

# 2015 Conference



Intermodal Hubs Keys to Success





# Welcome

Cr Geoff White

Deputy, Chair Rail Freight Alliance



# **Opening**

## Shaun Leane MP

Parliamentary Secretary
to the Special Minister
of State at Parliamentary Secretary for Transport.





# What makes a successful Intermodal Hub?

### **Mr Simon Ormsby ARTC**

Executive General Manager Strategy & Corporate Development







#### RAIL FREIGHT ALLIANCE

**Simon Ormsby** 

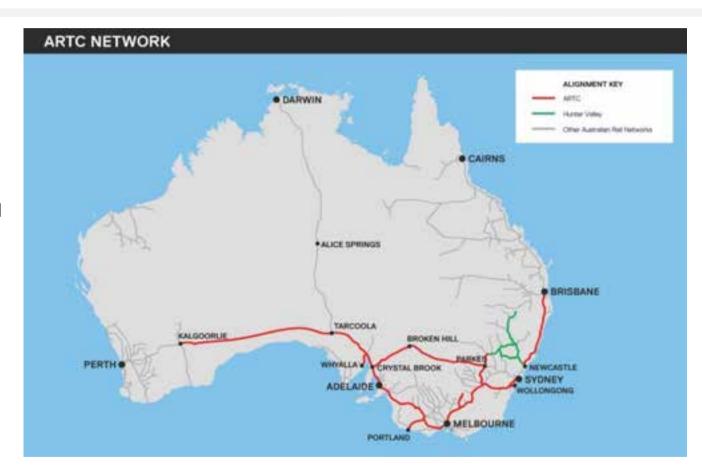
**Executive General Manager, Strategy & Corporate Development** 

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#### AUSTRALIA'S LARGEST RAIL FREIGHT NETWORK

- Controlling, operating and maintaining 8,500 kilometres of standard gauge rail infrastructure under freehold and longterm leasehold arrangements.
- Integrated manager of critical Australian infrastructure with the scale to deliver strong financial growth comprising of:
  - The Hunter Valley "heavy-haul" coal network and
  - The interstate mainline network (intermodal and general freight).
- The company employs around 1,150 staff located at 30 regional and city based locations across Australia (operating in all mainland states).





#### A HISTORY OF ARTC

**Company Establishment Phase** Infrastructure Investment Phase **Business Building Phase** Hunter Hunter Hunter Interstate Interstate Interstate Valley Valley Valley 32 Billion 50 Billion 60 Billion 100Mtpa 80Mtpa 150Mtpa **GTK** 2012 1998 2000 2002 2006 2014 2016 2004 2008 2010 Commenced · Initial access • 60 year lease NSW lease Commenced ARTC Agreement · Dedicated Freight · Renegotiated new terms with interstate covering undertaking of the NSW connection from extended to for Kalgoorlie-Perth Transformation with ACCC interstate and network for a 15 year term Program track in SA Kalgoorlie-Interstate to Outer include Port Perth **Hunter Valley**  Commenced Inland 15 year lease Harbour (Adelaide) Botany Rail Completion of Southern of the Interstate networks · 45 year extension of Terminal and Sydney Freight Line and Rail Interstate Network Victorian Lease network from lease of dedicated freight Commenced Dedicated Dual · Lease extended to deployment of ATMS network in Werris Creek to corridor to Port Botany Victoria gauge incl Narrabri/North · Woolworths commenced NTCS fully connection to Seymour to Albury Star its return to rail on the commissioned Port of and Interstate to Government North South corridor Melbourne Portland connection announcement of · SCT commenced moving • 60 year lease from initial works for treight between Melbourne NSW/QLD border to Melbourne to and Brisbane Brisbane (Acacia Brisbane Inland · Commencement of Ridge) Route Norther Sydney Freight Corridor

ARTC

#### **ARTC IS A UNIQUE ASSET**

World class, long-life monopoly asset  Forms a key link in the national logistics chain serving the needs of a strong and diversified customer base

Backbone of Australian transport infrastructure  Connected to all strategic terminals, regions, mining precincts, ports and capital cities in Australia

>\$6bn invested over last 10 years  Substantial investment to repair, modernise and upgrade the network to build a platform to grow the business

Strong financial performance record

- Profitable business
- Historically strong financial performance driven by economies of scale
- Positive financial outlook

Strong customer profile and aligned business structure

- Strong and diverse customer base underpinned by long term contracts
- ARTC has restructured its business, built a strong management team and it is now very focussed on business development and customer engagement to exploit opportunities in the supply chain

Well positioned for growth

- Outlook for rail industry in the 21st century remains very positive
- Network quality and available capacity will support further growth without further investment
- Real potential exists to invest in terminal developments to drive greater volume flows on to the network



#### **OUTLOOK FOR RAIL IN AUSTRALIA**

Positive
Outlook for
Rail in
Australia

Continued growth in freight transport market

Modal shift towards rail due to increase in urban and nonurban congestion

Focus on environmentally friendly modes of transport

Customer preference for rail as rail-based supply chains develop and improve











#### RAIL'S FOOTPRINT TO AUSTRALIAN PORTS

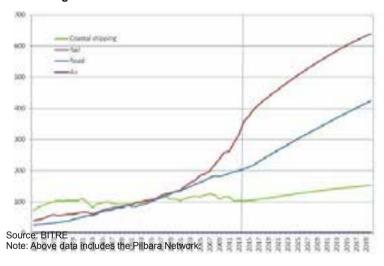


Source: Ports Australia Statistics 2013



#### STRONG FORECAST GROWTH FOR RAIL

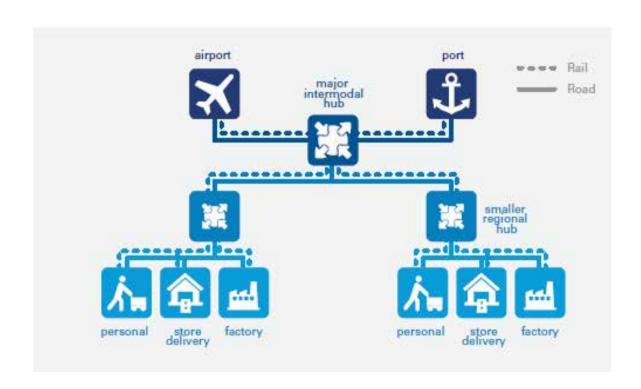
#### **Total Freight Estimates and Forecast**



- Based on BITRE data, Australian rail networks have sustained domestic freig decades
- Since 2000 the rate of growth in rail volume has increased strongly in large pa forecast to continue strongly over the next two decades.
- It is estimated that approximately one-fifth of freight rail volumes are hauled of
- Diversified range of commodities transported on the Interstate network include
  - Intermodal (58%)
  - Steel (11%)
  - Minerals (9%)
  - Passenger (8%)
  - Coal (6%)
  - General Freight & Other (5%)

Grain (4%).

