

2.01 KIWIRAIL DUNEDIN HILLSIDE WORKSHOPS

PGF Application		For: Approval	
Applicant:	KiwiRail Holdings Limited	Pipedrive ID #	Commercial Information
Entity Type:	Crown Entity / Government Agency	PGF Funding Sought:	Commercial Information
Region	Otago	Total Project Value:	Commercial Information
Tier:	2 - Sectors	Co-contribution:	Comm
Sector:	Heavy Engineering	Funding Structure:	Grant
<p>We recommend that the IAP:</p> <p>a) Approve \$19,970,000 from the Provincial Growth Fund (PGF) towards re-establishing Dunedin's Hillside Workshops as a mechanical hub and heavy-engineering facility providing key infrastructure to service KiwiRail's current rolling stock and to enable a more resilient and reliable rail network.</p> <p>b) Note this project strongly aligns with PGF and Southland and Otago Regional Engineering Collective (SOREC) objectives to rebuild capability, capacity and productivity of the engineering sector in Otago.</p> <p>c) Note this funding request is part of the agreed Ministerial PGF Southland/Otago engineering package.</p>			
<p>Proposal:</p> <p>Through Budget 2019, Cabinet agreed to provide Commercial Information to support rail investments. Commercial Information is being provided from the PGF for investment in regional rail initiatives. Investment in rail infrastructure is intended to enable KiwiRail and their rail network to become more resilient and reliable.</p> <p>One of the key sectors identified by the PDU for Provincial Growth Fund (PGF) investment is the Engineering/Manufacturing sector, with a particular focus on Otago and Southland regions. The RED Ministers endorsed this focus and officials were asked to develop a package that included a range of Engineering/Manufacturing investment opportunities.</p> <p>The PDU has been working directly with KiwiRail on its proposal to upgrade the Hillside Workshops and with the SOREC on how the PGF can assist the sector to rebuild some of the capability and capacity it has lost in recent years.</p> <p><i>Re-establishing the Heavy Engineering Facility</i></p> <p>The present condition of Hillside, which is the South Island's only operational heavy-engineering Workshop, is noted by KiwiRail as a key vulnerability for rail. KiwiRail notes in its application that it is essential the Hillside Workshops are invested in to ensure a reliable and resilient rail network through maximised and timely servicing of rolling stock.</p>			

Investment from the PGF would enable a site upgrade and the re-use of the larger 'heavy lift' building. Currently KiwiRail 'heavy lift' operates out of one building (Asset 1813) which is 4,000m².

The larger building of 7,000m² (Asset 1812) is not used for KiwiRail operations due to the poor state of the crane, floor, and pits. It also has asbestos issues and seismic concerns. Investment in the larger building would allow for the re-establishment of Asset 1812 which would enable operation of an additional 6 pits, allowing for a 50% increase in capacity at the site. Currently the Hillside site employs ^{Comme} people working fulltime on rolling stock or "units" (locomotives, shunt locomotives, wagons and carriages) in a 'heavy lift' workshop. The upgrade would enable work on ^{Comme} units, when currently KiwiRail can only work on ^{Com}.

The current site is impaired by aged buildings, contamination, and subsidence. The investment will specifically be used for:

- Demolition of end of life/unoccupied buildings.
- Some site decontamination and asbestos mitigation to Asset 1812.
- Workshop upgrades for buildings (Asset 1812 and 1813), including:
 - Recladding
 - Separation, upgrade and installation of site power supplies and fire protection
 - Upgrading infrastructure to current seismic standards
 - Remediate sinking floors and lay foundations
 - Upgrade and reconfigure adjacent rail track
 - Creation of pedestal roads
 - Creation of shunt servicing facilities

Essential interior upgrades for Asset 1812, including:

- Overhaul of the heavy lift crane (near end of life)
- Overhaul of the traverser (near end of life and had major breakdown in early 2019)
- Development of offices for Rolling Stock and Network Servicing teams, including affiliated car parking.

Additionally, with the upgrade to Asset 1812 refurbishment and re-fabrication of tourist carriages will be able to occur, 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.

Proposed Key Milestones

The table below covers the proposed high-level key milestones:

Project Activity:	Responsible:	Date:
Procurement, design and consenting	KiwiRail	Commercial Information
Demolition of building / Site decontamination	KiwiRail	Commercial Information
Workshop upgrade	KiwiRail	Commercial Information

Land Optimisation

KiwiRail note that there is currently a shortage of industrial space in Dunedin. Significant planned projects in Dunedin (for instance the **Commercial Information**) are catalysts to the demand for industry space.

