

Economic assessment of MP4

Final

Report to:

OceanaGold NZ Limited

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EAQUB & EAQUB

Contents

1. Executive summary.....	2
2. Introduction	4
2.1 Site Location and Description.....	4
2.2 Project Overview	7
3. Defining the region	11
3.1 Current economic contribution.....	13
4. Historical employment context	14
5. Project evaluation	17
5.1 Key assumptions for the project	19
5.2 The modelling approach	21
5.3 Results	23
5.3.a Exports.....	27
5.3.b GDP & employment effects	28
5.3.c Royalties and taxes	29
5.3.d Local government rates	30
6. Assessing costs of known externalities	30
7. Conclusion.....	31
Appendix A: Detailed economic model results	0

1. Executive summary

OceanaGold (New Zealand) Limited (OGNZL) has commissioned this report from economist Shamubeel Eaquad of Eaquad & Eaquad Limited. The purpose is to assess the economic impact of the Macraes Phase Four Project (MP4). MP4 extends gold mining at the Macraes Operation through to 2039. The alternative is the current life of mine plan, under which mining winds down around 2030, followed by rehabilitation.

Macraes is the largest gold mine in New Zealand. It has produced more than 6 million ounces since 1990 and accounted for 59% of all the gold produced in the country in 2024. MP4 sustains this operation, and a major regional employer, for almost a decade longer. It delivers significant regional and national economic benefits as summarised below. All dollar figures are in New Zealand dollars unless otherwise stated.

Investment. MP4 brings around \$1.3 billion of additional capital investment over the life of the project (\$1.6b including inflation). This is foreign direct investment that would not occur if the mine closed around 2030. It is well above the \$100 million the Overseas Investment regime treats as a significant investment.

Exports. The project adds between \$4.5 billion (at our base case gold price) and \$7.3 billion (upside) of gold exports, an average of \$320 to \$520 million a year, with a present value of \$2.5 to \$4.1 billion at an 8% real discount rate. This sustains Macraes' export contribution to the end of the 2030s rather than ending it around 2030. An average of \$320 to \$520 million a year is equivalent to between a tenth and a sixth of the Government's Minerals Strategy goal of \$3 billion in annual mineral exports.

Employment. The mine directly employs around 760 people, and supports around 2,600 jobs in total across New Zealand once suppliers, contractors and the spending of those workers are counted. The jobs are well paid, over \$100,000 a year on average against around \$80,000 in Otago and nationally, and the workforce lives mostly in Dunedin and Waitaki, so about half of the jobs are in Otago. Without MP4 this employment winds down from around 2030. MP4 sustains it to 2039, almost a decade longer.

Economic activity. MP4 is associated with around \$3.1 billion of spending in New Zealand over the life of the project, on wages, suppliers and capital. About \$1.0 billion of this, a third, is spent in the Otago region. We focus on this spending deliberately: unlike export revenue, it excludes the profits that flow to the mine's overseas owners, so it is the part of the project's revenue we can confidently say benefits the New Zealand economy. Tracing it through the economy, MP4 adds

around \$2.4 billion to New Zealand's GDP through direct and indirect effects, and around \$3.1 billion including the induced effects of workers' spending (present values of \$1.4 and \$1.9 billion). Around a quarter of the GDP effect accrues in Otago, including around \$330 million in Waitaki District, equivalent to around 1.5% of the district's economy a year while the project is active.

Crown revenue. The project returns between \$0.5 billion (base case) and \$1.4 billion (upside) to the Crown over its life, in royalties, company income tax and PAYE. The present value is \$0.3 to \$0.8 billion at an 8% real discount rate.

The project is robust to the gold price. MP4 breaks even at a gold price of about US\$2,050 an ounce. That is about half the spot price, which was over US\$4,000 an ounce in early August 2026, and below both our base case (US\$2,450) and the upside (US\$4,000). The project pays for itself, including the cost of new development, at prices well below where gold trades today.

The purpose of the Fast-track Approvals Act 2024 is to facilitate the delivery of projects with significant regional or national benefits. MP4 is a significant capital investment that unlocks gold resources with benefits that are both local, in concentrated spending and employment in the Waitaki District and Otago, and national, through exports, foreign direct investment and Crown revenue.

In my opinion, from an economic perspective, MP4 gives rise to economic benefits of a quantum and scale that meet the purpose of the Act. The Macraes mine is already a significant contributor to the local and national economy. With MP4, it will continue to be, for longer.

2. Introduction

OceanaGold (New Zealand) Limited (“**OGNZL**”) currently undertakes open pit and underground gold mining operations at the Macraes Operation located at Golden Point Road, Macraes Flat, East Otago. As part of their ongoing operations, OGNZL continually review the remaining life of the Macraes Operation in light of updated knowledge of the gold resource and the economics of mining.

Reflecting recent exploration success and optimisation work, together with higher gold prices, the Macraes Phase Four Project (“**MP4**” or “**the Project**”) seeks to extend the life of mining at the Macraes Operation through to 2039 (versus closure in 2030). The Project, which has the potential to add more than 1,000,000 ounces of gold production, is identified as a Listed Project in Schedule 2 of the Fast-track Approvals Act 2024 (“**FTAA**”) as a project of national significance.

To support the development of the substantive application for the Project, OGNZL has engaged Eaclub & Eaclub Limited to provide an assessment of the Project’s effects on economics and, to the extent required, identify any necessary management and operation measures to address any such effects.

The scope of this report is to assess the current economic contribution of the Macraes operation and the impact of this application, vs the status quo where the mine would close in 2030.

2.1 Site Location and Description

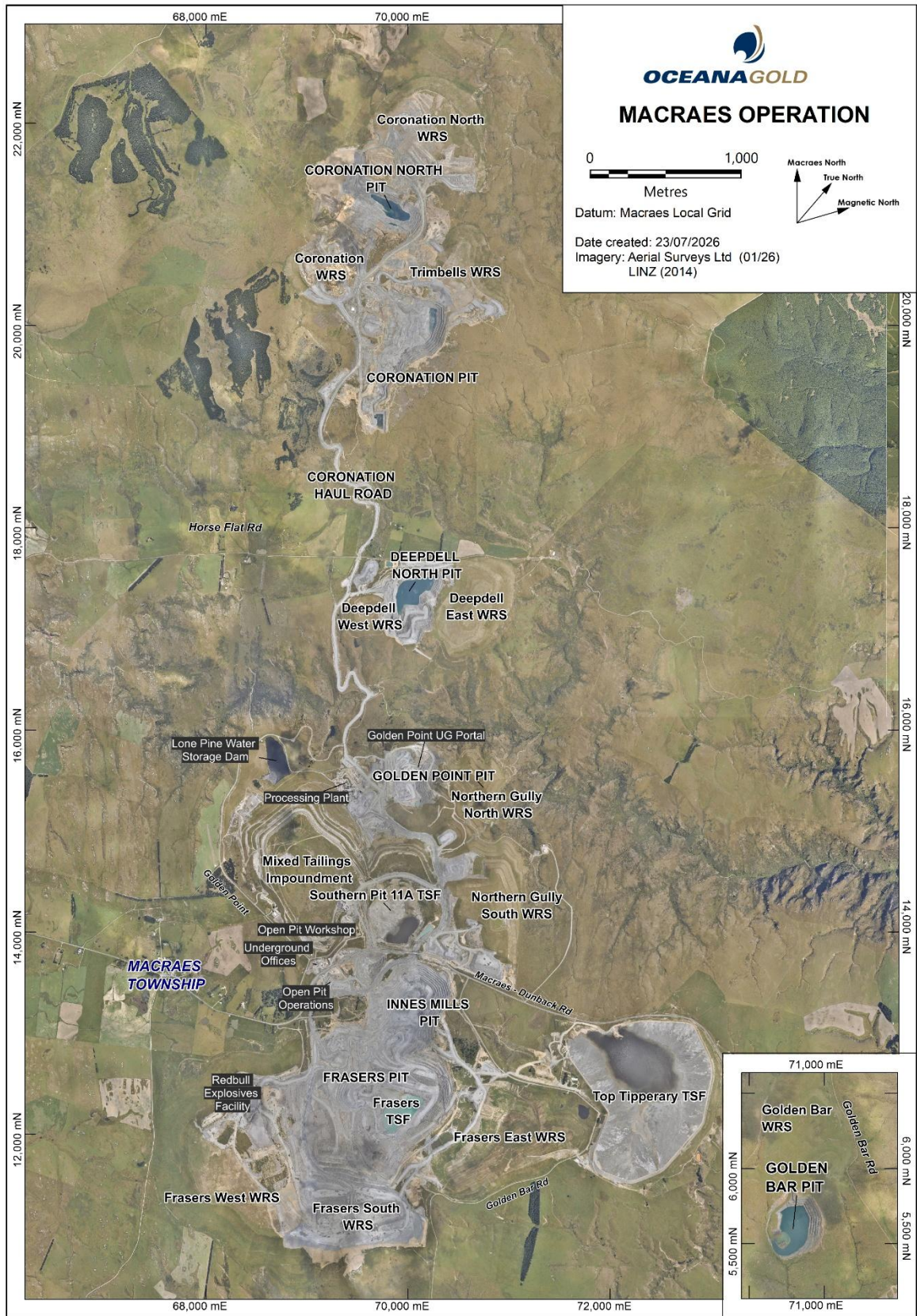
OGNZL owns and operates the Macraes Operation at Macraes Flat, approximately 30 km northwest of Palmerston in the Otago Region. The Macraes Operation is the largest gold mine in New Zealand and, since commissioning in 1990, has produced more than 6 million ounces of gold.

Macraes Flat is situated on an elevated plateau at approximately 500 m above sea level. The plateau is flanked by the Taieri Ridge to the northwest, Shag Valley and Horse Range to the east, and the coastal hills and extinct volcanic cones of Palmerston and Waikouaiti to the southeast. Macraes Road provides access to Macraes Flat and the Macraes Operation, connecting to State Highway 85 to the east and State Highway 87 (SH87, the Middlemarch–Hyde Road) to the west.