#### **PURPOSE OF TERMINALS**



- Terminals are critical elements of freight supply chains
- Very few supply chains in Australia are able to use a single mode for transport without handling of freight
- Terminals allow for the optimal transport mix to be deployed
- Optimal transport mix determined by service offering sought at the lowest price
- Terminal usage will need to provide efficiencies to the supply chain



#### MODERN METROPOLITAN TERMINALS

#### **Characteristics:**

- Sites are freight precincts not rail only facilities
- Likely to provide facilities for Interstate and Import/Export (IMEX) container movements
- Significant land for co-located logistics and general freight activities provide for significant land uplift value capture
- Terminal requires direct access to Interstate rail network
- Terminal requires B-Double road access at a minimum
- Site would be appropriately buffered from residential land encroachment

#### **Potential Layout**

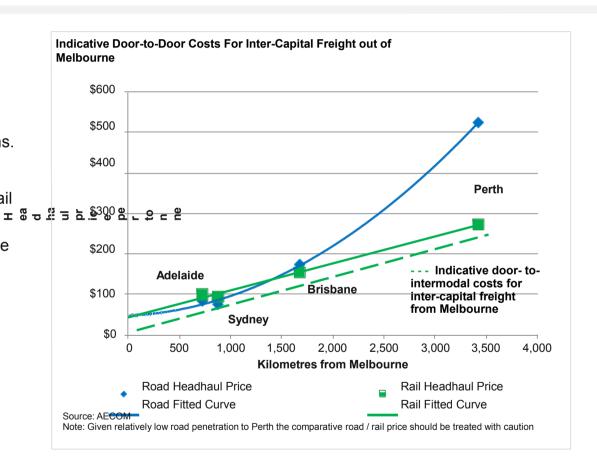




#### **RURAL TERMINALS**

#### **Characteristics:**

- Sites are integrated shipping container management facilities providing storage, handling and washing functions with direct rail access to ports.
- Close proximity to key regional agricultural, wine, mining operations.
- Volume: min 10,000 TEUs per annum.
- Provides an effective interchange from short road hauls to longer rail hauls.
- Typically a distance of at least 250-300 kms from a port for rail to be viable.
- Sufficient initial investment; Greenfield v Brownfield.
- Cater for seasonality/off-peak volumes.
- Competing channels e.g. rail v direct road transport.
- Meets economic and social objectives of Governments and the community.





#### CRITERIA FOR SUCCESSFUL TERMINALS

- A terminal should be both cost competitive and time competitive.
- The location of the terminal should ensure that the 'Pick up and Delivery' (PUD) component of the freight journey should be minimised to enable modal shift from road to rail.
- The savings generated the rail leg of the journey should be greater than the lift costs at the terminal end.
- If the terminal is not cost competitive, a minimum volume throughput is required to offset the fixed costs.
- A modern metropolitan terminal can cost upwards of \$50M to construct so the requisite volumes required to be commercially viable range from 300,000 TEU to 500,000 TEU annually.
- Support from local governments for land, statutory and strategic planning. In some instances, monetary incentives for infrastructure development may also be required.

#### ARTC

#### THE RIVERINA REGION

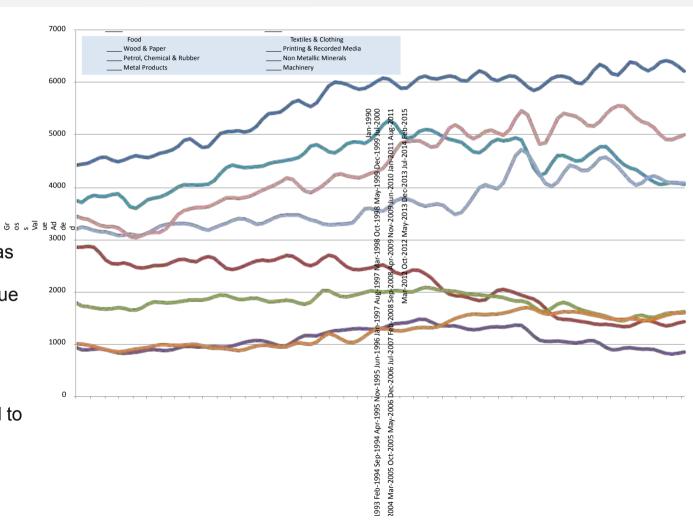
 For the last few years, ARTC has worked diligently to increase rail on freight in the Riverina region.

 ARTC believes that the Riverina offers extensive growth opportunities with contestable freight on a number of routes.

 As per the ABS National Accounts, Food has increasingly become the highest domestic manufacturing sector in terms of Gross Value Added.

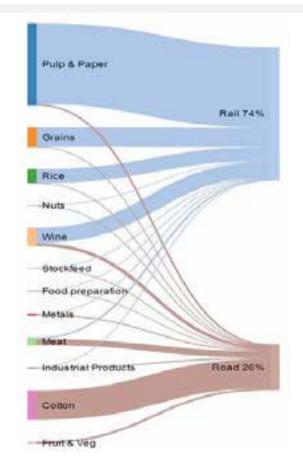
 Trains are ideally suited to conveying agricultural products to ports for export and to domestic processing centres.

ARTC



#### THE RIVERINA MARKET

- Cotton is viewed as the growth commodity in the Riverina as producers seek to move south to gain access to a guaranteed water supply.
- Underlying grain volumes have experienced growth in the past 30 years.
- Pulp & paper remains the highest commodity in volume terms.
- Increased grain planting and global demand for Australian agricultural products
- Improved grain yield forecast. Grain companies increasing supply chain investment to improve efficiencies



Rail & Road market share of Riverina export volumes by commodity



#### AN EXAMPLE RIVERINA TERMINAL

#### Premise: A rural terminal in Wodonga

- Freight to be moved from Wodonga to Melbourne.
- Using road, a fully loaded B-Double would cost approximately \$19 per tonne or \$160 per TEU.
- Using rail and excluding terminal & PUD costs, the total cost would be approximately \$12 per tonne or \$102 per tonne.
- This leaves approximately \$7 per tonne or \$58 per TEU to sustain the operating expenses associated with the road leg to the terminal, terminal operation and to recover any cost of capital associated with the terminal.