The decontamination and upgrade of the Hillside site could unlock viable options for industrial businesses to locate on site. This would create a hub of aligned products and services in the engineering, mechanical, construction and manufacturing sectors.

Additionally, KiwiRail's land portfolio in Dunedin includes a site on Cumberland Street. Like Hillside, this site is not

optimised to its full commercial potential. KiwiRail’s freight partners at Cumberland Street are experiencing capacity constraints and want to lease additional space to service growing freight demands. This opportunity could be unlocked if KiwiRail and Dunedin Railway’s ‘Network and Mechanical Servicing Teams’ were relocated out of Cumberland Street and into the upgraded Hillside site, releasing space for commercial development at Cumberland Street to lease to key freight partners.

Māori partnership

Local iwi, Confidentiality, have expressed an interest in partnering with KiwiRail to develop the potential freed-up site at Cumberland Street.

This partnership could provide long-term commercial leasing revenue to the mutual benefit of iwi and KiwiRail. If this partnership was to go ahead then the construction phase of the project and the ongoing operations would present a number of employment opportunities.

Increased capacity unlocked

The base forecast revenue from the upgraded facility will be an extra Confidentiality within 5 years; this will be done by undertaking the following new work:

Area of new work	Key Benefits
Wagon bogie refurbishment	Increase of over 30% of the annual wagon bogie refurbishment programme (up to 100 bogies per annum). This work is currently undertaken at Confidentiality which increases the cost of work and means significant time delays in getting the bogies back in service (approximately one week versus one day if done at Hillside) This will also reduce transportation costs of assets being shipped across the Cook Strait
Additional locomotive work	Increase of the weekly throughput of locomotive work from 3 to 6. This will allow for maintenance activities to be carried out to improve the reliability of the South Island fleet including: <ul style="list-style-type: none"> • Rust repairs • Structural repairs • Component change-outs • Rough-riding repairs • General preventative and corrective maintenance
Reinstatement of the Paint Booth	This work is currently undertaken at Confidentiality which adds significant cost and time to any work. KiwiRail notes that if Hillside is reinstated there will be increased capacity and resilience by having two facilities nationally. This will secure capacity for painting rolling stock in the South Island, including: <ul style="list-style-type: none"> • Locomotives (paint is currently in poor condition causing rust issues and negatively impacting on KiwiRail’s brand) • Passenger units (currently vehicles have to travel across the Cook Strait to be painted, adding two weeks to the out of service duration)
Wagon maintenance and project work	The upgrade will productionise wagon project work including: <ul style="list-style-type: none"> • Log conversion projects • CC/CB crack repairs • UKK to EU conversions • IAB/IH crack repairs Increase preventative and corrective maintenance of wagons. Current output levels of Confidentiality wagons per week could increase to Confidentiality. Net result will be increased utilisation of fleet and additional revenue opportunities.

Southland Otago Regional Engineering Collective (SOREC)

The PDU has been working with the Southland Otago Regional Engineering Collective (SOREC) on how the PGF can

assist the engineering sector to rebuild some of the capability and capacity it has lost in recent years. Two key issues were identified - the need for capital to invest in modern and more productive equipment; and the need for more workers, both skilled and unskilled. The PDU has encouraged an approach focused on a coordinator type role. SOREC has applied to the PGF for ^{Commercial Information} for this role across three years. For the PDU that role is a critical part of the overall engineering package and will help not only the firms seeking funding for equipment but all Workshops (including Hillside) - especially with staffing needs.

Assessment against the PGF criteria:

Eligibility Criteria

This application is eligible for PGF funding.

Productivity Potential

The upgrade will be a catalyst to accelerating servicing levels and subsequently providing for a more reliable and resilient rail network.

KiwiRail notes that within 12 months of project completion the site workforce will increase from ^{Comm} to around ^{Comm} employees. This will likely be a mixture of skilled labour including Welding, Fabrication, Fitting, Machine operators, Electrical testing and diagnostics, shunting and vehicle refinishes. It will also include apprentices.

Upgrading both buildings will directly increase capacity (from 7 to 15 units), it will reduce lead times for servicing and improvements will increase the productivity of staff.

