

Better Business Case

KiwiRail Dunedin Hillside Workshops



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Executive Summary

This Business Case - the Hillside Workshops Business Case - explains the rationale for capital investment of \$19.97 million for the rehabilitation and upgrade of Dunedin’s “Hillside Workshops” (Hillside). The upgraded heavy-engineering facility would act as a catalyst to support a number of interlinked socio-economic and environmental outcomes for the Otago region. Investment would provide the South Island rail network with the dependable servicing capability it currently lacks - critical to meeting Future of Rail¹ aspirations. It would also optimise the use of KiwiRail land in Dunedin for the betterment of the local economy and Māori prosperity.

KiwiRail’s ability to deliver crucial South Island heavy-engineering rolling stock servicing faces significant risk.

✓ ESSENTIAL SERVICING FOR SOUTH ISLAND ROLLING STOCK WORTH IN EXCESS OF \$ [REDACTED]

✓ ESTIMATED JOBS REALISED: [REDACTED]

✓ [REDACTED] Commercial Information

✓ PROJECTED LEASE REVENUE OF: \$ [REDACTED] (PER ANNUM) UNLOCKED

The Hillside Workshops are currently the *only* operational heavy-engineering rail workshop in the South Island - the Linwood facility at Christchurch has not yet been replaced following the 2011 Christchurch earthquake. In spite of this, the Workshop is significantly impaired - with sinking ground, [REDACTED] buildings, and outdated, broken equipment.

The Workshops, were once one of Dunedin’s biggest employers, supporting up to 1,200 jobs at their peak. However, Hillside was unable to maintain a competitive advantage in the market, predominantly due to production delays caused by years of underinvestment. Over time, employment numbers decreased. A [REDACTED] Commercial Information people. The remainder of the site is leased out for a combination of storage, a test lab and foundry services. There are a number of unoccupied buildings in a [REDACTED] Commercial Information

Neglecting the Hillside workshops further, to the point of de-commission, leaves KiwiRail vulnerable in its ability to deliver crucial heavy-lift maintenance and servicing to a growing freight, tourism and commuter operation in the South Island. There are several up-and-coming large modification, overhaul and rail upgrade projects to be delivered across KiwiRail’s rolling stock fleet - KiwiRail urgently requires investment at Hillside to deliver on these.

An average locomotive lifespan is 35 years, yet [REDACTED] Commercial Information
KiwiRail’s rolling stock [REDACTED] Commercial Information

However, the Hillside Workshops Business Case provides benefits far beyond rail resilience alone.

Over the last decade, Dunedin has experienced an estimated 910 engineering and manufacturing industry job losses². This equates to an estimated value of \$42 million of lost incomes generated per year³, which could have been spent in the local economy. Dunedin’s March 2018 unemployment rate sat at 7.1% - nearly 3% higher than the New Zealand-wide rate of 4.3%⁴.

¹ A cross-agency project led by the Ministry of Transport, working alongside KiwiRail, the NZ Transport Agency, Treasury, Auckland Transport, and Greater Wellington to define and develop the Future of Rail in New Zealand.

² Based on the impacts of Fisher & Paykel, Cadbury plant closure, Hillside Workshop redundancies and Milmeq job losses over the last decade.

³ Based on a salary of \$ [REDACTED] jobs and

⁴ Statistics New Zealand, unemployment rate Dunedin, March 2018 versus NZ wide unemployment of 4.3% in December 2018



13.4% YOUTH 'NEET' RATE, OTAGO REGION⁵
(compared with 4.7% in 2018)

\$44m ESTIMATED JOB SEEKER SUPPORT COST⁷
(Otago region)

7.1% UNEMPLOYMENT RATE DUNEDIN⁴
(nearly 3% higher than NZ wide rate of 4.3%)

Distant from the major North Island areas of population growth, Dunedin can find it challenging to retain talent and grow in high value niches of the economy. Job losses only exacerbate this challenge.

The Otago Region's Youth NEET rate is 13.4%, (Q1, 2019), compared with 4.7% in Q1 2018⁵.

As a region that is home to several world class training institutes these numbers fall short of fulfilling the regions socio-economic potential.

4,576 people receive job seeker support in the

Otago Region⁶, costing the government an estimated \$44.6 million per year⁷. Failure to invest in Hillside does nothing to improve this challenge.

The rehabilitation and upgrade of Hillside would provide positive outcomes for all three Provincial Growth Fund Tiers. Each of the tier outcomes are interconnected and drive the others' success. Investment in the Hillside Workshops is an initial catalyst to support the success of these outcomes.

- *Tier 1: Capability Building* – The Workshops would attract and retain niche talent to the Otago Region and support upskilling in the industry providing a safe site for apprenticeships and work experience programmes.
- *Tier 2: Priority economic opportunities* – Investment in Hillside would unlock work opportunities directly and indirectly, through construction, upon operation and through supply-chain impacts. The upgraded Workshops and site optimisation would be a catalyst for attracting and re-engaging talent, complementing similar anticipated work – the upgrade aligns with local projects including the Dunedin Hospital rebuild, proposed Dunedin harbourside project, ongoing University of Otago development activity, Council plans for a new community hub in South Dunedin.
- *Tier 3: Enabling infrastructure* – This Business Case supports strategic optimisation of KiwiRail's infrastructure and land assets to support essential South Island rail resilience, Māori partnership opportunities and New Zealand's sustainability agenda.

Each of the core goals within the tiers affects and is affected by the others driving an ecosystem of positive outcomes.



⁵ Statistics NZ, NEET stands for "Not in employment, education or training"- % of people aged 15-24


⁶ Statistics New Zealand, 2019, Q2, people receiving job seeker support benefits in New Zealand by region, number of people

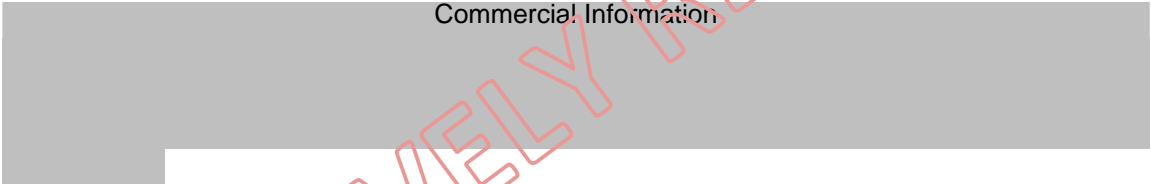
⁷ Treasury CBx Database, work and income 2018, average across different options – based off 2019, Q2 statistics NZ, Otago region job seeker support numbers

Investment in this Business Case would reignite Dunedin’s role as a key heavy-lift, network, and mechanical servicing hub in the lower South Island. The Case specifically supports the Government priority⁸, of unlocking “apprenticeships and trade training opportunities” through revitalisation of the Workshop, as well as supporting Dunedin City Council’s (DCCs) economic development plan for the city, which seeks “Growth in full time equivalent jobs” to support a “productive economy”.

LONG-TERM, SOCIO-ECONOMIC BENEFITS FOR THE LOWER SOUTH ISLAND - WITH RAIL AS A ‘LEVER’

Investing in Hillside would provide several indirect benefits beyond the Workshop itself.

-  Commercial Information

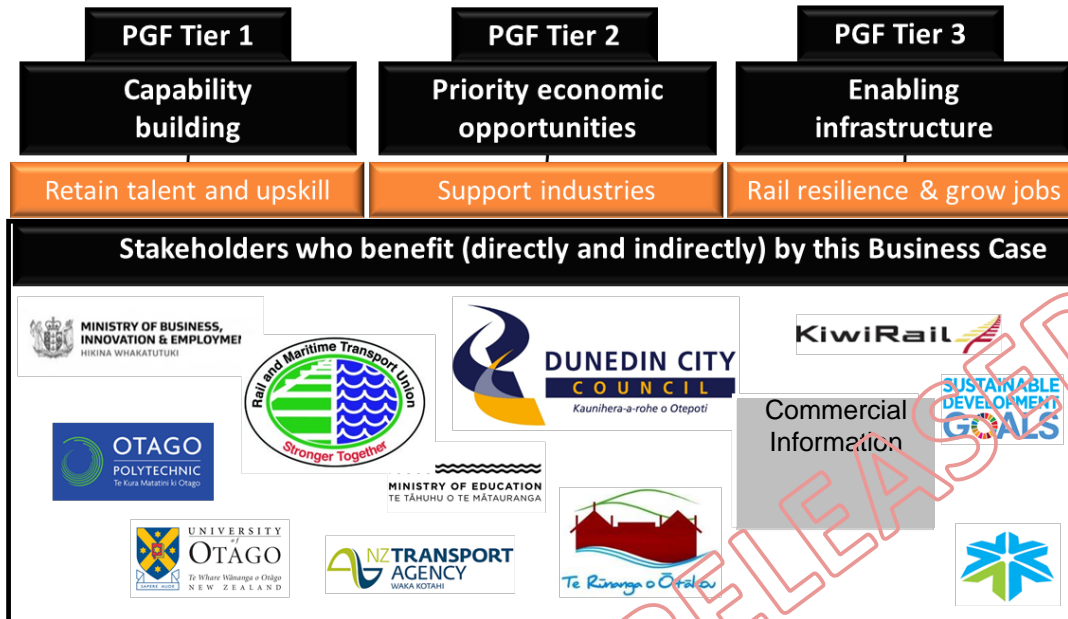
-  Commercial Information

- *Complementary Projects.* This Business Case complements local aligned sector projects, including:
 - The Dunedin Hospital upgrade project
 - Dunedin City Waterfront project
 - Various University of Otago projects; and
 - Council plans for a new community hub in South Dunedin.

Upskilling and market opportunities are intrinsically linked. Skills transfer could be used across the projects and a thriving supply-chain of goods and services would inject further capital into the economy through increased spending. The opportunities would support capability building through a combination of work experience, apprenticeships and increased interest in trades training.

⁸ 2019 Budget, The Wellbeing Budget

The Hillside Workshops Business Case - Supporting a sustainable economic ecosystem



Investing in Hillside is an opportunity to: ensure South Island rail resilience and dependability as stock and services grow (freight, tourism and commuter); support climate change goals; attract talent and provide a safe environment for upskilling; support iwi prosperity; and to unlock high-value employment for the local economy on land that is currently underutilised.

HILLSIDE: A RAIL-BASED SOLUTION TO GROW SKILLS, JOBS AND SUPPORT NATION-WIDE SUSTAINABILITY GOALS

In the 2018 Financial Year, KiwiRail transported 18 million net tonnes of freight⁹ - the equivalent freight task would have required 1.1 million trucks¹⁰. During the same period, more than 197,000 passengers experienced KiwiRail's Scenic Rail journeys. Without rail, nearly 4,000 tourist coaches¹¹ would have been required – the visitor experience would also have been far inferior.

- 1. Capability Building:** Investing in Hillside supports the upskilling of niche heavy-engineering and construction industry talent in the region – noting the Tertiary Education Strategy, priority 1 is “Delivering skills for industry”¹². A key step in ensuring sustainable economic prosperity for the region is laying a strong future generation capability pipeline. Safe, upgraded Workshops provide ideal learning conditions for generations to come. KiwiRail currently has [redacted] apprenticeship positions at Hillside, compared to [redacted] at KiwiRail's Lower Hutt Workshops. As the Workshops' infrastructure capability and capacity grows, so will staff numbers - this would directly impact the number of apprenticeships (KiwiRail's National plan is to have [redacted] % making up the total head count). Incorporating a strong pipeline of newly qualified talent into the sector supports growing innovation in the industry and would encourage potential students to consider the trades industry as a viable career option, strengthening the lower South Islands talent pool.
- 2. Industry growth:** Jobs are a requirement to fuel the success of the local economy. Over the last decade a large number of niche engineering and manufacturing industry jobs have been disbanded in Dunedin. An injection of capital to upgrade Hillside would provide opportunities for talent in the area to be brought to use again. The Workshop upgrade would support increasing jobs onsite from [redacted] FTE to [redacted] FTE within [redacted] of completion. It is estimated that within [redacted] the workforce would continue to be maintained at [redacted] FTE. The project activity and

⁹ Net tonnes of customer product- sourced from the customers' consignment notes. When product is moved in a container, then the container tare must be included as part of Net Tonnes.

¹⁰ Truck Trips (Container) are containerised freight moved to or from a NZ port and it is assumed that this freight would move on container trucks on road. Truck Trips (Weight) are truckload freight tonnages via the road [e.g. - logging truck, truck & trailer, B-train or bulk bin truck] as opposed to container load [moved on container trucks].

¹¹ 197,000/50 = 3,940. Average number of seats on a tourist coach = 50. Note the Coastal Pacific was not operating during FY18.

¹² Ministry of Education, Tertiary Education Strategy 2014- 2019

associated employment growth would instigate a ripple effect of supply-chain opportunities in Dunedin and transferrable skill sets would complement a wider pipeline of up and coming development projects in the region.

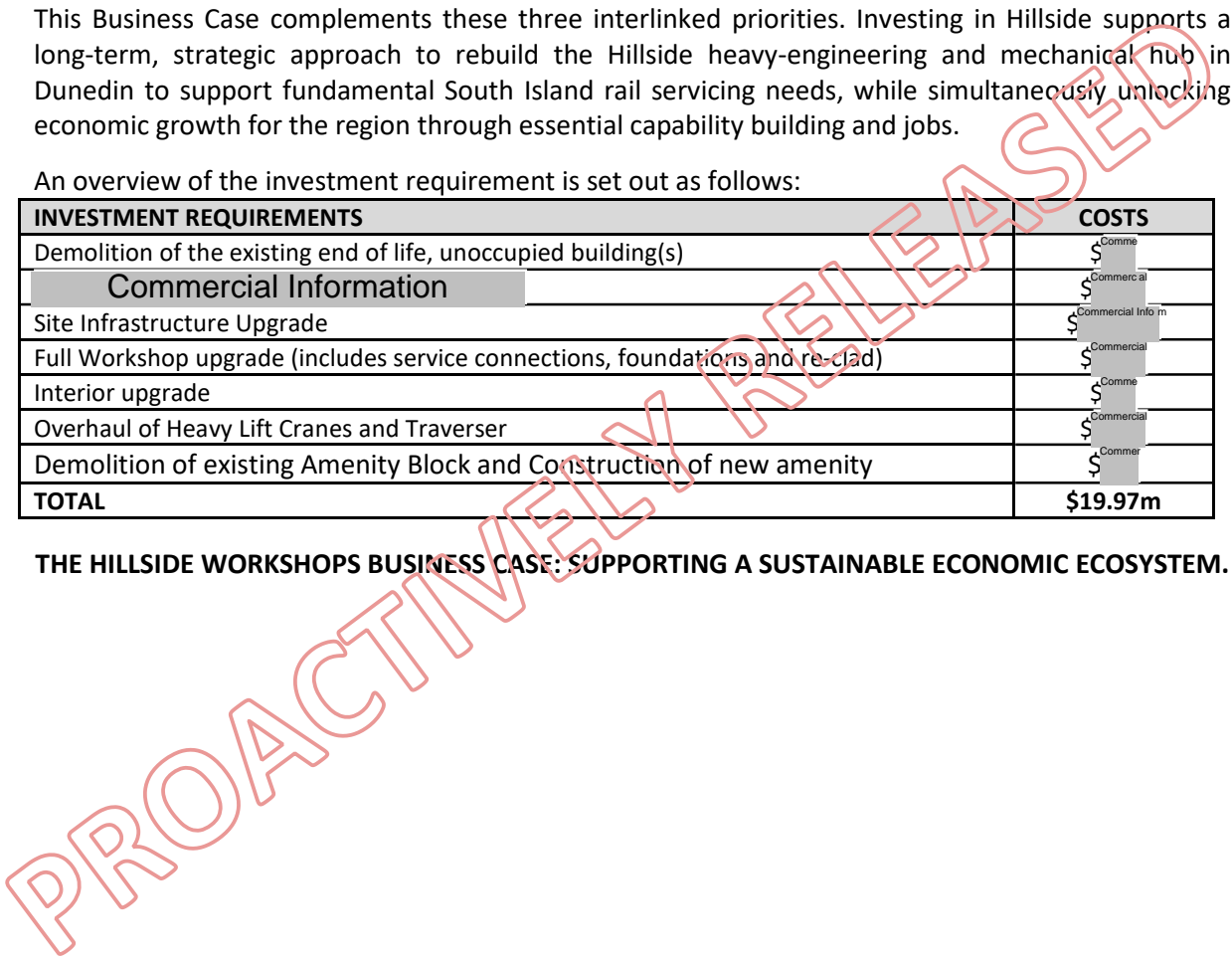
- 3. *Rail resilience:* Rail is a solution to servicing New Zealand’s increased freight, as well as supporting tourism, business and personal travel. Rail is the way to transport people and goods with two-thirds’ fewer carbon emissions than road. To enable the successful growth of rail, there must be a corresponding investment in maintenance infrastructure. **Commercial Information** of Hillside, the South Island’s only operational heavy-engineering hub, is a **Commercial Information** for KiwiRail. It is essential that the Workshops are invested in to ensure a reliable, resilient rail network.

This Business Case complements these three interlinked priorities. Investing in Hillside supports a long-term, strategic approach to rebuild the Hillside heavy-engineering and mechanical hub in Dunedin to support fundamental South Island rail servicing needs, while simultaneously unlocking economic growth for the region through essential capability building and jobs.

An overview of the investment requirement is set out as follows:

INVESTMENT REQUIREMENTS	COSTS
Demolition of the existing end of life, unoccupied building(s)	\$ Commercial Information
Commercial Information	\$ Commercial Information
Site Infrastructure Upgrade	\$ Commercial Information
Full Workshop upgrade (includes service connections, foundations and re-clad)	\$ Commercial Information
Interior upgrade	\$ Commercial Information
Overhaul of Heavy Lift Cranes and Traverser	\$ Commercial Information
Demolition of existing Amenity Block and Construction of new amenity	\$ Commercial Information
TOTAL	\$19.97m

THE HILLSIDE WORKSHOPS BUSINESS CASE: SUPPORTING A SUSTAINABLE ECONOMIC ECOSYSTEM.



Dunedin Hillside Workshop Business Case: Key Benefits

Otago Region

- Significant potential for developing and maintaining heavy-engineering skillsets in the country.
- Upgraded, safe site complements apprenticeships and work experience programmes, encouraging upskilling in this niche sector.
- Students more inclined to train in sector and remain in the region if there is a long-term commitment in the industry.
- An upgraded site may attract experienced workers, encouraging valuable knowledge transfer.
- Investment would unlock construction and engineering job opportunities both at Hillside, **Commercial Information** and indirectly – relocating businesses to a service cluster. **Commercial Information**
- High-value job creation unlocked **Commercial Information** jobs within **Commercial Information**
- Frees-up 'centrally-fringed' land for improved economic optimisation
- Flow-on work and consumer spending for local businesses through supply-chain ripple effect would benefit the local economy

Māori

- **Commercial Information**
- Hillside would unlock industry and upskilling opportunities to support Māori prosperity. 14,385 Māori usually live in the Otago Region, an increase of 17.2% since the 2006 Census¹³. Of this population, 6.8% are unemployed.

Benefits for health and the environment

- **Commercial Information**
- Supports NZ 'zero carbon' goals by enabling an increase in rail over road.

KiwiRail

- Supports rail network resilience as services grow
- Re-establishes a dependable heavy-lift mechanical hub in the Lower South Island
- Improved efficiencies through updated assets
- Provides additional capacity for freight volumes **Commercial Information**
- Land and asset portfolio optimisation

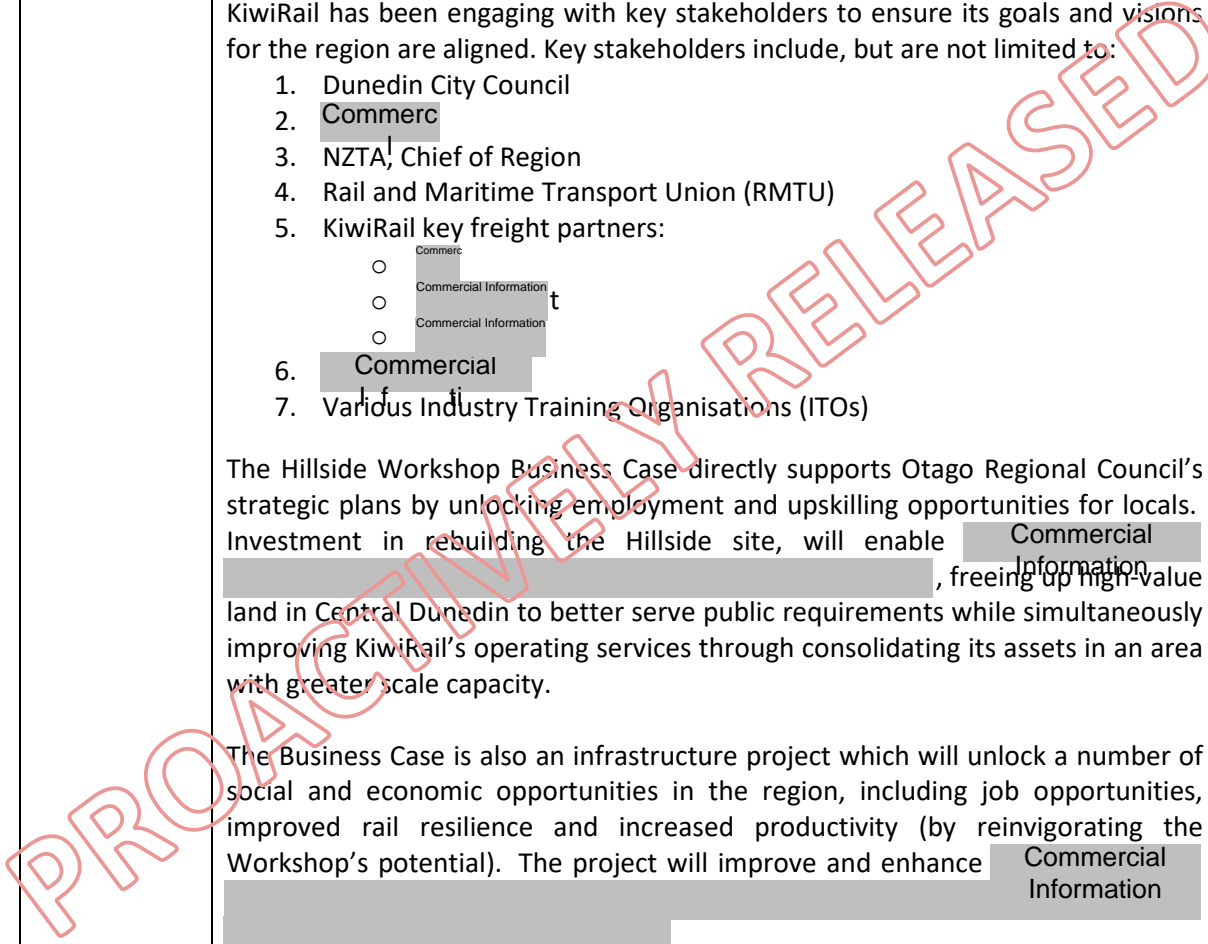
¹³ Statistics New Zealand, 2013 Census, Māori population by region

This Dunedin Hillside business case follows the New Zealand Treasury's better business cases guidance and is organised around the five-case model¹⁴.

<p>Strategic Case</p>	<p>This business case aims to provide positive outcomes for a number of strategically interlinked Provincial Growth Fund Tiers. The case supports:</p> <ul style="list-style-type: none"> ▪ <i>Tier 1: Capability Building</i> – Aiming to attract and retain niche talent to the Otago Region and support upskilling in the industry. ▪ <i>Tier 2: Priority economic opportunities</i> – By supporting the economic success of the industrial sector through unlocking construction and heavy-engineering job opportunities. ▪ <i>Tier 3: Enabling infrastructure</i> - Strategic optimisation of KiwiRail's infrastructure and land assets to support future rail resilience, Māori partnership opportunities and support New Zealand's sustainability agenda. <p>The strategic intent of each of the outcomes above are connected and support driving others' success. For example, an upgraded Workshop would contribute to increased interest in the industrial sector. Consequently, a talented labour market may be more inclined to take on local job opportunities - as opposed to looking abroad. Retaining local talent would support rail resilience and transport sustainability goals by increasing efficiencies and volume capacity capabilities. Innovation and technology spill-over would support the success and open opportunities in other similar industries.</p> <p>The Hillside Workshop is now KiwiRail's only operational heavy-engineering maintenance facility in the South Island - the "Linwood Loco" depot in Christchurch has not yet been replaced following major earthquake damage.</p> <p>A summary of the investment objectives for this Case are outlined as follows:</p> <ol style="list-style-type: none"> 1. To secure Dunedin as a dependable heavy-lift and mechanical rail servicing hub for the lower South Island. 2. To support Dunedin's strategic employment growth initiatives by unlocking job opportunities for locals and retaining niche talent. 3. To improve the resilience of the South Island's rail network. 4. To unlock opportunities to the benefit Māori in the region. 5. To fulfil KiwiRail's long-term, land-use management strategy considering a holistic economic approach for the region. <p>The existing arrangements for each of the five points above is expanded upon in Section 2.2. The business needs (or business gap) that this proposal addresses is also outlined in this section. However, in summary, by reinvigorating the Hillside Workshops, KiwiRail can provide improved resilience to the rail network, while simultaneously unlocking wider socio-economic opportunities to support the local economy.</p> <p>KiwiRail's Hillside Business Case aligns with several national and regional strategies. These include but are not limited to:</p> <ol style="list-style-type: none"> 1. Government Policy Statement on Land Transport (GPS) 2018 2. Government Regional Growth Study 2017 3. Safer Journeys Strategy: New Zealand's Road Safety Strategy 2010-2020 4. NZTA: Statement of Intent 2018 – 2022
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¹⁴ <http://www.treasury.govt.nz/statesector/investmentmanagement/plan/bbc>

	<ol style="list-style-type: none"> 5. NZTA: Draft South Island Freight Plan 2015 6. Budget 2018: Foundations for the Future Minister of Finance 7. Budget 2019: The Wellbeing Budget 8. Government Climate Change Bill 9. Dunedin City Council: Economic Development Strategy 2013 – 2023 10. Dunedin City Council: Transport Strategy 2013 11. Dunedin City Council Sustainability Framework 2013 12. Dunedin City Council 10year plan 2018 – 2028 13. Otago Regional Council Long Term Plan 2015 - 2025 <p>KiwiRail has been engaging with key stakeholders to ensure its goals and visions for the region are aligned. Key stakeholders include, but are not limited to:</p> <ol style="list-style-type: none"> 1. Dunedin City Council 2. Commerc 3. NZTA, Chief of Region 4. Rail and Maritime Transport Union (RMTU) 5. KiwiRail key freight partners: <ul style="list-style-type: none"> ○ Commercial Information ○ Commercial Information ○ Commercial Information 6. Commercial 7. Various Industry Training Organisations (ITOs) <p>The Hillside Workshop Business Case directly supports Otago Regional Council's strategic plans by unlocking employment and upskilling opportunities for locals. Investment in rebuilding the Hillside site, will enable Commercial Information, freeing up high-value land in Central Dunedin to better serve public requirements while simultaneously improving KiwiRail's operating services through consolidating its assets in an area with greater scale capacity.</p> <p>The Business Case is also an infrastructure project which will unlock a number of social and economic opportunities in the region, including job opportunities, improved rail resilience and increased productivity (by reinvigorating the Workshop's potential). The project will improve and enhance Commercial Information</p>
<p>Economic Case</p>	<p>A wide range of options were considered following key stakeholder priorities, for the best approach to achieve the key investment objectives (as outlined in this business case). The following short-listed options were selected for more detailed economic analysis in this business case:</p> <ul style="list-style-type: none"> ▪ Commercial Information ▪ Option 2: Invest \$19.97m for the rehabilitation and upgrade of the Hillside Workshops ▪ Commercial Information <p>The preferred option is to invest in the rehabilitation and upgrade of the Hillside Workshops. Investing provides long-term benefits environmentally, socially and</p>



	<p>economically to the region. This option also provides benefits to each of the interlinked PGF investment tiers, including:</p> <ul style="list-style-type: none"> ✓ An immediate economic benefit through construction activity. ✓ Improved efficiencies consolidating similar servicing requirements in one place. ✓ Unlocks employment opportunities for locals through reinvigorating the use of underutilised land to supporting industries. ✓ Unlocks apprenticeship opportunities for locals. ✓ Improved rail resilience through rejuvenated, heavy-lift, network, and mechanical rail asset maintenance and servicing facilities. ✓ Investment in rail supports New Zealand’s zero-carbon goals. ✓ Strategic land use benefits – Commercial Information ✓ Partnership opportunity realised Commercial Information ✓ Supports retaining talent in the region and increasing local skills. ✓ Supports environmental health and safety priorities. ✓ Complements opportunities for aligned projects and industries. ✓ Unlocks land for industry where there are currently constraints – industrial space in Dunedin remains scarce¹⁵ <p>Operational partners and allied businesses would also benefit from an uplift in handling capacity and efficiencies.</p> <p>The dilapidated Hillside site currently employs approximately ^{Comme} people working fulltime in a rolling stock, heavy-engineering workshop within a small area of the facility. The site is significantly impaired with poor quality, aging buildings Commercial Information</p> <p>The heavy-lift cranes are nearing end of life, and a traverser suffered a major breakdown earlier this year – it requires significant refurbishment. As the only¹⁶ operational heavy-engineering facility in the South Island, it is imperative that investment is made to ensure rail resilience and maximise the economic potential of the site.</p> <p>Investment now will not only save the costs of ongoing short-term solutions - but would also be a catalyst to support skills shortages in the region, retain talent and fuel industry opportunities. The injection of funds would go beyond rail resilience alone, unlocking industrial and skills development to leverage the regional economy.</p> <p>More detail on the direct and indirect benefits are explored in Section 3.</p>
<p>Commercial Case</p>	<p>Investment of \$19.97 million in Hillside will be used to provide essential upgrade works, Commercial Information and remediation of the South Island’s only operational heavy-engineering servicing facility. Investment will also support KiwiRail’s property strategy by optimising on infrastructure and land assets to provide long-term, sustainable revenue.</p> <p>Once funding is secured, KiwiRail will manage the procurement process in line with standard Government Rules of Sourcing requirements, testing the open</p>

¹⁵ Colliers International Market Report Dunedin, 2019.

