

**Final in-depth
review of the
New Zealand
Social Impact Bond**

Reduction in Youth Reoffending in South Auckland



Mint Asset Management,
Hosanna Charitable
Trust Board and
NZ Super Fund



Contribution statement

This social bond has had a long, and at times rocky, journey. It required the vision and persistence of people like Stuart Crosbie, Rob Woodley and Hugh Gollan to get it to a contractable stage, and Dean Spicer to find investors for the bonds. It was delivered through the passion and commitment of the entire Genesis Youth Trust team.

Dr Glenn Brown of Synergia provided the contemporaneous counterfactual quantitative evaluation.

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Others have provided input and comment on drafts which has helped strengthen the final product. However, the views, opinions, findings, and conclusions expressed in this report are strictly those of the author.

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Reduction in Youth Reoffending in South Auckland

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Note on key abbreviations and Māori words used in this report

YORST: Youth Offending Risk Screening Tool- an assessment tool used by NZ Police to predict the likelihood/risk of reoffending and is administered by Police Youth Aid staff. It has a scale of risk between 1 and 100, and only clients with score of 40 and above were referred to the Bond.

YLS/CMI: Youth Level of Service / Case Management Inventory- a risk/needs assessment and case management tool developed in Canada but validated for use in the US and Australia as well. It focuses on dynamic criminogenic risk factors.

Rangatahi: the younger generation, youth (Te Aka Māori Dictionary)

Whānau: Extended family or family group (Te Aka Māori Dictionary)

Te Ware Tapa Whā: A holistic model of wellbeing developed by Mason Durie in 1984

Foreword

By Sir William English KNZM,
former New Zealand Prime Minister and Finance Minister

If you care enough about a problem, you will work fairly hard to solve it. We owe it to our most disadvantaged New Zealanders to try every contemporary tool to change their lives and realise their potential.

This report on the Genesis Youth Trust social bond is the story of a community willing to be innovative, transparent and accountable for changing the lives of young offenders. This cause brought together an unlikely and energised group of seasoned social workers and police with large investors, lawyers, data experts and public servants.

The report captures 10 years of experimentation and major disruptions, but ultimately success.

Young people are worth the gritty effort seen here to define success and work out the combination of skills and measures and processes which achieve that success. Such analysis and adaptation is seen everyday in financial markets and science and clinical health services. Our young people with social needs deserve nothing less than the same effort. Complexity is no excuse.

I want to acknowledge Carl Bakker and the support team who persisted through the years of experimentation to bring the bond to a successful conclusion. I also acknowledge the commitment of dozens of Genesis trust staff who put themselves to the test grappling with new technical skills while they guided young people onto a life changing path. Genesis

staff gave young offenders the gift of their wisdom and this report wraps their efforts as a gift to the wider community.

Some of the early vision behind the social bonds programme is realised here. A small charity can learn to deliver sophisticated measured services. Private capital will show up for social purposes when there's a clear performance framework to be funded. Front line workers can know the satisfaction of seeing their efforts reduce social problems further validated by data.

Some of the predicted barriers made progress slow. Government agencies providing funds are reluctant to refer clients to competing programmes. Other social bonds closed earlier for lack of referrals. The agencies find it hard to maintain partnerships with regular personnel changes and in this case rarely engaged in the intellectual and analytical issues.

No government service is subject to the same rigour and accountability as the Genesis Social Bond. So it's hard to understand why government decided to pull the plug on this hard won success and return to business as usual. It would be a waste of a huge effort to throw away the deep learnings evident from this report,

It's my hope as the initiator of the first social bonds that those who see the benefits can gather up again and, with government support, embed these learnings in social service delivery for young offenders and other high needs groups. They deserve better.

Executive Summary

Overview

The Reducing Youth Reoffending in South Auckland Social Impact Bond (the Bond) is now completed. This evaluation indicates that it clearly delivered even better outcomes than were set for it six years ago, returning a lifetime social value of around \$12 for every dollar of cost. It achieved its goals for reductions in reoffending as well as improved outcomes across several other areas of wellbeing, it developed several potentially enduring innovations that lifted its service

delivery, and it has highlighted a series of important lessons for developing better outcome-focused contracting in the future. At the same time, it has also clearly demonstrated that these successes, while necessary preconditions, are not sufficient to guarantee that those lessons will be applied across other social sector providers and services. Crucially there are changes government agencies need to make to support an innovative and outcomes-orientated system.

Background

In September 2017 the Genesis Youth Trust started providing a new set of services to reduce reoffending amongst young people in South Auckland, funded through the Reducing Youth Reoffending in South Auckland Social Impact Bond (the Bond). The Bond was a pilot for novel social service contracting approaches that linked payments by the Government to actual measured achievement of better outcomes- a Social Impact Bond (SIB), a Pay for Results type of contract.

Six years later service delivery under the bond has been completed, with 607 young

people (rangatahi) and their families (whānau) impacted directly by this contract. This report evaluates the impact of the bond against its initial dual aims: delivering better outcomes and driving innovation in service delivery and contracting. It also reviews performance and lessons within the wider context of outcome contracting and impact investing across NZ and globally. It looks both in careful detail at what was intended in this New Zealand SIB and what was achieved, while also identifying insights and lessons that have wider application for other outcome oriented social impact investments.

Findings

“Young people spoke about Genesis looking after them, supporting their sense of identity and self-worth. They felt that they were loved unconditionally by their Genesis team.”¹

A key goal for the Bond was a reduction in youth reoffending. This was delivered, both against the historic counterfactuals set for the Bond, and when compared with a risk-matched contemporaneous counterfactual group of young people where offences

were 30% lower for the Bond clients. This achievement is made even more significant against a background where almost all of the counterfactual group received another form of intervention. So these improved outcomes actually represent performance that is better,

¹ From page 12 of the 2023 Kereama et al review of the Bond.

on average, than other reoffending reduction services operating in Auckland through 2017 to 2023.

But the Bond also achieved additional wellbeing gains in areas that were not specifically expected or set as targets. Clients also achieved more tertiary education, more jobs with higher incomes, reduced healthcare costs/demands, and more driver's licences. All these represent a wider contribution to social value for clients, their families and the NZ community.

Total estimated social value from the Bond is calculated at around \$34m for this first six years, and \$193m over the clients' lifetimes (or around two dollars for each dollar invested and twelve dollars respectively).

The Bond fostered innovation and adaptation in service delivery and the supporting data and management systems- gains which can be spread and applied more widely, not all limited to youth reoffending.

The other main goal for the Bond was to help effectively design and manage innovative approaches to contracting for (and achieving) better social outcomes. It achieved this, including highlighting process and contractual complexities that need to be addressed if this type of outcome-contract is to be used more widely. But it has also revealed the possibly greater need for adjustment in government

agencies where necessary changes will need to be made to incentives, cultures, and systems to create an environment within which outcome contracts can flourish and deliver to their potential. The potential gains seem significant: this review found that currently almost no government social service contracting has specific linkages to genuine and measurable outcome delivery.

The Bond has also demonstrated the positive and supportive contribution that financial markets can make to achieving better social outcomes. At a basic level, investors were able to provide the funding required to manage the risks associated with a pure outcome-contingent contract. But more significantly they were able to provide input through the Bond's life, assisting with risk management and making changes to support service adaptations that seemed likely to improve outcome delivery.

There are real gains across social service contracting that can be achieved, to deliver better outcomes for New Zealanders, as shown in this review. SIBs may be an important option for that, but they are just one of a range of outcome-focused or outcome-contingent forms of contracting that seem worth further exploring. This is not a simple process, and will need supporting development of contracting capability, simplification of contracting processes and funding that spans across single departmental appropriations.

The wider context: social impact bonds and impact investment

Impact investing: context and driving factors

Two broad currents internationally are driving interest in impact related contracting and investing:

- A strong but still growing concern around a range of societal and environmental impacts that existing contracts/investment strategies seem not to be addressing well- looking to make a much greater impact.

- A frustration that while government expenditures in many countries have grown, especially on social services, costs have grown but outcomes remain poor in many areas, exacerbating inequalities and disadvantage.

Financial markets have been on a fifteen-year journey with impact investing, where there is now significant scale, and maturity in specification, measurement and reporting:

“The size of the impact investing market currently stands at USD 1.164 trillion in assets under management (AUM)” (D. R. Hand 2022)

This approach involves specifying a set of outcomes (typically established by investment funds who in turn cascade those requirements to their investments in companies/ programmes) that extend beyond standard financial measures and has over time moved

well past loose and aspirational goals. Impact investment has now developed sets of international standards around outcome definition, measurement and reporting. Recent trends are highlighted in a 2023 summary provided by the Global Impact Investor Network (GIIN):

KEY MARKET INSIGHTS

- 1 Investor allocations to impact strategies have increased, with significant growth in public markets, housing and technology investments reflecting broader global trends.
- 2 Investors saw strong impact investment activity in 2022 with industry progress in finding investment structures that meet investor needs.
- 3 Capital is increasingly flowing from asset owners to managers, especially from pension funds and insurance companies.
- 4 Impact investors can achieve market-rate returns with nearly all investors meeting or exceeding their financial and impact performance expectations.

(D. S. Hand 2023)

Investors target a range of themes to achieve their impact goals. Almost all investors in GIIN's analysis (96%) target at least one UN Sustainable Development Goal (SDG), most commonly decent work and economic growth (SDG 8; 80% of investors), climate action (SDG 13; 74%) and gender equality (SDG 5; 71%). (D. R. Hand 2022)

But while the impact investment approach is

used widely now in developed markets the main investment areas are the environment with some portion in housing. But for a number of development bonds there is a broader social focus on areas such as housing, decent work, and employment. Western governments and their extensive social services are largely absent, although some housing bonds are emerging.

Social services- contracting for a better impact/outcome delivery

In a sector generally dominated by government owned providers, and government funding of most other service providers, there has been slower movement to develop and apply new instruments/contracting approaches that link results, or outcomes, to payment. Innovation has been slow, and cost pressures often intense.

In response several new contracting approaches have been explored- loosely within an umbrella of results-based (Pay-for Results, PFR contracts) or outcomes-based contracting (OBC) with differing degrees of contingency in payments on the level of outcome achievement. At the higher risk end of that risk spectrum are Social Impact Bonds (SIBs).

“OBCs, and the SIBs that help structure them, offer a window to explore a set of public policy, partner, management, and service innovations increasingly adopted across Western Europe, North America and in emerging economies. Introduced in their modern forms in 2010, OBCs and SIBs are tools which prioritize:

- (1) focusing on service outcomes rather than service inputs and activities and
- (2) increased and sometimes novel inter- sectoral relationships between government, nonprofit and for-profit organizations in the provision of public services” (Clare FitzGerald 2023)

Social Impact Bonds

SIBs are a form of outcomes-based commissioning. There is no generally accepted definition of a SIB beyond the minimum requirements that it should involve payment for outcomes and any investment required

should be raised from investors. The Government Outcomes Lab at Oxford University (GO Lab) defines impact bonds, including SIBs, as follows:

“Impact bonds are outcome-based contracts that incorporate the use of private funding from investors to cover the upfront capital required for a provider to set up and deliver a service. The service is set out to achieve measurable outcomes established by the commissioning authority (or outcome payer) and the investor is repaid only if these outcomes are achieved. Impact bonds encompass both social impact bonds and development impact bonds.” (Erskine, Smith and Ronicle 2023)

Or in the direct words of Samantha Morgan (Knowledge and Learning Manager at the

National Lottery Community Fund) p4 of the report cited above :

“A sib is the art of using social investment to combine de-risking commissioners through Payment by Results (PbR), with the de-risking and sustaining of contracted delivery providers through the provision of capital.”

SIBs are still a relatively small contracting approach. The first SIB was announced in 2010 in the UK, and as of October 2023 the GO Lab database² recorded there were 283 impact bonds internationally which had raised

US\$753m. While the capital raised is under 0.1% of the impact assets under management, the SIB is proving to be a useful tool for social service innovation.

² <https://golab.bsg.ox.ac.uk/knowledge-bank/indigo/impact-bond-dataset-v2/>, accessed 26 October 2023

Overview of the Bond: what was designed

Purpose: the bond and youth offending in Auckland

This bond was developed as part of a wider initiative designed to improve the effectiveness and value-for money from government

social service spending, initiated under the National-led government in 2013. In the words of its commissioning paper in 2017 it was:

“a social bond designed to reduce youth reoffending in South Auckland...

The bond offers significant benefits:

- 1.1 Innovations in the approach to tackling young offenders, an area where in New Zealand and internationally results have been poor ... and
- 1.2 Potential learnings about how to effectively design and manage innovative approaches to contracting for (and achieving) better social outcomes.... and
- 1.3 While the degree of innovation and a long tail of possible outcome improvements mean it is difficult to precisely forecast the overall cost-benefit for the Crown, it is expected to be positive and is coupled with a risk management mechanism that protects the Crown if the intervention is not successful.”³

Development of the Bond; set-up and key stakeholders

In 2013 the government formally commissioned a social bonds pilot programme. A slow and careful procurement approach was adopted, beginning with an approach to the market through a two-stage Registration-of-Interest process in December 2013 and February 2014. Seven proposals were evaluated and from that financial intermediaries were matched with service providers. Four topics were selected for further consideration for the social bonds pilots. Following further evaluations, two topics (outcomes) were prioritised as the first two social bonds to be developed as pilots through a procurement and negotiation process: getting more people with mental health issues into and remaining in work, and reducing youth reoffending rates in South Auckland.

By mid-2016 this drawn-out process had almost stalled, with little clear forward momentum from the Crown team and bidders demoralised and drained by the lengthy and uncertain process. Following a change of leadership and approach, two social bonds were implemented by September 2017.

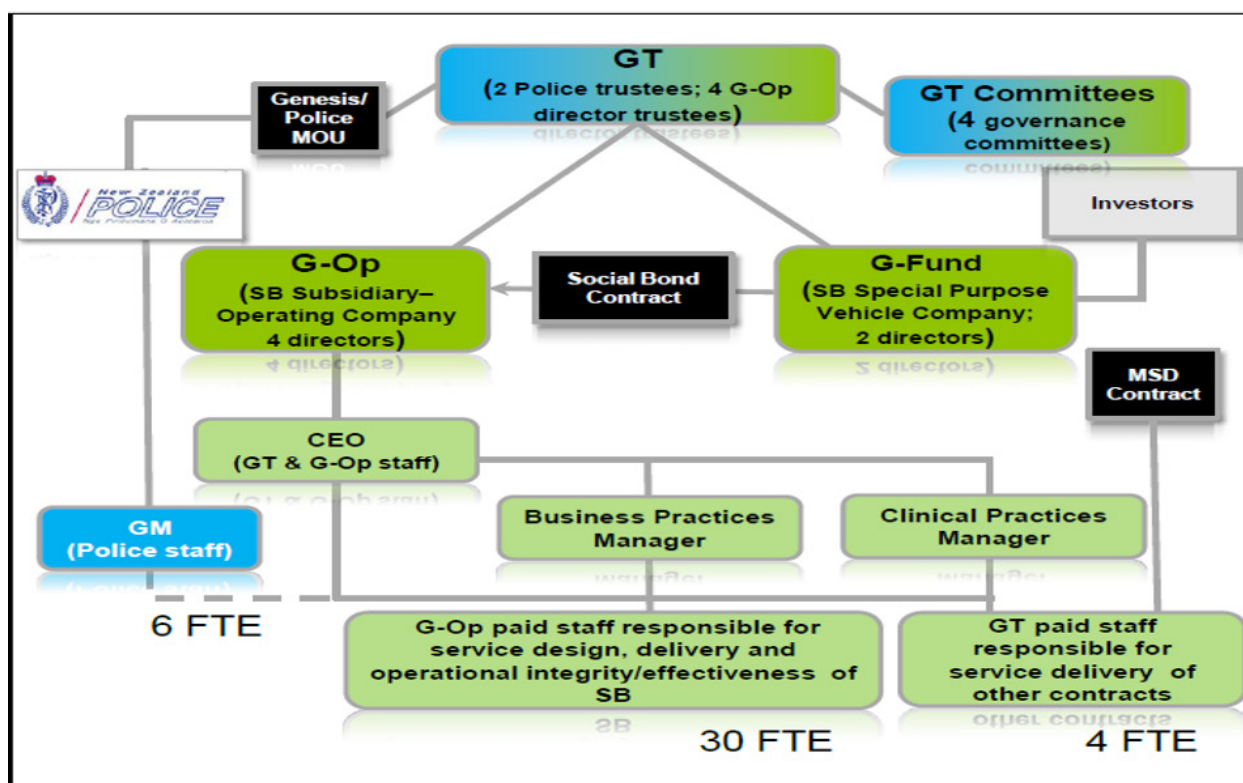
This bond was based on a proposal from the Genesis Youth Trust (GYT). GYT was established as a partnership between NZ Police and a charity, where in various forms GYT had been working with young offenders in South Auckland for 18 years. Prior to the bond it had 18 staff who worked on a variety of programmes designed to improve outcomes for local young people, most related to reducing future reoffending. The bond process joined

³ Taken from the Executive Summary of the 2017 Cabinet Social Committee paper seeking approval for the Bond

GYT with supporting financial and operational advisors (ANZ, Cranleigh/Synergia).

The bond also involved the establishment of two charitable companies that were wholly owned by GYT: a financial intermediary, G-Fund Ltd and a service provider, G-Op Ltd. G-Fund was the financial intermediary- the contract party with the Crown which in turn managed the performance of the subcon-

tractor, G-Op. It also managed relationships with investors, where the contracts provided for investor representation at G-Fund board meetings. G-Op was established as an independent subsidiary to enable transparent accounting and operational separation of social bond costs from other ongoing GYT programmes. This arrangement is illustrated in the diagram below.



For the Crown, the SIB pilot initiative was led by a small cross-agency team⁴ who coordinated direct input from youth justice policy officials (Police, Ministry of Social Development, Oranga Tamariki (OT, and its predecessor entities) and the Ministry of Justice) and the Treasury. A senior officials group oversaw the process. Once operating it was expected that client referrals would be made by Police,

potentially with multiple agency input and the overall outcome contract would be managed by, then, Oranga Tamariki- along with requisite standard setting and audit.

Once the contracting process was well developed, financial market interest was tested to identify possible investors in the bonds. This process was undertaken by the project team

⁴ The cross-agency team ended up comprising two consultants assisted by legal and commercial advisors.

and was assisted by the ANZ, who acted as the Arranger and sole Lead Manager for this transaction. Despite limited initial interest in the bonds the full \$6m sought was taken up; initially by NZ Super Fund, Mint Investment

and Wilberforce Foundation, with subsequent partial sell down by NZ Super to the Caleb and Hosanna Trusts, while Wilberforce representation was replaced by the related entity, Whakatapu Foundation.

What services were to be delivered?

The bond contract provided for up to 1000 clients, young people (generally between 14 and 17 years old) from South Auckland, to be enrolled in a new programme, with enrolment starting from 1 September 2017 and stopping on 31 August 2022 followed by a final year of service provision. Criteria for referral of youth to the programme included that they had a Police Alternative Action Plan and a YORST score over a threshold of 40: with a mix of 30% higher scores (60 to 100) and 70% medium scores (40 to 59). The YORST is completed by Police Youth Aid.

GYT had been delivering a variety of services for young offenders in South Auckland over the previous 18 years. While the social bond offering built on GYT's earlier experience it introduced some significant changes:

- A longer engagement with each client. Previous contracts typically paid for engagement over just six months. The proposal in the bond was a much longer engagement, up to two years comprising an initial intensive intervention phase and a less intensive follow-up phase.
- A wider set of services for each client. These were to be delivered through Multi-Disciplinary Teams (MDTs) made up of a social worker, counsellor, and mentor involving a holistic,

wraparound, rangatahi- and whānau-based service. Additional clinical and family specialist services were to be used as required.

- Introduction of a data-rich reporting and management tool (the Dashboard) to enable data-driven changes to how each client was interacted with, and teams were managed. A key ingredient was use of YLS/CMI scores across eight risk domains, to help staff see what was working for individual clients and across clients to see where programmes/resourcing were proving most helpful.
- GYT could scale up their services and extend operations in four sites across South Auckland. These included Counties Manukau West (covering Māngere, Papatoetoe, Otahuhu), Counties Manukau Central (covering Manurewa), Counties Manukau South (covering Papakura, Pukekohe, Waiuku, Tuakau) and Auckland East (covering Glen Innes, Panmure, Mt Wellington).
- The Bond provided a six year time horizon for GYT and the team to plan, develop and serve the community in contrast to the traditional 3-6 month contract time horizon in the sector.

Contractual framework

As is typical for SIBs, there were a detailed and lengthy set of contracts covering the bond, spanning the underlying outcome payment regime, service subcontracting and the bond-related payment and security documentation.

The underlying bond outcome contract covered 6 years, with expected (maximum) enrolments of up to 1000 young people over 5 years. Clients would receive a set of tailored wrap-around services for two years. GYT/G-Op was expected to grow to around 40 staff.

The bond was a very explicit payment-for-results contract. Defined and measurable outcome targets were specified, based on independent Police offending data, with payments due only where the actual outcomes delivered were above pre-established counterfactuals. Initial payments-for-results were based on change in pro-social behaviours: this migrated to observed reduction in reoffending from the early cohorts once outcomes could be observed. G-Fund was to report progress

to OT and investors on a six-monthly basis. Outcome payment rates were established that applied through the bond's life, with six monthly payments by Oranga Tamariki based directly on levels of outcome achievement over the preceding six months.

