Kingdom's Forensic Science Services was the world leader in forensic science research, innovation and service provision. This is one small example of the Spending Review 2010's principles in action, which include **localising power and funding, cutting burdens and regulations on frontline staff (including policing), removing barriers to greater independent provision of services, and supporting communities, citizens and volunteers to play a bigger role in shaping and providing services**.¹²⁸
- 2.73 Closer to home, our country's aspirations to 'catch up' to Australia are designed to provide New Zealanders with a better lifestyle, and come with the hope that they won't want to look elsewhere for more opportunities and choice.¹²⁹ One initiative borrowed from Australia is **New Zealand's new Productivity Commission**. This is expected to be operating by April this year, and while its

¹²⁶State Services Commission, 'Kiwis Count 2009: New Zealanders' Satisfaction with Public Services, (2010b) <<http://www.ssc.govt.nz/display/document.asp?docid=7637&pageno=7>> [accessed 9 February 2011] (p. 27)

¹²⁷Home Office, 'Government Forensics Office to Close', (2010) <<http://www.homeoffice.gov.uk/media-centre/news/government-forensics?version=1>> [accessed 17 December 2010]

¹²⁸HM Treasury, 'Spending Review 2010', (2010c) <http://cdn.hm-treasury.gov.uk/sr2010_summary.pdf> [accessed 19 January 2011] (p. 8)

¹²⁹The Treasury, p. 21



early attention is likely to be on regulatory review, productivity of the public sector is within its purview (see sections 4 and 7 of the New Zealand Productivity Commission Act 2010).¹³⁰ Elsewhere, the government has signaled a strong interest in a **mixed-model of public private partnerships and ownership for state-owned assets**.¹³¹

- 2.74 Regardless of the configuration behind the scenes, service offerings to an increasingly diverse and dichotomised society will need to be via 'differentiated responses'. *The Future State* says more:

The challenge for public services is to move to **differentiated responses as the norm** rather than the exception and to work in more diverse ways as a matter of course....

Another approach is to **recognise and introduce alternative models of service delivery** and harness the full range of choices in relation to **the funding mechanism, the nature and mix of providers, and client selection and choice** to get the best fit for the citizens involved and the outcomes sought....

Other options include making more use of information technology to **develop a more profound understanding of the citizenry** and its needs.¹³²

Expectations about police services

- 2.75 **Expectations about the nature and quality of police services are complex.** We've seen how the clear trend towards **transparency** and **openness** is presenting challenges, and we've looked how police work is characterised by complex problems which need to be addressed within a **network** of individuals and other organisations. We've also seen that this needs to be done **smartly** and more **efficiently**. Finally, we've touched on the **realities of police preventing crime** without substantial reliance on others, and **pressure on police to stem the flow of people into the criminal justice system**. New Zealand Police does more than prevent crime and bring people before the courts: the remainder of this section looks at the full range of its service demands.

Service demands on New Zealand Police now

- 2.76 In the twelve months to 30 June 2010, New Zealand Police:¹³³

- **Received** 708,000 111 calls, 1,063,000 non-emergency calls (at communications centres only) and 280,000 *555 calls

¹³⁰Nina Fowler, 'MAF Man to Chair Productivity Commission', *National Business Review*, 1 November 2010, <<http://www.nbr.co.nz/article/maf-man-chair-productivity-commission-132493>> [accessed 13 January 2011]

¹³¹John Key 'Statement to Parliament', 8 February 2011, Parliament Buildings, Wellington

¹³²Gill and others, 2010b, p. 34

¹³³New Zealand Police, 2010a, pp. 32-53



- Were **required** 129,000 times for an immediate response where there was a real threat to life or property
- **Conducted** 270,000 bail curfew checks and **held** 177,000 prisoners
- **Took** 93,000 prisoner fingerprints and 12,000 DNA samples
- **Prosecuted** 159,000 cases and 88,000 traffic prosecutions
- **Executed** 72,000 court documents (such as warrants)
- **Undertook** non-criminal investigations including 10,000 incidents involving persons with mental illness, 5,000 reports of sudden death, and 16,000 reports of missing persons
- **Conducted** 2,211,000 compulsory breath tests and **stopped** 104,000 commercial vehicles
- **Recorded** 82,000 traffic incidents, blockages and breakdowns
- **Deployed** 89 staff overseas and to the Pacific Islands Chiefs of Police
- **Vetted** 436,000 applications for passports and for licences issued by other agencies.