¹⁶ The “Linwood Loco” depot in Christchurch has not yet been replaced following major earthquake damage.

market as appropriate.

A high-level timeline is outlined as follows:

- Initial site clearance will be undertaken Commercial Information
- Design and consenting for two heavy lift buildings will be completed over Commercial Information
- Contractor procurement and onsite works Commercial Information
- Construction over Commercial Information

Consideration will be given to:

- Total cost
- Sustainability
- Guarantee and warranty periods
- Health and Safety
- Opportunity to procure locally/supply-chain considerations

Further detail on the procurement approach and key considerations are outlined in Section 4.

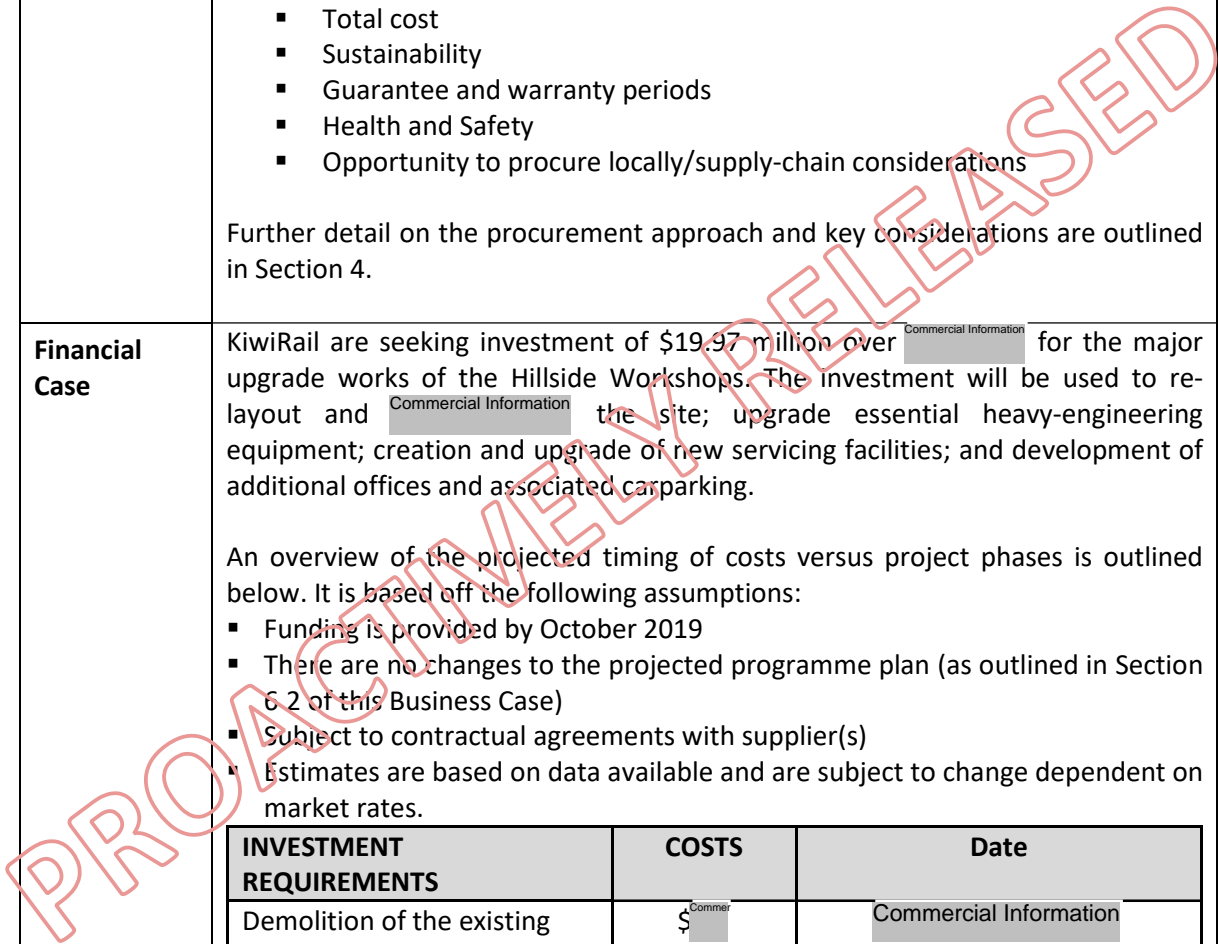
Financial Case


KiwiRail are seeking investment of \$19.97 million over Commercial Information for the major upgrade works of the Hillside Workshops. The investment will be used to re-layout and Commercial Information the site; upgrade essential heavy-engineering equipment; creation and upgrade of new servicing facilities; and development of additional offices and associated carparking.

An overview of the projected timing of costs versus project phases is outlined below. It is based off the following assumptions:

- Funding is provided by October 2019
- There are no changes to the projected programme plan (as outlined in Section 6.2 of this Business Case)
- Subject to contractual agreements with supplier(s)
- Estimates are based on data available and are subject to change dependent on market rates.

INVESTMENT REQUIREMENTS	COSTS	Date
Demolition of the existing end of life, unoccupied building(s)	\$ <small>Commercial Information</small>	<small>Commercial Information</small>
<small>Commercial Information</small>	\$ <small>Commercial Information</small>	<small>Commercial Information</small>
Site Infrastructure Upgrade	\$ <small>Commercial Information</small>	<small>Commercial Information</small>
Full Workshop upgrade (includes service connections, foundations and reclud)	\$ <small>Commercial Information</small>	<small>Commercial Information</small>
Interior upgrade	\$ <small>Commercial Information</small>	<small>Commercial Information</small>
Overhaul of Heavy Lift Cranes and Traverser	\$ <small>Commercial Information</small>	<small>Commercial Information</small>
Demolition of existing Amenity Block and Construction of new amenity	\$ <small>Commercial Information</small>	<small>Commercial Information</small>



	TOTAL	\$19.97m	
Management Case	<p>KiwiRail is committed to optimising infrastructure and land asset utilisation within their portfolio to achieve rail resilience, which in turn requires a strong, efficient services infrastructure behind it.</p> <p>KiwiRail is one of New Zealand’s largest employers with ^{Commercial Inf} employees¹⁷ across the country. It moves 18 million tonnes of freight each year and transport around 25% of New Zealand’s exports.¹⁸ It is critical that KiwiRail is viewed as an employer of choice if it is to continue meeting New Zealand’s distribution demands. People are vital to the success of the organisation and a productive and engaged workforce requires support from management to provide a fit-for-purpose work environment that values safety and promotes staff well-being</p> <p>In the event that this investment proposal receives formal approval, a dedicated project team will be established to deliver the required services. KiwiRail will follow its robust governance process using the reporting structure shown in the diagram below.</p> <div style="background-color: #cccccc; padding: 10px; text-align: center;"> <p>Commercial Information</p>  </div> <p>KiwiRail’s existing processes include oversight by an appointed executive owner and project sponsor. These processes have been robustly tested through the ^{Commercial Information}</p> <div style="background-color: #cccccc; padding: 5px; text-align: center;"> <p>Commercial Information</p> </div> <p>KiwiRail’s Project Control Group (PCG) will appoint a dedicated Stakeholder Engagement Manager to ensure key stakeholders who have interests in this investment are involved where necessary. Key stakeholders are outlined in the Strategic Case.</p> <p>In order for KiwiRail to remain reliable, sustainable and valuable to New Zealand, the regions and its employees, it needs to invest in infrastructure and upgrade works that support the reliability of the South Island’s rolling stock. Remediating and rationalising land for greater heavy lift, mechanical capability and a potential Manufacturing Hub in Dunedin, will support this.</p>		

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¹⁷ KiwiRail Annual Integrated Report 2017
¹⁸ KiwiRail Annual Integrated Report 2017

1. Introduction

This single stage Business Case seeks formal approval to invest \$19.97million to re-establish Dunedin's Hillside Workshops as the Lower South Islands heavy-engineering and mechanical hub. The investment will unlock job creation at a site that was once one of Dunedin's biggest employers - now employing just ^{Comm} people. The site is impaired by aging, Commercial Information. Crucially, Hillside is currently KiwiRail's only 'operational' heavy-engineering maintenance facility in the South Island - the Christchurch depot has not yet been replaced following major earthquake damage.

The business case process is organised around a five-case structure designed to systematically ascertain that the investment proposal:

1. Is supported by a compelling case for change - the 'Strategic Case'
2. Optimises value for money - the 'Economic Case'
3. Is commercially viable - the 'Commercial Case'
4. Is financially affordable - the 'Financial Case'; and
5. Is achievable - the 'Management Case'.

The purpose of this single stage Business Case is to:

- *Confirm* the strategic context for this proposal and how the proposed investment aligns with that strategic context;
- *Clarify* why there is a need to invest and the case for change;
- *Identify* a range of potential options and determine the preferred option which optimises value for money, by undertaking analysis of the costs, benefits and risks of the short-listed options;
- *Prepare* the proposal for procurement;
- *Plan* the necessary funding and management arrangements for the successful delivery of the project; and
- *Inform* a proposal to rehabilitate and upgrade the Hillside Workshops to seek agreement to approach the market and finalise the arrangements for implementation of the project.

Neglecting the Hillside Workshops to the point of decommission not only leaves KiwiRail and the South Island in a position of poor rail resilience, but also is counter to solving core environmental and socio-economic issues including:

- Developing and maintaining industry skills in New Zealand
- Nation-wide zero-carbon sustainability goals
- Strengthening the industrial sectors pipeline of work in the lower South Island

The investment of \$19.97 million for Hillside will be used for:

1. Demolition of the existing end of life, unoccupied building(s)
2. Commercial Information
3. Workshop upgrades (Buildings 812 and 813), including:
 - Recladding
 - Separation, upgrade and installation of site power supplies and fire extinguishing units
 - Upgrading infrastructure to current seismic standards
 - Remediate sinking floors and lay foundations

- Upgrade and reconfiguring of adjacent rail track
 - Creation of pedestal roads
 - Creation of shunt servicing facilities
4. Interior upgrades
- Overhaul of the heavy lift crane
 - Overhaul of the traverser
 - Development of offices for Rolling Stock and Network Servicing teams, including affiliated carparking

Benefits to KiwiRail include:

- Dependable heavy-engineering servicing facilities for rolling-stock refurbishment will extend the life of the South Island's rail assets.
- Efficiencies delivered through consolidation of similar services and strategic land use
- Removes the liability of a Commercial Information site
- Supports the lower South Island's capacity to service growing freight demands Commercial Information

Benefits to the Otago Region include:

- Unlocks the opportunity for redevelopment of the remaining Hillside site Commercial Information to support industry (construction and engineering) and to provide local employment opportunities.
- Secures Dunedin's place as a core heavy-engineering manufacturing hub in the lower South Island, creating jobs in a high value niche area of the economy.
- Unlocks training, apprenticeship and employment opportunities for locals, immediately in terms of the construction of the Hillside Workshops and longer-term through operational engineering work.
- Maximises socio-economic potential through attracting supporting industries to currently underutilised and vacant sites – leading to employment prospects.
- Flow-on work and consumer spending for local businesses.
- Frees-up 'centrally-fringed' land to better accommodate public uses.
- Commercial Information
- Investment in rail directly aligns with New Zealand's transition to a low-carbon future.
- Supports Industry Training Organisations (ITOs) through improving the attractiveness and potential opportunities in the sector

Investing in Hillside unlocks the opportunity to reinvigorate and re-establish the Hillside Workshops as a dependable heavy-lift and mechanical rail servicing hub for the lower South Island. Implementing this will enable a number of the Government's PGF objectives to be achieved, including:

- enhancing economic development opportunities;
- creating sustainable employment;
- enabling Māori to reach their full potential;
- boosting social inclusion and participation;
- building resilient communities; and
- helping New Zealand to meet its climate change targets.

This proposal supports all three Provincial Growth Fund Tiers and provides opportunity to address key challenges in the regions. The Business Case supports:

- *Tier 1: Capability Building* – By retaining niche talent and upskill the Otago Region.
- *Tier 2: Priority economic opportunities* – By supporting the economic success of the industrial sector through unlocking construction and heavy-engineering job opportunities.

- Tier 3: Enabling infrastructure - Strategic optimisation of KiwiRail’s infrastructure and land assets to support future rail resilience, Commercial Information and New Zealand’s sustainability goals.

The strategic intent of each of the tiers above are connected and drive the others’ success. Attracting skills and leveraging industry opportunities could be unlocked through using the Hillside investment as a catalyst.

Of all the transport modes, rail has, in recent years, demonstrated the ability to make sharp improvements in speed, cost, capacity and emissions. It is the logical sustainable way forward in a growing economy. If rolling stock assets are not maintained, the life of the assets will be compromised, impacting on the South Island’s sustainable rail economy. Investment is a necessity if the South Island’s valuable rail assets are to be depended on.

However, this Business Case looks beyond rail alone. Skills shortages continue in the region, impacting on the opportunities available within industry and vice versa. Investment in Hillside aims to attract new talent and retain experience in the industry to drive a positive economic ecosystem. The value of rail is not unsubstantial, estimated at \$1.54 billion to \$1.47 billion - this value includes net benefits from congestion time delays, safety, maintenance and emissions¹⁹. Further studies estimate the potential value of the rolling-stock industry in New Zealand to be worth \$15 billion²⁰ – this in itself presents huge opportunity to the local economy if investment is made in key infrastructure to attract aligned talent.

If rolling stock assets are not maintained, the life of the assets will be compromised, impacting on the South Island’s sustainable rail economy. Investment is a necessity if the South Island’s valuable rail assets are depended on.

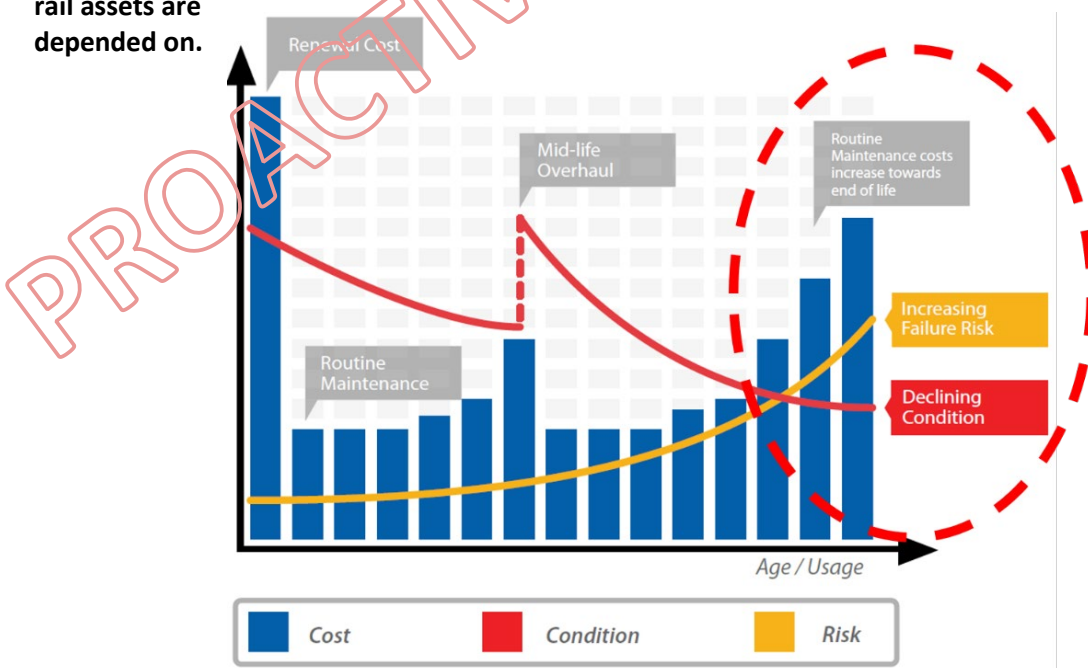


Figure 1: This graphic portrays capital investment decision making. Commercial Information

¹⁹ Ernst & Young, The Value of Rail New Zealand report, 2016

²⁰ Berl Economics, Business Case for Building Rolling Stock in New Zealand, April 2010

DUNEDIN AT A GLANCE

Investing in the Hillside Workshops will unlock a number of socio-economic benefits to Dunedin City, as well as contributing to Provincial Growth Fund priorities and key Government goals.

- ✓ **HOME TO THE SOUTH ISLAND’S ONLY OPERATIONAL HEAVY-LIFT RAIL FACILITY**
Dunedin’s Hillside Workshops are currently KiwiRail’s **only** operational heavy-engineering maintenance facility in the South Island - the “Linwood Loco” depot in Christchurch has not yet been replaced following major earthquake damage.
- ✓ **LOW EARTHQUAKE RISK ZONE**
A city is considered to have a low seismic risk if its ‘Z’ value is below 0.15. For Dunedin the Z value is 0.13. Hillside’s location provides resilience to crucial South Island rail maintenance facilities.
- ✓ **HIGH MĀORI IMPACT ZONE**
Dunedin is a high impact area to support Māori prosperity - 8,865 Māori usually live in Dunedin City - an increase of 20.4%, since the 2006 Census²¹. The Hillside investment also Commercial Information
[REDACTED]
- ✓ **ACCESS TO HIGHLY SKILLED WORKFORCE**
Dunedin is home to New Zealand’s oldest university, the University of Otago – ranked in the top 1% of universities in the world. It is also home to the Otago Polytechnic. Consequently, Dunedin has direct access to a pool of New Zealand’s highly skilled workforce. Unlocking engineering opportunities at Hillside would support retaining niche talent in the region.
In spite of this, the Otago Region has a high Youth NEET rate of 13.4% (Q1, 2019), compared with 4.7% in Q1 2018²².

- ✓ **JOBS NEEDED**
Dunedin has a higher unemployment rate compared to the rest of New Zealand – at 7.1%, compared with 4.3% for New Zealand²³. The Otago Region has the highest unemployment rate in the South Island²⁴. Reinvigorating the Hillside Workshops is a necessary step in unlocking employment opportunities for in Dunedin - securing Hillside’s place as a heavy-engineering mechanical hub in the lower South Island. The last decade has seen an estimated 910 engineering and manufacturing jobs lost in Dunedin²⁵, negatively impacting families and the local economy via the supply-chain.

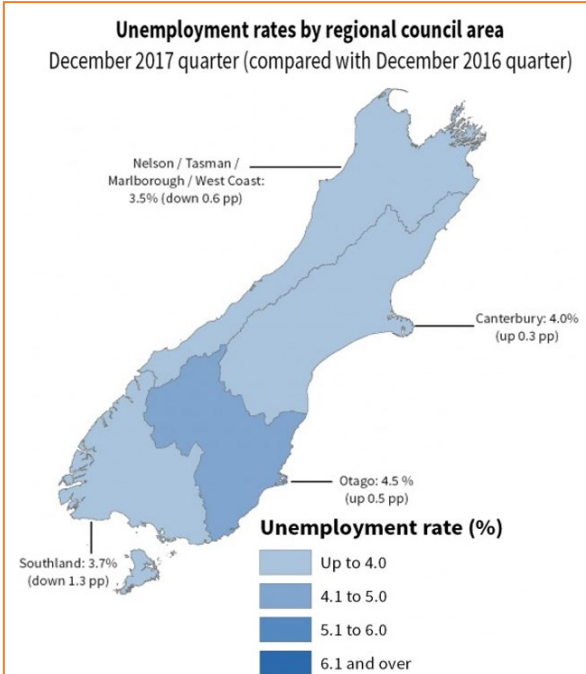


Figure 2: Statistics NZ, December 2017 quarter

²¹ Statistics New Zealand, Census 2013
²² Statistics NZ, NEET stands for “Not in employment, education or training” - % of people aged 15-24
²³ Statistics New Zealand, unemployment rate Dunedin, March 2018 versus NZ wide unemployment of 4.3% in December 2018
²⁴ Statistics New Zealand, December 2017, unemployment rates by regional council area.
²⁵ Based on the impacts of Fisher & Paykel, Cadbury plant closure, Hillside Workshop redundancies and Milmeq job losses over the last decade.

KiwiRail’s Hillside site

The Hillside Workshops, founded in 1901, were originally part of the New Zealand Railways Department. Although the Workshops began modestly, by 1935 Hillside employed approximately 800 workers and at its peak employed nearly 1,200. Hillside was considered a fundamental heavy-engineering and mechanical workshop in the mid 1900’s – during this time it was responsible for building approximately 190 locomotives. By 1990, Hillside had produced nearly 1600 wagons, including 1200 bogie container wagons.



Figure 3: Hillside Railway Workshop yards, Dunedin, 1925. Godber, Albert Percy, 1875-1949.

By 1989 Hillside was the largest mechanical engineering enterprise in New Zealand and incorporated the largest metal foundry.

During 2003, Hillside won the contract to refurbish several old retired Queensland Rail SX cars, that were purchased from Australia. The project lasted 14 weeks, after which the refurbished cars were sent to Auckland, where they are now used on commuter trains. Shortly after this, Hillside ran a project lasting around six years rebuilding imported British Rail Mark 2 passenger cars for use in Auckland on commuter trains. In 2009, KiwiRail announced that Hillside Engineering had won the contract to build seventeen new passenger cars for its two South Island long distance passenger trains - the TranzAlpine and the Coastal Pacific.

However, Hillside was unable to maintain a competitive advantage in the market due to production delays impacted by a lack of funding to support the costly new machinery required. Slowly, employment numbers at Hillside decreased, and over time, there was insufficient work to support meaningful operations in the workshops. By 2012, the Hillside Workshops were still operating but on a much smaller scale with the foundry being sold to Japanese company, Bradken.

Today, the dilapidated Hillside site employs approximately ^{Commo} █ people working fulltime in a rolling stock, “heavy-lift” workshop within a small area of the KiwiRail facility. The site is significantly impaired with poor quality, aging buildings █ Commercial Information

█. The heavy lift cranes are nearing end of life, and a traverser suffered a major breakdown earlier this year – it requires significant refurbishment. The remainder of the KiwiRail Hillside premise is leased to a combination of █ Commercial Information

█ The remaining buildings are vacant. The condition of the overall site directly impacts its market rental value and overall attractiveness.

As KiwiRail’s *only* operational heavy-engineering maintenance facility in the South Island, Hillside plays a fundamental role in servicing KiwiRail’s rolling stock. The future forecasts increased freight flows, commuter transport use, and a rise in tourism - the sustainable method to service these areas is rail. Robust heavy-engineering and rail servicing is a requirement to ensure rolling stock is maintained to deliver on rising rail dependencies.

Hillside Road site	
Current site layout – fragmented, aged and underutilised	
<ul style="list-style-type: none"> ▪ Fragmented, inefficient site layout ▪ Aged facilities and broken equipment ▪ Commercial Information standards and provide minimal investment returns on leases ▪ Poor land use – due to unoccupied and underutilised buildings ▪ The site is failing to maximise on its socio-economic potential 	Commercial Information
Future site layout- Investment in this Business Case	
<ul style="list-style-type: none"> ✓ Improved efficiencies - Upgraded heavy-engineering, network and mechanical servicing facilities consolidated in one area ✓ Upgraded equipment - For servicing crucial rolling stock requirements ✓ Improved buildings optimising lease value - Opening opportunities for supporting industry partnerships and employment ²⁶ ✓ Strategic land use – Optimising and improving efficiencies ✓ Employment prospects unlocked – Through construction, operation of the upgraded site and through attracting supporting industries to the site 	Commercial Information

²⁶ Colliers International Market Report, 2019, reports Industrial space remains scarce, with few options available for either lease or purchase in Dunedin

Commercial Information



Summary

Funding from the PGF will enable KiwiRail to remediate and upgrade its Hillside heavy engineering and mechanical Workshops.

This investment will not only support the resilience of valuable South Island rolling stock through essential maintenance and servicing, but would result in a number of positive cumulative effects, including:

- The development and retention of skills in the region;
- Unlocking future employment opportunities on currently underutilised land;
- Supporting New Zealand-wide environmental sustainability goals;
- Unlocking business partnership opportunities ^{Commercial Information}; and
- ^{Commercial Information}.

2. Strategic Case

The strategic context provides an overview of KiwiRail's key strategic objectives. It also provides an overview of other organisations who would benefit from investment in Dunedin's Hillside Workshops.