Bonds for \$6m were issued in two risk classes (lower risk Class A of \$4.8m and subordinated, higher risk Class B of \$1.2m). Investors paid for their bonds on the start of the programme on 1 September 2017, providing the initial finance to sustain payments to the service provider before the outcomes could be delivered and measured. Risk for non-achievement of outcomes was passed to investors through the bonds. Very significant and sustained underperformance permitted either the Crown or investors to terminate the contract: investors were exposed to potential negative returns on their investment. If performance was positive, investors would be paid a specified target rate of return and, if performance was sufficiently strong, the return would be topped up to a maximum rate on completion of the bond in October 2023.

Outcome expectations and measurement, and payment mechanism

Choice of outcome(s) to be used

While this was a social bond designed to reduce reoffending by young people, NZ youth justice research along with the international

literature indicated that most adolescent offending did not persist into adulthood:

“The ‘age-crime curve’, whereby criminal behaviour commences in late childhood or early adolescence, increases throughout adolescence and peaks in late adolescence or early adulthood, before declining, is a well-established phenomenon in criminology” (Sutherland P. 2016)

As such the policy goal for the bond was to try to maximise the impact on potential long-term offenders, estimated in the NZ data to comprise just some 10% of all youth offenders. Consequently, measures that best captured this higher risk group were sought. Evidence suggested that greater initial offence severity was positively linked to risks of subsequent offending.

These factors in turn led to several specific design choices for the bond:

- Specification that clients enrolled needed to be either medium or high risk, where risk was assessed using the Youth Offending Risk Screening Tool (YORST, carried out by NZ Police). To avoid possible cherry picking by the service provider, and conversely funnelling too many difficult clients to the provider, the contract specified that enrolments had to include no less than 30% High risk clients (a YORST score of 60 or more), and that no more than 70% were Medium risk (YORST score between 40 and 59).
- Designing a payment regime that stepped-up payments where reoffending reductions later on during the client's two-year participation in the intervention (offence reductions in the 18 month-24 month period were paid at around double the rate for offence reductions in the first six months).⁵
- Including a small payment which was paid in the event a client did reoffend, but it was at a lower severity (using Police/Justice categorisations) than their initial offence.

Early policy discussions and financial modelling highlighted another desirable feature: could client risks be assessed more directly at an early stage rather than waiting for actual reoffending reductions which could take some twelve months or more to be included in payment schedules? Crucially the YORST scoring tool was judged as identifying relatively static risk factors that were not significantly impacted in the short term. A new tool was identified that placed greater reliance on dynamic criminogenic risk factors, the Youth Level of Service/Case Management Inventory (YLS/CMI)⁶.

“The YLS/CMI is a risk/needs assessment and case management tool. Originally developed in Canada and adapted into an Australian version (YLS/CMI-AA), the YLS/CMI incorporates a checklist of items that represent static and dynamic factors.

The YLS/CMI examines attributes of a young person and their situation to determine areas of criminogenic need which may be contributing to their offending. The YLS/CMI informs the level and types of interventions to ensure that case planning activities are focused in the appropriate areas of need. The reliability and predictivity validity of the YLS/CMI have been assessed in overseas jurisdictions. There are eight YLS/CMI domains:

⁵ Although most reoffending occurs typically in the first few months after initial offences, reductions after a year indicated a more sustained trend

⁶ See for instance:

Review in a US context: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4096938/>

Review of use in a Singaporean context: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4427658/>

A recent Australian review: <https://journals.sagepub.com/doi/abs/10.1177/0306624X221086556>

1. Prior and current offences
 2. Family and living circumstances
 3. Education and employment
 4. Peer relations
 5. Substance abuse
 6. Leisure and recreation
 7. Personality and behaviour
 8. Attitudes and beliefs”
- (Centre 2021)

The YLS/CMI was adopted and used for the Bond, the first use at any scale in a NZ setting. This tool served two purposes:

- Providing interim outcome measures. Reassessments using the tool were made at up to six times during the two-year period of client engagement. Payments were made for reductions in the assessed risk score- enabling some early funding for the bond for these signs of desired progress. The overall payment design provided for around 80% of expected income in the bond (for performance at target expectations) to come from these interim outcomes in the first two-year period of the bond, which reduced

to less than 20% for 2-6 years after the bond started- a period where a much fuller set of actual reoffending reductions could be achieved.

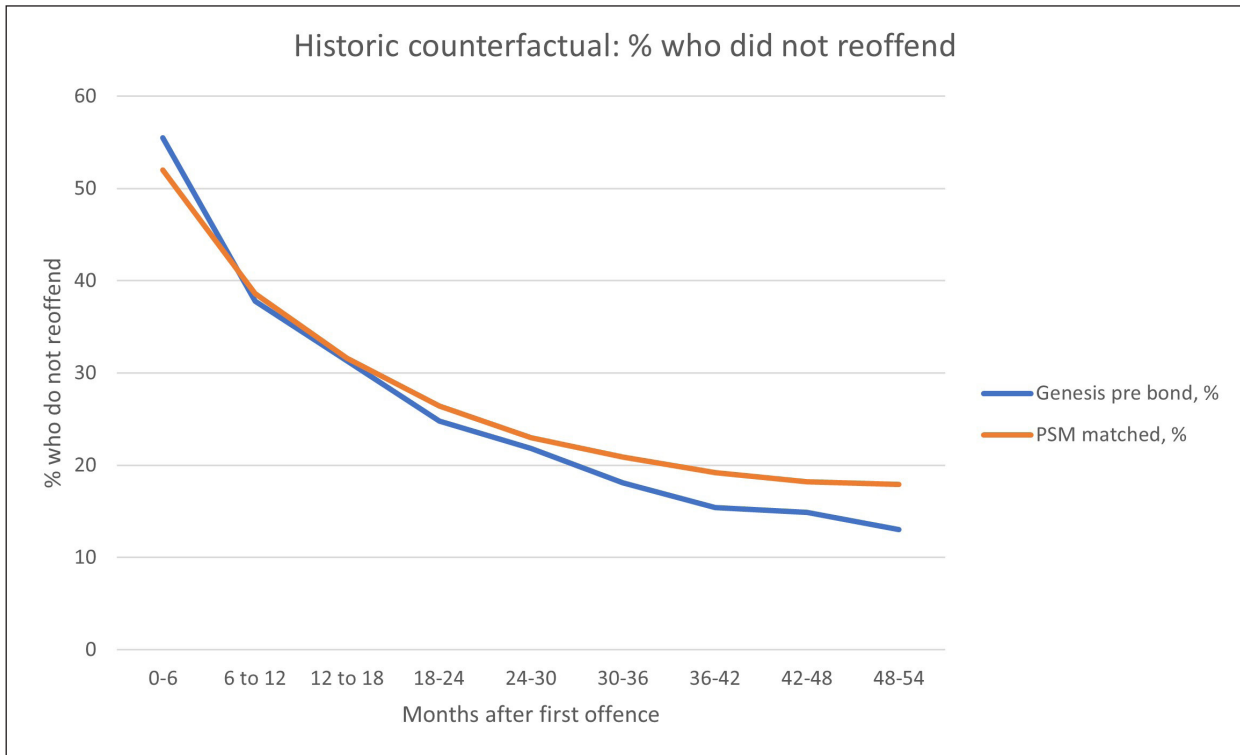
- Providing timely and targeted early measures of programme effectiveness for each client.

One other additional incentive payment arrangement was included in the Bond. From month 30 through to month 72, an extra incentive would be paid at six month intervals (with amounts set in a contract schedule) if contract outcomes had reached specified levels. This mechanism incentivised stronger achievement of desired outcomes.

Counterfactuals/benchmarks, and measurement systems

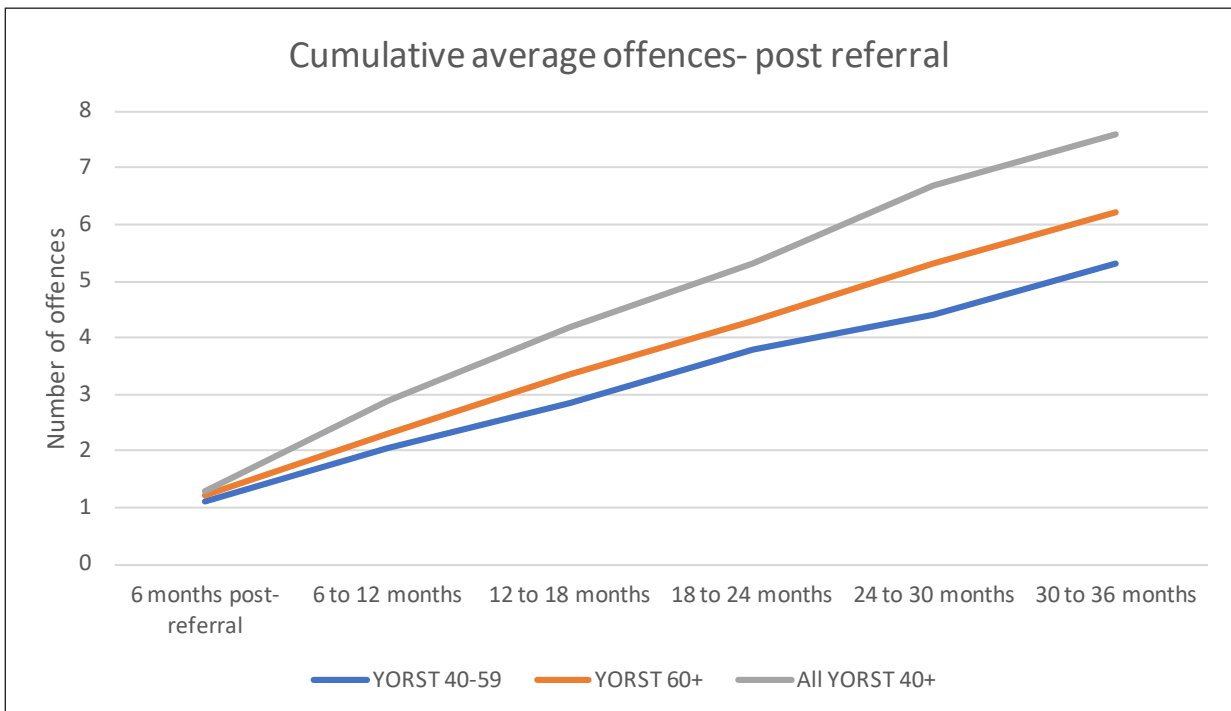
The ability to determine robust outcome measures is at the heart of a SIB: essentially a SIB provides a high degree of autonomy for service providers (to change how they deliver) on the basis that the funder can be certain that payments are only being made for the outcome improvements sought. SIBs generally then need to work through the difficulties of establishing outcome indicators that represent the outcome(s) of interest, have effective initial benchmarks and changes which can be reliably and consistently measured, and ensuring that those changes are largely attributable to the efforts of the service provider.

This SIB benefitted enormously from the existence of a Police data set on youth offenders and offences. This dataset was completely independent from GYT, and included a much wider set of young people than those who were/had been clients of GYT. It was used prior to the bond to establish an historic counterfactual, where for the seven years prior to the bond, a set of risk-matched (propensity score matched (PSM)) cohorts were identified (from youth offenders across Auckland) and their reoffending patterns used to set benchmarks for the Bond.



Outcome targets were then set separately for the high and medium risk groups, with payments made only if outcomes achieved

under the Bond were better than the historic counterfactual.



To best capture the outcomes sought and provide a measure of stability in the performance regime, the counterfactual was based on the average number of offences expected per person during each six-month period from the initial offence. Clients were grouped by their two risk groups into six-month cohorts (by enrolment dates), with actual offences aggregated across each risk cohort for subsequent six-monthly periods. Payments were made for the accumulated reduction in offences below the relevant counterfactual (number in that cohort times the average). Some consideration was given to the relatively small sizes of some cohorts and the impact of outlying offenders, where one young person could at times commit a series of offences within a few days. Due to the complexity of managing these possible outliers they were however not removed- leaving a risk for GYT.

Payments for intermediate outcomes (YLS/CMI score reductions and reductions in any reoffending severity) would be made for

Payment mechanism(s)

Income to G-Fund: The outcome contract specified a schedule of payment rates for the specified outcome changes in YLS/CMI scores, reoffending frequency and intensity. Claims based on outcome achievement were made six monthly by G-Fund on the basis of outcome reports, and payable by OT.

The contract included a variety of risk management clauses, allowing for early termination if performance was below set thresholds (by either investors or OT), and an overall cap on total payments of \$24m.

Payments by G-Fund: The Services Sub-contract, under which G-Op/GYT provided the services, included a monthly schedule for expected payments (based on target enrol-

reductions in scores from initial scores. Rates were determined after financial modelling but were lower than for the final outcomes- reoffending reductions.

Measurement- Offending. Once enrolled in the Bond programme, all clients were to be identified within the Police offence reporting system. Regular reports would be run on this dataset (made simpler due to the involvement of Police staff within G-Op), identifying all offending by those clients, including both frequency and severity of each event.

Measurement- YLS/CMI risk scores. Staff would be required to undertake up to six assessments with each client, at predetermined stages of their engagement in the programme.

Reoffending and YLS/CMI data were all incorporated in a weekly data "Dashboard" which was to be reported to G-Op management and available to key stakeholders.

ments and service costings). It incorporated a mechanism where G-Fund could adjust payments in some proportion if enrolments were materially different to the target rate (within specified limits).

Investors were to be paid interest at six monthly intervals, subject to performance and funding sufficiency (SIB surplus after service delivery and other operating expenses). For no difference in reoffending to the cohort counterfactual, investors would receive no return. Targeted reduction in reoffending yielded target rates for Class A bonds of 6% for the first two years then 9.6% for the remainder of the term, with a final bonus element if performance was exceptional to

11% over the term of the bonds. The higher risk Class B bond rates were 10% for the first two years then 16.8%, with a bonus element to 20%. (These target rates were comparable to market rates for lower risk investments at the time of the Bond.)

Subject to certain tests around funding sufficiency, bond capital was to be repaid at scheduled intervals.

Contract review

The overall contract payment structure pivoted in year three to shift the bulk of SIB payments from intermediate outcome achievement to actual reoffending reductions. In recognition of this planned shift and the

novelty of the Bond contract, with its large risks and uncertainties, there was a provision for a review at the two-year point, with scope for change if performance had been materially below expectations.

Performance - what happened in practice

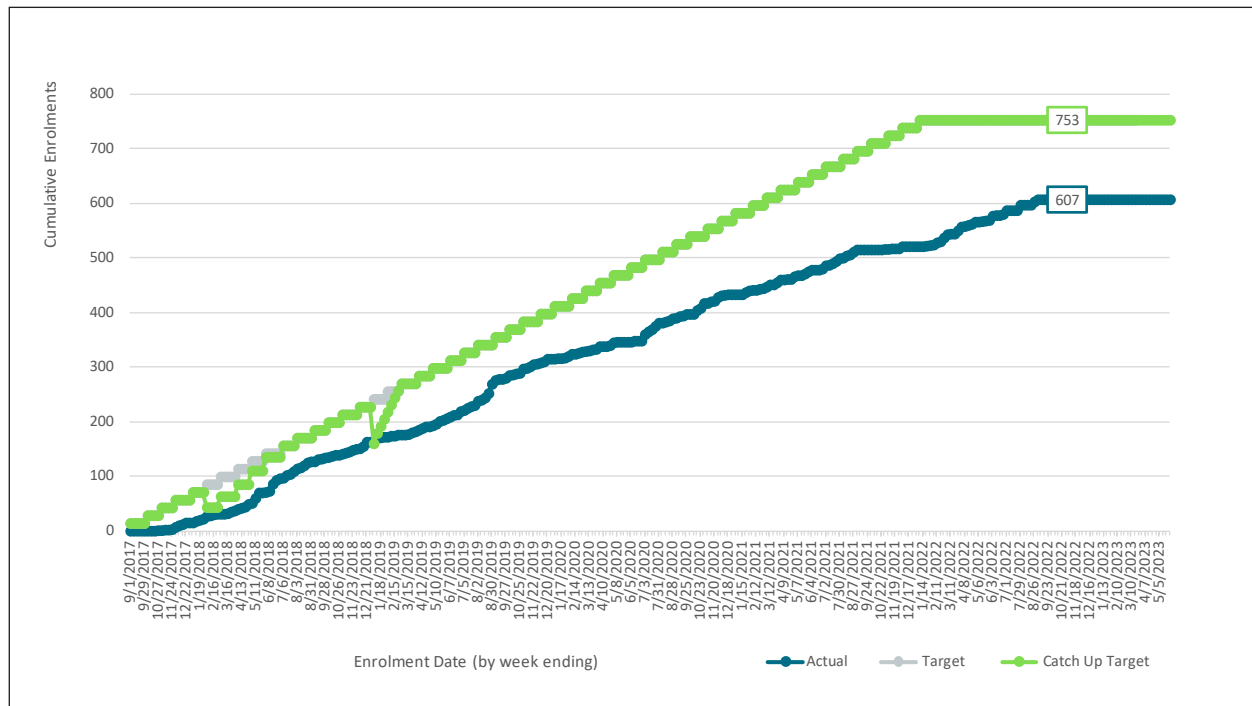
Service delivery

Enrolment in the Bond started from 1 September 2017 but due to delays and uncertainty around contract finalisation and Bond funding (the main outcome contract was signed only on 1 August 2017) initial G-Op capacity was limited. Against a target of 67 referrals by the end of 2017, only 32 were made and of those just 15 clients were enrolled. Referrals (almost exclusively from Police) remained below

anticipated levels throughout the contract period.

Client enrolments and G-Op capacity gradually increased so that by the end of the enrolment period (31 August 2022) 607 clients had been enrolled, against a target, and cap, of 1000. Final levels of enrolment were impacted by covid lockdowns. All Bond services for the last client cohort stopped on 31 August 2023.

Cumulative enrolments in the Bond



Of those enrolled 67% were medium YORST and 33% high, 29% were female. By ethnicity 70% identified as Māori, 22% Pacific and 13% NZ European/other. The average age of clients at enrolment was 14 years.

G-Op increased its staff levels to around 45 staff, including Police secondees, across four sites. Each site used the MDT approach to provide a set of wrap-around mix of services, although as discussed later, with adaptation.

This involved an initial intensive intervention phase, moving to a less intensive phase for up to two years from the enrolment date. Delivery of the programme prioritised holistic intervention through building trust with young people and their families, developing effective working partnerships with Police, the Ministry of Social Development (MSD), Oranga Tamariki and others. YLS/CMI assessments were generally undertaken at the six specified periods, although these often required some

catch-up effort by management. Practice and effort levels were then informed by the data insights provided by the data Dashboard and were adapted to improve upon what was working and to optimise resourcing.

Two year review. Oranga Tamariki was directed by Cabinet to evaluate the effectiveness of the Social Bond Pilot. Because of the early stage of the pilot, the evaluation two-years after the start of the pilot was a process evaluation with two main areas of interest:

- How the Social Bonds contractual arrangement was operating, and
- How the Genesis Youth Trust programme was operating.

The review (Malatest International and Oranga Tamariki Evidence Centre (2021). Reducing Youth Offending Social Bond Pilot Process Evaluation⁷) was completed albeit rather later than anticipated. Its summarised conclusion was:

“Overall, the Social Bond Pilot is supporting rangatahi as intended although referrals and enrolments are lower than the contracted maximums.”
(page 8)

Data and systems

While the services offered by GYT were built on the long experience of key staff members, the Bond introduced two integrated supporting factors: a new dynamic criminogenic risk assessment tool and a form of reporting that allowed staff to see emerging results in a timely manner- the Dashboard.

Data for the dashboard came from two

primary sources, the Police offending database and the YLS/CMI assessments completed by staff. Results were compiled weekly and distributed to staff and other key stakeholders.

To illustrate this tool, some excerpts from the 7 July 2023 Dashboard are set out in Appendix One.

Contract management

GYT structure: At the operational level GYT upscaled considerably and from time-to-time readjusted staffing in terms of overall levels, their composition, and location. Staff turnover was not high although it started to increase later in the Bond term as no replacement contract was available and some significant pay increases were awarded to public sector staff in several comparable roles.

A new GYT/G-Op chief executive was appointed at the start of the Bond contract partly as a change manager and implementer

of the new model. He resigned in April 2018, and then over the remainder of the Bond's life there were a further three chief executives. Operational advisers Synergia were retained through the contract however Cranleigh was soon disengaged.

The GYT/G-Op Board also experienced considerable change, with no-one on the Board in mid-2023 who had been there when the Bond started in 2017. The G-Fund Board was stable throughout the period.

⁷ Accessible at https://www.orangatamariki.govt.nz/assets/Uploads/About-us/Research/Latest-research/Reducing-youth-offending-social-bond-pilot/Social-bonds-process-evaluation_FINAL.pdf

Significant turnover also occurred amongst the government agency staff who most closely interacted with GYT/G-Fund around the contract. Key contacts changed and again at the end of the Bond there was no-one who had been there at the start.

The initial three investors were joined by two others during the Bond's life. Those investors remained interested in the Bond's operations through the entire contract period, often participating in the quarterly G-Fund Board meetings and discussing emerging strategic resourcing/priority issues.

