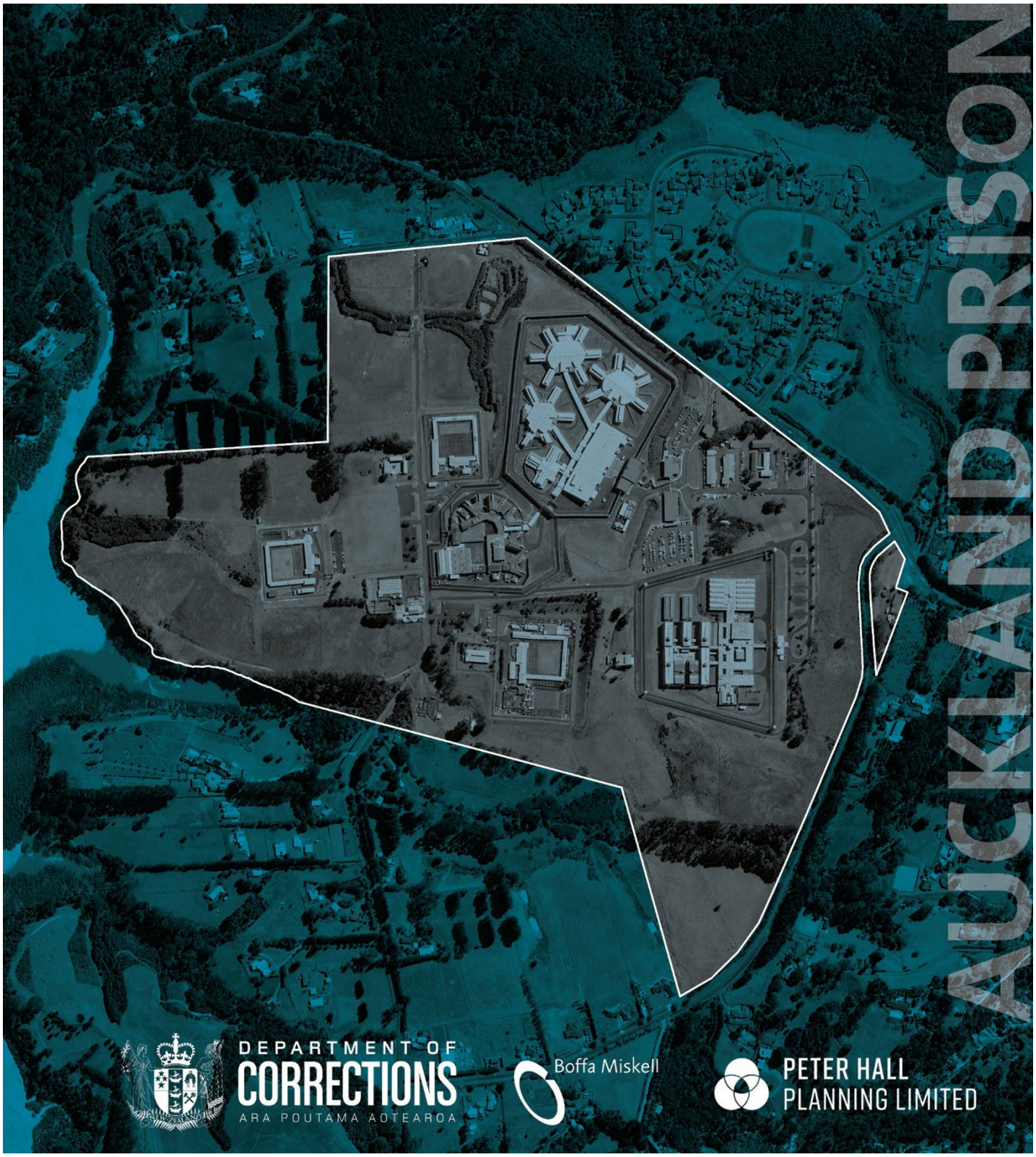
Auckland Prison Capacity Increase

Volume 2 – Appendix 2E
Economics Assessment



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Economics Assessment

26th March 2026

m.e consulting

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Contents

Figures and Tables

Executive Summary

Department of Corrections – Ara Poutama Aotearoa (Corrections) proposes to alter the designation at Auckland Prison, Pāremoremo, to enable capacity to be increased from the current designation limit of 681 to 1,220 prisoners. This increase is to enable Corrections to respond to projected population growth and build resilience into the region of highest demand. This increase in capacity will enable new facilities for 960 prisoners to be built, which will operate alongside the existing Maximum Security Facility (which can accommodate 260 maximum security prisoners). A specific site layout and design for the proposed new prison facilities will be provided with future Outline Plans of Work.

The proposal supports national-level resilience by accommodating anticipated growth in prisoner numbers, which are projected to rise by 36% over the coming decade.[1] It will also reduce the proportion of Auckland-based prisoners needing to be incarcerated out-of-region. Enhanced operational efficiency and the construction of modern rehabilitation infrastructure aligns with Corrections' Long-Term Network Configuration Plan.

This economic assessment evaluates the expected regional and national impacts of the proposed construction and operation of the new facilities. Using a Multi-Region Input-Output (MRIO) model, the analysis quantifies the gross economic effects associated with $1.76bn of capital expenditure. The facilities are anticipated to be delivered through a phased approach, with completion expected in approximately 2036. Multiple scenarios are used to show the cost structures and impact of planning costs over a thirty-year horizon. The report also analyses the effects of the project and ongoing operational expenditure associated with the build, in addition to distributional effects of future operational spending in Auckland. It is acknowledged that these effects cannot be modelled as net additions akin to the capital investment. Instead, the analysis uses both quantitative and qualitative analysis methods to illustrate potential effects. Finally, local community effects and other economic considerations are discussed in qualitative terms.

The construction phase is estimated to generate approximately $938 million – $1.07 billion in value added, in real present value terms and 2024 prices. This will sustain employment equivalent to around 13,900 – 15,600 job years, primarily within Auckland. Operational expenditure related to the project will also provide a small economic stimulus due to the need for facilities maintenance, operational servicing, Corrections project teams and operationalising the site. Some of these costs will continue beyond the construction phase and are estimated to contribute $94m in value added and 2,800 job years. Other operational costs, such as staffing the prison and costs for contractors, will generate downstream economic stimuli in the service economy and sectors that support the prison's various functions.

Many of the effects are likely to occur in Auckland, where 83% of the prison's staff currently live. The increase in capacity will reinforce the site's institutional role and secure employment in the area, as well as giving the construction sector a significant boost during the build phases. The removal of the designation over the former Prison Village also allows for potential development on site, unlocking latent land value.

Overall, the proposed capacity increase at Auckland Prison is expected to deliver significant economic benefits at both regional and national levels. The capital investment represents a large-scale public infrastructure commitment with measurable GDP and employment effects. The operational expenditure, meanwhile, will have material distributive impacts for Auckland's economy. Subject to future refinement through detailed

[1] Justice Sector Projections 2025 - 2035 – Department of Corrections (2025)

design and cost estimation, the economic case for proceeding with the designation and staged development is well supported.

1 Introduction

1. Department of Corrections – Ara Poutama Aotearoa (Corrections) proposes to alter the designation at Auckland Prison, at 530 Pāremoremo Road, Pāremoremo, to enable capacity to be increased from the current designation maximum of 681 to 1,220 prisoners. This increase is to respond to projected population growth in an identified region of demand. This increase in capacity will enable new facilities for 960 prisoners to be built, which will operate alongside the existing Maximum Security Facility (which can accommodate 260 maximum security prisoners). A specific site layout and design for the proposed new prison facilities will be provided with future Outline Plans of Works. The new facilities will ultimately replace some or all of the existing facilities at the site, apart from the existing Maximum Security Facility. For example, the Te Piriti Hut Unit, West Division, Te Mahunga Hut Unit and Te Wairere Hut Unit in the south and western parts of the Site are likely to be demolished to provide the developable land necessary for the new facilities. The project objectives are to:

- Provide sufficient prisoner places with the appropriate security classification in the geographical area of need to meet demand.
- Enable the development of quality and modern fit-for-purpose prison facilities to support the safety of staff and prisoners and enable better delivery of rehabilitation and reintegration programmes.
- Ensure the prison has the capacity to respond to unexpected events and changing conditions, including operational resilience and disaster reserves and flexibility for future design, operational efficiencies and innovation.
- Enable the efficient use and development of land held for prison purposes and associated assets.
- Locate the prison facility capacity sufficiently close and connected to:
    i) the culture, community, and whānau of prisoners;
    ii) a workforce of prison staff to support a safe, secure and effective prison operation; and
    iii) health services and service providers to rehabilitate and reintegrate prisoners.
- Significant adverse environmental effects of the development of the Site are appropriately avoided, remedied or mitigated.

2. This report assesses the economic impacts of the proposed project. Given the proposal is to amend the designation to enable the additional capacity sought, and detailed plans are not yet available, the assessment adopts an approach which is necessarily high level in parts. The assessment is based on potential scenarios rather than a finalised project plans. Where necessary, assumptions are used to define certain characteristics and operations for future facilities, enabling an evaluation of the proposal in line with these parameters. We document the sources or assumptions throughout this report. In addition to data shared by Corrections with Market Economics (M.E), we lean on various published data sources on prison construction. Our assessment is principally

concerned with the construction of additional capacity and costs and economic impacts associated with the ongoing operation.