By Road		By Rail	
Fuel (excl Road User Charge)	\$ 6.03	Terminal	\$ -
Road User Charge	\$ 1.41	Crew	\$ 0.70
Labour	\$ 3.94	Fuel	\$ 3.66
Tyres	\$ 1.66	Wagon maintenance	\$ 0.30
Maintenance	\$ 1.70	Loco maintenance	\$ 0.91
Capital	\$ 2.58	Track access	\$ 2.12
Rego	\$ 0.54	Overheads	\$ 1.54
Insurance	\$ 0.17	Locomotive capital	\$ 1.95
Overheads	\$ 0.90	Wagon capital	\$ 0.86
Cost per Tonne	\$ 18.94	Cost per Tonne	\$ 12.04

Cost per Payload tonne - Road vs Rail



#### AN EXAMPLE RIVERINA TERMINAL

- Based on ARTC estimates, the total Riverina market is close to 4 million tonnes or 130,000 TEU per annum.
- Using a rail solution, a 10,000 TEU terminal would potentially have \$600,000 per annum in savings from a road solution to meet the operating expenses associated with the terminal and to recover capital costs.
- This would mean that either the terminal has to be a very low cost operation or that the total freight task needs to be substantially higher.
- One method of decreasing terminal cost is to locate the terminal onsite where the freight is produced, thus eliminating the initial PUD leg.
- Terminals are expensive to construct and maintain. Aggregating freight at a common terminal from nearby areas is a more cost-effective option compared to building multiple terminals.

#### ROLE OF ARTC IN TERMINAL DEVELOPMENTS

- ARTC is looking to participate as actively as necessary to achieve good terminal outcomes in metropolitan areas.
- ARTC supports a market-driven and commercial approach to terminals in regional areas.
- ARTC encourages and would facilitate open access at capital city terminals it is involved in.
- ARTC is proactively identifying and promoting integrated land-use / transport planning solutions.
- ARTC is focused on improving its commercial position and revenues through terminal developments.
- ARTC preference would be to limit its involvement to enabling connections to the ARTC network and providing capital for the main line. Each case would require to have a commercial focus







# **Morning Tea**Sponsored by SMEC



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## Dooen Freight Hub

#### **Mr John Martin**

Director of Technical Services Horsham Rural City Council





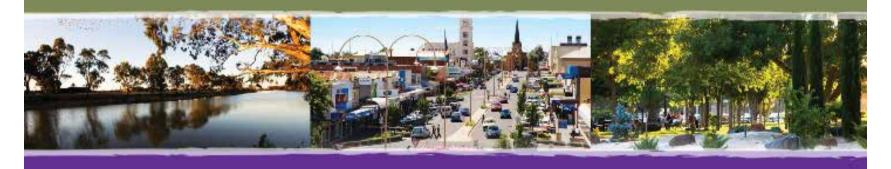


# immera Intermodal Freight Termin

WIFT

John Martin – Director Technical Services

4 September 2015



# WIFT

- History
- Regional Significance
- Successes
- Lessons Learnt





## WIFT

- Acknowledgements
  - David Eltringham former GMTS HRCC
  - Rodney Clarke founder of WCL
  - Allister Boyce WCL / SCT
  - All those who worked hard to deliver a project:
    - Costed at \$32 M,
    - On a \$9.5 M budget,
    - For \$17 M!





# WIFT-History

- Existing facility
  - Limited space for operations
  - Pavement failure
    - goods yard unsuited to heavier loads
  - Unsuitability for site development growth
  - Industrial use in urban area
    - Traffic, noise
    - Social barrier



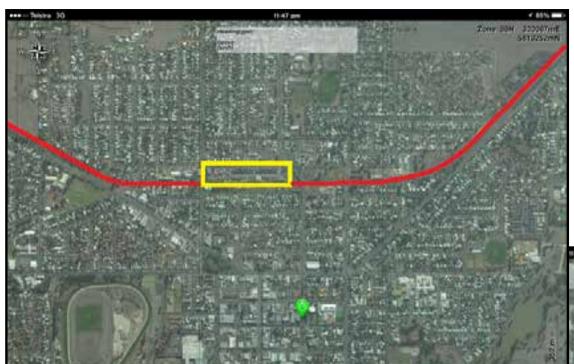


# WIFT-History

- Anticipated benefits
  - Improved operations
    - Reduced shunting
    - Longer trains up to 1800 m
    - More storage on site
    - More efficient container handling
    - Better OHS
  - Supports broader strategic objective of increased freight on rail
  - Distance from Melbourne 300 km makes Intermodal viable
  - Urban renewal















# WIFT-History

- Idea commenced development in 1999
- Feasibility Study 2002
  - Anticipated tripling in containers in 10 years
- Business Case 2006
  - Aimed to cater for 1800 m trains
  - Initially estimated to cost \$9.5 M
- Lobbying for support
- Funding applications
- Gateway review process
  - Dedicated project manager with relevant skills
  - Update costs / risks





## WIFT-Construction

- Initial budget \$9.5 M
- Initial tenders \$32 M
- Re-scoped
  - Second hand track, sleepers, office
  - Reduced rail infrastructure, cripple lines
- Completed for \$17.75 M
- Funding from Australian, Victorian Govts, industry, HRCC, Yarriambiack, Hindmarsh





## WIFT-Construction

- Separate contractors
  - Civil works Watpac
  - Tracks Downer EDI
  - Signalling ODG / ARTC
  - Roads Millers
  - PM GHD
  - Design Coffey Rail



