

2014 Rail Freight
CONFERENCE

10 October 2014
Grand Hyatt Melbourne



Welcome and Official Launch of RFA Website

2014 Rail Freight
CONFERENCE

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Grand Hyatt Melbourne



Introduction

Brett De Hoedt

2014 Rail Freight
CONFERENCE

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Welcome
Cr Mark Byatt
Chair, Rail Freight Alliance

History of Rail in Australia: Where are we Today and where does Australia Sit Globally?

Hon. Tim Fischer AC
Former Deputy Prime Minister



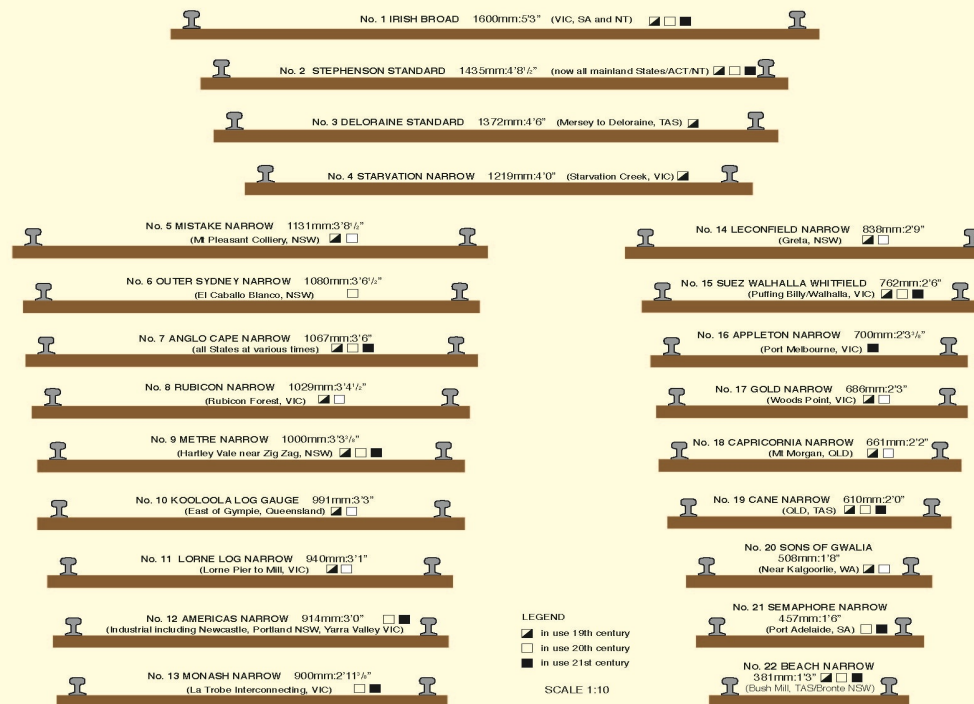
TIM
FISCHER'S



GREAT AUSTRALIAN RAILWAY GAUGES

Past and Present

1831 - 2004



Top left:
Albury Station,
Locomotive 3830

© Tim Fischer 2003

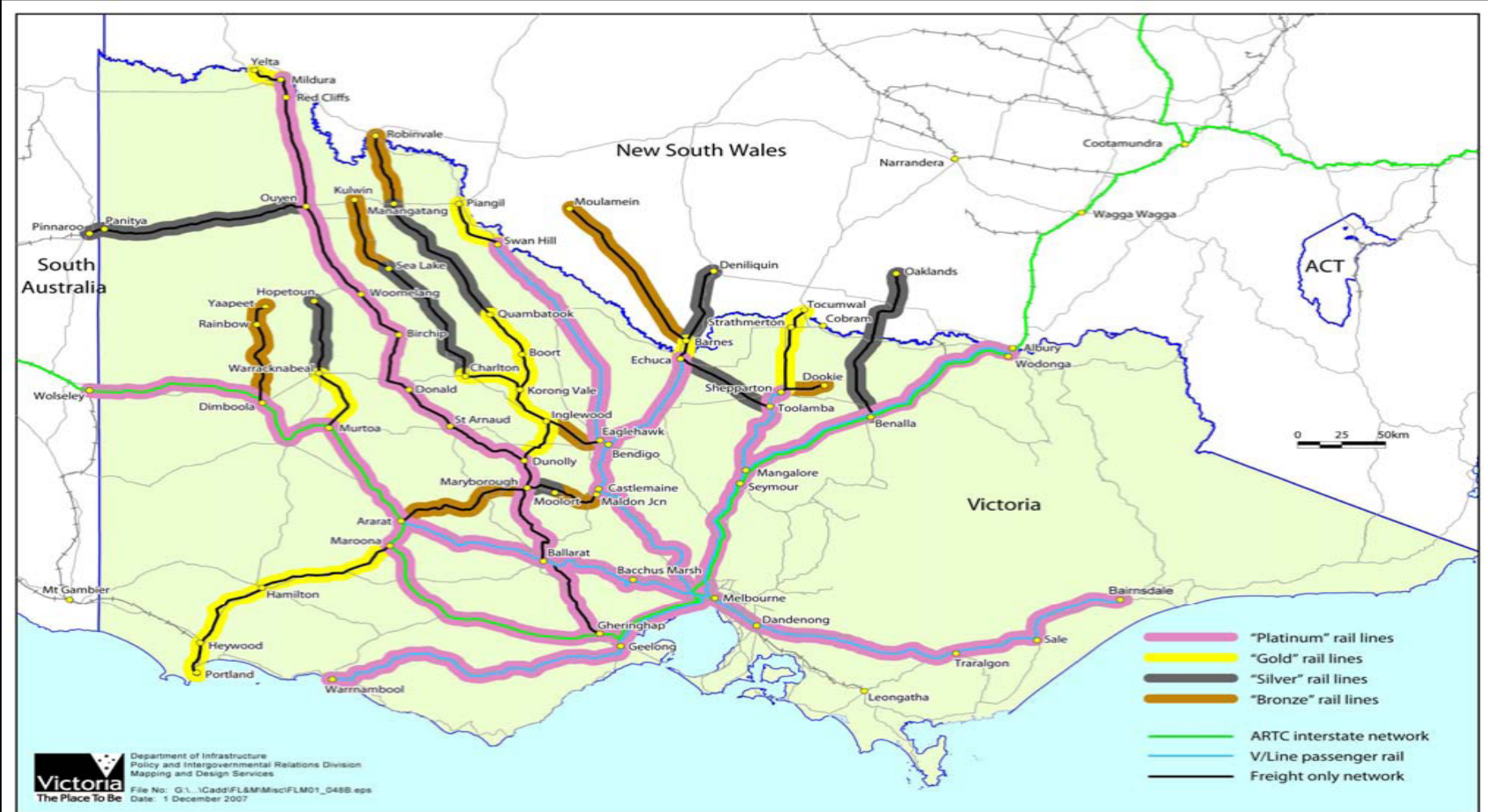
Top right:
Wahalla Goldfields Railway

The gauges listed above reflect measurement of inside rail to inside rail and arise from railways which have operated or are operating 1 mile or more (1.6 kilometres or more) in Australia since 1831 when Australian Agricultural Company built Australia's first railway in Newcastle, NSW to export coal. Only Anglo Cape Narrow operates in all States, Stephenson Standard operates in all mainland States, and to Darwin with FreightLink and The Ghan in 2004.

Poster proceeds in part to the ARHS and Don River, Hotham Valley, Mt Morgan, Old Ghan, Pichi Richi, Walhalla and ZigZag Railways.

