



**OFFICE OF THE PRIME MINISTER'S CHIEF SCIENCE ADVISOR**

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# Using evidence to build a better justice system: The challenge of rising prison costs

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## Foreword

The primary brief for work on this report was to explore the factors that have led New Zealand to have a high incarceration rate and the associated impacts on the capital cost of prisons. Data for the reports were sourced from the Ministry of Justice and the Integrated Data Initiative. The first drafts were prepared by the Science Advisor to the Justice Sector, Associate Professor Ian Lambie, who has been working in the justice sector for 30 years, assisted by the Chief Science Advisor, Sir Peter Gluckman. Subsequent drafts have incorporated comments and inputs from other departmental science advisors.

This is the first of two reports: it discusses the general issues and factors related to exploding prison population and costs. The second report, which will be released within the next month, explores factors that are particularly relevant to youth offenders.

## Table of Contents

Foreword .....	2
Executive Summary .....	4
Preamble.....	5
The drivers of prison population growth.....	5
Crime rates .....	5
Remand rates.....	9
Sentencing and parole issues.....	10
The cost of prisons .....	12
Cost-effectiveness of early intervention .....	13
The value of data rather than dogma and belief.....	14
Taking better care of victims .....	15
Complex risks and vulnerabilities .....	15
Mental health issues .....	16
Intergenerational considerations .....	17
Māori considerations .....	18
What we know about gangs .....	21
What we know about the illegal drug trade .....	22
Ways to approach change .....	23
References.....	25

## Executive Summary

1. Crime, especially violent crime, hurts individuals and society. Both direct and indirect victims of crime may suffer untold consequences that can endure for years and can even affect next generations. Those who do not suffer personally may nonetheless acquire negative perceptions of people or places because of criminal activity. The net effect of such perceptions can change societal attitudes creating a more negative environment. This is a loss for everyone. These perceptions can be disproportionately magnified by advocacy groups, media and political agendas.
2. Policy responses are often viewed in binary terms: tough or soft on crime. This simplistic duality has long had political resonance, but its impact on our prison system is a major concern. The New Zealand prison population is increasing and is one of the highest in the OECD at a time when crime rates are actually decreasing. This can only be explained by the systemic and cumulative impact of successive policy decisions over time, often in response to public demand and political positioning.
3. Successive governments of different political orientations have supported a progressively retributive rather than a restorative approach to crime with unsupported claims that prisons can solve the problems of crime. As a result, the costs of prisons far exceed those justified by the need to protect the public. We keep imprisoning more people in response to dogma not data, responding to shifting policies and media panics, instead of evidence-based approaches to prevention, intervention, imprisonment and rehabilitation. This does not diminish the importance of incarceration for a subset of individuals so as to protect the public.
4. The strong evidence base related to what fuels the prison 'pipeline' suggests that prisons are extremely expensive training grounds for further offending, building offenders' criminal careers by teaching them criminal skills, damaging their employment, accommodation and family prospects, and compounding mental health and substance use issues. On release, even after a short period of imprisonment, for example on remand, offenders have been found to reintegrate poorly to the community. Furthermore, this does nothing to reassure victims that the risk of harm is being effectively managed by the justice system.
5. It is now well understood that prisons act as recruitment centres for gangs (especially for young offenders) and underpin the illegal drug trade. Imprisonment leaves those incarcerated with high rates of undiagnosed and untreated alcohol/drug addictions and mental illness. They have a negative impact on the next generation, given that a high percentage of people in prison are parents. These issues disproportionately affect Māori.
6. Other countries, such as Finland, have significantly reduced their incarceration rates without crime rates rising. There is strong scientific evidence for putting resources into crime prevention, early intervention (identifying and mitigating risk), and a smarter approach to rehabilitation and subsequent social inclusion for those already in the criminal-justice system – not for building more prisons.
7. To assist in such an approach, there must be adequate investment in piloting and evaluating early intervention and prevention initiatives. With leadership and knowledge, we can fundamentally transform the justice system, reduce victimisation and recidivism and make prisons only a part of a much more proactive and effective systemic response to a complex problem.

## Preamble

This paper explores the drivers of the continued growth of the New Zealand prison population, including consideration of crime rates, remand, sentencing and parole practices. The cost of prisons is contrasted with the cost-effectiveness of early intervention and prevention of crime, including making sure the system is responsive to the needs of victims and ensuring that we will have fewer victims of crime. The complex risks and vulnerabilities that are associated with criminal-justice involvement are reviewed, especially mental health issues and intergenerational trauma. Issues of relevance to Māori are discussed, though it is acknowledged that a deeper and more complete analysis must be undertaken in collaboration with Māori leaders and knowledge holders in this field. The paper concludes with a discussion of some of the issues associated with gangs, drugs and how to introduce a programme of change.

2. The primary drivers of prison growth relate to public policies around crime rates, remand and sentencing.

## Crime rates

3. It is well established that incarceration rates are predominantly independent of crime rates.<sup>3</sup> It is government policy that guides who goes to prison and for how long. Thus, high incarceration rates reflect a culture of retributive rather than restorative justice, which in turn has major ongoing costs for society (discussed further below). New Zealand has a record high prison population of more than 10,000 people, although both crime rates and conviction and sentencing rates are historically low (Figure 3).<sup>4,5</sup>
4. New Zealand's recorded crime levels are the lowest seen since the late 1970s.<sup>6</sup> Crime rates have fallen steadily from 2009 until recently (when there is some evidence of levelling out). It is worrying that, in 2016, 71% of New Zealanders thought crime was increasing.<sup>7</sup>

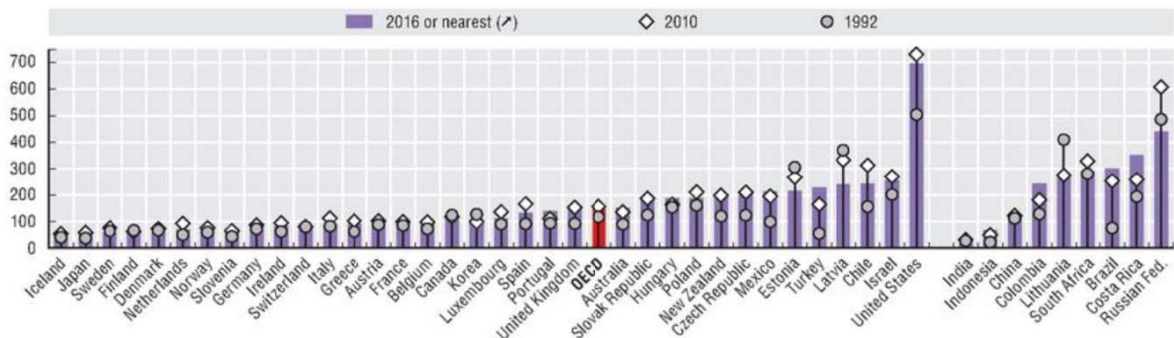


Figure 1. International prison population rates per 100,000 population.<sup>1</sup>

## The drivers of prison population growth

1. New Zealand's prison population is one of the highest in the OECD (Figure 1),<sup>1</sup> at around 220 per 100,000, and rising (Figure 2),<sup>2</sup> compared to an OECD average of 147 per 100,000. Indeed, when examined against that subset of countries with similar philosophies, contexts and cultures with which we should properly be compared, New Zealand has a much higher proportion of the population in prison.

5. Associations between the rate of imprisonment and rate of crime vary, as shown in Figure 3, where numbers of police and people in prison have risen over time, while numbers of crimes recorded are falling.<sup>6</sup>
6. Complex influences on crime rates relate to everything from how well-lit city streets are and how many CCTV cameras are in place, to how much harder it is to steal modern cars or cash (with car theft and opportunistic street crime often a young person's introduction to offending and subsequent entanglement with the criminal-justice system).<sup>8</sup> Recent research shows that in developed nations like New Zealand, it is security improvements (for

example, in cars, cash, businesses and homes) that have had a high impact on falling crime rates.<sup>8</sup>

9. Furthermore, while in prison, offenders often do not get sufficient, effective treatment for their mental health and substance-use issues

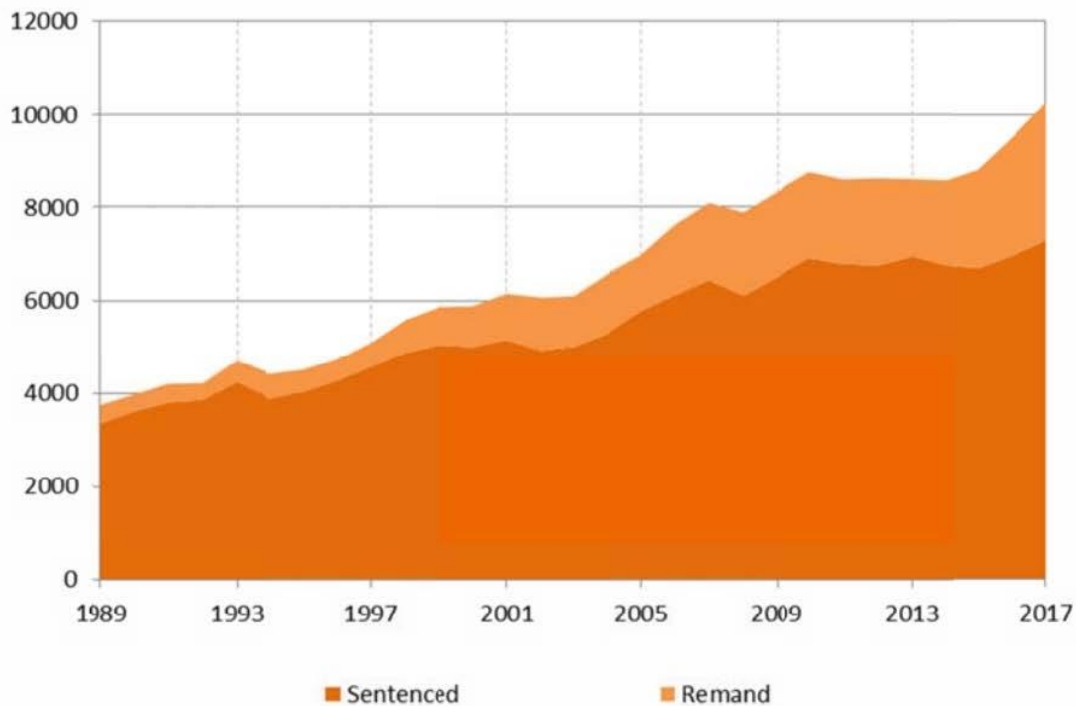


Figure 2. Prison population rates per 100,000 population.<sup>2</sup>

7. Similarly, a recent review of policing strategies identified that police tactics that focus on high-crime *locations* (e.g., so-called crime ‘hot-spots’) tend to be more effective than those focused on repeat offenders.<sup>9</sup> This is completely at odds with the populist assumption that it is by putting specific offenders into larger prisons that crime will fall.

8. Crime rates also relate to imprisonment rates to the extent that high imprisonment means more offenders are ‘off the street’ for a period of time. But this does not lead to lowered crime rates for them or their families and communities in the medium- to long-term. Victims of their offending are often not confident that justice has been served nor safety improved.<sup>10</sup> The partners and children of offenders (who are often also their victims) are inadequately supported to recover from the years of offending, trauma and violence that preceded the imprisonment.<sup>11</sup> Once a mother or father is in prison, children are more at risk of poverty and social deprivation, and of engaging in crime themselves.<sup>12</sup>

nor learn how to build good relationships with their partners, children and wider society, and their employment prospects are not enhanced.<sup>13</sup> Upon release, there are typically few opportunities to build positive community relationships in safe and healthy housing, with stable employment, good healthcare and ‘pro-social’ networks available (as opposed to the ‘antisocial’ networks they have often known since childhood).<sup>14</sup> Victims may not feel confident that further offending is unlikely, as the cost of the imprisonment vastly outstrips the investment in any more cost-effective, preventative or rehabilitative efforts.<sup>15</sup> (The *Complex risks and vulnerabilities* section below explores these points further.)

