

Rail Futures Institute

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Independent Review into the delivery of Inland Rail

SUBMISSION: FREIGHT TERMINALS IN MELBOURNE AREA FOR INLAND RAIL

This submission supports two contentions:

- (1) That the principal Melbourne area terminal for Inland Rail be provided at Truganina on the site provisionally reserved for the Western Intermodal Freight Terminal (WIFT) with a first stage of that facility available at the outset of Inland Rail operations; and**
- (2) That WIFT be provided with rail and road access by construction of the Outer Metropolitan Ring (OMR) linking Beveridge in the north with Little River in the south.**

OVERVIEW

Inland Rail, as currently conceived, has no terminal in Melbourne beyond the existing limited capacity facilities which are barely able to deal with existing demand. Without a full function Melbourne terminal, the Inland Railway will be hard pressed to achieve the modest market share penetration postulated in the business case. If history is any guide, inauguration of Inland Rail will provide a considerable 'bounce' in market share within a few years of starting, but without adequate terminal facilities rail will likely default on that opportunity. Having lost that opportunity there is a possibility is that it will be permanently lost, or at best market share penetration will be very muted compared to what would be possible with no terminal constraints.

BACKGROUND

Melbourne currently has a number of mostly inadequate terminals, all basically single company facilities that largely date back to the 1970s in their design and functioning.

South Dynon is the main base for Pacific National (PN), but even now is incapable of handling all PN's inter-modal traffic. There is no scope for expansion and the terminal is incapable of handling 1800 metre trains unless part of the terminal is blocked off while such a train is prepared.

North Dynon is QUBE's home base but does not handle inter-capital container traffic, other than overflow for PN from South Dynon. Aurizon did handle inter-capital containers at North Dynon until it relinquished that traffic around 2019. Now that Aurizon has acquired the South Australian based One Rail (which includes the Darwin line), it may return to inter-capital traffic although it will now have difficulty in finding terminal capacity in Melbourne.

SCT has their own private terminal at Altona North (Laverton) on the east- west route but involves a circuitous and inefficient route to connect with the north-south corridor towards Wodonga and Sydney. This site is also constrained although its capacity meets SCT's needs for the medium term.

Overall, the design of existing city terminals is sub-optimal in their physical area, capacity, their functioning and their location. The only freight advantage that the Dynon area terminals have is proximity to the Port of Melbourne (Yarra River) container berths and bulk grain handlers. Due to the Bunbury Street (Footscray) tunnel and other overline constraints, none of the existing terminals

can be accessed by double stack trains and, in the case of the Dynon area terminals, they could never do so without disproportionate cost and social disruption.

DOUBLE STACKING CAPABILITY

A key attribute of Inland Rail, other than its shorter and faster alignment, will be its capability to handle double stacked containers. At present this is restricted to west of Parkes and Adelaide to Perth and Darwin, but significantly, with Inland Rail overline structures on the east coast corridor modified to enable double stacking of containers between Melbourne and Brisbane.

Double stacking conventionally is accepted as reducing line haul costs by around 20%, an advantage that increases dramatically where route capacity becomes an issue. For a moderate length haul, such as Melbourne to Brisbane, a 20% reduction in line haul costs is likely to be a critical success factor in the inter-capital freight market.

The larger rolling stock outline, available on routes cleared for double stacking, is expanded upwards by more than 2 metres, enabling other innovative rolling stock solutions, such as SCT's 'Greater Freighter' vans which are only able to be used on such routes.

FREIGHT BUSINESS GENERATORS

Melbourne has a dispersed set of industrial clusters, which tend to focus much of the city's freight activity into discrete nodes – Western around Laverton/Brooklyn/Deer Park/Truganina; Northern centred around Campbellfield/Thomastown; North-Eastern around Bayswater/Montrose; Eastern around Dandenong and South-Eastern around Moorabbin. Approximately 60% of overall Melbourne metropolitan freight activity is in the Western area, largely driven by available land and suitable topography.

FREIGHT TERMINAL ATTRIBUTES

In the Melbourne context, a modern freight terminal must possess specific attributes if it is to meet today's service requirements and function efficiently. These include:

- A very large area of land available where trains of at least 1800 metres length can be handled. It also needs space to expand as demand grows.
- Ample space for warehousing and particularly cross-docking to enable on-site value-added activities.
- Capacity for sidings to warehouses enabling direct rail despatch/receival, minimising pick-up and delivery activity and associated cost.
- Good standard gauge rail access to the east – west route (Adelaide/Perth/Darwin) and the north – south route (Sydney/Brisbane). It may also have broad gauge connections, primarily for low volume and/or short haul domestic (within state) freight.
- Good road connections across Melbourne, particularly to industry nodes remote from the terminal's location.
- Capacity to provide facilities for rail shuttle services to the Port of Melbourne.