The environment within and surrounding the Macraes Operation has been shaped by historic and current mining activities undertaken in accordance with existing resource consents. Figure 1 shows the arrangement of the major mine features at the Macraes Operation. In summary, the current components of the Macraes Operation include:

- Numerous open pits (both operational and non-operational);
- Two underground mines (Fraser's, now closed, and Golden Point, which is actively mined);
- Waste rock stacks at various stages of operation and rehabilitation;
- A network of haul roads and general mine service tracks;
- A Processing Plant;
- Five tailings storage facilities (three inactive, one active but nearing capacity, and one under construction and currently receiving tailings);
- An extensive network of water management infrastructure, including diversion drains, silt ponds, sumps, pit lakes, and freshwater storage reservoirs;
- Two consented but not yet constructed water storage reservoirs (Camp Creek Dam and Coal Creek Dam); and
- Associated infrastructure supporting ongoing operations, including district roads, powerlines, workshops, offices, and associated water and amenity facilities.

Figure 1: Existing site layout at the Macraes Operation (as of July 2026)



2.2 Project Overview

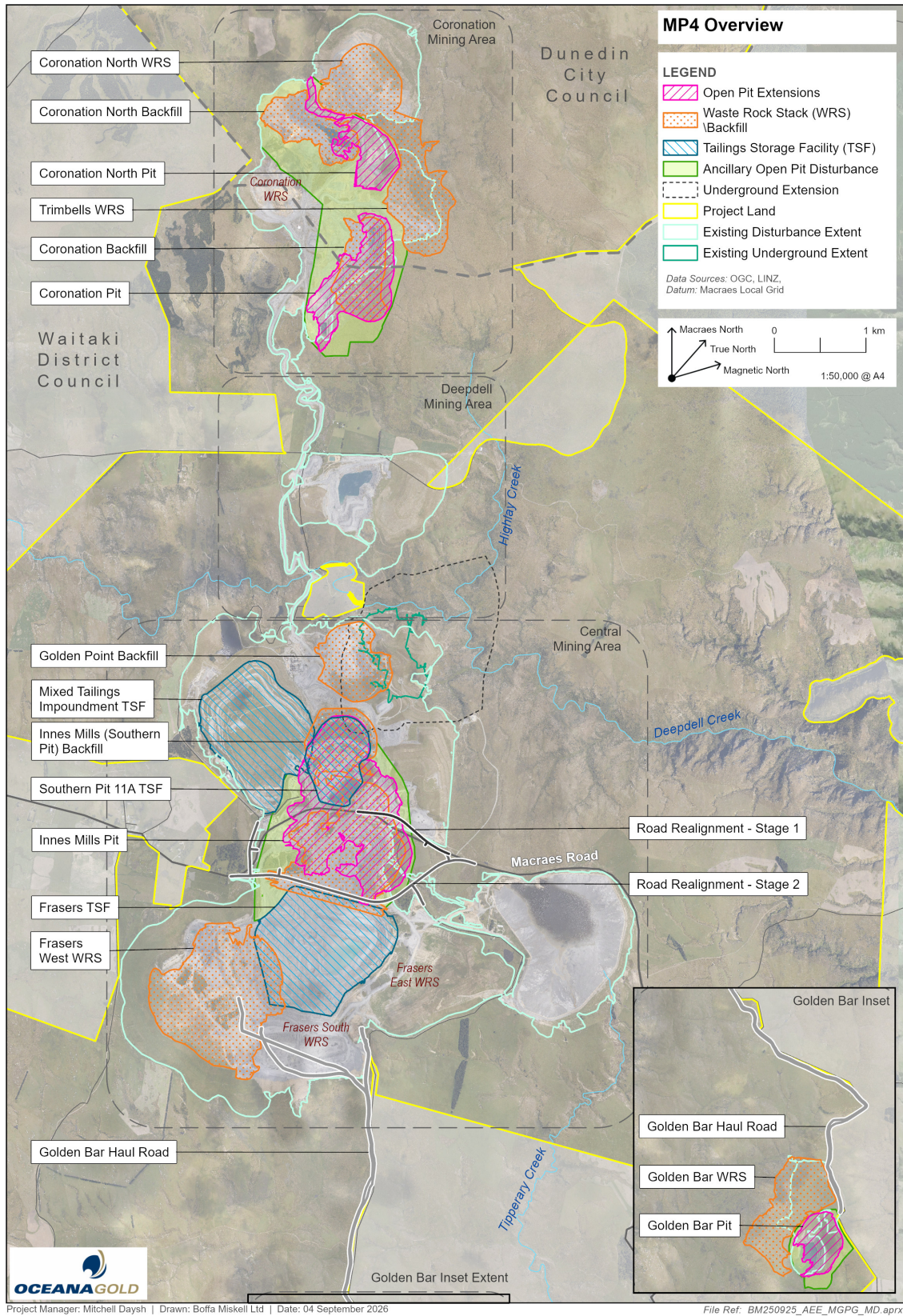
The Project is made up of the following proposed key activities:

- **Open pit extensions** at Golden Bar, Coronation, Coronation North, and Innes Mills.
- **Underground mine expansion** through further development of the Golden Point Underground mine (“**GPUG**”).
- **Tailings management**, including:
 - Construction of the Frasers Tailings Storage Facility (“**FTSF**”) Stage 3 to accommodate a total tailings storage of up to 153 Mt; and
 - Hydraulic mining and relocation of tailings from the Mixed Tailings Impoundment (“**MTI**”), Southern Pit Option 10 TSF (“**SP10**”), and Southern Pit Option 11A TSF (“**SP11**”) to FTSF.
- **Waste rock disposal**, including increased storage capacity within open pits and at existing waste rock stacks at Coronation, Coronation North, Innes Mills, Golden Bar, Golden Point, and Frasers.
- **Water management infrastructure and operations**, including:
 - Construction of Camp Creek and Coal Creek water storage dams for flow and water quality management;
 - Construction, operation and maintenance of a Water Treatment Plant; and
 - Ongoing operation and maintenance of the Mine Water Management System (“**MWMS**”).
- **Infrastructure and roading works**, including:
 - Realignment of Macraes Road in two stages; and
 - Relocation of the Open Pit Mining Workshop.
- **Ecological enhancements**, including establishment of:
 - Murphys Ecological Enhancement Area (“**MEEA**”) near Murphys Creek, including predator fencing, access tracks, and site facilities;
 - Mt Highlay restoration area;

- Cranky Jims Link shrubland enhancement area;
- Murphys Link tussock protection area; and
- Additional compensation measures for residual ecological impacts.
- **Mine closure and rehabilitation activities**, including rehabilitation of mining landforms, creation of pit lakes, dry capping of tailings storage facilities, and revegetation in accordance with closure objectives.

An overview of the proposed activities which make up the Project is shown in Figure 2 below.

Figure 2: Proposed activity sites

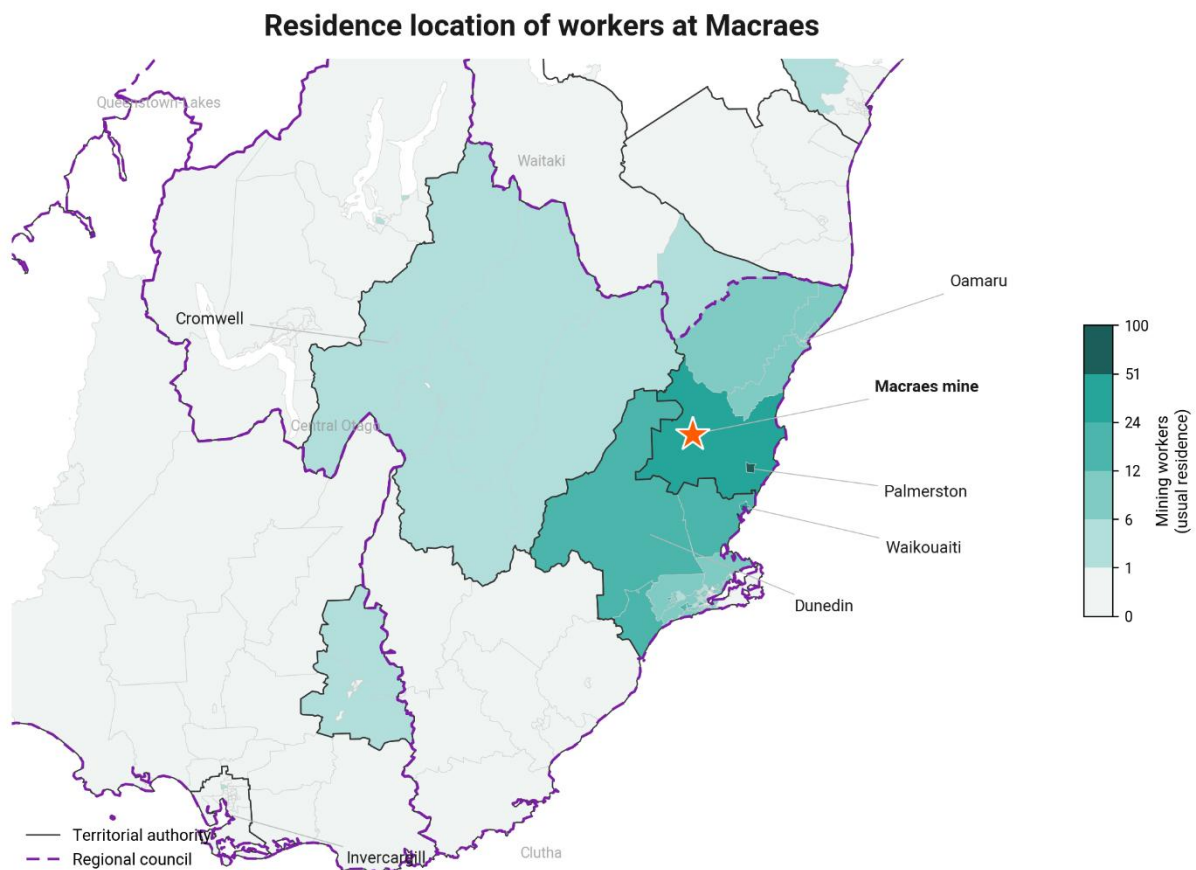


3. Defining the region

We define local/region mostly in terms of where the benefits of the mine are felt. We analysed this at a bottom-up level, looking at where staff live (Figure 3). The functional ‘regional’ area spans the Waitaki District and Dunedin City. We use Waitaki District and Dunedin City as the local area wherever comparable data allows, and the wider Otago Region where it does not. We do not use the Otago Region as the primary local lens: the regional council boundary is an administrative area drawn around water catchments rather than an economic region, and it includes large and distant economies like Queenstown-Lakes that have little connection to the mine.