Governance

Day-to-day Bond services were managed by the GYT chief executive, through the G-Op structure. Staff were employed by GYT and time was allocated to G-Op to ensure transparent costings could be maintained- where G-Op was maintained as a legal entity with separate accounts. GYT was managed by Trustees who were also the directors of G-Op. G-Op staff had the primary operating level relationships with Police and OT staff.

G-Fund operated as a two-person Board

supplemented with administrative and specialist contract assistance as required. It oversaw relationships in three directions: from G-Op it received reports on costs and performance, and determined, within contracted parameters, the level of service payments to make. In another direction, it reported outcomes to OT and claimed funding under the Bond Outcome contract. It was also responsible for relationships with bondholders, discussing progress and making necessary interest and capital payments in respect of the bonds.

Investment, risk sharing and financial returns

Although initial enrolments were lower than target, success with reductions in YLS/CMI risk scores and reoffending compared to the counterfactual was stronger than the original target. Together these combined to provide revenue into the Bond above target levels. The maximum revenue cap was reached by October 2022 such that there were no further payments from OT. G-Fund did not pay out

the potential maximum of service payments to G-Op, retaining some \$2.4m which represented a cost reduction due to lower than anticipated enrolments.

Investors were consistently paid interest at target rates on both classes of bond, and the maximum yield on completion- 26 October 2023. All bond capital was repaid as due.

Outcomes 1: Using a qualitative lens, what were the outcomes achieved and key success factors?

Qualitative response from clients and their families

Findings from the 2023 Oranga Tamariki qualitative outcomes evaluation report (derived from 15 client interviews and a set of GYT, Police and Oranga Tamariki staff interviews):

- Rangatahi and whānau achieved their aspirations across the domains of Te Whare Tapa Whā (Mason Durie’s 1984 holistic model of wellbeing).
- Positive outcomes were generated across the domains of Te Whare Tapa Whā (KEQ2 and KEQ3) and these outcomes were sustained.
- Genesis upheld and protected the mana⁸ of rangatahi and whānau participating in the Service, which contributes to wellbeing of rangatahi and whānau in regard to Te Whare Tapa Whā.
- Improvement across Te Whare Tapa Whā domains is built upon the foundation of well trained, Pacific and Māori community practitioners in multi-disciplinary teams.
- The social bonds model contributed to Te Whare Tapa Whā wellbeing outcomes reported by rangatahi and their whānau.
- Some changes could be made to the programme model to ensure it meets rangatahi and whānau needs.

(Kereama 2023)

A fuller set of findings from that report is included as Appendix Two.

In addition, for this report separate interviews were conducted with six clients, identified by GYT staff, who were able to meet in the time frames required. The process used was similar to that used by the Allen and Clarke/ Kereama review, although with a different standard question set. Alongside checking for permission to use data for the evaluation the key questions asked were:

What effect did your involvement with GYT have? What do you think was good and were there any things that you didn’t think helped?

All clients were supportive of their data being used with one commenting: “especially if it might help other kids avoid bad things happening, and make positive things happen.”

Given the small sample, the comments below are not presented as representative rather they are included to illustrate, at a more personal level, the sorts of changes that came from involvement in the social bond programme.

Client A, who had just graduated after two years. “The programme made major life

⁸ The concept of manaakitanga encompasses a range of meanings in a traditional sense with a central focus on ensuring the mana of both parties is upheld. In practice, manaaki signals the importance of looking after people.

changes for me. If it wasn't in place I'd be stuck where I was two years ago. It's given me more self-confidence, and helped me start to build a better relationship with my dad. He talks now and he actually joins in with the family for dinner. [GYT] delivers us two Kiwi Harvest boxes each week- we eat much better."

"I wish there was no graduation."

A now has a driver's licence and a job which GYT helped him secure.

Client B was about to graduate. On her experience with the programme: "It gave me quality time with someone- great communications and always someone to talk to. It provided motivation and helped me make new friends."

What was the biggest change? "It gave me a sense of self-worth."

B now has a job.

Client C. "If I hadn't been in the programme I'd be locked up now. The programme has given me techniques to handle issues like anger and anxiety, and a range of tools to do better. I used to hurt people, my parents and family when I got angry. I still use those tools

in my life now. I didn't want to go to jail like most of my family".

GYT has helped with housing, food, finances and getting a job.

Client D who has been in the programme for 12 months. "Since it started it's helped me stay out of trouble. They put good things in my head, and so I've stayed at school. I'm not sure what I want to do next but it's helping me see what I want to do. I've got three goals to achieve: getting my driver's licence, finishing school and getting a job."

Client E- just graduated. "It changed everything. I was popping cars and robbing stuff. They helped me change how I thought. I didn't want to be a jail bird like the rest of my family."

E was expelled from school but is now in work and has reconnected with his father.

Client F had been into ram raiding, vaping and drugs but had now adopted a positive exercise programme, where the discipline involved helps him. His GYT social worker had helped him locate a specific course that helped change his mindset and has helped him study and learn. He will finish courses this year and begin work.

Qualitative response from staff

The key success factors and issues highlighted by staff were:

- The Bond contract created certainty and funding that enabled investment in systems and staff development.
- Under the contract a new model of service was introduced involving more wrap around and intense client work.
- The six-year contract provided more certainty for staff in their careers and more stability in an organisation that otherwise had to undergo some significant transformation.
- While the YLS/CMI assessments took time to complete they did provide insights on what areas needed attention, and showed what was working for that client and more generally across teams.
- The team came to the view that the relatively fixed two-year engagement term with its required YLS/CMI assessments at several stages did not provide enough flexibility to respond to emerging client needs, especially where risks had reduced significantly.
- The YLS/CMI tool was seen to offer very helpful insights but it could be improved with some specific adaptations to fit the New Zealand context.

Of those referred to the programme around 20% (or 175) were not enrolled. This reflects typically an unwillingness of the young

person, or their family, to participate and/or difficulties in establishing a connection due to transience/inability to contact the person.

Outcomes 2: Using a quantitative lens, what were the outcomes achieved?

This section uses several tools to analyse the returns from this initiative:

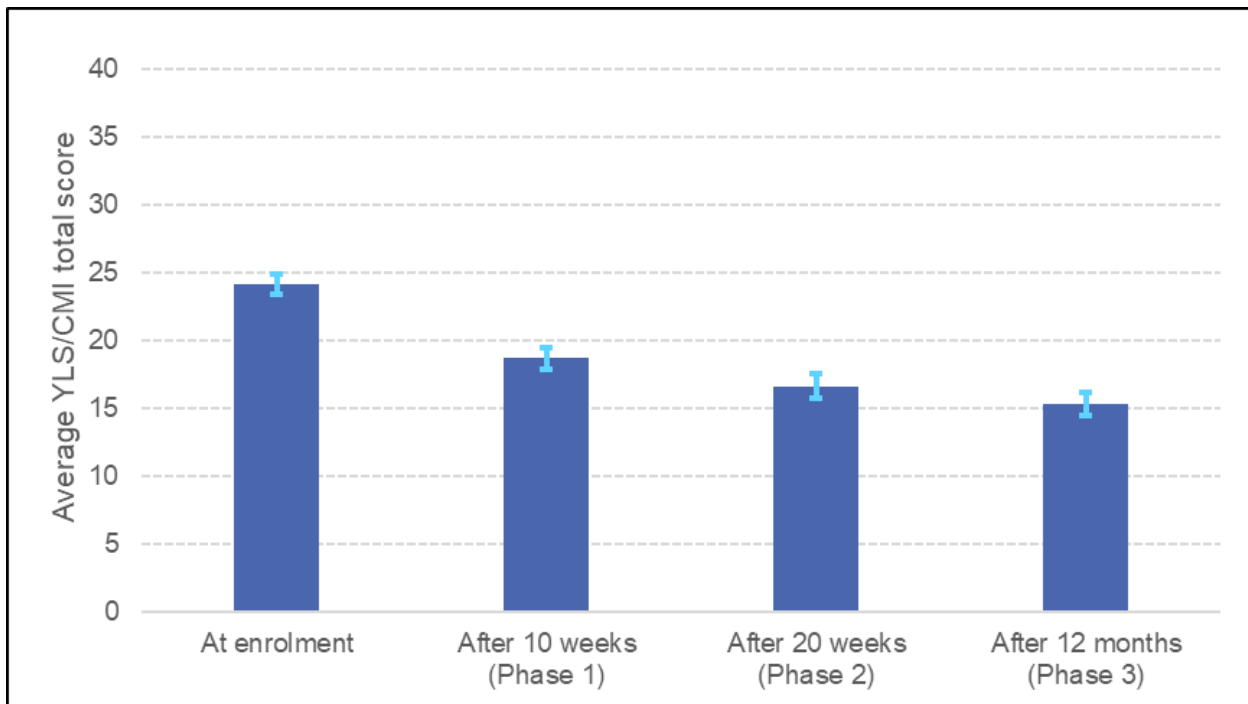
- Assessment of reductions in dynamic criminogenic risk of reoffending- an intermediate outcome measure.
- Assessment against the reoffending benchmarks set for the bond, based on an average of offending rates for the seven years (2009-2016) prior to the bond. However youth crime rates have dropped significantly through the period from 2011 to 2020 so there is a potential these benchmarks were set at levels that, in retrospect may have been too easy to meet. This may not though necessarily affect the benchmark reoffending frequency levels. They would still be valid if, after 2017, reoffending frequencies were still at the previous level albeit there were fewer offenders overall. The contemporaneous evaluation tests this.
- A contemporaneous counterfactual evaluation, assessing outcomes against a set of risk-matched individuals who offended at the same times as the Genesis youth.
- A social value measurement, capturing the value generated for all New Zealanders through use of the Treasury's Living Standards Framework and the associated CBAX cost benefit tool that provides a set of values for many wellbeing outcomes.
- Observations on the financial returns for investors.

The risk of reoffending reduced in the first 12 months

There was a significant decrease in total YLS/CMI scores over the first 12 months post-enrolment, indicating a decrease in overall risk for clients enrolled in the Bond

for at least 12 months⁹, as shown below. The Kereama et al report also provides a complete set of analyses against each of the YLS/CMI domains.

Average YLS/CMI total scores over time, for enrolled clients



Note. All YLS/CMI change analyses were restricted to clients who had completed at least the first 4 assessments i.e., those who had remained engaged with the Service for at least 12 months. Error bars show 95% confidence intervals. Also note that y-axis scales differ between YLS/CMI change figures; y-axis scale reflects the maximum possible risk score for each domain/total score.

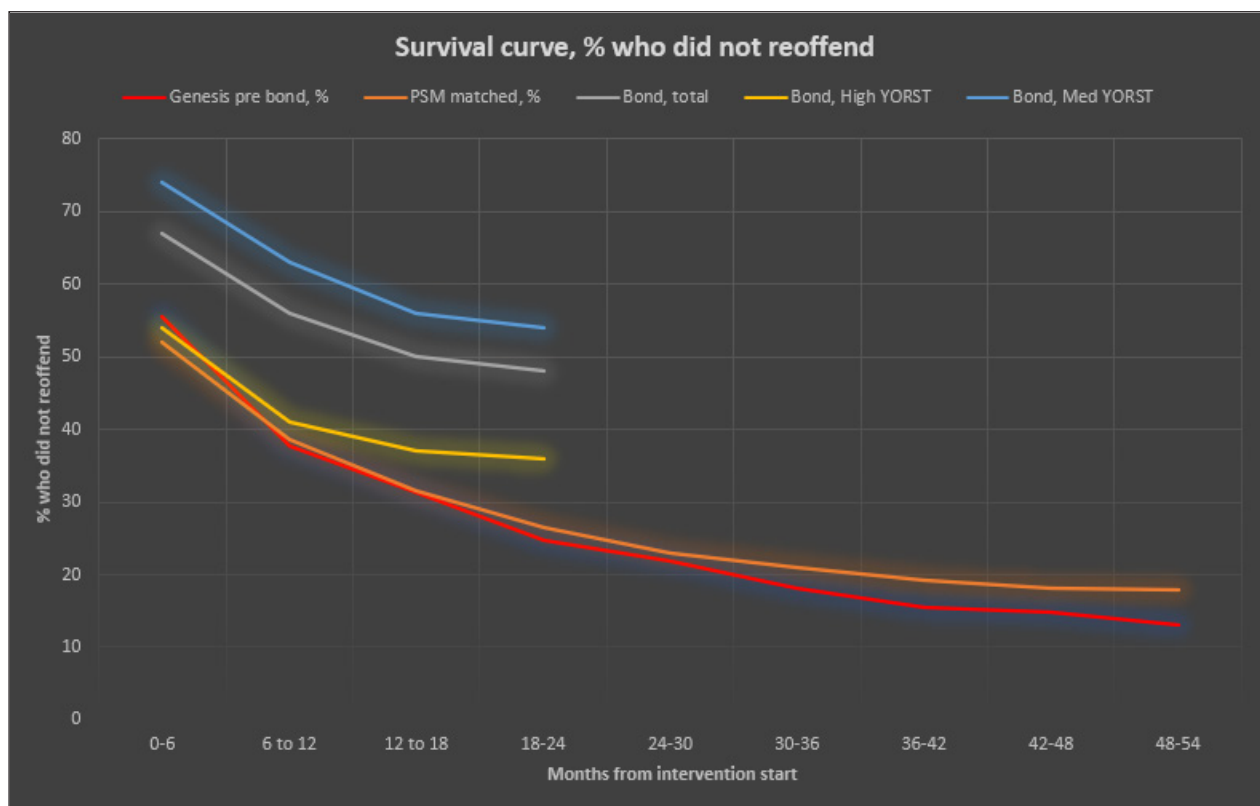
⁹ Graph taken from page 54 of Kereama, J. et al

Reoffending was reduced

Analysis for the bond's key reoffending benchmarks was based on the NZ Police's offence dataset. It examined youth offending proceedings between July 2009 and May 2016 for youth under 17 with at least one recorded proceeding. To create a control group, a matched cohort of youth were identified who were statistically likely to be referred to GYT but were not referred (across relevant Auckland regions). GYT tracked actual reoffending weekly during the Bond,

using client flags within the Police system to identify reoffending by enrolled young people. The graph below shows outcomes achieved for the proportion of clients who had not reoffended ("survived") during their two years of enrolment in the programme, compared to that historic counterfactual. It indicates considerable success for the Bond programme in reducing reoffending compared to that counterfactual.

Results against the Bond's historic counterfactual

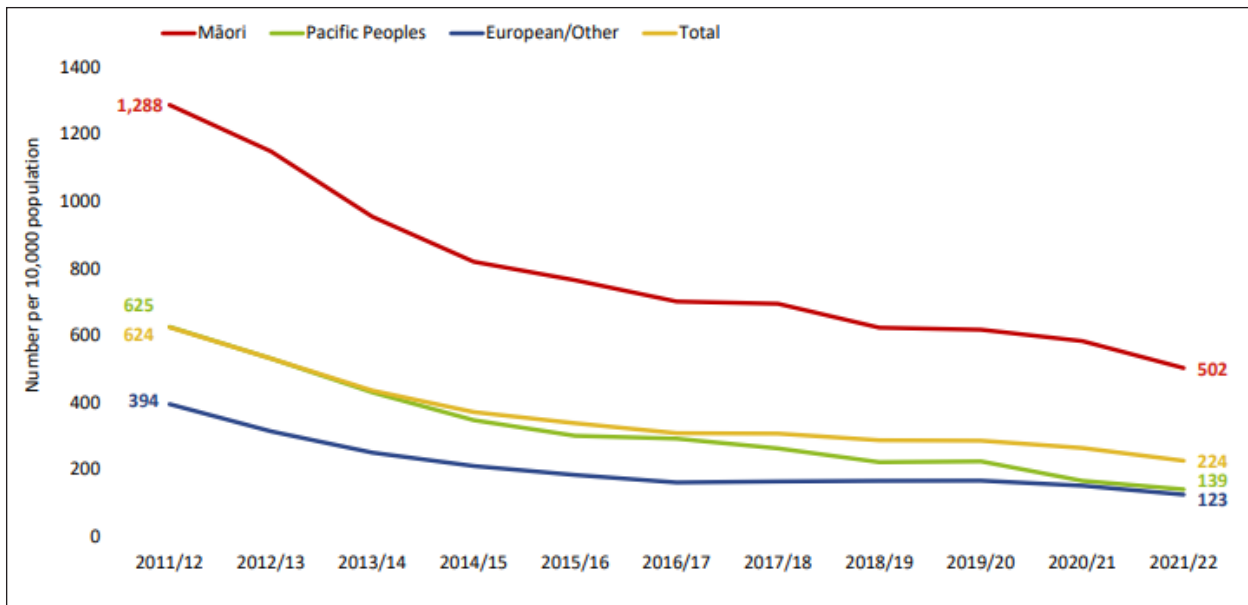


Source: Acuo analysis based on GYT data

Youth crime rates were reducing nationally

Across new Zealand youth offending, particularly for Māori, dropped significantly from 2010 through to 2021 (although most recent data

suggests an uptick over the last 12 months- post Covid), as illustrated in the graph below.



Source: Youth Justice Indicators Summary April 2023

Reoffending and other outcomes were positive when measured against a contemporaneous counterfactual

Given the significant reductions in youth offending, an evaluation was commissioned from Synergia that would analyse reoffending by Bond clients against a contemporaneous counterfactual group.

This required the identification of a contemporaneous cohort from the same geographical area (Auckland and Counties Manukau) matched in age, sex, ethnicity, and risk of reoffending (as determined by Police YORST youth offending risk scores) using Police data on offending. Records were not complete for some clients¹⁰ but a cohort of 519 young people (around 2/3 Māori) who completed the

programme was identified and matched. This data set, anonymised, of Bond clients and the counterfactual was introduced into the Integrated Data Infrastructure (IDI), a cross-agency government database maintained by Stats NZ.

Synergia then compared the Bond cohort with the counterfactual on several different outcome variables within the IDI including education, employment, justice, social support, driver's licensing, and consumption of health services. The full analysis is included in Appendix 3.¹¹

¹⁰ The reasons behind the non-identification/incomplete records for the 88 clients were not resolved, so there remain some potential confounding effects associated with this quasi experimental design.

¹¹ This report is available separately on request from the author of this report, Carl Bakker, or Synergia.

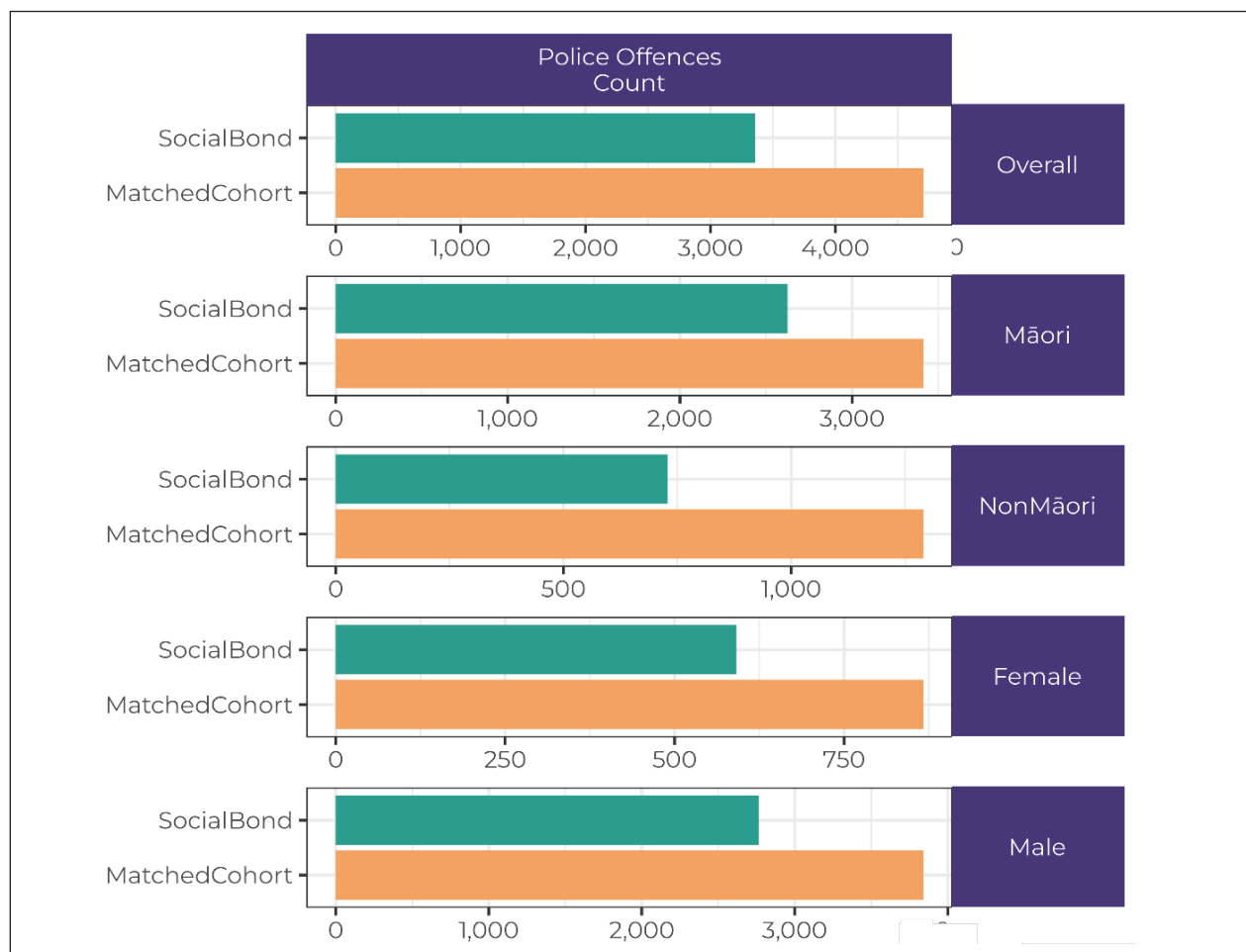
Key Findings

Overall, on the clear majority of metrics, measured outcomes for social bond participants were either significantly better or tending in that direction compared to the matched cohort.