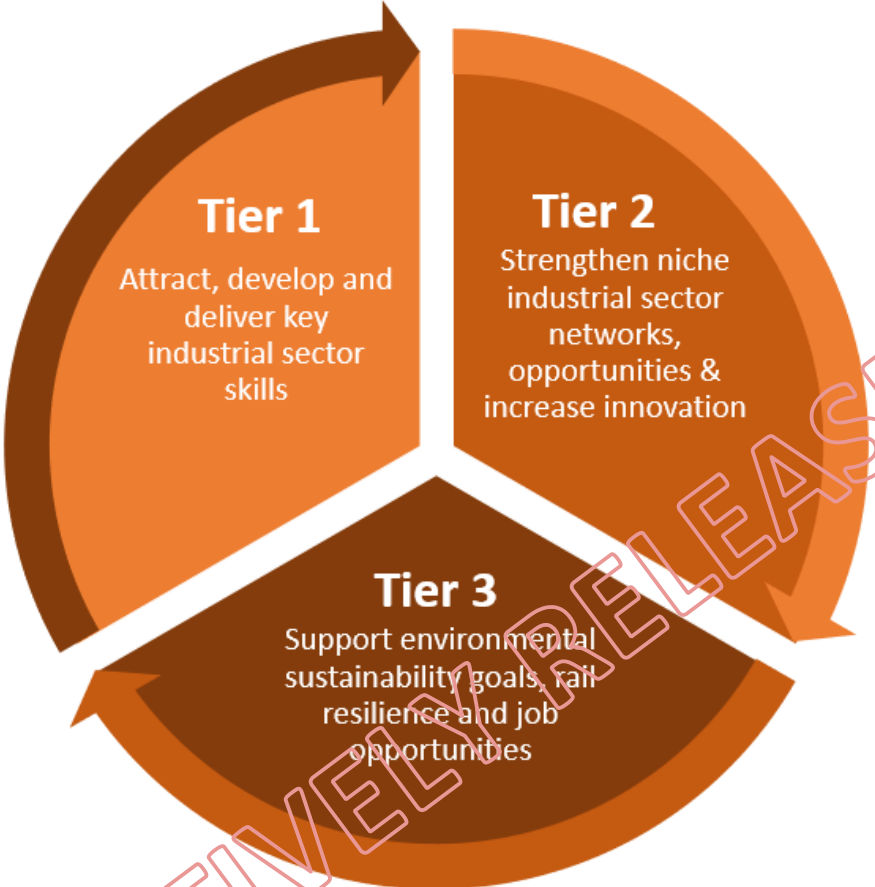
2.1 Strategic Context

This business case aims to provide positive outcomes for a number of strategically interlinked Provincial Growth Fund Tiers. The case supports:











- *Tier 1: Capability Building* – Aiming to attract and retain niche talent to the Otago Region and support upskilling in the industry.
- *Tier 2: Priority economic opportunities* – By supporting the economic success of the industrial sector through unlocking construction and heavy-engineering job opportunities.
- *Tier 3: Enabling infrastructure* - Strategic optimisation of KiwiRail's infrastructure and land assets to support future rail resilience, Commercial Information and support New Zealand's sustainability agenda.

The strategic intent of each of the outcomes above are connected and support driving the others' success. Each of the core goals within the tiers affects and is affected by the others driving an ecosystem of positive outcomes. Investment in the Hillside Workshops is an initial catalyst to support these positive outcomes.

Figure 5: Hillside Workshops - Tier Ecosystem Model



PROACTIVELY RELEASED

PGF Tiers	<h2 style="text-align: center;">PGF Tier 1</h2> <h3 style="text-align: center;">Capability Building</h3>	<h2 style="text-align: center;">PGF Tier 2</h2> <h3 style="text-align: center;">Priority Economic Opportunities</h3>	<h2 style="text-align: center;">PGF Tier 3</h2> <h3 style="text-align: center;">Enabling infrastructure</h3>			
Challenges	<h4 style="text-align: center;">Key challenges and opportunities</h4> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; vertical-align: top;"> <ol style="list-style-type: none"> 1. Skills shortages in heavy industrial sector. 2. Developing skills and retaining skills in the region. 3. Minimal industry apprenticeship and work experience opportunities in Dunedin. 4. Student reluctance to upskill in industry when job opportunities lacking. </td> <td style="width: 33%; vertical-align: top;"> <ol style="list-style-type: none"> 1. Disestablishment of various regional engineering and manufacturing industry businesses resulting in substantial job losses. 2. 7.1% unemployment rate in Dunedin (4.3% NZ wide). 3. Niche industry experience and skill transfer opportunities being lost to larger cities and offshore. </td> <td style="width: 33%; vertical-align: top;"> <ol style="list-style-type: none"> 1. Vulnerable rail resilience. 2. Rising CO2 levels. 3. Congestion on roads. 4. Underutilised land. 5. Increasing freight demands. 6. Under-investment in heavy-lift Hillside Workshop, impacting effectiveness and attractiveness of industry. </td> </tr> </table>			<ol style="list-style-type: none"> 1. Skills shortages in heavy industrial sector. 2. Developing skills and retaining skills in the region. 3. Minimal industry apprenticeship and work experience opportunities in Dunedin. 4. Student reluctance to upskill in industry when job opportunities lacking. 	<ol style="list-style-type: none"> 1. Disestablishment of various regional engineering and manufacturing industry businesses resulting in substantial job losses. 2. 7.1% unemployment rate in Dunedin (4.3% NZ wide). 3. Niche industry experience and skill transfer opportunities being lost to larger cities and offshore. 	<ol style="list-style-type: none"> 1. Vulnerable rail resilience. 2. Rising CO2 levels. 3. Congestion on roads. 4. Underutilised land. 5. Increasing freight demands. 6. Under-investment in heavy-lift Hillside Workshop, impacting effectiveness and attractiveness of industry.
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Solution	<h4 style="text-align: center; background-color: #f4a460; padding: 5px;">Solution: Hillside Workshops rehabilitation and upgrade</h4> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; vertical-align: top;"> <ol style="list-style-type: none"> 1. Upgraded, safe site complements apprenticeships and work experience programmes. 2. Students more inclined to train in sector and remain in region if industry invests in a long-term commitment. 3. An upgraded site may attract experienced workers, encouraging valuable knowledge transfer. 4. Investment would unlock construction and engineering opportunities Commercial Information indirectly – relocating businesses to a service cluster. </td> <td style="width: 33%; vertical-align: top;"> <ol style="list-style-type: none"> 1. Investment in Hillside would unlock work opportunities directly and indirectly, through construction, upon operation, supply-chain impacts. 2. Upgraded Workshops and site optimisation would be a catalyst for short, medium & long-term work in the industrial sector. It aligns with local projects including the Dunedin Hospital rebuild, Dunedin waterfront project. 3. The Workshops will seek experienced industry talent as demands grow, ensuring skills are transferred. </td> <td style="width: 33%; vertical-align: top;"> <ol style="list-style-type: none"> 1. Supports essential South Island rolling stock servicing. 2. Rail supports NZ wide zero-carbon goals. 3. Rail contributes to sustainability goals & reducing road congestion. 4. Better use of site space, opening opportunities for aligned industries & Commercial 5. Investment in Hillside Commercial Information Commercial Information increasing freight capacity. 6. An upgraded site would improve site attractiveness, capacity levels and add value. </td> </tr> </table>			<ol style="list-style-type: none"> 1. Upgraded, safe site complements apprenticeships and work experience programmes. 2. Students more inclined to train in sector and remain in region if industry invests in a long-term commitment. 3. An upgraded site may attract experienced workers, encouraging valuable knowledge transfer. 4. Investment would unlock construction and engineering opportunities Commercial Information indirectly – relocating businesses to a service cluster. 	<ol style="list-style-type: none"> 1. Investment in Hillside would unlock work opportunities directly and indirectly, through construction, upon operation, supply-chain impacts. 2. Upgraded Workshops and site optimisation would be a catalyst for short, medium & long-term work in the industrial sector. It aligns with local projects including the Dunedin Hospital rebuild, Dunedin waterfront project. 3. The Workshops will seek experienced industry talent as demands grow, ensuring skills are transferred. 	<ol style="list-style-type: none"> 1. Supports essential South Island rolling stock servicing. 2. Rail supports NZ wide zero-carbon goals. 3. Rail contributes to sustainability goals & reducing road congestion. 4. Better use of site space, opening opportunities for aligned industries & Commercial 5. Investment in Hillside Commercial Information Commercial Information increasing freight capacity. 6. An upgraded site would improve site attractiveness, capacity levels and add value.
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Stakeholders	<h4 style="text-align: center;">Stakeholders who benefit (directly and indirectly) by this business case</h4> <div style="display: flex; justify-content: space-between; align-items: center; padding: 10px;"> <div style="display: flex; flex-wrap: wrap; gap: 10px;">       </div> <div style="border: 1px solid gray; padding: 5px; background-color: #f0f0f0;">Commercial Information</div> <div style="display: flex; flex-wrap: wrap; gap: 10px;">     </div> </div>					

2.1.1. Organisational Overview

KiwiRail owns, operates and optimises rail and ferry transport and supply chain networks to facilitate the efficient movement of freight and passengers within New Zealand²⁷. It currently transports 18 million tonnes of freight each year²⁸.

KiwiRail's Strategic Land Use Team is overseeing a development programme to improve the utilisation of its assets nationally, including the quality, location and layout of operational yards and terminals. The programme will leverage new operating models and technologies, including automation to provide safe, reliable and efficient, services and terminals for the future.

The Hillside Business Case aligns to this national development programme. It supports KiwiRail's key objectives to:

- Support New Zealand's export growth
- Provide resilience to the national freight transport system
- Reduce New Zealand's carbon footprint
- Reduce congestion and make roads safer
- Improve operational layout and optimise rail management

The key strategies that KiwiRail uses to deliver the above are to Simplify, Standardise and Invest.²⁹ The work of the Strategic Land Use Team is underpinned by KiwiRail's Commercial Property Strategy 2017-2020, which is focused on protecting the active rail portfolio. It is designed to create key distribution hubs which enable the wider business through increased freight flows.

KiwiRail's freight strategy is to:

- Grow regional intermodal terminals;
- Accommodate predicted freight growth; and
- Ensure rail remains linked to wider transport, regional and economic development plans.

Investment in the Hillside mechanical hub aligns to this strategy by enabling a more resilient maintenance and refurbishment capability to accommodate growth in freight.

It also aligns to KiwiRail's Zero Harm strategy, [redacted] Commercial Information [redacted] to provide a safe working environment for staff

Commercial Information

KiwiRail's strategic customer insights programme, [redacted] Commercial Information [redacted]. It is an important part of the strategic framework which KiwiRail projects must align to. [redacted] Commercial Information [redacted] identified that KiwiRail needs to play a central role in the transformation of New Zealand's regional economy. Consequently, KiwiRail is redefining its business from being sales-driven to customer-focussed. The Hillside Mechanical and Manufacturing Hub will lift service levels and support the customer-focussed business model.

[redacted] Commercial Information [redacted] strategy diagram provides a summary of the key focus areas and how these are interlinked.

²⁷ KiwiRail's Statement of Corporate Intent 2018-2020 'Reshaping and Delivering'

²⁸ KiwiRail's Annual Integrated Report 2017, page 7

²⁹ KiwiRail's Annual Integrated Report 2017, page 10

Commercial Information

Remediating the Hillside site would directly support **Commercial Information**

1. Commercial Information

- Remediating the **Commercial Information** Hillside site and upgrading it to a modernised heavy-lift mechanical hub will improve efficiency, increase capability and resilience, and promote improved safety.

2. Commercial Information

- KiwiRail has been engaging with local iwi, DCC, NZTA, Rail and Maritime Union and industry training organisations to ensure an aligned approach is planned.
- The general nature of infrastructure related projects requires a long-term planning perspective **Commercial Information**; essentially KiwiRail are investing in the long term future of rolling stock maintenance and refurbishment in Southern New Zealand.
- A well-functioning Mechanical and Manufacturing Hub may have future capability to bring increased rail parts manufacture or assembly back to New Zealand.

3. Commercial Information

- Hillside will unlock increased capacity **Commercial Information**, enabling KiwiRail's freight partners to expand their operations and increase productivity.
- With an improved site design, KiwiRail will be able to create investment opportunities for complementary services to be developed on the adjacent land.
- The upgraded Hillside Workshops aims to unlock opportunity for industry growth in Dunedin and create momentum for businesses to retain talent within the region.
- An upgraded Hillside site aims to attract increased interest to the heavy industrial sector, supporting nation-wide goals to address skills shortages in this niche sector.

2.1.2. Alignment to Existing Strategies

The following table explains the relevance of KiwiRail's strategies to the Dunedin Hillside Workshops Business Case.

Table 3: Alignment to KiwiRail Strategies

Organisation & Strategy Identified	Description	Relevance to this Business Case
<p>KiwiRail Group</p> <p>Statement of Corporate Intent 2018 -2020</p>	<p>KiwiRail's Statement of Corporate Intent focuses on delivering a reliable and sustainable business, meeting shareholders' expectations, empowering its people and ensuring KiwiRail plays its role in an integrated transport system fit for New Zealand's future needs.</p> <p>KiwiRail will continue to drive its strategy of 'simplifying our business, standardising our assets, and investing in our people to support our customers' growth while delivering financial and operational results.</p>	<p>KiwiRail's ability to overhaul its Hillside heavy lift site is integral to delivering an integrated transport system for New Zealand by supporting essential servicing and maintenance demands of rolling stock. A renovated site would not only provide space to redevelop its heavy lift capability, but also provides space for complementary services to be developed and for capacity to expand in the future.</p> <p>KiwiRail can only support the growth of its customers if it has the facilities to do so; upgrading Hillside enables this.</p>
<p>KiwiRail Group</p> <p>Statement of Corporate Intent 2019 -2021</p>	<p>KiwiRail remains committed to 'facilitating efficient flows to/ from ports' (freight) and 'providing resilience to the NZ transport network'.</p> <p>KiwiRail also recognises its role in supporting New Zealand as the country progresses the global sustainable development agenda.</p> <p>To further support the agenda, KiwiRail has identified a subset of the United Nations' Sustainable Development Goals (SDGs) to integrate into its organisational strategy and work programme over the next three years. SDGs provide an integrated framework for addressing the world's most urgent social, environmental and economic challenges.</p>	<p>Commercial Information</p> <p>open the space for freight services to expand.</p> <p>Remediation and modernisation of the Hillside site would enhance the resilience of the NZ transport network.</p> <p>Investing in Hillside supports the growth of rail over road in New Zealand, which is necessary to reduce carbon emissions and meet the UN SDGs related to climate action. The Business Case also supports the UN SDGs in social and economic areas, for example, reducing inequality, by providing economic opportunities in regional New Zealand, and specifically for Māori, Commercial Information</p>
<p>KiwiRail Freight Strategy</p>	<p>KiwiRail's Freight strategy is to:</p> <ul style="list-style-type: none"> ▪ Grow intermodal terminals; 	<p>Investing in Hillside for a 'fit-for-future' mechanical site, and expanding freight capability at</p>

Organisation & Strategy Identified	Description	Relevance to this Business Case
(Drafting for completion, August 2018)	<ul style="list-style-type: none"> ▪ Accommodate predicted freight growth; and ▪ Ensure rail remains linked to wider transport and regional development plans. 	<p>Commercial Information would:</p> <ul style="list-style-type: none"> ▪ Allow the region to expand its freight capability to accommodate growth; and ▪ Optimise the ability of KiwiRail's Dunedin sites to complement wider transport and regional development plans.
KiwiRail Property: Commercial Strategy 2017-2020	<p>KiwiRail's Property Strategy looks to strengthen the alignment between its property assets and its core business objective: to move freight and people.</p> <p>The 2017-2020 strategy focusses on protection of the active rail portfolio, optimisation of the yard and terminal assets and maximising the release of capital from non-active rail land. It also considers the disposal of land outside of its active rail portfolio for re-investment into its future rail business.</p> <p>As part of KiwiRail's "Active Rail Corridor" initiative, it aims to develop key freight hubs to help support the wider business through predicted freight growth.</p> <p>KiwiRail's Strategic Land Use team have been mandated with over-seeing a group-wide rail development programme that aims to improve the quality, location, layout and efficiency of the operational yards and terminals.</p>	<p>Ensuring that KiwiRail is prepared for future national rail growth, by investing in strategically placed locations with suitable functionality is key for its preparedness to best service the country.</p> <p>An upgraded network, heavy lift, and mechanical site (Hillside) and increased freight capability Commercial Information will:</p> <ul style="list-style-type: none"> a) Optimise land assets by investing in plant and capability at an underutilised site, to rebuild the leading South Island hub for the refurbishment of rolling stock; b) Extend the freight hub at Commercial Information to support the lower South Island's freight needs; c) Reduce risk to the environment, to workers, and to the business, by Commercial Information d) Align to the nationwide programme of work in strategic land use, enhancing New Zealand's overall network resilience and efficiency.
Back on Track KiwiRail Sustainability Report 2014	<p>The Back on Track Report acknowledges that KiwiRail is predominantly a freight business which plays a crucial role in the supply chain for both New Zealand and international businesses.</p> <p>The 'Back to Basics' model introduced across the business is about ensuring KiwiRail tackles the</p>	<p>Environmental, social and economic sustainable outcomes underpin the proposed Dunedin Hillside remediation project.</p> <p>The intent with Hillside is two-fold:</p> <ol style="list-style-type: none"> 1. Remediate the site and build rail resilience; and 2. Unlock the opportunity for a 'manufacturing hub' to develop. The knock-on effects include creating a supply

Organisation & Strategy Identified	Description	Relevance to this Business Case
	<p>things which are going to keep them in business for the long haul. KiwiRail is seen as having an important role in New Zealand’s future for the next 150 years.</p> <p>The Report highlights KiwiRail’s sustainability position – ensuring they create value both for their business, the people and the environment. This includes future generations and the wider environment.</p>	<p>chain of goods and services and supporting high-value engineering and manufacturing jobs in Dunedin, anchoring the city’s reputation in this sector. With a growth in capability comes a need for supporting services and the opportunity for upskilling in the market.</p> <p>The Hillside site is <small>Commercial Information</small> [redacted], and the investment for remediation would improve the land quality. This coupled with strengthening New Zealand’s capability in the refurbishment of rolling stock rather than outsourcing abroad, would contribute to New Zealand’s goals and international commitments under the 2015 Paris Climate Agreement, by supporting a resilient rail network that can manage the growth in demand for services.</p>
<p>KiwiRail Group</p> <p><small>Commercial Information</small> [redacted]</p>	<p><small>Commercial information</small> [redacted]</p> <p>Inherent in the feedback from KiwiRail’s customers was the feedback that KiwiRail needs to play a more central role in the modern transformation of New Zealand’s regional economy.</p> <p>The project has highlighted a range of insights and opportunities. Now KiwiRail needs to convert these into imaginative and actionable commercial opportunities.</p>	<p>Hillside aligns with the three aspects of <small>Commercial Information</small> [redacted]</p> <p>Further details of <small>Commercial Information</small> are at Figure 10.</p>

PROACTIVELY REVIEWED

KiwiRail’s Dunedin Hillside Manufacturing Hub Business Case also aligns with several national and regional strategies relating to transportation in general.

NATIONAL STRATEGIES

An investment in a regional manufacturing hub in Dunedin aligns with a number of national strategic plans for the country.

Table 4: Alignment to National Strategies

Organisation & Strategy Identified	Description	Relevance to this Business Case
<p>Ministry of Education</p> <p>Tertiary Education Strategy 2014 - 2019</p>	<p>This strategy highlights the need to build international relationships that contribute to improved competitiveness, support business and innovation through development of relevant skills and research and improve outcomes for all. The first steps to achieving these shifts are outlined in the strategy's 6 priorities:</p> <ol style="list-style-type: none"> 1. Delivering skills for industry 2. Getting at-risk young people into a career 3. Boosting achievement of Māori and Pasifika 4. Improving adult literacy and numeracy 5. Strengthening research-based institutions 6. Growing international linkages 	<p>This business case directly aligns to priorities 1, 2 and 3 of the Tertiary strategy.</p> <p>Redeveloping Hillside and increasing the capability will mean an increase in numbers employed at the site. Tertiary providers in Otago produce highly skilled graduates within the engineering and manufacturing space and would be well-suited individuals to take up the roles created.</p> <p>Getting at risk young people into a career can also be supported by guiding youth on a relevant training path and into some of the 38 apprenticeship schemes and work experience programmes already offered by Kiwi Rail.</p> <p>14,385 Māori usually live in the Otago Region, an increase of 17.2% since the 2006 Census. Of this population, 6.8% are unemployed. Hillside aims to unlock industry and upskilling opportunities to support Māori prosperity. The business</p> <p>Commercial Information</p> <p>create career pathways for young Māori into the engineering and manufacturing industry.</p>
<p>Ministry of Transport</p> <p>Safer Journeys Strategy: New Zealand's Road Safety Strategy 2010-2020</p>	<p>This document is designed to guide New Zealand's efforts to improve road safety for the next 10 years. It sets out the direction and actions MIT will take to reduce the number of deaths and injuries on New Zealand's roads.</p> <p>Specifically, in its "Safe Roads and</p>	<p>Improving rail freight connectivity and capacity, will be an important facet of reducing the impact of more trucks on the road.</p> <p>By developing the Hillside site and improving regional freight capability</p> <p>Commercial Information KiwiRail is creating a more efficient platform to</p>

Organisation & Strategy Identified	Description	Relevance to this Business Case
	<p>Roadsides” actions, it supports “Better integrate road safety into land-use planning”. Furthermore, MIT’s findings show a rapidly growing Freight market in New Zealand.</p> <p>Freight is predicted to double by 2040 and the largest share of it is likely to continue to be transported by road.</p> <p>Growing international demand for oil – it is predicted that demand for liquid fuels will grow by 32 percent by 2030. If fuel prices rise, then the way people choose to travel may also change. This could have positive and negative impacts for road safety.</p>	<p>develop a credible alternative to road travel for freight, passenger transport and the tourism sector.</p> <p>It will provide a more fit-for-purpose use of the land on both sites, consolidating KiwiRail’s assets and infrastructure at Hillside and Commercial Information to allow the adjacent freight companies to expand and grow creating employment opportunities also. This will help support a credible alternative to road travel.</p>
<p>New Zealand Transport Agency</p> <p>Government Policy Statement on Land Transport (GPS) 2018</p>	<p>The Government Policy Statement on Land Transport (GPS) 2018 helps guide investment in transport by providing a longer-term strategic view of how the transport network is prioritised and why.</p> <p>GPS has a new focus that prioritises improving New Zealanders’ access to economic and social opportunities.</p> <p>The increased focus includes supporting nationally important freight connections that are safe, efficient, resilient and reduce greenhouse gas emissions.</p> <p>The four strategic GPS priorities are:</p> <ul style="list-style-type: none"> ▪ safety ▪ access ▪ environment ▪ value for money. 	<p>Rationalisation of KiwiRail sites unlocks both direct and indirect work opportunities which align with national land transport objectives and the long term results the Government wishes to achieve by:</p> <ul style="list-style-type: none"> ▪ Addressing future rail heavy lift and mechanical demands. ▪ Developing a reliable and resilient service for the South Island. ▪ Through construction, upon operation and supply chain impacts in Otago with economic and social benefits to the region in the form of jobs and new business. ▪ Mitigating the effects of land transport on the environment by maintaining valuable rolling stock assets and in the Commercial Information
<p>New Zealand Transport Agency</p> <p><i>Statement of Intent 2018 -2022</i></p>	<p>The policy statement focuses on creating a safe, resilient, well-connected and multimodal transport system that enables new housing opportunities, livable cities and</p>	<p>Economic prosperity and resilience would be an outcome of the upgraded Workshops and site optimisation as it is a catalyst for short, medium and long-term work</p>

Organisation & Strategy Identified	Description	Relevance to this Business Case
	<p>sustainable economic development in regional New Zealand.</p> <p>It supports the enduring outcomes for the transport sector: inclusive access, economic prosperity, resilience and security, environmental sustainability, and healthy and safe people.</p>	<p>in the industrial sector. It aligns with local projects including the Dunedin Hospital re-build and Dunedin harbourside project, and will seek experienced industry talent as demand grows, ensuring skills are transferred to an increasing employment footprint of KiwiRail in the region supporting economic prosperity for the Lower South Island.</p> <p>Environmental sustainability outcomes are supported through the engagement of rail over road and the remediation of the site itself. Commercial Information</p>
<p>Budget 2019</p> <p><i>Budget at a Glance</i></p> <p><i>The Wellbeing Budget</i></p>	<p>Budget 2019 has a specific focus on:</p> <ol style="list-style-type: none"> 1. Taking mental health seriously 2. Improving child wellbeing 3. Supporting Māori and Pasifika aspirations 4. Building a productive nation 5. Transforming the economy <p>Specifically, the Budget aims to invest in the Future of Rail with more than \$1 billion to be invested in the rail network (including \$^{Commerc} from the Provincial Growth Fund).</p> <p>It has an aim to support NZ's climate change goals and improve choices for freight and commuter transport.</p>	<p>The proposed Hillside site would specifically address several requirements within the Budget 2019 focus areas.</p> <p><i>Supporting Māori and Pasifika aspirations:</i></p> <p>KiwiRail is committed to developing its people, supporting diversity and promoting Te Ao Māori within the business. KiwiRail's successful graduate and mentoring programmes are nurturing young talent, and the Toi Leadership Programme aims to develop leaders who are making a difference in their workplaces, with their whanau and in their local communities.</p> <p><i>Building a productive nation:</i></p> <p>KiwiRail's goals directly support New Zealand transitioning to a low-carbon future. Investing in Hillside supports growing talent capabilities and providing opportunities to the local community to sustain and build that growth. It would unlock opportunities to develop apprenticeships and trade training</p>

Organisation & Strategy Identified	Description	Relevance to this Business Case
		<p>through its revitalisation and co-located manufacturing hub.</p> <p>Rail plays a key role in meeting UN SDGs, including climate - every tonne of freight carried by rail has 66% fewer carbon emissions than heavy road freight.</p>
<p>Climate Change Response</p> <p>(Zero Carbon) Amendment Bill</p> <p>New Zealand Government</p>	<p>According to the New Zealand Parliament website the purpose of this bill is to provide a framework by which New Zealand can develop and implement clear and stable climate change policies that contribute to the global effort under the Paris Agreement to limit the global average temperature increase to 1.5° Celsius above pre-industrial levels.</p>	<p>Investment in the Hillside site would specifically support New Zealand in meeting its zero carbon goals, while continuing to service freight and Tourism needs. The rail mode has 66% fewer CO² emissions than road.</p>
<p>New Zealand’s commitment to the United Nations Sustainable Development Goals</p>	<p>In September 2015, the United Nations signed up to 17 Sustainable Development Goals (SDGs) (external link) and 169 targets.</p> <p>The 17 goals and 169 targets set out a universal agenda to achieve sustainable development globally, known as Agenda 2030. They bring together the three dimensions of sustainable development: economic, social and environmental. They apply to all countries</p> <p>Sustainable Development goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.</p> <p>Sustainable Development goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation.</p>	<p>Sustainable Development goal 8: Hillside is an opportunity to centralise KiwiRail services in Dunedin and build capability for the future. Much talent is trained in Dunedin but often lost elsewhere – for example overseas or within larger cities in New Zealand. Investment in Hillside would increase job opportunities.</p> <p>Sustainable Development goal 9: Growing KiwiRail’s mechanical capability at Hillside would build resilience into the South Island rail network. Investment would unlock construction and engineering opportunities at the site. Unlocking the wider Hillside site potential would provide opportunity for aligned industries to relocate here. An industry service cluster would support networking and innovation.</p>

REGIONAL STRATEGIES

KiwiRail’s intention to invest in the Hillside Business Case aligns with a number of regional strategies and development plans.