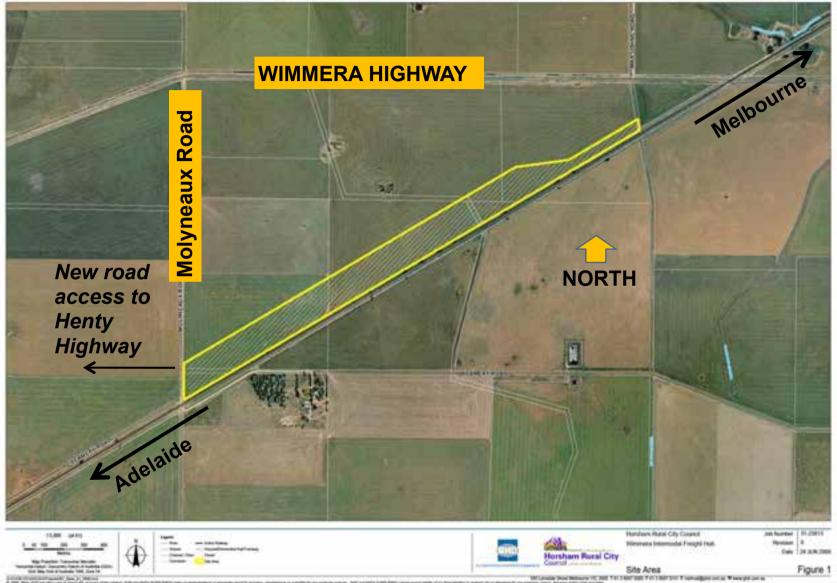


## WIFT-Construction

- 34 ha site
- 2.7 km long
- 200 m x 50 m concrete hardstand
- Fumigation area
- 2 main loading tracks, 950 m
- + third track