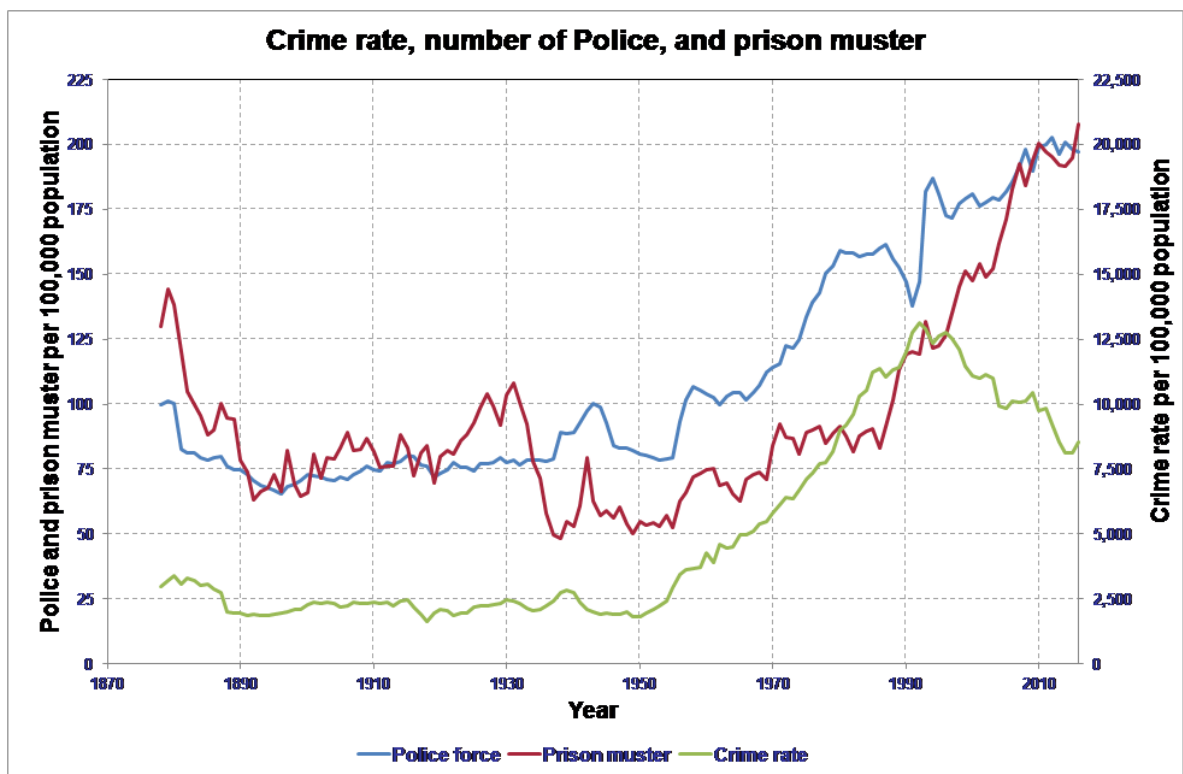


Figure 3. Comparative rates of crime, police and people in prison.<sup>6</sup>

10. The composition of crime will likely continue to change as property crime continues to reduce, meaning proportionately more of the crime problem will be associated with high-harm, personal offences—that is, exactly the types of offending that are worsened by intergenerational imprisonment, in the absence of effective prevention, intervention and rehabilitation efforts. Indeed, there has been a slight rise in reports of serious crime recently, with 12% more 'Category 3' offences coming before the courts since 2013/14.<sup>6</sup>
11. Category 3 offences are defined as crimes that are punishable by 2 years' imprisonment or more, up to life imprisonment. The recent rise in Category 3 cases is thought to be as a result of a change in focus by police on more serious offending, and, in particular, a much greater focus on family violence. However, it is unlikely that underlying crime has increased, as reporting rates have not increased substantially (though we will know more about that at the end of this year with the release of the New Zealand Crime and Victims Survey results).<sup>16</sup> There is currently justice sector data analysis going on to look at the impact of incapacitation on repeat offending, especially in the family violence area, especially given that imprisonment is known

to have very poor rehabilitative effects. A focus on family violence is laudable; an *ineffective* focus (by merely imprisoning more offenders without reversing the harm already done to their families, and without effective efforts to ensure the violence does not continue upon release) is frequently lethal.

12. Also in the area of serious crime, while the number of assaults reported each year has fallen, the proportion leading to conviction and imprisonment has risen (Figure 4).<sup>17</sup>

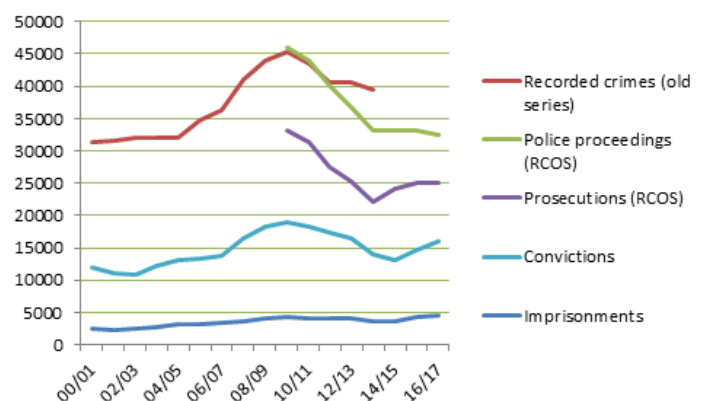


Figure 4. Volume of cases of assault.<sup>17</sup>

13. This is in part due to the emphasis of police proceedings which has shifted from less

serious to more serious types of assaults (Figure 5), so that, of the people who are prosecuted for assaults, the perpetrators of these more serious assaults are the ones more likely to end up with a custodial sentence. Similarly, for drug offences, there has been an increase in prosecuting serious offending (such as methamphetamine supply, which has a maximum penalty of life

volumes and costs do not relate to rises in crime, nor, critically, do they affect crime rates. Long-term increases in sentence length, and the proportion of that sentence that is served, driven by policy changes and a retributive environment, make the prison system disproportionately sensitive to small changes in volume.<sup>6</sup>

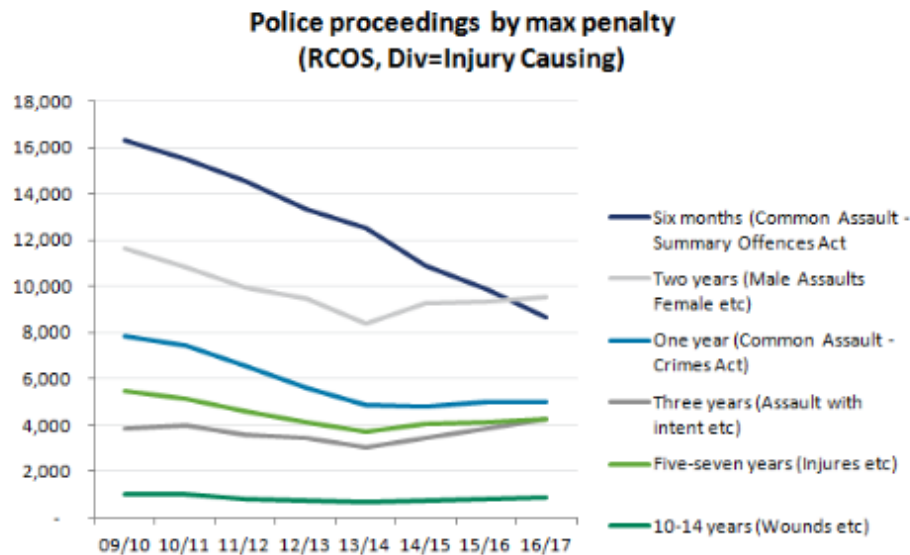


Figure 5. Police proceedings by maximum penalty.<sup>17</sup>

imprisonment).<sup>17</sup> See the *Drugs* section below for further detail.)

14. Again, few would debate the benefits of having more serious offending targeted by police (although the ability of victims to feel promptly responded to and adequately supported, and the programmes for rehabilitation and reintegration of all these offenders need to be much more effective). However, the rise in serious crime reporting does not match the rise in prison numbers. While about 70% of the prison population is made up of those who have committed serious violent, sexual and drug-related offences,<sup>6</sup> we need to actively focus on the other 30%.
15. The prison population has been amplified by criminal-justice system settings, including around remand and sentencing (discussed below), which are led by government policy, which, in turn, is often in response to political and media debate around a specific crime event. Importantly, substantial rises in prison

16. To illustrate, the crime rates in Finland and New Zealand have been similar for decades (peaking with the post-war baby boom through the 1980s, then declining). Despite similar crime rates, imprisonment rates in New Zealand are much higher and, despite this measure, regular 'fear of crime' surveys over 20 years show New Zealanders feel more fearful than their Finnish counterparts. Therefore, not only does imprisonment not reduce the crime rate here, it does not enhance a sense of public safety, nor address the risk factors that set children on a pathway to lifetime offending. In contrast, Finland spends more than NZ on rehabilitation and reintegration of offenders, and there are wider social factors, including greater investment in education and research, more generous income support, and a higher level of trust in government institutions, all of which address risk factors for crime.<sup>18</sup> These are socially constructive expenditures compared to expenditure on prisons.



17. The evidence is that prison growth has been driven largely by ‘tough on crime’ policies, from successive administrations on both sides of the political spectrum, encouraged by vocal, professional lobbyists. This is known as ‘penal populism’<sup>19</sup> – where politicians offer vote-winning, simplistic solutions for selected law-and-order problems - this phenomenon has also been seen in the US<sup>20</sup> and UK,<sup>21</sup> where reactive policy choices that are not particularly evidence-based have resulted in disproportionate incarceration and cost, with no evidence of concomitant increase in public sense of safety or realisation of decreasing crime. In reality, crime rates are falling but these are not related to prison policy.
18. Ministry calculations have shown that if no policy changes had been made since 2000, the estimated prisoner population would now be around 8,800, whereas the current prisoner population is around 10,600.<sup>6</sup> This calculated discrepancy is based on estimating the natural decreases in prisoner population as sentences end and crime volumes decrease, while allowing for increased convictions of serious violent crime.

## Remand rates

19. The remand population has more than doubled since 2000<sup>22</sup> and is now 28% of those incarcerated.<sup>23</sup> In addition, average time on remand has increased from 45 days (2004) to 62 days (2015),<sup>24</sup> as have rates of remand, from 6.1% in 2010 to 8.5% in 2015. The over-representation of Māori on remand is higher than that of the sentenced population.<sup>25</sup>
20. It is well documented that pre-trial detention has a ‘criminogenic’ effect on those remanded<sup>26, 27</sup> (that is, people lose jobs, homes, relationships, acquire more criminal skills and build more offender-based social networks when imprisoned). Custodial remand also diverts scarce resources from other criminal-justice priorities.<sup>28</sup>
21. Evidence shows that pre-trial detention significantly contributes to prison overcrowding (e.g., a 1% increase in the rate of remand requires 250 extra prison beds;<sup>24</sup> however, if the remandee is ultimately imprisoned, the time in remand is taken off the final sentence, so the length of imprisonment is not increased.) Surprisingly, what is not known is how many remandees do (or do not) get a term of imprisonment after trial; data analysis needs to be urgently undertaken to address this question.<sup>16</sup>
22. In addition, the enforcement of bail conditions has had an effect. A 53% increase in the number of bail conditions imposed between 2005 and 2012<sup>22</sup> inevitably increased the risk of breaches; young people in particular may not fully understand bail conditions or the importance of complying with them.<sup>29, 30</sup> (In 2012, there was a reclassification of bail-condition naming protocols, which provides a disjuncture in the data, so clear impact of bail-condition breaches and prison numbers over time is hard to detect, although the renaming reportedly reduced confusion about what conditions had been imposed.)<sup>16</sup>
23. Furthermore, NZ’s approach to enforcing bail conditions has been one of monitoring compliance to ‘catch’ people for breaches, rather than as a system that supports people to comply, and to address issues early before breaches occur.<sup>16</sup> Some US states have had some success in reducing remand populations in the past decade by taking a risk-based approach to bail, and by ensuring that those on bail are supported to comply with their conditions. Pre-trial risk assessment tools are used to provide an objective assessment of a person’s risk of failing to appear in court or their risk of offending while on bail, or both. Most of the tools in use have been shown to have predictive validity, and are likely to be more accurate than an individual’s assessment alone.<sup>31</sup> Such risk assessments are used by judges as the basis for recommendations on bail conditions and pre-trial supervision. Good pre-trial risk assessments require that all relevant information is gathered (such as from police, courts, mental health, child protection, family violence, and any other relevant agencies). Improved support for decision-making (including risk-based tools to support bail decision-making) is in demand from NZ judges.<sup>32</sup>

## Sentencing and parole issues

Part of the recent growth in the NZ prison population can also be attributed to tougher parole laws, often developed in response to the media- and political-driven reactions to high-profile events<sup>33</sup> (Figure 6). Indeed, it is clear that the repeated increases following criminal-justice law changes provide evidence that the increase in prison population is largely driven by these political responses.

also be very influential on system change. Such system change rarely improves long-term services for victims and their families, who continue to have limited access to trauma-based recovery and support.<sup>16</sup>

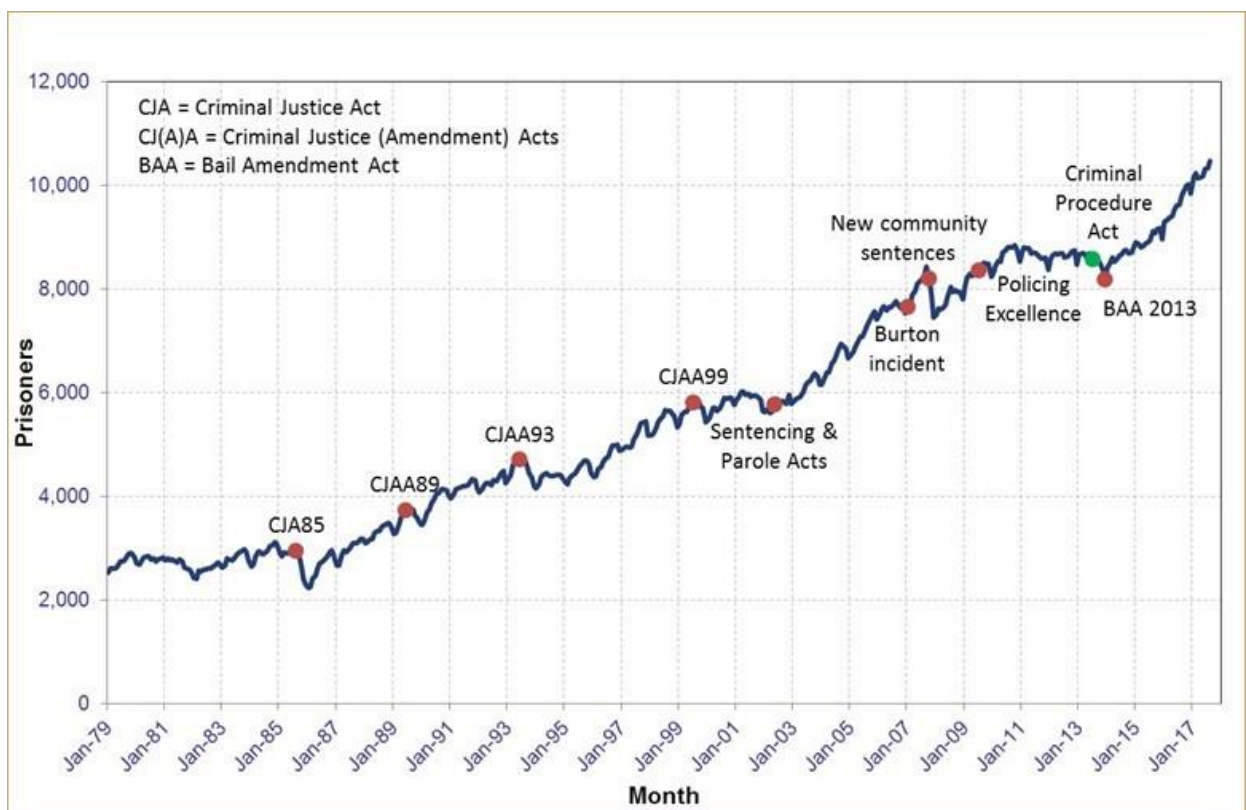


Figure 6. Prison population increases and legislation<sup>6</sup>

24. What Figure 6 shows is that, despite policy changes in response to high-profile events (e.g., the Burton incident in 2007), imprisonment rates do not correspondingly decline— that is, there is no evidence of the supposed ‘deterrent’ effect of harsher sentences. On the contrary, these political decisions appear to drive up the prison population and put further costs on the taxpayer.
25. Sentencing and parole are influenced by both legislation and policy, and by community and political responses to ‘sentinel’ events which are often distressing and high-profile and can