2.77 Long term trends in these numbers characterise the past decade for New Zealand Police as one of '**increasing demand and increasing complexity**':

- **Emergency calls for service have doubled** in the past decade, and non-emergency calls for service are up by almost one-third
- **Non-criminal incidents have risen by more than 50%** in the last ten years, with marked increases in service demands which require **time-consuming responses**
- **Serious crime cases** requiring Police investigation have risen, as have traffic offence and infringements and the number of prisoners held in Police custody
- The **prison population has tripled** since 1980, and
- **Rates of recidivism and reconviction are rising.**¹³⁴

2.78 There is more to the story though: in Chapter 22 of *Addressing the Causes of Offending: What is the Evidence?* Gabrielle Maxwell concludes:

An analysis of the most reliable and relevant crime and victimisation statistics presently available indicates that **crime in New Zealand is dropping or stable** and **our responses to crime are coming more effective. Police are resolving more crime speedily.** Young people are coming to attention less often now than early in

¹³⁴Department of Corrections, 'Annual Report 1 July 2009 - 30 June 2010', (2010) <http://www.corrections.govt.nz/_data/assets/pdf_file/0004/480820/Annual_Report_09-10.pdf> [accessed 22 February 2011] (p. 12)



the last 10 years. And there is little to indicate that unreported crime is increasing.¹³⁵

And to that we add:¹³⁶

- Total recorded crime has fallen slightly during over the past 15 years
- The **number of preventative tasks and services** New Zealand Police provides (such as bail checks and foot patrols) now **outstrips the number of incidents it responds to**
- New Zealand Police's **resolution rate is now one of the highest in the world** with 47% of offences currently resolved (excluding traffic)
- **New Zealanders don't appear to be increasingly fearful of crime or victimisation** and don't perceive crime or disorder problems in their neighbourhood (noting the limitations of victimisation surveys here and for the next three points also)
- The **amount of crime reported to New Zealand Police appears stable** at 32% (see the *New Zealand Crime and Safety Survey 2009* for explanations about this figure)
- Over the past three years, the proportion of **adults who experienced personal crime dropped** (including confrontational offences by partners, threats and sexual offences), and the **amount of vehicle crime dropped**, with fewer households experiencing thefts of vehicles, and thefts from vehicles or vehicle interference
- **More punitive sentencing is keeping people in prison** for longer.

2.79 Some shifts within these individual trends help explain apparent contradictions. **For example, violence and offences against the person and children are on an upward trajectory, and dishonesty offences downwards.** Crimes against the person are more likely to be solved, and this is driving resolution rates upwards in part. Other shifts adding to the complex mix include more time being spent on each case, and longer sentences which are associated with greater likelihood of reoffending.

Service demands on New Zealand Police in the future

2.80 Having absorbed these statistics, pondered some of the trends of the past decade or perhaps further back, and considered the changes in the operating environment flagged by this scan, **it's natural to ask what the future demand for police services might be.** Gabrielle Maxwell again:

¹³⁵Gabrielle Maxwell, 'Changing Crime Rates, 1998-2007', in *Addressing the Causes of Offending – What is the Evidence?*, ed. by Gabrielle Maxwell (Wellington: Institute of Policy Studies, 2009), pp. 173-84 (p. 184)

¹³⁶Ministry of Justice, 'The New Zealand Crime and Safety Survey: 2009 – Main Findings Report' (2010) <<http://www.justice.govt.nz/publications/global-publications/c/NZCASS-2009>> [accessed 22 February 2011] (p. 10)



Criminologists have never been able to point definitively to the factors responsible for rising and falling crime trends although many different theories have been tested. Economic downturns, unemployment rates, local disasters, better security, changing demographic patterns, and various changes in culture and life-style have all been examined. Even increased policing does not seem to necessarily change crime rates, although, **collectively, all these factors may play a part.**¹³⁷

These observations could reasonably be applied to the other sources of demands on New Zealand Police, from the transport to the social, health, education quarters to the border, defence and international aid sectors. Keeping this **broader definition of 'demand' for New Zealand Police's services** in mind, and the changing operating environment as laid out in this scan, we consider as a starter possible **future 'moderators' of demands** for service.¹³⁸