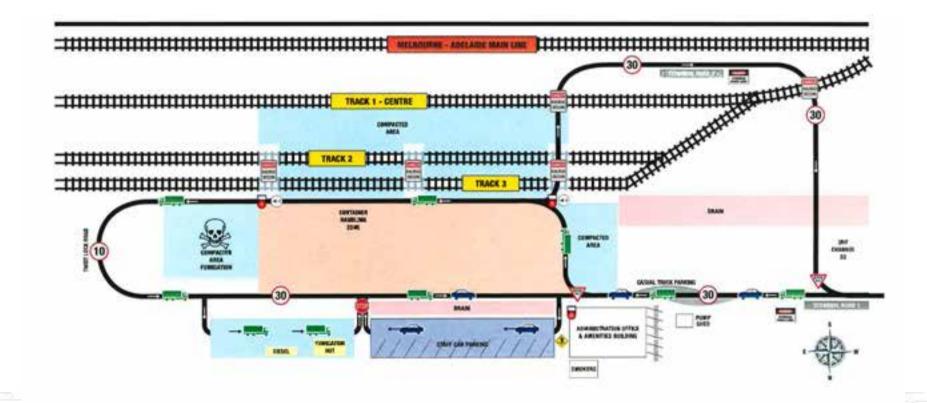






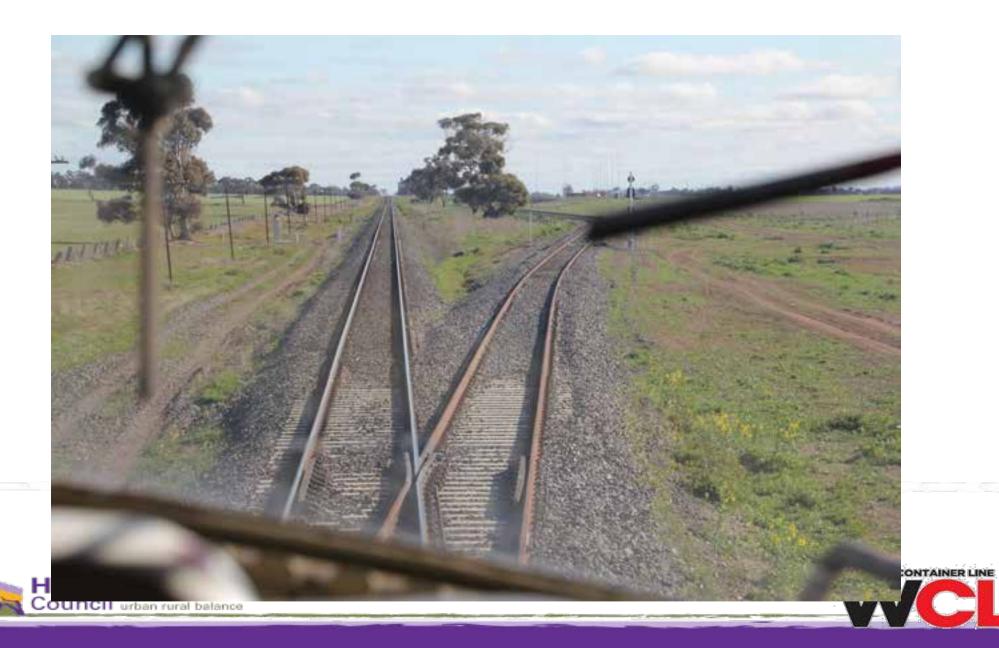












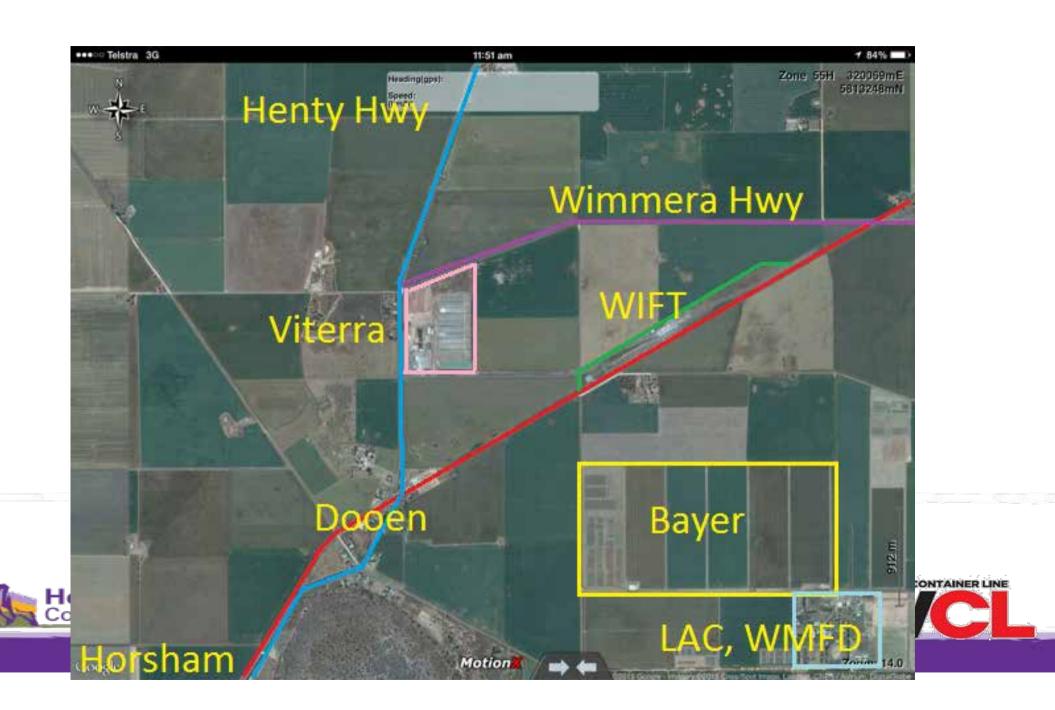


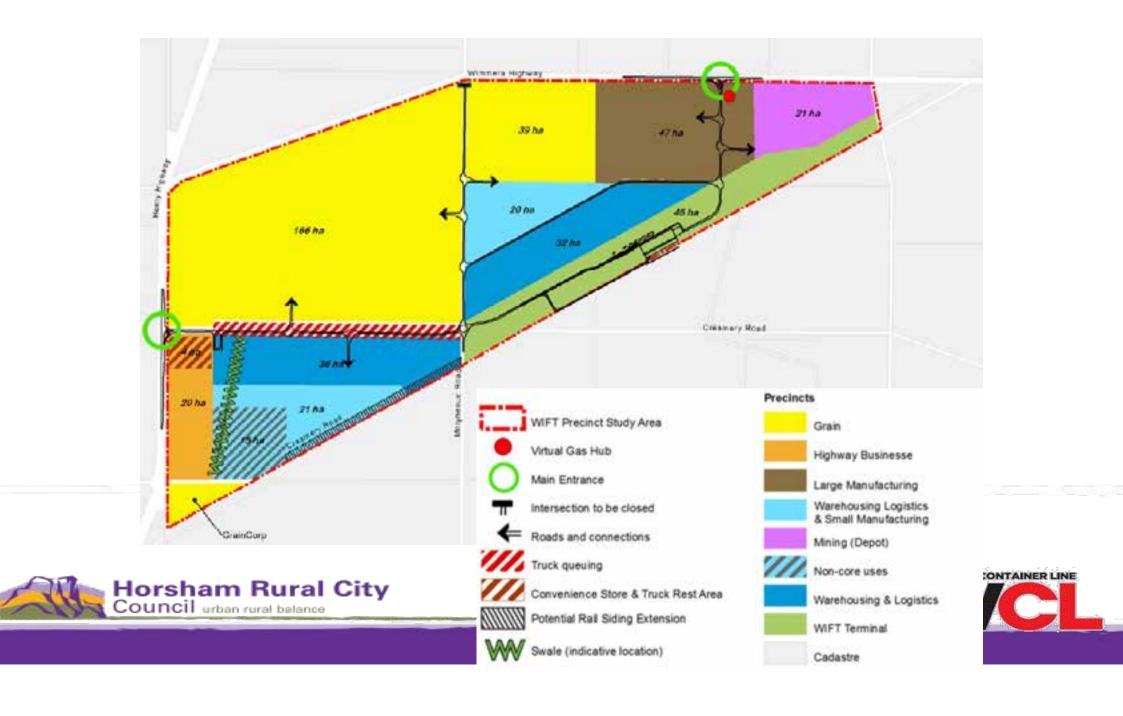
# W I F T – Regional Significance

- Central to regional grain production
- Located near junction of regional highways
- Significant existing local activity
- Further regional development
  - Mineral sands mines
  - Industrial precinct
- Horsham urban renewal
- Idea fostered by Wimmera Reg Trans Group
- Co-funded by neighbouring municipalities

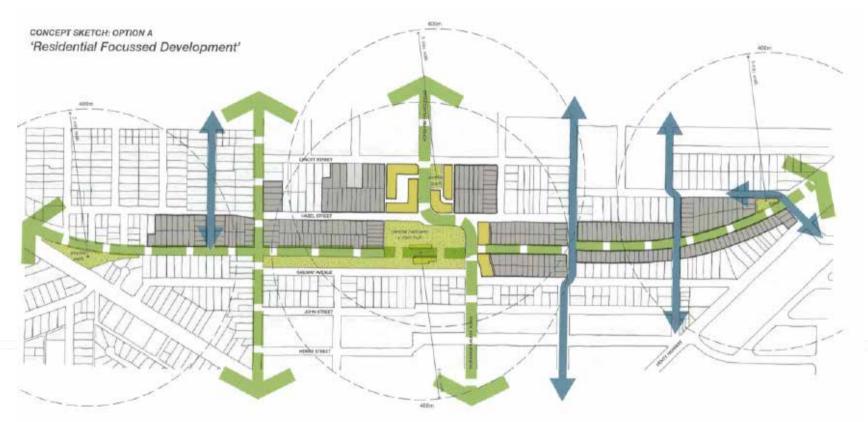








# **Urban Renewal**







#### WIFT-Successes

• 2014-15, about 14,000 TEU – drought a factor

Actual and Forecast Container Freight Transported by Rail (loaded containers/TEU per annum)

Containers	2004/05	2005/06 <sup>(1)</sup>	2010/11	2020/21
20ft	4,645	6,800	14,600	17,690
40ft	1,161	1,000	2,000	2,600
Total Containers	5,806	7,800	16,600	20,290
TEU	6,967	8,800	18,600	22,890

Source: Wimmera Container Line (actual) and Maunsell projections (forecasts)

\* Current freight includes.

- Grain 190 kt

- Hay 75 kt





#### WIFT-Successes

- Partnership with Governments and industry
- Open site multi-user 30 year lease
- Joint venture formed with SCT
- Operator satisfaction with site efficiency
- SCT direct port access with DP World





### WIFT-Lessons Learnt

- Too few funding milestones Council was bankrolling project for long periods.
- Final payment linked to ARTC Approval to Use took some time to finalise.
- Series of contracts, rather than a head contractor Council carried risk of managing interfaces (pros / cons)
- Continuity of project management (consultants) an issue
- Formation of a PCG with State / Federal representation a strong positive.
   Better communication.