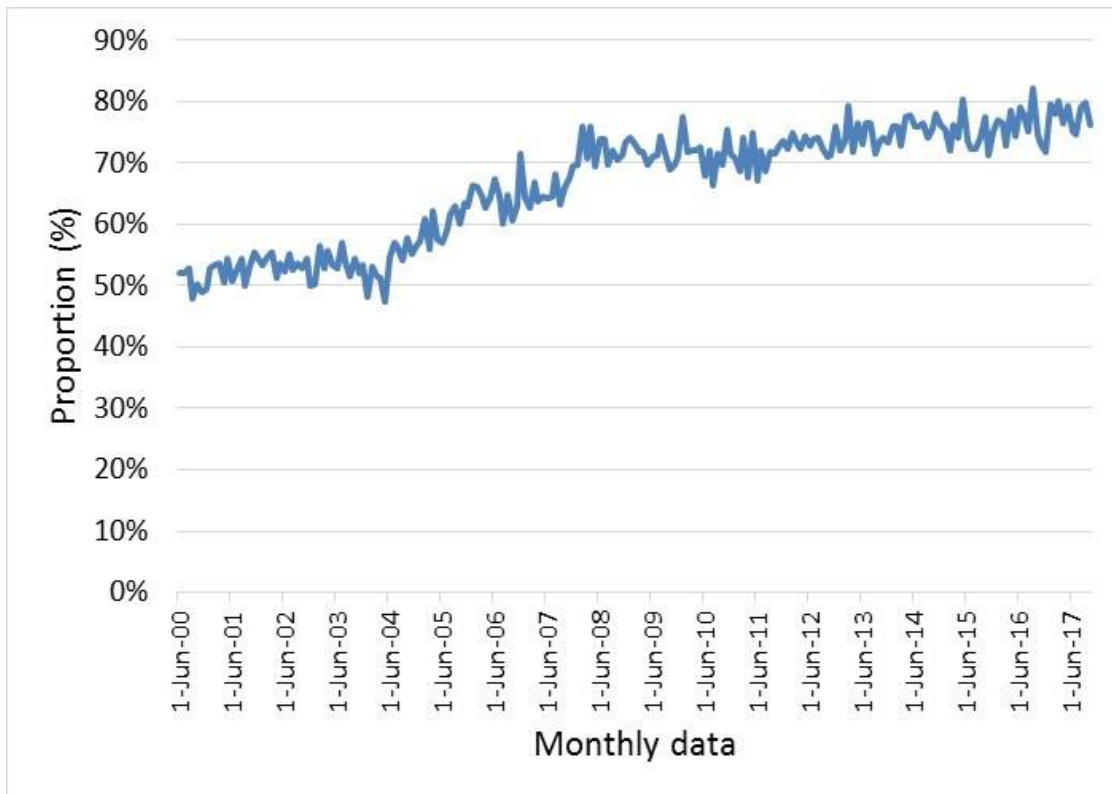


Figure 7. Proportion of sentence served.<sup>6</sup>

26. The prison system is most sensitive to the *proportion* of sentence served: if the proportion served were to rise from 75% to 85%, it is estimated an additional 900 prisoner places would be required.<sup>6</sup> The Parole Act 2002, which created the Parole Board and made release more dependent on the assessment of risk, has increased the proportion of sentence served from 50% to 75% for people with sentences of 2 years or more, meaning many will stay in prison longer.<sup>6</sup> This has added a cost of about \$164 million per year and added about 1,500 to the

prison population.<sup>17</sup> Figure 7 shows the continued steady rise of the proportion of sentence served.<sup>6</sup>

27. Systematic examination of the legislative and policy settings that lead to people's entanglement in the criminal-justice system is needed (e.g., Bail Amendment Acts 2011, 2013; Parole Act 2002; Sentencing Act 2002 & Sentencing Amendment Act 2014; Victims' Rights Amendment Act 2014).

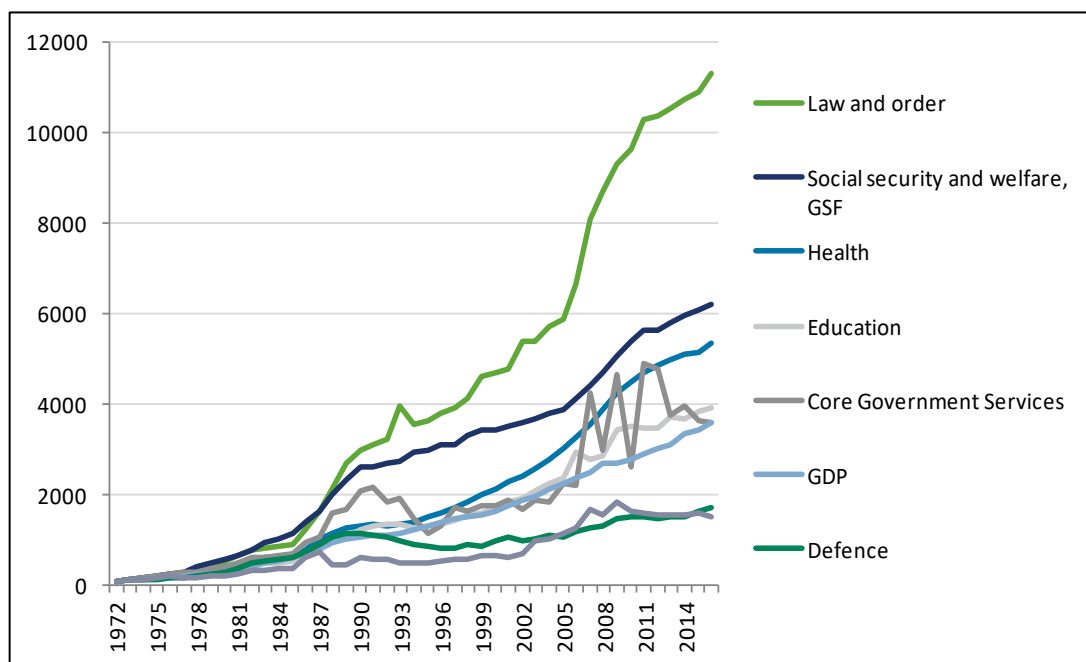


Figure 8. Core Government spending<sup>6\*</sup>

*\*(in nominal terms, so includes the impact of inflation; 1972 = 100, the CPI has gone up by a factor of 10 since 1972)*

## The cost of prisons

28. The total cost of prisons has doubled since 2005, and tripled since 1996.<sup>17</sup> Since 1972, criminal-justice costs have grown twice as fast as any other category of Government spending (Figure 8), and three times faster than GDP.<sup>17</sup>

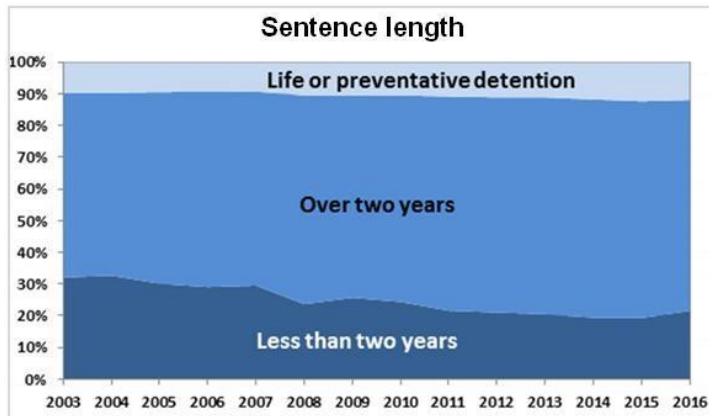


Figure 9. Proportion of prisoners by sentence length.<sup>6</sup>

29. It can be inferred from the data that this pattern of rising costs is due to the legislative changes that have resulted in more people in prison who are on longer sentences and are serving a longer proportion of their sentences (Figure 9).

30. Therefore, falls in the volume of crime (which would potentially save costs of imprisonment) have been cancelled out by the policy settings

that remand more people in custody, and then, if convicted, keep them in prison for longer (the settings for the 'intensity of punishment' in Figure 10).

31. The cost of prisons is not limited to physical infrastructure. There are also social and psychological costs of the system around each individual person in prison, and on their children and families, from being incarcerated. Further, although the communities in which they are located may benefit from the prison 'industry', they are not necessarily a desired or attractive institution in neighbourhoods.<sup>34</sup> From an economic perspective, it has been argued that prisons are predominantly a waste of public resources and may be cost-effective only for the most serious and violent offenders.<sup>35</sup>

32. It is important to consider whether these extremely high costs represent value for money for New Zealand, in terms of helping victims recover, keeping communities safe, reducing offending and reoffending, and getting people off the 'prison pipeline' (the apparently almost inevitable path from initial offending to escalating contact and eventual imprisonment, often with recidivism). Cost-benefit analyses, and research evidence, suggest they do not.



Figure 10. Changes in costs of prisons.<sup>17</sup>

## Cost-effectiveness of early intervention

33. Overall, the research shows that early prevention programmes are effective in substantially reducing long-term criminal-justice costs:
- Investing in early prevention is more cost-effective than imprisonment<sup>36</sup>
  - Programmes targeted at the highest-risk populations are the most cost-effective, especially the earlier they occur in the lifecourse.<sup>36</sup> This will be discussed further in the second report in this series, which focuses on those under 25 years.
34. Due to the high cost of crime, early intervention programmes are clearly more cost-effective.<sup>36</sup> In light of such research, Washington State (west coast of US) abandoned plans to build one of two proposed prisons, approving funding instead for evidence-based crime prevention and intervention programmes.<sup>37</sup> Early analyses indicate that such programmes have been effective in reducing crime and recidivism rates and lower criminal-justice costs.<sup>38</sup>
35. The evidence shows we must make the first interaction with the criminal-justice system positive for young people (e.g., a police talk at school, rather than a police drug raid on the family home)<sup>39</sup> and adequately and properly resource Police Youth Aid, all the way from police national headquarters through to isolated rural communities.
36. Incarceration costs are reduced by early intervention programmes with children and families (such as home-based programmes like, 'nurse-family partnerships').<sup>40</sup> Such programmes have been estimated in the USA to be able to reduce homicide rates by one-third, accounting for billions per year in reduced imprisonment costs,<sup>41</sup> not to mention saving lives.
37. Examples demonstrating that early prevention programmes can be extremely cost-effective include:
- Longitudinal evaluation of the Perry Preschool Program (preschool for children from disadvantaged backgrounds in the US)<sup>42</sup>
    - 65% of savings were accounted for by reduced offending
    - At age 27: \$7 saved for every \$1 spent
    - Follow-up at age 40: \$16.14 saved for every dollar spent
  - Benefit/cost analysis of the SNAP program (parent/child intervention for children aged 6-11 who display antisocial behaviour in Toronto)<sup>43</sup>
    - Reduced offending rates between age 12 and 20 by 18%-33%
    - Saved between 1.25 and 2.29 convictions per boy, saving between C\$9,493-C\$17,404 in criminal-justice costs per boy (adjusted for co-offending).
38. Economic benefits of prevention programmes go beyond reduced criminal-justice costs and also span healthcare (reduced use), education (reduced need for costly remedial approaches and support staff), social services (reduced use) and employment (increased tax revenue) sectors, as well as savings from reductions in the number of crime victims.<sup>36</sup>
39. Analyses by the Washington State Institute for Public Policy (WSIPP) have shown the benefits of expenditure on imprisonment and funding for prevention and intervention programmes. As such, these policies are being used as models for the development of more progressive criminal-justice policies in other US states, as well as in the UK.<sup>38</sup>
40. Those implementing successful early-intervention programmes see cost-benefit analyses as a crucial factor in the persuasion of governments to adopt evidence-based criminal justice and early prevention policies, as cost-benefit ratios are better understood than statistical terms such as effect sizes and significance levels.<sup>44</sup> Economic analyses of benefit-cost ratios can help policymakers' decision-making around where to best invest limited resources.<sup>45</sup>