- What could the effect be of proportionally fewer young people in the future? What could the effect of greater numbers of older people be, with for example, their higher association with "white collar" crimes? What **stereotypes about who commits crime** might need to change?
- We've seen that the vast majority of offences and offenders do not come to the attention of the criminal justice system. Could peer-to-peer **online 'shaming'** of alleged offenders decrease victims' likelihood to report crime? Could erosions in privacy or more overt defence of individual rights see some crimes which currently go unreported brought to Police attention? What new service channels could increase reporting? How could Police **target the serious end of the 68% of crime which currently goes unreported?**
- New Zealand can't afford to imprison people at current rates because of the social and fiscal cost. **What will the 'adjustment' of the total prison population mean for future demand** on New Zealand Police?
- Demands for police service in developed countries is no longer confined to geographical boundaries of states, and agreements between countries are shaping calls for a domestic police's services. **What are the likely future commitments for New Zealand Police's services offshore?**

2.81 In a piece titled simply *The Police*, Warren Young and Neville Trendle state that in the context of maintaining high levels of public support for New Zealand Police:

By far the most important challenge for the future, however, is how the police respond to meeting public expectations and demands for service.¹³⁹

¹³⁷Maxwell, p. 175

¹³⁸Russell Hogg, 'The Causes of Crime and the Boundaries of Criminal Justice', in *Criminal Justice in New Zealand*, ed. by Julia Tolmie and Warren Brookbanks (Wellington: LexisNexis, 2007), pp. 73-98 (p. 76)

¹³⁹Warren Young and Neville Trendle, 'The Police', in *Criminal Justice in New Zealand*, ed. by Julia Tolmie and Warren Brookbanks (LexisNexis: Wellington, 2007), pp. 99-123 (p. 123)



It may be that increasing its understanding of future expectations and demands for services is one of the most beneficial ongoing investments New Zealand Police could make.

2.82 Our scan's next and final trend looks at the challenges of countering globalised, technology-enabled time.

Summing up: key points from this section

- ★ Demands for and expectations of public services are broadly rising, although this is uneven across agencies
- ★ Shifts in expectations are particularly linked to advances in technology, and multiple service channels will need to be maintained and added to
- ★ Where economies are in distress, hard choices are being made about what services will be provided, by whom and through which means
- ★ Trends from the past decade paint a complex picture of falling crime, more police officers, better resolution rates, and stable fear-of-crime data, yet there is now more calls for service, more time-consuming cases, more non-criminal work and more recidivism
- ★ There is no definitive means of assessing how the drivers in this scan will impact on this complex picture, although attaining better understanding could be one of the most fruitful investments New Zealand Police could make
- ★ Demand for New Zealand Police's services needs to be understood as coming from arenas well beyond crime and law enforcement, from the social to the international.



Challenges in countering globalised, technology-enabled crime

- 2.83 By the time we arrive at the seventh and final of the drivers shaping New Zealand Police's operating environment, we find we've already done much groundwork and can anticipate most of what needs to be said.

Globalisation and technology

- 2.84 The overriding **mega-trends** we met early in this piece, and their effects on the movement of people, power and wealth, the strain they are putting on extraction of more value from natural and financial resources, and the upheaval caused by greater interconnectedness and reliance on technology are all shaping crime. When we looked at the **macroeconomic** environment, we considered the World Economic Forum's latest global risks report, in which it identified an 'illegal economy' nexus of risks formed by organised crime, corruption, illicit trade and weak states.¹⁴⁰ When examining **demographics**, we noted the *Crime and Policing Futures*' observation that criminals are increasingly exploiting the movement of people, hardship for migrants in destination countries is continuing to be a source of social stress and crime, and rapid urban growth is resulting in new or more crime environments.¹⁴¹ In the trends of **technology** and **transparency**, we saw how technological developments are accelerating the break-down of physical, organisational and geographical boundaries. This and the pace of change, combined with lack of understanding about eventual consequences, is increasing tensions between security, secrecy, privacy and openness. In the trend of **complexity and multi-player solutions**, we can imagine no greater coordination challenge than that which needs to take place between countries to achieve outcomes for the sake of us all; and finally, in the changing contexts of **demands and expectations** on a public police, we see demand being driven by factors largely outside its control and judgments of success hinging on much more than crime statistics.