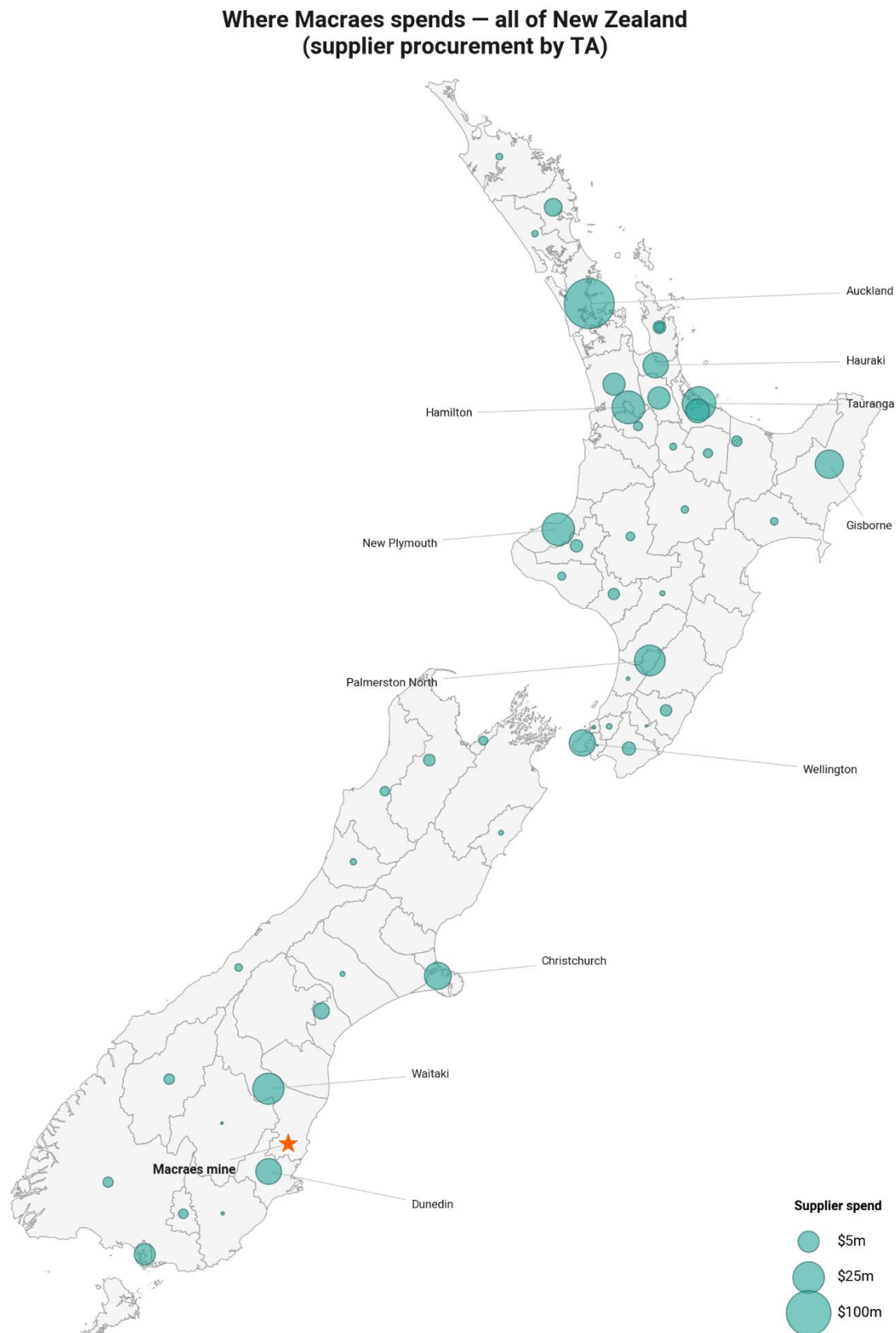
Figure 4 shows that suppliers to Macraes are spread across New Zealand, with 20% of spending in the Otago region. Many of these suppliers have local operations. While we have made efforts to map those, the head office location of these firms is also a beneficiary. This complexity is always an issue in local economic analysis, because firms, workers and supply chains cross local geographic boundaries with few barriers.

Figure 3: Workers directly employed at the mine live mostly in Waitaki and Dunedin (worker home locations from company records, mapped at Statistical Area 2)



Source: Analysis of company data

Figure 4: Suppliers to Macraes are spread across New Zealand

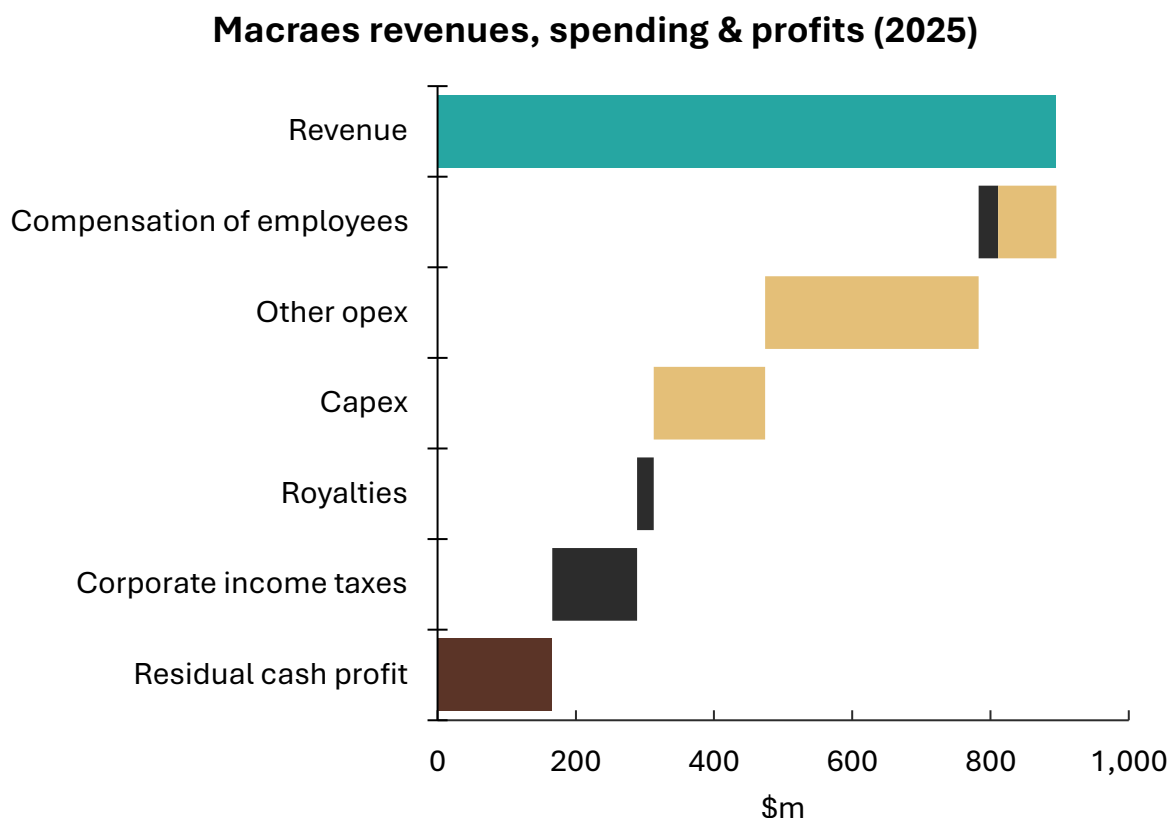


Source: Analysis of company data

3.1 Current economic contribution

To understand the impact of the project we focus on how the mine spends in the national and local economy, and its effects directly and indirectly via its suppliers and the jobs supported. The economic effect of the mine can be illustrated through the revenues and spending of the mine in 2025 (Figure 5).

Figure 5: Revenues and spending of the mine, 2025



Source: Analysis of company data

The breakdown is:

- Revenue of \$896m is from exports of gold. This is a helpful macro measure, consistent with the Mineral Strategy and stated goals of the FTAA to enable mineral exports.
- Spending of:
 - \$113m on compensation of employees (mostly based locally). This is a direct spending on employees and a tangible local economic impact. Average income exceeds \$100,000 per annum, compared to \$77,800 in the Otago region, and \$80,900 nationally.

- The spending by workers in their local communities supports further jobs, which we quantify in our analysis as induced economic and employment effects (we also do this for the incomes of those jobs supported in suppliers).
- Spending on Opex and Capex (\$583m), of which 21% is spent in the Otago region. Around 10% of the total is paid to international suppliers, measured by foreign-currency invoicing; measured by supplier billing address the share is up to 15%, because several overseas-domiciled suppliers deliver and service through New Zealand operations. We net imports out of the spending before tracing it through the economy (section 5.2). The spending on local suppliers is a key focus of our analysis, as this adds considerable economic benefit to the local economy. This also includes spending on resource consent compliance, such as rehabilitation and ecological enhancement work.
- This led to royalties and taxes of \$147m (and PAYE of around \$29m within the compensation of employees, shown as its own segment in Figure 5). These benefits accrue to government or the fiscal account.
- The residual of \$166m is the cash profit available to the owners of the mine.
 - While there was a residual cash surplus in 2025, 7 years of data between 2019 and 2025 shows a cumulative residual cash loss of \$49m, mainly explained by capital investments funded out of free cash flow and new capital injected into the operation.