## The value of data rather than dogma and belief

41. Crime has fallen yet, as noted, the public perception often differs from this reality.<sup>7</sup> Like other issues where scientific evidence is debated, misused or discounted and complex issues are reduced to simple, contradictory positions, law-and-order issues—and the ways to manage imprisonment—are infused with advocacy and political posturing.
42. Populist, ‘eye-for-an-eye’, retributive justice calls often relate to deeply distressing events.<sup>46</sup> This militates against restorative justice efforts, which are often more complex, and have less easily derived slogans or media appeal.
43. Most victimisations (around two-thirds) are not reported to authorities (such as family violence and sexual crime).<sup>6</sup> Even more so, of those crimes that are reported, media coverage focuses primarily on homicides and other rare, drug-, sex- or violence-related crimes, especially involving high-profile or high-status individuals, or children (whether as victims or perpetrators).<sup>47</sup>
44. The longstanding media tradition of, ‘if it bleeds, it leads’<sup>48</sup> highlights the ‘newsworthiness’ of crime events that are violent (bloody), extraordinary (and yet implying risk of such harm to us all), personified, emotional and local.<sup>49</sup> It is noteworthy that mainstream media in New Zealand have appeared to follow this trend, with crime reporting making up 70% of some day’s news coverage in a 2016 sample of the *New Zealand Herald*, and averaging 31% of daily news coverage (up from 21% in 1993).<sup>50</sup> Coverage style has also changed, as resources for specialist crime reporters or in-depth journalistic inquiry dwindle, to emphasise ‘celebrity victims’, single source stories, and social-media reports.<sup>50</sup>
45. News coverage portrays crime as caused by individuals who need harsh punishment, rather than as a complex issue with multiple driving factors related to individual, social and systemic contexts.<sup>51</sup> Although highly unusual cases may be portrayed as if they reveal general truths about the state of society (‘youth of today...’), data on the actual patterns and causes of crime are rarely covered<sup>47</sup> nor communicated by officials in ‘newsworthy’ ways.<sup>52</sup>
46. As people have limited personal experience of crime, news media depictions can disproportionately influence their views.<sup>53</sup> For example, NZ survey respondents in 2016 reported they relied on news media coverage for information about crime (e.g., online and hardcopy newspaper reports were the main source of information for 81%), whereas only 12% had had a personal experience of crime.<sup>7</sup> Lobby groups responding to specific cases also engage with media directly, providing vivid images and experienced media spokespeople for victim’s stories, and developing alarming themes such as ‘killer kids’ in relation to rare events.<sup>54</sup>
47. Groups who are *less* likely to experience crime (such as those aged over 50 years) can be more likely to think it is increasing. In fact, crime is concentrated among at-risk groups, with 3% of victims experiencing more than 50% of all crime.<sup>6</sup>
48. Victimisation and offending behaviour are closely linked, and strongly correlated to low socioeconomic status (e.g., high rates of victimisation for Māori).<sup>6</sup>
49. A feature of countries with low prison populations (e.g., Sweden, Norway, Finland, Germany) includes their adherence to ‘expert’ knowledge and robust evidence to influence policy, and consequent rejection of populist-driven and emotive criminal-justice politics.<sup>55, 56, 57</sup> In Finland, for example, 3 out of 4 respondents endorsed a general survey question, typical of populist ‘research’ that, ‘Offenders should be given harder sentences than they currently are’. Yet more nuanced research, which used vignettes to explore the sentences that laypeople and a sample of judges would recommend, saw more diverse endorsements of community and preventive measures, not just imprisonment.<sup>58</sup> There was also strong support by laypeople for judges to make decisions independent of public opinion, and trust that they were capable of doing so.<sup>58</sup>

50. International evidence from countries that have managed to reduce their prison populations includes shifting the emphasis of the criminal-justice system from primarily punishment to more rehabilitation and reintegration, and therefore expanding rehabilitation and reintegration options, e.g., intensive community supervision.<sup>37</sup>
51. Diverting more offenders into community-based alternatives (based on certain requirements) has been successful in Finland (with a 28% reduction in people sentenced to prison over a 13 year period).<sup>59</sup> A particular emphasis on the diversion, rather than incarceration, of youth offenders has also been effective; for example, in Germany, young adults until the age of 27 (and routinely between 18 and 21 years old) can still be sentenced under youth criminal law, not adult sanctions.<sup>60</sup>
52. Also, agreeing on principles to guide criminal-justice policy (often led by an independent working group that engages the public) can be effective.<sup>61</sup>
- 77% have been victims of violence
  - 53% of women and 15% of men have experienced sexual abuse
  - 52% of women and 40% of men have a lifetime diagnosis of post-traumatic stress disorder (PTSD).<sup>6</sup>
55. Individuals who have experienced such abuse and trauma face neurophysiological differences that make it harder to regulate their emotions, as well as tending to act more aggressively;<sup>62</sup> anger and aggression are highly correlated with violent crime.<sup>63</sup>
56. Socioeconomic disadvantage has been linked to criminal-justice outcomes across the lifecycle. Poverty-related early-life risks to wellbeing are well-established in many domains, including criminal-justice involvement, with socioeconomic factors evident in the increased prevalence in childhood of challenging behaviour (that goes on to become offending behaviour) among more economically deprived populations.<sup>64 65</sup>
57. Self-control and emotional resilience develop in early childhood and, by about age 10, many children have mastered skills to control their behaviour, emotions or actions as needed to achieve longer-term goals, such as in education.<sup>66</sup> Poor self-control in childhood has been shown to predict a diverse range of problematic behaviours and adverse outcomes, including poor educational outcomes,<sup>67</sup> high-risk substance use,<sup>68</sup> unemployment,<sup>69</sup> and engagement in crime.<sup>70</sup> It is cost-effective and possible, however, to change this trajectory, with parenting and family support that promotes healthy early-life experiences and environments for children;<sup>71</sup> targeted intervention in early childhood and through quality early childhood education;<sup>72</sup> and more consistent approaches to social and emotional learning, and challenging behaviour, in primary school.<sup>73</sup>
58. A body of work on ‘conduct problems’<sup>74</sup> has been focused on how New Zealand families can work together with health, education and social services to improve early childhood outcomes and target those with problems (from age 3 through to adolescence). This

## Taking better care of victims

53. While the rhetoric is often aimed at reducing victimisation, there is no good evidence that rhetoric or just increasing prison volumes improves provision of services to victims of crime, nor ensures that victims feel the justice system responds quickly and effectively to the harm and trauma they have experienced.

## Complex risks and vulnerabilities

Alongside debates as to how to respond to offending and imprisonment, there is a need to recognise the complex risks and vulnerabilities that combine to make it more likely someone will end up involved in the criminal-justice system. It is understanding the social and community aspects, applying cost-effective, early-intervention approaches with children and families, and tackling poverty and social inequities that have the potential to transform the criminal landscape.

54. Those involved in the criminal-justice system have faced multiple risk factors and vulnerabilities, such as:

programme of evidence-based interventions includes universal and targeted approaches, that are already available to a limited extent in NZ, and should be more widely implemented.

59. Educational and employment opportunities are hampered by literacy levels lower than the general population (Figure 11). As many as 70% of those in prison have significant literacy problems.<sup>75</sup> There is clear evidence that participation in prison literacy and education programmes (especially those with a vocational focus),<sup>76</sup> is associated with higher post-release employment and lower recidivism (7% to 46% reduction in recidivism across different meta-studies depending on study and outcome measure).<sup>77, 78, 79, 80</sup>

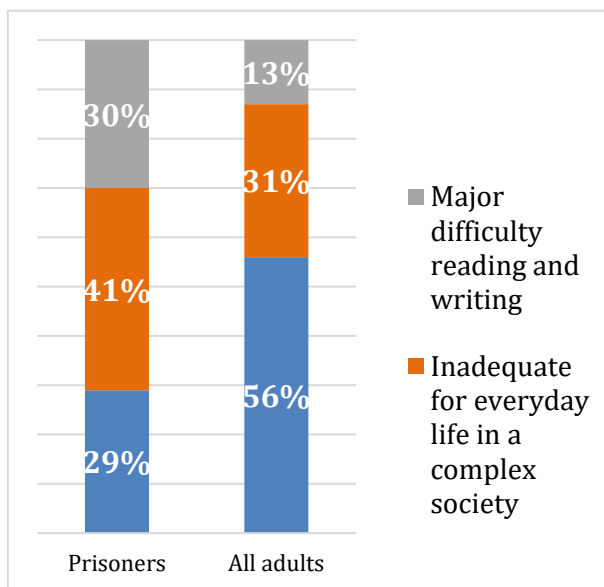


Figure 11. Literacy levels of people in prison and all adults<sup>6</sup>

60. Twenty percent of youth offenders have been identified as having a learning disability<sup>81</sup> and in NZ, 92% of young people in youth-justice residences showed significant difficulties in at least one area of achievement (IQ, attention, literacy, numeracy, verbal abilities). Reading skills were particularly low (mean ability in 4<sup>th</sup> percentile). Reading comprehension has been found to predict future offending.<sup>82</sup> Not being able to get a driver's licence because of literacy issues can compound offending and hamper job prospects.

61. In addition, social factors such as better access to housing can improve reintegration and reduce re-offending.<sup>83</sup> A gang address or homelessness prohibit both community sentencing options and parole, leaving prisons full and incarceration necessary for offences otherwise punishable by community sentences. More support for prisoners on release is required to help them find good housing, employment, healthcare and social supports, including as parents.

62. The response of government agencies such as Police and Oranga Tamariki requires a workforce that has been trained in the skills needed to respond not just to statutory requirements, but also to the complex risks and vulnerabilities children and families face, in a way that makes change possible and sustainable. For example, child offenders aged 8 to 12, whose behaviour has led to their exclusion from school, and to escalating antisocial networks and activities, have never had a targeted, evidence-based intervention in New Zealand offered to them (such as the intensive wraparound model<sup>84, 85</sup>). Such a programme could be cost-effectively provided through Oranga Tamariki and education, once staff were appropriately trained; this would potentially remove a cohort of young offenders from the prison pipeline.

63. Risks and vulnerabilities are evident in high rates of mental health and substance-use issues, and the intergenerational effects of offending and trauma, which are outlined below.

## Mental health issues

64. Nearly all (91%) people in prison in NZ have a lifetime diagnosable mental illness or substance-use disorder, 62% diagnosed in the past 12 months, according to a recent NZ survey<sup>86</sup> (Figure 12). Compared to the general population, those in prison are seven times more likely to have a lifetime prevalence of any substance-use disorder, and one in three have a clinically significant personality disorder.

65. Mental health and substance-use disorders often go undetected and under-treated; fewer than half (47%) of prisoners with a



mental health diagnosis had had mental health treatment in the past year, with the lowest rates of treatment for substance-use disorders (42%).<sup>86</sup> Men are significantly less likely to seek mental health treatment in prison than women.<sup>86</sup>

- 66. Furthermore, high rates of comorbidity and multi-morbidity hamper treatment effectiveness,<sup>87, 88</sup> with two-thirds (66%) having two or more lifetime diagnoses of mental or substance-use disorders. Personality disorders make treatments for mood disorders less effective.<sup>89</sup>
- 67. Untreated substance-use disorders and dependence keep people on the prison

68. Childhood trauma is associated with poor mental health; NZ data shows almost half (48%) of those in prison experienced family violence as a child.<sup>92</sup> Trauma-informed practice is needed across all ministries involved in the justice system, and ongoing exploration of the relationships between family violence victimisation and perpetration.<sup>92</sup>

69. Rates of mental illness among youth offenders far exceed those of children and adolescents in the general population.<sup>93</sup> Compared to 13% of children and adolescents in community samples, as many as 50% to 75% of youth involved in the justice system meet diagnostic criteria for at least one disorder,<sup>94 95 96 97</sup> and young people in youth detention centres are about 10 times more likely to have a psychiatric disorder.<sup>95</sup>

70. Increased and sustained provision of evidence-based treatment for mental and substance abuse disorders, including comorbidity, is needed from earliest engagement with the justice system, e.g., through pre-trial services.<sup>98</sup> In addition, some people in prison with severe personality disorder and chronic self-harm behaviour would potentially have their needs better catered for in the forensic mental health system. For example, in Germany, mentally ill prisoners fall outside the jurisdiction of the Ministry of Justice and are instead admitted to psychiatric hospitals, and in the Netherlands, they are placed in specialist Forensic Psychiatric Care Institutions.<sup>60</sup>

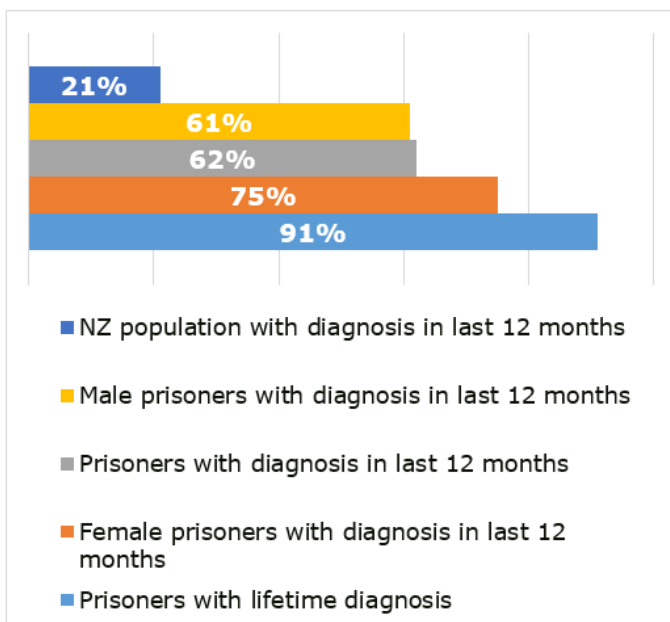


Figure 12. Comparative rates of diagnosis of mental illness for people in prison<sup>6</sup>

pipeline. There's a strong relationship between alcohol abuse and offending, and youth drinking is particularly problematic.<sup>90</sup> Young NZ offenders saw heavy use of alcohol and drugs as precipitating and maintaining their offending (e.g., heavy drinking by 79% of offenders vs. 27% of non-offenders).<sup>91</sup> This youth culture is an issue that New Zealand has failed to confront. International evidence shows that diagnosing and treating substance-use disorders, in particular, has an impact on lowering recidivism, for example through drug treatment courts (9% reduction in recidivism).<sup>37</sup>

## Intergenerational considerations

71. Intergenerational issues such as persistent maltreatment in childhood are linked to later violent offending.<sup>99</sup> Child maltreatment in one generation is directly correlated to exhibiting maltreatment in the next generation.<sup>100 101</sup> This relationship may have a biological as well as environmental component due to stress-induced changes in brain biology in the first generation affecting their emotional control.

72. Those who have experienced recurrent or more than one form of maltreatment are

more likely to engage in offending behaviour<sup>102</sup> and notably, offending patterns among youth with an out-of-home care history are more likely to be chronic and persistent into adulthood.<sup>103</sup> Again, therefore, the evidence points to the importance of responding early to identified risks and harm, ideally before encounters with the justice system occur. This requires a broad multi-sector approach that engages other community, cultural and social sector services.