Reoffending: There were significantly fewer police offences and criminal charges recorded for the social bond participants than their matched cohort. Overall, the cumulative number of offences by Bond clients was around 30% lower than the counterfactual group.

This difference is significant and becomes

even more significant given that the counterfactual group, in almost all cases, would have received some alternative form of intervention. As such this counterfactual comparison is in effect a comparison of effectiveness for the Bond programme with the outcomes of a range of other intervention services and options used by NZ Police. These are varied however most other programme options are of shorter duration. This evaluation shows much greater effectiveness, on average, for the Bond programme. This report does not otherwise have data on relative costs or performance of alternative interventions.



Source: Synergia 2023 report

Other wellbeing outcomes

Tertiary education: Significantly more social bond participants enrolled in tertiary education, enrolments were around 40% higher for this group.

Labour market outcomes: When compared to their paired individuals in the matched cohort, the social bond participants were significantly more likely to have a higher income overall, and a higher income from wages and salary.

Several outcomes tended in the direction of being more favourable for social bond participants, but the differences were not statistically significant. Specifically, more social bond participants **enrolled in secondary education, obtained driver's licences, registered vehicles, and used MSD-funded employment assistance programmes**, although these differences were not statistically significant.

There were no clear differences in the number of people consuming benefits or the number of people who completed a recognised course of education. The education completion counts were, however, small and may have been limited by the opportunity to complete courses of education.

Health: Although this outcome was not expected initially, participants in the programme were associated with significantly fewer hospital events, lower use of prescriptions, and lower consumption of mental health services. Anecdotally staff suggested this could have been an outcome of a focus by mentors on good health and personal discipline, achieved with better food, enrolment in sport/fitness, and more consistent health system connections and follow-up.

Overall Social Returns for the Crown and all New Zealanders

The social impact bond programme was a key part of a social investment programme, initiated to deliver innovative social service delivery that improved the lives of New Zealanders. The pilot SIB programme was funded by a specific dedicated funding pool, where the underlying rationale was that this fund represented benefits that could accrue across departmental boundaries, between different groups in society, and might only emerge over time (and well beyond the one-year departmental budget cycle and even a three-year election cycle).

The initial business case for this Bond recognised those potential benefits and estimated they could amount to 1.6 times the

expected costs- a high social rate of return, if achieved.

Using Treasury's Living Standards Framework and the associated CBAX set of values for cost benefit analysis the social benefits from the Bond have been evaluated (see Appendix 4 for additional detail). CBAX has provided specific values for some outcomes: offending, gains from achieving higher educational outcomes and hospital events. For this valuation estimates were added for PRIMHD access (Mental Health and Addiction), prescriptions and an average value for the custodial costs of one year's imprisonment. Given the potential for double counting, no separate allowance was made for the

improved labour market incomes.

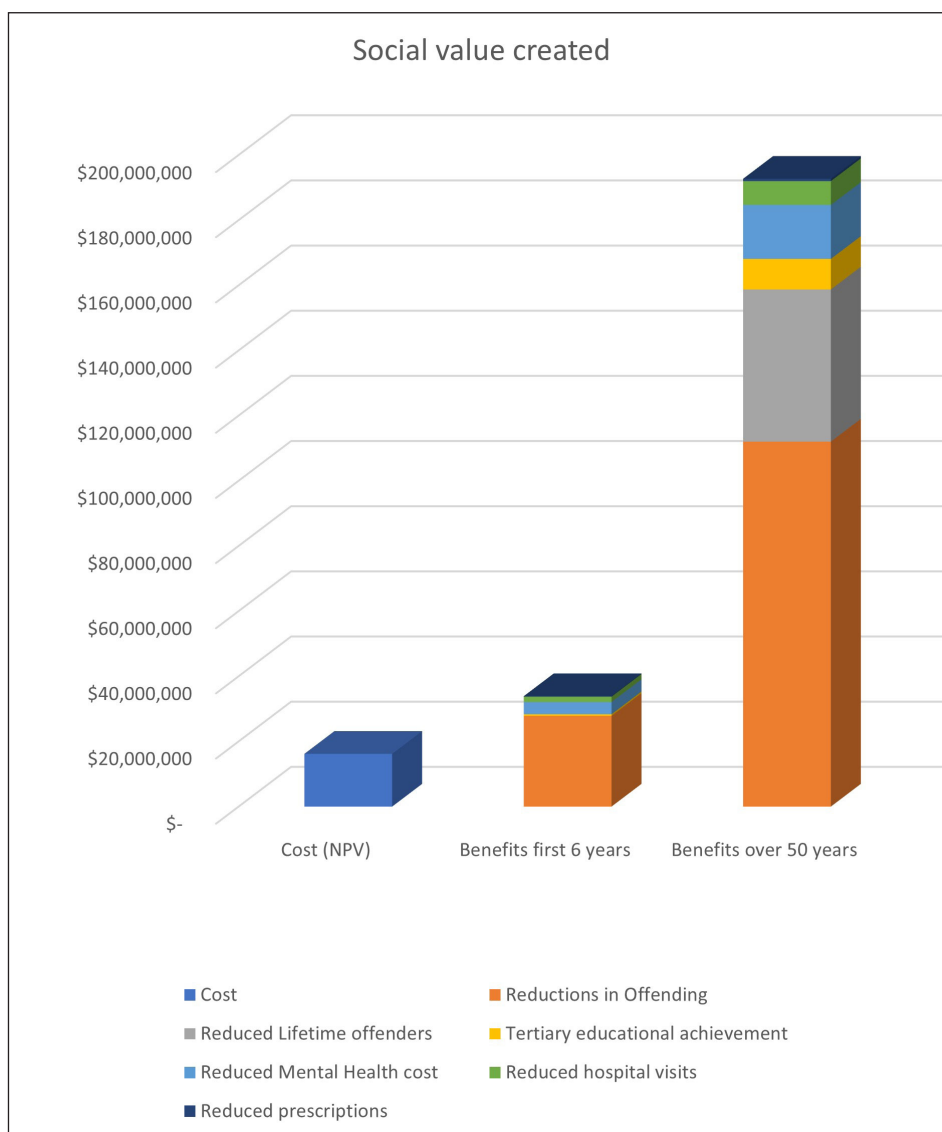
A high value outcome is the reduction in life-course-offenders (LCPs), those who remain as offenders through their lives. No recent NZ research was identified that provided a value for this group in New Zealand. During development of the Bond, Youth Justice officials provided their internal estimates for the size of this group as around 10% of youth offenders. Given the skewed intake of the Bond to medium and high-risk offenders, the 2017 Business case used an 8% effect size on some 20% potential LCPs.

A 2012, cited in Appendix 4, reviewed the literature and found estimates indicating that LCPs account for between 5% and 10% of the population. While subject to considerable uncertainty, the social value analysis in this report has adopted as a central estimate an impact from the Bond as reducing potential LCPs by 2.5% of the size of the full intake. This reflects an estimate that, of the most risky 10% of offenders, half are immediately streamed into court or custodial routes, and the remaining possible 5% GYT is successful with half.

Overall Social value

Social value actually delivered during the programme's existence, up to September 2023, is estimated to have been \$34m, as compared with a net present value of costs to the Government of \$16.2m (excluding transfer payments such as interest). Even in this short period the programme delivered actual social value around double its costs.

Over a longer period, the benefits grow as former clients continue to live lives with improved wellbeing outcomes for themselves, their families and the community. The overall lifetime social value delivered through the Bond is estimated to be around \$193m, or close to twelve times its cost (well above the 2017 Business case estimate full life estimate of 1.6 times).



This result is subject to considerable uncertainty, but parameter values are generally taken from externally referenced data points. The valuation excludes some benefits for which values were not readily observable, for instance the value of a driver's licence. It also does not measure gains to the families of clients, where it is clear from qualitative feedback that aspects of family life were enhanced by the Bond programme. It also makes no valuation of the learning gains, the innovations in service design and delivery which may be applied to future GYT clients or spread more generally through the sector

(eg gains from use of the YLS/CMI tool, the data-informed MDT approach), nor of gains from the learnings from this pilot SIB as they are incorporated into other outcome-based social sector contracting. Those gains will need though to be realised through application in new contract design.

Gains from intervention programmes like this are often substantial, see for instance the comments from the Government's Science Advisor after a review of the literature around prevention of youth offending, in 2018:

“Overall, the research shows that early prevention programmes are effective in substantially reducing long-term criminal justice costs.”
page 28 (Gluckman 2018)

Returns viewed from an investor perspective

Given the novelty of the SIB for NZ capital markets and the real risks associated with an innovative proposal, the investors who took up the bonds had a high degree of alignment with the purpose of the Bond and a desire to deepen NZ's impact investment market. All those spoken with expressed satisfaction with several aspects of the Bond:

- They appreciated an open and transparent process where they had insight into what was happening (based on a data-informed dashboard) and discussions with G-Fund.
- They appreciated being able to use their commercial skills and background to bring extra clarity to decision-making on some strategic choices about whether to lift/shift resourcing.

There were also some issues of frustration and concern identified:

- Contracts were very complex for the size of investment.
- There were several options that could have been used to reduce some of the risk around the initial bond offering.

Financial returns

A commonly expressed view about the bonds during the capital raise was the real difficulty of establishing a valid risk assessment, certainly something sufficiently rigorous to meet requirements of fund mandates. Consequently ANZ sought a Due Diligence report from BrightLight (an Australasian impact investment advisory firm) outlining their assessment of relative risk.

None-the-less there was low interest in the initial bond offer. This seemed to reflect a position that while the risk return offering was adequate, existing mandates did not provide for such an innovative product. What was also

needed was an interest in this sector and/or some wider interest in developing the impact/outcome-based contracting market.

Hence, while the final ex-post return paid on the bonds was higher than rates for many other classes of debt, it reflected an ex-ante rate that was required for a product

with mixed debt and equity characteristics, embodying many of the risks of start-up equity offerings.

But having been through the process, most of the investors expressed considerable interest in further investments of this type, and certainly in further GYT offerings.

Outcomes 3: what other benefits, especially innovation, did this initiative deliver?

In designing the planned services supported by the Bond, GYT was forced to innovate and develop new and better interventions. These

were derived from distilling lessons from past practice and looking at best practices from overseas.

New tools and use of the data they provided

- A key innovation was use of the YLS/CMI tool, derived from a credentialled model used overseas. It required more explicit assessments of clients to assess the root cause or main (top three out of the eight possible) criminogenic risk areas behind the youth offending, informing the areas of focus for the Genesis team.
- The use of a validated tool to better understand and measure changes in criminogenic risk, combined with a timely reporting system enabled “brain and heart connectivity”, made the intervention more systemic and repeatable.
- Improved data and reporting/visibility. A weekly dashboard was developed, circulated to staff and managers. This required learning how to automate weekly reports based on a combination of specific Police client data on offending with internally generated YLS/CMI data, and staff resourcing. The dashboard measures showed changes in youth offending frequency and severity utilising offence severity ratings. This data meant that staff could identify which discipline, which team, and which individual worker was working most effectively to achieve better reductions in offending. Equally key stakeholders in Police, Oranga Tamariki, and investors could see the results being generated, and the resourcing associated with those results.

Changes to the services and how they were delivered

- Another key innovation was a broader, longer set of wrap-around services- where the direct linkage with YLS/CMI enabled improved targeting. GYT created a new process where the MDT would meet after an assessment was completed, and agree what intervention (intensity, timeframes, specific needs, best staff to allocate etc) was required, drawing from social workers, mentors and counsellors to create one plan for each client. GYT included the client and their family in this decision making, working in partnership. This MDT meeting would continue throughout the two-year intervention each time a YLS-CMI assessment was completed to re-align and adjust interventions. This enabled staff to respond appropriately to the YLS score and adjust their priorities and intervention. Their aim was always to reduce the YLS score, focussing intervention effort on the top 2-3 scoring criminogenic areas eg family relationships (counsellor), education (social worker), peers and pro-social activities (mentor).

- The Bond saw a longer client engagement period, of two years which was itself an innovation from past practice of typically just three-month engagements. A learning was that support, and especially the need for any further YLS/CMI assessments, needed to adapt more to emerging findings, ie when risks were low the assessments could stop, and clients exited). Not all clients needed 24 months of intervention. Once YLS scores got down to under ten the youth typically did not reoffend, and the learning was that they could be exited earlier. Equally if there was a significant negative event in the young person's life, GYT could increase the intensity of intervention eg, grief and loss after losing a family member.
- The Bond also saw more focus on extending the range of multi-disciplinary services, eg picking up whole-of-whānau support. But again a lesson was that perhaps there was less adaptation than might have been possible. A key to working with the whole of whānau was whether the whānau was keen and open to engage with the counselling, family therapy, and whānau programmes. An important learning was the need/benefit from early family engagement, involving them in choices and gaining their agreement to programme.
- Genesis did utilise the learning from the Social Bond contract to innovate other programmes/services around youth aggressors involved in family harm incidents (Genesis Whakamana Rangatahi), involvement in Youth Justice mentoring/counselling to be flexible with the menu of service offering and timeframes, and with a new OT contract to deliver mentoring to tamariki involved in ram-raids from South Auckland.

Innovation dissemination weakness

- The learnings around improving the intervention have largely remained with GYT staff who are still retained by the organisation, including skills around YLS/CMI assessments, knowledge and ownership of the model used to deliver the Dashboard, and understanding around using those data insights to adapt practice. This reflects two main factors:
 - o The Bond arrangements where, as is typical for SIBs, learning insights remain primarily with the service provider, not the funder.
 - o The primary agencies involved, most notably Oranga Tamariki who were the Purchaser under the contract, took little interest in the bond and saw high turnover amongst the individuals assigned as key contact. Police were supportive but experienced high turnover at key connection points - Youth Aid officers at relevant stations.

Outcome contracting and impact investment- current New Zealand overview

Current state of outcome contracting for social services in New Zealand

For this report, staff from the Treasury, Te Whatu Ora, Ministry of Social Development, Oranga Tamariki, the Social Wellbeing Agency and NZ Police (plus some policy advisory groups) were interviewed regarding the state of outcome or results-based contracting across the \$60-70 billion government spending each year on social services across New Zealand.

- **Social sector commissioning model**

Government has established a team to explore and develop new contracting

“Work is underway across government agencies (jointly led by the Ministry of Social Development and Oranga Tamariki) to improve the commissioning of social services in New Zealand. Progress towards a better system has begun. This includes more sustainable funding models, client and whānau-centred design and innovation, supporting community-led initiatives, longer term contracts, simplified contracting and procurement processes and partnering with iwi and Māori communities”.¹³

This strand places considerable stress on the benefits from adoption of a co-creation relational approach. It reflects a response to often complex social needs with intertwined contributory factors and multiple linked outcomes. It is seen as important to share between the government and affected groups the process of deciding what is important and how challenges can be addressed with enduring solutions. Some key challenges exist

No-one spoken to could point to genuine outcome-based funding models with any significant degree of funding contingency, such as funding dependent on measured outcomes achieved¹². Nonetheless two broadly connected and supporting threads of activity were identified:

approaches for social services:

in this approach, similar to those for the social bond: the analytical and data needs to determine causality and contribution can be difficult requiring expertise and tools that are not widely available. Similarly, robust accountable contracting that provides transparency and a clear outcome focus may be diffused through the adoption of a multiplicity of unranked desirable outcomes.

¹² Interestingly the Government does operate many clear outcome contracts with contingent payment mechanisms in other areas, for example construction. Even in those areas the payment mechanisms are about the output not being at the quantum or quality, or timeliness specified rather than being full outcome contracts.

¹³ See <https://www.msd.govt.nz/about-msd-and-our-work/publications-resources/planning-strategy/social-sector-commissioning/index.html>

- Whānau Ora commissioning and contracting

The Whānau Ora Commissioning Agency has been established to support a culturally-based and whānau centred approach to wellbeing

focused on whānau (family group) as a whole, as the decision-makers who determine their goals and aspirations.

“Standard funding models invest in tightly defined services and activities that are specific to a service or programme. They focus on unit costs, prescriptive activity, targets and exacting outputs, making services rigid with little flexibility to respond to changing circumstances and needs. Deficit-focused data requirements ask what’s wrong and how to reduce it – creating a missed opportunity to take a more preventative and strengths-based approach.

We work with our providers, co-creating long term solutions, taking a more preventative approach to existing and emerging concerns. We stimulate innovation by moving away from over-specified services and working collectively with all our Whānau Ora providers, whānau, and communities to explore ideas and activities that lead to successful outcomes. Ultimately, recipients are best placed to say how the service is working and what could be done better – thus allowing us to grow and move forward together”.¹⁴

This approach has a number of common elements with the more general social sector commissioning model, although applied

specifically to funding for Māori initiatives. An example of an outcomes statement from a recent trial is included below:

“The Ngā Tini Whetū Pilot has shown that Whānau Ora approaches are effective in supporting whānau to address poverty-related issues. Ngā Tini Whetū is a whānau-centered, strengths-based and locally led approach to supporting whānau to achieve their aspirations. Through Ngā Tini Whetū, the six outcomes of the Child and Youth Wellbeing Strategy have been achieved by whānau. Whānau pursued many, diverse moemoeā through Ngā Tini Whetū that contributed to creating safe, loving homes for their tamariki. Many whānau demonstrated a willingness to engage in activities and seek support that contribute to the wellbeing of their tamariki, such as counselling and parenting programmes, and through their Ngā Tini Whetū journey, they have experienced beneficial results. These actions have also positioned whānau to be more financially resilient and reduce the danger of slipping back into poverty and crisis.”¹⁵

¹⁴ Taken from page 22 of the Whānau Ora Commissioning Agency’s 2022-23 Annual report: https://whanauora.nz/assets/resources/WOCA_Annual%20Report_2022-23.pdf

¹⁵ Page 22 of E TIPU, E REA NGĀ TINI WHETŪ THE COLLATERAL CHANGE FOR REDUCING CHILD POVERTY 2022 <https://whanauora.nz/assets/resources/E-Tipu-E-Rea-Reducing-Child-Poverty-Report-Digital-FA.pdf>

Some agencies also pointed to other smaller trends, for instance a move towards more place-based initiatives (PBIs). Some com-

mentary from the 2019 evaluation report is included below:

“PBIs are inherently about innovation, trialling a new approach to social investment using “the expert knowledge and judgement of local decision makers, in conjunction with national level data and analysis in order to gain a much improved understanding of what the local needs are”.

One of the initiatives in Te Tai Tokerau stopped. Innovation is risky, but that didn’t kill the whole concept, nor should it. Each of the three trials was done distinctly to learn about different approaches. The initiatives also attempted to use the IDI and the Bayesian method to quantify value. However, this did not work (mainly as IDI is deficit based and not reflective of Māori wellbeing values) so they too stopped before there were misaligned deliverable expectations relating to IDI use”.¹⁶

Other approaches identified included joined-up partnerships (eg Te Hiku accord, a post-settlement agreement with Te Hiku o Te Ika Iwi) and some limited examples of outcome focused performance targets and reporting, for example in MSD employment programmes.

Another supporting trend, the need for better data to inform decision-making, was identified by Oranga Tamariki in the actions set out in its Future Direction Action Plan:

“5.6 Embed evidence-based decision making from sites to national office, that encompass several actions including implementing new performance reporting tools to make data and information available to all staff to inform decision-making.”¹⁷

A concern identified by some was that commissioning systems often appeared void of any objective measures or deep audit, making it hard to know whether the intervention was having the impact claimed. Connected to this was a concern around the quality of contract

reporting, monitoring, review, and modification by the commissioning agency, which often seemed to be missing in action. This is echoed in recent commentary by the Auditor General:

Te Puni Kōkiri should prioritise completing its work to improve its ability to measure and report on impacts from Whānau Ora and its contribution to improved whānau outcomes. It should also make monitoring, research, and evaluation information on Whānau Ora and whānau-centred approaches more accessible to public organisations and others.¹⁸

¹⁶ Taken from the Social Wellbeing Agency’s evaluation of Place Based Initiatives: <https://www.innovationgps.co.nz/post/place-based-initiatives-evaluation-social-wellbeing-agency>

¹⁷ Oranga Tamariki Future Direction Action Plan 2021

¹⁸ Summary: *How well public organisations are supporting Whānau Ora and whānau-centred approaches*, Controller and Auditor General 2023: <https://oag.parliament.nz/2023/whanau-ora/docs/summary-whanau-ora.pdf>

Current state of the broader outcome/impact-based investing sector in New Zealand

Impact investing and outcome achievement linkage

Although perhaps lagging behind the progress in international markets in terms of depth, breadth and sophistication, impact investment in New Zealand is growing and maturing. Market participants (funders, investment managers, asset owners and operators, firms and not-for-profits) are at various stages of working through a process which begins with articulating a desire for making an impact, perhaps associated with loosely defined impact objectives. The next stages require rigorous impact definition and measurement (aligned with emerging international standards), transparent evaluation and reporting, and finally clear reporting accompanied with independent impact auditing.