4. Historical employment context

The Macraes Operation has been going since the early 1990s. Employment on site has increased over time, with variations over time, due to changes in production. The 2025 employment picture looks like this (Figure 6):

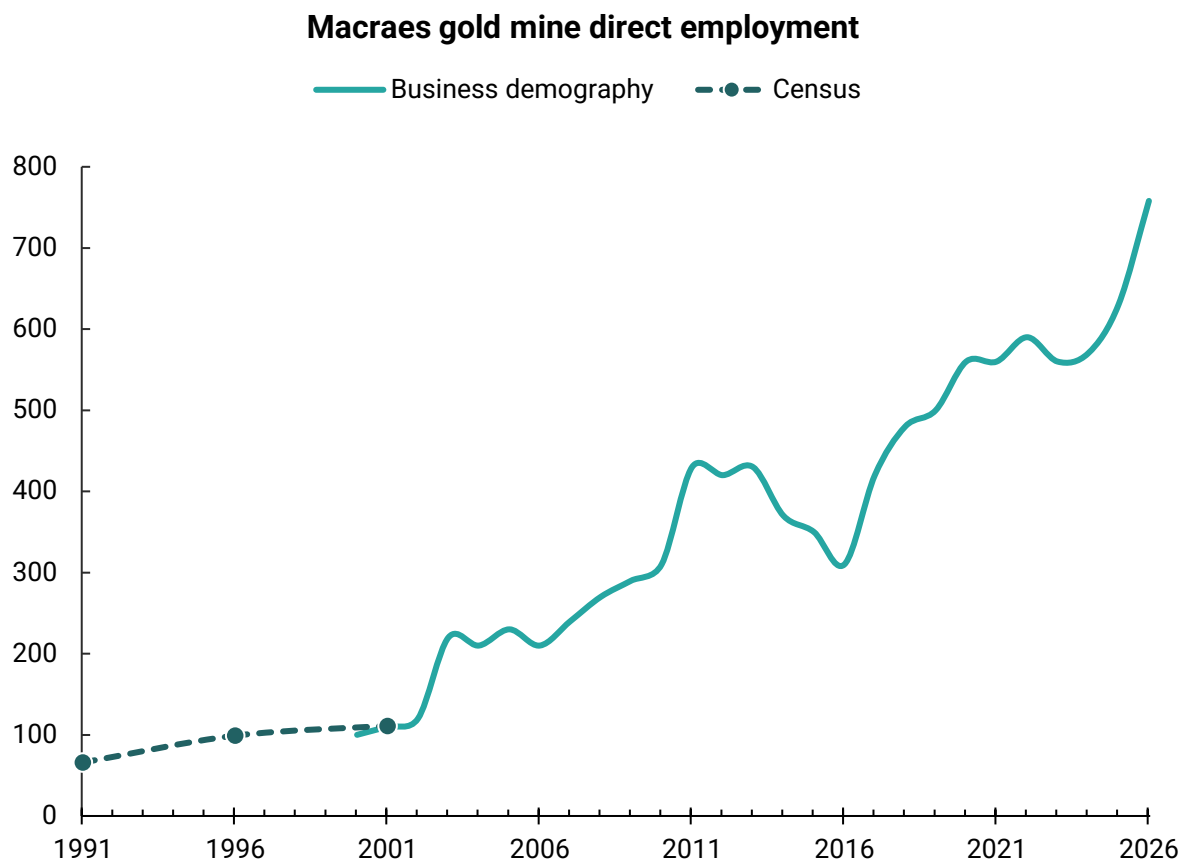
- Direct employment: There were around 760 people employed at the mine (726 full-time equivalents) in 2025, around 85% of whom live in the Otago region.
 - There were another 85 operational contractors working at the mine site, but they are counted as suppliers for this economic assessment.
- Indirect employment: Spending on New Zealand suppliers (both opex and capex) supported around 2,950 jobs indirectly, around 890 of them in Otago. These estimates use the same input-output model as the project assessment in section 5.

- Induced employment: The spending of the jobs directly and indirectly supported by the mine, supported a further 1,400 jobs across the economy, around 760 of them in Otago. These induced estimates come from our economic modelling (section 5.2). They include the spending of the mine's own wage bill as well as wages earned at its suppliers.
- The total employment effect, directly, indirectly and induced totalled around 5,100 nationally (around 4,600 full-time equivalents), or around 0.2% of all jobs, and around 2,400 in Otago, around 2% of regional jobs.

For context, there were 10,980 filled jobs¹ in Waitaki district where the mine is located, and 57,723 in Dunedin City, where many of the workers live and commute from. Total jobs from the mine (direct, indirect and induced) account for around 13% of jobs in Waitaki and around 1.4% of jobs in Dunedin.

Across the Otago region, there were 115,120 filled jobs, and 156,200 total employed (the official Household Labour Force measure also includes self-employed, which is not counted in the filled jobs data, which we use as a benchmark for Territorial Authorities, as more reliable data is not available). Nationally there were 2.3 million filled jobs and 2.9 million employed including self-employed.

¹ Those who paid PAYE tax.

Figure 6: Gold mine direct employment at Macraes

Source: Statistics NZ, Company data

The reduction in mining jobs between 2013 and 2016 gives a natural experiment. During that period, overall economic activity was strong. The local economies of Waitaki and Dunedin continued to grow overall, but one-off effects of mining job losses and meat processing dragged down overall jobs growth in Waitaki district. National trends suggest employment in the region should have been stronger than had been experienced through that period. This is more visible in the smaller Waitaki district; effects are harder to see in the larger Dunedin City. These employment trends are based on Stats NZ filled jobs data for Waitaki District and Dunedin City. Filled jobs count employees at employing businesses; contractors and the self-employed are not included. Employment at the mine has risen over time even in years when gold output has fallen, because ore grades have declined: more rock must be mined and processed for each ounce, which takes more labour.

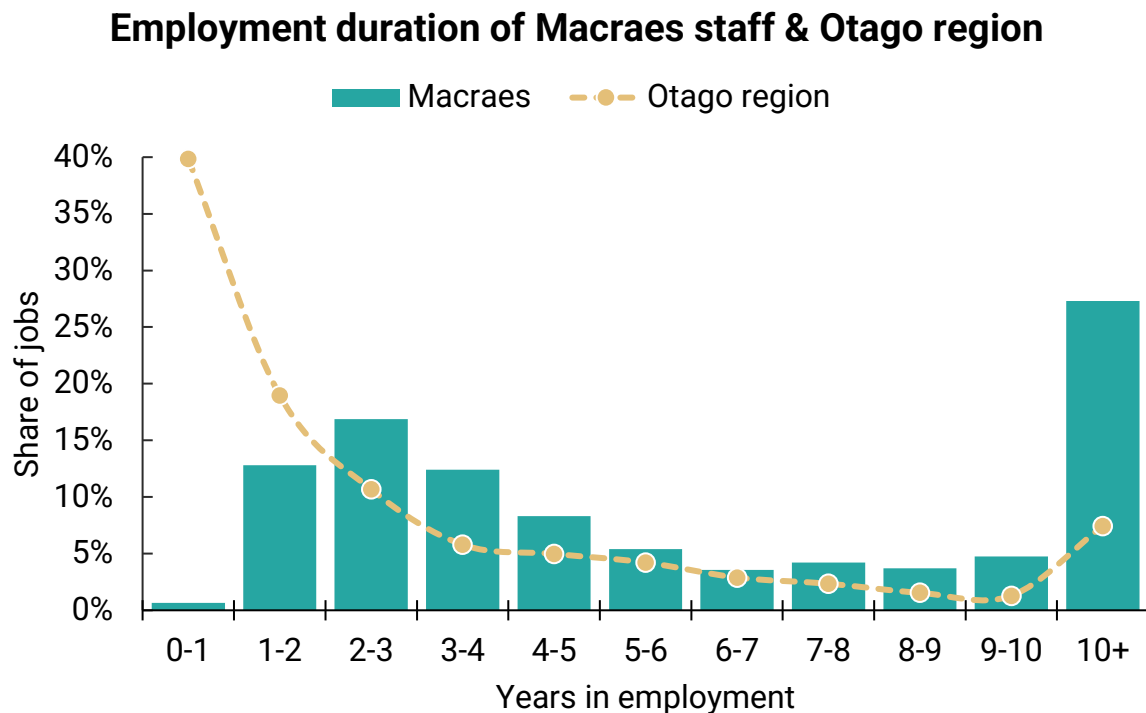
The jobs at the mine are not short term or Fly in Fly Out, as sometimes happens in more remote operations internationally. As our analysis in the previous section shows, a majority of workers live within driving or bussing (provided by the mine from main centres) distance.

Employment in the mine is more stable than the local experience. Figure 7 shows employment by tenure duration and provides Otago region comparison for context.

The average duration of employment at Macraes is 6.5 years, 2.2x longer than the Otago region average of 3 years.

Furthermore, analysis of company data shows just over 5% are returning employees (people who left the mine and later rejoined). Long tenure, returning employees and locally based workers are consistent with a stable workforce.

Figure 7: Employment tenure at Macraes and in the Otago region



Source: Statistics NZ, Analysis of company data

5. Project evaluation

For this economic assessment, we have been guided by the following relevant sections of the FTAA (our emphasis):

- S3: The purpose of this Act is to facilitate the delivery of infrastructure and development projects with **significant regional or national benefits**.
- S22(1)(a) the project is an infrastructure or **development project that would have significant regional or national benefits**; and
- S22(2)(a)(ii) will deliver new regionally or nationally significant infrastructure or **enable the continued functioning of existing regionally or nationally significant infrastructure**:

- S22(2)(a)(vi) **will support development of natural resources, including minerals** and petroleum:
- S22(6) For the purposes of subsection (1)(a), the Minister may compare the activity involved in the project against the **current and other likely uses of the space**

Complementary to this is A Minerals Strategy to 2040² published by MBIE, which states that “growth towards our goal of \$3 billion in annual mineral exports will be underpinned by scaling up our existing exports”.