Table 5: Alignment to Regional Strategies

Organisation & Strategy Identified	Description	Relevance to this Business Case
<p>Dunedin City Council:</p> <p>Economic Development Strategy</p> <p>2013 - 2023</p>	<p>This Strategy’s goals are for Dunedin to provide sustaining and appealing jobs, business and lifestyle opportunities for all. Specifically:</p> <ul style="list-style-type: none"> ▪ 10,000 extra jobs over 10 years (requiring employment growth of approximately 2 percent per annum); and ▪ an average \$10,000 of extra income for each person (requiring GDP per capita to rise by about 2.5% per annum). <p>There are five strategic themes for the next decade:</p> <ol style="list-style-type: none"> 1. Business vitality 2. Alliances for innovation 3. A hub of skills and talent 4. Linkages beyond our borders 5. A compelling destination <p>Dunedin has economic foundations on which to build this prosperous city of opportunity. These include:</p> <ul style="list-style-type: none"> ○ A reputation for high quality education, innovation and research, with the University of Otago and Otago Polytechnic ○ Access to significant natural resources, such as mineral wealth in the hinterland and extensive agriculture ○ Developing strengths in high value niches of the economy related to health technologies and biotechnology, food processing, ICT, creativity, niche manufacturing and engineering ○ Being the gateway to the lower South Island – a major transport and export hub <p>The 10 Year Plan includes creating job and training opportunities for youth, reducing economic inequality, retaining skilled students as workers, attracting migrants to Dunedin, maintaining the relatively high</p>	<p>Making land available for industry Commercial Information will deliver the essential infrastructure required for KiwiRail to run a sustainable heavy lift, refurbishment and freight business. This will unlock employment opportunities directly and indirectly, through construction, upon operation and supply-chain impacts which aligns with the goal to create annual employment growth of 2%.</p> <p>If industry invests in a long-term commitment it creates an environment of opportunity where students are more inclined to train in the sector and remain in the region. An upgraded site may attract experienced workers, encouraging valuable knowledge transfer.</p> <p>An upgraded, safe site also compliments apprenticeships and work experience programmes.</p> <p>These along with the direct and indirect opportunities above create a service cluster of businesses within the supply chain which all supports the City’s goal to strengthen high value niches of the economy, manufacturing and engineering.</p> <p>The Commercial Information to up-skill in relevant areas and fill employment opportunities created by new businesses. Dunedin is a high impact area to grow Māori prosperity - 8,865 Māori usually live in Dunedin</p>

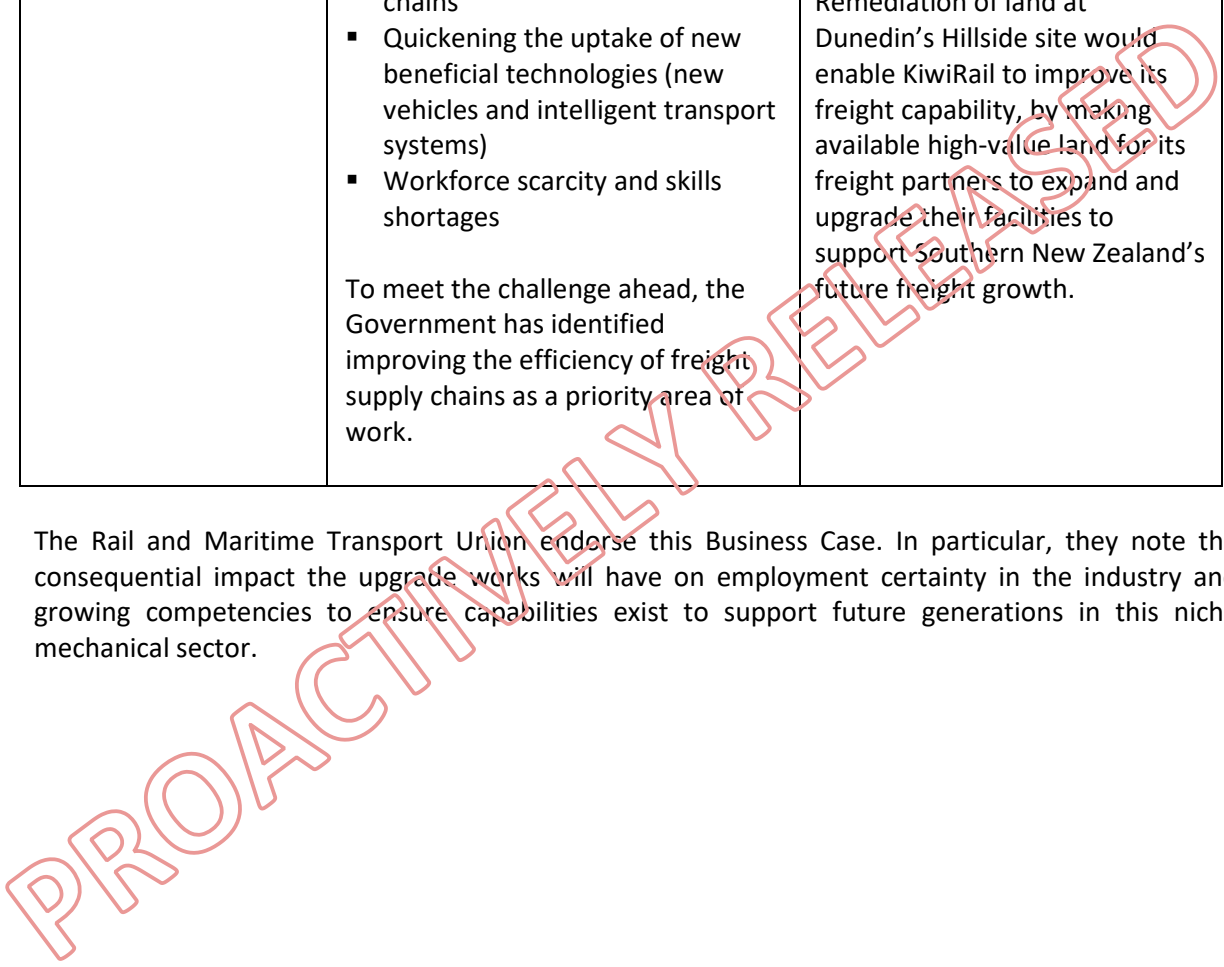
Organisation & Strategy Identified	Description	Relevance to this Business Case
	<p>knowledge and skills base that exists, and encouraging our labour force to continually upskill.</p> <p>Commercial Information</p>	<p>City - an increase of 20.4%, since the 2006 Census and a significant talent pool to tap into, lifting Māori incomes, skills and opportunities.</p> <p>Additionally, Commercial Information would unlock the current land for more strategic city planning.</p>
<p>Dunedin City Council Sustainability Framework: Transport Strategy 2013</p>	<p>This strategy identifies some of Dunedin's key transport challenges, including road safety, high dependence on motor vehicles, improving provision for travel modes other than cars, and maintaining critical infrastructure in light of a changing climate.</p> <p>The Integrated Transport Strategy reflects the DCC's commitment to sustainable development and sets a basis for a transport system that supports the environmental, social, cultural and economic sustainability of Dunedin.</p>	<p>For KiwiRail to operate a sustainable, reliable heavy-engineering centre in Dunedin, it needs to be in an area that is well connected, will accommodate expansion goals, and will allow it the facilities to upgrade and modernise. A remediated Hillside site would satisfy these objectives; enabling KiwiRail to contribute positively to a move from Road to Rail in support of local and South Island sustainability goals.</p>
<p>Dunedin City Council 10-year Plan: 2018 – 2028</p> <p>Transport</p>	<p>Key priorities of the DCC 10-year plan are "Sustainability" and "Economic Development: A successful city with a diverse, innovative and productive economy".</p>	<p>Investing in remediation of the Hillside Workshops, is directly investing in the future of rail – a more sustainable and environmentally friendly transport choice when compared to road.</p> <p>Revitalising the heavy-lift workshops would align with other major local infrastructure projects ensuring skills are transferred and creating opportunities in the heavy-engineering sector, supporting Dunedin City Council's goal to create a "hub for skills and talent: increasing the retention of graduates and building skills base".</p>
<p>Otago Regional Long-</p>	<p>The latest Otago Regional Council</p>	<p>KiwiRail has a strong sense of</p>

Organisation & Strategy Identified	Description	Relevance to this Business Case
<p>Term Plan:</p> <p>2015 - 2025</p>	<p>Long Term Plan took effect from 2015 and looks at various initiatives within the community such as protecting the Environment, Health and Safety and Transport strategies.</p> <p>The following community outcomes have been identified:</p> <ul style="list-style-type: none"> ▪ Sustainable development of the region’s resources through the sharing of knowledge and information. ▪ Community participation in planning and managing the use and enhancement of Otago’s resources. ▪ The environmental, economic, social and cultural needs of Otago people are met. 	<p>community and is committed to developing a long-term strategy of growth and prosperity with the community firmly in mind.</p> <p>The remediation of Hillside provides the opportunity to build a yard that is not only fit for purpose but Commercial Information Modern techniques and strategies will be adopted to ensure the site is redeveloped using sustainable methods. The investment in Hillside would provide a platform of growth for the region’s rail industry to optimise rail over road whilst also creating a need for complimentary services to boost the local economy.</p>
<p>Ministry of Business, Innovation and Employment; and the Ministry for Primary Industries</p> <p>Regional Growth Programme 2017</p>	<p>The Ministry of Business, Innovation and Employment and the Ministry for Primary Industries, lead central government’s contribution to the Regional Growth Programme.</p> <p>The programme will investigate ways to prioritise investment and economic growth opportunities for all districts within the Region over the next 30 years.</p> <p>Ensuring our regions are as productive and innovative as they can be will not only improve regional living standards, but also lift our national exports and increase wealth throughout New Zealand³⁰.</p>	<p>Transport is a key enabler of growth, and sustainable transport (rail) in a Government priority.</p> <p>By investing in a re-invigorated ‘fit-for-future’ Heavy lift and Manufacturing hub the South Island is increasing its rail resilience to support a growth in freight and tourism.</p> <p>The workshops will seek experienced industry talent, ensuring skills are transferred in support of the lower South Island’s wealth and productivity.</p>
<p>NZ Transport Agency, Draft South Island Freight Plan 2015</p>	<p>The South Island faces several challenges including related to freight:</p> <ul style="list-style-type: none"> ▪ Canterbury earthquake recovery impacts and recovery ▪ Projected 58% increase in freight volumes by 2042 	<p>KiwiRail needs to deliver reliable distribution services to the growing freight economy, and Dunedin is a key area for lower South Island New Zealand distribution.</p>

³⁰ Regional Growth Programme, page 2

Organisation & Strategy Identified	Description	Relevance to this Business Case
	<ul style="list-style-type: none"> ▪ Uncertainty concerning fuel price volatility ▪ Changes to international shipping movements ▪ Increasing consumer demand for more sustainable, low CO₂ supply chains ▪ Quickening the uptake of new beneficial technologies (new vehicles and intelligent transport systems) ▪ Workforce scarcity and skills shortages <p>To meet the challenge ahead, the Government has identified improving the efficiency of freight supply chains as a priority area of work.</p>	<p>When KiwiRail is strategically located and connected with wider regional transport initiatives, its services will be optimised.</p> <p>Remediation of land at Dunedin’s Hillside site would enable KiwiRail to improve its freight capability, by making available high-value land for its freight partners to expand and upgrade their facilities to support Southern New Zealand’s future freight growth.</p>

The Rail and Maritime Transport Union endorse this Business Case. In particular, they note the consequential impact the upgrade works will have on employment certainty in the industry and growing competencies to ensure capabilities exist to support future generations in this niche mechanical sector.



2.2 Investment Objectives, Existing Arrangements and Business Needs

2.2.1 Investment Objectives

The investment objectives for this proposal are:

1. Re-establish Dunedin as a dependable mechanical-engineering hub for the lower South Island.
2. Support strategic employment growth and upskilling in the Otago region.
3. Ensure resilience of the South Island’s rail network.
4. Support Māori prosperity.
5. Enable a sustainable land-use strategy complementing regional plans.

2.2.2 Existing Arrangements and Business Needs

Table 1: Investment Objective 1

Investment Objective 1	Re-establish Dunedin a dependable mechanical-engineering hub for the lower South Island
Existing Arrangements	<p>KiwiRail’s Dunedin Hillside facility was established in the late 1800s. It houses the South Islands only operational heavy lift capability following the earthquake damage caused to Christchurch’s “Linwood Loco” facilities. Hillside was once a significant manufacturing and maintenance facility - employing 1200 people, but it has fallen into disrepair.</p> <p>In November 2012, KiwiRail announced sold part of the business to Australian firm Bradken, and the remainder was closed down - ninety jobs were lost.</p> <p>The Workshops are [REDACTED] Commercial Information [REDACTED] these require extensive remediation. The traverser, which broke down earlier this year, needs a significant overhaul. The heavy lift cranes are nearing end of life and will need overhaul to ensure their longevity.</p> <p>KiwiRail currently has a small team of approximately ^{Comm}[REDACTED] working at Hillside. Approximately ^{Comm}[REDACTED] staff in the [REDACTED] Commercial Information [REDACTED] This site also suffers from poor layout and aged facilities.</p> <p>Over the past decade a number of engineering businesses in the Otago Region have been disestablished resulting in job losses. Some businesses have been opting to use heavy-engineering expertise from the overseas market over New Zealand based firms – this approach has multiple knock-on effects which are explored in the economic case.</p>
Business needs	<p>As KiwiRail’s <i>only</i> operational heavy-engineering maintenance facility in the South Island, Hillside plays a fundamental role in repairing, upgrading and servicing KiwiRail’s rolling stock.</p> <p>The future forecasts increased freight flows, commuter transport use, and a rise in tourism - the sustainable method to service these areas is rail. Robust heavy-engineering and rail servicing is a requirement to ensure rolling stock is maintained to deliver on rising rail dependencies.</p> <p>The upgrade of Hillside would provide positive outcomes beyond the</p>

<p>Investment Objective 1</p>	<p>Re-establish Dunedin a dependable mechanical-engineering hub for the lower South Island</p>
	<p>Workshops alone. The upgrade is the first step in triggering a chain-reaction of interlinked goals, both within and around the Hillside site.</p> <p>An upgraded Workshop would contribute to increased interest in the industrial sector. Consequently, a talented labour market may be more inclined to take on local job opportunities - as opposed to looking abroad. Retaining local talent would support rail resilience and transport sustainability goals by increasing efficiencies and volume capacity capabilities. Furthermore, retaining talent is more likely to support the growth of new industry innovations in New Zealand. An increased mechanical network would support the success and open opportunities in related industries, fuelling the potential for Dunedin's engineering sector to grow.</p> <p>The Workshop upgrade would free-up underutilised space for aligned industries to establish themselves, creating a mechanical hub.</p> <p>Capital investment of \$19.97m would:</p> <ul style="list-style-type: none"> ▪ Re-establish the Hillside Workshops as dependable heavy-engineering and servicing facilities for South Island rolling-stock. ▪ Commercial Information ▪ Support the lower South Island's capacity to service growing freight demands. ▪ Unlock opportunity for redevelopment of the remaining site to support aligned industries – enhancing the Workshops resilience through accessibility.
<p>Alignment with Provincial Growth Fund priorities</p>	<p>The reinvigoration of the Hillside site aligns directly with the Funds' priorities to: enhance economic development opportunities and build resilient communities.</p> <p>The current yard at Hillside is not sustainable nor is it capable of providing the rolling stock resilience required. The \$19.97million of funds sought through the PGF would enable KiwiRail to undertake the work required to re-establish its heavy lift capability, providing dependable mechanical rail servicing for the lower South Island and opening up opportunities to support the heavy-engineering industrial sector.</p> <p>The New Zealand Government 2019 Budget specifically aims to invest in the Future of Rail with more than \$1 billion to be invested in the rail network</p> <p>Commercial Information</p>

Table 2: Investment Objective 2

Investment Objective 2	Support strategic employment growth and upskilling in the Otago region
<p>Existing Arrangements</p>	<p>The dilapidated Hillside site employs approximately ^{Comm} people working fulltime in a rolling stock, “heavy lift” workshop within a small area of the facility. This was once one of Dunedin’s biggest employers, with more than 1000 staff.</p> <p>Dunedin’s unemployment rate sits at 6.1% - nearly two percentage points higher than the New Zealand wide rate of 4.3%.³¹</p> <p>The region has suffered a number of organisational dis-establishments, closures and size reductions over the last 10 years.</p> <ul style="list-style-type: none"> ▪ In 2008, Fisher and Paykel’s Dunedin based plant announced job losses of an estimated 430 skilled workers. ▪ In 2012, 90 jobs were lost at Dunedin’s Hillside Workshops. ▪ In 2017, Mondelez International announced the closure of its’ Cadbury plant, with the loss of more than 350 jobs. ▪ In 2018, tourist attraction, Cadbury World made 39 staff redundant – a knock-on effect of the Cadbury plant being closed. ▪ In 2018, Dunedin’s engineering specialist Milmeq announced its’ closure with the loss of 40 jobs. <p>Currently Hillside’s end-of life-facilities and equipment are restricting the degree to which it can add value to the rail maintenance network and grow its operation. Years of underinvestment have impacted the scale to which Hillside operates.</p> <p>The ^{Commercial Information} Hillside site, with broken equipment is not an ideal training facility for enthusiastic apprentices or engineering students looking for work experience. Valuable experienced skillsets are being lost putting skill transfer opportunities at risk.</p>
<p>Business needs</p>	<p>Over the last decade, Dunedin has experienced an estimated 910 engineering and manufacturing industry job losses. This equates to an estimated value of \$42 million of lost incomes generated per year, which could have been spent in the local economy. Dunedin’s March 2018 unemployment rate sat at 7.1% - nearly 3% higher than the New Zealand-wide rate of 4.3%.</p> <p>Unlocking employment opportunities is a key priority for Dunedin City Council (DCC). One of DCC’s specific strategic plans for the city is to unlock “10,000 extra jobs over 10 years - requiring employment growth of approximately 2 percent per annum”. It also has a key priority to strengthen high value niches of the economy, specifically “niche manufacturing and engineering”.</p> <p>The Ministry of Education’s ‘Tertiary Education Strategy’, has a first priority of</p>

³¹ Statistics New Zealand, unemployment rate Dunedin, March 2019

<p>Investment Objective 2</p>	<p>Support strategic employment growth and upskilling in the Otago region</p>
	<p>“Delivering Skills for Industry³²”. Challenges include:</p> <ol style="list-style-type: none"> 1. Skills shortages in the heavy industrial sector 2. Developing and retaining skills in the region 3. Minimal engineering industry apprenticeship and work experience opportunities in Dunedin 4. Student reluctance to upskill in industry when job opportunities are lacking <p>Upskilling and market opportunities are intrinsically linked. Investment in the Hillside Workshops would provide the opportunity to leverage employment in Dunedin, providing the landscape for apprenticeships and encouraging upskilling in this area.</p> <p>Investment in this Business Case would support reigniting Dunedin’s key role as a key heavy-lift, network, and mechanical servicing hub in the lower South Island. The Case specifically supports the Government priority³³, of unlocking “apprenticeships and trade training opportunities” through revitalisation of the Workshop, as well as supporting DCC’s economic development plan for the city, which seeks “Growth in full time equivalent jobs” to support a “productive economy”.</p> <p>Employment would be unlocked through:</p> <ul style="list-style-type: none"> ▪ The initial Hillside construction phase; ▪ Operationally (through renewed equipment and facilities to perform work and increase productivity); ▪ Through optimisation of currently underutilised land Commercial Information <p>Within Commercial Information: The site workforce will increase from Commercial Information FTE employees. This is a mixture of skilled labour similar to the current of Welding, Fabrication, Fitting, Machine operators, Electrical testing and diagnostics, shunting and vehicle refinishes. It will also include apprentices.</p> <p>Within Commercial Inform: With both buildings, online and working to capacity there will be an additional increase of a further Commercial Inf-staff increasing the workforce to approximately Com erta. This will be a mixture of engineering, welding, fabrication, fitting, machine operators, electrical testing and diagnostics, shunting and vehicle refinishes as well as more apprentices.</p> <p>Within Commercial Informatio: The workforce will continue to be maintained in the Commercial level with the steady stream as well as supporting business established.</p> <p>Indirect employment opportunities would be unlocked through skill transfers and aligned sector projects including: The Dunedin Hospital upgrade project Dunedin City Waterfront project</p>

³² Tertiary Education Strategy, 2014 -2019, Ministry of Education, New Zealand Government

³³ 2019 Budget, The Wellbeing Budget

<p>Investment Objective 2</p>	<p>Support strategic employment growth and upskilling in the Otago region</p>
	<p>Upskilling would be unlocked through an upgraded, safe site:</p> <ol style="list-style-type: none"> 1. Complementing apprenticeships and work experience programmes 2. Students may be more inclined to train in the engineering and construction sector if this industry is invested in and opportunities are opened 3. Attracting experienced workers and retaining current workers would provide invaluable skill transfer opportunities to new recruits <p>An increase in Hillside’s structural capability would create job opportunities, build and retain the skills and knowledge of existing residents, as well as attract new talent to the industry. Jobs would also be created as part of the supply-chain ripple effect through the supply-chain and aligned construction projects in Dunedin.</p> <p>Rail sector-aligned businesses operating out of and adjacent to the <small>Commercial Information</small> would create new employment opportunities, promoting Dunedin as a genuine long-term employment option.</p> <p>Indirect benefits include reducing youth unemployment, creating opportunities for Māori in the region and support alignment with the Dunedin City Council’s economic goal of employment growth of 2% per annum with an average income gain of 2.5% per annum.</p>
<p>Alignment with Provincial Growth Fund priorities</p>	<p>Investment in Hillside would specifically support PGF key priorities:</p> <ul style="list-style-type: none"> • enhancing economic development opportunities • creating sustainable jobs. <p>The Business Case considers a long-term, strategic approach to secure Dunedin’s place as the Lower South Island’s primary heavy-lift and mechanical hub. The increase in site capability will create sustainable job opportunities for the community, build and retain the skills and knowledge of existing residents, as well as attracting the talent required. The intention to create an engineering and manufacturing hub for Dunedin will foster innovative new industries and promote Dunedin as genuine long-term employment option for the region.</p> <p>Wider strategic benefits</p> <ol style="list-style-type: none"> 1. Upgraded, safe site complements apprenticeships and work experience programmes 2. Students more inclined to train in sector if industry is invested in – supporting interest in local universities, polytechnics and Industry Training Organisations (ITOs) 3. An upgraded site may attract experienced workers 4. Investment would unlock construction and engineering opportunities both at Hillside and indirectly <small>Commercial Information</small> 5. Other development projects in the region could benefit from construction workers making the most of a medium – long term pipeline of work. Eg. Dunedin Hospital rebuild

Table 3: Investment Objective 3

Investment Objective 3	Ensure resilience of the South Island’s rail network.
<p>Existing Arrangements</p>	<p>Hillside is significantly impaired with poor quality, aging buildings Commercial Information . Equipment is failing or at end-of-life.</p> <p>Hillside is currently KiwiRail’s <i>only</i> operational heavy maintenance facility in the South Island - the “Linwood Loco” depot in Christchurch has not yet been replaced following major earthquake damage. Commercial Information</p>
<p>Business needs</p>	<p>The Christchurch earthquakes have reinforced the importance of resilience regarding rail maintenance facilities – the Hillside Workshops are now the only operational heavy maintenance facility in the South Island. Commercial Information</p> <p>. Meanwhile, freight growth is projected to increase 58% by 2042.</p> <p>Rail has the potential to transport greater volumes of heavy freight and tourists, play a larger and complementary role to road freight and provide much needed resilience to New Zealand’s transport network³⁴. It is also far more environmentally friendly when compared to alternative road options. For KiwiRail to keep up with the demands of a growing freight economy, and to provide resilience to the locomotive assets, investment is required in the facilities that support this.</p> <p>On average, rolling stock - locomotives, shunt locomotives, wagons and carriages - have a lifespan around 35-40 years although this may vary depending on factors³⁵ including the level of use, asset condition, cost of maintenance and operation, technical obsolescence³⁶ and customer expectations. Replacing an old c2800 wagon with an entirely new one could cost as much as \$ Commercial Informa – a substantial price to pay, when comparing the value of upgrading facilities to maintain and service a number of these assets to ensure their longevity. KiwiRail must invest in the facilities to maintain these valuable assets through a combination of midlife restoration and frequent maintenance interventions. It makes commercial sense and aligns with New Zealand wide sustainability goals.</p>

³⁴ <https://www.stuff.co.nz/national/107960545/State-Highways-1-and-2-closed-after-separate-truck-crashes-limiting-access-to-Wellington>

³⁵ <https://www2.deloitte.com/content/dam/Deloitte/au/Documents/Economics/deloitte-au-economics-passenger-rolling-stock-procurement-efficiency-opportunities-270913.pdf>

³⁶Out of date technology and obsolescence has become a major issue for KiwiRail with difficulty sourcing some parts from the original equipment manufacturers

<p>Investment Objective 3</p>	<p>Ensure resilience of the South Island’s rail network.</p>
	<p>The flow-on effect Commercial Information though the investment in Hillside site will contribute to rail resilience by consolidating assets at a site with greater capacity to serve a growing freight market.</p> <p>Based on a combination of the volume of scheduled maintenance works required and New Zealand’s strong drive increase transport modes to a more sustainable source (rail over road), it is anticipated that servicing demands will continue to grow. Ideally, the South Island requires a rail servicing facility in Christchurch in addition to Hillside to meet demands. Upgrading Hillside is a minimal and essential requirement to ensure rail resilience. From a seismic perspective the investment is solid – Dunedin’s seismic rating is 0.13 (anything below 0.15 is considered to have a low chance of earthquake activity).</p>
<p>Alignment with Provincial Growth Fund priorities</p>	<p>This investment objective directly supports the PGF priority: Build resilient communities.</p> <p>The Business case considers a long-term, strategic approach to secure Dunedin’s place as the Lower South Island’s primary heavy-lift and mechanical Hub while ensuring KiwiRail has the facilities available to provide resilience to its valuable rail assets.</p> <p>Re-invigorating Hillside will unlock future employment opportunities for locals, free-up central CBD land to better accommodate public uses, while simultaneously providing dependable heavy-lift, mechanical and network service facilities on a site that has capacity to meet future freight growth.</p>

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Table 4: Investment Objective 4

Investment Objective 4	Support Māori prosperity
<p>Existing Arrangements</p>	<p>Dunedin is a high impact area with regard to supporting Māori prosperity. 8,865 Māori usually live in Dunedin City - an increase of 20.4%, since the 2006 Census³⁷. The “Labour Force Participation” rate for Māori in the Otago Region is 68.6%³⁸ - compared with 69.7% for the whole of New Zealand.</p> <p>The South Island is home to principal iwi, Ngāi Tahu, whose tribal area is the largest in New Zealand.</p> <p>Commercial Information</p>
<p>Business needs</p>	<p>KiwiRail supports initiatives to ensure the prosperity of Māori.</p> <p>Commercial information</p> <p>Investing in Hillside will reinvigorate Dunedin’s place as a heavy-lift, mechanical hub in the Lower South Island, providing training and employment opportunities in this sector for locals. Dunedin is a high impact Māori zone, opening up opportunity for New Zealand’s indigenous demographic in this area.</p> <p>Investment in Hillside provides the opportunity for KiwiRail to consolidate its property assets, Commercial Information</p> <p>The Hillside Business Case contributes to the future economic success of Māori in the region by way of enabling employment opportunities and working together with local Maori as part of a synergistic, mahi tahi approach.</p>
<p>Alignment with Provincial Growth Fund priorities</p>	<p>The PGF has a specific priority focused on enabling Māori to reach their full potential.</p> <p>By targeting a high impact Māori area, providing the means to unlock future employment opportunities, Commercial Information, the PGF will be directly supporting a target Provincial Growth Fund priority area.</p>