1.1 Qualifications and Experience

3. The author of this report is **Greg Akehurst (BA Geography/BCom. Economics)**, Director Market Economics, RMLA, NZ Association of Economists. Greg has 30 years' experience in economic consulting, including 25 years as a Director of Market Economics Ltd. During this time, he has carried out numerous assessments of economic benefits and effects of developments and projects under the RMA, the COVID-19 Fast Track Act and the Fast Track Approvals Act 2024. Greg has also acted as a peer reviewer for Councils and others on economic matters.

4. Analytical support and quality assurance has been provided by **Tom Harris (BSc/MSc Economics),** Senior Consultant at Market Economics. Tom has three years' experience at Market Economics, during which time he has carried out a number of economic assessments in support of FTAA applications. Prior to joining M.E, Tom worked in the UK Civil Service as an economist across a challenging portfolio of projects and sectors. During the Covid-19 pandemic he was the principal analyst in the Department for Education modelling the pandemic's impacts on Children's Social Care. His other roles included leading on graduate outcomes analysis, supporting high-profile national policy implementation, being embedded in the permanent secretary's office, and working closely with external academics and stakeholders. Tom has taught undergraduate economics at the University of Exeter and runs Good with Data, a New Zealand-based charity doing pro bono data-led project for charities.

5. Full C.V's for Greg and Tom are contained in Section 9, below.

6. While this assessment and application is not before the Environment Court, this report has been prepared and reviewed in accordance with the Environment Court's Code of Conduct for Expert Witnesses, contained in the Environment Court Practice Note 2023. Other than where it is stated that reliance is placed on the advice of another person, the author(s) confirm that the issues addressed in this report are within their area of expertise. The author(s) have not omitted consideration of any material facts known to them that might alter or detract from the opinions expressed.

2 Project Overview

7. This section outlines the parameters of the proposal relevant to economic assessment, forming the basis for subsequent economic analysis. It summarises the intended scale and scope of the capacity increase, relevant institutional context and key planning details.

2.1 Site and Regulatory Context

8. Auckland Prison is located at 530 Pāremoremo Road in Auckland's Rural-Countryside Living Zone. It is wholly covered by Designation 3900 for "Auckland Prison" (Auckland Unitary Plan). The Crown owns the land and the Minister of Corrections is the requiring authority. Current designation conditions limit the prisoner population at 681. Existing infrastructure on the Site comprises a 260-place Maximum Security Facility (built in 2018) and several low to high-security units dating from 1969–late 1990s (West Division, Te Mahunga, Te Wairere, Te Piriti). The Old East Division, which the 2018 Maximum Security Facility replaced, remains in place but is no longer used.

2.2 Parameters Approach

9. A set of development parameters have been used to provide maximum flexibility and as much certainty as practicable; they form the basis for the assessment of the effects on the environment. The parameters provide for the maximum anticipated "envelope" of built form and operational characteristics (i.e. prescribed maximum limits), that form the proposal. The parameters have been tested against existing physical configurations of prisons and operational characteristics elsewhere in New Zealand, to ensure there is sufficient opportunity for flexibility in future design, operational efficiencies and innovation.

10. The parameters approach aligns with the planning purpose of designations, which is to future proof for development where complete design information is currently unavailable. The approach provides a greater level of certainty than simply designating a piece of land for prison purposes (as the current Designation 3900 does). This method has precedent: it was adopted for the designation alteration processes for Auckland South Corrections Facility (a Board of Inquiry process) and also for Waikeria Prison (a direct referral to the Environment Court). In both cases, the detail of the design followed the confirmation of the designation alteration.

2.3 Works Programme and Phasing

11. Corrections seeks to alter the designation to raise capacity to 1,220. This would enable the building of new accommodation for 960 low- to high-security prisoners alongside the existing Maximum Security Facility. The total capital investment is estimated at $1.76bn ($1.2bn in 2024 prices), spread across a ten-year build horizon (plus a planning phase at the beginning). Within this programme, it is anticipated that two X-wings could be delivered by 2032, one by 2034 and one by 2036, subject to future central government funding decisions.

12. Much of the planning builds on the Long-Term Network Configuration Plan (LTNCP), Corrections' principal strategic planning document for prison infrastructure. It sets out how capacity will be distributed across the network, regional provisions and sequencing of major investments. Since the LTNCP was endorsed, however, the high security situation has changed. Existing pressures in high security capacity combined with projected population growth means demand for high security capacity has increased and more urgent investment is needed. The prison population has grown significantly in recent years, and in the eight months since the long-term plan was endorsed, it has increased by more around 800 people. Over 70% of that growth is in the remand or high-security sentenced population.

13. The parameters in this assessment are drawn from the anticipated costs and phasing in the most recent High Security Capacity Programme Business Case (HSCPBC)[2]. Table 2-1 summarises key development parameters pertinent to the economic assessment. In addition, the former Prison Village opposite the main Site is proposed to be removed from the spatial extent of the designation. More detail on the phasing and cost breakdown is contained in Section 4.

Table 2-1: Parameters relevant to economics assessment

Parameter	Key Limits
Number of Prisoners and Prisoner Type	1,220 in total (an increase from 681 current maximum) 260 (maximum security)

[2] 250707 DRAFT High Security Capacity PBC v0.13

3 Baseline Economic Context

14. This section describes the existing economic conditions in Auckland and the Pāremoremo locality, providing context for interpreting the impact of the increase in capacity. It outlines the structure of the regional economy, labour market capacity and the current economic considerations relevant to Auckland Prison. Together, these inform the interpretation of modelled results and the likely distribution of economic effects across sectors and locations.

3.1 Regional Economic Overview

15. The Auckland Region accounts for approximately 38% of New Zealand's GDP and employs 36% of the national workforce.[3] The regional economy is dominated by service sectors – particularly professional services, health, education and retail. Three-quarters of employment is concentrated in either high-value services or other services, with the rest split between goods-producing industries (20.2%) and primary industries (5.4%).[4] Construction is the largest single industry (ANZSIC Level 1 code) in employment terms (10.4%) and remains elevated relative to pre-Covid levels due to ongoing housing and infrastructure investment, although margins face ongoing pressure from cost inflation and material/skills shortages.

16. Pāremoremo itself lies within the Upper Harbour Local Board area, which includes high-income residential zones, pockets of rural land and institutional uses (e.g., schools and prisons). Infrastructure in the area is limited compared to central Auckland, especially in terms of immediate access to public transport and social services, which has limiting implications for labour mobility and localised spending effects.

3.2 Auckland Prison

17. Auckland Prison is a major employer and a critical piece of New Zealand's corrections infrastructure. It currently employs approximately 576 staff, the majority of whom are in permanent, full-time roles (97%)[5]. Custodial staffing comprises two thirds of the FTE (approximately 378).[6]

18. Employees at the prison are mostly based in Auckland (95%), with 40% living within 20km and 83% living within 50km.[7] This geographic concentration should restrict commuting-related attrition, which is important given the specialised and security-sensitive nature of corrections work.[8]

[3] Regional Economic Profile – Infometrics (2024). Values for Auckland and New Zealand
[4] Regional Economic Profile – Infometrics (2024). Values for Auckland.
[5] Auckland Prison – Staff FTE query (10/07/2025)
[6] Auckland Prison – Staff FTE query (16/07/2025)
[7] Based on data on suburb of residence rather than address.
[8] Commuting related attrition arises when staff are not prepared to travel significant distances to work, therefore the industry potentially loses those skilled workers to other sectors. In this case, providing additional employment in Auckland helps ensure skilled staff who live locally are engaged in the sector.

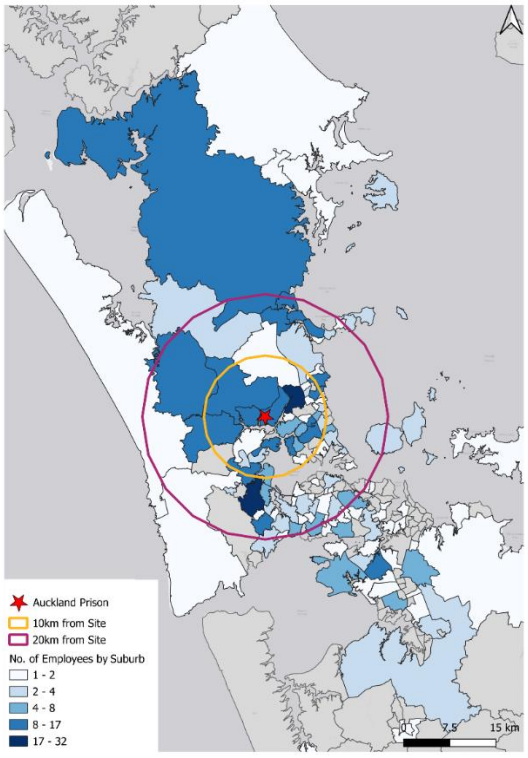
Retaining experienced staff and staff sufficiency can also benefit prisoner outcomes, through mechanisms such as better interpersonal prisoner-officer relationships.[9][10]

Table 3-1: Distance of Staff Residences from Auckland Prison

Location	Share
Within 5km	3%
5-10km	7%
10-15km	15%
16-20km	15%
20+ km	60%

19. Figure 3-1 visualises the distribution of Auckland Prison employees in the region. Due to the data being provided for suburb of residence, locations are grouped based on a suburb centroid location. The map shows a concentration of suburbs in North and West Auckland.