#### WIFT—The Future

- Precinct Plan
  - Logistics and agriculture related industry
- Bulk Loading Facility
  - Trial has been conducted
  - Awaiting finalisation
- Mineral Sands
- Re-development of old site in town
- Owner/landlord of site should be VicTrack

















# **Gippsland Logistics Precinct**

**Geoff Hill** 

Manager Economic Development



Rail Freight Alliance Conference 4 September 2015

Geoff Hill

Manager Economic Development















# Overview

- Greenfield investment opportunity
- Located in the heart of Gippsland
- For transportation, logistics and manufacturing



- Latrobe City Council has had a long term interest and involvement in facilitating an "open access" intermodal freight terminal to meet the growing logistic needs of the Gippsland Region.
- \$10 million has been committed by the Victorian Government to support the development of this intermodal terminal known as the







- Precinct is comprised of two land parcels:
  - A 7.6 hectare site immediately adjacent to the main Gippsland Rail Line known as the Gippsland Intermodal Freight Terminal (GIFT); and
  - A 64 hectare parcel of land immediately adjacent to the GIFT. This site also abuts the Princes Freeway and key industrial areas.











- Why is Council interested in progressing this project?
- Why not just leave it to the private sector?





# Regional Context

- Latrobe City and Gippsland's future prosperity is firmly linked to effective utilisation and increased value-adding of our massive resource base.
- As we transition from an economy underpinned by being Victoria's energy provider to a more diversified economy, development and expansion of export markets will be fundamentally important to maintaining prosperity.
- There is significant international interest in a range of opportunities including coal derivatives, resource value adding and food production.





# Food production

- Already a large food producer
- Reliable rainfall and good soils,
- Increasing recognition of a need to increase capacity due to growing international demand and anticipated impacts of climate change in other traditional food producing areas





#### **Coal Derivatives**

- Pelletised coal
- Fertiliser
- Oils including diesel
- Gases including hydrogen
- Chemicals
- Biodegradable plastic





But.....

 The geography and transport infrastructure in and around Gippsland currently limits opportunities to move freight effectively.



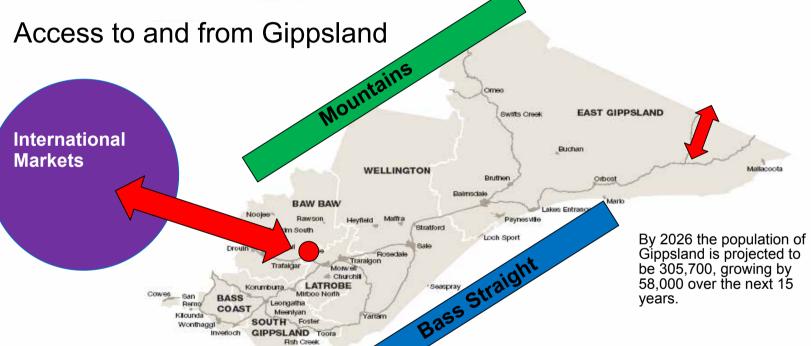


Advice from a major potential investor.

" 50% of the cost of freighting the value added product to China, would be incurred moving it from Latrobe Valley to a ship."











# **Project Status**

#### Key actions

- 2004-Purchased 68 Ha of land adjacent to the rail.
- 2005- Adopted a Master Plan for the site
- 2009- Prepared freight task analysis in 2009 indicating sufficient demand exists
- 2011- Secured rail siding via 45 year lease
- 2012- Freight and Supply Chain Assessment
- 2011- 2014- Undertook process to identify level of private sector interest in the project. Continued to negotiate with interested parties regarding opportunity.





### Project Status continued

- 2014- Secured \$10 million funding commitment from State Government for the Precinct.
- 2015- Council resolved to reopen Request for Proposal to attract private sector.
- 2015- Establishment of a Project Control Group (PCG)
  consisting of Victorian Government and Latrobe City
  Council officers to maximise the return to the community of
  the \$10 million investment.





# Freight Demand Analysis

 Overall Gippsland freight task estimated to increase from 16 million tonnes in 2012 to around 30 million tonnes in 2021.

Source: MCa/Maakan Survey and MCa estimates. Gippsland = 3 LGAs (Latrobe, Wellington, East Gippsland); coal based on projects and estimates of volumes and updates in Nov 2012

Gippsland Region	2012	2021	2021	2021
Freight Volumes	Gippsland	Gippsland	Coal & Minerals	Total
Freight Out	6,727,426	8,212,087	8,310,000	16,522,087
Intra-regional Freight	6,998,749	8,591,939	530,000	9,121,939
Freight In	2,503,810	3,505,334	800,000	4,305,334
Total	16,229,985	20,309,360	9,640,000	29,949,360





#### Precedence of Success







# In Summary

- Improved access to and from international and national markets is critical to Gippsland's future
- The Gippsland Logistics Precinct will play a significant role in achieving this goal.
- Considerable work has been undertaken to progress the development of the GLP
- The Victorian Government has committed \$10 million to support the development of the Precinct
- A Request for Proposals seeking private sector interest will be reundertaken, probably early next calendar year.







# Lunch Sponsored by AON



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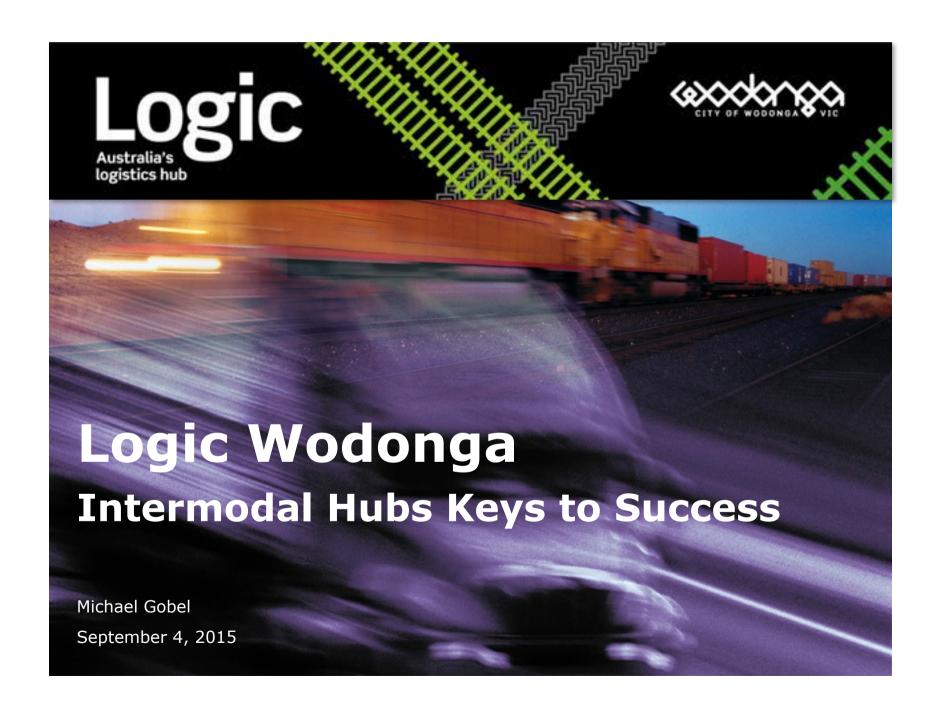
# Logic