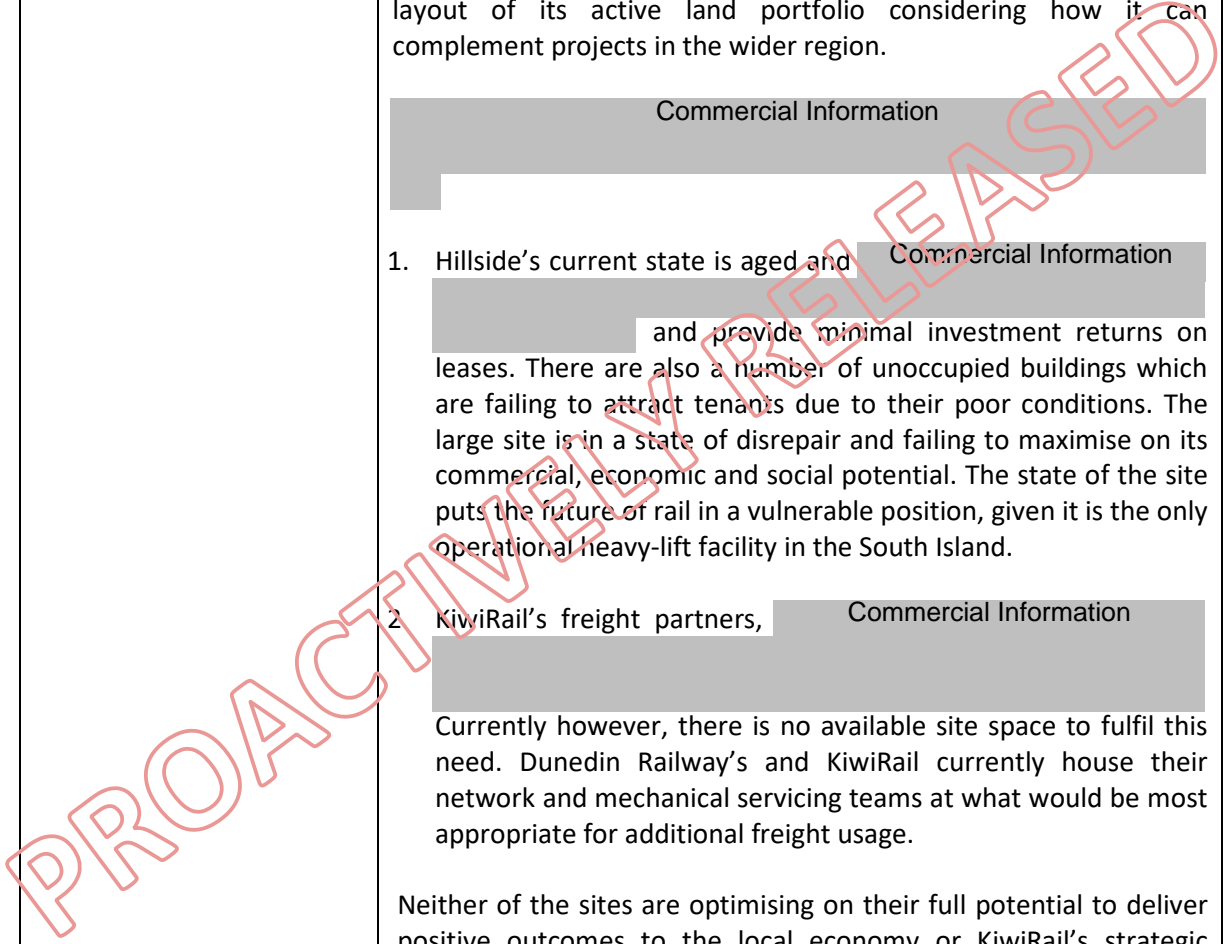
³⁷ Statistics New Zealand, Census 2013

³⁸ Statistics New Zealand, year ended March 2019, % of the working age population, Māori by Region

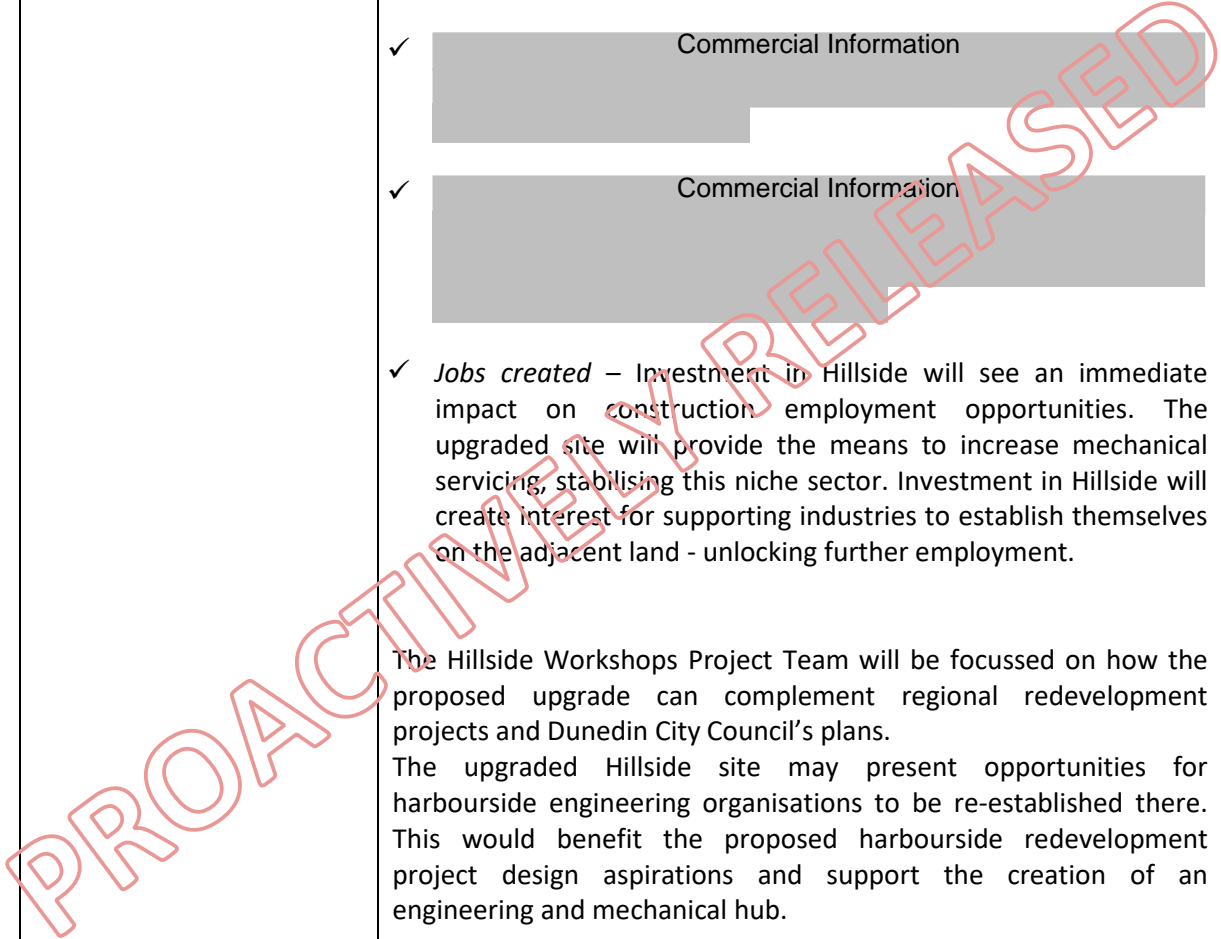
Investment Objective 4	Support Māori prosperity

Table 5: Investment Objective 5

Investment Objective 5	Enable a sustainable land-use strategy complementing regional plans.
Existing Arrangements	<p>KiwiRail’s Strategic Land Use team is focussed on leading a group-wide development programme to improve the quality, location and layout of its active land portfolio considering how it can complement projects in the wider region.</p> <p style="text-align: center;">Commercial Information</p> <p>1. Hillside’s current state is aged and Commercial Information and provide minimal investment returns on leases. There are also a number of unoccupied buildings which are failing to attract tenants due to their poor conditions. The large site is in a state of disrepair and failing to maximise on its commercial, economic and social potential. The state of the site puts the future of rail in a vulnerable position, given it is the only operational heavy-lift facility in the South Island.</p> <p>2. KiwiRail’s freight partners, Commercial Information</p> <p>Currently however, there is no available site space to fulfil this need. Dunedin Railway’s and KiwiRail currently house their network and mechanical servicing teams at what would be most appropriate for additional freight usage.</p> <p>Neither of the sites are optimising on their full potential to deliver positive outcomes to the local economy or KiwiRail’s strategic objectives.</p> <p>Dunedin City Council’s long-term strategy is to create hubs of industry, including niche engineering and manufacturing, that will lead to high-value job creation.</p> <p>Major projects due to begin in Dunedin include:</p> <ul style="list-style-type: none"> ▪ Proposed harbourside redevelopment; ▪ Dunedin Hospital upgrade (estimated at \$ Commercial Information); ▪ Ongoing property development at the University of Otago; ▪ A potential new community hub in South Dunedin.
Business needs	<p>Rehabilitation of Hillside provides the opportunity for KiwiRail to strategically consolidate its services and land asset portfolio in Dunedin to improve efficiencies and commercial outcomes, as well as supporting economic success for the region. Specifically, it would</p>



<p>Investment Objective 5</p>	<p>Enable a sustainable land-use strategy complementing regional plans.</p>
	<p>achieve:</p> <ul style="list-style-type: none"> ✓ <i>Improved resilience for rail</i> - through investment in the servicing facilities and equipment required to perform essential maintenance. ✓ <i>Improved ground rent</i> – upgrading the Hillside premise will increase lease values and site attractiveness enabling KiwiRail to maximise value on its land portfolio. ✓ [Redacted Commercial Information] ✓ [Redacted Commercial Information] ✓ <i>Jobs created</i> – Investment in Hillside will see an immediate impact on construction employment opportunities. The upgraded site will provide the means to increase mechanical servicing, stabilising this niche sector. Investment in Hillside will create interest for supporting industries to establish themselves on the adjacent land - unlocking further employment. <p>The Hillside Workshops Project Team will be focussed on how the proposed upgrade can complement regional redevelopment projects and Dunedin City Council’s plans. The upgraded Hillside site may present opportunities for harbourside engineering organisations to be re-established there. This would benefit the proposed harbourside redevelopment project design aspirations and support the creation of an engineering and mechanical hub.</p> <p>There would likely be a crossover of skills sets within the industry to support the complementary projects. This would encourage knowledge transfer, improved pipelines of work for locals and improved opportunities for apprenticeships and work experience.</p> <p>Investment in Hillside opens the opportunity for KiwiRail to strategically consolidate its assets and associated services to achieve improved commercial, economic and social outcomes. These outcomes not only contribute to KiwiRail’s sustainable success, but also support local iwi and the regional economy.</p>
<p>Alignment with Provincial Growth Fund priorities</p>	<p>KiwiRail’s long-term, land-use management strategy considers a holistic, economic approach for the region. This approach directly supports a number of PGF priorities:</p>



Investment Objective 5	Enable a sustainable land-use strategy complementing regional plans.
	<ul style="list-style-type: none">▪ ‘Enhance economic development opportunities’ – strategic, upgrading and consolidation of the two underutilised sites, will unlock unrealised opportunities to support positive socio-economic outcomes, including jobs for industry workers.▪ ‘Create sustainable jobs’-upgrading Hillside will provide immediate job opportunities in the construction phase and long-term employment as the each of the sites full potential is optimised.▪ ‘Enable Māori to reach their full potential’ – Commercial Information and opens employment in a high Māori impact zone³⁹▪ ‘Building resilient communities’ – strategic optimisation of KiwiRail’s land portfolio, lays the foundations to support resilience. It unlocks stable employment in a niche mechanical sector and encourages local talent to remain in the region.

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³⁹ 8,865 Māori usually live in Dunedin City, an increase of 20.4% since the 2006 Census – Statistics NZ

2.3 Main Benefits

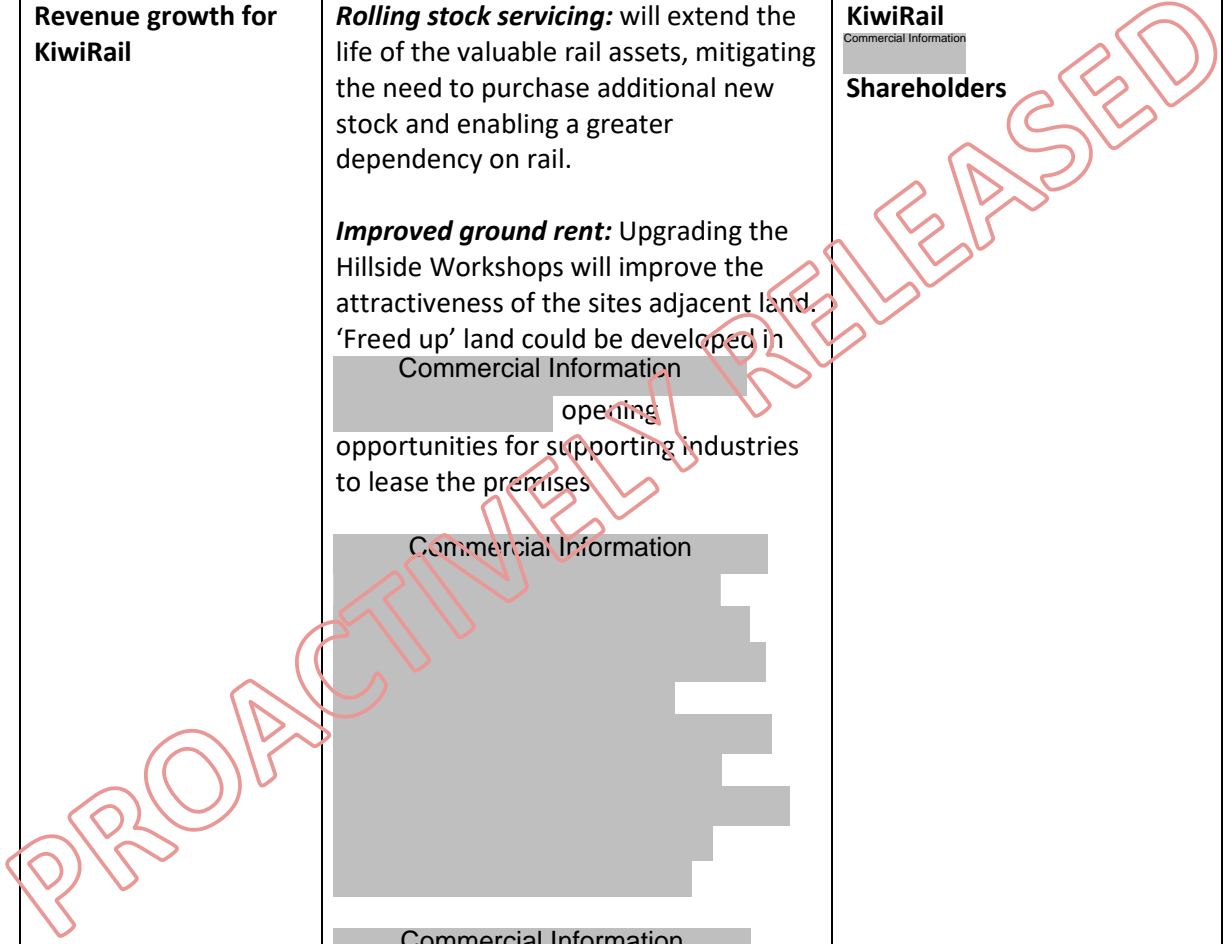
A breakdown of the potential benefits of the investment proposal are provided in the tables below.

Table 13: Potential benefits that can be expressed in monetary terms

Main Benefits	Description	Who Benefits?
<p>New Zealand economy through - Dependable heavy engineering servicing for rail</p>	<p>Rail network servicing in New Zealand is now more important than ever before.</p> <p>The Ministry of Transport’s National Freight Demand Study, 2014, has forecasted the New Zealand’s freight task to increase by 58% by 2042. In FY18, more than 197,000 passengers experienced KiwiRail’s Scenic rail journeys. Without rail, nearly 4,000 tourist coaches⁴⁰ would have been required to transport those passengers from region to region.</p> <p>According to MBIE, New Zealand’s visitor numbers are set to increase 37% by 2024 which creates strong tourism potential for the scenic train industry. With the help of funding through the PGF, KiwiRail’s Coastal Pacific line will be adding one more carriage while the popular TranzAlpine line will add another two. These premium tourism experiences require high levels of heavy engineering support and maintenance.</p> <p>Crucially, Hillside is now KiwiRail’s <i>only</i> operational heavy maintenance facility in the South Island - the “Linwood Loco” depot in Christchurch has not yet been replaced following major earthquake damage. Neglecting the Hillside Workshops to the point of decommission leaves KiwiRail and the South Island in a position of poor rail resilience moving forward.</p> <p>Investment will extend the life of New Zealand’s rolling stock, and supports a dependable, resilient rail industry in New Zealand.</p>	<p>KiwiRail Freight Partners New Zealand Customers Global import/ export markets Tourism sector Local community - jobs</p> <p>KiwiRail estimates that scenic rail passengers spend an average of \$^{Commercial} per person, per day in the regions. Every additional passenger on ‘Scenic’s’ rail services is critical and valuable to the economic growth of the regions that KiwiRail service.</p> <p>Investment in heavy-lift and mechanical servicing will reduce the risk of rolling stock failure during operations and will improve the life span of current assets.</p> <p>Without rail, the alternative for all tourism and freight services is to be delivered by road.</p>
<p>Regional Economic Development</p>	<p>The upgrade and optimisation of the Hillside Workshops will support employment opportunities and unlock</p>	<p>Local economy <small>Commercial Information</small></p>

⁴⁰ 197,000/50 = 3,940. Average number of seats on a tourist coach = 50. Note the Coastal Pacific was not operating during FY18.

Main Benefits	Description	Who Benefits?
	<p>strategic land-use to optimise on its commercial potential.</p> <p>The project will support construction activity and reinvigorate long-term mechanical servicing employment, securing Dunedin’s role as a dependable mechanical hub in the South Island.</p>	<p>Freight Partners Otago New Zealand Customers Tourism Sector Global import/export markets</p>
<p>Revenue growth for KiwiRail</p>	<p>Rolling stock servicing: will extend the life of the valuable rail assets, mitigating the need to purchase additional new stock and enabling a greater dependency on rail.</p> <p>Improved ground rent: Upgrading the Hillside Workshops will improve the attractiveness of the sites adjacent land. ‘Freed up’ land could be developed in Commercial Information opening opportunities for supporting industries to lease the premises</p> <p>Commercial Information</p> <p>Commercial Information</p>	<p>KiwiRail <small>Commercial Information</small> Shareholders</p>
<p>The value of rail</p>	<p>Direct - KiwiRail</p> <p>In 2016, Ernst Young (EY) prepared a report for the New Zealand Transport Agency on the Value of Rail. The report</p>	<p><small>Commercial Information</small> Local Māori Freight Partners Dunedin City residents Lower South Island</p>




Main Benefits	Description	Who Benefits?
	<p>considered the potential economic cost to New Zealand from no rail network.</p> <p>The Value of Rail report highlighted how rail delivers \$^{Commercial} in often unseen benefits each year including reducing congestion, reducing cost and frequency of road maintenance, improving road safety and reducing emissions.</p> <p>By 2030 it is expected that the value of rail will increase to ^{Commercial Information}.</p>	<p>New Zealand Customers</p>  <p>EY's 'Value of Rail' report confirms that the "net benefits of rail can be measured by net congestion benefit or time delay, net safety benefit, net maintenance benefit, net emissions benefit".</p>
Health and Safety	<p>Zero Harm is KiwiRail's number one priority.</p> <p>Underinvestment in the current heavy-lift servicing facilities present health and safety risks for KiwiRail.</p> <p>These risks have been mitigated So Far As Is Reasonably Practical (SFAIRP) however investment in upgrading heavy-lift and mechanical servicing facilities will enable KiwiRail to reset the standard significantly higher.</p>	<p>The public KiwiRail KiwiRail Employees Tenants</p> <p>Transporting freight using heavy vehicles is more dangerous than rail. The safety benefits of moving both freight and passengers by rail instead of roads is estimated to be approximately \$68.78m to \$60.21m.</p>

Table 14: Potential benefits that cannot be reliably expressed in monetary terms

Main Benefits	Who Benefits? Direct or Indirect?	Quantitative or Qualitative?
Jobs and economic development	<p>Direct - Local community and New Zealand economy</p> <p>The Hillside Workshops upgrade project would have an immediate impact on jobs and economic development through associated construction activities. It would provide the foundations to secure long-term employment for heavy-lift and mechanical servicing, due to improved facilities and upgraded equipment.</p>	<p>Quantitative</p> <p>Employment opportunities as a direct result of the Hillside upgrade can be measured. This includes employment connected to procurement and construction related activities.</p> <p>The Hillside project would also ^{Commercial Information} should jobs be provided to those who were</p>

Main Benefits	Who Benefits? Direct or Indirect?	Quantitative or Qualitative?
	Further job opportunities would be unlocked through attracting supporting industries to the site.	previously on the job seeker benefit, additional quantitative benefits can be gained and calculated.
Environmental sustainability outcomes	<p>Direct – Hillside Network and Mechanical/Heavy lift Servicing employees</p> <p>Indirect – Dunedin community</p> <p>Commercial Information</p> <p>Commercial Information</p>	<p>Quantitative</p> <p>Improved environmental sustainability outcomes associated from Commercial Information</p> <p>Commercial Information</p>
Carbon emissions benefits	<p>Direct – New Zealand</p> <p>The total emission cost figure represents avoided costs from transporting freight and passengers by rail over road.</p>	<p>Quantitative</p> <p>Every tonne of freight carried by rail has 66% fewer carbon emissions than heavy road freight⁴².</p>
<p>Figure 12: Steel Wheels is the monthly sustainability report for KiwiRail's Freight business⁴³</p> <p>STEEL WHEELS FY2019 (AS AT 31 AUGUST 2018)</p> <p>Your partner in sustainable freight</p> <p>The infographic displays the following data:</p> <ul style="list-style-type: none"> 647.5m Net Tonne Kilometres (NTK's) = 178,139 Reduced heavy vehicle road impact + 14.8m Fuel savings (L) + 19,673 CO₂ emission savings (T) 		
Māori development	Direct - Māori in the Region	Quantitative

⁴¹ Commercial Information

⁴² KiwiRail's Annual Integrated Report 2017

⁴³ http://www.kiwirailfreight.co.nz/media/21144/steel_wheels_report.pdf

Main Benefits	Who Benefits? Direct or Indirect?	Quantitative or Qualitative?
	<p>KiwiRail acknowledges and respects ^{Commercial Information} [REDACTED]</p> <p>In collaboration with Dunedin City Council, and other key stakeholders, KiwiRail is committed to prioritising engagement and working together on solutions ^{Commercial Information} [REDACTED] throughout this project.</p> <p>^{Commercial Information} [REDACTED]</p>	<p>KiwiRail intends to create an environment that embraces and enhances the ^{Commercial Info} [REDACTED] from pre-development through to the full implementation of the Dunedin site.</p> <p>Commercial Information [REDACTED]:</p> <ul style="list-style-type: none"> • Early and proactive engagement during site master-planning and concept design • Standard protocols that take full consideration of Commercial Information [REDACTED] • Commercial Information [REDACTED]
Resilience	<p>Direct - KiwiRail, freight partners and customers</p> <p>Investment to maintain and provide servicing for KiwiRail's rolling stock is critical to ensure sustainable transport resilience for future generations, predicted freight growth and the rail tourism industry.</p>	<p>Quantitative</p> <p>With improved technology and efficiencies KiwiRail will be able to report on increased maintenance throughput and assess the facilities in a more consolidated way.</p>
Efficiencies gained through strategic land-use	<p>Direct – KiwiRail, freight partners, Ngai Tahu, supporting industry and local community</p> <p>Rehabilitation of Hillside provides the opportunity for KiwiRail to strategically consolidate its services and land asset portfolio in Dunedin. This will unlock a number of connected benefits including, maximisation of land use to better deliver rolling stock servicing, ^{Commercial Information} [REDACTED]</p>	<p>Qualitative</p> <p>Land that was once not being optimised will provide either improved employment or lease revenue for KiwiRail. Although these elements can be measured, they are an outcome of improved land use.</p>

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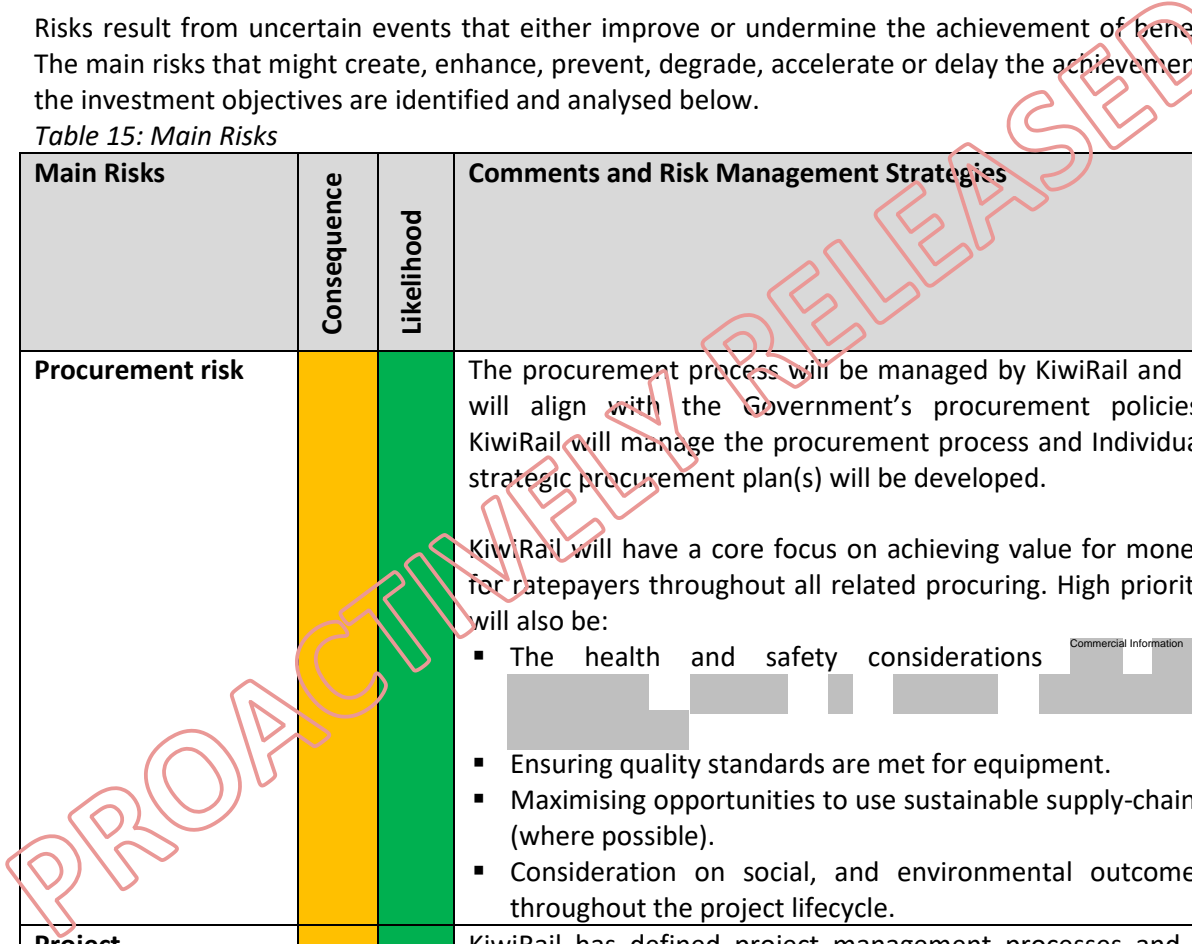
Main Benefits	Who Benefits? Direct or Indirect?	Quantitative or Qualitative?
	Commercial Information	

2.4 Main Risks

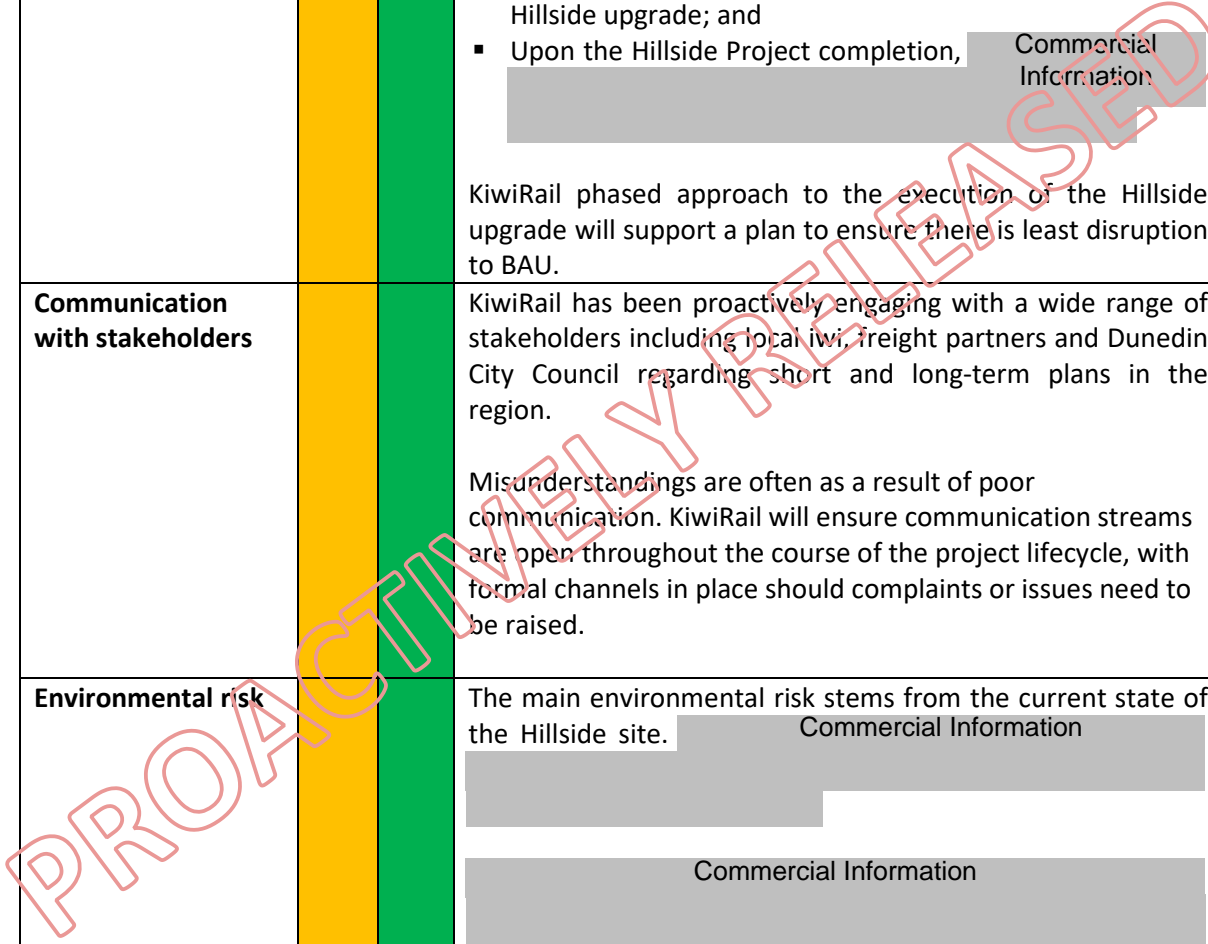
Risks result from uncertain events that either improve or undermine the achievement of benefits. The main risks that might create, enhance, prevent, degrade, accelerate or delay the achievement of the investment objectives are identified and analysed below.