New Zealand and international crime

- 2.85 World events cause conflict and crime to rise and fall year-to-year. Last year, New Zealand was rated the most peaceful nation on earth for the second time in a row by the Institute for Economics and Peace in its fourth annual Global Peace Index. The overall assessment pointed to the world becoming a little less peaceful since 2009's index was published. This was led mainly by the global financial crisis fuelling crime and civil unrest, evident by a five percent rise in homicide, more violent demonstrations and a perceived greater fear of crime. On the positive side, these gains were partially off-set by the risk world-wide of outright armed conflict falling. Since the survey began in 2007, Africa and the

¹⁴⁰ World Economic Forum, p. 21

¹⁴¹ SAG, pp. 6-7



Middle East are the only two regions to have become safer, and South Asia has been the worst performing.¹⁴²

- 2.86 To the extent that it's possible, prevention of crime on a global scale will require **national police agencies to become increasingly involved in nation-to-nation negotiations and agreements as they relate to migration, trade and international aid**. The success of this collaboration in turn will require overcoming differences in legislation and approach - and some of those obstacles to power-sharing we examined in the 'complex problems, multiple players' trend. It will also mean New Zealand Police preparing for greater involvement in civil disorder and natural disasters on- and offshore, and longer term, for 'climate change refugees' from some of our nearest neighbours. The *Crime and Policing Futures* final chapter (titled *Policing Futures*), covers these topics in more detail, and touches on the **reliance of genuine transnational policing on governance, intelligence, and speed of coordination, pre-emption and action**.¹⁴³
- 2.87 New Zealand Police's intelligence centre assesses how some of these international trends are shaping the operating environment from New Zealand Police's point of view. These assessments are used to inform and coordinate the deployment of New Zealand Police's resources.

Summing up: key points from this section

- ★ The level of peace and conflict in the world fluctuates year to year under the influence of the forces we've examined in this scan
- ★ New Zealand Police examines this driver as it relates to a variety of topics such as organised crime, electronic crime, and illicit drugs
- ★ National police agencies need to become increasingly involved in nation-to-nation negotiations and agreements as they relate to migration, trade and international aid
- ★ To be genuinely transnational, policing will need to overcome challenges relating to governance, intelligence, and speed of coordination, pre-emption and action.

¹⁴²Peter Apps, 'Financial Crisis Fuels Unrest and Crime but War Risk Eases', *Reuters*, 8 June 2010, <<http://www.reuters.com/article/2010/06/08/us-peace-index-idUSTRE6570MV20100608>> [accessed 8 June 2010]

¹⁴³SAG, pp. 12-15



'X' factors

- 2.88 This environmental scan contains a **tremendous amount of information, but in reality barely scrapes the top of very large, mobile icebergs**. Indeed, entire bergs may have been missed for all sorts of reasons. In some ways, seeking to collate and polish the perfect set of icebergs could lead to a false sense of comfort or the investment of effort at the margins when other matters are more pressing. The final page of this scan is dedicated to reminding us that 'reading' the operating context, even as it's changing in front of our eyes, and responding with the long view in mind, requires a diverse set of mature organisational competencies.
- 2.89 The course of **history has been regularly changed by events which are unforeseen and have unexpected but profound consequences**. The break-up of the USSR, the fall of the Berlin wall, the collapse of Enron, the *Deepwater Horizon* BP oil spill, and the bombings of New York's World Trade Centre and the Pentagon are all events with the combination of being low in probability and high in impact.^{144,145} **'Slower-burning' examples** include China's admission to the World Trade Organisation, and the emergence of the SARS virus from Asia. Although **these events in themselves are often shocking, the fact that they occur is not**. One of the best weapons for dealing with the challenges of the future, especially as the pace of change picks up still more, might not be an armful of knowledge, but **skills and aptitude in resilience and agility, comfort with uncertainty, and experience and courage in identifying and nudging the consequences of these events while they are still small** - after all, the longer adjustments are left, the bigger they will need to be.¹⁴⁶

Summing up: key points from this section

- ★ Unforeseen, one-off events regularly change the course of history, and necessarily introduce uncertainty into any long-range perspective
- ★ Skills and aptitude in resilience and agility, are just as important as experience in 'reading' the operating context, comfort with uncertainty and the courage to act
- ★ Perhaps the best way to consciously change the course of events is to act while impacts are still emerging and still small.

¹⁴⁴Graham Hubbard, *Strategic Management: Thinking, Analysis & Action*, (New South Wales: Pearson, 2004), pp. 53-4

¹⁴⁵Jones and Dewing, p. 281

¹⁴⁶The Treasury, p. 68



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