Figure 3-1: Residential Location of Auckland Prison Employees



20. The Prison has ongoing operational spend, which funds the employment discussed above. This spend is also used for facility upkeep and other contracted services. This money paid for contracts with Auckland businesses increases the economic footprint of the Prison at the regional level. The

[9] Improving Employment Outcomes for the Federal Bureau of Prisons' Returning Citizens – Russo et al. (2023)
[10] A typology of Corrections Officers – Mary Ann Farkas (2000)

prisoner volume funding component of operational expenditure estimated at $120k per prisoner, which covers costs such as food, clothing and FTE costs.[11]

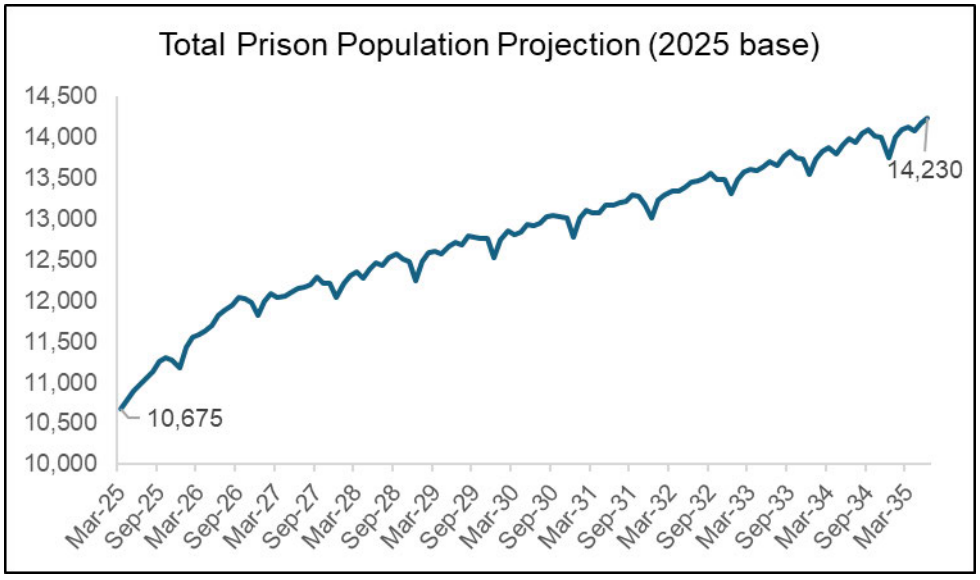
21. Staff and visitor expenditure contribute to demand in Albany, Hobsonville, and other peri-urban catchments, though we do not attempt to quantify this spending due to lack of data.

3.3 New Zealand Prison System

22. New Zealand has 18 prisons and corrections facilities.[12] 93% of prisoners are male and the majority of prisons (15 of 18) are for men. The locations are spread throughout the country, mostly on sites proximate to major population hubs. Auckland Prison is the only maximum security prison in New Zealand.

23. In December 2024, there were 10,680 prisoners in New Zealand. [13] Figure 3-2 shows the justice sector projections (2025) from March 2025 until June 2035.[14] Over the period, prisoner numbers are forecast to grow from 10,675 to 14,230, an increase of 33% (2.9% annually). An increase of 3,555 represents a substantial demand increase, which will place pressure on the existing system capacity. The ten-year projection is also approximately 3,000 higher than that provided in 2024, which is attributed to the inclusion of finalised policy impacts.

Figure 3-2: Prison Population Projections



24. At 1st March 2025, there were 2,047 offenders from Auckland incarcerated around New Zealand.[15] Of these prisoners, 47% are being accommodated outside Auckland. Of those being

[11] Figure from HSPBC and Prisoner Volume funding – Department of Corrections
[12] Prison Facts and Statistics – March 2025. Department of Corrections.
[13] Prison Facts and Statistics – March 2025. Department of Corrections. Data refers to a quarterly cross section, not daily numbers.
[14] Justice Sector Projection 2025 – Ministry of Justice
[15] Internal DOC data using most serious offence courts to determine origin.

accommodated elsewhere, 6% were in the South Island, presenting significant logistical challenges for whānau access.

3.4 Implications for Impact Assessment

25. The rationale for the proposed increase in capacity is to address capacity constraints and meet future demand as identified in the LTNCP. The LTNCP forms the core planning instrument through which network resilience, the spatial distribution of capacity and long-run operational efficiency have been assessed. Within this framework, increasing the capacity at Auckland Prison has been identified as a necessary intervention to accommodate future growth in prisoner populations, particularly in the upper North Island. The plans in this assessment come from the HSCPBC, which builds on the findings in the LTNCP and looks at the implementation of its findings.

26. This assessment does not evaluate whether expanding capacity at Auckland Prison is the optimal use of resources compared with alternative interventions – such as investments in other sites or demand-reduction strategies. Those decisions have already been made at Department of Corrections level when evaluating how best to address prison network needs. Nor does it test how the marginal return associated with the proposed investment compares with alternative capital allocations within or beyond the corrections system. Such an analysis would require a comprehensive accounting of both the fiscal and societal costs and benefits of incarceration, including the counterfactual impacts of non-custodial sentencing, differences in rehabilitation outcomes by facility type or location and the opportunity costs of capital deployment. It would also need to consider network interdependencies such as transport costs for court and whānau visits, and impacts on staff recruitment and retention.

27. Such an analysis is outside of that required under the Fast Track Approvals Act 2024.

28. Rather, this assessment relies on the high-level decisions regarding network design and investment prioritisation that have already been made through the LTNCP and associated planning processes. This has resulted in development at Auckland Prison being identified as an appropriate response to project prisoner growth. Accordingly, the scope of this assessment is confined to evaluating the economic implications proceeding with the capacity increase at Auckland Prison as defined in the project brief.

4 Analytical Framework & Methodology

29. This section outlines the economic modelling approach used to quantify the GDP and employment impacts of the increase in capacity at Auckland Prison. It also identifies key assumptions and limitations, which are critical to interpreting the results appropriately.

4.1 Modelling Approach

30. The economic impacts are estimated using a Multi-Region Input-Output (MRIO) model, which captures the direct, indirect and induced effects of increased expenditure associated with the project.

- **Direct effects** reflect activity by contractors and Corrections itself (e.g., construction firms).
- **Indirect effects** arise from upstream demand on suppliers (e.g., building materials).
- **Induced effects** stem from additional household income spent in the regional economy (e.g., by workers employed through the construction firms or their suppliers).

31. This is a Type II multiplier model, incorporating labour income feedbacks to households. All effects are measured in gross terms – that is, they do not reflect displacement of existing activity or changes in market equilibrium (e.g., price or wage responses).

32. A MRIO model can trace how an initial exogenous change, such as an increase in spending or investment, might be transmitted through interconnected industries and regions within the economy. This approach is highly effective when the magnitude, timing and composition of the economic shock are clearly identifiable and separable from broader economic activity. It is therefore well suited to demonstrate the impact of capital expenditure. We address operational expenditure separately in section 4.2.2.

33. The MRIO model assumes unlimited labour and material availability, however we note that Auckland's construction sector is operating near full capacity.[16] Skilled trade shortages and high demand for project managers, engineers and other key professions has the potential to create upward cost pressures, which are difficult to reflect in modelling.[17] This assumption also extends to recruiting and retaining corrections staff to work at the enlarged Prison once operational.

34. As discussed in Section 4.4, the investment time horizon is long. Some of the costs are anticipated to be borne more than 10 years in the future, when the domestic and global economy could look substantially different to what we observe today. Forecasting economic effects so far in the future brings inherent uncertainty. Our approach assumes that the structure of the economy reflects the national accounts tables published by Stats NZ for 2019-20.[18] This is more accurate than making unfounded assumptions about expected structural changes, though presents other accuracy

[16] Building and Construction Sector Trends: Annual Report 2023 – MBIE
[17] Skills Shortage List – New Zealand Immigation
[18] The most recent figures at the time of writing

challenges. The outputs are best viewed as a way to understand potential changes rather than a forecast of what we expect to eventuate.

Table 4-1: Model Specifications

Component	Specification
Model Type	Static Multi-Region Input-Output Model
Geographic Base	Auckland Region, The Rest of the North Island, The Rest of New Zealand
Price base	2024 $NZD
Focal sectors	Construction and construction services, professional and scientific services, central government administration

35. The costs, impacts and benefits are discounted at 8%, in line with the Treasury's guidance for commercial proposals.[19] The social opportunity cost of capital, on which this discount rate is based, accounts for the observed return on the next best alternative investment with the same risk profile.[20] This effectively prices in the benefits from government using these funds for alternate uses. However, no comparative investment options are presented in this analysis.