No clear data are available which provide a breakdown of impact assets/bonds which move beyond transparent articulation /measurement and reporting of desired impacts and include specific outcome achievement linked consequences. Anecdotal discussion with some Global Impact Investment Network

(GIIN) members suggests the proportion is low internationally, and by and large funders/ investors expect benchmark returns on impact investments in line with other investments. This may gradually shift as the demand for clear impact reporting (and achievement) becomes even stronger, and as external reporting moves to standardise impact reporting alongside financial measures.

In New Zealand Spark has however issued a sustainability linked bond 'SLB', but this is the only one to date.¹⁹ Under this bond Spark pays a higher interest rate on the bonds if specified greenhouse gas emission reductions are not achieved. There have been a number of loans structured as sustainability linked loans 'SLL's²⁰. While the majority of SLLs and SLBs have environmental KPIs some have social KPIs as well. A New Zealand example of an SLL that included a social KPI in the transaction is that issued by Oceania where it will pay a higher interest if it does not meet its targets²¹:

"The SLL is linked to three Key Performance Indicators ("KPIs") that cover environmental and social aspects of Oceania's sustainability ambition and business strategy. Oceania's Sustainability Performance Targets ("SPTs") associated with the SLL are to:

1. Reduce greenhouse gas emissions in line with targets approved by the international Science Based Targets initiative.
2. Increase the diversion of construction waste from landfill.
3. Improve resident experience and wellbeing."

Note: There have been a number of green bonds issued within NZ, most commonly associated with CO2 emissions reductions (eg Auckland City Council Green Bonds) but they

are not included here as they do not contain specific contingency components related to target achievement.

¹⁹ See [Spark Finance issues first Sustainability-Linked Bond \(sparknz.co.nz\)](https://sparknz.co.nz)

²⁰ These products are aligned with either; for Sustainability Linked Loans – LTSA/APLMA [Sustainability Lined Loan Principles \(SLLP\)](#) or for Sustainability Linked Bonds – ICMA [Sustainability Lined Bond Principles \(SLBP\)](#)

²¹ [Oceania Healthcare Limited](#)

Successes, challenges and impacts of the SIB contracting arrangements: key lessons for future results-based/outcome contracts

Effort at the beginning to carefully define what you want and how to measure it is crucial

Earlier commentary highlights the tension that exists currently around the best ways forward to tackle disadvantage and strengthen communities. Put simplistically, one stream emphasises the need to co-create solutions with impacted communities to develop enduring solutions, and to avoid imposing one party's view on which outcomes matter. The other stream emphasizes the benefits from rigorous data-informed analysis to select a set of more important outcomes that can be measured and seem amenable to improvement.

An approach that implements both streams is possible. This bond illustrates that certainly for youth reoffending a clear focus on a well-defined but limited set of outcomes can deliver large benefits, and benefits which extend beyond the initial narrowly defined targets. Delivery was then adapted as staff worked with clients and their families.

But defining outcomes and measurement is hard. It requires initial policy/data work

identifying outcomes and defining the actual metrics and data that generate the most suitable evidence (sometimes proxies are required). This needs to combine reviews of the literature, data analysis and good policy/service design in conjunction with providers. This unpicks which outcomes matter, can be measured and are impacted by the intervention. It also requires some pragmatic but well-informed commercial judgements about how payment structures can be set up- typically desired outcomes are years away so some intermediate indicators are required to trigger early revenue flows into a service provider/bond.

The Bond introduced a level of sophistication into the performance of a programme. Typically a programme like this in Government might report quarterly with bland set of activity reporting. The data enabled a much deeper set of insights/exploration into the theory (and practice) of change- looking at how the intervention model was working.

Creating a clear contract that facilitates investment and permits adaptation

A helpful description of the contract framework is tight loose tight: tight outcome expectations, loose service specification, and tight on monitoring and payment only for desired results.

The clear and measurable outcomes for the Bond created a frame where the government could commit to a long-term contract (poor outcomes would be clear and enabled the

contract to be terminated) while also giving enough certainty for GYT to invest in better assessment tools, data systems, and staff development. The explicit outcomes focus meant that GYT was free to adapt its service model- enabling innovation and the funding over a six-year life supported investment in systems and people. This is not dissimilar to a recent finding for an Australian SIB:

“The evaluation found that the key innovative features of Aspire—intensity of supports, flexibility to tailor supports, and the long duration of supports—were unlikely to have been possible without the resourcing levels provided by the SIB.”
(Coram 2022)

OT commented on how unusual the bond contract was, with little service specification, and that they had expected to see more on the intervention model. Their role was in practice reduced to standard setting and audit. In practice this resulted in a relatively low level of engagement with GYT as the bond progressed (and high turnover of key contact staff), potentially limiting some learning opportunities.

This review though identified that some innovation opportunities were missed, Despite a data-rich dashboard that provided clear information on what was and was not working, in practice only a minority of GYT managers took much time to analyse and apply its insights. A lesson is that more training would be helpful for what was a significant change in practice.

Managing contract complexity and lead-times

SIBs are contractually complex- the literature indicates an average 18-month development time- and they have remained a relatively niche product at one end of a spectrum of outcome based contracting approaches.

A solution used in other jurisdictions to some of the complexity and timeframe is to develop some templates for basic documentation and contracting along with streamlined procurement, and a dedicated capability/group

of people that understand how to develop contracts, providing support to the Crown and interested service providers.

Another learning from the commencement of the Bond was the benefit from allowing a ramp-up/training time between contract finalisation and service start date. For a variety of reasons this did not really occur for the Bond, resulting in a slow client enrolment over the first six months.

Managing the unexpected

The inevitable flipside of very specific long-term contracts is that there will be unexpected developments. For the bond there were probably two that stood out: a change in government soon after the bond began and the impact of Covid-19.

The change in government was accompanied by ministerial suspicion of social bonds which translated into reduced departmental interest. The crucial impact was that front-line staff were less motivated to maintain strong referral flows into the Bond (and the contract did not guarantee any flow levels, rather it had been based on analysis of the large potential client pools). Overall, only 607 clients were enrolled rather than an expected 1000.

Covid-19 lockdowns drastically curtailed staff direct contact with clients and the ability to connect them with relevant services.

The contract mechanism had provisions for G-Fund to reduce funding to G-Op to reflect lower client flows, and they were utilised, as well as a general provision that permitted almost any change by agreement between G-Fund and OT. While G-Fund sought to extend the contract life in negotiations with OT to reflect the lower pace of enrolments there was no corresponding interest so negotiations lapsed.

Government agencies, looking across boundaries and into the future

Initial design work for the bond was carried out by a cross-agency team, working with key contacts across all affected departments. But the impetus for the work came from a clear ministerial direction and the establishment of dedicated funding pool for development of social bonds. Due in part to restructuring the key youth justice agency (Oranga Tamariki) was distracted and would not have signed the fully prepared Bond documentation in a timely way without ministerial encouragement. A separate dedicated funding pool also emerged as a vital prerequisite. Strong support from ministers who looked across individual departmental boundaries was needed to push through a lack of urgency and support from individual agencies.

Working across providers and government agencies can be a real bonus, joining together services in these challenging areas, but in this case it proved to be a real challenge to integrate organisations that have operated in more siloed ways in the past. Government agencies are largely incentivised to look at short-run fiscal impacts, not longer-term and preventative initiatives that may save money later. This process also demonstrated they

were poor at working across agencies even when the same client group was involved, but across multiple domains. An issue for departments is that benefits often only accrue after several years (well beyond most budget cycles and the attention of senior managers and politicians). The long term of the contract was also a challenge for departments where key staff were changed at relatively frequent intervals.

This problem is not unique to New Zealand. Other countries such as the UK, Australia and more recently Canada have tackled it through the creation of a separate body dedicated to achieving better social outcomes through forms of results-based contracts (including social bonds)- for example the Life Chances Fund in the UK. This is both a pragmatic solution to mixed line agency incentives and a more principled response: the Government is clearly providing a funded voice to represent benefits that accrue to society but emerge across departmental boundaries and over much longer time frames.

Another approach was used in the UK's Kirklees Better Outcomes Partnership (KBOP):

System orchestration. From the start of the SIB programme, KBOP stakeholders articulated a strong ambition to foster cross-sector collaboration. The requirement for cross-sector collaboration is outlined in the contract. More importantly though, the KBOP project director showed a strong intrinsic motivation to foster cross-sector collaboration within and beyond the immediate KBOP delivery network. Page 87 (Rosenbach 2023)

Anticipating and supporting cultural and structural change in smaller service providers

The structural and cultural changes required of the service provider were not adequately anticipated and hence well planned for across the organisation: the significant demands to be able to complete the contract negotiations to establish the Bond limited available attention to prepare as deeply as would have been preferred. GYT needed to scale up, more than doubling in size, as well as adapting its intervention model - employing a wider set of workers/skills. Perhaps the largest surprise was the cultural change: at its core GYT needed to shift from a fundamentally passion driven model to one where that passion was complemented for a transitional time by learning and enabling new tools to track evidence and effectiveness. Staff were required to complete more frequent assess-

ments, using standardised tools. Managers were provided with a comprehensive and timely dashboard that allowed comparisons of achievement between teams, and analysis of which parts of the programme were working more successfully. The bond contract allowed GYT to adapt its model without OT involvement, though this adaptation happened less than hoped for.

GYT was fortunate to recruit a highly experienced chief executive for a transitional period who then remained for a further period on the GYT Board. After this period, GYT struggled for a time to find a chief executive with the broad and relatively novel (for a small non-profit) skill set required, as reflected in the high turnover.

Involvement of investors- more than finance

Risk and innovation are effectively flip sides of each other. If a goal for social service contracting is driving innovation, which is the end of the spectrum SIBs are positioned, then higher risk will arise and need to be managed. Financial markets generally have well established mechanisms to deal with a wide range of risks, but SIBs typically (and certainly in this case) have risks that don't fit within most risk tools.

Suggestions offered to reduce risk involved the provision of a credit rating and/or more of a guarantee/underwrite. Liquidity was also a very real issue at the time of the bond offer although with growing depth in the impact investing market this may be less of an issue now.

Investors also commented that the Bond was very complex relative to its size and impacts on their portfolios. It required a lot of effort

to understand the performance metrics and process (a lot of elements, many new to analysts and some untried). Due diligence was hard.

Investors appreciated the opportunity provided by the G-Fund Board which gave them space to participate. Given the novelty of the Bond, and its risk, a collaborative approach was important along with transparency and visibility for investors. In turn, G-Fund appreciated the approach investors brought to meetings, where they focused clearly on performance and risks and responsiveness. They brought a clear commercial approach, working to identify any areas that were not working well and contributed to finding solutions that strengthened performance, even if that involved additional costs. This aspect may reflect a unique confluence between the parties.

Innovation and its dissemination

Often reviewers have commented that the inevitable constraints in developing fundable proposals have led to reductions in risk, and consequently, novelty and innovation.

A number of reviews of SIBs have also

identified that while they were designed as an instrument to spur innovation, actual innovation was less than anticipated. This is exemplified in this comment from one 2020 review of four UK SIBs (page 3):

“MIXED RESULTS TO DATE ON INNOVATION

Research to date suggests that, while SIBs have had some success in bringing social investment into public services and have, in the process, transferred risk away from service commissioners and third sector providers, their record on innovation is less clear. SIBs have undoubtedly exhibited elements of financial innovation and often encouraged a greater emphasis on performance management and accountability within delivery organisations, but they have yet to demonstrate that they are an effective model for fostering innovation in the design and delivery of services”. (Fox P. 2020)

In the case of this Bond there have however been clear innovation benefits. But the contract structure means detailed knowledge of the key innovations remains within GYT as a form of intellectual property. This issue,

where SIBs foster innovation but then have limited mechanisms to share that learning more widely has been identified as a more general shortcoming. For instance see:

“Finally, while the Aspire SIB proved successful in terms of investor returns, social outcomes, contributing to the evidence base around what works in responding to homelessness, and capacity-building for both government and the service provider, there are opportunities for consolidating and sustaining the learnings generated by the SIB as the funding mechanism for the program.” (Coram 2022)

There are potential arrangements to tackle this issue, where contracts might explicitly include provisions for sharing learning, training others. But to reduce risks of service providers then facing service loss to competitors there may need to be offers of longer-term contracts for that service provision (subject to basic ongoing performance requirements).

As commented in an earlier section, finding

ways to ensure relevant agencies remain interested in the innovation that is occurring is crucial. Ultimately any outcome-oriented social service innovation will be dependent on some crucial interfaces with departments (regulatory, audit, possibly referrals and/or connections to other government services) to operate well, and departments will generally have a much wider set of service providers where they could help share any innovation lessons.

Summary of the most significant learnings

1. This bond has demonstrated the potential to make very large gains in wellbeing through better contracting approaches, potentially applicable across a variety of social services.
2. Time spent on the initial policy analysis and identification of which outcomes matter and how they are impacted provides the critical platform that ensures incentives can be designed effectively for subsequent contracting and service delivery.
3. While key outcomes might be narrowly defined, even for complex issues, smart programme design and allowance for adaptation can mean that the programme does deliver a much wider set of wellbeing improvements, as demonstrated with this bond.
4. Where desired longer-term outcomes are the highest priority, it may become important to have robust interim outcome quantification to test and prove value along the way, but not at the expense of replacing good measures and incentives for achieving those long-term outcomes.
5. Some social issues can be tackled with focus on a limited set of specified outcomes. Although some others may involve more complex multi-factor causal factors, this creates a premium for working through those issues to identify areas amenable to clearer outcome-based contracting, and to allow some adaptation as new needs emerge.
6. The risk of poor performance and limited outcome achievement in social services is typically largely borne by the government and impacted groups, often with limited transparency. Outcome-based contracting offers the chance to shift that risk away from the government, creating greater transparency about what is being achieved (or not) and incentives to deliver better outcomes.
7. Long experience and powerful passion of front-line staff can be informed by the judicious creation and use of data to make changes that deliver better outcomes and improve lives.
8. Organisational change should be expected and planned for as data-led outcomes-based contracts are undertaken, especially impactful on smaller service providers. Similarly, cultural change may be required for government staff who become more involved in set up and audit and have to let go of implementation and instead encourage innovation.
9. Outcome-based contracts for social services, especially social impact bonds, can be complex and time consuming. Several supportive factors need to be put in place to reduce this load including the development of more standardised templates and resources, and establishment of a dedicated capability to help the often-small potential providers navigate through the process.

10. Investment in new service models and the supporting data and analytical tools can be costly especially for small service providers. Longer-term contracting helps offset this, but alongside that the Crown needs to have clear outcome-based contracts, coupled with realistic monitoring systems to mitigate risks of lock-in to poor performance.
11. This outcome-oriented bond would not have occurred if development of the initiative had been left with line agencies responsible across the youth justice space.
12. Within-government structural options and financing arrangements need to be adopted that expedite new outcome-based contract while still meeting standards for procurement and good contract design. Overseas experience indicates the benefits of creating a dedicated outcomes fund with supporting infrastructure.
13. Perhaps even more important than support for contract simplification and development is a need to shift the incentives on departmental chief executives and their staff so that innovative and cross cutting contracts like SIBs receive genuine support at all points of linkage- client referrals, regulatory/ standard setting and audit, and client linkage into other government programmes.
14. Alongside the greater support and connectivity with government agencies is a need to develop better systems for spreading innovation developed within a SIB to similar activities carried out by others without reducing incentives within SIBs to develop that innovation.
15. NZ financial markets have increased their involvement in impact related bonds and equities substantially since this bond was introduced, with interest expressed in further opportunities.

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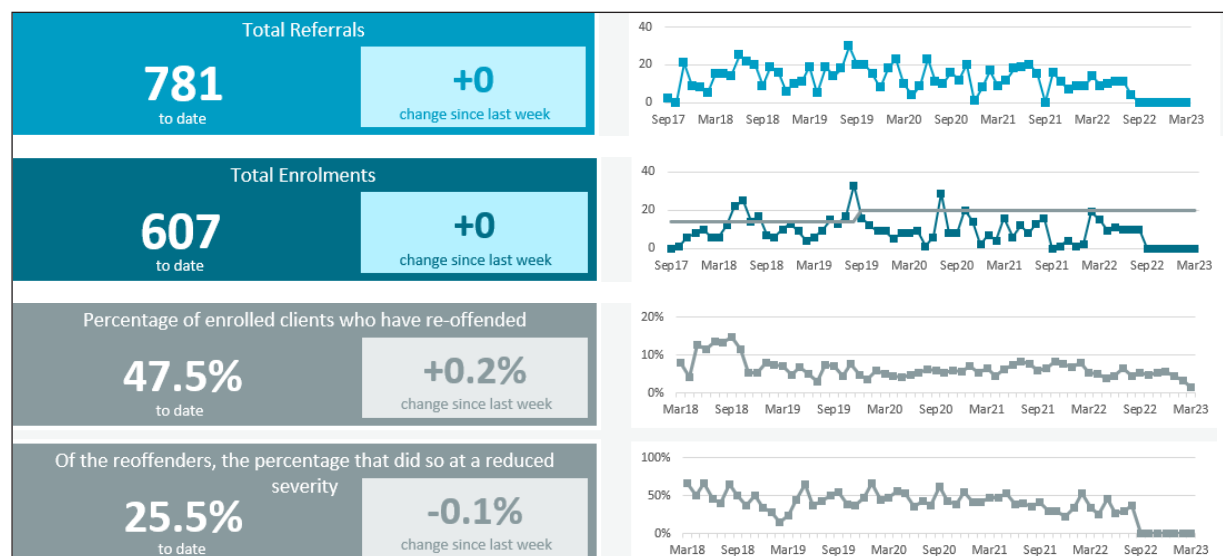
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Appendix One: Excerpts from G-Op Dashboard

Included below are a variety of excerpts from the data Dashboard, a weekly compilation of data relating to the social bond drawn from Police offence data, G-Op's staff completion of YLS/CMI assessments, and administrative data on staff allocations taken from GYT systems. It included information on referrals,

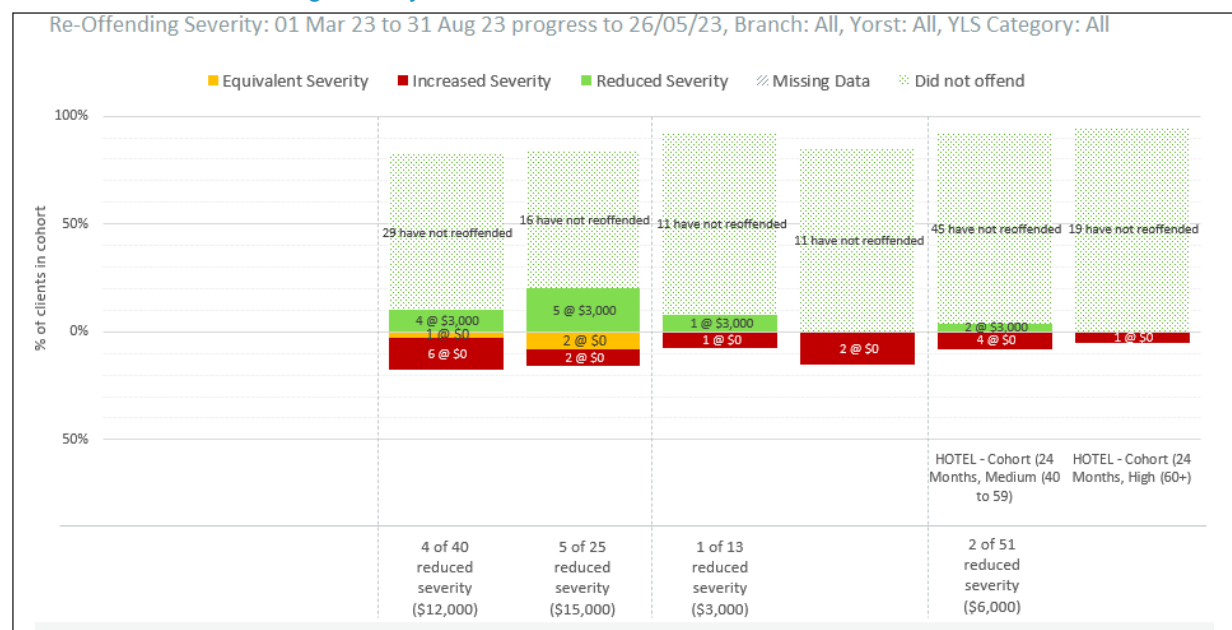
enrolments, an update on client flows and their current status, various cuts analysing YLS/CMI scores and any changes (by domains, including changes broken down into G-Op team locations), reoffending updates.