Tim Fischer (email: famu@bigpond.com)






 Department of Infrastructure
 Policy and Intergovernmental Relations Division
 Mapping and Design Services
 File No: G:_Cadd\FLM\Misc\FLM01_048B eps
 Date: 1 December 2007













REV A					MELBOURNE - BRISBANE INLAND RAIL MELBOURNE TO BRISBANE ALIGNMENT STUDY CONFIDENTIAL - FOR DISCUSSION ONLY				AMEND NO: 1 - A							
<table border="1"> <thead> <tr> <th>REV</th> <th>DESCRIPTION</th> <th>BY</th> <th>CHKD</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>					REV	DESCRIPTION	BY	CHKD	DATE						SCALE: 1:4,500,000 (at A3)	DESIGNED: DRAFTED: APPROVED FOR USE: DWG: JC JL CHECKED: TR TR
REV	DESCRIPTION	BY	CHKD	DATE												

IN CONSULTING COPY ONLY

Victorian Policy, Direction and Commitment

Gary Blackwood MP
*State Member for Narracan, Parliamentary
Secretary for Transport*

Rail Freight Futures Australia
Victorian Policy, Direction and Commitment

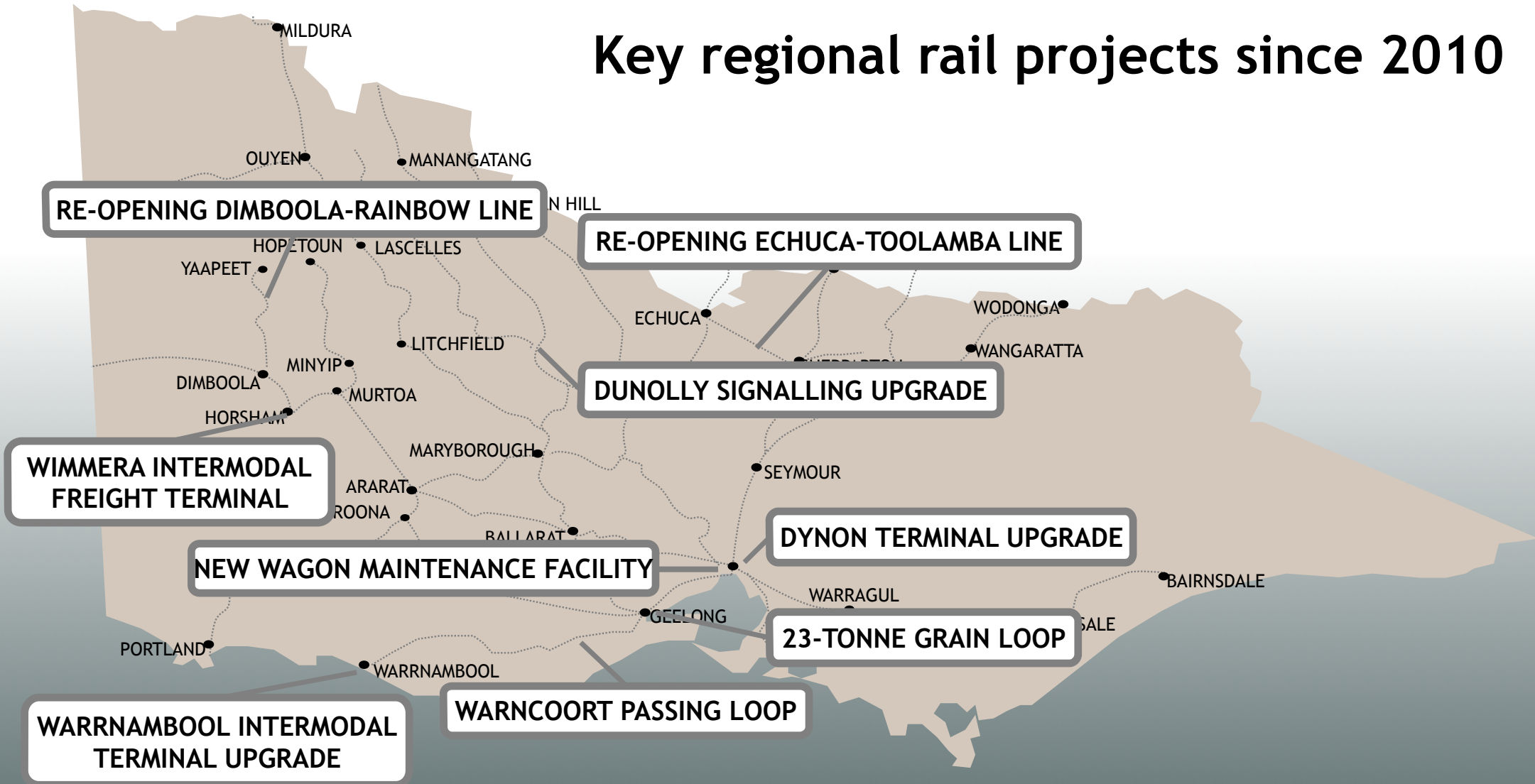
Gary Blackwood MP
Parliamentary Secretary for Transport