#### **Mr Micheal Gobel**

City of Wodonga



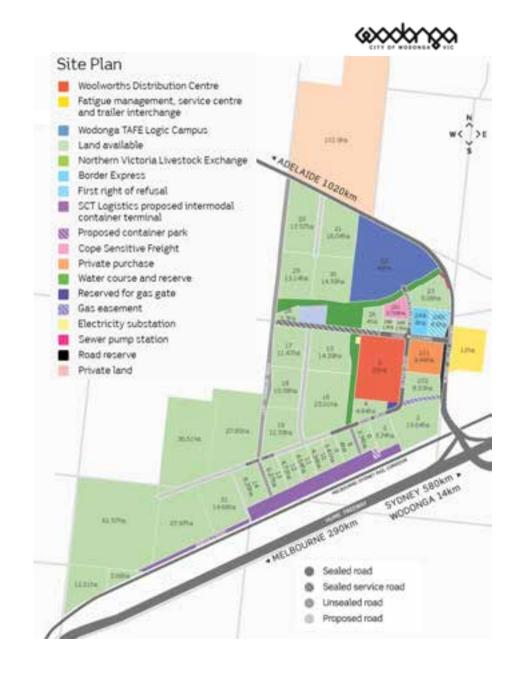






### **Key facts**

- Intersection of Hume Fwy, Murray Valley Hwy and Melbourne Sydney rail corridor.
- 567ha of Industrial 1 and Bus 4 zoned land.
- Over 115ha sold.
- Investment in excess of \$144 m.
- In excess of 520 FTE.





### Infrastructure and land

- Full interchange and existing road infrastructure.
- Power, water, gas, fibre optic available.
- Flexibility to customise site.
- Possibility of negotiating FRR on additional adjoining land.
- Capacity to operate 24/7.
- 1km buffer zone around Logic Estate.
- Competitive prices.





### **Intergenerational project**





### Pillar 1: Create Logic Wodonga. Secure anchor tenant

### Woolworths Distribution Centre: 60,000sqm facility









- Turns over \$2 billion of stock every year.
- Generates up to 450 truck movements every day.
- Supplies more than 75 outlets across northern Victoria and southern New South Wales.

### **Ancillary Tenants**

Border Express: 7,500sqm warehouse







# **Pillar 2: Secure additional tenants**

### Wodonga TAFE National Industrial Skills Training Centre







# Pillar 3: Secure FMC and Trailer Interchange

24-hour service station, fatigue management centre and trailer interchange including 45 B-double and B-triple bays.







# Pillar 4: Provision for the development of rail terminal







### Regional significance

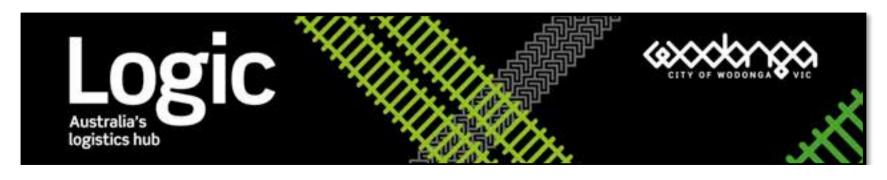
- Major economic development driver Investment and jobs
- Major portal for inbound and outbound freight (both road and rail)
- Providing alternatives to road freight transport
- Synergy of integrated freight activity assets improving efficiencies of the regional rail freight task
- Competition





### **Keys to success**

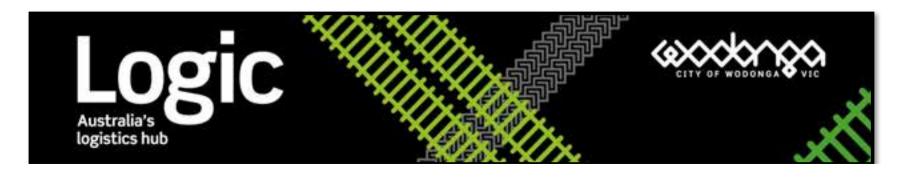
- The four pillars:
  - Secure anchor tenant with ancillary tenants
  - Secure educational provider
  - Secure fatigue management centre and trailer interchange
  - Provision for the development of a rail intermodal terminal
- Strategic location; both regionally and nationally
- Site geography
- Alignment with Federal, State and Local Government policy
- Staying the course to the vision
- Commitment by Wodonga Council





### **Lessons learned**

- Managing stakeholder expectations (community)
- The long gestation period of the project
- Bringing all levels of government along on the journey; including the community
- Structuring risk mitigation:
  - Governance models
  - Ownership structure
  - Contracts with purchasing parties
- Partnering with third parties that are aligned to the vision





### Importance of local government

Local Government, the:

#### **VISIONARY**

Establishing a vision around the aspirations of the community

#### **PLANNER**

- Recognising our competitive advantages in the region
- Developing a plan that leverages off those advantages

#### **INVESTOR**

Seed capital to catalyse private investment

#### **FACILITATOR**

Attracting quality companies aligned to the vision of the Logic development



### **Conclusion**



- Eleven years in the making.
- Regional significance in the terms of investment, jobs and the role Logic plays in the region.
- Many factors behind the success of Logic.
- Multitude of lessons learned.
- Key role of Local Government in catalysing the investment.







### **Parkes National Logistics Hub**

Mayor, Cr Ken Keith

Parkes Shire Council

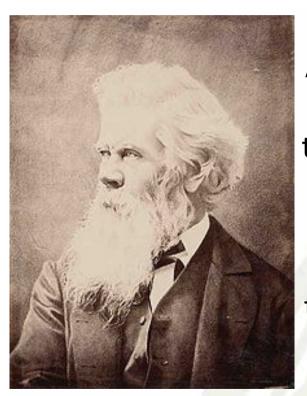




# Parkes National Logistics Hub

Chair of MBIRA
Cr Ken Keith OAM
Mayor Parkes Shire Council





"...they had now, from South Australia to Queensland, a stretch of about 2,000 miles of railway, and if the four colonies could only combine to adopt a uniform gauge, it would be an immense advantage in the movement of troops, as well as in the operations of commerce and the various pursuits of society...".