4.1.1 Model Suitability

36. Economic Impact Assessment has been chosen as the most appropriate technic to assess the scale of economic change driven by the prison expansion project.

37. The FTAA requires assessment of benefits and costs. However, it specifies an analysis structure which is different from CBA. The s85(3) structure is different from CBA, and beyond the need to identify and assess benefits and costs.

38. The decision in the Waihi North Mine case stated:

[786] Two points come out of this [s85(3)]:

> *(a) There is no explicit requirement for either the "benefits" or "adverse impacts" to be quantified in monetary terms. This is so even where the claimed benefits are economic in character (as new jobs are). And:*
>
> *(b) If adverse impacts have already been monetised and factored into the benefits assessment, there would not be much point in a weighting exercise of the kind required by s 85(3).*

39. The panel therefore rejected the CBA approach where all matters were quantified and monetised - and by implication summed to show the relative size of benefits and costs – as being not consistent with the broader scope for decision-making in the FTAA.

40. Economic assessment is core to evaluating proposals under the FTAA. The Act establishes a clear framework for assessment, characterised by:

[19] Discount Rates – NZ Treasury. (Accessed 28/04/2025)
[20] The Treasury's social discount rate – Treasury and Motu Presentation (17/02/2025)

(a) the purpose of the Act to facilitate additional economic activity, with the benefits and adverse impacts of that activity being core matters,

(b) the decision structure in s85(3), which requires an evaluation of whether adverse impacts are out of proportion to the benefits of a proposal; and,

(c) the scope of assessment, which extends to regional or national benefits across economic, social, environmental and cultural effects, assessed in benefit and cost terms.

41. This structure reflects a generic benefit and cost appraisal approach, whereby benefits and adverse impacts are identified and evaluated in terms of their nature, scale and relativity. That approach is embedded throughout the FTAA, most explicitly in s85(3), and reinforced by the Act's emphasis on regional and national benefits.

42. The assessment framework under the FTAA is inherently economic in nature. Its focus is on the additional economic activity enabled by fast-tracking, assessed from a regional or national, whole-of-economy perspective that extends beyond the direct effects of a proposal itself. The proportionality test in s85(3) requires all material effects to be identified and compared in some combination, making the comparison of benefits and adverse impacts central to the assessment.

43. Methodology is central to tracking a project's impacts on the economy. In this context, EIA, using input-output modelling, provides a strong fit with the purpose of the Act by estimating total and net GDP, Household incomes and employment effects across the economy, which are central to assessing proportionality under s85(3).

44. Overall, economic assessment of FTAA proposals requires analysis of total and net effects across the economy, to inform the evaluation required by s85(3). The FTAA assessment structure is not a single calculated test, but an evaluation of a 'basket' of adverse impacts and benefits, to determine whether adverse impacts are out of proportion to the benefits of a proposal. This evaluation is able to take into account the scale and nature of effects, with decision-makers afforded considerable flexibility in determining what constitutes "out of proportion" in the context of regional or national benefits.

4.2 Key Inputs and Assumptions

4.2.1 Capital Expenditure

45. Total Capital Expenditure (Capex) is estimated at $1.2bn in 2024 prices.[21] This is expected to be distributed across three primary build phases, incorporating allowances for:

- Site preparation
- Facility construction
- Utility upgrades and landscaping

[21] Real costs provided by EY and Department of Corrections

- Professional services and contingency

46. Table 4-2 shows the spend broken down by year and phase. We convert the nominal values into real prices to present the analysis in a single price year (2024). The table also displays the Present Value (PV) of costs, discounted at 8%.

47. In building the model, we have divided the estimated spend between economic sectors based on the budgets for Wiri Prison (Auckland South Corrections Facility), and Waikeria Prison, in Otorohanga[22], and in one scenario have also included allowances for procurement costs, estimates as 10% of the build phase total, borne the year prior to the phase commencement. Details of these scenario breakdowns are contained below in Section 4.3.

Table 4-2: Capex Phasing and Spend

Year	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	35/36	36/37	Total
Phase 1	-	-	$132	$203	$109	$223	$206	-	-	-	-	-	$873
Phase 2	-	-	-	-	-	-	-	$229	$218	$63	$58	-	$569
Phase 3	-	-	-	-	-	-	-	-	-	$101	$156	$67	$323
Nominal Capex	-	-	$132	$203	$109	$223	$206	$229	$218	$164	$214	$67	$1,766
Real Capex (2024 prices)	-	-	$101	$151	$79	$157	$142	$153	$142	$104	$132	$40	$1,200
PV Real Capex	-	-	$86	$120	$58	$107	$89	$89	$77	$52	$61	$17	$756
Real Capex + Procurement	-	$63	$101	$151	$79	$157	$179	$153	$162	$104	$132	$40	$1,320
PV Real Capex + Procurement	-	$58	$86	$120	$58	$107	$113	$89	$88	$52	$61	$17	$849

4.2.2 Operational Expenditure

48. Annual Operational Expenditure (Opex) can be divided into two streams:

- Prisoner volume funding, which covers offender cost such as food, clothing and staffing; and
- Site-specific infrastructure investment and associated asset-related costs.

49. Prisoner volume funding is estimated as $120k per prisoner in New Zealand and has economic implications through a range of channels including wages paid to staff, spending on healthcare and rehabilitation services, maintenance contracts and spending on utilities and consumables.[23] The total prisoner volume funding for Auckland Prison under the new capacity designation could total around $146.4m at full occupancy. This is $64.8m higher than the currently at capacity ($81.6m). However, establishing a credible counterfactual scenario – against which the impact of the prisoner volume Opex could be assessed – is inherently problematic.

50. Without an evidence-based counterfactual, modelled estimates of economic impact risk misrepresenting additionality. Specifically, incarceration reallocates resources within the economy rather than creating wholly new economic activity. The GDP and employment generated by operational expenditure must be offset against

- the direct fiscal cost of incarceration; and

[22] These are the most recent Department of Corrections large scale prison builds
[23] Figure from HSPBC and Prisoner Volume funding – Department of Corrections

- the economic opportunity costs associated with the foregone productive potential of incarcerated individuals, many of whom would otherwise have participated, to varying extents, in the labour force.[24]

51. For these reasons, the prisoner volume funding is not incorporated into an MRIO model framework. Meanwhile, for asset-related funding, a share of spending is recurrent and endogenous to how the system is already configured, rather than an injection of new activity. The continuation of this outlay would be assumed in the business-as-usual path of the economy. We therefore limit our focus to the new infrastructure costs introduced through the project.

52. Table 4-3 shows the new asset-related Opex figures that we consider and how they are calculated. These are the relevant cash costs considered directly attributable to the project. Non-cash and overhead costs such as depreciation and capital charge are excluded because these do not relate to direct expenditure, hence don't flow through the economy.[25] We also exclude utilities and rates spending to maintain a conservative analytical position, and because that spending is not suited to being modelled through an MRIO. In the case of rates, these are transfers rather than a payment for production activity. Whereas utilities spending presents issues for counterfactual separation. These only represent tiny fractions of estimated spending, too.

Table 4-3: Infrastructure Opex Spend Components

Component	Type	Spend	Phasing Assumption
Facilities Maintenance Costs (Infrastructure)	Ongoing Opex	0.7% of Capital Cost per annum	Commencing the year after final Capital Expenditure for each site/phase
Operational Servicing Costs (Digital Infrastructure)	Ongoing Opex	0.3% of Capital Cost per annum	Commencing the year after final Capital Expenditure for each site/phase
Programme Team Costs (incl. Procurement)	Project Opex	1% of Capital Cost of each site/phase	Evenly phased over the Construction/Delivery period
Operationalising Costs	Project Opex	0.6% of Capital Cost	Applied to final year of Capital Expenditure

53. Table 4-4 shows the real annual Opex estimates for each phase. Because the ongoing Opex continues beyond the construction period, we analyse these over a 30-year horizon in the analysis.

[24] Crime and Economic Incentives – Machin and Meghir (2004)
[25] These reflect the cost of tying up capital and are necessary for reporting on accounts.