DEPARTMENT OF TRANSPORT,
PLANNING AND LOCAL INFRASTRUCTURE



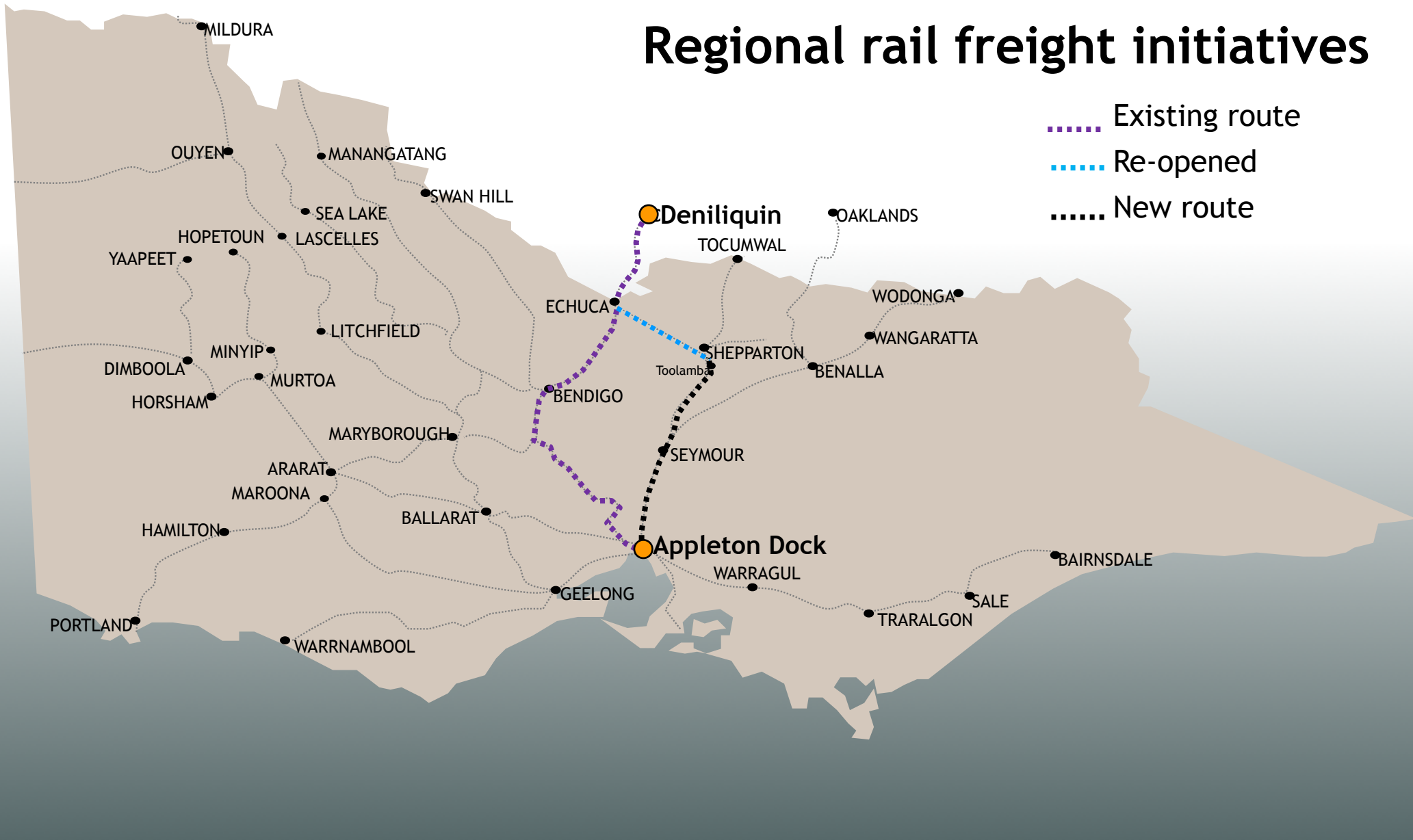
Key regional rail projects since 2010



Re-opening the Dimboola-Rainbow line



Regional rail freight initiatives







DEPARTMENT OF TRANSPORT,
PLANNING AND LOCAL INFRASTRUCTURE



Mode Shift Incentive Scheme



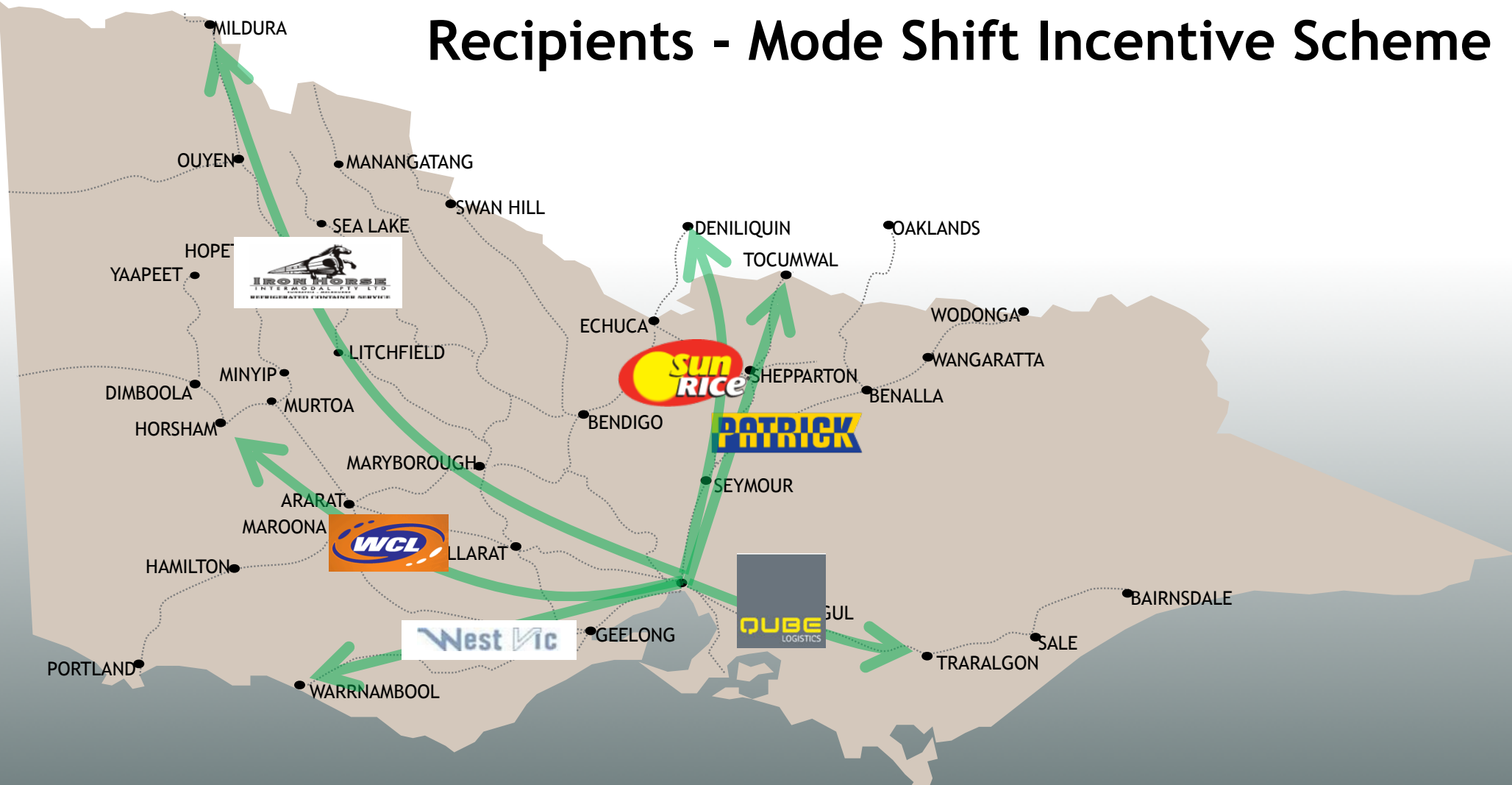
Market-based incentives



DEPARTMENT OF TRANSPORT,
PLANNING AND LOCAL INFRASTRUCTURE



Recipients - Mode Shift Incentive Scheme





DEPARTMENT OF TRANSPORT,
PLANNING AND LOCAL INFRASTRUCTURE

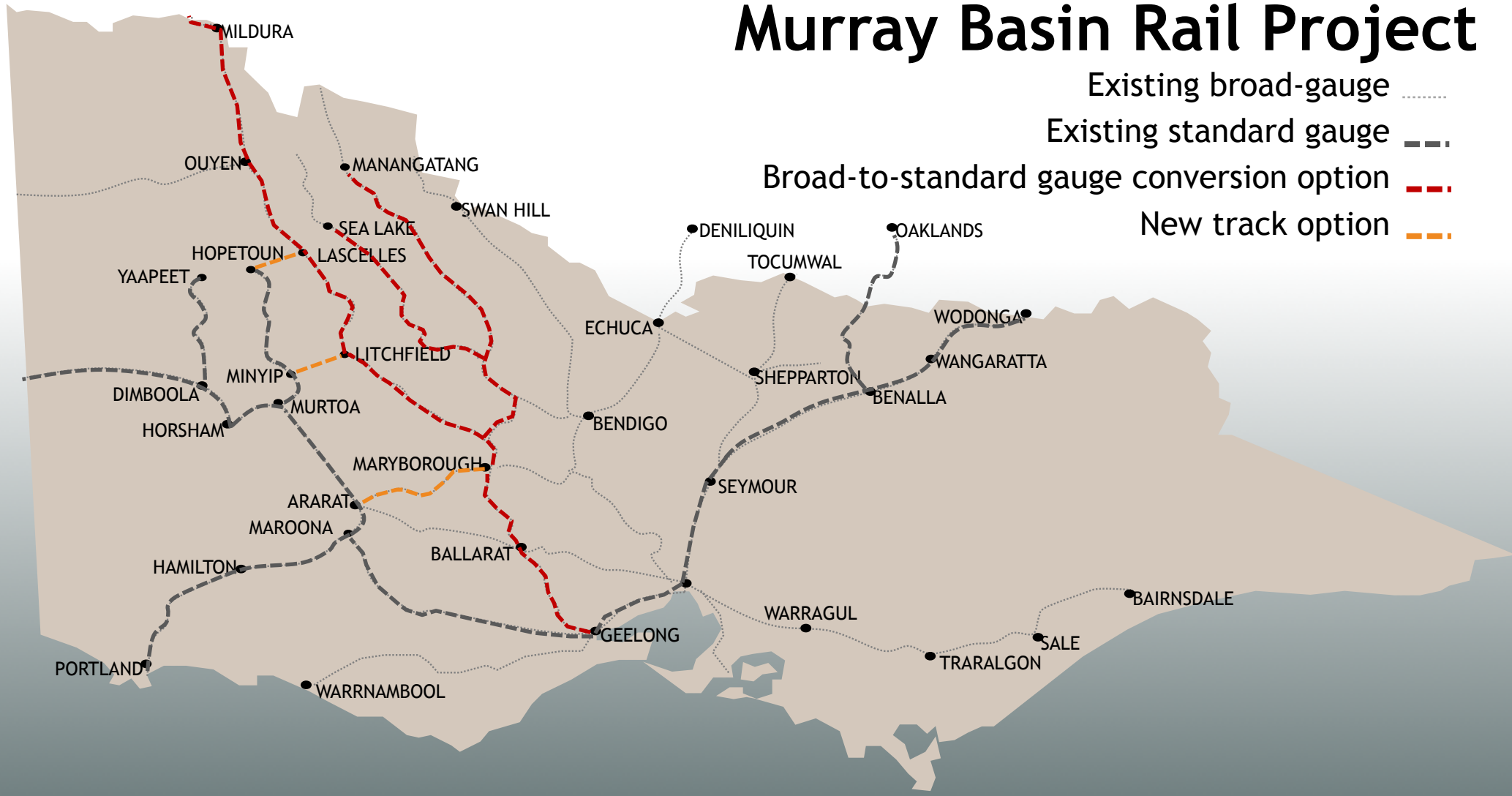




DEPARTMENT OF TRANSPORT,
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Murray Basin Rail Project



