

## BRG Case for re-opening the South West Rail Line

### 1. Importance

Re-opening of the Picton-Bridgetown rail line (c.100km) to transfer the heavy haulage of lithium concentrate, and, desirably, wood chips from South West Highway to that line is a community imperative for restoration of the amenity of towns between Bunbury and Bridgetown.

The lithium concentrate currently moved by road is predicted to triple in quantity in the next few years. The number of outward heavily laden B-double trucks and inward returning trucks per day would then be approximately 1 every 3.5 minutes, 24 hours per day 7 days per week. That, coupled with similar movement of B-double trucks carrying logs and wood chips, is an unacceptable burden for those towns to bear. [["Rail option pondered to get lithium-laden trucks off highway", 'The West Australian' 19-20 January 2019, p129 \(pdf file\)](#)]

Given that the rail line is adjacent to the lithium mine at Greenbushes, and that prior to its closure in c.2000 had been ballasted to accommodate heavy haulage of wood chips, it is obvious that re-activation of the line to replace road haulage of lithium concentrate to the Bunbury port, Kemerton and Kwinana would be the proper course to follow. Furthermore, facilitating efficient transport of the high-grade lithium concentrate produced at Greenbushes would be in the national interest. It is a product of strategic and international importance in great demand.

As noted above rail infrastructure to enable rail transport of the Lithium product from Greenbushes to Bunbury and Kwinana already exists and the rail service from Kwinana to Picton and Bunbury Inner Harbour is today a modern heavy haulage freight and passenger railway, primarily used for the alumina industry.

Although the Picton-Bridgetown line is currently "non-operational" restoration of the Picton-Greenbushes section to a 19t axle load freight line capable of carrying 3 million tonnes of lithium traffic per annum is relatively straight forward and practicable -and cost effective ! ( It is understood that recent independent costing provided to Industry to reopen the Picton-Greenbushes line is in the vicinity of \$55m ).

The cost of restoring the remaining section ,Greenbushes-Bridgetown(c.20km), for light tourist rail use would be relatively insignificant. That part of the line was also upgraded for heavy haulage of woodchips.

### 2. Cost

The Government has obtained an independent expert report on the cost of restoring the neglected Tier 3 lines (\$1.096b) of the South West rail network and has announced that it will apply to Infrastructure Australia for contribution (\$513.5m) to the cost of restoring part of the Tier 3 lines. [["Tier 3 rail line hopes soar", 'The Countryman', 1 October 2020, p.5 \(pdf file\)](#)]

It appears that to obtain re-activation of part of the Tier 3 lines the Government will incur part of the cost. No doubt the Government will require an offset to that cost by demanding that third parties be given easier access to the improved lines. [["State seeks to clear up rail", 'The Countryman', 10 January 2019, p.11 \(pdf file\)](#)]

[["WA Government approves rail access changes", 'Infrastructure Magazine', 11 February 2020 \(pdf file\)](#)]

Communities served by the Picton-Bridgetown rail line should be able to expect that the cost of re-opening the line would receive similar consideration to that given to Tier 3 lines and inclusion in the State's application to Infrastructure Australia for the grant of funds to carry out an infrastructure project of re-establishing the State's South West rail network. Infrastructure Australia announced recently that the construction of a light rail connection between Fremantle and Murdoch (10km) is "a project of national significance".

[\["Transit link upgrade", 'The Fremantle Herald', 5 March 2021,p.3 \(pdf file\)\]](#)

It would seem to follow that a proposal to renovate the Picton-Bridgetown line to provide efficient daily transport to port and processing facilities of a high-quality strategic product in great demand internationally, and to deliver marked improvement in highway safety and in the amenity of communities, would also be accepted by Infrastructure Australia as "a project of national significance".

It is to be noted that in addition to expenditure on the Tier 3 lines the State Government will provide a grant of \$22m to CBH for improvement of rail facilities on the grain rail system.

[\["Labor vows \\$22m to CBH for upgrade of grain rail", 'The Countryman', 25 February 2021, p.16 \(pdf file\)\]](#) That would suggest that expenditure required to re-open the Picton-Bridgetown line can be accommodated.