Table 4-4: Infrastructure Opex Spend by Year ($NZ million, 2024 prices)

Phase	Opex Breakdown	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	35/36	36/37	37/38	Out-years
Phase 1	Facilities Maintenance Costs	-	-	-	-	-	-	-	$4.1	$4.1	$4.1	$4.1	$4.1	$4.1	$4.1
	Operational Servicing Costs	-	-	-	-	-	-	-	$1.7	$1.7	$1.7	$1.7	$1.7	$1.7	$1.7
	Programme Team Costs	-	-	$1.4	$1.4	$1.4	$1.4	$1.4	-	-	-	-	-	-	-
	Operationalising Costs	-	-	-	-	-	-	$3.7	-	-	-	-	-	-	-
Phase 2	Facilities Maintenance Costs	-	-	-	-	-	-	-	-	-	-	-	$2.4	$2.4	$2.4
	Operational Servicing Costs	-	-	-	-	-	-	-	-	-	-	-	$1.0	$1.0	$1.0
	Programme Team Costs	-	-	-	-	-	-	-	$1.0	$1.0	$1.0	$1.0	-	-	-
	Operationalising Costs	-	-	-	-	-	-	-	-	-	-	$2.2	-	-	-
Phase 3	Facilities Maintenance Costs	-	-	-	-	-	-	-	-	-	-	-	-	$1.3	$1.3
	Operational Servicing Costs	-	-	-	-	-	-	-	-	-	-	-	-	$0.5	$0.5
	Programme Team Costs	-	-	-	-	-	-	-	-	-	$0.7	$0.7	$0.7	-	-
	Operationalising Costs	-	-	-	-	-	-	-	-	-	-	-	$1.2	-	-
	Total	**-**	**-**	**$1.4**	**$1.4**	**$1.4**	**$1.4**	**$5.1**	**$6.8**	**$6.8**	**$7.5**	**$9.7**	**$11.2**	**$11.1**	**$11.1**

4.3 Scenario and Sensitivity Design

54. Three cost scenarios were modelled to test the sensitivity of results. Because the details on construction methodology are not confirmed at the time of writing this report, the scenarios only differ in their allocation of spending and whether procurement costs are included. Table 4-5 contains this summary.

Table 4-5: MRIO Scenario Summary

Scenario	Description	Capex (real, 2024 prices)	Notes
1	Raw baseline	$1.20bn	Shares of spending in sector: Non-residential building construction (37%), Construction services (37%), Employment and other administrative services (5%), Electronic and electrical equipment manufacturing (9%), Scientific, architectural, and engineering services (12%). All spending occurs in Auckland Region.
2	Changing cost input split	$1.20bn	As above but Non-residential building construction (19%) and Construction services (56%).
3	Including in procurement costs	$1.32bn	10% of spending is allocated to procurement. This spend occurs in the year preceding each build phase, with half in Advertising, market research, and management services, half in Central government administration services. The spending is also split 50/50 between Auckland Region and The Rest of the North Island.

4.4 Limitations

55. While input–output models are widely used for policy impact analysis, the approach adopted above must be viewed in light of the following caveats:

1. Indicative Cost Base

- The capital and operational cost estimates are preliminary and based on the parameters outlined above as well as extrapolation from past projects and public records. They do not reflect detailed cost plans or Department-verified budgets. Capex values come from those used in the HSCPBC. We assign the structure of costs to sectors based on spend line budgets for Wiri and Waikeria Prisons. [26] Opex is calculated by Corrections using capital cost ratios, as detailed in Table 4-3.
- The cost estimates are provided as annual totals for capex, rather than estimated as individual spend components. We use assumptions to disaggregate costs into spend baskets which can be attributed to economic sectors and analysed. While these have been based on analysis of past Department of Corrections projects, they may not reflect the precise nature of spend from this project when it occurs.
- Procurement costs are not included in the total capex figures. Given this assessment is based on a set of parameters that would guide the design and implementation of an increase in capacity at Auckland Prison, no procurement plan is in place. However, scenario three assigns a notional 10% of the budget for this process and shows the implications of this inclusion. Opex spending on programme team costs incorporates procurement, too.
- Variations in final scope or design could substantially affect actual costs and thus the estimated economic effects.

2. Modelling Constraints

- Input-Output (IO) models assume fixed production relationships and constant returns to scale. The structure of the economy is assumed to be consistent with the 2019-20 economy, the year in which the most recent national accounts tables are available from.
- IO models cannot incorporate supply constraints such as skilled labour shortages or material bottlenecks, which may affect the construction sector in Auckland. The effects of these bottlenecks or other constraints may be price increases across the construction sector, meaning the effects in reality would differ from those modelled.

3. Excluded Impacts

- Environmental externalities (e.g., embodied emissions, land use change) are discussed but not quantified.
- Social costs and benefits (e.g., rehabilitation outcomes, community safety, cultural proximity benefits) are not monetised in the IO model. We therefore discuss these qualitatively in various sections of the report. We understand that separate social impact and cultural impact assessments are being conducted and will sit alongside this assessment.

[26] Waikeria Prison Economic Impact Assessment (2016), Wiri Prison Economic Impact Assessment (2010),

- Displacement effects – such as whether construction workers are drawn from alternative projects – are not captured, meaning the gross impacts may overstate the net addition to regional activity. While this is true of all IO assessment, the Construction sector operates by joining up individual projects that are often relatively short in duration, to form a continuous workstream. In this instance, with sufficient planning and lead time, the project has the potential to contribute significantly to the sector by providing a stream of secure work over a 10-year timeframe.

4. Lack of counterfactual

- These outputs do not represent the net position. Given the modelling carried out is based on a parameters approach, focussing on the construction and operation of the increase in capacity within the Auckland economy, it does not consider alternatives. Overall, the economic impacts from alternative approaches to providing capacity are likely to differ from those modelled. The aim of assessment is not to provide a net position relative to alternatives, but to assess, as accurately as possible, the parameters as determined by Corrections current policy position (as set out in the HSCPBC).

- Potential counterfactuals might include expanding other prisons, building on a new site, changes to sentencing and bail policy or deferred investment. Each of these carries its own economic, social and institutional trade-offs, and would deliver different patterns of regional impact. However, this was beyond the scope of this assessment. The intent of this report is not to assess whether this is the optimal approach in national economic terms. Instead, it assesses the scale and character of economic effects that could arise if the proposal proceeds. This assessment's role is as an input to the planning and regulatory process concerned with the implications of the proposed designation, rather than a strategic investment prioritisation exercise.

5. Long investment horizon

- The assessment assumes uninterrupted project delivery and stable policy settings across a 10-year horizon until 2036/37. However, policy could be sensitive to political change. Influences such as population growth, judicial practice, changes in the policy settings or unforeseen shifts in offender volumes could result in higher-than-anticipated demand, placing pressure on the system even after capacity increase. Staged development has the potential to mitigate some of this risk. We include stage-disaggregated outputs in Appendix 2: MRIO Results Disaggregated, which show the impacts by phase.

4.5 Rationale for Approach

56. Given the absence of detailed design or tender-stage costings, this framework offers a pragmatic, transparent method for evaluating potential economic returns from the proposed increase in capacity at Auckland Prison. IO modelling is particularly appropriate at the preliminary planning stage, where policymakers need an order-of-magnitude understanding of regional economic implications before committing to more detailed investment appraisal.

5 Analytical Outputs

57. This section contains the outputs from the MRIO models. The outputs quantify the estimated economic impacts in terms of value added (contributions to GDP) and employment creation (measured in Modified Employment Counts, or MECs) across different regions and scenarios.

58. The economic effects reported are not the net social effects and are presented in aggregate terms. The quantified economic impacts are predominately to firms in Auckland that would be engaged to work on the project (construction sector and other key contributors such as manufacturing and professional services), as well as downstream businesses benefitting from increased spending by businesses directly engaged and the retail sector as households spend wages.

5.1 Capex Spending

59. Table 5-1 presents the estimated value added, expressed in 2024 $NZ million and present value terms, broken down by region and by type of economic effect (direct, indirect, and induced). Under Scenario 1, total value added is estimated at $937.5 million, comprising $310.5 million in direct effects, $319.5 million in indirect effects, and $307.5 million in induced effects. The Auckland Region captures the overwhelming majority of direct value added, while indirect and induced effects extend modestly into the Rest of the North Island and the Rest of New Zealand. Scenario 2 generates a slightly lower direct value added ($271.5 million) but higher indirect ($355.2 million) and comparable induced effects ($309.5 million), reflecting a more extensive supply chain engagement. Scenario 3 represents a higher investment scenario and thus results in the largest aggregate impacts, with total value added reaching $1.07 billion. Notably, this scenario generates greater direct and flow-on effects into the Rest of the North Island compared to Scenarios 1 and 2 because of the allocation of some procurement spending in the Rest of the North Island.

Table 5-1: Value Added Estimates ($NZ million$_{2024}$)(PV$_{8\%}$)

Scenario	Region	Direct	Indirect	Induced	Total
1	Auckland Region	$310.5	$275.3	$238.5	$824.3
	Rest of North Island	$0.0	$32.0	$49.2	$81.2
	Rest of NZ	$0.0	$12.2	$19.8	$32.0
	Total	$310.5	$319.5	$307.5	$937.5
2	Auckland Region	$271.5	$307.4	$239.3	$818.2
	Rest of North Island	$0.0	$34.9	$50.2	$85.1
	Rest of NZ	$0.0	$12.9	$20.0	$32.9
	Total	$271.5	$355.2	$309.5	$936.2
3	Auckland Region	$334.5	$294.6	$264.3	$893.4
	Rest of North Island	$24.0	$48.1	$68.1	$140.2
	Rest of NZ	$0.0	$13.6	$23.6	$37.2
	Total	$358.5	$356.3	$356.0	$1,070.8

60. Table 5-2 summarises the estimated employment equivalents, expressed as Modified Employee Counts (MECs)[27], again disaggregated by region and effect type. These are effectively MEC equivalent years, due to the aggregation over the full appraisal period. Employment effects are calculated using sector-specific labour-output ratios, adjusted for Auckland's current productivity and employment intensity in each sector. The employment generated may not be new jobs created, but rather a mix of new jobs and existing jobs sustained by this project over the duration of its build. The employment gains largely reflect the value added gains. Slight discrepancies come from some industries having higher employment figures for a given quantum of gross output, and the impact of discounting, which is seen on the value added estimates but not the employment count.