Dashboard 1: Summary page



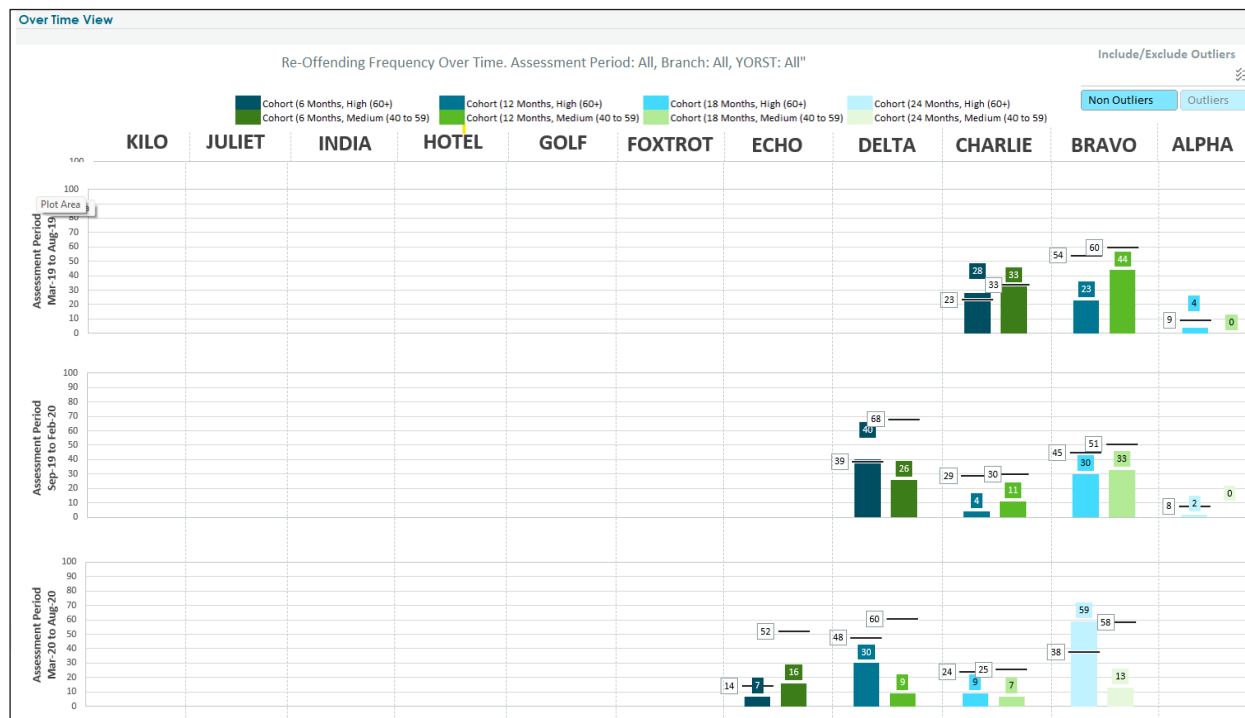
At a glance, overall numbers and key reoffending outcome information.

Dashboard 2: Reoffending severity



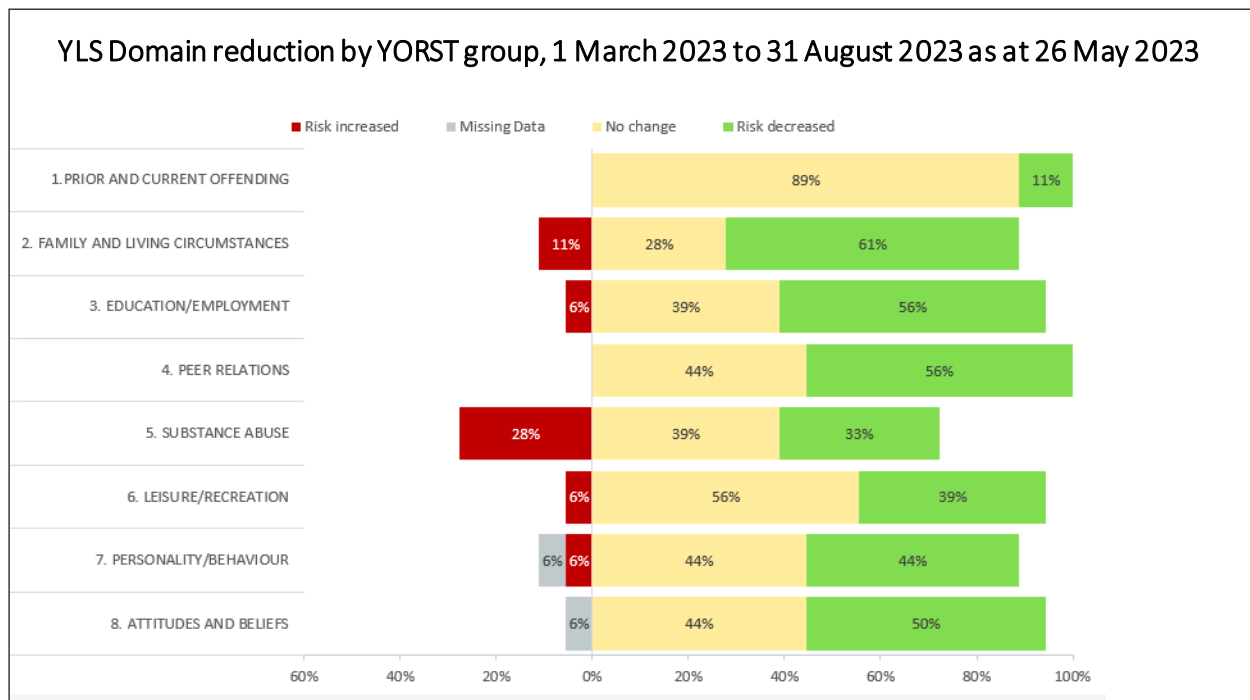
Summary data that indicates, for different cohorts, the pattern of reoffending severity, enabling comparisons across cohorts.

Dashboard 3: Reoffending frequency



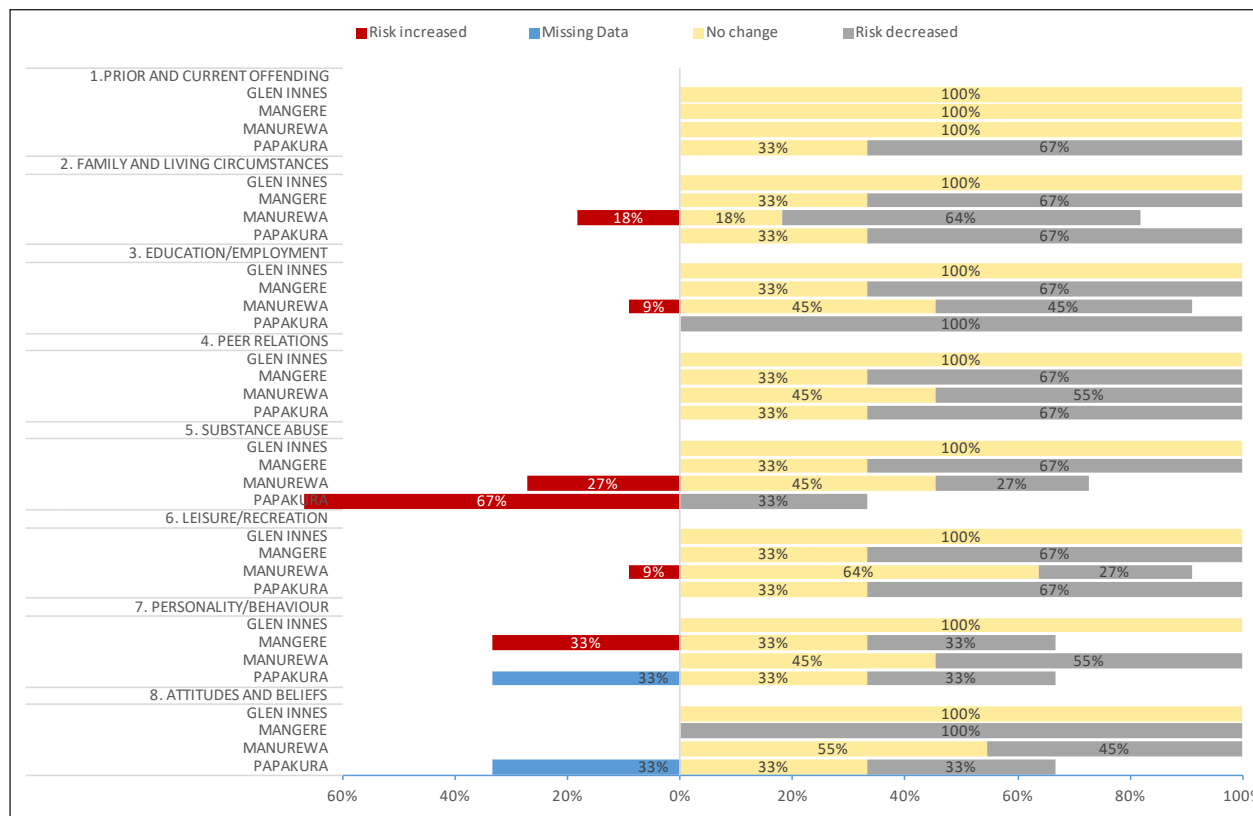
This graph provides grouped information on reoffending against the benchmarks, for each 6 month cohort (split by YORST) and by GYT office/team (*note the cohort labels are not shown in this picture but results are presented for three active cohorts*). The format of the results also allows comparison between cohorts, where the most recently enrolled cohort is the lefthand set of columns. It allows quick comparisons for instance of outcomes at similar programme stages (albeit in different time periods) or comparison of outcomes across different cohorts for the same six-month period.

Dashboard 4: YLS/CMI criminogenic risk



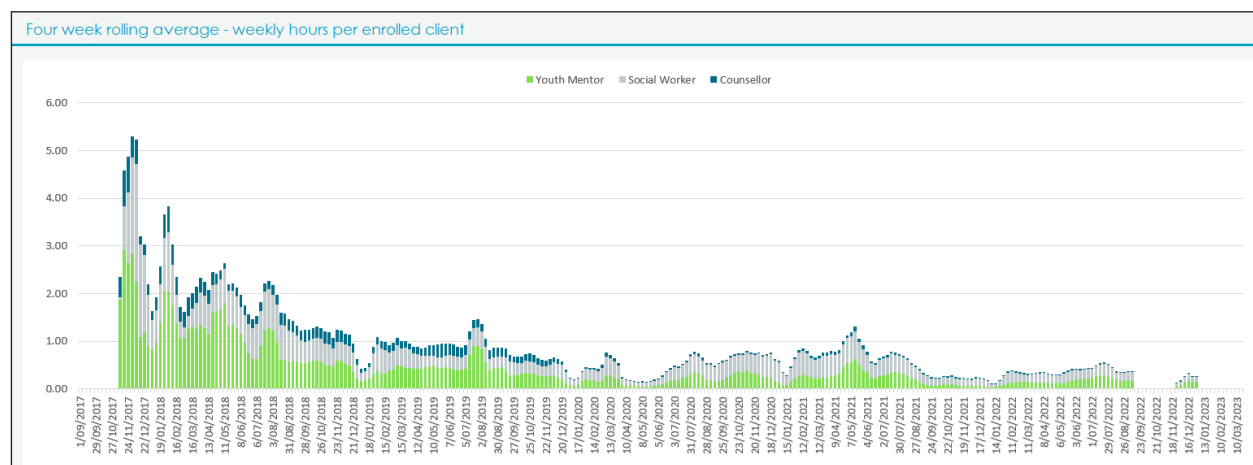
Shows the differing levels of change in criminogenic risk (as measured by YLS/CMI across the eight domains, where in this example it is substance abuse that is showing the lowest degree of improvement (on average).

Dashboard 5: Risk data by YLS/CMI domain and GYT team site



This graph shows the breakdown in YLS/CMI score changes shown previously, now broken down between offices- informing discussion about whether practice or client mix was contributing to these different outcomes.

Dashboard 6: Team resource application



At-a-glance indication of the total resource intensity per client over time and the mix between different staff skills.

Appendix 2: Key findings reported in Oranga Tamariki's 2023 Qualitative outcomes evaluation

This section copies material from the Executive Summary of the recent report, pages 11-14 (used with permission). For readers unfamiliar with Māori language used: rangatahi is the word referring to the younger generation, "youth" and whānau refers to the extended family or family group.

In total, 823 rangatahi were referred to the Service and 607 (74%) were successfully enrolled and engaged with Genesis. Overall, the risk of offending for participants

(as measured by YLS/CMI) significantly decreased as they progressed through the programme.

Rangatahi and whānau achieved their aspirations across the domains of Te Whare Tapa Whā (KEQ1)

Rangatahi (and whānau) spoke about achieving personal goals, and the deliberative practice of regular goal-setting discussions with Genesis.

unpacking (and building) aspirations, given many rangatahi are initially hesitant to engage with services.

Rangatahi emphasised the unconditional love and trust they experienced with Genesis, which helped them open up and begin to think about goals, dreams and aspirations. The Service positions trust and relationship-building at the centre of their work. This is key to

Rangatahi goals and aspirations evolve throughout their engagement with the Service. Rangatahi discussed how their whole whānau had been helped to think about their own aspirations too, such as parents setting and achieving employment goals, and other siblings completing a driving course.

Positive outcomes were generated across the domains of Te Whare Tapa Whā (KEQ2 and KEQ3) and these outcomes were sustained

Rangatahi achieved positive outcomes across Te Whare Tapa Whā, including improved whānau relationships and communication, progress towards tertiary education, and not reoffending. The changes were lasting; some of the young people interviewed had completed the programme several years ago, and were completing their last year in school, studying in a tertiary institute, or employed. For these young people, the programme profoundly changed their lives. This aligns with statistically significant improvements in YLS/CMI Education and Employment score.

that whānau bonds deepened through the generous and unconditional levels of support from Genesis. There were statistically significant improvements in YLS/CMI Family and Living Circumstance scores.

The whānau interviewed described the learnings and gains made through the Service in regard to te taha whānau. The stated

While there are indications that the programme reduces offending for rangatahi who engaged with the Service, it was not possible to definitively attribute reductions in reoffending to the programme as reductions in reoffending were also observed for rangatahi who did not engage with the Service. We were also unable to control for other explanations for the reduction in reoffending, including maturation of rangatahi or other youth offending initiatives active in the area.

COVID impacted on Genesis during the period examined by the evaluation. South Auckland's experience of lockdown was prolonged, and lockdown conditions exacerbated structural inequities²². This had an impact on

Genesis' ability to affect change. However, the pandemic also developed Genesis' innovation and expertise in exploring creative forms of engagement and intervention.

Genesis upheld and protected the mana²³ of rangatahi and whānau participating in the Service (KEQ3), which contributes to wellbeing of rangatahi and whānau in regard to Te Whare Tapa Whā

Rangatahi spoke about Genesis looking after them, supporting their sense of identity and self-worth. Rangatahi felt that they were loved unconditionally by their Genesis team. For whānau members we interviewed, two of the three described a team that they could call on, with no judgement, who were there for their children and themselves. Genesis staff spoke about enhancing and upholding mana through showing rangatahi that someone is fighting for them, and that they are worthy of being fought for. There were statistically significant improvements in YLS/CMI Attitudes and Beliefs scores.

The achievement of long-term goals, such as reducing reoffending, are supported by

celebrating small wins. This enhances and protects mana.

Rangatahi reported they felt different, had different standards for themselves and reengaged in spaces such as church, school or employment. In regard to te taha whānau, families who were engaged in the service expressed gratitude in seeing the changes in the way their rangatahi carried themselves and communicated. They were proud of seeing rangatahi achieve in their education, get licenses, complete courses or gain employment. There were statistically significant improvements over time in personality and behaviour-related risk for rangatahi, according to YLS/CMI scores.

Improvement across Te Whare Tapa Whā domains is built upon the foundation of well trained, Pacific and Māori community practitioners in multi-disciplinary teams (KEQ 4)

Rangatahi and whānau simply expressed that everything Genesis did made a difference. The investment in building trust was reported by rangatahi as one of the reasons why they wanted to work with Genesis. Rangatahi talked about Genesis turning up weekly, making efforts to find them, and making sure they stayed in contact. If they had a magic wand, they reported they would want every city to have a service like Genesis.

Genesis has a high proportion of Māori and Pacific staff with strong cultural and local

knowledge. The operational management team are Māori and Pacific, and the CEO is Māori, supported by G-Ops, a governance team of commercial trustees committed to Te Tiriti o Waitangi principles and articles. The cultural capacity of the organisation is a key strength of the services they deliver. Genesis staff provide their own communities with culturally appropriate interventions and services.

The multi-disciplinary teams made a difference in the lives of rangatahi, allowing

²² <https://waitangitribunal.govt.nz/assets/Covid-Priority-W.pdf> page 23 Auckland remained at Alert Level 4 until 21 September 2021, when it moved to Alert Level 3. Auckland transitioned into Step 1 on Tuesday 5 October, 11:59pm. At Step 1, people were able to connect with loved ones.

Page 44 It is thus vital that the design and provision of health and social services are founded in the Treaty partnership, in which the tino rangatiratanga and mana motuhake of Māori must be fully recognised.

²³ The concept of manaakitanga encompasses a range of meanings in a traditional sense with a central focus on ensuring the mana of both parties is upheld. In practice, manaaki signals the importance of looking after people.

multiple connection points with the ability to work with rangatahi and whānau in different ways, but ultimately working on the same focus areas (as identified by the YLS/CMI).

Rangatahi and whānau talked about the service being unlike any other they had experienced, in terms of offering a wraparound service, having counselling available, having

The social bonds model contributed to the Whare Tapa Whā wellbeing outcomes reported by rangatahi and their whānau (KEQ 5)

The social bonds model enabled Genesis to invest in service expansion and enabled the provision of wraparound support services in Manurewa, Māngere, Papakura and Glenn Innes; areas in which there were previously no targeted services focused on reducing youth reoffending. The investment provided a form of economic security for a six-year period. This enabled South Auckland to retain its Pacific and Māori practitioners through employment in the Service, building a workforce with a depth of language, culture, and a range of ages and experiences, including kaumātua.

The evaluation also found that the provision of professional governance structures and commercial support was a key success factor of the social bonds model. These were provided through the G-Fund Investment Board, and the G-Ops commercial trustees who administer the functions connected with the social bond. The interest and oversight from the investors provided the impetus for the

a social worker assist with food, clothing and shelter, advocacy, and a range of programmes that they were supported to undertake.

The extended period of intervention allows time to build trust and relationships, which was identified as important for Genesis and rangatahi to create a genuine connection. It also allows time for learning and use of creative approaches customised to the young person.

data-driven practice that the Service adopted, and a strong focus on demonstrating value.

Another key feature of the social bond model is that payment for a service is only made upon the achievement of agreed outcomes. The outcome-related payments provided a clear focus on the reduction of youth reoffending, and prompted Genesis to adapt and innovate, with the focus on 'whatever works' to reduce reoffending.

The social bonds model embeds a data-driven approach to assessment and case planning through the YLS/CMI. This allowed Genesis to make data-driven decisions regarding intervention approach and track outcomes, centred around the focus areas drawn out by the YLS/CMI.

The YLS/CMI scores provided evidence of change to investors that was measurable and internationally tested.

Some changes could be made to the programme model to ensure it meets rangatahi and whānau needs (KEQ 6)

The evaluation identified that improvements could be made to the YLS/CMI assessment tool, which drives measurements and planning.

YLS/CMI is not designed for indigenous communities, or the collective cultures of the Māori and Pacific populations that Genesis works with, and needs to be re-designed to better meet the context of service delivery in South Auckland.

The YLS/CMI assessment measures and targets need to be refined so that reporting is easier. Reporting metrics move between percentages and proportions, scores, percentages above a cut-point, rates of reoffending, and raw numbers. This makes comparisons between metrics difficult.

Further adjustments that were suggested by Genesis include the need to ensure a caseload that allows staff to work intensively with rangatahi and whānau to develop strong relationships, and flexibility in the timeframe for other rangatahi who did not need two years.

The ability for Genesis to deliver on the social bond investment was impacted by the global pandemic, and referral pathways were disrupted by events such as the Christchurch mosque attacks and Ihumātao. There is a need to build flexibility into the social bonds contracting model to allow the service targets to be adapted to unforeseen events.

Appendix 3: Contemporaneous counterfactual evaluation using the NZ Government Integrated Data Infrastructure: Report from Dr Glenn Brown, Synergia Ltd

Did the Genesis Social Bond Programme Improve Outcomes for Rangatahi and Young People at Risk of Reoffending?

Introduction and Executive Summary

Genesis Youth Trust works with at-risk rangatahi to reduce offending in Auckland's most vulnerable communities. In September 2017, it was awarded a Social Bond to substantially improve resourcing for its innovative wrap-around programme that enables young offenders to proudly transform their lives for themselves.

The purpose of our research was to establish whether the programme improved outcomes for its participants. Using the Integrated Data Infrastructure (IDI), a cross-agency govern-

ment database maintained by Stats NZ, more than 500 rangatahi and young people (around 2/3 Māori) who completed the programme were compared to a contemporaneous cohort from the same geographical area matched in age, sex, ethnicity, and risk of reoffending (as determined by Police YORST youth offending risk scores). We compared them on several different outcome variables within the IDI including education, employment, justice, social support, driver's licensing, and consumption of health services.

The key outcomes were that:

Overall, on the clear majority of metrics, measured outcomes for social bond participants were either significantly better or tending in that direction compared to the matched cohort.