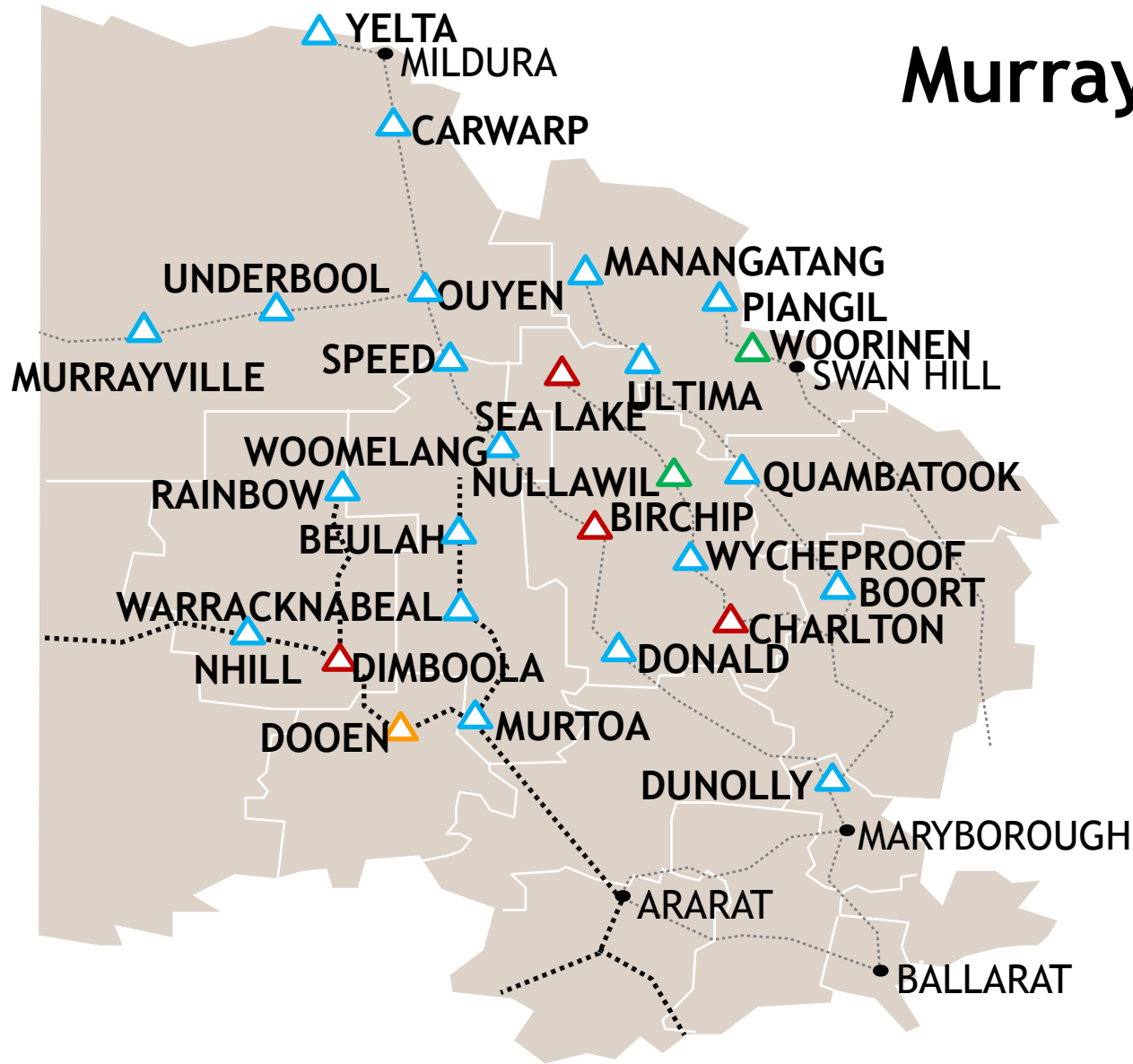


Murray Basin Rail Project

DEPARTMENT OF TRANSPORT,
PLANNING AND LOCAL INFRASTRUCTURE







Murray Basin Rail Project

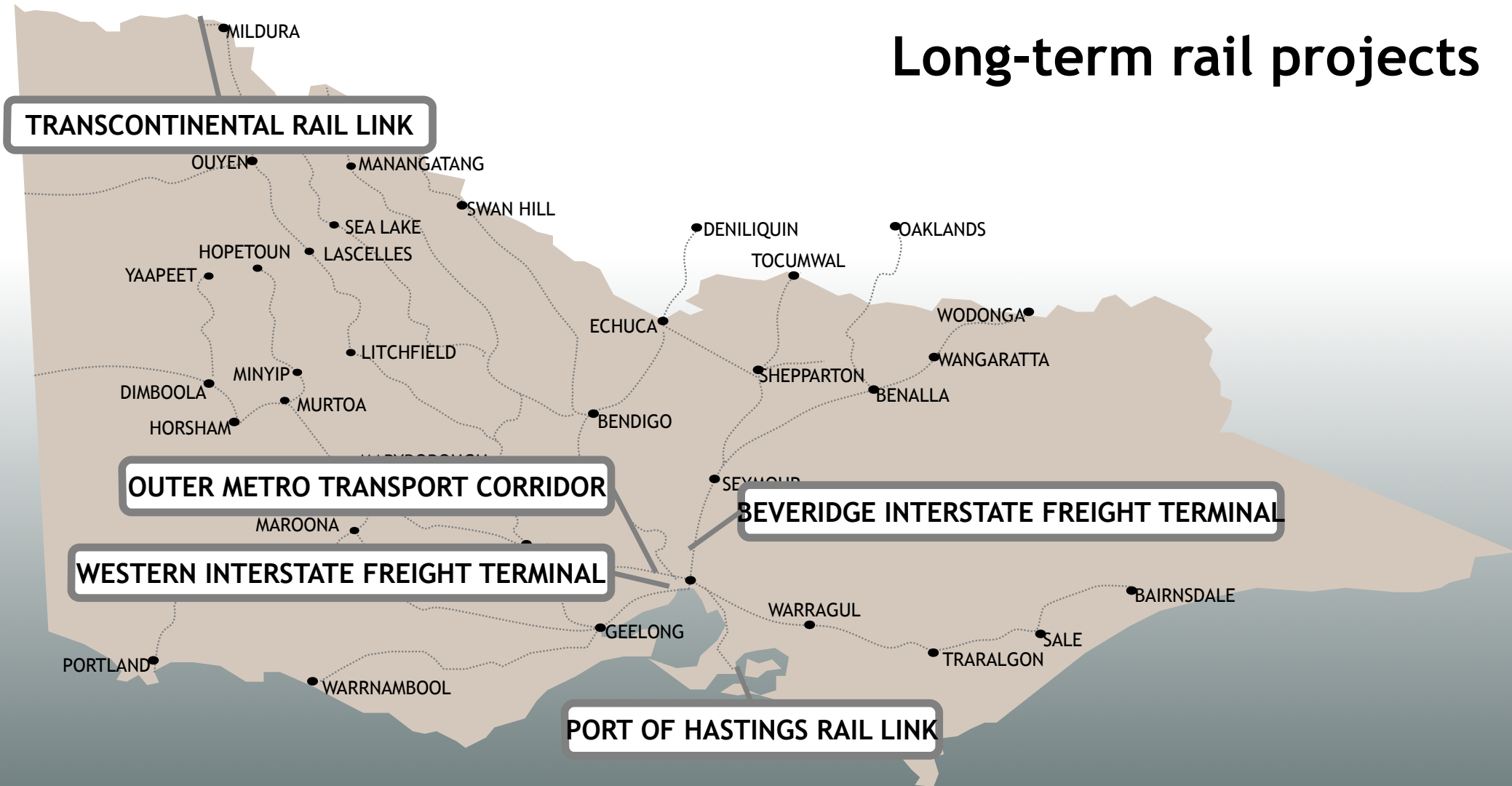


Broad-gauge
Standard gauge

Grain receipt sites







- Cargill 
- Emerald 
- Graincorp 
- Viterra 

Long-term rail projects

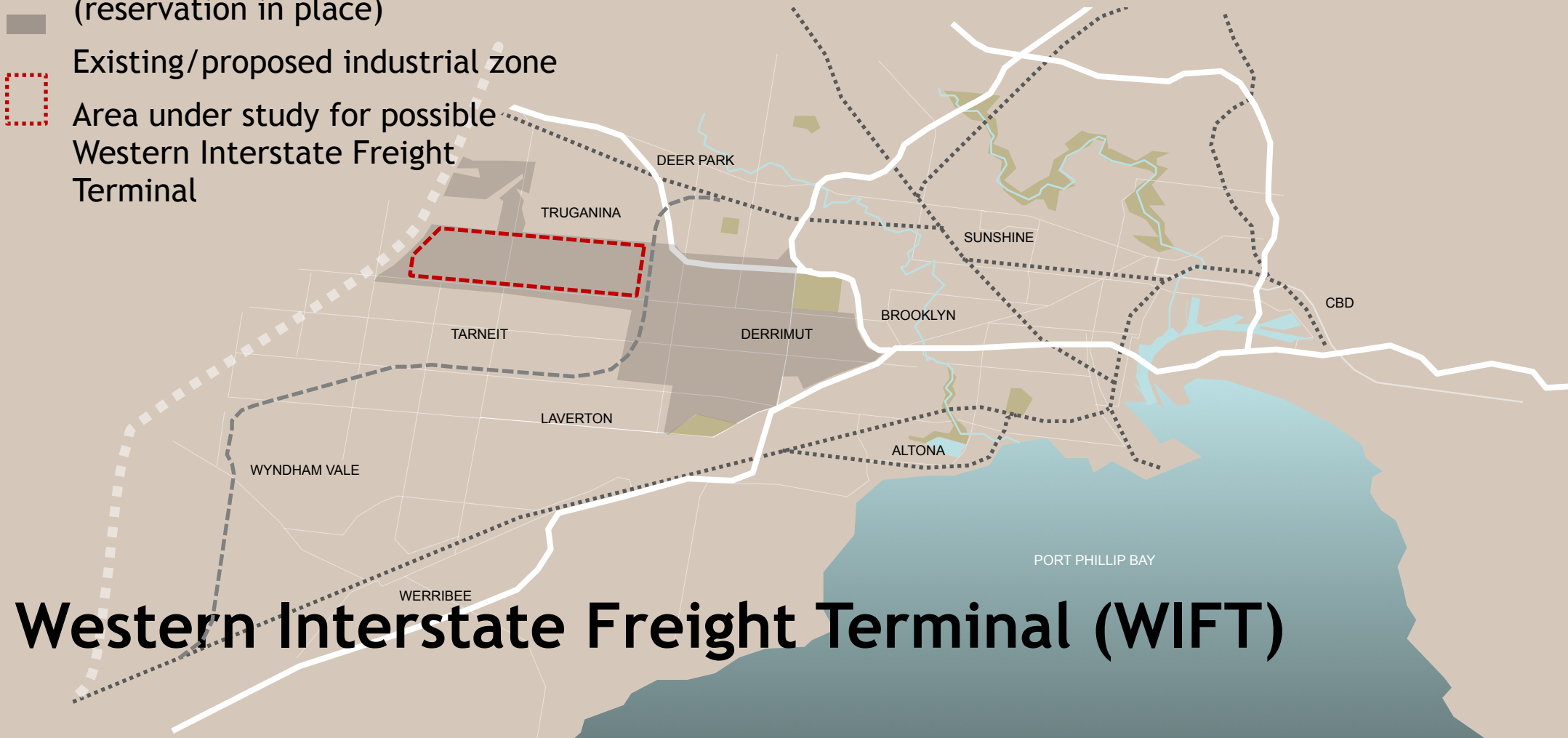


Port of Hastings rail link



-  Rail
-  Road
-  Port zone
-  Proposed planning scheme amendment
-  Subject to planning
-  Planned rail

- Regional Rail Link (under construction)