Table 5-2: Employment Equivalent Years Estimates (MECs)

Scenario	Region	Direct	Indirect	Induced	Total
1	Auckland Region	5,588	3,989	2,812	12,389
	Rest of North Island	0	385	656	1,041
	Rest of NZ	0	166	301	467
	Total	5,588	4,539	3,769	13,896
2	Auckland Region	4,883	4,539	2,821	12,243
	Rest of North Island	0	424	668	1,092
	Rest of NZ	0	175	305	480
	Total	4,883	5,139	3,794	13,816
3	Auckland Region	5,948	4,214	3,062	13,224
	Rest of North Island	360	578	857	1,795
	Rest of NZ	0	184	349	533
	Total	6,309	4,976	4,268	15,552

5.1.1 Comparative Impacts

61. Table 5-3 shows the modelled value added to the discounted costs associated with the Capex in each scenario. No attempt has been made to establish a counterfactual scenario against which to benchmark the impacts. Across all scenarios, the ratio of value added return to costs exceeds 1.0, indicating that the gross economic GDP effects exceed the costs.

[27] Modified Employee Counts (MECs) take Statistics New Zealand Employee Counts (ECs) as a base and adds in working proprietors, who may not be employees (for tax purposes). It represents a more accurate measure of actual jobs generated than ECs

Table 5-3: Net Effects Summary ($NZ million$_{2024}$)(PV$_{8\%}$)

Item	Scenario 1	Scenario 2	Scenario 3
PV Value Added	$938	$936	$1,071
PV Discounted Costs	$756	$756	$849
Value Added less Costs	$181	$180	$222
Ratio	1.24	1.24	1.26

5.1.2 Capex Sensitivity tests

62. Table 5-4 shows the outputs of sensitivity analysis using a 2% discount rate across the three scenarios, in line with Treasury guidance.[28] Because the appraisal period is less than 30 years, the 2% rate is used throughout. There is no change in the ratio of value added to cost due to the spend and gains occurring in the same years, therefore being subject to the same discount factor. Any changes are negligible (at 3-4 decimal places).

Table 5-4: Sensitivity Effects Summary ($NZ million$_{2024}$)(PV$_{2\%}$)

Item	Scenario 1	Scenario 2	Scenario 3
PV Value Added	$1,316	$1,314	$1,477
PV Discounted Costs	$1,062	$1,062	$1,173
Value Added less Costs	$254	$252	$303
Ratio	1.24	1.24	1.26

5.2 Opex Results

63. Next, we present the outputs from analysing the project Opex spending. Importantly, some of this spending continues for the whole 30-year appraisal horizon. Therefore, many of the GDP impacts occur in the future. Discounting at 8% leads these impacts to be very small in present terms. Employment, by contrast, is presented without discounting and is therefore disproportionately high.

64. Only one scenario is used, with the spend being distributed between construction services (facilities maintenance), internet and data processing services (operational servicing costs), and public order, safety and regulatory services (project Opex – Corrections project team costs and operationalising costs).

65. There are modest value added impacts from the project Opex, estimated at $94.7m. Job creation is estimated at 2,800 MEC years, equivalent to slightly under 100 per year.

[28] Updated public Sector Discount Rates for Cost Benefit Analysis – Treasury (2024)

Table 5-5: Opex Effects ($NZ million$_{2024}$) and MEC years

Scenario	Region	Direct	Indirect	Induced	Total
Value Added ($NZ million)	Auckland Region	$36.1	$23.2	$24.7	$84.0
	Rest of North Island	$0.0	$2.7	$4.9	$7.6
	Rest of NZ	$0.0	$1.1	$2.0	$3.1
	Total	$36.1	$27.0	$31.6	$94.7
Employment (MEC years)	Auckland Region	1,185	706	600	2,491
	Rest of North Island	0	70	137	207
	Rest of NZ	0	32	63	94
	Total	1,185	807	800	2,792

5.3 Local Community Economic Effects

66. This section provides a discussion of the potential effects of the local and wider community. For the purposes of this assessment, we define:

- **Local Community**: The area immediately adjacent to Auckland Prison, including Pāremoremo and the Upper Harbour Local Board area.
- **Wider Community**: The broader region, particularly the North and West of Auckland.

67. The project will create construction employment, much of which will be temporary. However, given the nature of the construction sector and the long time horizon, the expenditure on construction activities is likely to lead to engagement in the sector, supporting either existing workers for a significant period of time, or ensuring new workers have a strong and sustained employment pathway. Operational expenditure will also support ongoing employment both directly and in supplier sectors.

68. At the very local level, the net effect on local employment depends on skill matching, commuting patterns and a variety of other factors.

5.3.1 Construction Phase

69. The headline figures suggest 9,422 – 10,162 direct and indirect job years in Auckland region from the construction phases. While these cannot all accrue to local resident, local employment data from Coatesville, Pāremoremo East and Pāremoremo West show a strong presence in construction industries in the locality. Table 5-6 shows these figures. The share of workers in Auckland region employed in construction is only 10.4%, which is significantly lower than in the areas around the Prison. After accounting for the high employment recorded in correctional and detention services in Pāremoremo East – due to Auckland Prison being located there and many employees being recorded as working at the Prison – the share in construction rises to 30%. However, it is unclear whether this high construction presence is due to many construction workers living here or ongoing construction projects in these areas.

Table 5-6: Local Employment (MECs)

Metric	Coatesville	Pāremoremo East	Pāremoremo West
Total Employment	535	1,042	294
Construction share	24%	16%	34%

5.3.2 Operational Phase

70. Auckland Prison currently employs approximately 576 staff, the majority of which are in permanent, full-time roles (97%)[29]. At present 83% of this workforce live within 50km, but only 3% live within 5km. 95% of staff live in the Auckland region.

71. Corrections has provided estimates of the number of workers and associated shift patterns required to run the Prison with a 1,220 capacity. These staff numbers are indicative for the purpose of the Notice of Requirement (NOR). Final staff numbers are contingent on many factors such as Site design and operating model, the details of which will be confirmed in the future. Despite the capacity increasing by 79%, the increase in workforce is only anticipated to be 51%, suggesting there are opportunities for efficiencies. While custodial staff are estimated to increase by 55%, non-custodial staff are estimated to increase by 43%, reflecting the potential scale efficiencies across both groups, though to a greater degree for non-custodial functions.

72. Of the 292 total staff increase, we estimate that around 278 might be based in Auckland, if in line with the current distribution. It is possible that this is slightly higher given the tendency for workers coming from further away to be specialists, the numbers of which may not need to rise proportionally with prisoner increases. However, absent more robust figures, we base our regional estimates off this number.

73. Using average salaries for different CO qualification levels and estimates of the average wages for other positions, we estimate that additional wages paid to employees in Auckland would total $17.5m - $19.2m annually (2024 prices).[30] This is lower than the total operational spending anticipated at the Prison, with other spending also supporting wages for locals.

74. At full occupancy, the annual total operational expenditure attributable to Auckland Prison could be $146m. These figures are presented indicatively and reflect uncertainty around how fixed and variable costs scale with prisoner numbers, particularly under different custodial profiles. Actual expenditure will depend on how the Site is configured and managed in practice.

5.3.3 Visitor and Ancillary Spending

75. Staff and visitor spending may generate minor commercial benefits to nearby service providers, particularly in Albany. However, this effect is constrained by:

- the absence of a significant retail cluster in Pāremoremo; and

[29] Auckland Prison – Staff FTE query (10/07/2025)
[30] Based on average salaries multiplied by FTE numbers. Average salaries taken from SEEK listings for April 2025. Other employment uses medium percentile estimates from the IRD wage salary distributions statistics.

- limited public transport and accessibility for non-resident spending capture.

76. These have not been quantified due to the limited baseline data and because they are unlikely to materially affect the economic case.

5.4 Other Economic Considerations

77. In addition to the direct and flow-on effects associated with construction and operations, the proposed increase in capacity at Auckland Prison is likely to generate a range of other economic effects.

5.4.1 Procurement and Service Economy Stimulation

78. Although many Corrections procurement functions are managed through national contracts, the increase in capacity will still generate substantial regional demand for goods and services. These include:

- Maintenance and facilities management, which often rely on local trades and contractors;
- Health and mental health services, particularly through contracted primary care or NGO providers; and
- Educational programming and rehabilitation, some of which may be delivered in partnership with local tertiary or skills training institutions.

79. There is scope for regional economic benefit where such contracts are delivered by Auckland-based providers. Existing suppliers may be able to expand output to meet demand. Alternatively, the prospect of these contracts may enable new providers to access the market. The presence of a large, stable institutional buyer should help to stimulate growth in service sectors capable of meeting Corrections' requirements and standards.