73. Also, there are negative effects on the next generation of having a parent in prison. In New Zealand, almost one in five inmates (19%) has a direct parenting role at the time they are imprisoned, which means about 3,800 children currently have one active parent in prison. This, in turn, affects the development of the child. Another 20,000 more children have a parent in prison, not in an active parenting role.<sup>6</sup> Intergenerational links to offending are evident, but preventable. For example, adolescents with incarcerated parents are at greater risk for mental health problems<sup>104</sup> and following a first offence, those whose parents have a criminal conviction are at more risk of subsequent offending.<sup>105</sup>
74. Prevention of child abuse and maltreatment is possible. For example, home visitation has been found to reduce child abuse in high-risk families.<sup>106</sup> Greater programme efficacy has been found with visits starting in pregnancy and continuing for up to 2 years, weekly visits in the immediate post-partum period, longer follow-up post-intervention, and focused intervention. Predictable, sustained and respectful home visitation has been found to impact positively on mother-infant interaction, maternal mood, subsequent pregnancies, maternal employment potential,

and cognitive development and externalising behaviours of children.<sup>106</sup>

75. Incarcerated fathers who have experienced more childhood risk factors have been found to have had less contact with their children.<sup>105</sup> This indicates a potential opportunity to provide parenting programmes to enhance their skills in developing healthy relationships with their children.

## Māori considerations

76. For decades, Māori have been significantly over-represented at all stages of the criminal-justice system.<sup>25</sup> There are multiple and complex reasons for this, not least because Māori tend to experience disproportionately many of the interacting risk factors previously discussed.
77. Identity and self-esteem play an important role in how individuals live within a society, contributing to their resilience and confidence. However, the enduring impact of colonisation and dominant cultural norms in most aspects of New Zealand life, especially the criminal-justice system,<sup>107</sup> can contribute to undermining these protective factors for Māori youth in myriad ways. Although the criminal-justice system has recognised the link between loss of identity and self-esteem in Māori offending, the response has been largely individualised and guided by non-Māori worldviews.<sup>108</sup> Recent research in this area suggests that the impact of such in-prison programming is limited,<sup>108</sup> and that a more broadly based and sustained Māori approach that attends to the interrelated elements of offending, collective social harm, and the roles of the state and criminal-justice system in over-representation and social marginalisation, is required.<sup>109</sup>

*Table 1. Disproportionate imprisonment rates (as at August 2013) <sup>110</sup>*

<b>Ethnicity</b>	<b>Proportion of total population</b>	<b>Sub-population totals</b>	<b>Prisoners (end of August 2013)</b>	<b>Imprisonment rate (per 100,000 sub-population)</b>
Māori	14.6%	649,700	4285	<b>660</b>
Pacific	6.9%	307,050	1006	<b>328</b>
NZ European	69.0%	3,070,500	2847	<b>93</b>
Asian/Other	9.5%	422,750	376	<i>NA: many are foreign nationals</i>
<b>Total</b>	<b>100%</b>	<b>4,450,000</b>	<b>8514</b>	<b>191</b>

78. If Māori had the same proportion of their population in prison as non-Māori, then the prison population would be 44% smaller. That is, based on the current prisoner population, if Māori had an imprisonment rate of 100 per 100,000 Māori population, there would be only around 700 Māori in prison, not 5,400 as there are at present. On that basis, the prisoner population would decrease by around 4,700, or 44%. (Table 1 shows figures from 2013.)<sup>110</sup>
79. Māori are also significantly more likely to be victims of crime than non-Māori, with persistently higher rates across all offence types, including violent interpersonal offences (18.9% Māori vs. 10.4% 'NZ average').<sup>111</sup>
80. Socioeconomic deprivation increases the likelihood of offending; Māori are more likely to live in highly deprived areas.<sup>6</sup>

82. Māori over-representation is seen as more closely related to socioeconomic status and demographics than ethnicity,<sup>25</sup> although some understand this as being reflective of 'direct and indirect discrimination within the criminal-justice system and society more broadly' (p. 12).<sup>113</sup> This has prompted investigations into the possibility of racial bias influencing current levels of ethnic disparity. A report by the Department of Corrections investigating the role of racial bias in the criminal-justice system concluded that ethnicity, in and of itself, played a small but tangible role at key decision-making points, in ways the justice system did not intend.<sup>114</sup> However, a more recent report noted that, compared to other countries, little research exists in NZ investigating bias in the criminal-justice system,<sup>113</sup> and thus, firm conclusions cannot be made.

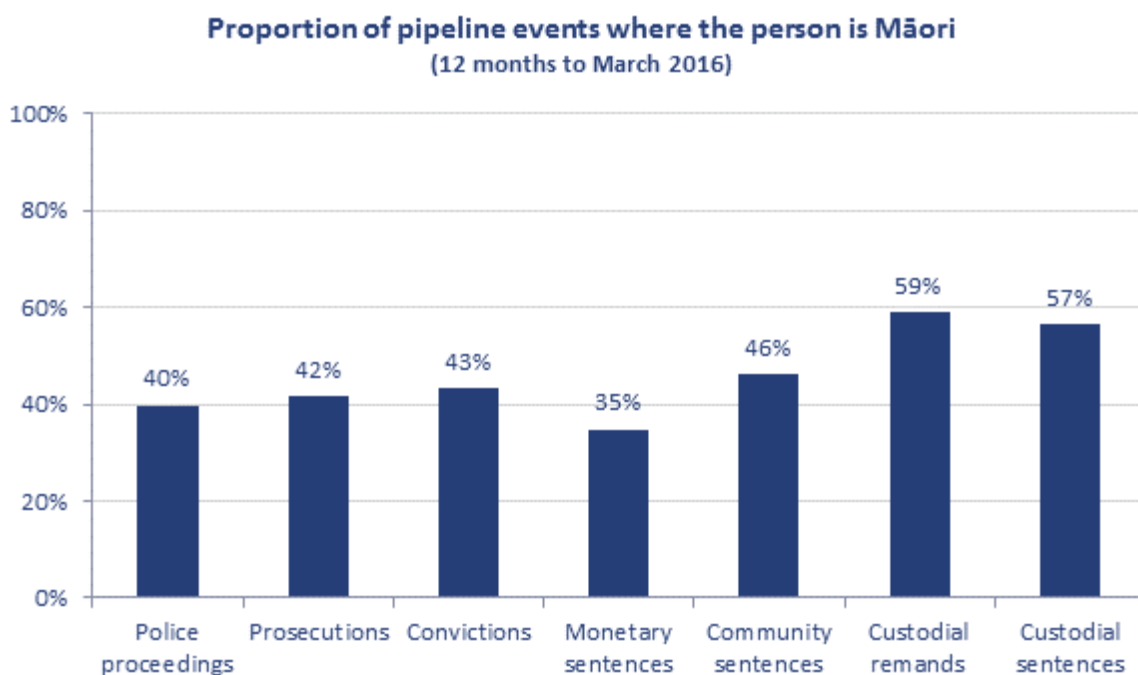


Figure 13. Proportion of Māori involved in aspects of the criminal-justice system<sup>115</sup>

81. Also compounding the picture are structural issues such as the relatively young age structure of the Māori population: 26% are aged 15 to 29 years, compared to 21% non-Māori.<sup>112</sup> This coincides with a similarly young age of offenders: one-third of adults sentenced in the year ending June 2017 were aged 18 to 24.<sup>5</sup>

83. At all points along the prison pipeline, from the arrest of a young person through to imprisonment, rates are disproportionately higher for Māori than for similar offences by non-Māori peers (Figure 13).<sup>114 115</sup> Similarly, evidence from Australia indicates that indigenous status remains a significant predictor of an imprisonment sentence even after controlling for measured legal factors.<sup>116</sup>

84. Special sentencing practices to halt the over-representation of indigenous populations in NZ, Australia and Canada have been largely unsuccessful.<sup>117</sup> For example, in Canada, the 1999 ‘Gladue decision’ required that special consideration be given to First Nations defendants, and although specialist Gladue courts improved judges’ decision-making and diversion from prison, over-representation of Canadian Aboriginal peoples persists.<sup>118</sup> Again, the issue is that it is too little, too late. To tackle indigenous over-representation only at the point of sentencing fails to recognise the opportunities to intervene far more cost-effectively (and effectively) well before young people ever enter the criminal-justice system.
85. In a comprehensive NZ review of evidence-based approaches to conduct disorder (and its trajectory into the criminal-justice system), there were data to show a high percentage of Māori (and Pacific) youth presenting with challenging behaviour, and yet there was persistent underinvestment in Māori and Pacific programmes that might have helped them.<sup>119</sup> Kaupapa Māori responses consistently lack sustained funding for programme development and evaluation to build an evidence base.<sup>119</sup>
86. Similarly, in work on the ‘drivers of crime’ for Māori, Te Puni Kokiri analysed the lack of development of robust evidence for approaches based on culturally appropriate frameworks.<sup>120</sup> We would endorse their call for implementation varied to suit local contexts, with a particular focus on four key aspects: ‘hard to reach’ whānau/communities; citizen/whānau-centred services and interventions (consistent with Whānau Ora); policy and practice actions tackling community and systemic factors; and a flexible funding approach.
87. Furthermore, the ethnicity assigned to offenders is imprecise, including the ‘best guess’ of witnesses or police as to offender characteristics,<sup>114</sup> and problematically does not accord with ethnicity classifications of other government datasets.<sup>121</sup> Definitions of ethnicity can be by lineage/whakapapa, descent and/or self-identification, and multiple ethnicities are common and variously identified (e.g., parents’ definition of child vs. adult’s self-identification).<sup>114</sup> Multiple ethnicities further complicate the picture: census figures of 14.6% Māori included 42.2% who also identified with European ethnic groups, 7% with Pacific, 1.5% with Asian ethnic groups and 2.3% with ‘New Zealander’

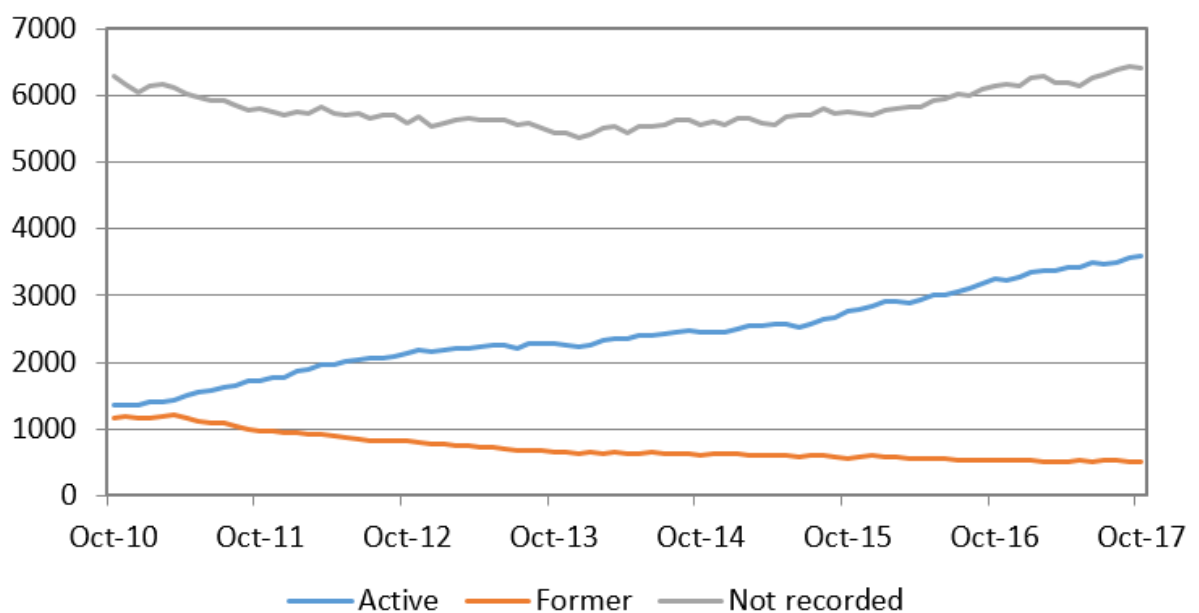


Figure 14. Number of people in prison affiliated to gangs<sup>16</sup>

(2006 Census).<sup>121</sup> This makes presenting crime statistics simply as ‘the ethnicity of sentenced adults was 41% Māori, 37% European, and 9% Pacific’<sup>122</sup> problematic.

- 88. Building the robust evidence base as to the effectiveness of iwi/hapū alternatives already underway is crucial, evaluating them appropriately.<sup>120</sup>
- 89. This work needs to be undertaken in partnership with Māori. Ideally, government partnerships should be developed with bodies like the Iwi Leaders Forum to develop a clear strategic plan as to how to address the over-representation of Māori in the criminal-justice system.