Policy objectives and regional priorities

The Engineering and Manufacturing sector has been identified by RED Ministers as a key sector for PGF investment. Linked to this is the identification that Otago and Southland are two regions which possess a high number of firms in this sector. Alongside this, the Hillside Workshops were identified as a key piece of rail network in the South Island needing investment.

While not yet public, the project aligns well to the objectives of the ORED Framework, specifically the objective to increase productivity of the region.

Benefits to the Otago region

The project is nationally driven with benefits to the organisation from an operational and resilience perspective, it does however complement local sector projects and the region. Over the last 10 years Dunedin has experienced an estimated ^{Co er} engineering and manufacturing industry job losses. This equates to an estimated value of ^{Co erc} ^{Commercial Info} of lost income per year, which could have been spent in the local economy.

Dunedin's March 2019 unemployment rate is ^{Comm} - higher than the New Zealand-wide rate of ^{Comm} (MBIE Regional Economic Activity Tool).

Upgrade to these buildings will directly impact on and increase workload and will unlock up to 100 highly skilled engineering jobs (including apprentices). KiwiRail note that this equates to an estimated value of ^{Commercial Information} ^{Commercial Inform} per annum and around ^{Commercial Information} generated, which could be spent in the local community.

PGF Criteria	Assessment Commentary	Rating (0✓ to 5✓)
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Link with fund and government outcomes

Creates permanent jobs	<ul style="list-style-type: none"> Hillside Workshops currently employs ^{Comm} staff. PGF support will enable the Hillside Workshops to hire around ^{Comm} more permanent staff in highly-skilled roles. This will increase to ^{Commercial} staff over 10 years. 	✓✓✓✓
Delivers benefit to the community	<ul style="list-style-type: none"> Indirectly, the creation of ^{Comm} new sustainable roles will have flow on effects to the local economy. Upgrade to the site will likely deliver an area where industrial business can co-locate around a 'hub' of aligned products and services in the engineering, mechanical, construction and manufacturing sectors. Unlocking the potential for collaboration and shared capacity. 	✓✓✓
Increased utilisation and returns of Maori asset base	<ul style="list-style-type: none"> Local iwi, ^{Confidentiality}, has expressed an interest in partnering with KiwiRail to develop the potential freed-up site at Cumberland Street. 	✓
Enhanced sustainability of natural assets	<ul style="list-style-type: none"> Not evident 	
Mitigation of climate change effects	<ul style="list-style-type: none"> The project promotes the continued use of rail which supports New Zealand in meeting its climate change goals. KiwiRail note that every tonne of freight carried by rail has ^{Comm}% fewer carbon emissions than heavy road freight. Sustainability and carbon neutrality will be a key component in the design and construction of the new facility. The initial development of the facility was in 1875, the evolution of technology will mean that the operational carbon footprint will be significantly reduced. 	✓✓✓
Additionality		
Adding value by building on what is already there	<ul style="list-style-type: none"> Engineering and Manufacturing is a strong sector in Dunedin which has been constrained due to the inability for companies to meet the demands through the lack of efficient equipment or aging facilities. 	✓✓✓
Acts as a catalyst for productivity potential in the region	<ul style="list-style-type: none"> With the upgrade of the Hillside site KiwiRail will be able to increase productivity and meet current demands to support rail network resilience and reliability. 	✓✓✓
Connected to regional stakeholders and frameworks		
Alignment with regional priorities	<ul style="list-style-type: none"> While not yet public, the project aligns well to the objectives of the ORED Framework, specifically the objective to increase productivity of the region. 	✓✓✓

	<ul style="list-style-type: none"> Over the last 10 years Dunedin has experienced an estimated ^{Commercial} engineering and manufacturing industry job losses. This upgrade will bring in around ^{Commercial} permanent jobs. 	
Support from local governance groups (inc. Councils, Iwi/Hapu)	<ul style="list-style-type: none"> KiwiRail has engaged with Dunedin City Council to ensure alignment with wider regional and community growth objectives. Local iwi, ^{Confidentiality}, has expressed an interest in partnering with KiwiRail to develop the potential freed-up site at Cumberland Street. This partnership could provide long-term commercial leasing revenue to the mutual benefit of iwi and KiwiRail. If this partnership was to go ahead then the construction phase of the project and the ongoing operations would present a number of employment opportunities. 	✓✓✓
Governance, risk management and project execution		
Robust project management and governance systems	<ul style="list-style-type: none"> KiwiRail has experience in delivering major projects throughout New Zealand (from ^{Commercial Information} metro upgrade projects and an annual capital replacement project of ^{Commercial Information}). KiwiRail note that it 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. The Project Team will be formed out of KiwiRail's 'Property and Capital Projects' teams. KiwiRail has a formal Project Management Office for delivery of major CAPEX projects. KiwiRail has in place a governance structure consisting of a Steering Group, Project Control Group, Mechanical Facilities Governance Board and KiwiRail Board. 	✓✓✓✓
Risk management approach	<ul style="list-style-type: none"> Risks around asbestos, procurement, time constraints, escalation costs, resource consents are identified with mitigations. 	✓✓✓
Future ownership / operational management	<ul style="list-style-type: none"> Existing arrangements. 	