5.4.2 Land Use and Spatial Policy Implications

80. The proposed capacity increase will reinforce the site's long-term institutional function, effectively locking in its use for corrections purposes. Additionally, the designation will be lifted off the existing Auckland Prison Village, potentially freeing that land up for a range of other uses. This has important economic consequences:

- Possible Enhanced Residential Activity: Auckland Prison Village may become surplus to requirements for Auckland Prison and become owned by another party. This will unlock value from the Site and enable a productive reallocation of Crown assets. This may result in an increase in residential development activity locally, noting that any increase in residential density at the Prison Village would require resource consent or a plan change.
- Foregone alternative use: The land on which the Prison is located could otherwise be used for residential or commercial purposes. However, given its role as an existing prison and its distance from core urban growth nodes, the opportunity cost is considered insignificant in economic terms.

- **Transport and connectivity demands**: As prisoner numbers increase, so too will the volume of staff movements, service deliveries and family visits. This places very modest but persistent pressure on surrounding roading infrastructure, particularly in peak periods. The dearth of public transport options may lead to increased car dependency, which has associated economic externalities (e.g., congestion and emissions).

5.4.3 Institutional Resilience and Geographic Improvement

81. A sustainable and efficient system should have positive fiscal implications over time. Expanding prison capacity within Auckland improves estate sufficiency both at the regional and national level. Corrections outlines its 20-year plan for investment in the prison network in the LTNCP. It has the following aims:

- **Optimise capacity;**
- **Upgrade facilities;**
- **Adapt to evolving needs; and**
- **Create a future-ready network.**

82. Within the LTNCP is the Future Prison Network Framework that helps ensure decisions about prison infrastructure are made with a whole of network view. The plan balances regional needs with improving the quality of prison infrastructure. The changes proposed for Auckland Prison help to ensure corrections system is resilient while addressing a growing capacity concern within Auckland.

5.4.4 Emissions and Environmental Externalities

83. One of the objectives that this proposal responds to is "[to] avoid or mitigate significant environmental effects". The project will generate emissions over the build cycle and its entire lifecycle. These arise from both embodied emissions during construction and ongoing operational emissions over the facility's usable life. Although prisons are not classed among the most emissions-intensive public assets, the cumulative effects over multiple decades are not insignificant.

84. Construction-phase emissions primarily derive from energy use in civil works and the embedded carbon content of materials such as concrete and steel. However, the final figure will depend heavily on material selection, construction methods, supply chain provenance and contractor sustainability practices. Given there is no design or procurement, environmental considerations have the potential to influence the level of total economic costs during the build and operation of the new Prison.

85. Opportunities exist to reduce or offset emissions associated with the increase in capacity through actions such as:

- **Sustainable procurement strategies**, prioritising low-carbon materials and suppliers;
- **Passive and energy-efficient design**, reducing ongoing operational energy demands;

- On-site renewable generation, such as solar panels on roofs; and
- Native planting or biodiversity offsets, particularly if surplus land within the Prison estate can be rehabilitated.

6 Conclusion

86. The proposed increase in capacity at Auckland Prison represents a significant public infrastructure investment. The construction phase alone is expected to generate approximately $938m - $1.07bn in value added[31]. This will sustain employment equivalent to around 14,000 job years, primarily within Auckland. These estimates are robust across a range of plausible cost scenarios and reflect gross economic effects relative to discounted investment costs. The scale of investment is significant, with only 10 planned or ongoing infrastructure projects in Auckland listed as larger by the Infrastructure Commission, and most of those are large scale motorway additions or upgrades.[32]

87. Operational expenditure generated by the project and operating the Prison at the higher capacity will also generate sustained economic effects. The potential value added associated with the project operational expenditure is $95m, and 2,800 job years. This will expand the Prison's role as a major institutional employer and procurement hub within the region. While this spending redistributes existing fiscal resources rather than creating new economic activity, it does yield localised benefits and supports labour market participation in secure public sector roles. The larger Prison will also require more staff to operate it. Of the estimated additional 292 staff expected to be employed, we estimate that around 278 might be based in Auckland. Wages paid to these staff could total around $18m.

88. While this assessment is necessarily based on a parameters approach, it has been constructed to provide a conservative and credible estimate of economic effects associated with current project definition. Some material uncertainties remain, such as in relation to the length of the investment horizon and future structure of the economy, use of indicative cost estimates and absence of counterfactual modelling. However, these are standard constraints at this stage of infrastructure planning and have been transparently documented. The justification for the proposed capacity is shown clearly in Ministry of Justice population growth projections and regional distributional needs. Auckland continues to account for a high share of the national prison population, and the economic effects associated with providing capacity for that demand are expected to remain within the bounds considered in this assessment.

89. The increase in capacity at Auckland Prison aligns with the Department of Corrections' broader network planning goals which include:

- Optimising capacity: the capacity increase helps ensure the right types of prisoner places are being provided within Auckland, a centre of strategic importance.
- Upgrading Facilities: The proposal includes significant upgrades to Auckland Prison overall and replaces end-of-life facilities.
- Adaptation to evolving needs: The capacity increase responds to evolving needs in terms of the mix of prisoner places to help ensure the network matches ongoing requirements.

[31] Real present value terms, 2024 prices

[32] New Zealand Infrastructure Commission – The Infrastructure Pipeline. Includes projects in planning or construction in 2025.

- Creating a future-ready network: The capacity increase at Auckland Prison is a vital network upgrade and expansion that contributes significantly to a future ready prison network as outlined in the LTNCP.

90. **In summary, the proposed capacity increase is expected to deliver measurable and significant regional and national level economic benefits through both the construction and operational phases.** It supports network resilience in the corrections system and provides a long-term institutional asset in the region of highest demand.

Appendix 1: CVs

Gregory Akehurst

DIRECTOR

BA/BCom (Geography and Economics)

- Email Address: [redacted]
- Mobile Number: [redacted]
- Location: Auckland

Code of Conduct for Expert Witnesses

In the context of this application, which is made under the Fast-track Approvals Act 2024, and in relation to which there may be no hearing, I have been asked to confirm that the reporting has been prepared in accordance with the Environment Court's Code of Conduct for Expert Witnesses.

I confirm that I have read the Environment Court's Code of Conduct for Expert Witnesses, as contained in section 9 of the Environment Court's Practice Note 2023, and I agree to comply with it.

The data, information, facts and assumptions that I have considered in forming my opinions are set out in this technical report. The reasons for the opinions expressed are also set out in the technical report.

I confirm that the matters addressed in the technical report are within my area of expertise, with the exception of where I confirm that I was relying on information provided by another person. I have not omitted to consider material facts known to us that might alter or detract from my opinions expressed. I have specified where my opinion is based on limited or partial information, and I have identified any assumptions I have made in forming my opinions.

Professional Experience

Greg is a founding Director of Market Economics and has over 30 years' experience consulting to a wide range of sectors in both the New Zealand and Australian markets. His experience covers assessment of market structure, size and change for development clients, economic impact assessment for commercial and government clients, as well as strategic policy, social infrastructure and amenity studies carried out for local councils. He has developed models to assess community needs and assess allocation networks set up to meet those needs. Greg leads 20-30 projects annually and has given expert witness evidence in local government hearings, the Environment Court and provided affidavits as an expert for the High Court.

Greg headed the team investigating the Canterbury Earthquake Rebuilds, labour force, materials and temporary housing requirements for CERA, Christchurch City and Canterbury Development Corporation. In recent years he has led studies into; infrastructure projects, Air Quality Impact modelling, as well as sector studies (Marine Industry, Quarrying and the aggregate sector and Construction) These studies draw together all aspects of inputs, to present central and local government with comprehensive assessments on economy's growth and change. Greg has also specialised in assessing Council funding mechanisms – in

particular Development Contributions and Financial Contributions for both Councils and the development sector.

Greg authored the Guidebook for Growth Councils that needed to carry out non-residential land capacity and demand assessments to meet their obligations under the National Policy Statement on Urban Development Capacity (NPS-UDC). He was Auckland Council's chief economic witness with respect to Business Land in the Unitary Plan Hearings and led a number of projects around the country investigating business land requirements under the NPS for high growth Councils (Auckland, Future Proof, Queenstown). He has carried out numerous studies into business land requirements across Auckland, including for Auckland Regional Council, Auckland Council, Tāmaki Redevelopment Company, Private Clients including Stevenson's at Drury focusing on the Southern Sector. Finally, in recent years, Greg has carried out a large number of economic impact assessments under the various different Fast Track legislations (COVID-19, Fast-Track Approvals Act 2024).

Areas of Expertise

Spatial and Economic Analysis and Modelling | Input-Output Modelling | Urban and Regional Economics | Skills and Labour Force Modelling | Economic Growth Modelling | Geographic Information Systems (GIS) | Supply and Demand Analysis | Sectoral and Specialist Market Analysis | Demand Analysis and Forecasting | Economic Impact Assessment | Policy Analysis and Advice | Infrastructure Funding and Investment | Local Government Funding | Resource Management | Strategic Advice | Peer Review

Tom Harris

Senior Consultant

MSc (Economics)

BSc (Economics)

- [redacted]
- Location: Wanaka

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Professional Experience

2023 to date	*Senior Consultant – Market Economics*
2021 – 2023	Economist – Department of Education (UK)
2019 – 2021	Fast Stream Assistant Economist – Department of Education (UK)
2018 – 2019	Economic Scholar – University of Exeter

Tom joined Market Economics from the UK Civil Service in 2023 where he worked as an economist across a challenging portfolio of projects and sectors. During the Covid-19 pandemic he was the principal analyst in the Department for Education modelling the pandemic's impacts on Children's Social Care. His other roles included leading on graduate outcomes analysis, supporting high-profile national policy implementation, being embedded in the permanent secretary's office, and working closely with external academics and stakeholders.