There were significantly fewer police offences and criminal charges recorded for the social bond participants than their matched cohort.

Significantly more social bond participants enrolled in tertiary education.

When compared to their paired individuals in the matched cohort, the social bond participants were significantly more likely to have a higher income overall, and a higher income from wages and salary.

A number of outcomes tended in the direction of being more favourable for social bond participants, but the differences were not statistically significant. Specifically, more social bond participants enrolled in secondary education, obtained driver's licences, registered vehicles, used MSD-funded employment assistance programmes, although these differences were not statistically significant.

There were no clear differences in the number of people consuming benefits or the number of people who completed a recognised course of education. The education completion counts were, however, small and may have been limited by the opportunity to complete courses of education.

Although this outcome was not expected initially, participants in the programme were associated with significantly fewer hospital events, use of prescriptions, and consumption of mental health services.

Disclaimer

These results in this report are not official statistics. They have been created for research purposes from the Integrated Data Infrastructure (IDI) which is carefully managed by Stats NZ. For more information about the IDI please visit <https://www.stats.govt.nz/integrated-data/>.

Research Methodology

Research Design

The research design is a direct comparison between social outcomes of those who participated in the Genesis programme, and a counterfactual group that is matched on as many important variables as possible (including YORST risk), but that did not participate in the programme. As such, any outcome differences between the groups can

most likely (but not definitively) be attributed to participation in the programme. While this design is not as ideal as one with randomised allocation to experimental and control groups, it is the next best thing – and perhaps the best design permissible in the context of ethical considerations.

Community Consultation and Ethical Considerations

To ensure compliance with Te Tiriti o Waitangi and foster alignment with iwi, Genesis Youth Trust engaged with numerous iwi/mana whēnua, marae, and urban authorities across the Auckland region prior to commencing the Social Bond programme. All stakeholders who provided a formal response supported the programme. No negative responses were reported. Kaimahi within Genesis Youth Trust are representative of the wider community and were supportive of both the programme and the general research around it.

We also sought feedback by interviewing several participants in the Social Bond programme and asking them about this specific piece of research. All clients interviewed gave

their strong and positive support to use of this Police data and its connection with wider data sets. This explicitly included the data that was about them. Indeed, one client’s verbatim response was: “Yes I’m happy for this data to be used like this, especially if it might help other kids to avoid bad things happening, and help positive things happen”.

We also note that the programme’s participants all provided consent for their data to be used for research purposes. The integration of data into the IDI was supported by a Data Ethics and Privacy Impact Assessment submitted to Stats NZ which assessed data usage against privacy and Ngā Tikanga Paihere principles.

Participant and Comparison Data

Using a combination of New Zealand Police and Genesis Youth Trust records, we obtained a confidentialised list of around 600 participants who had participated in the Social Bond programme, with intakes from 2017 onwards. At the time of the programme, they were residents of the Papakura, Mangere, Glen Innes, or Manurewa in the Auckland region. Around three quarters were male. Around two thirds were Māori, one fifth were Pacific Peoples, and around one tenth were NZ European. Close to two thirds were aged 16 years plus at the time of the programme, with fewer than around one tenth being aged less than 15. The minimum age was 10. All those who participated in the programme had medium to high YORST risk scores for youth offending.

In addition to the Genesis Youth Trust

Construction of Matched Cohort

We matched each social bond client to a comparable person who was not a social bond client, but who was:

- at similar risk (being in the same YORST risk category, and having had a similar YORST score at a similar time),
- of about the same age,
- of the same ethnic group (using prioritised ethnicity),
- of the same sex/gender, and
- processed within the same Police District within Auckland.

We created the comparison group by using an algorithm that, over a number of iterations, attempted to find the best overall risk- and demographically-matched group for the social bond clients. The demographic composition of the matched cohort was almost identical to that of the social bond group.

participants, we obtained from New Zealand Police confidentialised records of all YORST assessments conducted nationwide during the relevant time period. YORST assessments are conducted when young people become known to Police through their offending. It was from this data set that we selected a contemporaneous matched cohort. Data included an individual identifier, YORST score, date of assessment, and the associated Police station. For both the Social Bond participants and those who did not participate, these data were submitted to Stats NZ and loaded into the Integrated Data Infrastructure (IDI) so that they could be linked to other government records. Records were excluded if age data suggested an incorrect link to identities in the IDI. Of the approximately 600 Social Bond participants identified, 519 were successfully linked to individual identities in the IDI.

The algorithm to match social bond clients with a matched cohort of individuals with YORST scores was implemented following several rules. Firstly, a similarity score was generated for each possible pairing of social bond clients and the sample pool across a range of demographic (gender, ethnicity, age, location) and outcome (YORST score) factors. If multiple YORST scores were recorded for an individual, we used the earliest medium- or high-risk YORST score. The sample pool for each client was then reduced by excluding any pairing that did not match on station location and gender. Pairings were also excluded for any combination where ethnicity did not match at the level of “Maori and Pacific” vs “Other”, age within 2 years, age at YORST taken within 2 years, YORST score within the same category (Medium/High), and YORST score within 20 points. Pairings were

were then sampled and evaluated in based on a similarity score. After iterating 100 times,

the best sample was chosen as the matched cohort.

Outcome Metrics

The broad areas covered by the outcome metrics were justice, education, employment and income, driver’s licensing and vehicle registration, consumption of benefits, and

consumption of healthcare services. A description of each metric and its source appears in Table 1, below. These metrics were based on data in the 2023-06 refresh of the

Table 1. Outcome metrics used to compare Genesis Youth Trust Social Bond participants to their matched cohort.

Area	Metric	Description and IDI Source
Justice	Count of Police offences	The count of individuals who were recorded as having Police criminal proceedings against them since their YORST completion. Based on [pol_clean].[pre_count_offenders]
	Count of criminal charges	The count of individuals who were recorded as having MOJ criminal convictions or youth offences against them since their YORST completion. Based on [moj_clean].[charges]
Education	Individuals with secondary enrolment	The count of individuals who were recorded as having enrolled in secondary school after their YORST completion. Based on [moe_clean].[student_standard]
	Individuals with tertiary enrolment	The count of individuals who were recorded as having enrolled in tertiary education after their YORST completion. Based on [moe_clean].[enrolment]
	Individuals completing education	The count of individuals who were recorded as having completed a recognised course of education after their YORST completion. Based on [moe_clean].[completion]

Area	Metric	Description and IDI Source
Drivers' Licensing and Vehicle Registration	Individuals with driver's licence	The count of individuals who were recorded as having obtained a drivers licence after their YORST completion. Based on [nzta_clean].[drivers_licence_register]
	Individuals with vehicle registration	The count of individuals who were recorded as having registered a vehicle after their YORST completion. Based on [nzta_clean].[motor_vehicle_register]
Employment and Income	Individuals with employment	The count of individuals who were recorded as having received wages or salary at some time following their YORST completion. Based on [ir_clean].[ird_ems]
	Individuals with earnings greater than match	The count of individuals who received more gross earnings following YORST completion than their risk- and demographic-matched comparison individual. Based on [ir_clean].[ird_ems]
	Individuals with wages and salary greater than match	The count of individuals who received more wages and salary following YORST completion than their risk- and demographic-matched comparison individual. Based on [ir_clean].[ird_ems]
	Individuals using employment assistance	The count of individuals who were recorded as having received MSD-funded employment assistance after their YORST completion. Based on [msd_clean].[msd_employment_assistance]
Consumption of benefits	Individuals consuming benefits (MSD)	The count of individuals who were recorded as having one or more benefit events following their YORST completion. Based on [msd_clean].[msd_spell]
	Individuals consuming benefits (IR)	The count of individuals who were recorded as having received benefits based on IR data at some time following their YORST completion. Based on [ir_clean].[ird_ems]

Area	Metric	Description and IDI Source
Consumption of healthcare services	Count of hospital events	The total count of hospital discharge events recorded across the entire group since YORST completion. Based on [[moh_clean].[pub_fund_hosp_discharges_event] and [moh_clean].[priv_fund_hosp_discharges_event].
	Count of pharmaceutical events	The total count of pharmaceutical events recorded across the entire group since YORST completion. Based on [moh_clean].[pharmaceutical].
	Count of mental health service events	The total count of PRIMHD events recorded across the entire group since YORST completion. Based on [moh_clean].[PRIMHD]

Metrics were based on recorded occurrences since YORST completion. The YORST completion date was the first YORST completion by an individual that resulted in a medium- or high-risk score. When the matched cohort was constructed, the YORST completion date was required to be similar to that of the match. Moreover, there was no overall difference in the time elapsed since the YORST completion date, or the age of individuals.

Key caveats around the metrics are that:

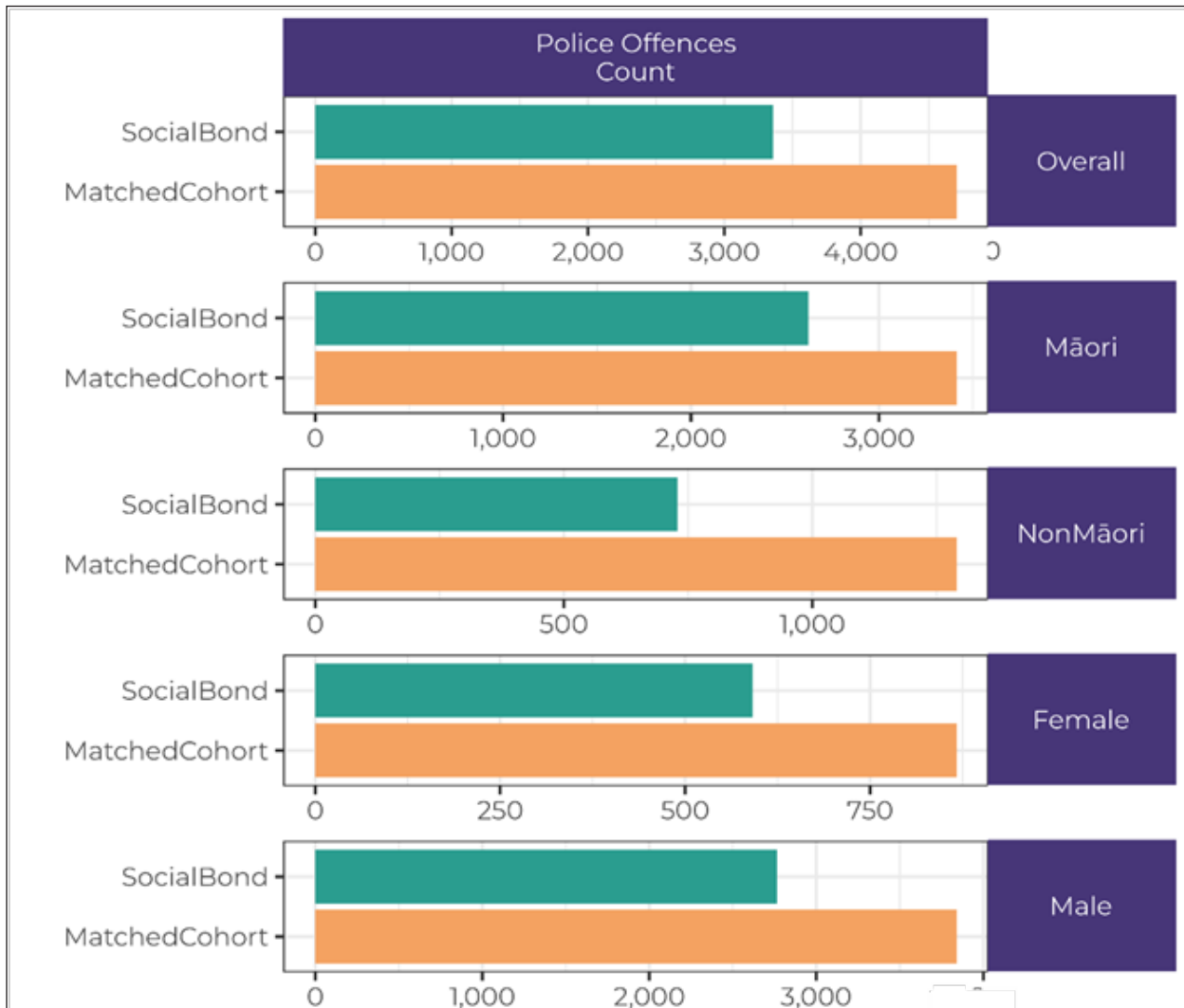
- Outcome data may not be less available for people with more recent YORST completion dates, or for younger people. If so, however, the same will be true for equivalent individuals in the matched cohort.
- A number of the participants will be too young to have meaningful data available for some of the outcome variables (e.g., tertiary education or employment).
- Income data excludes some sources of income, the most notable being self-employment.

Results

Justice

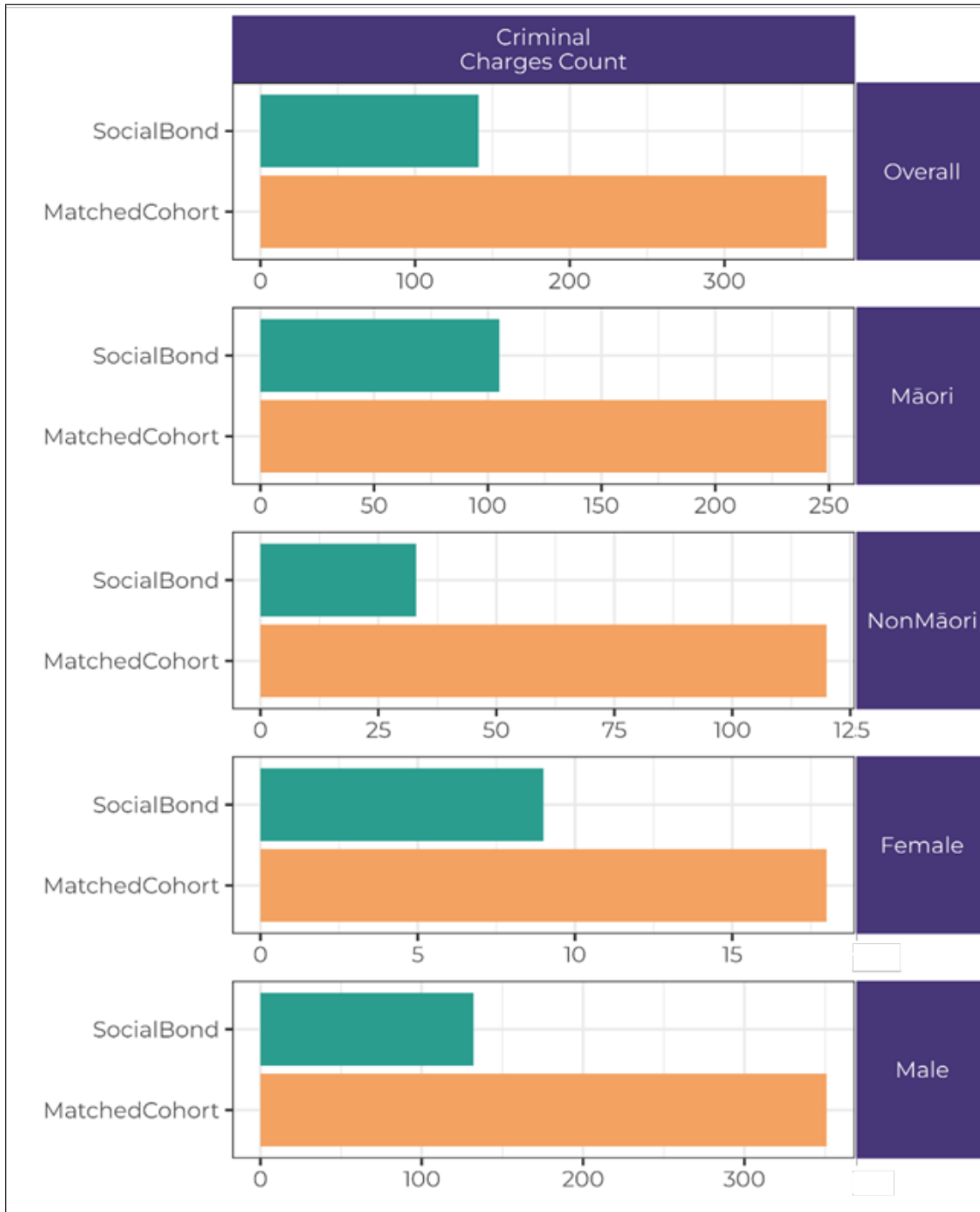
The overall count of Police offences was highly significantly ($p < 0.001$) lower for the Social Bond group than for the matched cohort

($\chi^2(1) = 225$). The difference was similar for males and females, but appears to have been more pronounced for non-Māori than Māori.



The overall count of criminal convictions was highly significantly ($p < 0.001$) lower for the Social Bond group than the matched cohort ($\chi^2(1) = 100$). As with Police offences, this difference appears to have been more

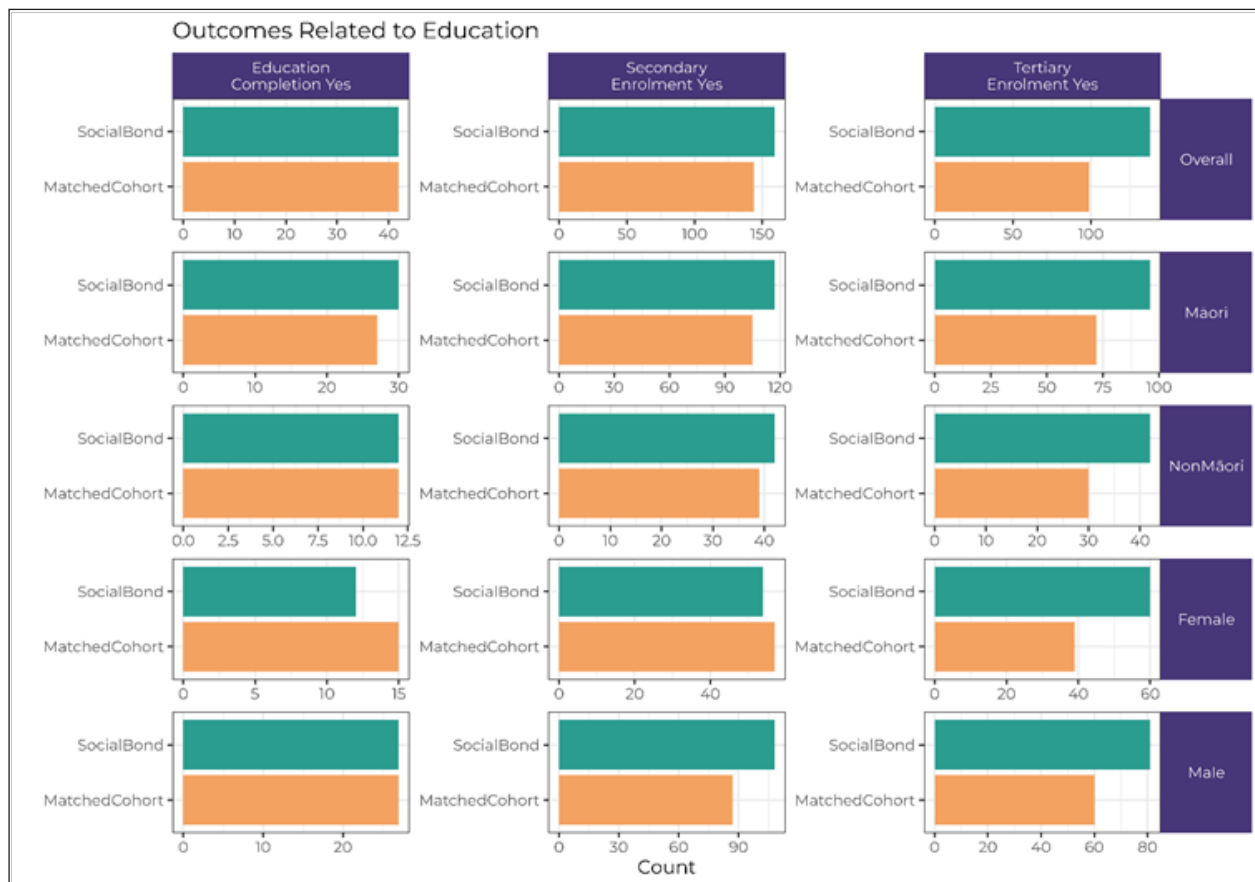
pronounced for non-Māori than Māori. Unlike Police offences, however, the difference may have been more pronounced for males than females.