- ⋯ Outer Metro Transport Corridor (reservation in place)
- Existing/proposed industrial zone
- ▭ Area under study for possible Western Interstate Freight Terminal



Western Interstate Freight Terminal (WIFT)



Industrial node

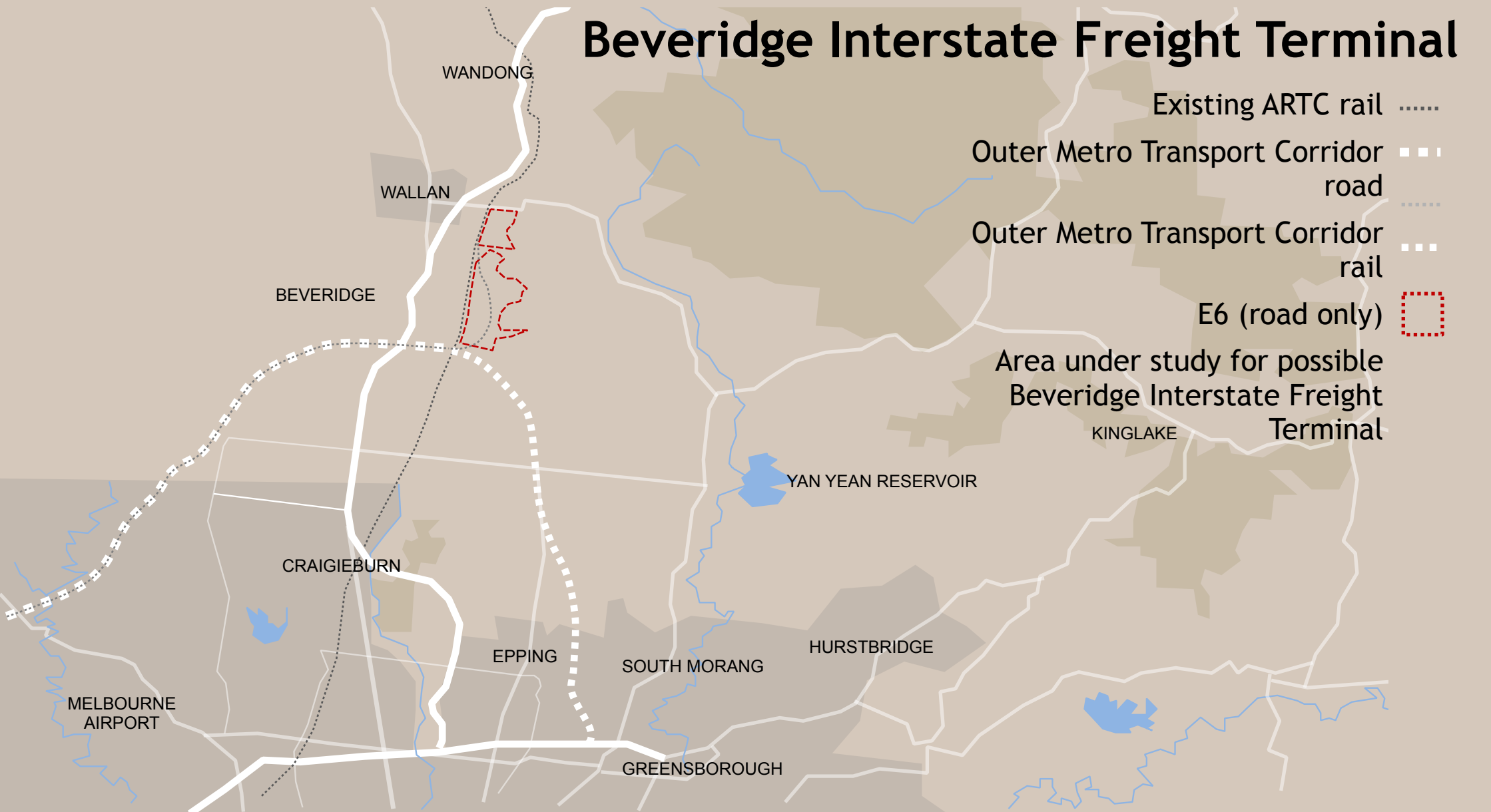
Proposed interstate rail terminal

Outer Metro Transport Corridor

Port

Interstate rail bypass of metropolitan Melbourne

Beveridge Interstate Freight Terminal



PERTH

Potential connection to trans-continental link

- Standard gauge —
- Broad gauge - - -
- Murray Basin Rail Corridor - . - .
- Standard-gauge options - . - .