## What we know about gangs

- 90. Gang membership is associated with criminal offending, imprisonment and difficulty reintegrating into the community after incarceration.<sup>123</sup> As at October 2017, more than one-third of people in prison were current (34%) or former (5%) gang members (Figure 14).

members (39% active, 3% former) and 80% of Europeans were recorded as being not affiliated to gangs (Table 2). There is some debate, however, as to how well gangs are defined or affiliation measured.<sup>123</sup>

- 92. Gang members are both victims and perpetrators of violence and trauma, having high rates of undiagnosed and untreated mental and substance use disorders, that function as risk factors for, and/or a consequence of, being a gang member.<sup>124</sup> Multiple childhood risk factors are compounded by violent victimisation once gang-affiliated.<sup>125</sup>
- 93. All humans live within societal structures which define in-groups and out-groups. In-groups are defined by sets of rules and provide a sense of identity and belonging. Gangs can be seen as a form of in-group where the rules are clear and which create a sense of belonging and identity but the required conforming behaviours are seen as antisocial by other parts of society. They provide a real sense of belonging, status and protection in what are often otherwise

*Table 2. Ethnicity of prisoners, by gang indicator as at 31/10/2017<sup>16</sup>*

Ethnicity	Active	Former	Not affiliated	Total	% Active	% Former	% Not affiliated
Māori	2519	367	2432	5318	47%	7%	46%
European	564	90	2663	3317	17%	3%	80%
Pacific	466	41	676	1183	39%	3%	57%
Other/Not rec	48	5	638	691	7%	1%	92%
<b>Total</b>	<b>3597</b>	<b>503</b>	<b>6409</b>	<b>10509</b>	<b>34%</b>	<b>5%</b>	<b>61%</b>

- 91. In terms of ethnicity, Māori make up around 90% of the two largest adult gangs (Black Power and the Mongrel Mob),<sup>6</sup> so addressing deprivation and risk factors for justice system involvement for Māori would also affect the pathway to gang involvement. More than half of Māori in prison were recorded as active or former gang members (47% active, 7% former) in October 2017 and just under half were not affiliated to gangs (46%). More Pacific people in prison were not affiliated (57%) than were active or former gang

threatening or confusing environments;<sup>125, 126</sup> young people join for friendship, enjoyment, money and respect.<sup>127</sup> In New Zealand, Māori whānau links and role models influence membership,<sup>128</sup> and histories of colonisation and racism are linked to criminal-justice involvement, including within gangs.<sup>129</sup> Yet, patterns of social deprivation, more than ethnicity, are seen as mapping gang affiliation,<sup>130</sup> including for example with Samoan youth gangs.<sup>131</sup>

- 94. Early alternative environments and prosocial links (e.g., through sports,<sup>132</sup> education,

cultural and youth groups etc.) are recommended for children and young people, especially before age 16 to 19, when gang membership can already be entrenched.<sup>133</sup> There is limited evidence for the effectiveness of gang membership ‘prevention’ programmes *per se*,<sup>134</sup> in the absence of dealing with social risk factors.

95. In addition, research shows youth may leave gangs as they mature, if they get jobs, have children, build prosocial links, and/or experience traumatic events or intolerable violence that motivates them to leave the gang and ‘desist’ from crime.<sup>135</sup> Offending rates can decrease through becoming less embedded with the gang, even while self-identity as a gang member remains.<sup>136</sup> Law enforcement and criminal-justice sanctions rarely prompt ‘desistance’ from gangs and crime, evidence which is at odds with populist rhetoric.<sup>137</sup>
96. ‘Adolescent-limited offenders’ (those who engage in offending as teenagers) may have more prosocial skills to transition out of gang roles than do lifecourse-persistent offenders with narrower behavioural repertoires.<sup>136</sup> (Lifecourse-persistent offenders are the small group of offenders who engage in crime at every stage in their lives; their antisocial behaviour begins in childhood and deteriorates thereafter, including through gang involvement.)<sup>138</sup>
97. Parenthood can motivate reduced gang affiliation, especially for mothers and residential first-time fathers.<sup>139</sup> However, it can also perpetuate intergenerational risk

factors—for example, of almost 6,000 children of gang members known to Oranga Tamariki (then CYFS), 60% had substantiated records of being abused or neglected, and nearly a quarter of those aged 10 years or older already had youth-justice involvement.<sup>140</sup>

98. Gangs have been seen primarily as a concern of law and order, instead of gang membership being related to a range of social factors that draw young people into gang affiliation rather than being engaged and identifying with other components of New Zealand society. Leaving the suppression of gangs up to police and law enforcement has been largely unsuccessful, both in New Zealand and internationally. Instead, community-coordinated intervention, across government and community agencies with agreed goals has been recommended,<sup>130</sup> with active leadership of Māori crucial.<sup>141</sup>

## What we know about the illegal drug trade

99. The decline in reported drug crime has more recently flattened overall, but high costs to the prison system persist as prosecutions more successfully lead to convictions (Figure 15). The conviction rate and sentence length are the main drivers of cost.<sup>6</sup>
100. Efforts to focus on more serious drug offending (Figure 16), such as methamphetamine supply, have combined with higher conviction rates to add about 360 prisoner places to the current prison

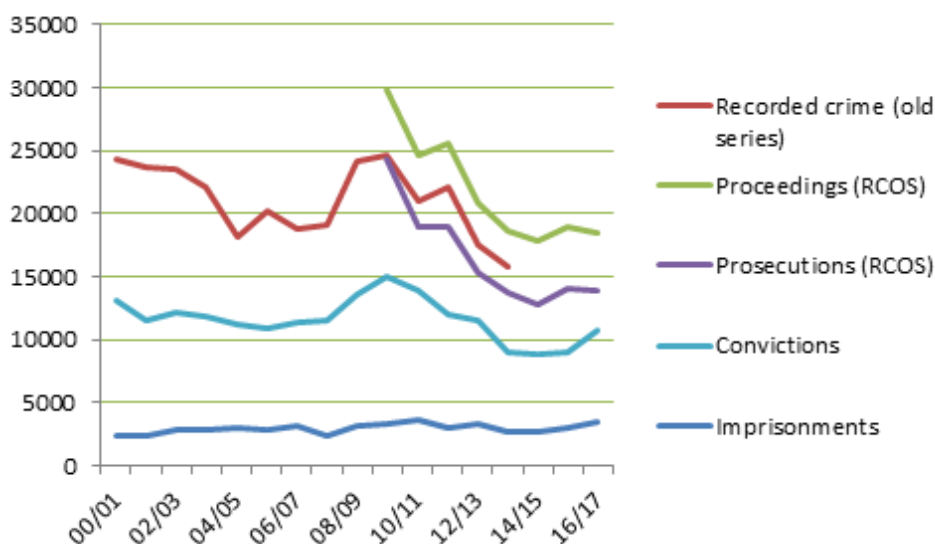


Figure 15. Volumes of drug related cases<sup>17</sup>

population since 2013.<sup>17</sup> Again, while it can be argued that imprisoning serious drug offenders is good for public safety, the lack of services to reduce substance use disorders and interrupt the demand for drugs is of serious concern. Prison teaches young offenders the skills of the methamphetamine supply trade; it does not resource them to

systemic, adaptive, and innovative change include a political and policy aversion to risk, a focus on dogma rather than evidence, and a focus on short-term delivery of pressure-releasing initiatives.<sup>144</sup> The general context of prisons filling up with people on remand awaiting trial and of prisoners waiting longer for parole, relate to political decisions that

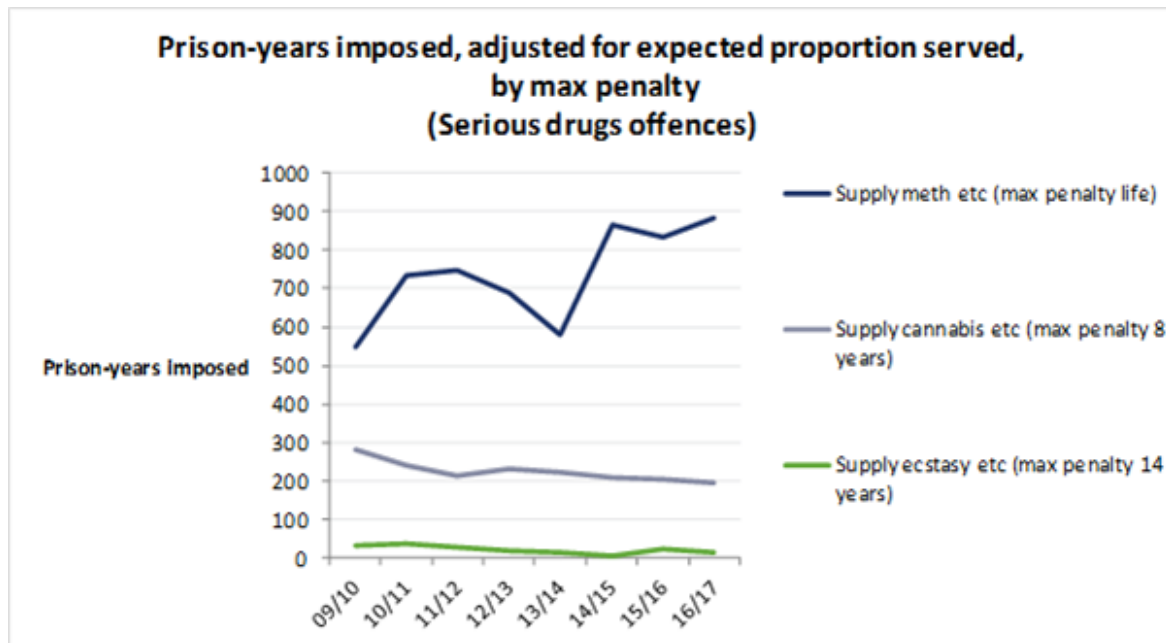


Figure 16. Changes in drug conviction rates<sup>17</sup>

make different choices. The recruitment of young people into gangs in prison also adds to this.

101. There has long been an argument that illicit drug use should be looked at as a public-health issue, rather than just as a law-and-order concern, because the ‘war on drugs’ rhetoric has not tackled the social and political determinants that underpin the global and local trade in illicit substances.<sup>142</sup> While we await research on attempts to build an effective public health approach, there is plenty of longstanding evidence for the need to intervene early, to prevent involvement in drug consumption and supply in the first place: that should be our focus.<sup>143</sup>

### Ways to approach change

102. The problems confronting the current justice and prison system are complex and multifaceted and require both short- and long-term solutions. Potential obstacles for

ramp up being ‘tough on crime’ with no evidence of benefit. Beyond the incapacitation of a given individual (which keeps the general public ‘safe’ from that specific offender), prisons overall reduce public safety by their criminogenic effects (both on the individual and subsequent generations).

103. Resources are overwhelmingly directed to those already in the criminal-justice system, not to the prevention of their getting there. Yet there is strong and compelling evidence that interventions for pre-schoolers and young children experiencing trauma and maltreatment, and showing challenging behaviours that underpin a pathway to offending, are effective. The younger the child at intervention, the more effective it is likely to be.<sup>145 146</sup> This will be expanded upon in the next report.

104. Technical change has been the mode of operating in the past, attempting to fix a

problem within a system while essentially keeping the system as is.<sup>147</sup> In contrast, 'adaptive change' addresses the underlying issues by altering the fundamental nature of the system,<sup>148</sup> and the context in which it operates and interacts. This is something most systems or work environments are resistant to as the status quo is a comfortable state.

105. The Integrated Data Infrastructure (IDI) programme within Statistics New Zealand draws together anonymised data on interactions with government services, including justice, health, education, social development and so on.<sup>149</sup> Ideally, this should be used as a research tool at a population level to target resources and programmes to those groups identified as most at risk. The data must also, however, guide better workforce planning of skilled staff and

organisational responses so that prevention and intervention are effective, for risk identification without collaborative, skilled and wide-ranging community and government response is likely to be inadequate.

106. To assist in such a change programme, there must be adequate investment in piloting and evaluating early intervention and prevention initiatives to ensure evidence-based, cost-effective programmes are implemented. With appropriate leadership, it would be possible to fundamentally transform the justice system, reduce victimisation and recidivism and make prisons only a part of a much more proactive and effective whole. The alternative is to continue to lock more people up at great cost to the taxpayer and fuel a prison system that feeds on itself.