Tom taught undergraduate macroeconomics at The University of Exeter and completed a part-time master's alongside his work in the UK Civil Service. Using his access to novel administrative governmental datasets, he

authored research into topics which included comparing the scarring effect on early-career earnings of graduating during the Covid-19 years with the Global Financial Crisis, and assessing whether prospective university students could be nudged into making better application choices. Tom has extensive experience working with senior officials and politicians guide policy- and decision-making with analysis.

As a proficient and interested coder, Tom has written a book on the R programming language and published open-source software packages to aid data analysis.

Areas of Expertise

Econometrics| Game Theory | Empirical Industrial Organisation | Mathematical and Algorithmic Modelling | Machine (Statistical) Learning Models | Quantitative and Qualitative Research Methods | Public Economics | Economic Appraisal | Sectoral Analysis | Cost Benefit Analysis | Demand Analysis and Forecasting | Policy Analysis and Advice | Business Cases | Project Management

Appendix 2: MRIO Results Disaggregated

Table A-0-1 and Table A-0-2 show the value added and employment generation disaggregated by year and phase, according to the most recent cost and planning information. The lack of spending in years 1 and 2 reflect an initial planning period.

Table A-0-1: Capex Value Added by Year ($NZ million$_{2024}$)

					Phase 1					Phase 2				Phase 3
Scenario	**Region**	**Employment**	**25/26**	**26/27**	**27/28**	**28/29**	**29/30**	**30/31**	**31/32**	**32/33**	**33/34**	**34/35**	**35/36**	**36/37**
1	Auckland Region	Direct	0	0	35	49	24	44	37	37	32	21	25	7
		Indirect	0	0	31	44	21	39	33	33	28	19	22	6
		Induced	0	0	27	38	18	34	28	28	24	16	19	5
	Rest of North Island	Direct	0	0	0	0	0	0	0	0	0	0	0	0
		Indirect	0	0	4	5	2	5	4	4	3	2	3	1
		Induced	0	0	6	8	4	7	6	6	5	3	4	1
	Rest of NZ	Direct	0	0	0	0	0	0	0	0	0	0	0	0
		Indirect	0	0	1	2	1	2	1	1	1	1	1	0
		Induced	0	0	2	3	2	3	2	2	2	1	2	0
2	Auckland Region	Direct	0	0	31	43	21	38	32	32	28	19	22	6
		Indirect	0	0	35	49	24	44	36	36	31	21	25	7
		Induced	0	0	27	38	18	34	28	28	24	17	19	5
	Rest of North Island	Direct	0	0	0	0	0	0	0	0	0	0	0	0
		Indirect	0	0	4	6	3	5	4	4	4	2	3	1
		Induced	0	0	6	8	4	7	6	6	5	3	4	1
	Rest of NZ	Direct	0	0	0	0	0	0	0	0	0	0	0	0
		Indirect	0	0	2	2	1	2	2	2	1	1	1	0
		Induced	0	0	2	3	2	3	2	2	2	1	2	1
3	Auckland Region	Direct	0	15	35	49	24	44	43	37	34	21	25	7
		Indirect	0	12	31	44	21	39	37	33	30	19	22	6
		Induced	0	16	27	38	18	34	35	28	27	16	19	5
	Rest of North Island	Direct	0	15	0	0	0	0	6	0	3	0	0	0
		Indirect	0	10	4	5	2	5	8	4	5	2	3	1
		Induced	0	12	6	8	4	7	11	6	7	3	4	1
	Rest of NZ	Direct	0	0	0	0	0	0	0	0	0	0	0	0
		Indirect	0	1	1	2	1	2	2	1	1	1	1	0
		Induced	0	2	2	3	2	3	3	2	2	1	2	0

Table A-0-2: Capex Employment by Year

					Phase 1					Phase 2				Phase 3
Scenario	**Region**	**Employment**	**25/26**	**26/27**	**27/28**	**28/29**	**29/30**	**30/31**	**31/32**	**32/33**	**33/34**	**34/35**	**35/36**	**36/37**
1	Auckland Region	Direct	0	0	469	703	366	732	659	712	661	484	615	186
		Indirect	0	0	335	502	261	523	470	509	472	346	439	133
		Induced	0	0	236	354	184	368	332	359	333	244	309	94
	Rest of North Island	Direct	0	0	0	0	0	0	0	0	0	0	0	0
		Indirect	0	0	32	48	25	50	45	49	46	33	42	13
		Induced	0	0	55	83	43	86	77	84	78	57	72	22
	Rest of NZ	Direct	0	0	0	0	0	0	0	0	0	0	0	0
		Indirect	0	0	14	21	11	22	20	21	20	14	18	6
		Induced	0	0	25	38	20	39	35	38	36	26	33	10
2	Auckland Region	Direct	0	0	410	614	320	640	576	623	578	423	537	163
		Indirect	0	0	381	571	297	595	535	579	537	393	499	151
		Induced	0	0	237	355	185	370	333	360	334	244	310	94
	Rest of North Island	Direct	0	0	0	0	0	0	0	0	0	0	0	0
		Indirect	0	0	36	53	28	56	50	54	50	37	47	14
		Induced	0	0	56	84	44	88	79	85	79	58	74	22
	Rest of NZ	Direct	0	0	0	0	0	0	0	0	0	0	0	0
		Indirect	0	0	15	22	11	23	21	22	21	15	19	6
		Induced	0	0	26	38	20	40	36	39	36	26	34	10
3	Auckland Region	Direct	0	189	469	703	366	732	770	712	721	484	615	186
		Indirect	0	118	335	502	261	523	540	509	510	346	439	133
		Induced	0	131	236	354	184	368	409	359	374	244	309	94
	Rest of North Island	Direct	0	189	0	0	0	0	111	0	60	0	0	0
		Indirect	0	101	32	48	25	50	105	49	78	33	42	13
		Induced	0	105	55	83	43	86	139	84	111	57	72	22
	Rest of NZ	Direct	0	0	0	0	0	0	0	0	0	0	0	0
		Indirect	0	9	14	21	11	22	25	21	23	14	18	6
		Induced	0	25	25	38	20	39	50	38	44	26	33	10

Table A-0-3: Opex Value Added ($NZ million$_{2024}$) and Employment by Year

				Phase 1					Phase 2					Phase 3																		
Value Added	**Region**	**25/26**	**26/27**	**27/28**	**28/29**	**29/30**	**30/31**	**31/32**	**32/33**	**33/34**	**34/35**	**35/36**	**36/37**	**37/38**	**38/39**	**39/40**	**40/41**	**41/42**	**42/43**	**43/44**	**44/45**	**45/46**	**46/47**	**47/48**	**48/49**	**49/50**	**50/51**	**51/52**	**52/53**	**53/54**	**54/55**
Direct		0.0	0.0	0.8	0.7	0.7	0.6	2.1	2.0	1.8	1.9	2.4	2.4	2.0	1.9	1.8	1.6	1.5	1.4	1.3	1.2	1.1	1.0	0.9	0.9	0.8	0.8	0.7	0.6	0.6	0.6
Indirect	Auckland Region	0.0	0.0	0.3	0.3	0.2	0.2	0.8	1.3	1.2	1.2	1.3	1.5	1.5	1.4	1.3	1.2	1.1	1.0	0.9	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.4
Induced		0.0	0.0	0.6	0.6	0.5	0.5	1.7	1.3	1.2	1.3	1.8	1.6	1.3	1.2	1.1	1.1	1.0	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4
Direct		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Indirect	Rest of North Island	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Induced		0.0	0.0	0.1	0.1	0.1	0.1	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Direct		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Indirect	Rest of NZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Induced		0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Employment																															
Direct		0.0	0.0	10.1	10.1	10.1	10.1	36.6	33.1	33.1	38.1	53.9	55.3	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7
Indirect	Auckland Region	0.0	0.0	3.2	3.2	3.2	3.2	11.7	18.8	18.8	20.4	25.4	30.8	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5
Induced		0.0	0.0	5.4	5.4	5.4	5.4	19.8	16.9	16.9	19.6	28.1	28.3	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9
Direct		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Indirect	Rest of North Island	0.0	0.0	0.3	0.3	0.3	0.3	1.1	1.8	1.8	2.0	2.5	3.0	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Induced		0.0	0.0	1.1	1.1	1.1	1.1	4.1	3.8	3.8	4.4	6.1	6.4	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
Direct		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Indirect	Rest of NZ	0.0	0.0	0.2	0.2	0.2	0.2	0.5	0.8	0.8	0.9	1.2	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Induced		0.0	0.0	0.5	0.5	0.5	0.5	1.9	1.7	1.7	2.0	2.8	2.9	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6