Transcontinental Rail Link

ADELAIDE

BROKEN HILL

MILDURA

HOPETOUN

DIMBOOLA

MURTOA

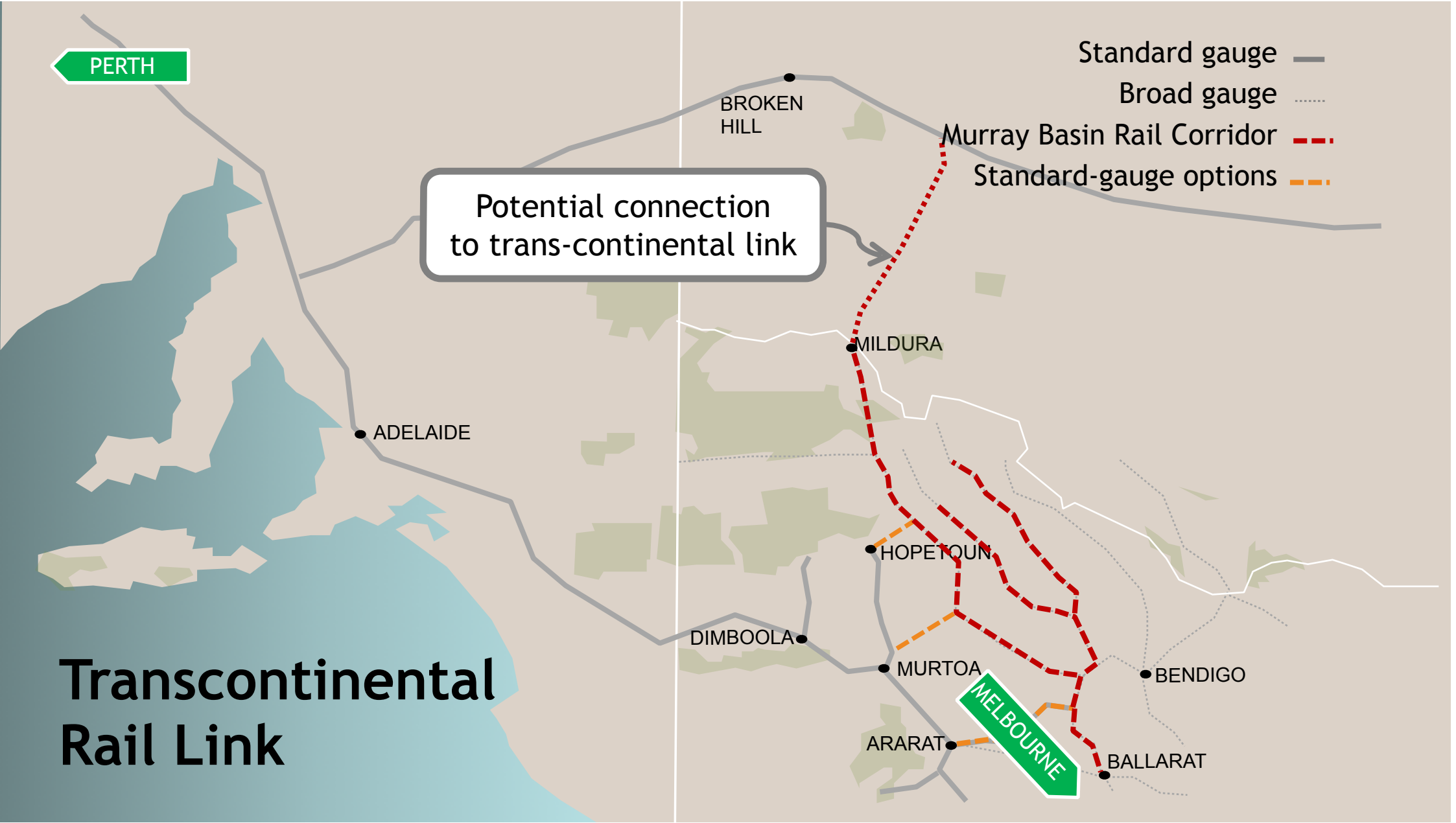
BENDIGO

ARARAT

MELBOURNE

BALLARAT

Murray Basin Rail Corridor



Rail Freight Futures Australia
Victorian Policy, Direction and Commitment

Gary Blackwood MP
Parliamentary Secretary for Transport



DEPARTMENT OF TRANSPORT,
PLANNING AND LOCAL INFRASTRUCTURE



Labor's Vision for Rail in Victoria

Natalie Hutchins MP

Shadow Minister for Industrial Relations

Shadow Minister for Ports, Freight and Logistics

Melbourne to Brisbane Inland Rail Project

Peter Winder
General Manager, ARTC (Major Projects)



Inland Rail

RAIL FREIGHT FUTURES
AUSTRALIA CONFERENCE



THE OPPORTUNITY OF THE FREIGHT CHALLENGE

PETER WINDER

Executive General Manager, Interstate
Australian Rail Track Corporation

InlandRail

THE FREIGHT CHALLENGE

- Melbourne-Brisbane is the busiest non-bulk freight corridor in Australia
- Freight volumes are expected to double by 2030 and triple by 2050
- Brisbane – Melbourne freight is slowed down by passing through Sydney
- Regional producers have limited options to get their goods to market
- Road dominates the market causing congestion and safety issues
- Rail is under-represented and has an opportunity to gain market share as well as coping with additional growth



MEETING THE FREIGHT CHALLENGE WITH INLAND RAIL



- A new 1700km freight rail connection from Melbourne to Brisbane via regional NSW and QLD.
- A road-competitive rail service based on transit time, reliability and cost (<24 hours Melbourne to Brisbane)
- This will complete the backbone of Australia's freight rail network, linking five state economies
- Route from Melbourne to Brisbane will take advantage of recent enhancements to the existing network, especially in Victoria.



DELIVERING INLAND RAIL

InlandRail

THE AUSTRALIAN GOVERNMENT'S COMMITMENT

“...this Government knows Inland Rail is a project that we absolutely have to get right and one which we need sooner, rather than later.”

Deputy Prime Minister, the Hon Warren Truss MP

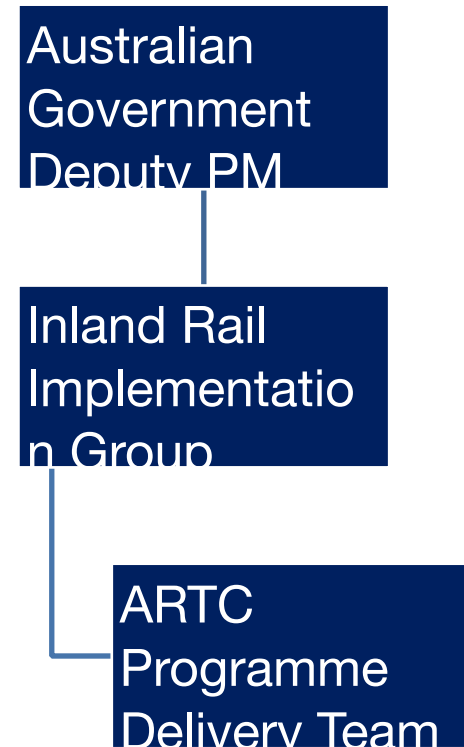
12 March 2014

THE AUSTRALIAN GOVERNMENT'S DIRECTION

The Australian Government has committed \$300M and appointed ARTC to:

- Establish the project team
- Develop the 10 year program
- Progress design work and gain required approvals
- Start early works and land acquisition
- Investigate and recommend the most appropriate route for a dedicated freight rail connection to the Port of Brisbane.

This is happening under direction of the Inland Rail Implementation Group (IR-IG).



THE AUSTRALIAN RAIL TRACK CORPORATION

- Established in 1998 to facilitate a national standard gauge network
- One of Australia's largest rail network owners, operating and managing more than 8,500 kilometres of rail track in New South Wales, Queensland, South Australia, Victoria and Western Australia
- 1,128 staff
- 450 trains per day on the network
- Capital investment of >\$5billion over the past 10 years
- Inland Rail is the next logical step to develop the national freight network.