Analysis of the benefits and costs

The key benefits of the proposal are the number of highly-skilled engineering jobs created and the increased capacity (from 7 to 15 units), reduction of lead times for servicing and facility improvements increasing the productivity of staff.

In addition, KiwiRail has implemented a sustainable outcomes framework to formalise social, economic, community and environmental outcomes. In accordance with the framework the project procurement will look at supplier's commitment to:

- a) Trainee development – with a focus on Māori, disadvantaged youth and long term unemployed for apprentices and trades training
- b) Employment of cadets, graduates and apprentices
- c) Local supply
- d) Sustainable environmental outcomes – carbon reduction, recycling, EV/hybrid vehicles, carbon offsetting

Financial Analysis

N/A – Government Agency

Funding Arrangements

A Commercial Information of Commercial Information.

While KiwiRail have requested a grant and PDU discussions have centred on a grant, it has been suggested (given that it is more of a commercial investment) that government could take up an equity position. Given that government owns KiwiRail PDU's view is that a grant is appropriate and is consistent with other PGF funded projects within government owned agencies.

Due Diligence and Ownership

N/A – Government Agency

Risk Assessment

The key risks to the PDU and proposed mitigations of this investment are as follows:

Type of risk	Risk description	Mitigations	Risk Rating L/M/H
Budget	That the cost estimate is inaccurate and the applicant may seek further funding, or be unable to complete the project in the agreed manner.	Agreed project plan and any overruns need to be funded by KiwiRail.	Low-Medium
Resource	The ability for the company to find employees to fill the roles may delay the productivity potential of the applicant.	While still in its infancy, SOREC will aim to work with engineering firms to understand the current employee shortages, and then work with tertiary educators, employment agencies, and social development agencies to fill the employment gaps. This will be critical as there is the potential for a project of this scale to take up majority of the	High

		roles that other engineering firms are seeking to fill within the region.	
Timeline	Delay in commencement of project.	Agreed project plan with mitigations in place around timelines and release of funds dependent on meeting project plan deadlines.	Medium

Consultation undertaken or implications:

Ministry of Foreign Affairs and Trade (MFAT) has no concerns over this proposal (verbatim)

Ministry of Transport (MoT) provided feedback to KiwiRail on the first draft of their Hillside Workshops Business Case, below are their comments. **PDU is awaiting feedback from them on the PGF application.**

Free and frank opinions

[Redacted]

Purpose of business case document

Free and frank opinions

[Redacted]

Additional benefits to region also needs more emphasis

As noted above, the PGF criteria focus on additional benefits to regions. Dunedin is within PGF scope as it is not an explicitly excluded metro. **Free and frank opinions**

[Redacted]