The FTAA does not specifically define significant regional or national benefits. For our assessment, we suggest that:

- the national significance test is best assessed as contributions to exports and fiscal impacts. Economic effects are compared against other major projects and large businesses, because any one project or business is usually a small part of the national economy.
- For regional effects, we suggest defining regional or local as the area where the economic effects are concentrated. Our earlier analysis shows that while the mine is in Macraes flat in the Waitaki District, around 80% of the workers live across Waitaki District and Dunedin City. Economic effects are identified in GDP and employment terms, as well as the direct (in the mine alone), indirect (suppliers to the mine) and induced (the income effect of the direct and indirect jobs) effects.

How economic benefits should be assessed under the FTAA is contested. Fairgray (2026)³ argues that economic impact assessment, quantifying the direct, indirect and induced activity a project adds against a clear counterfactual, matches the Act’s purpose of facilitating projects with significant regional or national benefits, and that flow-on effects are a critical part of those benefits. Denne and Stroombergen (2026)⁴ respond that activity is not the same as benefit, and that benefits are better assessed through cost-benefit analysis, treating induced effects with particular caution. The Waihi North panel decision indicates the Act does not require benefits

² <https://www.mbie.govt.nz/building-and-energy/energy-and-natural-resources/minerals-and-petroleum/strategies/a-minerals-strategy-to-2040>

³ Fairgray, D. (2026). Economic Assessment for Fast Track Approvals Act 2024. Market Economics, RMLA Insights.

<https://static1.squarespace.com/static/650b8bab23e9e609fd42e851/t/69efd8ccf464a918d99d45d5/1777326286650/FT+Amendment+Act.pdf>

⁴ Denne, T. and Stroombergen, A. (2026). Economic Analysis under the Fast Track Approvals Act, June 2026. <https://static1.squarespace.com/static/650b8bab23e9e609fd42e851/t/6a28b6ea730d2535ff037716/1781053163715/Benefits+Analysis+under+the+FTAA.pdf>

and adverse impacts to be monetised into a single net figure; a transparent, quantified account that the panel can weigh is sufficient.

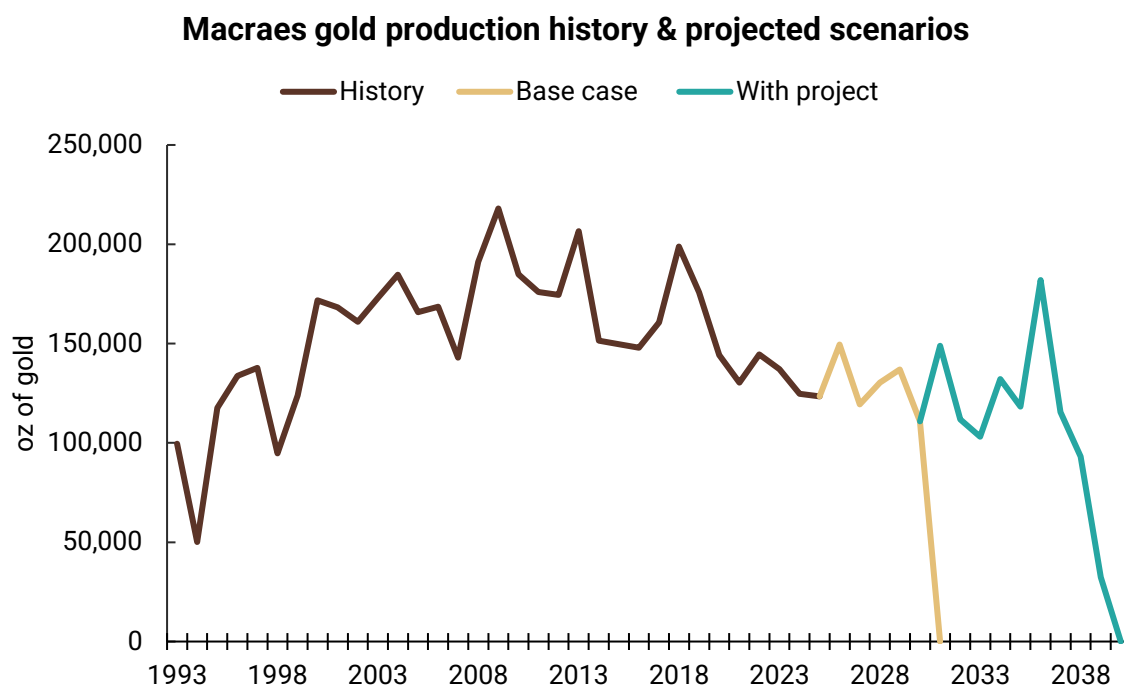
Our approach is designed to be robust to both readings. We assess effects against a clear counterfactual, the consented wind-down of mining around 2030, so we count only what the project adds. Alternative economic use of the land is marginal farming and forestry. We report GDP, the value added to the economy, not just gross output. We separate the direct and indirect (Type I) effects from the induced (Type II) effects, and treat the total including induced effects as an upper bound. And we set out each component, exports, investment, GDP, employment and Crown revenue, transparently, so the panel can decide what weight each deserves. The known external costs of the project are addressed in section 6.

Our analysis shows that the mine is a significant economic contributor currently, both regionally and nationally, and this project would allow further development of natural resources (gold) and continued economic contribution, and the alternative use of this land is of marginal economic value.

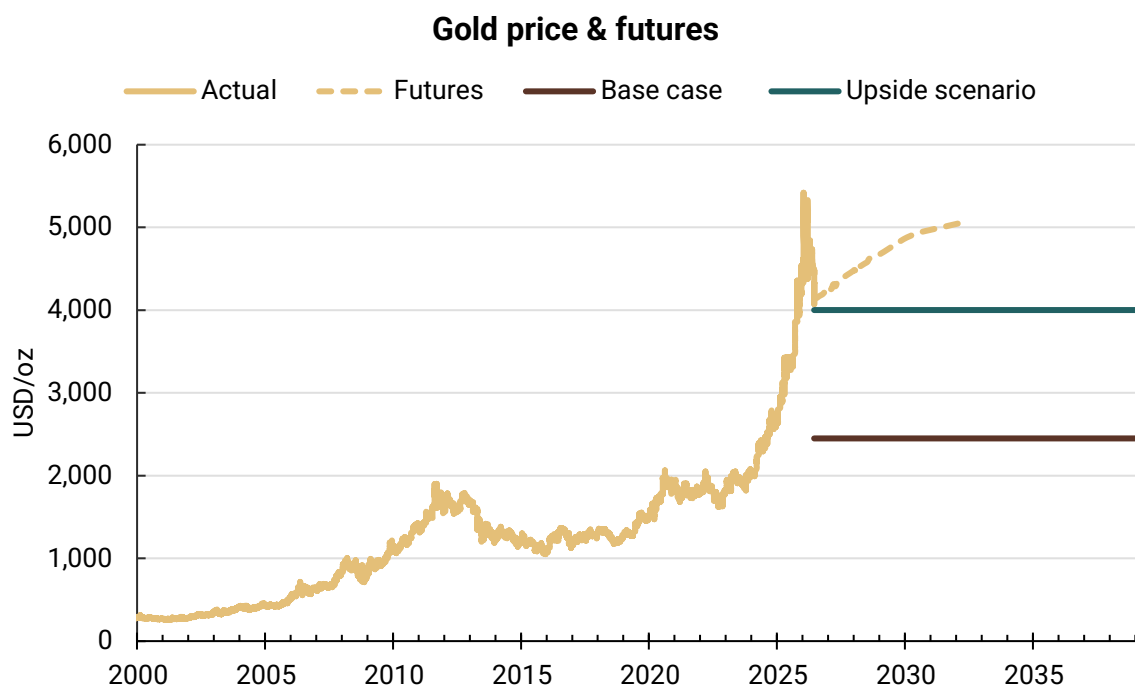
5.1 Key assumptions for the project

The key economic element to assess for this project is an extended life of mine. In the base case (without project approval), production winds down from 2030, with a small tail of production to 2031 and site rehabilitation in 2032. This is the company's current mine plan; the NI 43-101 technical report dates the end of the current life of mine at 2032 on the same schedule, including rehabilitation. We date the economic wind-down at 2030 because production after that is small. With this project, life of mine will be extended to 2039 (Figure 8). This project will ensure that the existing economic effects continue for longer. The extension also re-phases production across the same pits, so with-project production differs from the base case from 2028, before the extension years; the base case production year by year is the first row of Figure 10.

The closure and rehabilitation related expenditure is not yet fully known, because they are subject to consent conditions. As a result, we have not evaluated that part of the project here. However, we have provided a companion analysis in "Economic impacts of MP4 closure and rehabilitation", based on high level estimates of likely expenditure, and their associated economic effects. This should be considered illustrative.

Figure 8: Mine life under the current plan and with MP4

Source: Analysis of company data

Figure 9: Gold price assumptions, futures curve and market price

Source: MacroBond, company data

Extending production means the current benefits of the mine can continue for an additional nine years. In 2024, Macraes accounted for 59% of all gold produced in New Zealand⁵.

Two gold prices are used, both from the NI 43-101 (2025) report and both below the spot price (over US\$4,000/oz as at early August 2026) and the futures curve (Figure 9). A base case of US\$2,450/oz (OceanaGold's official Resources price) and an upside of US\$4,000/oz, at an exchange rate of NZD:USD 0.60. Figures are in New Zealand dollars and 2026 prices; present values use an 8% real discount rate (or 10% nominal).

5.2 The modelling approach

The model used is a modified Input-Output table (using the latest 2024 Input-Output tables published by Statistics NZ) regionalised at the Territorial Authority level. We have used detailed analysis of suppliers to the Macraes Operation to understand the effect on suppliers, rather than rely on Statistics New Zealand's input-output tables. This ensures our analysis is grounded in the actual experience of the mine.