ARTC's existing rail freight network





THE ROUTE

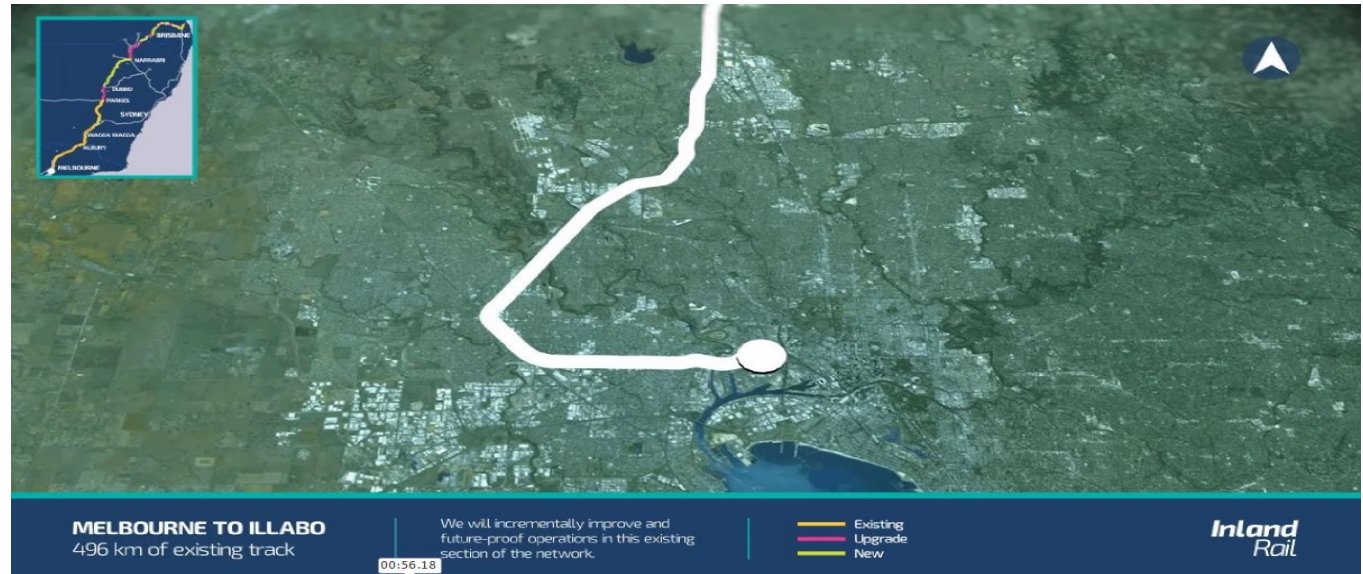
InlandRail

HOW WE DEVELOPED THE ROUTE

- Extensive planning work undertaken in 2006 and then in the 2010 Inland Rail Alignment Study:
 - More than 50,000 possible combinations across the three states
 - extensive consultation with train operators and end customers
 - modelling of freight demand
- Optimum alignment determined (2010) ready to proceed to environmental assessment and engineering design.
- 2010 alignment endorsed by Australian and State Governments as the base case for Inland Rail.
- Now being optimised for performance, demand and standards to deliver a construction ready project in 2015

THE ROUTE

- We're about to take a journey on the Inland Rail route, which was identified through the 2010 study.
- You'll notice a navigation panel in the top left that shows where we are on the overall route
- Project descriptions at the bottom of the screen change as we travel the route.



Colour coding:

- Gold is the existing network
- Pink is a track upgrade
- Green is new track

TAKE THE JOURNEY WITH US





DEVELOPING THE SERVICE OFFERING

InlandRail

DEVELOPING A CUSTOMER-RELEVANT SERVICE OFFERING

- We consult regularly with our customers and freight end users and are developing a service offering that meets their needs.



PERFORMANCE SPECIFICATION TO MEET CUSTOMER NEEDS

Customers want efficiency, reliability and cost-competitiveness. This requires:

- standard gauge line (dual gauge in QLD)
- double stack
- train length of 1800m (initially)
- axle load / max speed:
 - 21 tonnes @ 115km/hr
 - 25 tonnes @ 80km/hr and
 - 30 tonnes @ 80 km/hr



FUTURE PROOFING INLAND RAIL

- Train length of 3600m
- 30 TAL for new structures, sleepers and new formation
- Sleeper spacing 600mm on new track/ re-sleeping on existing
- Rail – 60kg/m on new or upgraded track
- Advanced Train Management System employs on-train GPS and broadband communications to locate and route trains in real time (An ARTC / Lockheed Martin innovation).





INLAND RAIL IN VICTORIA

InlandRail



INVESTMENTS IN VICTORIA

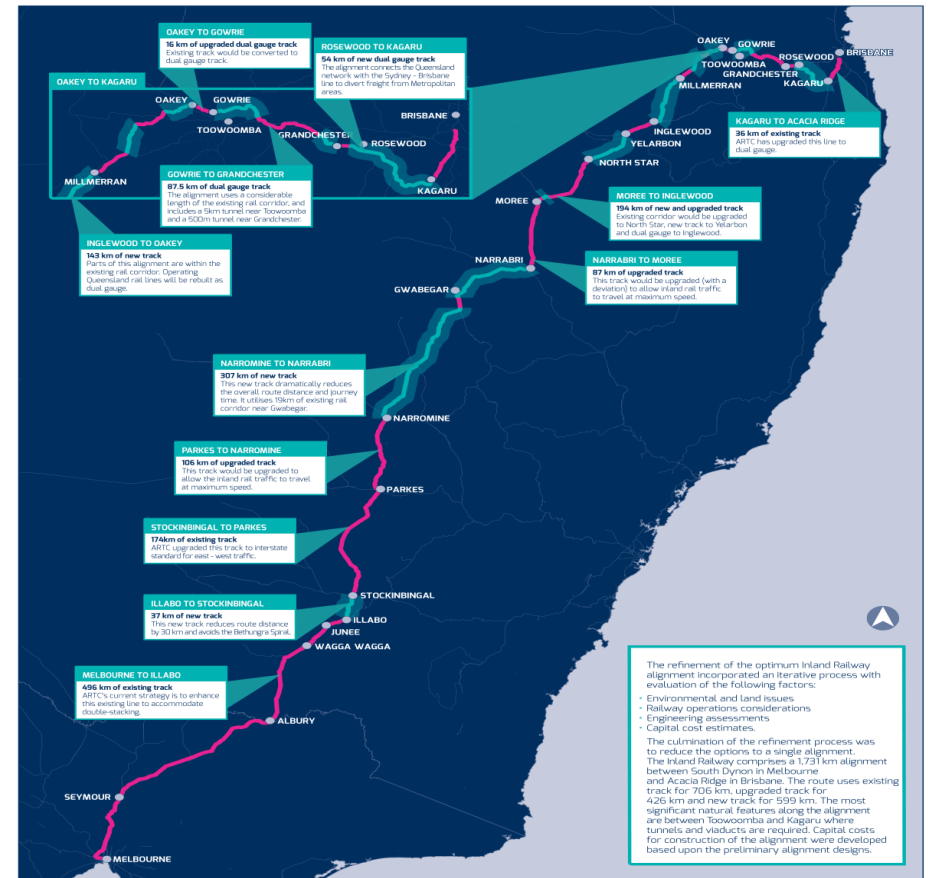
Investment in the interstate rail network in Victoria since 2009 has seen:

- A rail bypass and new rail station at Wodonga (and, as a result removed 11 railway level crossings from Wodonga)
- New passing lanes, crossovers and turnouts
- Re-signalling
- Replacement of dog spiked rail with continuously welded rail
- Gauge conversion
- Concrete re-sleepering of the West track
- Upgrading local level crossings,
- New platforms at Euroa, Avenel and Violet Town Stations
- Critical safety improvements to 32 rail bridges

KEY WORK ELEMENTS

The Inland Rail alignment comprises:

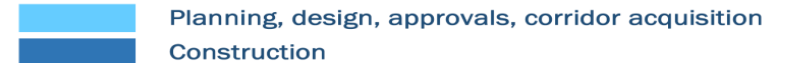
- Around 700km of existing Interstate Network (41%)
- Approximately 400km of upgrades to existing corridors, some of which are operational and some of which are moth-balled (25%)
- 600km of greenfield construction through a mix of rural, forest and semi urban areas (34%).



INDICATIVE SCHEDULE – PREPARED APRIL 2014

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24
Priority Projects										
Rosewood-Kagaru <i>new corridor</i>	Planning, design, approvals, corridor acquisition		Construction							
Narrabri-North Star <i>upgrade</i>	Planning, design, approvals, corridor acquisition									
Parkes-Narromine <i>upgrade</i>	Planning, design, approvals, corridor acquisition									
North Star (NSW) - Gowrie (Qld) Missing Links										
Gowrie-Rosewood <i>new corridor including Toowoomba Range tunnel</i>	Planning, design, approvals, corridor acquisition				Construction					
Oakey-Gowrie <i>upgrade & dual gauging</i>					Planning, design, approvals, corridor acquisition	Construction				
North Star-Oakey <i>new corridor + upgrade & dual gauging</i>		Planning, design, approvals, corridor acquisition			Construction					
Enhancement Projects										
Narromine-Narrabri <i>new corridor</i>			Planning, design, approvals, corridor acquisition			Construction				
Illabo-Stockinbingal <i>new corridor</i>						Planning, design, approvals, corridor acquisition			Construction	
Melbourne-Illabo <i>clearance improvement for double stack operations</i>								Planning, design, approvals, corridor acquisition	Construction	

Indicative - subject to change as planning proceeds



INLAND RAIL STATISTICS

- 10 year program of work
- 1,731km route
- Bridges – 10.35km (122 new / 52 upgraded)
- Culverts - (371 new / 124 upgraded)
- Tunnels - 4 including 5km Toowoomba Range Crossing
- 1.72 million sleepers
- 142,000 tonnes of steel
- 2,367km of rail