Table 15: Main Risks

Main Risks	Consequence	Likelihood	Comments and Risk Management Strategies
Procurement risk			<p>The procurement process will be managed by KiwiRail and it will align with the Government’s procurement policies. KiwiRail will manage the procurement process and Individual strategic procurement plan(s) will be developed.</p> <p>KiwiRail will have a core focus on achieving value for money for ratepayers throughout all related procuring. High priority will also be:</p> <ul style="list-style-type: none"> ▪ The health and safety considerations ▪ Ensuring quality standards are met for equipment. ▪ Maximising opportunities to use sustainable supply-chains (where possible). ▪ Consideration on social, and environmental outcomes throughout the project lifecycle.
Project management risk			<p>KiwiRail has defined project management processes and a project management office. Project performance is tracked, including:</p> <ul style="list-style-type: none"> • Budget • Programme • Quality • Stakeholders • Risks • Health & Safety and Environmental • Governance – Executive and Board
Execution Risk			<p>Part of the execution risk is the potential impact on Business as Usual (BAU).</p> <p>KiwiRail’s Project Control Group will need to actively pursue a change management philosophy to ensure component parts</p>



Main Risks	Consequence	Likelihood	Comments and Risk Management Strategies
			<p>of the business are not impacted negatively.</p> <p>There are predominantly two phases that will need to be carefully managed:</p> <ul style="list-style-type: none"> ▪ Maintaining BAU heavy-lift servicing throughout the Hillside upgrade; and ▪ Upon the Hillside Project completion, Commercial Information <p>[Redacted]</p> <p>KiwiRail phased approach to the execution of the Hillside upgrade will support a plan to ensure there is least disruption to BAU.</p>
Communication with stakeholders			<p>KiwiRail has been proactively engaging with a wide range of stakeholders including local iwi, freight partners and Dunedin City Council regarding short and long-term plans in the region.</p> <p>Misunderstandings are often as a result of poor communication. KiwiRail will ensure communication streams are open throughout the course of the project lifecycle, with formal channels in place should complaints or issues need to be raised.</p>
Environmental risk			<p>The main environmental risk stems from the current state of the Hillside site. Commercial Information</p> <p>[Redacted]</p> <p>Commercial Information</p> <p>[Redacted]</p>
Governance			<p>KiwiRail has defined project governance processes.</p> <p>A Project Control Group will be responsible for the upwards flow of information to the KiwiRail Chief Executive and Board.</p>



A risk register has been developed and will be progressively updated as more detailed analysis is undertaken. The current risk register is available in the Appendix.

2.4.1 Optimism Bias

KiwiRail recognise that optimism bias can be a factor with which investment decisions are made. Section 3.2.2 considers the impacts of investing in the Hillside Business Case, versus not investing at all - 'doing nothing'. As the South Island's ability to provide heavy-lift mechanical servicing is currently left in a vulnerable position following the Christchurch earthquakes, the risks associated with 'doing nothing' appear to be apparently greater (when considering the impact on South Island rail resilience) compared to remediating the Hillside facility.

There may be the potential for optimism bias with regard to the value of leases on the Hillside and Commercial Information post the upgrade. This is mainly as the revenue gained from ground rent will largely be driven by interested parties in the market at time of leasing which cannot be accurately predicted. However, KiwiRail feel confident Commercial Information

– to secure additional site capacity for freight, the value of leased premises should be optimal/improved. Local leasing agents have also provided guidance on market interest and KiwiRail will regularly check-in on interest levels throughout the project lifecycle.

Some reports indicate that investor demand is high in the industrial market and that there is a lack of vacant space and available development land near the CBD in Dunedin⁴⁴. Reports have also indicated that tenants are prepared to pay more for quality space.

A list of the financial assumptions used to reduce the effects of optimism bias can be found in section 3.1.

2.5 Key Constraints and Dependencies

The proposal is subject to the following constraints and dependencies. These will be carefully monitored during the project.

Table 16: Key constraints

Constraints	Notes
Finance availability and dependence on Government (Shareholder)	<div style="text-align: right; background-color: #cccccc; padding: 2px;">Commercial Information</div> <p>To ensure the successful growth and prolonged use of rail, there must be a corresponding investment in maintenance infrastructure. The present neglected state of Hillside, the South Island's only operational heavy-engineering hub, is a key vulnerability for KiwiRail in providing a reliable, resilient rail network.</p> <p>Investing in this facility, as outlined in this Business Case, provides for a long-term, strategic approach to rebuild a heavy-engineering and mechanical hub in Dunedin.</p> <p>KiwiRail is reliant on PGF funding to upgrade the Hillside Workshops.</p>
Hillside is currently KiwiRail's only operational heavy-lift maintenance facility in the South Island.	<p>After the Christchurch earthquakes, the Linwood Loco depot was left damaged and still has not been repaired. This has left Hillside as KiwiRail's only operational heavy-lift maintenance facility in the South Island. However, the Workshop's heavy lift cranes are nearing the end of their use by date and the traverser requires significant overhaul after a recent breakdown.</p>

⁴⁴ Queenstown, Wanaka and Dunedin - Market Review and Outlook 2017, Colliers International

Constraints	Notes
	<p>KiwiRail faces major operational constraints due to lacking the equipment it requires to deliver rolling stock repair, upgrades and servicing.</p> <p>The proposed investment will allow these key pieces of machinery to be upgraded so that the workshops are able to service the current rolling stock fleet without operational constraint. The upgrades to the Hillside site will be done with cooperation from other KiwiRail maintenance facilities, such that the temporary impact on network and maintenance services is minimal.</p>

Table 16: Key dependencies

Dependencies	Notes
<p>Finance availability and dependence on Government (Shareholder)</p>	<p>KiwiRail seeks funding from the Provincial Growth Fund to enable the rehabilitation of the Hillside Workshops site.</p> <p>A number of stakeholders have an interest in the proposed project [REDACTED] Commercial Information [REDACTED]</p> <p>KiwiRail requires certainty on funding before embarking on the project process and to retain crucial niche talent at both sites.</p>

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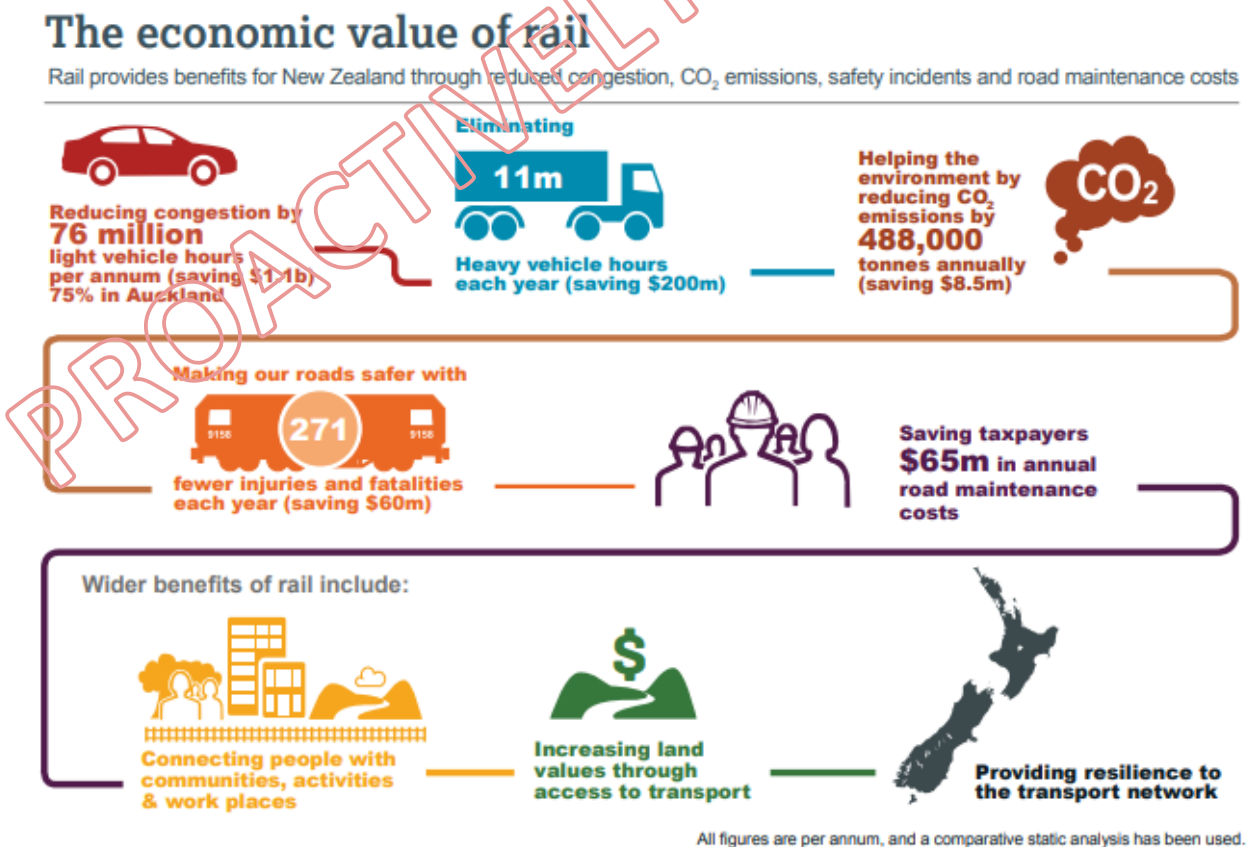
3 Economic Case

This Business Case recommends capital investment of \$19.97 million for the rehabilitation and upgrade of the “Hillside Workshops” (**Hillside**) in Dunedin. Investing in Hillside would provide the best overall value for money solution and complements a number of interlinked socio-economic benefits to Dunedin City, the local community, the Otago Region, as well as contributing to Provincial Growth Fund priorities and key Government goals.

KiwiRail’s heavy-lift maintenance team at Hillside is currently working within poor conditions and unoptimized workflow layouts. Given Hillside is currently KiwiRail’s only⁴⁵ operational heavy-lift maintenance and servicing facility in the South Island, it is critical that investment is made to ensure rails resilience – this in turn, will support realising numerous direct and indirect economic benefits.

Investment in Dunedin’s Hillside Workshops will support the success of a number of key social, environmental, cultural and economic outcomes for the region.

Figure 7: The economic value of rail – overview of Economic benefits to be realised



⁴⁵ The “Linwood Loco” depot, Christchurch, has not yet been replaced following earthquake damage

HILLSIDE – SUPPORTING POSITIVE ECONOMIC BENEFITS FOR THE LOWER SOUTH ISLAND

1. *Improved rail resilience*

KiwiRail's freight services and connected rail-based tourism journeys are a crucial part of New Zealand's transport asset portfolio. Investment to maintain critical rail assets is required to support sustainable transport resilience.

In the Ministry of Transport's National Freight Demand Study 2014, the New Zealand freight task at the time was 236 million tonnes and was expected to grow 373 million tonnes by 2042 (an increase of more than 60%). This large increase takes the total freight task to the equivalent of about 67 tonnes each year for each person in New Zealand. Strong tonnage growth is predicted in the regions, showing that there is a very strong case for maintaining transport infrastructure to ensure rail resilience.

In FY18, KiwiRail transported 18 million net tonnes of freight⁴⁶. Without rail, the equivalent freight task would have required 1.1 million trucks⁴⁷. During the same period, more than 197,000 passengers experienced KiwiRail's Scenic rail journeys. Without rail, nearly 4,000 tourist coaches⁴⁸ would have been required to transport those passengers from region to region.

The Hillside Workshop will play a key role in heavy-engineering, network, and mechanical rail asset maintenance and refurbishment, ensuring that KiwiRail's rolling stock can be relied on to service future generations, predicted freight growth and the rail tourism industry.

Through investment in the Hillside site upgrade, additional capacity will be realised, through improved land-use, supporting increased capacity for rolling-stock upgrades and additional freight storage.

Studies show that increased, dependable connectivity services have a direct impact on increasing productivity⁴⁹. Investment in the Hillside Workshops Business Case will be supporting the resilience of the South Islands rail assets, and in turn New Zealand's sustainable transport economy.

EY's 2016 Report 'The Value of Rail in New Zealand' prepared for the New Zealand Transport Agency, confirms that the "net benefits of rail can be measured by net congestion benefit of time delay, net safety benefit, net maintenance benefit, net emissions benefit".

**EY's 2016 Report – estimates the annual value of rail to delivers approximately \$1.5b per year
By 2030 it is expected that the value of rail will increase to \$2.5 billion.**

2. *Supporting New Zealand's zero-carbon goals*

Freight remains the biggest income earner for KiwiRail and contributes 58%⁵⁰ of total operating revenue. A fully-laden freight train can accommodate forty 40-foot containers – by comparison, a truck is limited to one 40-foot container. These numbers are an important consideration as New Zealand aspires to meet zero-carbon goals.

⁴⁶ The net tonnes of customer product are sourced from the customers' consignment notes. When product is moved in a container, then the container tare must be included as part of Net Tonnes.

⁴⁷ Truck Trips (Container) are containerised freight moved to or from a NZ port and it is assumed that this freight would move on container trucks on road. Truck Trips (Weight) are truckload freight tonnages via the road [e.g. - logging truck, truck & trailer, B-train or bulk bin truck] as opposed to container load [moved on container trucks].

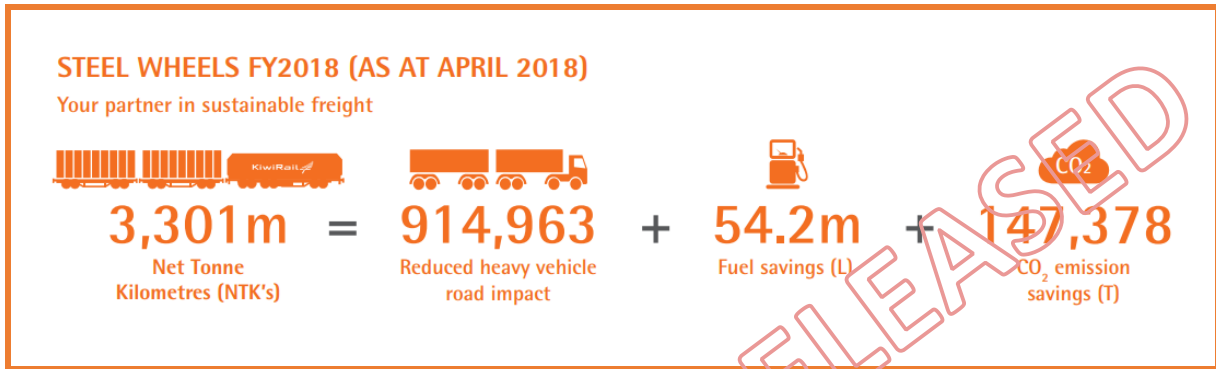
⁴⁸ 197,000/50 = 3,940. Average number of seats on a tourist coach = 50. Note the Coastal Pacific was not operating during FY18.

⁴⁹ The economic impacts of connectivity, February 2017, NZ Transport Agency research report 608

⁵⁰ KiwiRail's Annual Integrated Report 2017, page 18

The rail mode is approximately twice⁵¹ as efficient as the road mode in terms of fuel consumption and CO₂ emissions. Investment in the Hillside Workshop will support the resilience of well-maintained rail carriage assets, simultaneously providing the Lower South Island with dependable, quality and safety checked locomotive solutions through a modern, well-equipped, upgrade facility. Investing in rail will directly support New Zealand to “transition to a low-carbon future⁵²”, helping New Zealand to make deep cuts in New Zealand’s fossil fuel dependence and carbon emissions.

Figure 8: Steel Wheels is the monthly sustainability report for KiwiRail’s Freight business



3. Unlocking long-term job resilience

In the 1930’s, the Hillside Workshop’s employed an estimated 800 staff. Full-time staff numbers in the heavy-lift workshop, now sit at approximately  – a dramatic reduction.

Over the last decade an estimated 910 engineering and manufacturing jobs have been lost in Dunedin⁵³. There are currently 4,576 people reported as receiving job seeker support in the Otago Region⁵⁴. The estimated cost of job seeker support in the region is an estimated \$44.6 million per year⁵⁵.

Unlocking employment opportunities is a key priority for Dunedin City Council (DCC). The December 2017 quarter showed the Otago Region to have a 4.5% increase in unemployment⁵⁶ (compared with December 2016). Furthermore, one of DCC’s specific strategic plans for the city is to unlock “10,000 extra jobs over 10 years - requiring employment growth of approximately 2 percent per annum”. It also has a key priority to strengthen high value niches of the economy, specifically “niche manufacturing and engineering”.

Investment in this Business Case will support maintaining Dunedin’s role as a key heavy-lift, network, and mechanical servicing hub in the lower South Island.

The case specifically supports the Government priority⁵⁷, of unlocking “apprenticeships and trade training opportunities” through revitalisation of the Workshop, as well as supporting DCC’s economic development plan for the city, which seeks “Growth in full time equivalent jobs” to support a “productive economy”.

⁵¹ NZTA report 497, Freight transport efficiency: a comparative study October 2012

⁵² New Zealand Government, Budget 2019 - The Wellbeing Budget

⁵³ Based on the impacts of Fisher & Paykel, Cadbury plant closure, Hillside Workshop redundancies and Milmeq job losses over the last decade.

⁵⁴ Statistics New Zealand, 2019, Q2, people receiving job seeker support benefits in New Zealand by region, number of people

⁵⁵ Treasury CBx Database, work and income 2018, average across different options – based off 2019, Q2 statistics NZ, Otago region job seeker support numbers

⁵⁶ Statistics New Zealand, 2017, Unemployment rates by Regional council area

⁵⁷ 2019 Budget, The Wellbeing Budget

- *Construction phase*

The Hillside Workshops development project would have an immediate impact on regional economic development through construction activity, providing related employment opportunities for locals. The estimated jobs created for this phase are between [Commercial Information]

- *Upgraded Hillside Workshops*

Upgrading the Hillside Workshops as a dependable heavy-engineering facility would provide opportunity for further growth capacity in this area. Currently the end of life facilities and equipment are restricting the degree to which Hillside can add value to the rail maintenance network. Upgrading and rejuvenating the site would provide greater scope for the Workshops to increase productivity and their ability to be relied upon.

Improved use of space at the Hillside site would provide capacity to accommodate extra service requirements, and with New Zealand's freight task expected to grow by 58% by 2042⁵⁸, laying the foundations to facilitate maintenance services to support KiwiRail's heavy-lift assets is a sound investment. The reinvigoration of Hillside would propagate the opportunity for the Workshops to accommodate increased maintenance services, ultimately unlocking additional job opportunities at the facility.

The work will be staged so initially benefits will not be significant as the building is offline, however current capacity will be able to be maintained.

Within [Commercial Information] of completion:

- The site workforce will increase from [Commercial Information] to [Commercial Information] FTE employees. This is a mixture of skilled labour similar to the current of Welding, Fabrication, Fitting, Machine operators, Electrical testing and diagnostics, shunting and vehicle refinishes. It will also include apprentices
- With increased headcount, there will be the ability to instate afternoon shifts, reducing the out of service locomotives between [Commercial Information]%. Allowing both buildings to be used will also increase capacity, reduce lead times for servicing and increase productivity of staff.
- There is an increased need for servicing due to increased freight in the South Island. One additional locomotive will be available to Hillside for servicing equating to increased revenue of \$ [Commercial Information].

Within [Commercial Information]:

- With both buildings, online and working to capacity there will be an additional increase of a further [Commercial Information]-staff increasing the workforce to approximately [Commercial Information]. This will be a mixture of engineering, welding, fabrication, fitting, machine operators, electrical testing and diagnostics, shunting and vehicle refinishes as well as more apprentices.
- Improved heavy Engineering capacity to service future rolling stock refurbish and rebuild programs for KiwiRail and third-party rail operators
- These buildings will be used for the refurbishment and re-fabrication of tourist carriages, which will include internal and external works. It is expected that supporting businesses such as cabinet making, furniture manufacture, plumbing, air conditioning and the like will be established in the area to support this work.

Within [Commercial Information]

⁵⁸ Ministry of Transport's National Freight Demand Study 2014

- The workforce will continue to be maintained in the ^{Commercial} level with the steady stream as well as supporting business established.
- Development of a heavy engineering hub on the remaining vacant land will allow for the establishment of other supporting businesses which will have the ability to relocate to Hillside (in newly developed buildings).

It is estimated that operational jobs realised within 10+ years would be in excess of ^{Commercial} full time opportunities.

- *Employment through optimisation of underutilised land*
A combination of upgrading Hillside, and rehabilitating the adjacent land, would stimulate local employment opportunities through increased attractiveness for local industry to secure Hillside leases.
- ^{Commercial Information} *unlocked*
Upgrading Hillside would unlock the opportunity for the Workshops to be established as a combined heavy engineering, network and mechanical facility, ^{Commercial Information}

There are communication benefits to having heavy-lift, network and mechanical staff consolidated in one expansive, upgraded site. Co-location will likely result in improved service efficiencies and inevitably more space to accommodate freight growth due to the increased scale capacity of the site. The combination of these elements would support increasing potential future employment opportunities at the Workshops. It is expected that the workforce would grow according to the production levels at the site, and specifically to support several large modification, overhaul and upgrade projects to be delivered across KiwiRail's rolling stock fleet.

Overall, investment in the Hillside Business Case would unlock the potential for ^{Commercial} long-term job opportunities over 10+ years.

4. *Retaining local talent Apprenticeship and training opportunities unlocked*

This Business Case supports upskilling, with a specific focus on those 'Not in Employment Education or Training' (NEETs). The Otago Region has a Youth NEET rate of 13.4% (Q1, 2019), compared with 4.7% in Q1 2018⁵⁹.

KiwiRail would adopt the same upskilling and training approach used Nationally across the organisation:

- Apprenticeship opportunities opened for ^{Commercial Inf} % of total head count
- Cadet programme implemented
- Internship programme to be run over the Christmas holiday period
- Opportunities leveraged through KiwiRail's 'Gateway' programme for High Schools.

Learning at KiwiRail is heavily focused around technical operational skills, zero harm, industry recognised qualifications and leadership.

In the past 12 months ^{Commercial} employees have been involved in some form of learning with KiwiRail and there have been ^C ^{cial Inform} instances of learning across the business. This figure includes formative, on the job training, mentoring, and those who have completed a qualification.

⁵⁹ Statistics NZ, NEET stands for "Not in employment, education or training"- % of people aged 15-24

Our facilitation of Rail training is an important element of our organisation and provides our workforce with the licence to operate in the rail environment. This year we have facilitated 592 face-to-face technical courses. This also extends to our contracting companies and those who may need access to our network. This year we have trained 6157 individual contractors in specific Rail safety and technical courses.

Overtime, through a combination of relationships with Otago University, Otago Polytechnic Graduates, Commercial Information and growing rail servicing demands, KiwiRail aspires to provide more opportunities for apprenticeships at the Workshops. This initiative will support DCC with maintaining key niche talent in the area and KiwiRail with ensuring a strong talent pipeline to service future demands. It would also support local trades training organisations through attracting talent to the sector.

5. Supporting Māori Prosperity

Dunedin is a high impact area with regard to supporting Māori prosperity. 8,865 Māori usually live in Dunedin City - an increase of 20.4%, since the 2006 Census⁶⁰. The "Labour Force Participation" rate for Māori in the Otago Region is 68.6%⁶¹ - compared with 69.7% for the whole of New Zealand. The Māori unemployment rate in Dunedin is 6.8%⁶², far above the New Zealand wide rate sits at 4.3%⁶³.

Investing in Hillside will reinvigorate Dunedin's place as a heavy-lift, mechanical hub in the Lower South Island, providing training and employment opportunities in this sector for locals. Dunedin is a high impact Māori zone, opening up opportunities for New Zealand's indigenous demographic in this area.

Commercial Information

Targeting a high impact Māori area, would provide the means to unlock future employment opportunities. Commercial Information

6. Strategic land use planning – to the benefit of rail resilience

This Business Case takes a long-term view, considering land-use implications wider than the Hillside Workshops alone. Rehabilitation of Hillside provides the opportunity for KiwiRail to strategically consolidate its services and land asset portfolio in Dunedin to ensure better commercial returns, improved rail resilience and improved socio-economic benefits for the region.

KiwiRail currently owns Commercial Information the Hillside Road site. Neither of the sites are being optimised to their full commercial potential.

Commercial Information	
Hillside Workshops key issues:	<ul style="list-style-type: none"> ▪ Outdated, Commercial Information site ▪ Facilities and equipment in extreme state of disrepair

⁶⁰ Statistics New Zealand, Census 2013

⁶¹ Statistics New Zealand, year ended March 2019, % of the working age population, Māori by Region

⁶² Statistics New Zealand, by Region end ended March 2019, Employment rate of Māori people in New Zealand

⁶³ Statistics New Zealand, December 2018 quarter

- Only operational heavy-lift facility in the South Island
Site space is underutilised – some buildings are vacant

PROACTIVELY RELEASED

Commercial Information

- [Redacted]
- [Redacted]

Commercial Information

[Redacted]

PROACTIVELY RELEASED

The upgrade of the Hillside Workshops

Commercial Information

[Redacted]

- Commercial Information [Redacted]

Commercial Information [Redacted]

Commercial Information [Redacted]

Commercial Information [Redacted]

Commercial Information [Redacted]

[Redacted]

- *Hillside site:* The Hillside site [redacted] Commercial Information
Investment in this Business Case would provide the opportunity to maximise the strategic layout of the Hillside site, to achieve optimal capacity and resilience.