We look at the effects of local, that is New Zealand, spending only. We don't shock revenue, which is highly volatile due to international gold price and exchange rate effects. In contrast, mining operation and capital investment plans are known with more clarity, and are less prone to change. This is also specifically focuses on money that will be specifically spent in New Zealand associated with the project.

We then quantify the expenditure effects relative to the economy (GDP) and job effects. The latter is often easier to conceptualise. By looking at the expenditure effects, we avoid issues of ownership rules and leakage of profits to shareholders, who are dispersed globally.

The analysis distinguishes three layers of economic effect. Direct effects are the mine itself: employment, wages, and on-site activity. Indirect effects are the jobs and income generated in NZ firms supplying goods and services to the mine. Induced effects are the spending by mine workers and supplier employees in the wider economy: on housing, retail, healthcare, and other local services. Together these three layers constitute the mine's contribution to New Zealand's national output. In input-output terms, the direct and indirect effects together are the Type I effect; adding induced effects gives the Type II effect. We report both, and treat the induced layer as an upper bound.

⁵ MBIE, Annual minerals industry statistics and survey, accessed 1.05.2026: <https://www.nzpam.govt.nz/nz-industry/nz-minerals/minerals-statistics/industry-statistics>

Economic effects are reported by year, and net present values at an 8% real discount rate. All figures are in 2026 dollars unless stated otherwise.

This is an economic impact assessment. We have set out the contributions in a way that makes it easy for the panel and interested parties to understand the economic effects and their channels. This allows the panel to then weigh up the relative costs and benefits to their satisfaction. The other reason is that a cost benefit analysis requires well specified effects to value. It is not yet clear which externalities the economic evidence should value, given the mitigation strategies including consent conditions should manage these externalities. If there are specific externalities the panel would like an economic valuation on, we can provide those in the future.

Method notes and limitations. The model is built on Statistics New Zealand's 2024 national input-output table, regionalised to Territorial Authority level and calibrated to Macraes' actual supplier ledger, corrected so that spending is placed where suppliers operate rather than where they are billed. The industry and regional pattern of spending is held constant across the projection years. All figures are in 2026 New Zealand dollars.

Input-output results should be read as gross activity supported, not guaranteed net gains. The model is linear: it does not impose capacity constraints, and it does not net off activity that would be displaced or workers who would in time find other jobs. Employment is reported in full-time-equivalent job-years, not a persistent count of jobs. For these reasons we report GDP (value added) alongside gross output, and the direct and indirect (Type I) effect alongside the total including induced effects (Type II), so the panel can weigh the firmer and the upper-bound measures itself.

The results move proportionately with the share of spending that stays in New Zealand. We net off around 10% of opex and capex as imports; if the true import share were 15%, the GDP and employment results would be around 6% lower. Exports, Crown revenue and the mine's own workforce would be unchanged. OceanaGold has confirmed that its large overseas-billed suppliers, for explosives, cyanide and heavy equipment, supply through New Zealand dealerships, with one exception treated as international, so the share we net off is, if anything, conservative.

The direct workforce (around 760) is the mine's established staffing level from company employment records, and is consistent with current employment; the project financial model drives the spending lines, not the labour count. PAYE is 25.3% of the gross wage bill, the effective personal income tax rate at the average Macraes wage; on the tax scale in force from July 2024 the rate would be around 24.4%, which would lower PAYE by around \$6 million over the project, an immaterial difference. The without-project case includes rehabilitation spending of around \$71

million in 2032; with the project, rehabilitation moves to 2037 to 2039 and is assessed in the companion closure report, because its scale depends on consent conditions.

OceanaGold is listed on the Toronto Stock Exchange and its share register is dominated by international institutional investors; the New Zealand share of beneficial ownership is not observable from public data. The results do not depend on it: the mine's operating surplus is excluded from the New Zealand GDP and spending figures, and enters the assessment only through exports and taxes.

5.3 Results

This section sets out the economic effects of MP4. Detailed estimates by regional breakdown are in Appendix A. We look at the marginal effect of the project, the difference it makes over and above the status quo.

The status quo is the current life of mine plan, where mining winds down around 2030 (Figure 10). The project extends mining to 2039, so the difference between the two is the contribution of MP4 (Figure 11), at the base case gold price assumption. Figures 11 and 12 show only this difference, the increment that the consent enables; the with-project total is the sum of Figure 10 and Figure 11. We show the same for our upside gold price assumption for the affected line items only (Figure 12). All figures cover 2026 to 2039.

We report the effects in three layers. The direct effect is the mine itself, its workers and its on-site activity. The indirect effect is the jobs and income in the New Zealand firms that supply the mine. The induced effect is the spending of those workers in the wider economy, on housing, retail, health and other local services. Together these three layers are the project's contribution to New Zealand's economy.

Figure 10: Baseline economic scenario without the project

Measure	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	Cum.	NPV 8%
Gold production (koz)	150	119	116	84	25	20									514	458
Export revenue (\$m)	614	487	472	341	103	82									2,099	1,872
Royalties (\$m)	12	5	8	5	1	1									32	29
Company income tax (\$m)	63	27	44	27	4	2									166	151
PAYE (\$m)	22	22	20	16	12	5	2								99	86
Crown total (\$m)	97	54	72	48	17	7	2								297	265
NZ-bound procurement spend (\$m)	375	350	222	185	71	59	64								1,326	1,169
GDP : direct suppliers (\$m)	177	165	105	87	33	28	30								625	551
GDP : indirect (\$m)	111	104	66	55	21	17	19								393	346
GDP : Type I, direct+indirect (\$m)	288	269	171	142	54	45	49								1,018	898
GDP : induced (\$m)	87	81	51	43	16	14	15								307	270
GDP : Type II, incl. induced (\$m)	375	349	222	185	71	59	64								1,325	1,168
Employment : mine workforce (FTE)	755	737	657	527	416	162	66								3,320	
Employment : direct suppliers (FTE)	1,164	1,085	690	575	220	182	198								4,114	
Employment : indirect (FTE)	748	697	444	370	141	117	127								2,644	
Employment : Type I (FTE)	1,912	1,782	1,134	945	361	299	325								6,758	
Employment : induced (FTE)	522	487	310	258	99	82	89								1,847	
Employment : Type II supply chain (FTE)	2,434	2,270	1,444	1,203	460	381	414								8,605	
Employment : total incl. mine (FTE)	3,189	3,007	2,101	1,730	876	543	480								11,925	

Figure 11: FTAA consent application economic impact

Measure	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	Cum.	NPV 8%
Gold production (koz)	2	1	15	55	86	132	113	103	127	116	149	96	77	27	1,098	621
Export revenue (\$m)	9	4	63	223	351	538	460	421	518	473	607	392	316	110	4,485	2,535
Royalties (\$m)	-2	0	-1	3	5	8	5	5	5	5	11	6	8	2	59	31
Company income tax (\$m)	0	0	0	0	19	45	23	25	25	11	55	29	40	13	285	151
PAYE (\$m)	0	1	3	7	10	18	21	22	22	21	20	16	12	8	180	100
Crown total (\$m)	-2	0	2	10	34	70	48	53	53	36	86	51	60	23	523	282
NZ-bound procurement spend (\$m)	16	61	177	216	336	350	346	362	335	306	234	171	105	51	3,067	1,887
GDP : direct suppliers (\$m)	8	29	83	102	158	165	163	171	158	144	110	81	49	24	1,446	890
GDP : indirect (\$m)	5	18	52	64	99	104	102	107	99	91	69	51	31	15	909	559
GDP : Type I, direct+indirect (\$m)	13	47	136	165	258	269	266	278	258	235	180	131	80	39	2,355	1,449
GDP : induced (\$m)	4	14	41	50	78	81	80	84	78	71	54	40	24	12	709	436
GDP : Type II, incl. induced (\$m)	16	61	177	215	335	350	346	362	335	306	234	171	105	51	3,064	1,885
Employment : mine workforce (FTE)	0	18	98	228	339	593	689	755	755	695	665	527	411	262	6,035	3,358
Employment : direct suppliers (FTE)	51	190	549	669	1,042	1,086	1,073	1,125	1,041	949	727	530	325	159	9,516	5,855
Employment : indirect (FTE)	33	122	353	430	670	698	690	723	669	610	467	341	209	102	6,115	3,762
Employment : Type I (FTE)	83	313	902	1,098	1,712	1,784	1,763	1,847	1,710	1,559	1,194	871	534	261	15,631	9,617
Employment : induced (FTE)	23	85	246	300	468	487	482	505	467	426	326	238	146	71	4,272	2,628
Employment : Type II supply chain (FTE)	106	398	1,148	1,399	2,180	2,271	2,245	2,352	2,177	1,986	1,521	1,109	679	332	19,903	12,246
Employment : total incl. mine (FTE)	106	416	1,246	1,627	2,519	2,864	2,934	3,107	2,932	2,681	2,186	1,636	1,090	594	25,938	15,604

Figure 12: FTAA consent application economic impact upside scenario

Measure	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	Cum.	NPV 8%
Gold production (koz)	2.2	1.0	15.5	54.5	85.9	131.8	112.7	103.0	126.8	115.8	148.7	96.0	77.5	26.9	1,098.3	620.7
Export revenue (\$m)	15	6	103	363	573	878	751	687	845	772	991	640	517	180	7,322	4,138
Royalties (\$m)	-1.9	-3.1	1.1	9.9	16.2	25.6	19.2	18.3	21.4	17.4	30.0	18.1	17.7	6.0	195.7	107.2
Company income tax (\$m)	0	0	0	43	86	135	101	96	112	91	157	95	93	31	1,041	577
PAYE (\$m)	0	1	3	7	10	18	21	22	22	21	20	16	12	8	180	100
Crown total (\$m)	-2	-3	4	60	112	178	140	137	156	129	207	129	123	45	1,417	784