The cost to restore the Picton-Bridgetown line would represent little more than 5% of the funds required for restoration of the Tier 3 line, with the knowledge that lithium haulage at around 2m-3m tonnes per annum would occur 52 weeks of the year (for at least 20 years),as opposed to seasonal grain traffic on Tier 3 lines carrying no more than 0.5 m tonnes per year

It is recognised that as a result of the Sale/Privatisation of the Government Freight Railways in 2000, a commercial arrangement between a number of parties -that would include the Government as a provider of funds to allow the re-opening of the said lines-is necessary.

It would appear that ,if left to the private industry parties ,ie Arc Infrastructure and Talison , little will happen to transfer this mineral traffic from road to rail.

It is clear that public , Local and State Government support is required for this to occur.

### 3. Cost of Highway Damage Caused by Heavy Haulage Trucks.

If the transport of lithium concentrate is not transferred to rail the Government will face continuing and increasing unrecoverable costs for constant repair of the South West Highway. The Highway between Greenbushes and Bunbury is not constructed to a standard to withstand the impact of such traffic.

Application of the "**Generalized Fourth Power Law**" to heavy truck movements on roadways shows that a B-double truck is 20,000 times more destructive of a road structure than a typical family car and dramatically reduces the life of the pavement. [\[Report of WA Parliamentary Select Committee on Heavy Transport, \(1996\) para 6.1.6 "Wear and Damage" \(pdf file\)\]](#)

[\["Trucks are destroying our roads and not picking up the repair costs", The Conversation, P Laird, 23 June 2017 \(pdf file\)\]](#)

Road damage is not limited to South West Highway, Forrest Highway between Perth and the South West is also impacted by unwanted triple trailer lithium trucks, and the severe "bitumen surface rutting "caused by these multiple axle heavy laden trucks is a major ongoing road maintenance cost ( paid by the public)

#### 4. Road Safety

The South West Highway between Bunbury and Bridgetown is well known for the road safety issues the route presents- significant hills, tight corners, blind spots, limited passing space and tourist traffic with caravans and trailers.

It is not a suitable road for concentrated numbers of laden B-double trucks.

As it is articulated trucks have been over-represented in road fatalities. During 2012-2013 articulated trucks were involved in 12% of Australia's road fatalities but only accounted for 3.2% of all vehicle kilometres driven.

[\["Too many loads on our roads when rail is the answer" P. Laird, The Conversation, 24 January 2018 \(pdf file\)\]](#)

The RAC supports the BRG submission that it is in the interests of road safety to shift this transport to rail. [\[RAC letter to BRG, November 2020 \(pdf file\)\]](#)

#### 5. Tourism and Tourist Rail Service

The towns on this line south of Bunbury from Dardanup to Pemberton have been longstanding tourist destinations and the tourist excursion trains that ran on the line before its closure in c.2000 were always very popular. At the time the line was closed an entity led by a former WAGR Manager of Passenger Rail Services, Leisure Rail WA, had prepared its business case for a quality tourist rail operation and was approaching introducing that service on the line.

For all towns on the line the rail journey passes through very scenic countryside attractive to both local and international travellers. Furthermore, those towns have major tourist attractions that would underwrite a regular tourist rail service: e.g. Bridgetown Blues Festival; Greenbushes Discovery Centre; Balingup Small Farm Field Day; Balingup Medieval Carnival; Balingup Golden Valley Tree Farm; Donnybrook Easter and Apple Festivals; Boyanup Rail Heritage Museum; Dardanup - Ferguson Valley and "Gnomesville".

All Australian states have tourist train operations and New Zealand markets its tourist train services internationally.

Tourism in the South West is experiencing substantial expansion and a regular tourist train service would be a natural element of tourism development if the line were re-opened. BRG has obtained an outline of a feasibility study for a tourist rail service and is seeking SWDC assistance in commissioning that study and the preparation of a business plan. Commencement of a tourist rail operation and the opportunity to link it with the "Australind" rail service would boost tourism and the economies of all towns on the line and further enhance Bunbury's position as a regional centre.

The prospect of commencement of such an operation would in itself provide sufficient justification for the Government to include the Picton-Bridgetown rail line in the proposed improvements to the South West rail network.

It is to be remembered that in contrast with the seasonal requirements of the Tier 3 lines lithium concentrate would be carried on the SW rail line 365 days a year and the chance to offset the costs of re-opening the line from the economic dividends delivered by a tourist rail service in the South West is not an outcome presented by expenditure on the Tier 3 lines.