The terminal should operate in accordance with open access principles. A new major freight terminal will also release valuable land in the Dynon area that can be re-purposed for other productive use.

TERMINAL LOCATION OPTIONS

Two locations have been identified that meet the land area condition – at Truganina in western Melbourne and at Beveridge (near Wallan) north of Melbourne. The former is somewhat removed from existing standard gauge rail routes but is adjacent to the Outer Metropolitan Ring Road (OMR) corridor which is planned to run approximately 75 km from Beveridge in the north to near Little River in the south-west. The OMR corridor is a protected route having been part of the relevant Planning Schemes since 2010. The corridor has provision for up to four rail tracks and six road lanes, plus associated buffering. Importantly, the Truganina site is close to much of Melbourne’s western area freight generating capacity, including numerous warehouse facilities and distribution centres.

The alternative location at Beveridge is adjacent to the standard gauge main line toward Sydney and the parallel broad gauge line to Seymour and Tocumwal. However, it is an upland swamp area on the northern fringes of Melbourne and remote from the majority of Melbourne’s industrial and freight generating areas. Although located only 40 km north of the CBD, current road conditions incur around 10% of the road journey time from central Melbourne to Sydney. With the majority of freight activity generated in Melbourne’s west, road transfers to and from Beveridge would be on already heavily congested roads including the Hume Freeway and Metropolitan Ring Road (M 80). Its ability to attract freight to rail would be limited for freight on the north–south route and its location (compared with Truganina) would add some 60km and around 90 minutes additional transit time to rail freight destined for the east-west route.

In theory both the terminals proper, built to the same scope, would be at similar cost. The key difference would be the need to provide a standard gauge link via the OMR from the north – south route near Beveridge to the east – west route near Little River. There would be some offset to the OMR component by eliminating the significant cost of fixing multiple clearance issues to create double stack clearance between Craigieburn and Sunshine and then build a connecting link to the Truganina site. The Truganina site is also adjacent to the broad gauge Regional Rail Link passenger route to Geelong which can provide limited broad gauge freight capacity outside peak hours.

Irrespective, import/export trains currently running from Dooen (Horsham), Merbein (Mildura) and Griffith (NSW Riverina) will continue to run directly to the Port via existing lines, while passenger trains (Overland from Adelaide, XPT from Sydney, and V/Line trains from Albury) will continue to run via existing routes to Southern Cross Station. In both cases creation of an alternative route via the OMR would provide a welcome aspect of resilience, something that is notably in short supply on the current Victorian and National rail network.

SCT may be able to adapt clearances at two overbridges (at Laverton and Werribee) to enable double stack operation from their North Altona facility to the southern OMR connection near Little River, but only if the OMR route is built. The alternative would involve removal of their terminal to a new site which offers standard gauge access with double stacking capability – a high cost option which is unlikely to be commercially viable for the company.

CONCLUSION

Qualitatively, there is no contest – the Truganina site wins hands down in terms of location, being near the centre of majority freight activity in the Melbourne area and thus well positioned for

Inland Rail to garner an improved share of the freight market. The additional Capex required to create the OMR, including connections to Truganina, provides a long term solution to many of Melbourne's freight transport needs.

Alternatively, siting of the rail freight terminal at Beveridge, while marginally attractive to some freight to the north, will be of no interest to freight east-west. This terminal could not provide the key facility required for the Inland Railway to achieve the best prospects for long term viability.

In summary, provision of the future Melbourne rail and intermodal terminal, capable of handling longer term freight demand, along with associated rail and road connections, needs to be initiated as a matter of urgency. It will have a long lead time for design, necessary approvals and construction. This requires that the Commonwealth, in close collaboration with Victoria, commit to construction of the OMR and WIFT as soon as possible, move to acquire the necessary property and commence the required approval processes.

The facility needs to be operational with the inauguration of Inland Rail or as soon thereafter as is realistically possible.

ATTACHMENT:

Diagram of rail freight lines and terminals in Melbourne's West and North.

(Note: Potential connections to WIFT, other than via OMR, as shown on the diagram are no longer considered feasible).

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The Rail Futures Institute (RFI) is an independent non-partisan group. RFI was formed in 2013 to advocate cost-effective rail and intermodal solutions for public transport and freight problems based on sound commercial, economic and social reasoning.



- Legend**
- Outer Metropolitan Ring (OMR) Rail & Road Corridor
 - Metro Trains Melbourne (MTM) Electrified Lines
 - ⋯ Future MTM Electrified Connecting Lines
 - V/Line Non-electrified Lines
 - ARTC Interstate Lines
 - Proposed Melbourne Airport Fast Line
 - ⋯ Potential Western Interstate Goods Line (WIGL) Corridor
 - ⋯ Potential Westlink (former freeway) Corridor

Melbourne's West and North Rail Corridors and Freight Terminals