Where current buildings at Hillside are predominantly underutilised or in some cases vacant, opportunity would be unlocked to strategise the best economic use of these.

The Hillside upgrade [redacted] Commercial Information
[redacted] unlock desirability of the Hillside site for commercial tenants. Some reports show that there is high demand for quality properties sought after by tenants in the industrial market⁶⁴. Land within easy proximity to Dunedin's CBD is also highly desirable.

Commercial Information

7. Strategic land use planning – to the benefit of industry in the regions

Investment in remediating the Hillside site would provide benefits beyond maximising on commercial land use to support rail resilience.

There are a number of large up and coming development projects due to take place in Dunedin. Including the Dunedin Hospital upgrade, the proposed harbourside development, University of Otago projects and a proposed South Otago Community hub. Upgrading and [redacted] Commercial Information Hillside would provide a potential solution for industrial property occupiers to lease from. Studies show that industrial space in Dunedin is scarce, with few options available for either lease or purchase. There is also a drought in available industrial development sites, with the situation unlikely to improve in the near future due to geographical constraints and shortage of freehold land⁶⁵. Other challenges in this space include:

⁶⁴ Queenstown, Wanaka and Dunedin - Market Review and Outlook 2019, Colliers International

⁶⁵ Colliers International, Dunedin Market Report 2019

- Industrial rents increasing due to high demand and supply shortages; and
- Few opportunities for tenants to secure new premises.

Hillside provides an opportunity to unlock a ‘hub’ of aligned industry businesses. It provides a practical solution for various trades, engineering and construction businesses to locate to.

3.1 Critical Success Factors

The critical success factors for this Business Case have been identified and are described in the tables below. This set of factors is used to determine the final most suitable option of the shortlisted options.

KiwiRail’s investment criteria were:

- Long-term sustainable profitable revenue for New Zealand and KiwiRail
- Resilience of the Lower South Island’s heavy-lift and mechanical facilities
- Supporting the Lower South Island’s capacity to service New Zealand’s growing freight demands
- Support wider local, regional and Government economic development plans
- Contribute to reducing New Zealand’s carbon footprint and environmental sustainability
- Improve public health and safety
- Strategically consolidate KiwiRail’s infrastructure and land asset portfolio
- Unlock employment opportunities and retain local talent

Table 17: Critical Success Factors

Generic Critical Success Factors	Broad Description	Proposal Specific Critical Success Factors
Strategic fit and business needs	How well the option meets the agreed investment objectives, related business needs and service requirements, and integrates with other strategies, programmes and projects.	Does it support long-term sustainable profitable revenue for New Zealand and KiwiRail? Does it help deliver consistent reliability for stakeholders? Does it improve resilience to the freight distribution network? Does it reduce complexity and cost? Does it improve commercial performance? Will it support the reduction of carbon emissions? Will it result in improved rail resilience for Lower South Island? Will it improve public health and safety needs?

Generic Critical Success Factors	Broad Description	Proposal Specific Critical Success Factors
		Will it unlock employment opportunities in the region?
Potential value for money	How well the option optimises value for money (i.e. the optimal mix of potential benefits, costs and risks)	Will it optimise on KiwiRail's land portfolio to improve revenue opportunities? Will investment support the lifespan of KiwiRail's rolling stock fleet? Refer to Section 5 Financial Case
Supplier capacity and capability	How well the option matches the ability of potential suppliers to deliver the required services and is likely to result in a sustainable arrangement that optimises value for money.	Does KiwiRail have the expertise to undergo an infrastructure upgrade? Have KiwiRail upgraded any sites before? How did that go?
Potential affordability	How well the option can be met from likely available funding and matches other funding constraints.	Will funding support the upgrade of Hillside Workshops?
Potential achievability	How well the option is likely to be delivered given the organisations ability to respond to the changes required and matches the level of available skills required for successful delivery.	Does KiwiRail have the internal expertise within its resources to successfully scope and manage procurement and project processes?

3.2.1. Options identification

Under the five dimensions a comprehensive long list of in-scope options was identified for the business case. These are listed in the table below.

Table 18: Possible options classified by the five dimensions of choice

Dimension	Description	Options within each Dimension
Scale, scope and location	In relation to the proposal, what levels of coverage are possible?	<i>Option 1- Do Nothing:</i> As the only operational heavy-lift facility in the South Island (due to Christchurch's facilities being out of action), the Hillside Workshops will be depended on for the majority of heavy-lift mechanical servicing for the foreseeable future. Given New Zealand's growing freight demands, and increased desire to use rail over road for tourism and general commuting, investment in rolling stock maintenance is a necessity. Not investing and waiting until the facilities are at the point of decommission

Dimension	Description	Options within each Dimension
		<p>leaves KiwiRail Commercial Information to service the South Islands growing rail needs. The potential for Hillside to support aligned industries through creating a trade, mechanical and engineering hub would not be unlocked. Commercial Information</p> <p><i>Option 2- Invest in the upgrade of Hillside:</i> Investment in Hillside makes sense from a scale, scope and location perspective. As New Zealand becomes more reliant on sustainable transport methods, the volume of population using such methods will increase. This in turn will have a direct impact on the servicing schedules to ensure rolling stock meets safety standards and are well maintained. Dunedin is in a low seismic zone – furthermore, servicing and heavy-lift talent are already present in the area. It is the most logical choice to secure New Zealand’s rail resilience through upgrading a well-positioned site, that already has the talent to maximise its value.</p> <p><i>Option 3- Do minimal:</i> This short-term solution is a sinking “good money after bad” model. Investing minimally would result in a similar long-term outcome to not investing at all. It would simply delay the inevitable failure. Contracted revenue would likely be serviced first and therefore the loss of locomotives in the fleet in the short term would result in delays to freight and potentially increased unreliability as locomotives are worked harder to deliver the same freight task.</p>
Service solution	How can services be provided?	<p><i>Option 1 -Do Nothing:</i> The Hillside Workshops are in an extreme state of disrepair. Doing nothing will inhibit KiwiRail from delivering crucial maintenance services.</p> <p><i>Option 2- Invest in the upgrade of Hillside:</i> As the South Islands only operational heavy-lift facility, rail is put in a vulnerable position if it is to continue to deliver freight, tourism and commuter requirements.</p> <p><i>Option 3- Do minimal:</i> This short-term solution would provide services for a limited period of time. Minimal investment would get the Workshops to a state of minimal capability and efficiency. This option would not support accommodating increased rolling stock servicing demands, emergency maintenance or non-routine maintenance.</p>
Service delivery	Who can deliver the services?	<p><i>Option 1 - Do Nothing:</i> There would be no project management or project specific procurement processes</p>

Dimension	Description	Options within each Dimension
		<p>to implement through doing nothing.</p> <p>Commercial Information</p> <p>Doing nothing to remedy this will impact on servicing impacting the South Islands rail resilience. Eventually there would be no service delivery coming from Hillside. The loss of the heavy lift facility has the ability to impact revenue if the rolling stock team are then unable to supply the agreed level of locomotives to enable the contracted rail freight task to be delivered. The rolling stock team could mitigate the loss by doing the following:</p> <ul style="list-style-type: none"> ○ Hiring a heavy lift crane ○ Adding labour to servicing in the short term to increase the availability of locomotives in the short term – noting this won't be an effective long-term solution due to the locomotives eventually requiring a heavy lift ○ Bring forward heavy lifting maintenance ahead of schedule in the off-peak season to get “ahead” of the maintenance required. <p>Total revenue loss per annum is estimated at \$^{Commercial} per annum with this option.</p> <p><i>Option 2- Invest in the upgrade of Hillside:</i> The KiwiRail team has specialist expertise in Crown land and infrastructure advisory services, delivering technical advice in property consultancy, strategic planning, project management, and resource management. KiwiRail also has specialist procurement personnel who will be used to support related processes – more detail can be found in the Commercial Case. KiwiRail possess the internal expertise to address rolling stock maintenance and provide servicing. However, investment is required for the facilities, infrastructure and equipment to support this.</p> <p><i>Option 3-Do minimal:</i> Project management and procurement processes would follow the same course as “Option 2 – invest in Hillside upgrade”. Service delivery would slowly deteriorate with time. Although it would be at a slower rate than “Option 1- No nothing”, the inevitable outcome would be the same, with a continued steady decline projected.</p>
Implementation	When can services be delivered?	<p><i>Option 1- Do Nothing:</i> No implementation would be required for this option. However, alternative options to service rolling stock would be required to ensure safety and resilience of the rail network in the Lower South</p>

Dimension	Description	Options within each Dimension
		<p>Island.</p> <p>Commercial Information</p> <p><i>Option 2-Invest in the upgrade of Hillside:</i> KiwiRail would manage the implementation of this project using set Governance and Project Control Groups. An estimated timeline has been provided at item 6.2 of this Business Case.</p> <p><i>Option 3-Do minimal:</i> The implementation process would follow a similar timeline to 'Option 2 -invest in the upgrade.</p> <p>Commercial Information</p>
Funding	How can it be funded?	<p><i>Option 1- Do Nothing:</i> No funding required.</p> <p><i>Option 2-Invest in the upgrade of Hillside:</i> Provincial Growth Fund</p> <p><i>Option 3-Do minimal:</i> Provincial Growth Fund – noting this option would be sinking “good money after bad” and provides a short-term solution only. This option does not support increasing capabilities in the region, it does not support industry growth, and would not provide long-term rail resilience or any associated benefits.</p>

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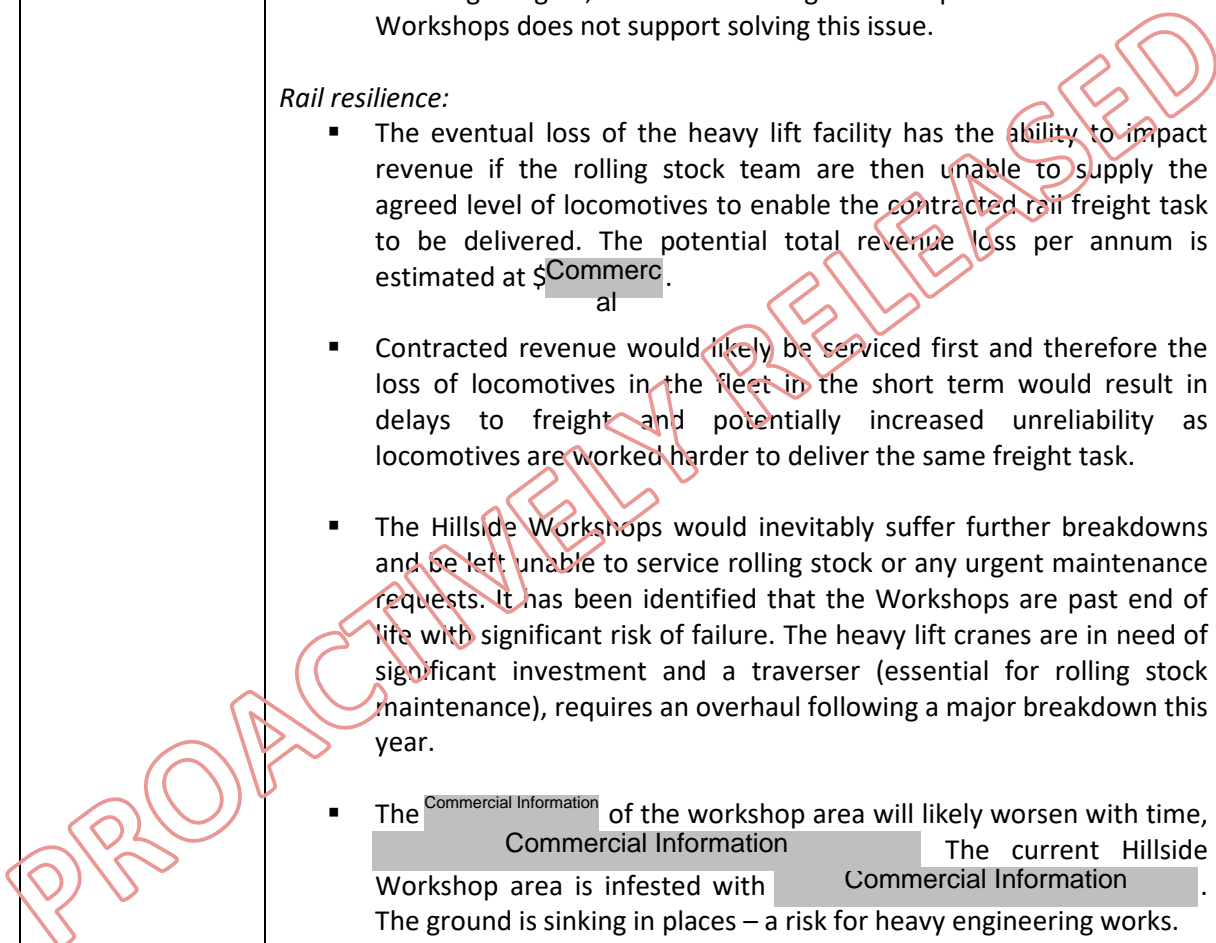
3.2.2. Options Development

The options developed through consideration of the ‘dimensions of choice’ that are assessed in this Business Case are described in the table below.

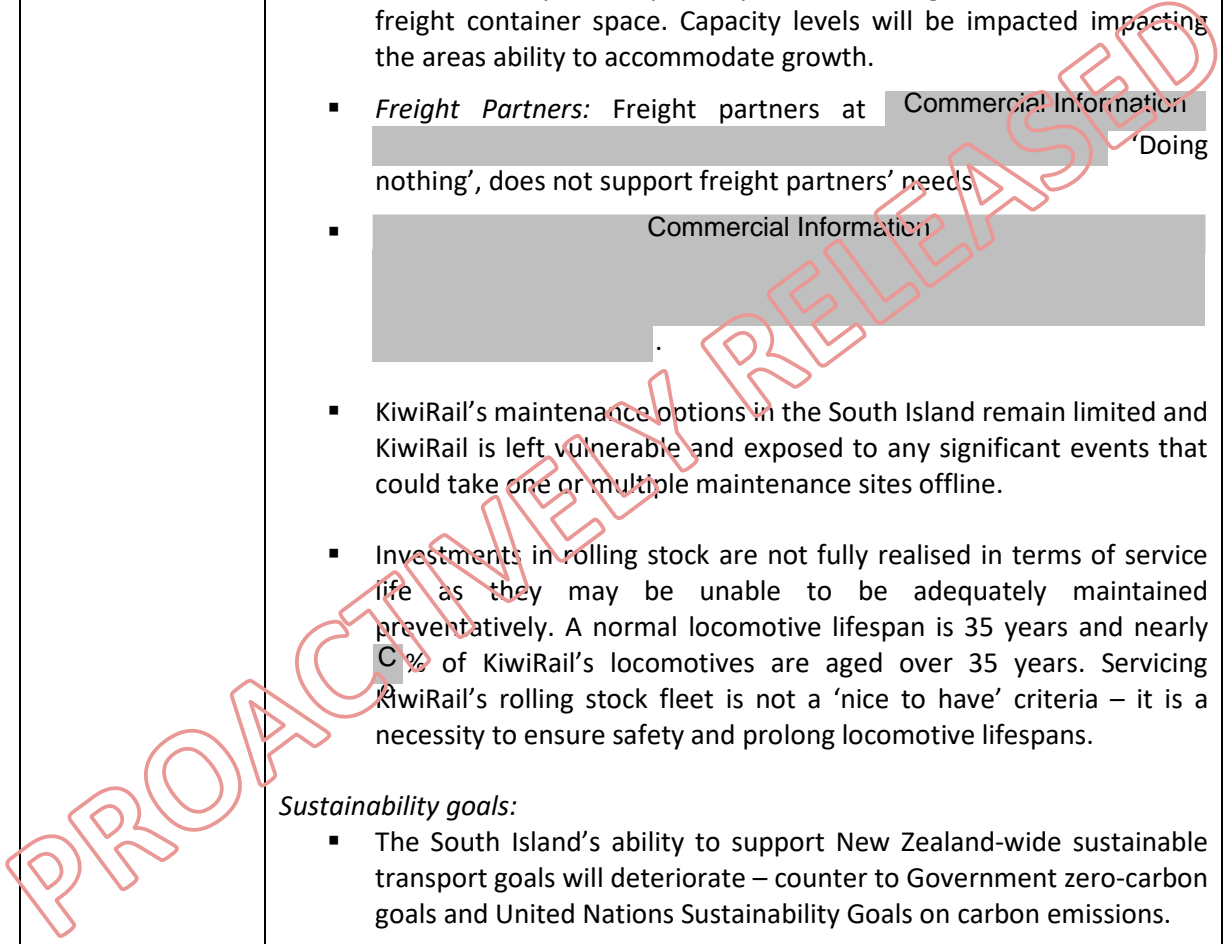
Table 6: Options assessed

Option Title	Option Description
<p>Option 1: Do nothing – no upgrades made to ‘Hillside’.</p> <p>(Full shut down inevitable.)</p>	<p>KiwiRail does no upgrade or remediation work to the Hillside Workshops. End of life equipment is used until decommissioned and heavy-lift engineering work in the South Island gradually decreases. This option considers the implications of investing nothing until full shut down of the Workshop is inevitable.</p> <p>Advantages: The Provincial Growth Fund could use capital elsewhere in the country.</p> <p>There are no known advantages in relation to improving skills, supporting industry, ensuring rail resilience, supporting sustainability goals, or providing Māori prosperity opportunities with this option.</p> <p>Disadvantages: Noting future financial projections that have been presented to the KiwiRail Board and Shareholders have assumed that the availability of locomotives in the South Island is not impacted by the loss of the Hillside facility. As the only heavy-engineering workshop in the South Island (following the Christchurch earthquake impacting the other site), not investing leaves rail resilience in the South Island in a vulnerable state.</p> <p>Skills:</p> <ul style="list-style-type: none"> ▪ This option does not support delivering skills for industry through promoting heavy engineering as a viable attractive career option. ▪ This option does not offer safe premises to accommodate training new talent and retaining current talent. ▪ This option would not encourage students to upskill in the industry, noting Otago Region’s Not in Employment Education or Training (NEET) rate is 13.4%, (Q1, 2019), compared with 4.7% in Q1 2018. ▪ This option does not support local Industry Training Providers (ITOs). <p>Industry:</p> <ul style="list-style-type: none"> ▪ Disestablishment of various regional engineering and manufacturing industry businesses has taken place over the last decade with an estimated 910 jobs being lost. Not investing in Hillside would add further job losses to already high statistics for the area. ▪ This option does not support minimising Dunedin’s unemployment rate (7.1% compared to 4.3% NZ wide). As the Workshop slowly

Option Title	Option Description
	<p>becomes more dilapidated, efficiencies will decrease along with current staff who may feel unsettled at the lack of long-term employment.</p> <ul style="list-style-type: none"> ▪ Niche industry experience and skill transfer opportunities would be lost exacerbating the cycle of lost skills. ▪ There is already a relatively high labour force underutilisation rate in the Otago Region, of 11.6% - waiting until complete shutdown of the Workshops does not support solving this issue. <p><i>Rail resilience:</i></p> <ul style="list-style-type: none"> ▪ The eventual loss of the heavy lift facility has the ability to impact revenue if the rolling stock team are then unable to supply the agreed level of locomotives to enable the contracted rail freight task to be delivered. The potential total revenue loss per annum is estimated at \$Commercial al. ▪ Contracted revenue would likely be serviced first and therefore the loss of locomotives in the fleet in the short term would result in delays to freight and potentially increased unreliability as locomotives are worked harder to deliver the same freight task. ▪ The Hillside Workshops would inevitably suffer further breakdowns and be left unable to service rolling stock or any urgent maintenance requests. It has been identified that the Workshops are past end of life with significant risk of failure. The heavy lift cranes are in need of significant investment and a traverser (essential for rolling stock maintenance), requires an overhaul following a major breakdown this year. ▪ The Commercial Information of the workshop area will likely worsen with time, Commercial Information The current Hillside Workshop area is infested with Commercial Information. The ground is sinking in places – a risk for heavy engineering works. ▪ KiwiRail’s capacity for maintenance activities in the South Island would fail to match the projected increase in the New Zealand freight task (60% increase from 2014 to 2042 – National Freight Demand Study 2014). This will inevitably impact the South Island’s economy (import /export) market, noting that in FY18, KiwiRail transported 18 million net tonnes of freight. Without rail, the equivalent freight task, would have required 1.1 million trucks. ▪ KiwiRail’s ability to support the South Island’s tourism industry would also be jeopardised. Notably, in FY18, more than Commercial Informat passengers experienced KiwiRail’s Scenic Rail journeys. Without rail, nearly Commercial In tourist coaches would have been required to transport those passengers. ▪ KiwiRail has several large modification, overhaul and upgrade projects to be delivered across its South Island rolling stock fleet.



Option Title	Option Description
	<p>Failing to provide upgrade works to Hillside will inhibit KiwiRail’s ability to deliver on these projects. As the only operational heavy lift facility in the South Island, KiwiRail’s fleet will be left in an extreme state of vulnerability.</p> <ul style="list-style-type: none"> ▪ KiwiRail’s freight partners, KiwiRail, Commercial [redacted] and the local economy would miss out on Commercial Information [redacted] ▪ <i>Local economy:</i> As import/export demands grow, so the need for freight container space. Capacity levels will be impacted impacting the areas ability to accommodate growth. ▪ <i>Freight Partners:</i> Freight partners at Commercial Information [redacted] ‘Doing nothing’, does not support freight partners’ needs ▪ Commercial Information [redacted] ▪ KiwiRail’s maintenance options in the South Island remain limited and KiwiRail is left vulnerable and exposed to any significant events that could take one or multiple maintenance sites offline. ▪ Investments in rolling stock are not fully realised in terms of service life as they may be unable to be adequately maintained preventatively. A normal locomotive lifespan is 35 years and nearly C % of KiwiRail’s locomotives are aged over 35 years. Servicing KiwiRail’s rolling stock fleet is not a ‘nice to have’ criteria – it is a necessity to ensure safety and prolong locomotive lifespans. <p><i>Sustainability goals:</i></p> <ul style="list-style-type: none"> ▪ The South Island’s ability to support New Zealand-wide sustainable transport goals will deteriorate – counter to Government zero-carbon goals and United Nations Sustainability Goals on carbon emissions. <p><i>Māori Prosperity:</i></p> <ul style="list-style-type: none"> ▪ Allowing the Workshops to fall into a state of complete failure will not support Māori opportunities. 8,865 were reported as living in Dunedin in 2013, up 20% on the 2006 Census – these numbers continue to rise. ▪ Commercial Information [redacted] – this opportunity would not be unlocked if this Business Case is not approved. <p>Overall the loss of the heavy lift facility has the ability to impact loss of jobs, lack of upskilling and loss of revenue. The rolling stock team would eventually be unable to supply the agreed level of locomotives to enable the contracted rail freight task to be delivered.</p> <ul style="list-style-type: none"> ○ On average each locomotive in the South Island generates approximately



Option Title	Option Description
	<p>Commerc of revenue per annum.</p> <ul style="list-style-type: none"> ○ Contracted revenue would likely be serviced first and therefore the loss of locomotives in the fleet in the short term would result in delays to freight and potentially increased unreliability as locomotives are worked harder to deliver the same freight task. ○ Other mitigations to make up the shortfall could be to reduce the number of double headed locomotives, therefore adding greater risk to the overall revenue base due to a lower level of reliability and performance.
<p>Option 2: Upgrade the Hillside Workshops (This Business Case – suggested option to achieve investment objectives)</p>	<p>KiwiRail receives the required funding of \$19.97million to re-establish the Hillside site as a heavy-engineering, network and mechanical facility to service essential Lower South Island rolling stock requirements.</p> <p>Advantages:</p> <p><i>Skills:</i></p> <ul style="list-style-type: none"> ▪ An upgraded, safe site complements apprenticeships and work experience programmes. ▪ An upgraded site may attract experienced workers encouraging valuable knowledge transfer. ▪ Investment would support unlocking construction and engineering opportunities both at Hillside and indirectly (through supply-chain and aligned projects including the Dunedin Hospital build and Dunedin waterfront project). Students would more inclined to train in sector if the industry is invested in and opportunities are abundant. <p><i>Industry:</i></p> <ul style="list-style-type: none"> ▪ The upgrade would present opportunities for aligned industries to consolidate in a mechanical, engineering and manufacturing hub at Hillside. (Providing options following potential site constraints impacted as part of the Dunedin waterfront project). ▪ The increased work from tourism carriage refurbishment, ability to service bogies and increased servicing will see a proportionate increase in staffing levels to between [Commercial Information] which for most part be industrial engineering, design engineers, welding & fabrication, fitting & mechanical, machine operators, electrical testing and diagnostics, ground based shunting of rolling stock and vehicle refinishes (painting). ▪ Within [Commercial Information] it is estimated that the workforce would continue to be maintained at a [Commercial] FTE level. This will be a mixture of engineering, welding, fabrication, fitting, machine operators, electrical testing and diagnostics, shunting and vehicle refinishes as well as more apprentices. <p><i>Rail resilience:</i></p> <ul style="list-style-type: none"> ▪ Supports securing the South Island’s rolling stock resilience. ▪ [Commercial Information] ▪ KiwiRail would have a more resilient maintenance network with options for future capacity expansion. Notably, Dunedin is considered to have a low seismic risk factor (Z = 0.13). KiwiRail would be better placed to match the projected increase in the New Zealand freight task (60%

Option Title	Option Description
	<p>increase from 2014 to 2042 – National Freight Demand Study 2014).</p> <p><i>Land optimisation:</i></p> <ul style="list-style-type: none"> ▪ Optimise underutilised and vacant site space at Hillside to realise employment opportunities through supporting industries and maximise on commercial returns. ▪ Commercial Information Ground works will futureproof the site foundations and ensure the site meets current building standards. ▪ Investment in Hillside provides the opportunity for KiwiRail to Commercial Information Commercial Information <ul style="list-style-type: none"> ○ Providing additional land for freight customers to accommodate predicted freight growth; ○ Commercial Information ○ Several industrial property occupiers in Dunedin have expressed interest to relocate to larger or higher-grade premises – however there are currently severe supply constraints. The Hillside investment unlocks this opportunity⁶⁶ <p><i>Sustainability goals:</i></p> <ul style="list-style-type: none"> ▪ The investment would align with New Zealand’s commitments to reduce greenhouse gas emissions to net zero by 2050. Studies in the United Kingdom indicate that freight by rail is approximately four times more carbon efficient than road freight⁶⁷. <p><i>Māori prosperity:</i></p> <p>This investment aligns with a number of Government priorities as outlined in the 2019 Budget: The Wellbeing Budget:</p> <ol style="list-style-type: none"> 1. <i>Building a productive nation</i> – Helping New Zealand to transition to a low-carbon future and unlocking apprenticeships and trade training opportunities through the revitalised heavy-engineering and mechanical workshop. 2. <i>Transforming the economy</i> – The priority aims to support New Zealand’s climate change goals and improve choices for freight and commuter transport. Commercial Information Hillside site will support the Government priority on <i>Encouraging sustainable land use</i> – Commercial Information current state of disrepair is unhealthy for the land it sits on as well as the workforce which use it. 3. <i>Supporting Māori and Pasifika aspirations</i> - Commercial Information Commercial Information KiwiRail to more directly contribute to lifting Māori and Pasifika incomes, skills and opportunities.
Option 3:	This option refers to implementing a ‘do minimum’ approach in terms of

⁶⁶ Colliers International Market Report Dunedin, 2019

⁶⁷ UK Department for Environment, Food and Rural Affairs
<http://www.ukconversionfactorscarbonsmart.co.uk/>

Option Title	Option Description
<p>Do minimum – ‘short-term’ approach</p>	<p>investment. There are certain urgent infrastructure requirements to be addressed Commercial Information and essential machinery to be overhauled to ensure the Workshops can function at a skeleton level. It is estimated that \$Commerc would be a short-term fix for the above.</p> <p>Advantages:</p> <ul style="list-style-type: none"> ▪ <i>Funding:</i> The Provincial Growth Fund could use additional capital elsewhere in the country. <p>Disadvantages:</p> <ul style="list-style-type: none"> ▪ <i>Skills:</i> The short-term fix would be unlikely to provide long-term career prospects, meaning current apprentices would likely be looking outside the Workshops for opportunities. The lack of material investment would not support a message to the region on the importance of upskilling in niche heavy-engineering, manufacturing and trades roles. This option would not support the Ministry of Education, Tertiary Education Strategy⁶⁸ priority 1 of Delivering Skills for Industry. ▪ <i>Industry:</i> Current workers on site would benefit in the short-term from improved conditions and short-term machinery overhauls. However, the long-term machinery upkeep and career stability would be lacking, spurring workers to keep open minded about alternative employment options. It is anticipated that staff numbers would slowly diminish impacting on efficiencies and volume capabilities. <p>The lack of land optimisation would not complement broader redevelopment projects in Dunedin, specifically industries that might be impacted by the Dunedin Harbourside redevelopment project and require alternative site options to locate to.</p> <ul style="list-style-type: none"> ▪ <i>Rail resilience:</i> None. A short-term option would not guarantee long term rail resilience for the lower South Island. Over time the rolling stock team would be unable to supply the agreed level of locomotives to enable the contracted rail freight task to be delivered. Notably, each locomotive in the South Island generates approximately \$Co of revenue per annum. ▪ <i>Land-use optimisation:</i> Minimal to none. No remedial work would be able to be done on the remaining buildings. These would continue to be underutilised and prove difficult to lease as their condition continues to deteriorate. ▪ <i>Sustainability:</i> Doing minimum does not send a supportive message regarding New Zealand’s sustainability commitments. ▪ <i>Māori prosperity:</i> Limited to not at all. <p>Practical next steps as the skeleton operation slowly declined further:</p> <ul style="list-style-type: none"> ○ Contracted revenue would likely be serviced first and therefore the loss of locomotives in the fleet in the short term would result in delays to freight and potentially increased unreliability as locomotives are worked harder

⁶⁸ Ministry of Education, Tertiary Education Strategy 2014-2019

Option Title	Option Description
	to deliver the same freight task <ul style="list-style-type: none"> ○ Mitigations to make up the shortfall could be to reduce the number of double headed locomotives, therefore adding greater risk to the overall revenue base due to a lower level of reliability and performance. ○ Locomotives from the North Island could be repositioned from lower earning traffic to offset the loss of horsepower in the South Island There will inevitably be further job losses as the Workshop runs as a skeleton operation. This option would result in a continued steady decline in rail servicing delivered by the Workshops, employment and apprenticeships.