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## References

- <sup>1</sup> OECD. *Society at a Glance 2016*. Retrieved from [http://www.keepeek.com/Digital-Asset-Management/oe.cd/social-issues-migration-health/society-at-a-glance-2016\\_9789264261488-en#page135](http://www.keepeek.com/Digital-Asset-Management/oe.cd/social-issues-migration-health/society-at-a-glance-2016_9789264261488-en#page135). 2016.
- <sup>2</sup> Department of Corrections. Retrieved from [http://www.corrections.govt.nz/\\_\\_data/assets/pdf\\_file/0006/901518/Briefing\\_to\\_the\\_Incoming\\_Minister\\_-\\_2017.pdf](http://www.corrections.govt.nz/__data/assets/pdf_file/0006/901518/Briefing_to_the_Incoming_Minister_-_2017.pdf); 2017.
- <sup>3</sup> Clear TR, Schrantz D. Strategies for reducing prison populations. *The Prison Journal* 2011; **91**(3): 138S-159S.
- <sup>4</sup> Department of Corrections. *Prison facts and statistics – September 2017*. Retrieved from [http://www.corrections.govt.nz/resources/research\\_and\\_statistics/quarterly\\_prison\\_statistics/prison\\_stats\\_september\\_2017.html#total](http://www.corrections.govt.nz/resources/research_and_statistics/quarterly_prison_statistics/prison_stats_september_2017.html#total). 2017.
- <sup>5</sup> Ministry of Justice. *Trends in conviction and sentencing*. Retrieved from <https://www.justice.govt.nz/assets/Documents/Publications/Adult-infographic-June-2017.pdf>. 2017.
- <sup>6</sup> Ministry of Justice, Department of Corrections & New Zealand Police. *Maintaining a safe NZ and working towards a more humane and effective criminal justice system*. Wellington, NZ: Authors; 2017.
- <sup>7</sup> Binnie, I. Public perceptions of crime - 2016 survey report. Report prepared for Ministry of Justice. Wellington, NZ: Ministry of Justice; 2016.
- <sup>8</sup> Farrell G. Five tests for a theory of the crime drop. *Crime Science* 2013; **2**(5): 1-8.
- <sup>9</sup> Lum C, Koper C, Telep C. The evidence-based policing matrix. *Journal of Experimental Criminology* 2011; **7**(3).
- <sup>10</sup> Van Camp T. Understanding victim participation in restorative practices: Looking for justice for oneself as well as for others. *European Journal of Criminology* 2017; **14**(6):679-96.
- <sup>11</sup> Miller RJ, Alexander A. The price of carceral citizenship: Punishment, surveillance, and social welfare policy in an age of carceral expansion. *Michigan Journal of Race & Law* 2015; **21**:291.
- <sup>12</sup> Davis L, Shlafer, RJ. Mental health of adolescents with currently and formerly incarcerated parents. *Journal of Adolescence* 2017; **54**: 120-134.
- <sup>13</sup> Visher CA, Lattimore PK, Barrick K, Tueller S. Evaluating the Long-Term Effects of Prisoner Reentry Services on Recidivism: What Types of Services Matter? *Justice Quarterly* 2017; **34**(1): 136-65.
- <sup>14</sup> Chang Z, Lichtenstein P, Larsson H, Fazel S. Substance use disorders, psychiatric disorders, and mortality after release from prison: a nationwide longitudinal cohort study. *The Lancet Psychiatry* 2015; **2**(5):422-30.
- <sup>15</sup> Umbreit MS, Coates RB, Vos B. Victim-offender mediation: Three decades of practice and research. *Conflict Resolution Quarterly* 2004;**22**(1-2):279-303.
- <sup>16</sup> Justice sector briefing, 2018.
- <sup>17</sup> Ministry of Justice. *Introducing the LMDI: A new method to understand pipeline flows and their impact on the prison spend*. Wellington: Ministry of Justice; 2017.
- <sup>18</sup> Pratt J. New Zealand Penal Policy in the Twenty-first Century In: Deckert A, Sarre R, eds. *The Palgrave Handbook of Australian and New Zealand Criminology, Crime and Justice*, 346-362. Cham: Springer International Publishing; 2017.
- <sup>19</sup> Pratt J, Clark M. Penal populism in New Zealand. *Punishment & Society* 2005; **7**(3): 303-22.
- <sup>20</sup> Enns P. The Public's Increasing Punitiveness and Its Influence on Mass Incarceration in the United States. *American Journal of Political Science* 2014; **55**(4):857-872.
- <sup>21</sup> Jennings W, Farrall S, Gray E, Hay C. Penal Populism and the Public Thermostat: Crime, Public Punitiveness, and Public Policy. *Governance* 2017, **30**: 463-481.
- <sup>22</sup> Henderson P. *Remands in custody*. Crime and Justice Insights. Wellington: Ministry of Justice; 2014.
- <sup>23</sup> Ministry of Justice remand figures as at October 2016.
- <sup>24</sup> Justice Sector briefing, 2015.
- <sup>25</sup> Ministry of Justice, New Zealand Police, Department of Corrections. *What we know: Māori justice outcomes*. Wellington: Authors; 2016.
- <sup>26</sup> Aizer A, Doyle Jr JJ. Juvenile incarceration, human capital, and future crime: Evidence from randomly assigned judges. *The Quarterly Journal of Economics* 2015; **130**(2):759-803.
- <sup>27</sup> Heaton P, Mayson S, Stevenson M. The downstream consequences of misdemeanor pretrial detention. *Stanford Law Review* 2017; **69**:711-795.
- <sup>28</sup> Schönteich M. Managing risk through rational pre-trial detention practices. *Advancing Corrections Journal* 2016; **1**: 48.
- <sup>29</sup> Seymour M, Butler M. *Young people on remand*. National Children's Strategy Research Series, Office of the Minister for Children and Youth Affairs. Dublin, Ireland: Minister for Health & Children; 2008.
- <sup>30</sup> Spratt JB, Myers NM. Set up to fail: The unintended consequences of multiple bail conditions. *Canadian Journal of Criminology and Criminal Justice* 2011, **53**(4), 404-423.

- 
- <sup>31</sup> Summers C, Willis T. Pretrial risk assessment: Research summary. Arlington, VA: Bureau of Justice Assistance, US Department of Justice; 2010.
- <sup>32</sup> Green A. A risk-based approach to pretrial decision-making: Recommendations for New Zealand. Wellington, NZ: Harkness Report; 2016.
- <sup>33</sup> Jeffries S, Stenning P. Sentencing, aboriginal offenders: law, policy, and practice in three countries. *Canadian Journal of Criminology and Criminal Justice*, 2014; **56**(4): 447-494.
- <sup>34</sup> Hatzenbuehler ML, Keyes K, Hamilton A, Uddin M, Galea S. The collateral damage of mass incarceration: Risk of psychiatric morbidity among nonincarcerated residents of high-incarceration neighborhoods. *American journal of public health* 2015; **105**(1):138-43.
- <sup>35</sup> Marsh K, Fox C, Hedderman C. Do you get what you pay for? Assessing the use of prison from an economic perspective. *The Howard Journal of Crime and Justice* 2009; **48**(2): 144-157.
- <sup>36</sup> Welsh BC, Farrington DP, Gowar BR. Benefit-cost analysis of crime prevention programs. *Crime and justice*, 2015; **44**(1): 447-516.
- <sup>37</sup> Drake EK, Aos S, Miller MG. Evidence-based public policy options to reduce crime and criminal justice costs: Implications in Washington State. *Victims and offenders* 2009; **4**(2): 170-196.
- <sup>38</sup> Aos S. Updates and new findings: Crime trends in Washington & policy options that reduce crime and save money. *Senate Human Services and Corrections Committee*; 2011.
- <sup>39</sup> McNeill F, Weaver B. *Changing Lives? Desistance Research and Offender Management. Report 03*. Glasgow: The Scottish Centre for Crime and Justice Research; 2010.
- <sup>40</sup> Eckenrode J, Campa MI, Morris PA, Henderson Jr CR, Bolger KE, Kitzman H, Olds DL. The prevention of child maltreatment through the nurse family partnership program: mediating effects in a long-term follow-up study. *Child maltreatment* 2017;**22**(2): 92-9.
- <sup>41</sup> Ebel BE, Rivara FP, Loeber R, Pardini DA. Modeling the impact of preventive interventions on the national homicide rate. In *Young homicide offenders and victims* (pp. 123-135). Boston, MA: Springer; 2011.
- <sup>42</sup> Schweinhart LJ, Barnes HV, Weikart DP. *Significant Benefits: The High/Scope Perry Preschool Study Through Age 27*. Ypsilanti, MI: High/Scope Press; 1993.
- <sup>43</sup> Farrington DP, Koegl CJ. Monetary benefits and costs of the Stop Now and Plan Program for boys aged 6–11, based on the prevention of later offending. *Journal of Quantitative Criminology* 2015; **31**(2): 263-287.
- <sup>44</sup> Welsh BC, Farrington DP. Monetary value of early developmental crime prevention and its policy significance. *Criminology & Public Policy*, 2015; **14**(4): 673-680.
- <sup>45</sup> Vanlandingham GR, Drake EK. Results first: Using evidence-based policy models in state policymaking. *Public Performance & Management Review* 2012; **35**(3): 550-563.
- <sup>46</sup> Staggs SM, Landreville KD. The Impact of Pretrial Publicity on “Eye for an Eye” Retributivist Support and Malicious Perceptions of Criminal Offenders. *Mass Communication and Society* 2017; **20**(1): 116-35.
- <sup>47</sup> Greer, C. Reiner, R. Mediated Mayhem: Media, Crime and Criminal Justice. (5th ed.) In: M. Maguire, R. Morgan & R. Reiner (Eds.), *Oxford Handbook of Criminology*. (pp. 245-278). UK: Oxford University Press; 2015.
- <sup>48</sup> Serani D. If it bleeds, it leads: Understanding fear-based media. *Psychology Today*. 2011 Jun;7.
- <sup>49</sup> Wright Monod S. Media in a Moral Panic. Making Sense of Moral Panics: A Framework for Research. Cham: Springer International Publishing; 2017: 85-115.
- <sup>50</sup> McGregor J. Crime, news, and the media. In: Deckert A, Sarre R. (Eds). *The Palgrave Handbook of Australian and New Zealand Criminology, Crime and Justice* (pp. 81-94). Cham, Switzerland: Palgrave Macmillan, 2017.
- <sup>51</sup> Chagnon N. Reverberate, Resonate, Reproduce: A Reconsideration of Ideological Influence in Crime News Production. *Critical Criminology* 2015; **23**(1): 105-23.
- <sup>52</sup> Lugo-Ocando J, Faria Brandão R. Stabbing News: Articulating crime statistics in the newsroom. *Journalism Practice* 2016; **10**(6): 715-29.
- <sup>53</sup> Surette R. *Media, crime, and criminal justice: Images, realities, and policies* (5th ed.). Stamford, CT: Cengage Learning; 2015.
- <sup>54</sup> Wright Monod S. Portraying Those We Condemn with Care: Extending the Ethics of Representation. *Critical Criminology* 2017; **25**(3): 343–356.
- <sup>55</sup> Pratt J, Eriksson A. ‘Mr. Larsson is walking out again’. The origins and development of Scandinavian prison systems. *Australian & New Zealand Journal of Criminology* 2011; **44**(1), 7-23.
- <sup>56</sup> Oberwittler D, Höfer S. Crime and justice in Germany: An analysis of recent trends and research. *European Journal of Criminology* 2005; **2**(4): 465-508.
- <sup>57</sup> Downes D, Van Swaaningen R. The road to dystopia? Changes in the penal climate of the Netherlands. *Crime and Justice* 2007; **35**(1): 31-71.
- <sup>58</sup> Kääriäinen J, Seven criminal cases – Comparing Finnish Punishment policies and Finns’ punishment preferences. Research Report 27/2018. Helsinki, Finland: University of Helsinki Institute of Criminology and Legal Policy, 2018.

- 
- <sup>59</sup> MacKenzie DL, Weiss DB. Other Countries Have Successfully Reduced Incarceration Rates Without Increasing Crime: We Can Do It!. *Victims and Offenders*, 2009; **4**(4): 420-426.
- <sup>60</sup> Subramanian R, Shames A. Sentencing and prison practices in Germany and The Netherlands. *Center on Sentencing and Corrections. Vera Institute of Justice*; 2013.
- <sup>61</sup> Pratt J, Eriksson A. *Contrasts in punishment: An explanation of Anglophone excess and Nordic exceptionalism* (Vol. 7). London: Routledge; 2014.
- <sup>62</sup> Pardini D, Frick PJ. Multiple developmental pathways to conduct disorder: Current conceptualizations and clinical implications. *Journal of the Canadian Academy of Child and Adolescent Psychiatry* 2013; **22**(1), 20.
- <sup>63</sup> Hurren E, Stewart A, Dennison S. Transitions and turning points revisited: A replication to explore child maltreatment and youth offending links within and across Australian cohorts. *Child abuse & neglect* 2017; **65**: 24-36.
- <sup>64</sup> Ackerman BP, Brown ED, IZard CE. The relations between persistent poverty and contextual risk and children's behavior in elementary school. *Developmental psychology* 2004; **40**(3): 367.
- <sup>65</sup> Farrington DP. Childhood origins of antisocial behavior. *Clinical Psychology & Psychotherapy* 2005; **12**(3): 177-190.
- <sup>66</sup> Moffitt TE, Arseneault L, Belsky D, Dickson N, Hancox RJ, Harrington H, . . Ross S. A gradient of childhood self-control predicts health, wealth, and public safety. *Proceedings of the National Academy of Sciences* 2011; **108**(7):2693-2698.
- <sup>67</sup> Evans TD, Cullen FT, Burton VS, Dunaway RG, Benson ML. The social consequences of self-control: Testing the general theory of crime. *Criminology*, 1997; **35**(3): 475-504.
- <sup>68</sup> Griffin KW, Scheier LM, Acevedo B, Grenard JL, Botvin GJ. Long-term effects of self-control on alcohol use and sexual behavior among urban minority young women. *International journal of environmental research and public health* 2011; **9**(1): 1-23.
- <sup>69</sup> Daly M, Delaney L, Egan M, Baumeister RF. Childhood self-control and unemployment throughout the life span: Evidence from two British cohort studies. *Psychological science* 2015; **26**(6): 709-723.
- <sup>70</sup> Heckman JJ. The economics, technology, and neuroscience of human capability formation. *Proceedings of the National Academy of Sciences* 2007; **104**(33): 13250-13255.
- <sup>71</sup> Michelson D, Davenport C, Dretzke J, Barlow J, Day C. Do evidence-based interventions work when tested in the "real world?" A systematic review and meta-analysis of parent management training for the treatment of child disruptive behavior. *Clinical child and family psychology review* 2013; **16**(1): 18-34.
- <sup>72</sup> Schindler HS, Yoshikawa H. Preventing crime through intervention in the preschool years. *The Oxford handbook of crime prevention* 2012; 71-88.
- <sup>73</sup> Durlak JA, Weissberg RP, Dymnicki AB, Taylor RD, Schellinger KB. The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child development* 2011; **82**(1): 405-432.
- <sup>74</sup> Blissett W, Church J, Fergusson DM, Lambie I, Langley J, Liberty K, et al. *Conduct Problems Best Practice Report 2009*, Wellington: Ministry of Social Development; 2009.
- <sup>75</sup> Bowman J. Assessing the Literacy and Numeracy of Prisoners. *Practice: The New Zealand Corrections Journal*, 2014; **2**(1): 39.
- <sup>76</sup> Davis LM, Bozick R, Steele JL, Saunders J, Miles JNV. Evaluating the effectiveness of correctional education: A meta-analysis of programs that provide education to incarcerated adults. Washington DC: Bureau of Justice Assistance & RAND Corporation; 2013.
- <sup>77</sup> Kim RH, Clark D. The effect of prison-based college education programs on recidivism: Propensity score matching approach. *Journal of Criminal Justice* 2013; **41**(3): 196-204.
- <sup>78</sup> Wilson DB, Gallagher CA, MacKenzie DL. A meta-analysis of corrections-based education, vocation, and work programs for adult offenders. *Journal of Research in Crime and Delinquency* 2000; **37**(4): 347-368.
- <sup>79</sup> Chappell CA. Post-secondary correctional education and recidivism: A meta-analysis of research conducted 1990-1999. *Journal of Correctional Education* 2004; 148-169.
- <sup>80</sup> Lockwood S, Nally JM, Ho T, Knutson K. The effect of correctional education on postrelease employment and recidivism: A 5-year follow-up study in the state of Indiana. *Crime & Delinquency* 2012; **58**(3): 380-396.
- <sup>81</sup> Chitsabesan P, Kroll L, Bailey SUE, Kenning C, Sneider S, MacDonald WE, Theodosiou L. Mental health needs of young offenders in custody and in the community. *The British Journal of Psychiatry* 2006; **188**(6): 534-540.
- <sup>82</sup> Rucklidge JJ, McLean AP, Bateup P. Criminal offending and learning disabilities in New Zealand youth: Does reading comprehension predict recidivism?. *Crime & Delinquency* 2013; **59**(8): 1263-1286.
- <sup>83</sup> Gojkovic D, Mills A, Meek R. Accommodation for ex-offenders: Third sector housing advice and provision. Working Paper 77. University of Birmingham: Third Sector Research Centre; 2012.
- <sup>84</sup> Walker JS, Bruns EJ. Building on practice-based evidence: Using expert perspective to define the wraparound process. *Psychiatric Services* 2006; **57**: 1579-1585.