Figure 13: Export revenue scenarios

Cumulative \$m over project life

US\$/oz	0.55	0.58	0.60	0.65
US\$2,200	4,393	4,166	4,027	3,717
US\$2,450	4,892	4,639	4,485	4,140
US\$3,000	5,990	5,681	5,491	5,069
US\$3,500	6,989	6,628	6,407	5,914
US\$4,000	7,987	7,574	7,322	6,759
US\$4,500	8,986	8,521	8,237	7,603
US\$5,000	9,984	9,468	9,152	8,448

Figure 14: Royalties scenarios

Cumulative \$m over project life

US\$/oz	0.55	0.58	0.60	0.65
US\$2,200	55	47	43	39
US\$2,450	76	65	59	46
US\$3,000	129	114	104	84
US\$3,500	179	161	150	125
US\$4,000	229	208	196	168
US\$4,500	279	256	242	210
US\$5,000	329	303	287	252

Figure 15: Company income tax scenarios

Cumulative \$m over project life

US\$/oz	0.55	0.58	0.60	0.65
US\$2,200	260	199	161	76
US\$2,450	394	327	285	192
US\$3,000	687	605	554	442
US\$3,500	953	856	798	667
US\$4,000	1,218	1,108	1,041	891
US\$4,500	1,484	1,360	1,285	1,116
US\$5,000	1,749	1,612	1,528	1,341

Figure 16: Crown income scenarios

Cumulative \$m over project life

US\$/oz	0.55	0.58	0.60	0.65
US\$2,200	495	426	384	294
US\$2,450	650	571	524	418
US\$3,000	996	898	838	705
US\$3,500	1,311	1,197	1,127	972
US\$4,000	1,627	1,496	1,416	1,239
US\$4,500	1,942	1,796	1,706	1,506
US\$5,000	2,258	2,095	1,995	1,772

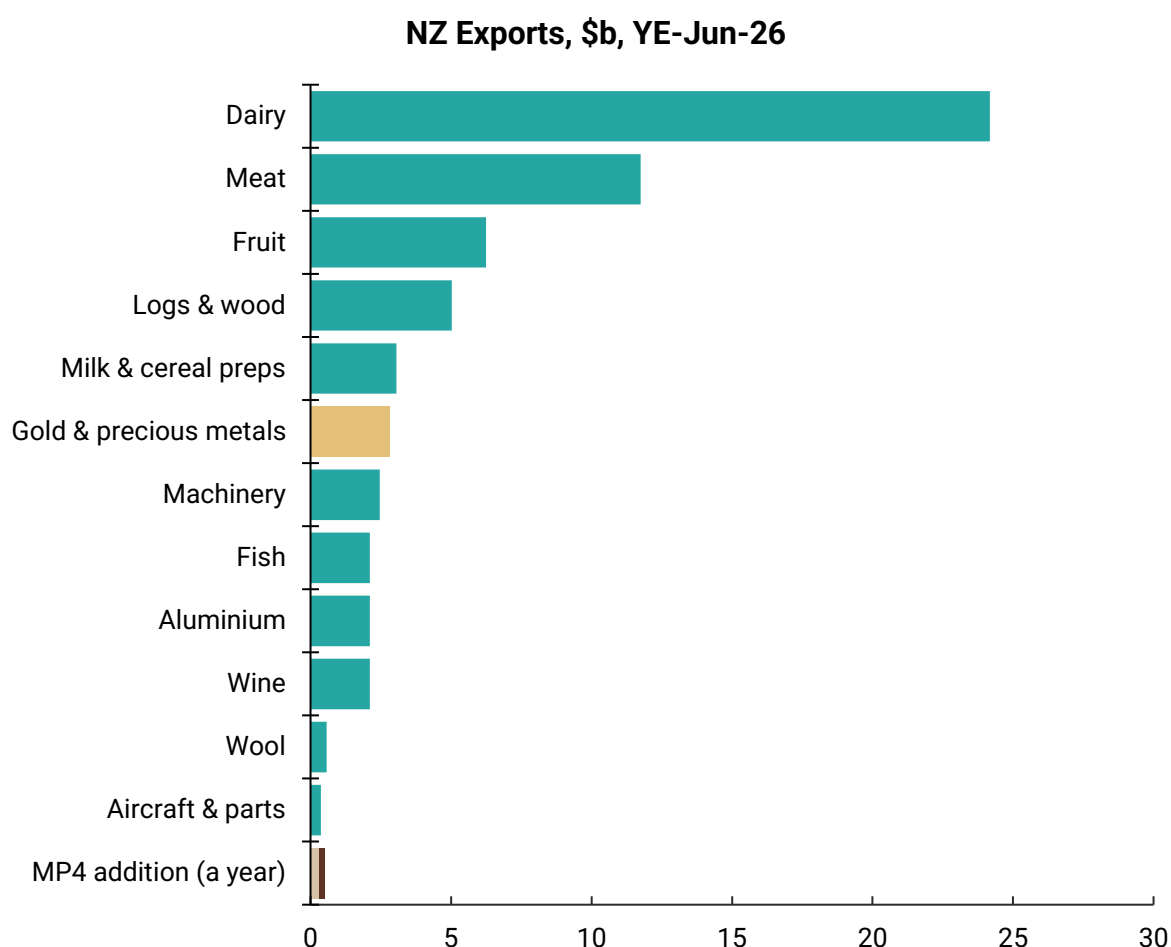
5.3.a Exports

The most visible result of MP4 is gold exports. Gold is almost entirely exported, so the mine's revenue is close to its export earnings.

MP4 extends production by around 1.1 million ounces of gold. At our base case price of US\$2,450 an ounce, that is \$4.5 billion of additional exports over the life of the project, an average of \$320 million a year. At the upside price of US\$4,000, it is \$7.3 billion, or \$520 million a year. Figure 13 shows the export revenue across a range of gold prices and exchange rates.

This is a sizeable and durable addition to New Zealand's exports. Gold has become one of the country's larger export earners. In the year to June 2026, exports of precious metals, jewellery and coin, which are predominantly gold, reached \$2.8 billion. They have nearly doubled in a year as the gold price has climbed, and now rank as New Zealand's sixth-largest commodity export, ahead of wine, fish and aluminium (Figure 17). Macraes is the largest gold mine in the country and produced 59% of its gold in 2024.

Figure 17: Gold and other New Zealand commodity exports



Source: Stats NZ overseas merchandise trade (June 2026); company estimates

For context, in the year to June 2026 New Zealand exported \$575 million of wool and \$2.1 billion of wine. At our base case gold price, MP4's \$320 million a year of additional gold exports is equivalent to more than half of the country's annual wool exports. At the upside, \$520 million a year is almost as much as all of them. MP4's exports are larger than New Zealand's exports of ships and boats (\$238 million) or sugar (\$224 million), and in the range of its aircraft and parts exports (\$363 million). Without the project, this contribution falls away as the mine winds down from around 2030.

5.3.b GDP & employment effects

MP4's spending supports economic activity and jobs across New Zealand. We trace the mine's spending on suppliers and wages through the economy using a regional input-output model built on Macraes' actual suppliers, rather than generic industry averages, so the result reflects the real experience of the mine.

Over the life of the project, around \$3.1 billion of spending stays in New Zealand, after allowing for imported equipment and materials. This spending is the measure we focus on: unlike export revenue, it excludes the profits that flow to overseas owners, so it is what we can most confidently count as benefit to the New Zealand economy. Tracing it through the supply chain, the project adds around \$2.4 billion to New Zealand's GDP through direct and indirect effects, with a present value of \$1.4 billion at an 8% real discount rate. Including the induced effects of household spending lifts this to around \$3.1 billion of GDP, with a present value of \$1.9 billion. We report both layers deliberately: the direct and indirect (Type I) effect is the firmer measure, and the total including induced effects (Type II) is an upper bound, so the panel can judge which is in scope. In gross output terms, measuring total turnover rather than value added, the equivalent figures are \$5.0 billion and \$6.3 billion. These figures do not depend on the gold price, because the spending and the jobs are the same whatever gold sells for.

The mine directly employs around 760 people. Counting the suppliers and contractors it uses, and the spending of those workers, the operation supports around 2,600 jobs in total across New Zealand at the project's peak, more than three for every job at the mine. Without MP4 this employment winds down from around 2030. MP4 sustains it to 2039. Over the life of the project, that is the equivalent of around 22,300 job-years that would otherwise be lost, around 19,900 in full-time-equivalent terms, an average of around 1,600 a year.

These marginal figures are smaller than the operation's current footprint (section 4) for two reasons. The project financial model assumes a leaner cost base for the MP4 years than the mine's actual 2025 spending, which reflected record gold prices

and a heavy capital programme. And the marginal figures are deliberately conservative: the project's whole cost base, including wages, is run through the supply chain at supplier job intensities, rather than counting the mine's own workforce and the spending of its wages separately, as section 4 does. Section 4 shows what the operation supports in a full year of operation today; the figures here show what would be lost without the project.

The benefits are concentrated in Otago. The mine's procurement is led by firms in Waitaki and Dunedin, and its workforce lives there. Around 85% of Macraes' workers live in the Otago region, mostly in Dunedin and Waitaki, and they spend their incomes locally. Allowing for where the workers live, around half of the jobs the project supports are in Otago. In GDP terms the Otago share is around a quarter, some \$770 million over the project, of which around \$330 million is in Waitaki District, because more of the supply-chain activity sits outside the region. The wider supply chain spreads the rest across the country, which is the normal pattern for a large operation whose suppliers and head offices sit in the main centres.

These are well-paid and stable jobs. Average pay at the mine is over \$100,000 a year, against around \$80,000 in Otago and nationally. The jobs at Macraes are not fly-in fly-out, and turnover is low, so the income stays and circulates in the local economy. If the mine were to close, the experience of other New Zealand towns that lost a dominant employer is that displaced workers do find new jobs, but at materially lower pay. We examine the closure transition, and how to manage it, in a companion paper, *Managing the eventual closure of Macraes*.

5.3.c Royalties and taxes

MP4 also returns revenue to the Crown, through royalties, company income tax and PAYE. PAYE is calculated at the effective personal income tax rate on the gross wage bill. ACC levies are not counted as Crown revenue in this report, because they fund accident insurance rather than the core Crown accounts.