3.2.3 Initial Options Assessment

This assessment examines each option against the investment objectives and the five critical success factors. Key advantages and disadvantages of each option are briefly noted.

Table 20: Hillside Workshops Initial Options Assessment

Pass	Partially	Fail
------	-----------	------

Assessment criteria	Option 1	Option 2	Option 3
	Do nothing	Invest \$19.97m Commercial Information	Do minimum Commercial
1.Re-establish Dunedin as a dependable mechanical-engineering hub for the lower South Island.			
2.Support strategic employment growth and upskilling in the Otago region.			
3.Ensure resilience of the South Island’s rail network.			
4.Support Māori prosperity.			
5.Sustainable land-use strategy complementing regional plans.			
Critical Success Factor			
1.Strategic fit and business needs			
2.Potential value for money			

Commercial Information

3. Supplier capacity and capability
4. Potential affordability
5. Potential achievability
Advantages/ Disadvantages:
Overall Assessment

Table 20: Hillside Workshops Options Assessment

Pass

Partially

Fail

Commercial Information

Strategic fit and business needs
Potential value for money
Capacity and capability
Long term sustainable profitable revenue for KiwiRail and New Zealand
Self-sustaining business

Public safety and environment (e.g. trucks off road)

Achievability



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3.3. The recommended way forward

Based on the above options assessment, the most strategic way forward, is to invest in the upgrade and remediation of the Hillside Workshops, Dunedin. Reinvigoration and upgrading of Hillside provides the opportunity for KiwiRail to:

1. Upgrade essential heavy-engineering and mechanical facilities to service essential Lower South Island rolling stock requirements;
2. Support capability growth in the engineering, manufacturing and construction industries in the Otago Region;
3. Unlock employment opportunities for aligned industry workers;
4. Optimise the use of currently underutilised Hillside Road Commercial Information
5. Support New Zealand’s zero-carbon sustainability goals;
6. Support Māori prosperity through unlocking job opportunities Commercial Information; and
7. Complements wider industry projects in Dunedin, including the Waterfront project and Dunedin Hospital rebuild.

This business case supports a number of strategically interlinked Provincial Growth Fund Tiers that complement economic prosperity for the region.

PGF Tier	Positive Economic outcomes achieved
<p><i>Tier 1: Capability Building –</i> By attracting and retaining niche talent to the Otago Region and support upskilling in the industry.</p>	<ul style="list-style-type: none"> ▪ <i>Supports reducing NEET statistics in the region</i>
<p><i>Tier 2: Priority economic opportunities –</i> By supporting the economic success of the industrial sector through unlocking construction and heavy-engineering job opportunities.</p>	<ul style="list-style-type: none"> ▪ <i>Supporting income generated which can be spent in the local community – fuelling positive outcomes for the economy.</i>
<p><i>Tier 3: Enabling infrastructure –</i> Supporting future rail resilience, Commercial Information and support New Zealand’s sustainability agenda.</p>	<ul style="list-style-type: none"> ▪ <i>EY’s 2016 Report – estimates the annual value of rail to delivers approximately \$1.5b per year.</i> ▪ <i>By 2030 it is expected that the value of rail will increase to \$2.5 billion.</i> ▪ Commercial Information ▪ <i>Supports meeting New Zealand’s goals and international commitments under the 2015 Paris Climate Agreement.</i>

Each of the outcomes above are connected and support driving the others' success. Investing in Hillside would provide short and long-term economic benefits, including:

- ✓ An immediate economic benefit through construction activity.
- ✓ Employment opportunities unlocked for locals through reinvigorating the use of currently underutilised land to supporting industries and a remediated heavy-lift servicing facility.
- ✓ Apprenticeship opportunities for locals through KiwiRail's upskilling programme.
- ✓ Improved rail resilience through rejuvenated, heavy-lift, network, and mechanical rail asset maintenance and servicing facilities – supporting the rail-based economy (freight, tourism and commuter).
- ✓ Strategic land use benefits – Commercial Information
- ✓ Direct economic benefits to Māori Commercial Information
- ✓ Flow-on work and consumer spending for local businesses as part of the supply-chain ripple effect.
- ✓ Supply-chain impacts as a result of Workshop upgrade construction, ongoing operation and complementary industry projects (including Dunedin Hospital rebuild, proposed Dunedin Harbourside development, University of Otago development projects and South Dunedin community hub project).

3.3.1 Indicative costs and benefits

The indicative costs and benefits for each of the options assessed in this Business Case are provided in the table below.

Table 21: Indicative costs and benefits

	Option 1 Do nothing (Use until failure)	Option 2 Upgrade Hillside Workshops (MOST SUITABLE)	Option 3 Do minimum (short-term solution)
Whole of life capital costs	Co	Commer	Commer
Ongoing scheduled maintenance – per annum Hillside	\$C	\$ial ^{ns}	\$el
Ongoing non-scheduled maintenance – per annum Hillside	\$ Co mm	\$ ^{Comme}	\$ Co mm
Commercial Information	\$ Co mm	\$ ^{Commerc}	\$ Co mm
Building lease potential (per annum)– Hillside**	\$4C	\$ ^{Commerc}	\$ Co

*Assumes Commercial Information

**Assumption based on ² of site remediated for lease

4 Commercial Case

The commercial case outlines the suggested way forward to resolve the South Island's current state of vulnerability regarding its ability to deliver crucial maintenance and servicing requirements for rail related rolling stock while simultaneously providing key socio-economic solutions to the region. As a state-owned-enterprise (SOE) KiwiRail will follow standard Government Rules of Sourcing (GRS) processes.

4.1 The Procurement Strategy

KiwiRail is seeking funding to upgrade and remediate the Hillside Workshops in Dunedin

Upon funding being secured, KiwiRail will undergo the following steps:

- Removal of current unoccupied end of life assets
- Remediation of ground
- Design and consenting for two heavy lift buildings. Work to include:
 - Re-clad
 - Re-Roof
 - New services (Fire, power, plumbing)
 - Demolition of end of life office area
 - Commercial Information
 - Construction of new amenity facility
 - Construction of new Network Services Warehouse
- Staged construction over the two facilities
- Commercial Information

4.2 Required Services

Proceeding with this Business Case will entail using the following resources:

- Legal assistance
- Master-planning drafting expertise
- Due diligence
- Civil/ Geotech construction consultancy
- Designation and technical reporting inputs i.e. Traffic, landscape
- Commercial Information

4.3 Contract Provisions

- KiwiRail is well equipped with the expertise it requires for an upgrade and remediation construction project.
- KiwiRail will use its standard terms which cover delivery, payment terms and breach-of-contract.
- KiwiRail's legal department and procurement team is well versed in large procurements and will provide support throughout the issuing of contracts process to ensure highest standards and best practices are met.

4.4 Potential for risk sharing

An initial assessment of how the associated risks might be apportioned between the organisation and potential providers is outlined in the risk allocation table below.

Table 22: Risk Allocation table

Risk Category	Potential Risk Allocation		
	KiwiRail	Supplier	Shared
Commercial Information	Commercial %		
Commercial Information		Commercial	Commercial Information
Commercial Information		Commercial	Commercial Information
Commercial Information	Commercial %		
Commercial Information			Commercial Information
Commercial Information	Commercial %		
Commercial Information	Commercial %		
Commercial Information	Commercial %		
Commercial Information		Commercial	Commercial Information
Commercial Information	Commercial %		
Commercial Information	Commercial %		
Commercial Information	Commercial %		
Commercial Information	Commercial %		
Commercial Information			Commercial Information

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5 Financial Case

The purpose of this section is to outline the timing and costs associated with the Hillside Workshops Business Case.

5.1 Impact on the Financial Statements

Based on current estimates, the anticipated cash flows for the investment proposal over its intended life span are set out in the table below.

\$	Commercial Information	Commercial Information	Commercial Information	Commercial Information	Totals
Phase 1 – preparation					
Demolition - end of life/unoccupied building(s)	\$ Commercial Information		Comm	Comm	\$ Commercial Information
Commercial Information	\$ Comm call Inform		Comm	Comm	\$ m
Phase 2 – construction works					
Workshop Upgrade (1812)					
Services (power, fire & plumbing)	\$ Commercial Information		\$ Commercial Information	Comm	\$ Commercial Information
External Works	Comm		\$ Commercial Information	Comm	\$ Commercial Information
Demolition of Amenity Block	\$ Commercial Inform		\$ Commercial Inform	Comm	\$ Commercial Information
Construction of new Amenity	Comm		\$ Commercial Information	\$ Commercial Information	\$ Commercial Information
Internal Works	Comm		\$ Commercial Information	Comm	\$ Commercial Information
Workshop Upgrade (1813)					
Services (power fire & plumbing)	Comm		\$ Commercial Information	Commercial Information	\$ Commercial Information
External Works	Comm		Commercial Inform	\$ Commercial Information	\$ Commercial Information
Internal works	Comm		Comm	\$ Commercial Inform	\$ Commercial Inform
Mechanical Upgrade					
Overhauls of heavy lift cranes	Comm		\$ Commercial Inform	\$ Commercial Inform	\$ Commercial Information
Overhauls of traveriser*	Comm		\$ Commercial Inform	Comm	\$ Commercial Inform
Total	\$ Commercial Information		\$ Commercial Information	\$ Commercial Information	\$ Commercial Information

**The indicative dates provided above are aligned with KiwiRail's financial year ending 30 June and commencing 1 July. Work previously undertaken on the traveriser related to the engine itself replacing the running gear, gears and upgrading the engine to allow for additional capacity. The work to be completed to the traveriser as part of this project involves upgrade of electrical supply, running wheels, shafts and wheel bearing assemblies to assist with clearance issues.*

5.2 Input Assumptions

The cash flow estimates provided above are based on the following assumptions:

- The required funding is provided by the Provincial Growth Fund by Commercial Information
- There are no unforeseen delays impacting on the construction works and estimates are based on forecasted rates.
- The assumptions account for a Comm % contingency.

5.3 Overall affordability

Capital investment of \$19.97 million from the PGF will support the initial upgrade and remediation of the Hillside Workshops as outlined above (5.1). [REDACTED] Commercial Information [REDACTED]

Remediation of the remainder of the Hillside site (outside buildings 1812, 1813 and the [REDACTED] Commercial Information [REDACTED] will require additional capital which will likely be internally funded by KiwiRail. It is anticipated that this will take place as a phased approach in order to maximise on asset lease potential across the site. Information

5.3 Funding sources

It is proposed that the funding of \$19.97 million for the Hillside Workshops Business Case, will be provided by the Provincial Growth Fund.

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6 Management Case

6.1 Project Management Strategy and Framework

6.1.1 Project Governance

KiwiRail's existing processes include oversight by an appointed executive owner and project sponsor. These processes have been robustly tested through the \$ [REDACTED] Commercial Information [REDACTED]

6.1.1.1.1 Project Control Group

KiwiRail's existing governance processes include a Project Control Group (PCG) that meets monthly to provide overall project governance and direction to the project team and review project performance and assurance. A PCG specific to the manufacturing and commissioning of this additional rolling stock and platform upgrades will be established and will include executive owners and sponsors. The project sponsors are ultimately accountable for the performance of the project.

Members of the PCG will be responsible for producing a single report for the KiwiRail chief executive and Board. Membership of the PCG will typically include:

- KiwiRail – Executive Owner (e.g. Group General Manager)
 - KiwiRail – Project Sponsor (e.g. General Manager Project Management Office)
- Project Director
- KiwiRail – Technical representation (TBC)

6.1.1.2 Project Steering Committee

For larger (>\$10m) high risk projects, KiwiRail's standard process is to establish a Project Steering Committee (PSC) with representatives from key stakeholders and personnel. The PSC meets fortnightly or as required.

The PSC's role is to monitor and support the delivery of the programme of works.

- KiwiRail - Group General Manager
- KiwiRail - General Manager Project Management Office
- Project Director
- KiwiRail – Technical and Representation (TBC)

6.1.1.3 Governance Reporting

As part of KiwiRail's project governance and management processes a Project Status Report (PSR) is prepared monthly by the Project Manager for submission to the PCG. The Programme Director will provide an overarching commentary on progress against key programme milestones focussing on exceptions, risks, impact on interdependent projects and plans to mitigate or manage the impact(s).

The PSR provides a dashboard of project performance highlighting areas of key performance including:

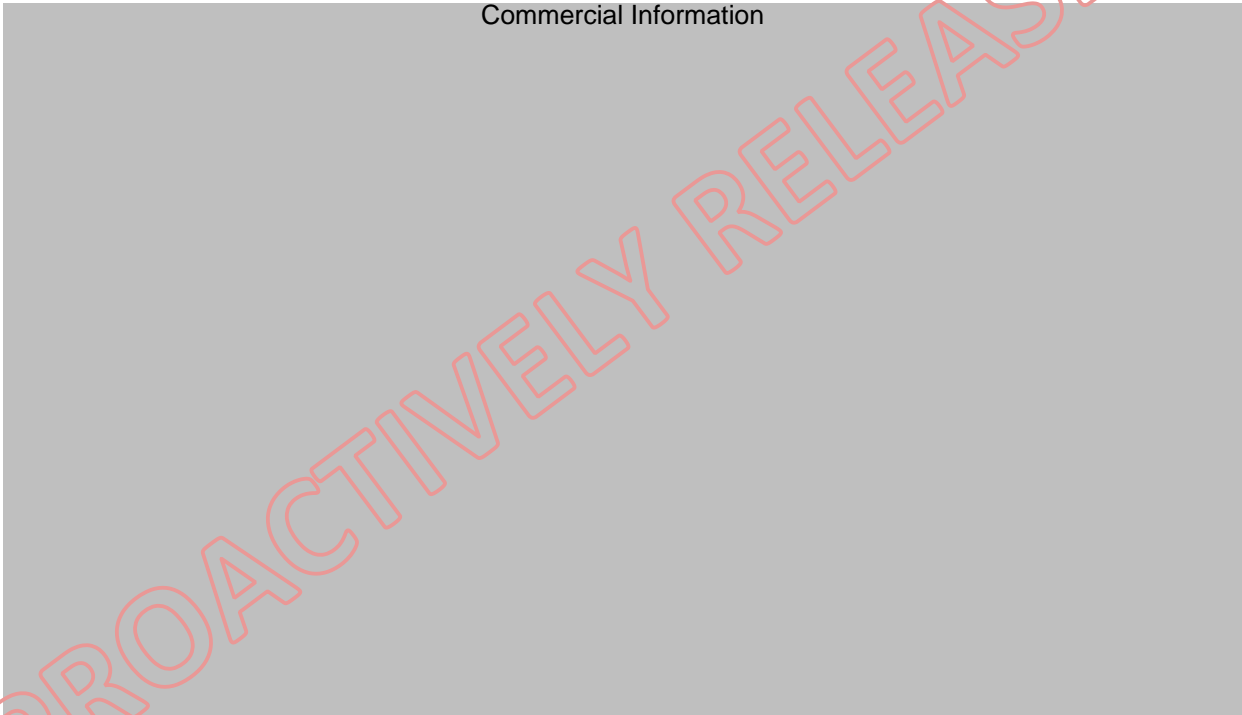
- Budget
- Programme
- Quality

- Stakeholders
- Risks
- Health & Safety and Environmental

The PSR provides an opportunity to raise key issues and opportunities. KiwiRail's existing processes determine that the PSC meets prior to the PCG and provides assurance to the PCG that the issues and opportunities identified in the PSR are being dealt with appropriately or may seek guidance should issues require other senior executive input and/or guidance. The PSR will be reviewed during the planning phase for the manufacturing and commissioning of this additional rolling stock and platform upgrades to ensure reporting addresses the needs of both organisations.

Figure 13: Project Governance structure and reporting

Commercial Information



6.1.2.1 Owners and Sponsors

The Executive Owners act as vocal and visible champions to their respective Executive Teams and Boards and are the ultimate decision-makers for the project. The Project Sponsors are ultimately accountable for the success or failure of the whole programme. They ensure that the project is focussed on achieving the business objectives and delivering on the forecast benefits.

Throughout the project they are responsible for the business case and need to be able to take a balanced view of the project on behalf of KiwiRail's interests – that is, maintain a “best for the network and programme” approach to Programme interactions and decision making.

6.1.2.2 Project Director

The Project Director is ultimately accountable for the success or failure of the project and must ensure that the project is focused on achieving its business objectives and delivering the forecast benefits.

The Project Director must ensure that the project gives value for money and adopts a cost-effective approach which balances the demands of the business, users and suppliers. Throughout the project

the Project Director is responsible for the business case and needs to be able to take a balanced view of the project on behalf of the wider organisation.

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Role of Project Director

The Project Director acts as the representative of the organisation, and plays a vital leadership role through:

- Providing 'championship' for the project, selling and marketing the project throughout the organisation
- Providing business expertise and guidance to the Project Manager
- Acting as the link between the project, the business community and perhaps most importantly, management decision making groups
- Acting as an arbitrator and making decisions that may be beyond the authority of the Project Manager
- Acting as chairperson of the Steering Committee.

Responsibilities of Project Director

Typically, the Project Director will be responsible for:

- Ensuring that the business need is valid and correctly prioritised
- Ensuring that the project is properly launched
- Ensuring that the project remains a viable business proposition
- Ensuring changes to the project are properly managed
- Ensuring risks are managed
- Establishing the project organisation, roles and reporting structure
- Ensuring the project is under control
- Approving key project deliverables
- Initiating project reviews and supporting the process of review
- Resolving issues (typically competition for resources and priority clashes) that are beyond the control of the Project Manager
- Resolving conflict and removing obstacles to progress
- Overall quality of the project, both the methods used to develop it and the end product.

During the life of any project, business circumstances may change considerably, making it impossible for the Project Manager to carry out his/her job. Examples are such things as changes of policy, adverse business conditions, etc. In such cases the Project Director is responsible for recognising and reacting to any such circumstances.

6.1.2.3 Project Manager

The delivery function of the project will be managed by the KiwiRail Project Management Office, and the Project Manager will report to General Manager of the Project Management Office.

Role of Project Manager

The Project Manager is responsible for developing, in conjunction with the Project Director, a definition of the project. The Project Manager then ensures that the project is delivered on time, to budget and to the required quality standard (within agreed specifications). The PM ensures the project is effectively resourced and manages relationships with a wide range of groups (including all project contributors). The Project Manager is also responsible for managing the work of consultants, allocating and utilising resources in an efficient manner and maintaining a co-operative, motivated and successful team.

Responsibility of Project Manager

- Managing and leading the project team
- Recruiting project staff and consultants

- Managing co-ordination of the partners and working groups engaged in project works
- Detailed project planning and control including:
 - Developing and maintaining a detailed project plan
 - Managing project deliverables in line with the project plan
- Recording and managing project issues and escalating where necessary
- Resolving cross-functional issues at project level
- Managing project scope and change control and escalating issues where necessary
- Monitoring project progress and performance
- Providing status reports to the project sponsor
- Managing project training within the defined budget
- Liaises with, and updates progress, to project board/senior management
- Managing project evaluation and dissemination activities
- Managing consultancy input within defined budgets
- Manage final approval of the design specification by technical lead(s)
- Working closely with users to ensure the project meets business needs
- Providing regular status reports to the Project Steering Committee

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6.2 Outline project plan

Below is a high-level timeline for the Hillside Workshops project.

Figure 14: High level timeline Hillside Workshops (Best Case)



The above timeline assumes KiwiRail's request for funding from the Provincial Growth Fund is approved and that the initial capital required is provided by

Commercial Information

6.3 Risk management

The Project Sponsor is responsible for ensuring that arrangements for the management of project risk are in place, together with the appointment of a Risk Manager. The risk register is to be continuously updated and reviewed throughout the course of the project.

A Risk Manager will be appointed for this project and a risk register will be created as a part of the project management framework.

6.4 Project and business assurance arrangements

This investment proposal has been assessed as low risk based on the following:

- KiwiRail have an experienced property development team;
- New Zealand’s freight distribution demands are increasing;
- Rolling-stock servicing and maintenance is a necessity to ensure a resilient rail focused market;
- KiwiRail’s current sites in Dunedin are underutilised – maximising their potential will support long-term commercial returns.

This proposal is also subject to independent quality assurance.

7 Next Steps

The following table details the proposed next steps following approval of this Business Case. This best-case timeline assumes funding is secured by Q4 2019.

INVESTMENT REQUIREMENTS	COSTS	Date
Demolition of the existing end of life, unoccupied building(s)	\$ <small>Commercial In</small>	Commercial Information
Commercial Information	\$ <small>Commercial In</small>	Commercial Information
Site Infrastructure Upgrade	\$ <small>Commercial Informa</small>	Commercial Information
Full Workshop upgrade (includes service connections, foundations and recial)	\$ <small>Commercial In</small>	Commercial Information
Interior upgrade	\$ <small>Comme</small>	Commercial Information
Overhaul of Heavy Lift Cranes and Traverser	\$ <small>Commercial In</small>	Commercial Information
Demolition of existing Amenity Block and Construction of new amenity	\$ <small>Comme</small>	Commercial Information
TOTAL	\$19.97m	

Decision Sought

Please approve KiwiRail's Business Case request to reinvigorate the Hillside Workshops in Dunedin, noting that this strategy aligns with a number of nation-wide, regional and KiwiRail strategies and supports key Provincial Growth Fund initiatives.

On behalf of the KiwiRail Executive Team

Name:

Signed:

Date:

Appendix A: Risk and Mitigation Table

Risk, Issues and Mitigation Table

KiwiRail have identified a number of high-level risks and issues. Where in the Mitigation it is stated 'note' this is to ensure that during further detailed investigation (i.e. the design stage), that these issues and risks are subsequently mitigated through planning and consideration.

Table 7: Risks and Mitigation

	RISK	MITIGATION
1	Commercial Information	All activities carried out on site will be done so in accordance with the Health and Safety at Work Act and Commercial Information
2	Sourcing a construction partner with the increased investment in Dunedin.	KiwiRail will commence the procurement process early to ensure that work is carried out before other major infrastructure projects such as the hospital do not impact on the project.
3	Heritage NZ oppose the demolition of end of life vacant buildings	There is no current Heritage interest in the site, KiwiRail will ensure they are engaged appropriately.
4	Commercial Information within the facility	KiwiRail will ensure that there is a current environmental plan in place for the duration of the project. Suitably qualified contractors will undertake the work and any Commercial Information
5	Time Constraints to undertake the work	KiwiRail will ensure that significant planning is undertaken in the front end of the project. This will include some contingency and will agree the timeframe with the contractor and put in performance management as part of the project.
6	Escalation of Costs	KiwiRail will ensure all planning is thoroughly undertaken, scoped and have fixed priced contracts in place where possible.
7	Requirement of Resource Consents	KiwiRail will be doing the work under their Rail Designation and do not anticipate the requirement of Resource Consents. KiwiRail will ensure that our Senior RMA Advisors are consulted before any work undertaken.
8	Additional works due to complicated integrated overall site.	It is possible due to the whole site being integrated in terms of services, this will be managed by ensuring that where possible incumbent contractors are used, the work is thoroughly scoped prior to work commencing.

Appendix B: Background

Background

In the Ministry of Transport's National Freight Demand Study 2014, the New Zealand freight task at the time was 236 million tonnes and was expected to grow 373 million tonnes by 2042 (an increase of more than 58%). This large increase takes the total freight task to the equivalent of about 67 tonnes each year for each person in New Zealand. Strong tonnage growth is predicted in the regions, showing that there is a very strong case for improving transport infrastructure and ensuring the means to provide essential maintenance and servicing to rolling stock.

KiwiRail's heavy-engineering, mechanical servicing Workshops, located at Hillside in Dunedin, have reached the end of their use by date. Commercial Information



Rehabilitation of Hillside provides the opportunity for KiwiRail to strategically consolidate its services and land asset portfolio in Dunedin. Commercial Information

Commercial Information

Commercial Information

Commercial Information

Current layouts of both sites are fragmented and disjointed - they are also nearing the end of their useful life. Significant investment is required to improve their efficiency, to create modern fit for purpose amenities and to upgrade the overall environment to today's improved standards.

Redeveloping the Hillside Workshops

Commercial Information

Investment of \$19.97 million in Hillside will be used to provide essential upgrade works and remediation of the South Islands only operational heavy-engineering servicing facility.

KiwiRail requires reliable rolling stock which is fit for purpose and meet safety standards. Without this investment, KiwiRail will not be able to maintain the life of its valuable rail assets or ensure the future of rail in the South Island.

The implications of not investing are counter to New Zealand's zero carbon goals; will not solve road congestion issues; and will simply transfer the challenges of rising freight, forestry, container and tourism rail services from one transport mode to another. Notably, analysis has shown that for every tonne of freight carried by rail, there are 66% fewer carbon emissions released compared to heavy road freight.⁶⁹

Of all the transport modes, rail has, in recent years, demonstrated the ability to make sharp improvements in speed, cost, capacity and emissions. It is the logical sustainable way forward.

⁶⁹ KiwiRail's Integrated Annual Report 2017