- 
- <sup>85</sup> Bruns EJ, Walker JS. The wraparound process: An overview of implementation essentials. In EJ Bruns & JS Walker (Eds.), *The resource guide to wraparound*. Portland, Oregon: National Wraparound Initiative; 2010.
- <sup>86</sup> Indig D, Gear C, Wilhelm K. Comorbid substance use disorders and mental health disorders among New Zealand prisoners. Wellington: Department of Corrections; 2016.
- <sup>87</sup> Lemmens LC, Molema CC, Versnel N, Baan CA, de Bruin SR. Integrated care programs for patients with psychological comorbidity: A systematic review and meta-analysis. *Journal of psychosomatic research* 2015; **79**(6):580-94.
- <sup>88</sup> Bearman SK, Weisz JR. Comprehensive treatments for youth comorbidity—evidence-guided approaches to a complicated problem. *Child and adolescent mental health* 2015; **20**(3):131-41.
- <sup>89</sup> Tyrer P, Reed GM, Crawford MJ. Classification, assessment, prevalence, and effect of personality disorder. *The Lancet* 2015; **385**(9969):717-26.
- <sup>90</sup> *The Law Commission. Alcohol In Our Lives: Curbing the Harm. Report 114; Wellington, NZ: Author; 2010.*
- <sup>91</sup> Bowman J. Lessons from research into youth desistance. *Practice – The New Zealand Corrections Journal* 2015; **3**(1): 14-17.
- <sup>92</sup> Bevan M. New Zealand prisoners' prior exposure to trauma. *Practice: The New Zealand Corrections Journal* 2017; **5**(1): 8-16.
- <sup>93</sup> Fazel S, Doll H, Långström N. Mental disorders among adolescents in juvenile detention and correctional facilities: a systematic review and metaregression analysis of 25 surveys. *Journal of the American Academy of Child & Adolescent Psychiatry* 2008; **47**(9): 1010-1019.
- <sup>94</sup> Polanczyk GV, Salum GA, Sugaya LS, Caye A, Rohde LA. Annual Research Review: A meta-analysis of the worldwide prevalence of mental disorders in children and adolescents. *Journal of Child Psychology and Psychiatry* 2015; **56**(3): 345-365.
- <sup>95</sup> Collins O, Vermeiren R, Vreugdenhil C, van den Brink W, Doreleijers T, Broekaert E. Psychiatric disorders in detained male adolescents: a systematic literature review. *The Canadian Journal of Psychiatry* 2010; **55**(4): 255-263.
- <sup>96</sup> Wasserman GA, McReynolds LS, Schwalbe CS, Keating JM, Jones SA. Psychiatric disorder, comorbidity, and suicidal behavior in juvenile justice youth. *Criminal Justice and Behavior* 2010; **37**(12): 1361-1376.
- <sup>97</sup> Domalanta DD, Risser WL, Roberts RE, Risser JMH. Prevalence of depression and other psychiatric disorders among incarcerated youths. *Journal of the American Academy of Child & Adolescent Psychiatry* 2003; **42**(4): 477-484.
- <sup>98</sup> Mullen J. Evidence-based principles for prison-based alcohol and drug treatment. *Innovations* 2016; **4**(2).
- <sup>99</sup> Malvaso CG, Delfabbro PH, Day A. Child maltreatment and criminal convictions in youth: The role of gender, ethnicity and placement experiences in an Australian population. *Children and youth services review* 2017; **73**: 57-65.
- <sup>100</sup> Conger RD, Belsky J, Capaldi DM. The intergenerational transmission of parenting: Closing comments for the special section. *Dev Psychol* 2009; **45**:1276-83.
- <sup>101</sup> Schofield T, Lee R, Merrick M. Safe, stable, nurturing relationships as a moderator of intergenerational continuity of child maltreatment: A meta-analysis. *Journal of Adolescent Health* 2013; **53**, S32-S38.
- <sup>102</sup> Hurren E, Stewart A, Dennison S. Transitions and turning points revisited: A replication to explore child maltreatment and youth offending links within and across Australian cohorts. *Child abuse & neglect* 2017; **65**: 24-36.
- <sup>103</sup> Yang J, McCuish EC, Corrado RR. Foster care beyond placement: Offending outcomes in emerging adulthood. *Journal of Criminal Justice* 2017; **53**: 46-54.
- <sup>104</sup> Davis L, Schlafer, RJ. Mental health of adolescents with currently and formerly incarcerated parents. *Journal of Adolescence* 2017; **54**: 120-134.
- <sup>105</sup> Besemer S, Farrington DP, Bijleveld CCJH. Labeling and intergenerational transmission of crime: The interaction between criminal justice intervention and a convicted parent. *PLoS ONE* 2017; **12**(3): e0172419.
- <sup>106</sup> Levey EJ, Gelaye B, Bain P, Rondon M, Borda C, Henderson DC, Williams MA. A systematic review of randomized controlled trials of interventions designed to decrease child abuse in high-risk families. *Child Abuse and Neglect* 2017; **65**: 48-57.
- <sup>107</sup> Jackson M. The Maori and the Criminal Justice System: He Whaipaanga Hou: A New Perspective, Part 2. Wellington: Department of Justice; 1988.
- <sup>108</sup> Tauri JM, Webb R. A Critical Appraisal of Responses to Maori Offending. *International Indigenous Policy Journal* 2012; **3**(4):1-19.
- <sup>109</sup> Webb R. Māori Experiences of Colonisation and Māori Criminology. In: Deckert A, Sarre R, eds. *The Palgrave Handbook of Australian and New Zealand Criminology, Crime and Justice*. Cham, Switzerland: Springer International Publishing; 2017: 683-696.
- <sup>110</sup> Department of Corrections calculation as at August 2013.

- 
- <sup>111</sup> Ministry of Justice Research and Evaluation. 2014 New Zealand Crime and Safety Survey Main Findings Te rangahau o aotearoa mō te taihara me te haumarutanga. Wellington: Ministry of Justice; 2014.
- <sup>112</sup> Statistics New Zealand Population estimates (as at June 30 2017).
- <sup>113</sup> Morrison B. Identifying and responding to bias in the criminal justice system. Wellington: Research, Evaluation and Modelling Unit of the Ministry of Justice; 2009.
- <sup>114</sup> Policy, Strategy and Research Group. Over-representation of Māori in the criminal justice system: An exploratory report. Wellington: Department of Corrections; 2007.
- <sup>115</sup> Ministry of Justice figures, 2017.
- <sup>116</sup> Snowball, L., & Weatherburn, D. (2007). Does racial bias in sentencing contribute to indigenous overrepresentation in prison? *Australian and New Zealand Journal of Criminology*, 40, 272.
- <sup>117</sup> Jeffries S, Stenning P. Sentencing, aboriginal offenders: law, policy, and practice in three Countries. *Canadian Journal of Criminology and Criminal Justice* 2014; **56**(4): 447-494.
- <sup>118</sup> Rudin J. Aboriginal over-representation and R. v. Gladue: Where we were, where we are and where we might be going. In *The Supreme Court Law Review: Osgoode's Annual Constitutional Cases Conference* (Vol. 40, No. 1, p. 22); 2008.
- <sup>119</sup> Advisory Group on Conduct Problems. *Conduct Problems: Adolescent Report*. Wellington: Ministry of Social Development; 2013.
- <sup>120</sup> Te Puni Kokiri. Addressing the drivers of crime for Māori: Working paper 014. Wellington: Te Puni Kokiri; 2011.
- <sup>121</sup> Statistics New Zealand. Review of crime and criminal justice statistics report. Wellington: Statistics New Zealand; 2009.
- <sup>122</sup> Ministry of Justice. *Trends in conviction and sentencing*. Retrieved from <https://www.justice.govt.nz/assets/Documents/Publications/Adult-infographic-June-2017.pdf>; 2017.
- <sup>123</sup> Tamatea A. The problem with 'the problem with gangs'. Reflections on practice and offender desistance. *Practice: The New Zealand Corrections Journal* 2015; **3**(1): 33-36.
- <sup>124</sup> Beresford H, Wood JL. Patients or perpetrators? The effects of trauma exposure on gang members' mental health: a review of the literature", *Journal of Criminological Research, Policy and Practice* 2016; **2**(2):148-159.
- <sup>125</sup> Raby C, Jones F. Identifying risks for male street gang affiliation: a systematic review and narrative synthesis, *The Journal of Forensic Psychiatry & Psychology* 2016; **27**(5): 601-644.
- <sup>126</sup> Andrae D, McIntosh T, Coster S. Marginalised: An insider's view of the state, state policies in New Zealand and gang formation. *Critical Criminology* 2017; **25**(1):119-35.
- <sup>127</sup> Howell JC. Gang Prevention: An Overview of Research and Programs. *Juvenile Justice Bulletin*. Office of Juvenile Justice and Delinquency Prevention. 2010 Dec.
- <sup>128</sup> Pratt J. New Zealand Penal Policy in the Twenty-first Century In: Deckert A, Sarre R, eds. *The Palgrave Handbook of Australian and New Zealand Criminology, Crime and Justice*, 346-362. Cham: Springer International Publishing; 2017.
- <sup>129</sup> McIntosh T, Workman K. Māori and Prison. In: Deckert A, Sarre R, eds. *The Palgrave Handbook of Australian and New Zealand Criminology, Crime and Justice*, 725-35. Cham: Springer International Publishing; 2017.
- <sup>130</sup> Gilbert J, Newbold G. Youth gangs: A review of the literature. A report prepared for the Ministry of Social Development. Wellington, NZ: Ministry of Social Development; 2006.
- <sup>131</sup> Tunufa'i L. Samoan Youth Crime. In: Deckert A, Sarre R. (Eds). *The Palgrave Handbook of Australian and New Zealand Criminology, Crime and Justice* (pp. 175-190). Cham: Palgrave Macmillan, 2017.
- <sup>132</sup> Taylor MJ, Nanney JT, Welch DZ, Wamser-Nanney RA. The impact of sports participation on female gang involvement and delinquency. *Journal of Sport Behavior* 2016; **39**(3):317.
- <sup>133</sup> Abt TP. Towards a framework for preventing community violence among youth. *Psychology, Health & Medicine* 2017; **22**: 266-285.
- <sup>134</sup> Wong JS, Gravel J, Bouchard M, Descormiers K, Morselli C. Promises kept? A meta-analysis of gang membership prevention programs. *Journal of Criminological Research, Policy and Practice* 2016; **2**(2) 134-147.
- <sup>135</sup> Pyrooz DC, Decker SH. Motives and methods for leaving the gang: Understanding the process of gang desistance. *Journal of Criminal Justice* 2011; **39**: 417-425.
- <sup>136</sup> Sweeten G, Pyrooz DC, Piquero AR. Disengaging From Gangs and Desistance From Crime. *Justice Quarterly* 2013; **30**(3): 469-500.
- <sup>137</sup> Hastings R, Dunbar L, Bania M. Leaving criminal youth gangs: Exit strategies and programs. Ottawa, Canada: Institute for the Prevention of Crime; 2011.
- <sup>138</sup> Moffitt TE. Adolescence-limited and life-course-persistent antisocial behavior: a developmental taxonomy. *Psychological review* 1993; **100**(4): 674.

- 
- <sup>139</sup> Pyrooz DC, McGloin J, Decker SH. Parenthood as a turning point in the life course for male and female gang members: a study of within-individual changes in gang membership and criminal behavior. *Criminology* 2017; **55**(4):869-99.
- <sup>140</sup> Ministry of Social Development. *Adult gang members and their children's contact with Ministry of Social Development service lines*. Wellington, NZ: Author; 2016.
- <sup>141</sup> Tauri JM, Webb R. A Critical Appraisal of Responses to Māori Offending. *International Indigenous Policy Journal* 2012;**3**(4):1-19.
- <sup>142</sup> Mosher JF, Yanagisako KL. Public health, not social warfare: a public health approach to illegal drug policy. *Journal of public health policy* 1991; **12**(3):278-323.
- <sup>143</sup> Stockings E, Hall WD, Lynskey M, et al. Prevention, early intervention, harm reduction, and treatment of substance use in young people. *The Lancet Psychiatry* 2016; **3**(3): 280-96.
- <sup>144</sup> Mulgan G, Albury D. *Innovation in the public sector*. London, UK: Strategy Unit, Cabinet Office; 2003.
- <sup>145</sup> Church RJ. *The definition, diagnosis and treatment of children and youth with severe behaviour difficulties: A review of research*. Report prepared for the Ministry of Education. Christchurch, N.Z.: University of Canterbury, Education Department; 2003.
- <sup>146</sup> Scott S. An update on interventions for conduct disorder, *Adv Psychiatr Treat* 2008; **14**: 61- 70.
- <sup>147</sup> Heifetz R, Grashow A, Linsky M. *The practice of adaptive leadership: Tools and tactics for changing your organization and the world*. Boston: Harvard Business Press; 2009.
- <sup>148</sup> Heifetz R. Adaptive work. In T. Bentley & J. Wilsdon (Eds.), *The adaptive state* (pp. 68–78). London: Demos; 2003.
- <sup>149</sup> Statistics New Zealand. *Integrated Data Infrastructure*. Wellington, NZ: Author; n.d.