Education

Significantly more Social Bond participants than their matched cohort enrolled in tertiary education ($p < 0.05$). This pattern appeared to be fairly consistent across Māori and non-Māori, males and females. There were no significant differences in education completion, although this may be related to the limited opportunity in time to complete

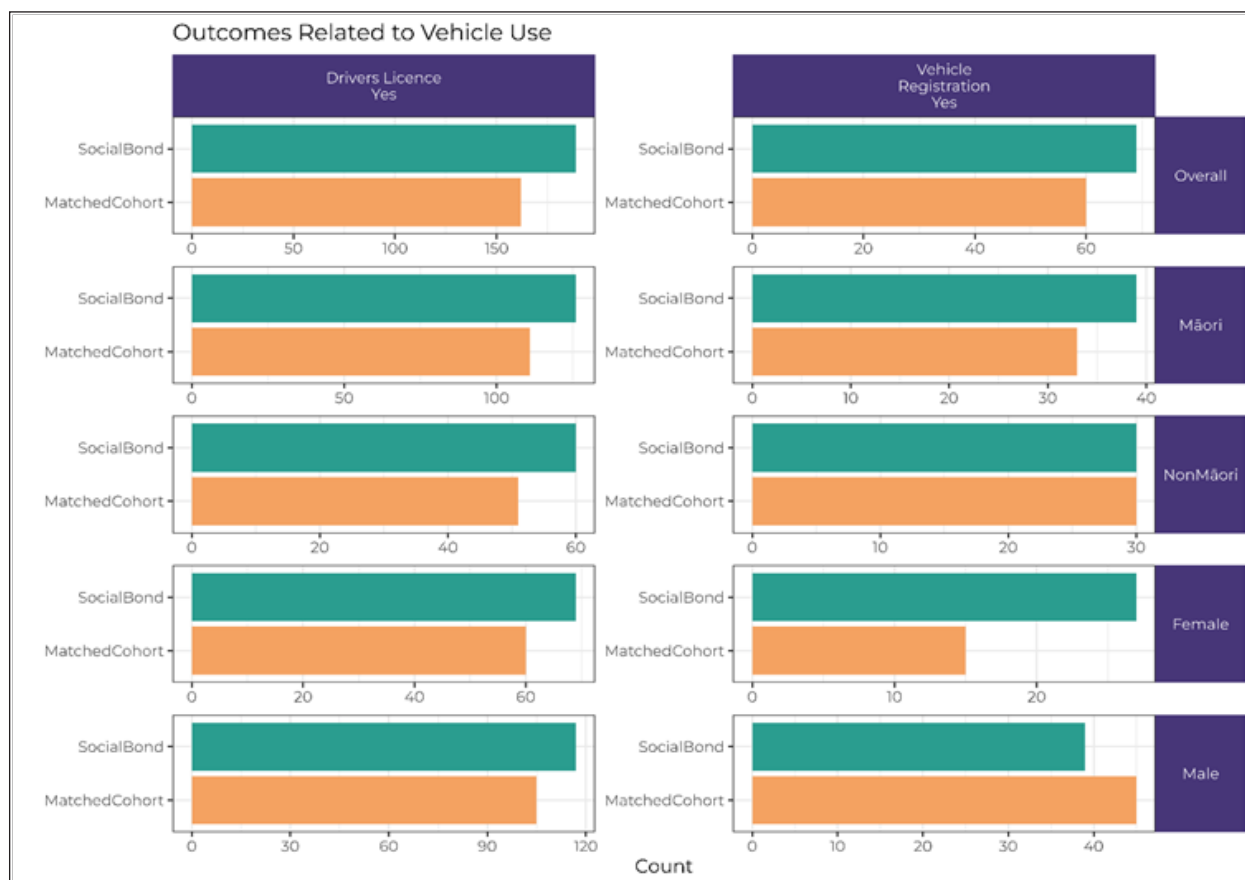
education and, consequently, to the small counts involved. Although more Social Bond participants enrolled in secondary education than the matched cohort, the difference was not significant. If there was a difference, it may have been more pronounced for males than females, but similar across Māori and non-Māori.



Driver's Licensing and Vehicle Registrations

Although more people in the Social Bond group obtained a driver's licences, the difference was not significant. Nevertheless, any observed difference was consistent across Māori and non-Māori, males and females. Similarly, although Social Bond participants

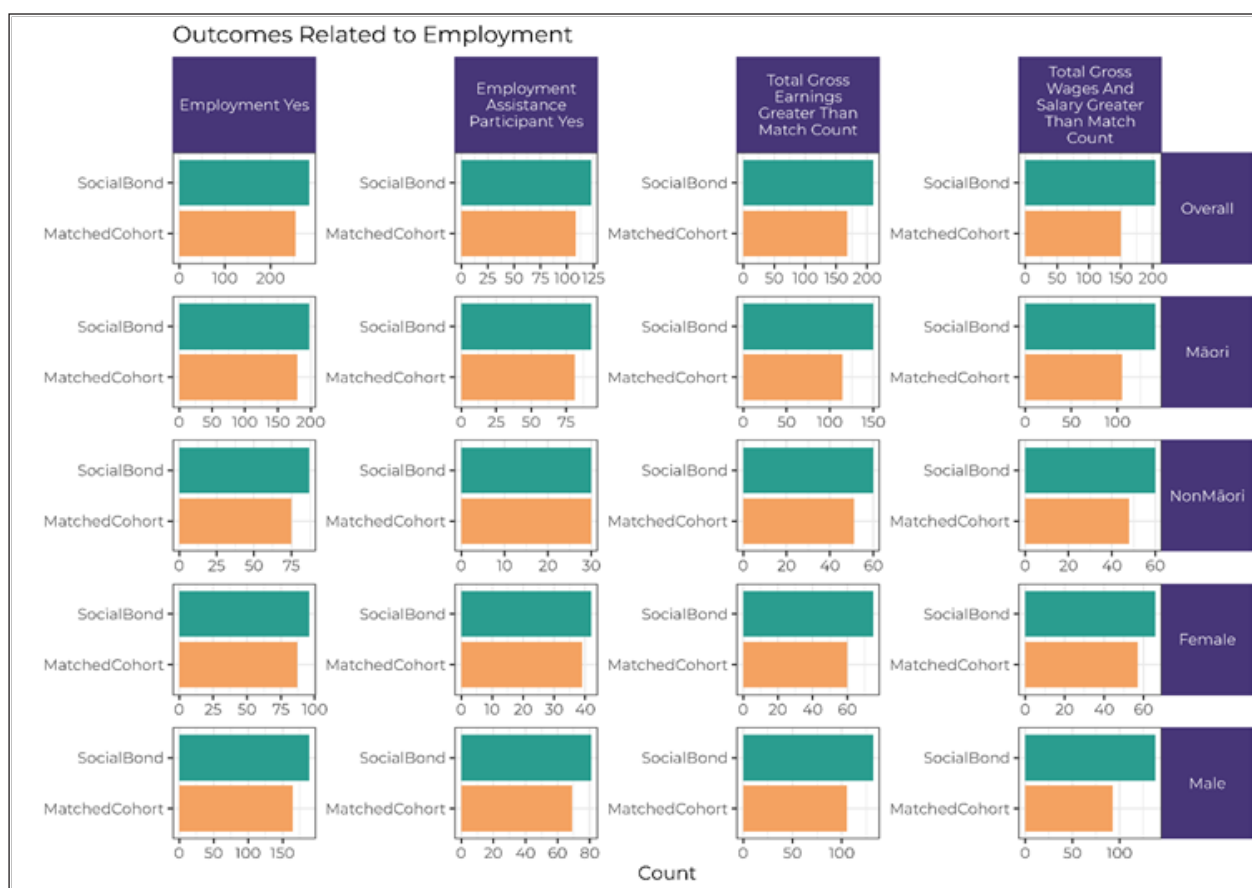
may have been more likely to register vehicles, this difference was not significant. Unlike driver's licensing, if there was a difference it appeared to be more pronounced for Māori than non-Māori, and may have been exclusively for females.



Employment and Income

When Social Bond individuals were compared to the individual that they paired with in the matched cohort, they were significantly more likely to have earned more overall income ($p < 0.05$), and highly significantly more likely to have earned more wages and salary ($p < 0.01$). These differences appeared to be fairly consistent across Māori and non-Māori, males and females. Relatedly, although there were more Social Bond participants recorded

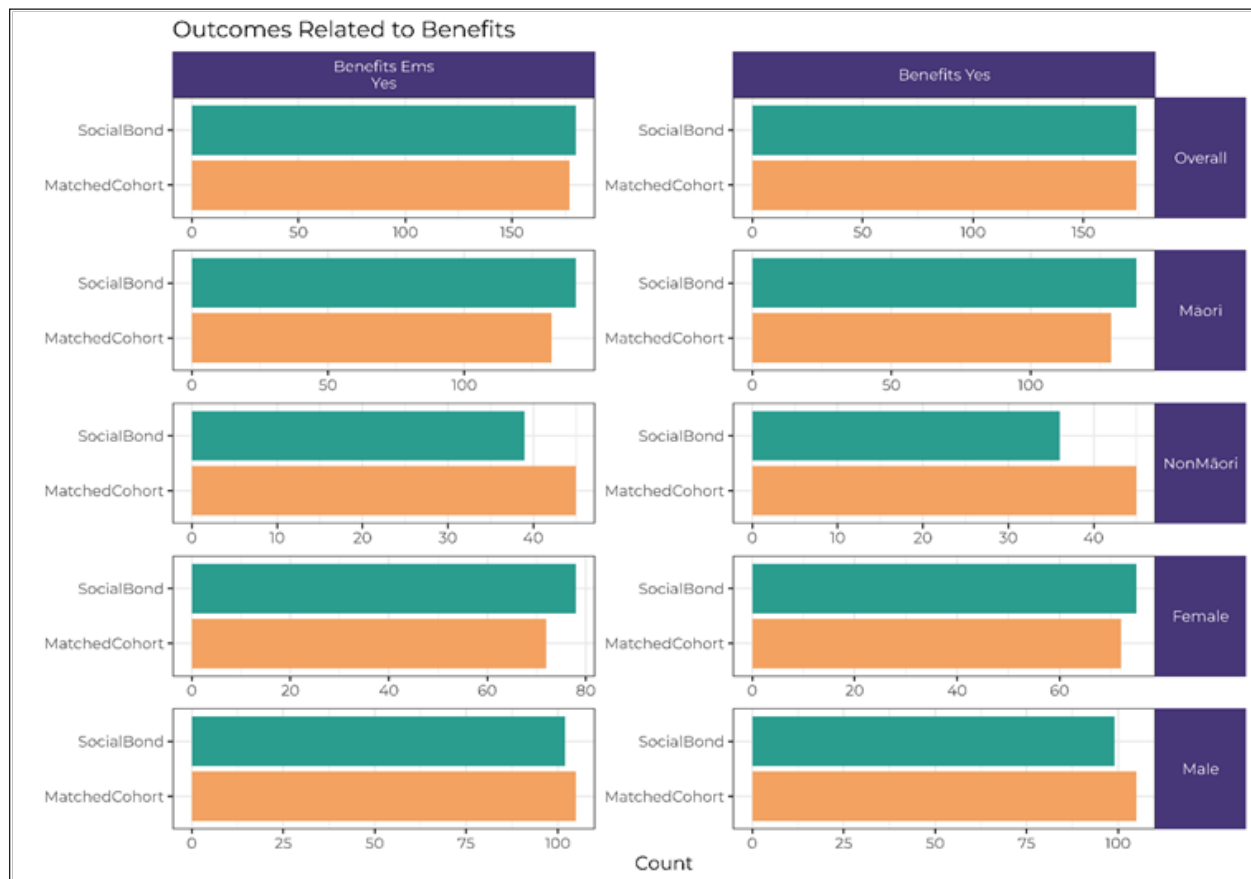
in employment than the matched cohort, this difference was not significant. If there was a difference, it appeared to be similar across demographic groups. The number of individuals using MSD-funded employment assistance programmes appeared to be higher for the Social Bond group than for the matched cohort, but this difference, too, was not significant. Any difference here appeared to be exclusively for Māori, but was similar across males and females.



Consumption of Benefits

Across both IR EMS records and MSD records, the number of Social Bond participants consuming benefits was similar to the number of matched cohort individuals consuming benefits. If there were any differences,

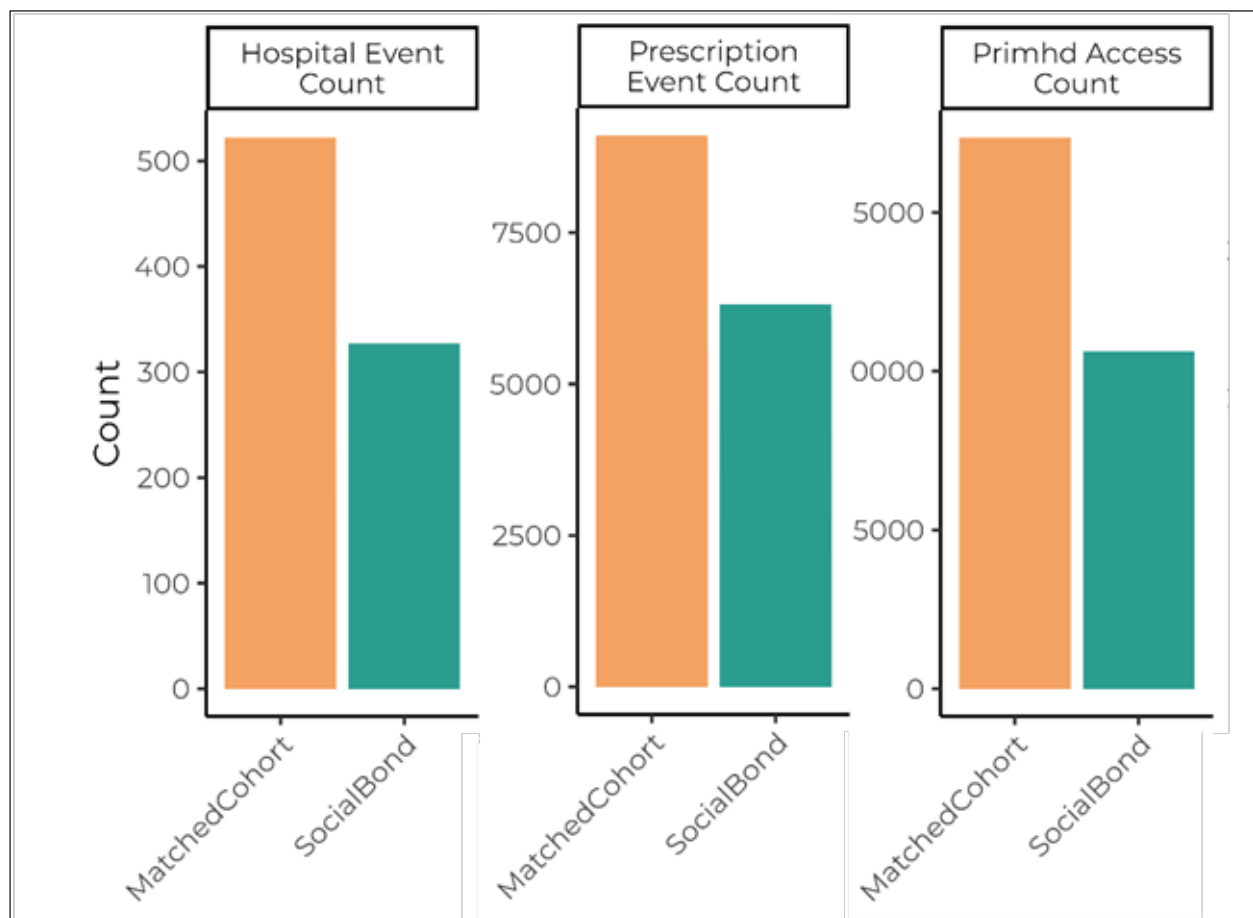
it may have been that Social Bond non-Māori were less likely to consume benefits, but there was not enough statistical evidence to support such a claim.



Consumption of Healthcare Services

The Social Bond group was associated highly significantly fewer hospital events ($\chi^2(1) = 1617, p < 0.001$), pharmaceutical events ($\chi^2(1) = 44, p < 0.001$), and PRIMHD mental health

services usage ($\chi^2(1) = 488, p < 0.001$) than the matched cohort. All of these differences appeared to be more pronounced for non-Māori, and for males more than females.



Summary of Results

Across all of the metrics examined, overall differences between the Social Bond group and the matched cohort either favoured the Social Bond group (often statistically significantly), or did not show a difference.

The clearest differences were in improved justice metrics, reduced healthcare service usage, higher wages and salary, and higher tertiary enrolment for the Social Bond group compared to the matched cohort.

Appendix

Minimum Criteria for Completing a YORST

From p.4 of Mossman, E. (2011). *Research to validate the New Zealand Police Youth Offending Risk Screening Tool (YORST) Phase II: Predictive ability analysis*. Available: [2012-02-27 YORST Predictive Ability Analysis FINAL \(police.govt.nz\)](#)

A YORST is to be completed on every child and young offender that meet the following minimum criteria:

Child offenders

- All children (aged 10-13 years) who have come to police attention for a second offence and/or incident.
- All children that are having a Youth Justice Family Group Conference (FGC) [s14(1)(e), s247(a)].

Youth offenders

- Every young person referred by the police for a Youth Justice FGC (s247(b)).
- Every young person who is arrested and brought before the Youth Court and an FGC is required pursuant to;
- Section 247(c) - the charge is denied and the young person has been remanded in custody
- Section 247(d) - the Youth Justice Co-ordinator is directed to convene an FGC
- Section 247(e) - the charge against the young person is proved and a FGC has not had the opportunity to consider ways in which the Court might deal with the young person for the offence that forms the basis of the charge.

Police Youth Development Referrals

- Children or young people being referred to a Police Youth Development Programme (YDP).

Appendix 4: Social value analysis- the social impact in dollar terms that the Bond program is expected to achieve for participants over their lifetime

This social value analysis combines the estimated social impacts across relevant domains with values for those impacts, generally derived from Treasury's CBAX model but

where that does not include values, estimates are developed from the literature or other similar/related areas where relevant values can be inferred.

Social Impacts

Appendix 3 of this report sets out the results of the contemporaneous risk-matched counterfactual evaluation, using the NZ Government IDI- so robust impact values have been identified for the clients who went through the Bond. The values in that report were based on the final matched sample of 519 and have been scaled up (on a simple proportional basis) to represent impacts for the 607 clients in the Bond.

A high value outcome is the reduction in

life-course-persistent offenders (LCPs), those who remain as offenders through their lives. No recent NZ research was identified that provided a value for this group in New Zealand but during development of the Bond, Youth Justice officials provided their internal estimates for the size of this group as around 10% of youth offenders.

A 2012 study reviewed the literature and found estimates indicating that LCPs account for between 5% and 10% of the population:

"Moffitt (1993) suggested that two primary groups of offenders exist and can be identified in the population: adolescence-limited (AL) and life-course-persistent (LCP) offenders. These groups are thought to arise via alternative developmental pathways and engage in qualitatively different forms of antisocial behavior.¹ AL offending develops in conjunction with the onset of puberty and results from a disjuncture between biological and social maturity (Barnes & Beaver, 2010). AL offenders are considered normative because they engage in aggressive and impulsive behaviors that are quite widespread during adolescence (i.e., smoking, drinking, breaking curfew, property crimes, etc.). More important, these individuals eventually desist once their social and biological development returns to a point of equilibrium (Moffitt, 1993).

LCPs, on the other hand, begin to evince signs of antisocial behavior very early in childhood. As these individuals age, their actions tend to escalate in severity, eventually including violent interpersonal acts of aggression (Moffitt & Caspi, 2001). Owing to their chronic antisocial tendencies, LCPs are responsible for a disproportionate number of the most serious and egregious crimes committed in the general population (DeLisi, 2001). Some estimates, for example, suggest that although LCPs account for between 5% and 10% of the population, they are responsible for more than 50% of all crimes (DeLisi, 2001)." (Brian B. Boutwell 2012)

While subject to considerable uncertainty, the social value analysis in this report has adopted as a central estimate an impact from the Bond as reducing potential LCPs by 2.5% of the size of the full intake. This reflects an estimate that perhaps half of the highest risk offenders move directly into more intensive parts of the youth justice system. Of the

balance, an average of 5% of all offenders, it is estimated that on average the Bond was effective for half this group, indicating that 2.5% of clients would be diverted from a pattern of life-course offending. Given the Bond intake was a little skewed to higher risk offenders so the ratio could be conservative.

Social impact values

CBAX has provided specific values for some outcomes: offending, gains from achieving higher educational outcomes and hospital events. Offences are spread across a range of severities so an average value- for Burglary- is used for simplicity. It was assumed that reoffending benefits would reduce as adolescent offending dropped off, so benefits decay at ten percentage points per annum until they plateau at 20% or the original level.

For this valuation estimates were added for PRIMHD access (Mental Health and Addiction, using a hospital outpatient visit value from CBAX), prescriptions (an estimated \$50/script) and an average value for the custodial costs of one year's imprisonment of \$169k (derived from Correction's Estimates and Annual Report). Given the potential for double counting, no separate allowance was made for the improved labour market incomes.

Costs

Costs used for this analysis are the actual resources costs of this programme- the money spent on G-Op staff and their overheads (including governance costs) as represented by the service cost payments made by G-Fund through the life of the bond. The net present value of all costs was \$16.2m. This is less than the \$24m revenue earned by the

Bond (and paid by the Crown) as it excludes that do not represent real resource flows such as interest paid on the bonds and any remaining surplus.

Discounting; All costs and benefits have been discounted to 2023 using the Treasury central discount rate of 5%. All dollar values are expressed at 2023 levels.

Summary of social values, present valued in \$m (2023)

	Benefits in first 6 years	Lifetime Benefits
Reductions in offending	28	112
Reduced life-course offending	0	47
Tertiary educational achievement	0.5	9
Reduced Mental Health cost	3.8	17
Reduced hospital visits	1.8	7.3
Reduced prescriptions	0.2	0.7
Total benefits	34	193
Costs:	16.2	
Net Social value created	18	177