October 1889, Sir Henry Parkes



### **MBIRA History**

The Melbourne to Brisbane Inland Rail Alliance (MBIRA) was formed after the 2006 Rail Symposium held in Parkes

### **Current Executive**

Chair: Cr Ken Keith OAM (Mayor Parkes Shire Council)

Deputy Chair: Cr Sue Price (Deputy Mayor Moree Plains

Shire Council)

Executive Member Victoria; Reid Matthews (Executive

Officer - Rail Freight Alliance)

Executive Member Queensland: Cr Paul Antonio (Mayor

Toowoomba Regional Council)

Secretary: Kent Boyd (General Manager, Parkes Shire

Council)

 Successful Inland Rail Symposiums have been held in Parkes in 2006 & 2012 and Moree in 2013 and Toowoomba 2015



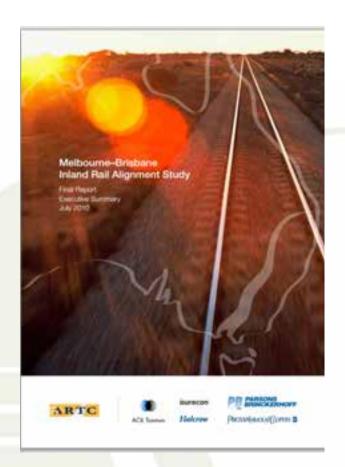
### **MBIRA Advocacy**

• 2013 Federal Election

 \$300 million Federal Government commitment to Inland Rail

 November 2013 the announcement of the Inland Rail Implementation Committee headed by former Deputy PM John Anderson AM







## **Stakeholder Consultation**

- Transport and Logistics Industry
- Ports
- Agriculture
- Local Government
- State Agencies



# **Double Stacking Monkey's**



# **Moving Forward**

 First tender awarded in July 2015 to provide environmental and engineering consultancy in NSW



- Local planning of the Route
- Regional Development along & adjacent to the Route
- Encourages development of Industry
- Relieves the pressure on Sydney & the coastal route
- Freight is set to double by 2020 and triple by 2050 and local Government needs to plan for this
- Improves the cost competitiveness of agriculture



# **Parkes National Logistics Hub**

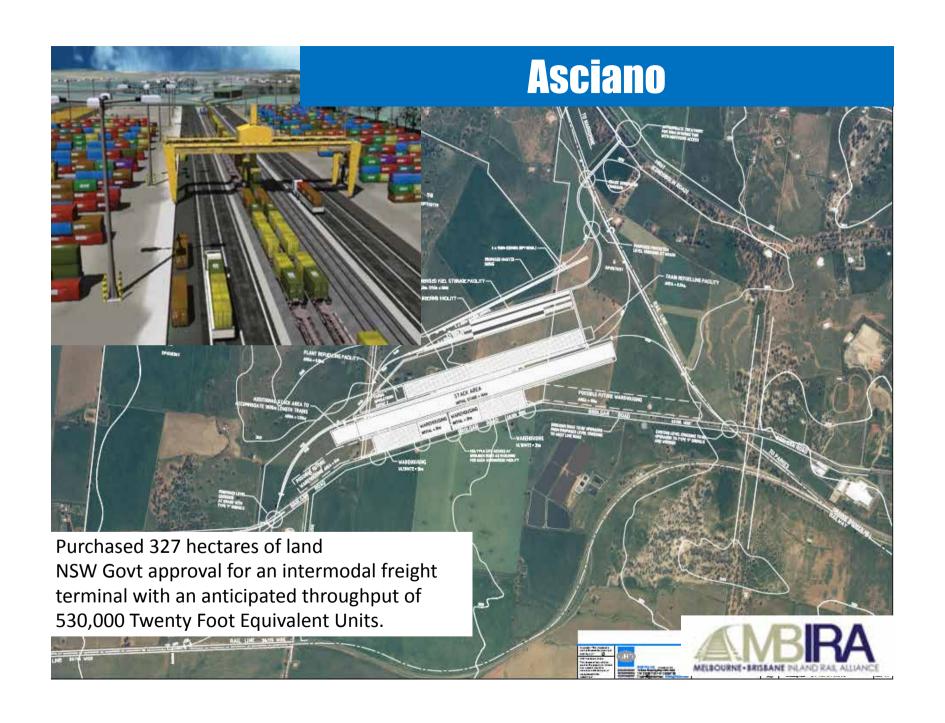




### **Linfox Parkes**

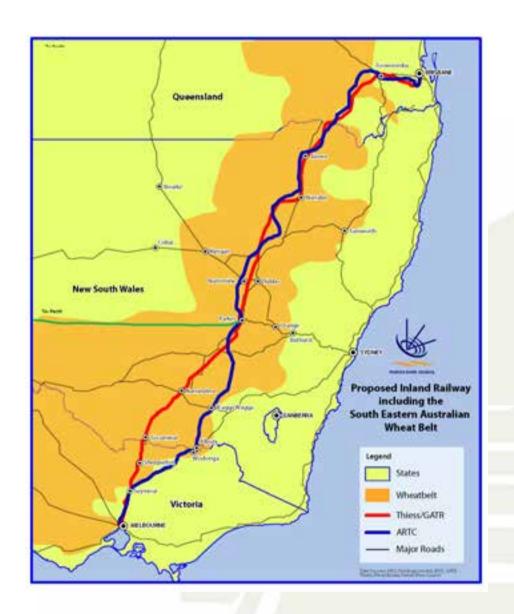






- Local planning of the Route
- Regional Development along & adjacent to the Route
- Encourages development of Industry
- Relieves the pressure on Sydney & the coastal route
- Freight is set to double by 2020 and triple by 2050 and local Government needs to plan for this
- Improves the cost competitiveness of agriculture







BUT there is still a long way to go.

Local Government NEEDS to play a major role in the development of the Inland Rail – Especially if it is to leverage from

"the Corridor of Opportunity"



# Lobbying



Thank you verrry much...





### **CONCLUSIONS**



Intermodal Hubs Keys to Success