Strategic case

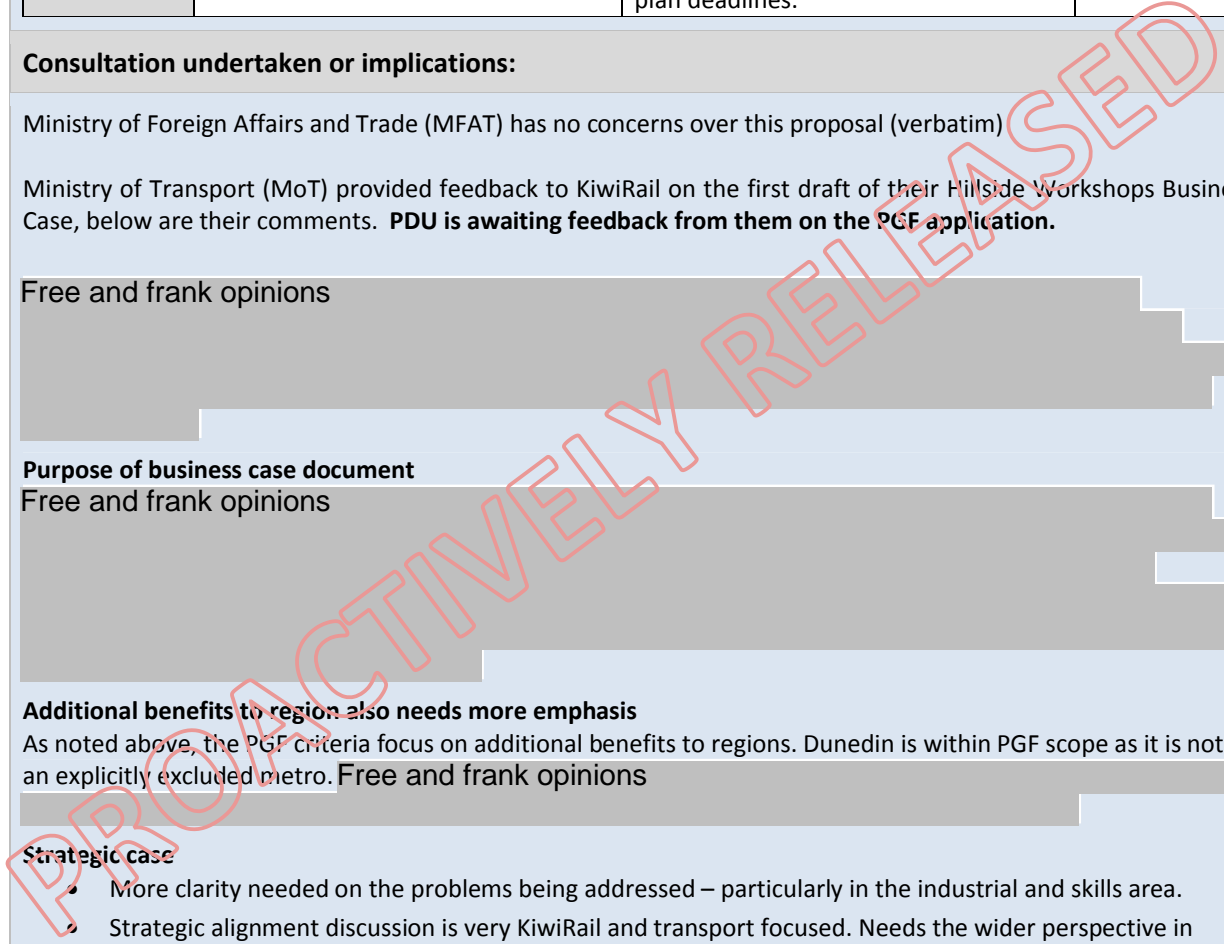
- More clarity needed on the problems being addressed – particularly in the industrial and skills area.
- Strategic alignment discussion is very KiwiRail and transport focused. Needs the wider perspective in terms of strategic document references and existing arrangements.
- Investment objective 2 (strategic employment) is good, but needs expanding beyond KR centric discussion.
- Investment objective 4 (Maori development) and Objective 5 (Land development) are good, but aren't adequately analysed in the subsequent economic and other cases.
- Main benefits (2.3) Needs the wider regional skills and industrial development perspective (limited discussion in Table 14) beyond KR benefits.
- **Free and frank opinions**

[Redacted]

Economic case

- **Free and frank opinions**

[Redacted]



<ul style="list-style-type: none"> • Free and frank opinions [redacted] 	
<ul style="list-style-type: none"> • Free and frank opinions [redacted] 	
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<ul style="list-style-type: none"> • Free and frank opinions [redacted] 	
<ul style="list-style-type: none"> • Free and frank opinions [redacted] 	
<p>Commercial case</p> <ul style="list-style-type: none"> • The front end of this section seems to belong in the strategic or economic case. • The commercial case should focus on the procurement issues. The property, skills and industrial development risks are inadequately explored. 	
<p>Financial case</p> <ul style="list-style-type: none"> • This is currently all about KR and Hillside only • How will the property, skills and industrial development proceed? What are the costs and who will fund these elements? • What are the revenues for Hillside from KR and others? 	
<p>Management case</p> <p>KR focused. Need addition of how the wider programme will be managed.</p>	
<p>General comments</p> <p>Free and frank opinions [redacted]</p>	
Supporting proposal:	Yes
Appendices:	Yes – Application [redacted] Commercial Information [redacted]
Author of paper:	HW, Investment Team