Mineral royalties on Macraes are the greater of 1% of net sales revenue or 5% of accounting profit. At the gold prices in this assessment the accounting profits royalty is the higher of the two, so it sets the royalty. MP4 adds royalties of around \$59 million at the base case price, and \$196 million at the upside (Figure 14).

Company income tax is the larger payment. We model it on the project's incremental cash flows, with the early losses from development spending carried forward and offset against later profits, as the tax system allows. MP4 adds company tax of around \$285 million at the base case price, and \$1.0 billion at the upside (Figure 15). PAYE on the wages of the mine's workers adds a further \$180 million, and does not change with the gold price.

Together, the project returns between \$523 million (base case) and \$1.4 billion (upside) to the Crown. The company tax and the accounting-profits royalty are geared to the gold price, so the Crown shares in the upside if gold stays high. Figure 16 shows the Crown revenue across a range of gold prices.

5.3.d Local government rates

The mine also contributes to local government revenue. OGNZL pays around \$640,000 a year in rates (excluding GST) to the Waitaki District Council in 2025/26. That is around 1.6% of the council's total rates revenue, from a single ratepayer (Stats NZ local authority statistics; company data). MP4 sustains this contribution to 2039; without the project it winds down with the mine from around 2030.

The project is economically robust. It breaks even at a gold price of around US\$2,050 an ounce, the price at which the present value of the project's cash flows, before tax, falls to zero. That is about half the spot price, which was over US\$4,000 an ounce in early August 2026, and below both our base case and upside prices. The mine pays for itself, including the cost of new development, at prices well below where gold trades today. The project is robust to a large fall in the gold price.

6. Assessing costs of known externalities

The main external cost of continued mining is greenhouse gas emissions, around 75,000 tonnes of CO₂-equivalent a year from the operation. Extending the mine extends these emissions over the additional years of production. This is a real cost, and it should be weighed against the economic benefits set out above. The emissions are small in relation to the scale of the export, employment and fiscal benefits the project delivers. For reference, valued at the Treasury cost-benefit shadow price of carbon, the additional emissions have a present-value cost in the order of \$140 million over the extension, against a GDP contribution with a present value of \$1.9 billion. We state this for completeness rather than netting it off, because this report is an impact assessment rather than a cost benefit analysis.

The wider environmental effects of the project, on water, ecology, landforms, dust and noise, are assessed in the relevant technical reports and managed through the project's mitigation, compensation and rehabilitation measures. The alternative use of the Macraes site, were the mine to close, is of marginal economic value. Beyond emissions, we do not identify other material economic disbenefits from extending the existing operation.

7. Conclusion

MP4 would extend gold mining at Macraes to 2039, sustaining the largest gold mine in New Zealand for almost a decade beyond the current plan. Without the project, mining winds down around 2030 and the economic benefits end.

We have provided a preliminary estimate of economic effects of closure related expenditure in a companion report “Economic impacts of MP4 closure and rehabilitation”.

The project brings around \$1.3 billion of new capital investment. It adds between \$4.5 and \$7.3 billion of gold exports, and around \$2.4 billion of GDP through direct and indirect effects (up to \$3.1 billion including induced effects), and returns between \$0.5 and \$1.4 billion to the Crown. It sustains the mine’s 760-strong workforce, and the roughly 2,600 jobs that depend on it, for almost a decade longer than the current plan. About half of the jobs, and a third of the spending, are in Otago. The jobs are well paid and long held. The project breaks even at a gold price of about half the current market, so these benefits are robust to a fall in the price of gold.

In my opinion, from an economic perspective, MP4 gives rise to economic benefits of a quantum and scale that meet the purpose of the Fast-track Approvals Act 2024. It is a nationally significant investment that sustains a nationally significant export operation, and concentrates well-paid employment in a part of the country that values it. The Macraes mine is already a significant economic contributor. With MP4, it will be for longer.

Appendix A: Detailed economic model results

Figure 18: Employment effects of the project (marginal effect vs status quo)

Category	Geography / Level	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	Average
EMPLOYMENT (FTE-years)																
Direct	Waitaki	12	46	134	163	254	264	261	274	253	231	177	129	79	39	166
Direct	Dunedin	6	24	69	84	132	137	135	142	131	120	92	67	41	20	86
Direct	Rest of Otago	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct	Rest of NZ	32	120	346	421	657	684	677	709	656	598	458	334	205	100	428
Direct	Total	51	190	549	669	1,042	1,086	1,073	1,125	1,041	949	727	530	325	159	680
Indirect	Waitaki	2	6	17	21	33	34	34	35	33	30	23	17	10	5	21
Indirect	Dunedin	3	12	33	41	63	66	65	68	63	58	44	32	20	10	41
Indirect	Rest of Otago	2	6	17	21	33	34	34	35	33	30	23	17	10	5	21
Indirect	Rest of NZ	26	99	285	347	541	564	557	584	540	493	378	275	169	82	353
Indirect	Total	33	122	353	430	670	698	690	723	669	610	467	341	209	102	437
Induced	Waitaki	1	5	14	17	27	28	28	29	27	24	19	14	8	4	17
Induced	Dunedin	4	16	45	55	85	89	88	92	85	78	60	43	27	13	56
Induced	Rest of Otago	2	7	21	26	41	42	42	44	41	37	28	21	13	6	27
Induced	Rest of NZ	15	58	166	202	315	328	324	340	315	287	220	160	98	48	205
Induced	Total	23	85	246	300	468	487	482	505	467	426	326	238	146	71	305
Total	All NZ	106	398	1,148	1,399	2,180	2,271	2,245	2,352	2,177	1,986	1,521	1,109	679	332	1,422
Total	Local (Waitaki+Dunedin)	29	108	313	381	593	618	611	640	593	541	414	302	185	90	387

Figure 19: GDP effects of the project (marginal effect vs status quo)

Category	Geography / Level	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	Total	NPV 8%
ECONOMIC ACTIVITY CONTRIBUTION (\$m)																	
Direct GDP	Waitaki	1	5	15	18	29	30	30	31	29	26	20	15	9	4	263	162
Direct GDP	Dunedin	1	4	10	12	19	20	20	21	19	18	13	10	6	3	176	108
Direct GDP	Rest of Otago	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct GDP	Rest of NZ	5	20	58	71	110	115	114	119	110	101	77	56	34	17	1,008	620
Direct GDP	Total	8	29	83	102	158	165	163	171	158	144	110	81	49	24	1,446	890
Indirect GDP	Waitaki	0	1	2	3	4	4	4	4	4	4	3	2	1	1	36	22
Indirect GDP	Dunedin	0	2	5	6	9	9	9	9	9	8	6	4	3	1	79	49
Indirect GDP	Rest of Otago	0	1	2	2	4	4	4	4	4	3	3	2	1	1	33	21
Indirect GDP	Rest of NZ	4	15	44	53	83	87	86	90	83	76	58	42	26	13	760	467
Indirect GDP	Total	5	18	52	64	99	104	102	107	99	91	69	51	31	15	909	559
Induced GDP	Waitaki	0	1	2	2	3	3	3	4	3	3	2	2	1	1	31	19
Induced GDP	Dunedin	1	2	5	7	10	11	11	11	10	9	7	5	3	2	95	58
Induced GDP	Rest of Otago	0	1	4	4	7	7	7	7	7	6	5	3	2	1	61	38
Induced GDP	Rest of NZ	3	10	30	37	57	60	59	62	57	52	40	29	18	9	523	322
Induced GDP	Total	4	14	41	50	78	81	80	84	78	71	54	40	24	12	709	436
TOTAL GDP / ACTIVITY	All NZ	16	61	177	215	335	350	346	362	335	306	234	171	105	51	3,064	1,885
TOTAL GDP / ACTIVITY	Local (Waitaki+Dunedin)	4	14	39	48	74	77	77	80	74	68	52	38	23	11	679	418

Figure 20: Production, procurement and crown revenue effects of the project, base case and upside gold price assumptions

Category	Unit/detail	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	Total	NPV 8%
PRODUCTION																	
Gold production	k oz	2	1	15	55	86	132	113	103	127	116	149	96	77	27	1,098	621
Revenue / Exports	Total \$m	9	4	63	223	351	538	460	421	518	473	607	392	316	110	4,485	2,535
PROCUREMENT / SPEND (\$m)																	
NZ-bound spend (opex+capex, ex-exports)	All NZ	16	61	177	216	336	350	346	362	335	306	234	171	105	51	3,067	1,887
Local direct spend	Otago region	5	20	56	69	107	112	110	116	107	98	75	55	33	16	979	602
Direct wages (mine)	All NZ	0	2	12	27	40	70	81	89	89	82	78	62	48	31	710	395
PAYMENTS TO GOVERNMENT (\$m)																	
Royalties (max 1% AVR / 5% APR)	Crown	-2	0	-1	3	5	8	5	5	5	5	11	6	8	2	59	31
Company income tax (loss carry-forward)	Crown	0	0	0	0	19	44	23	25	25	11	55	29	40	13	285	151
PAYE (25.3% of gross mine wages)	Crown	0	1	3	7	10	18	21	22	22	21	20	16	12	8	180	100
Crown total	Crown	-2	0	2	10	34	70	48	53	53	36	86	51	60	23	523	282
Upside scenario: Gold US\$4,000/oz, NZD:USD 0.60																	
Measure	Unit/detail	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	Cum.	NPV 8%
Export revenue	Total \$m	15	6	103	363	573	878	751	687	845	772	991	640	517	180	7,322	4,138
Royalties	Crown, \$m	-2	-3	1	10	16	26	19	18	21	17	30	18	18	6	196	107
Company income tax	Crown, \$m	0	0	0	43	86	135	101	96	112	91	157	95	93	31	1,041	577
PAYE	Crown, \$m	0	1	3	7	10	18	21	22	22	21	20	16	12	8	180	100
Crown total	Crown, \$m	-2	-3	4	60	112	178	140	137	156	129	207	129	123	45	1,417	784