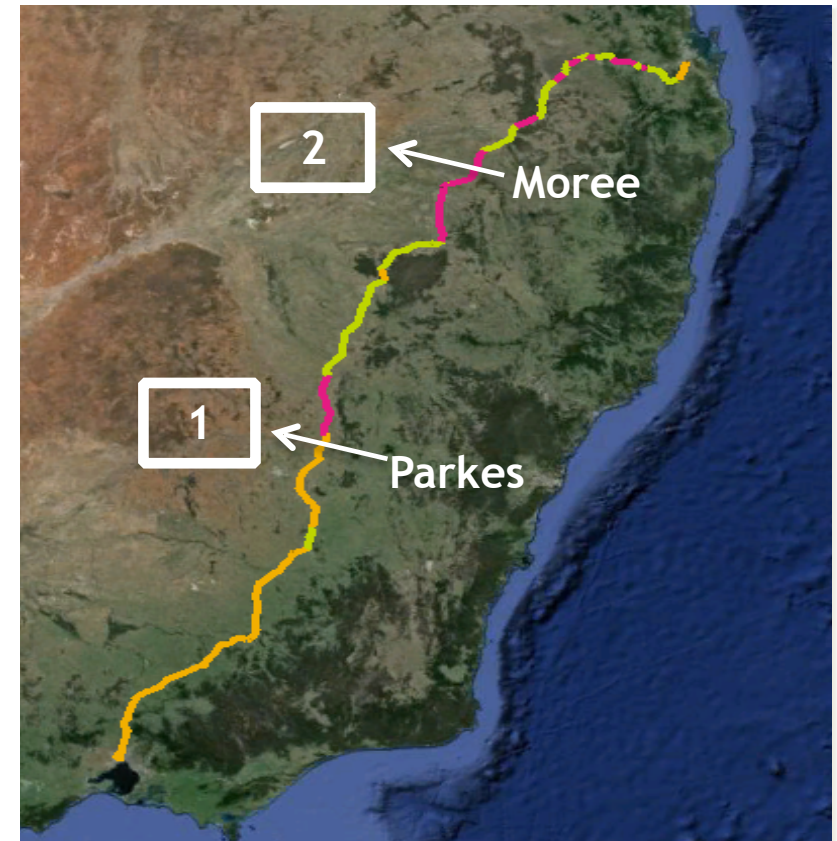


PRIORITY PROJECTS

InlandRail

PRIORITY PROJECTS NSW

- Parkes to Narromine – 106km
- Narrabri to North Star - 183km
- Existing corridor track upgrades
 - flood protection
 - passing loops and sidings
 - bridges, culverts and level crossings
- Currently conducting preliminary environmental, cultural heritage, flooding and geotech.



PRIORITY PROJECTS QUEENSLAND

Rosewood to Kagaru

- 54 km greenfield
- connects the QLD network with the Interstate Network
- gazetted by QLD Govt.

Gowrie to Grandchester

- 88km greenfield /existing
- includes Toowoomba Range Tunnel – 5km.
- scoping underway for tunnel specification, environmental risk assessment, engineering, schedule and costing.



PORT OF BRISBANE AND TERMINALS

Two additional aspects to maximise economic benefits of Inland Rail:

- ARTC tasked to identify the most appropriate dedicated freight route to the Port of Brisbane
- Collaborating with Port of Brisbane on investigating several broad alignments
- Reviewing current intermodal terminal's ability to handle future volume
- Reviewing likely need for additional terminal capacity from potential new 'greenfield' sites.





PROGRESS TO DATE AND NEXT STEPS

InlandRail

MILESTONES

Since March, ARTC's Inland Rail Programme team has achieved the following milestones:

Milestone 1 – July 2014 - completed

- Establish the project team and develop the strategy and project management plan for the programme.

Milestone 2 – September 2014 - completed

- Begin working through the stakeholder and environmental assessment requirements, develop a recommended approach to approvals and land acquisition.

IN ADDITION

- Project Management Office established in Sydney with a blended team and additional staff in Newcastle, Brisbane, Melbourne, Adelaide and Wagga Wagga.
- Regional roadshows conducted in June with more planned
- Industry Information Sessions held in September to start engagement with potential suppliers
- Key stakeholder reference group forums in May and October with the Australian Government to gain input on service offering from customers and industry.

WHAT'S HAPPENING NEXT

Milestone 3 – December 2014

- Deliver updated cost estimates and 10-year delivery and construction plan
- Commence environmental assessments, detailed engineering & geotechnical investigations in consultation with stakeholders.





THANK YOU

InlandRail



Challenges and Opportunities Today

Geoff Smith - *Managing Director, SCT Logistics*

Ken Wakefield - *Group Manager, Wakefield Transport*

Neil Johns - *Group General Manager, Storage and Logistics, Grain Corp*

Jim Cooper - *Chief Executive Officer, Port of Portland*

Rory MacManus - *General Manager Business, VLine*

GrainCorp Storage & Logistics

Rail Freight Futures Australia

Rail Freight Alliance – 10th October 2014



GrainCorp

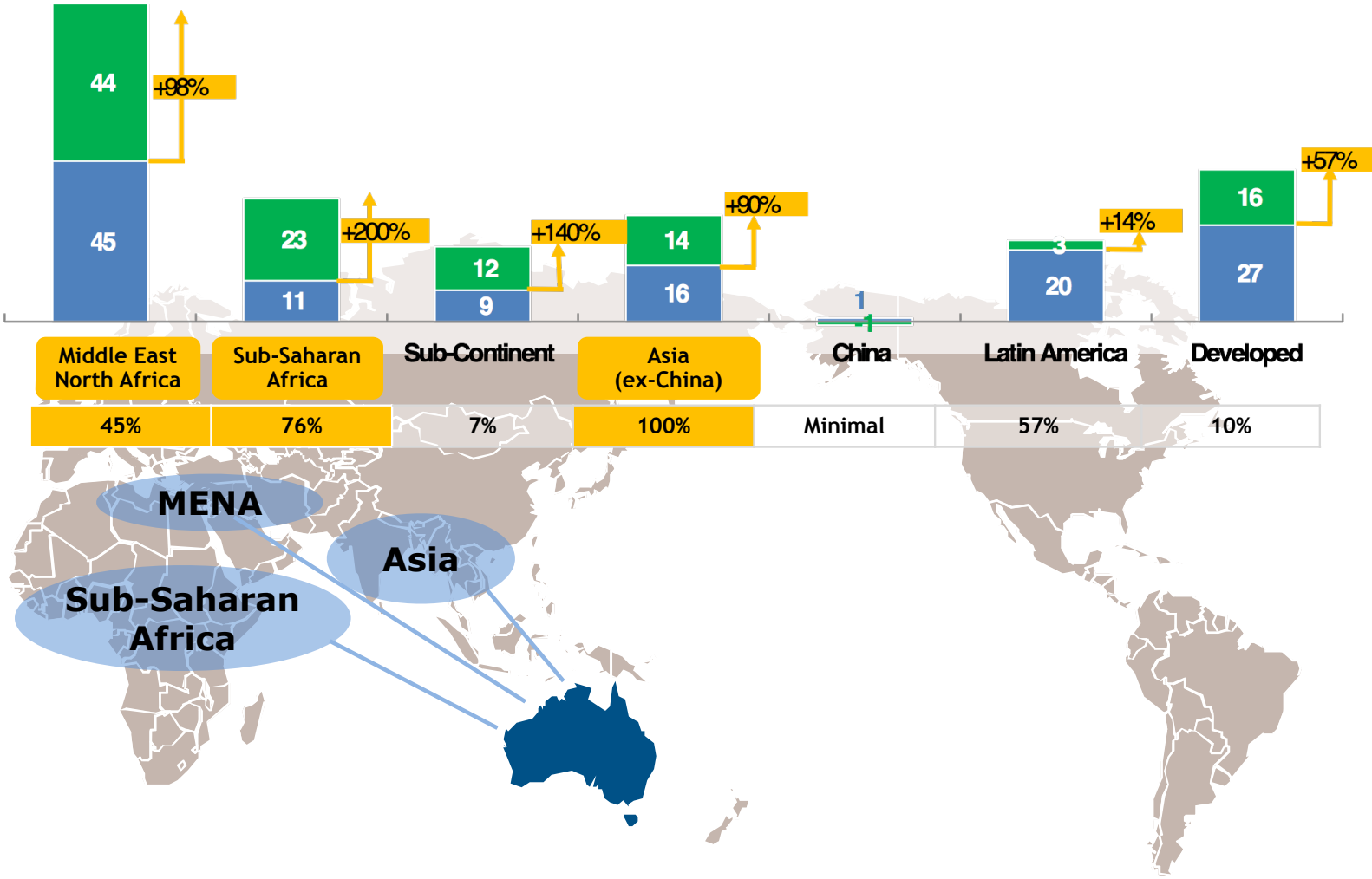


The grain opportunity at our door step



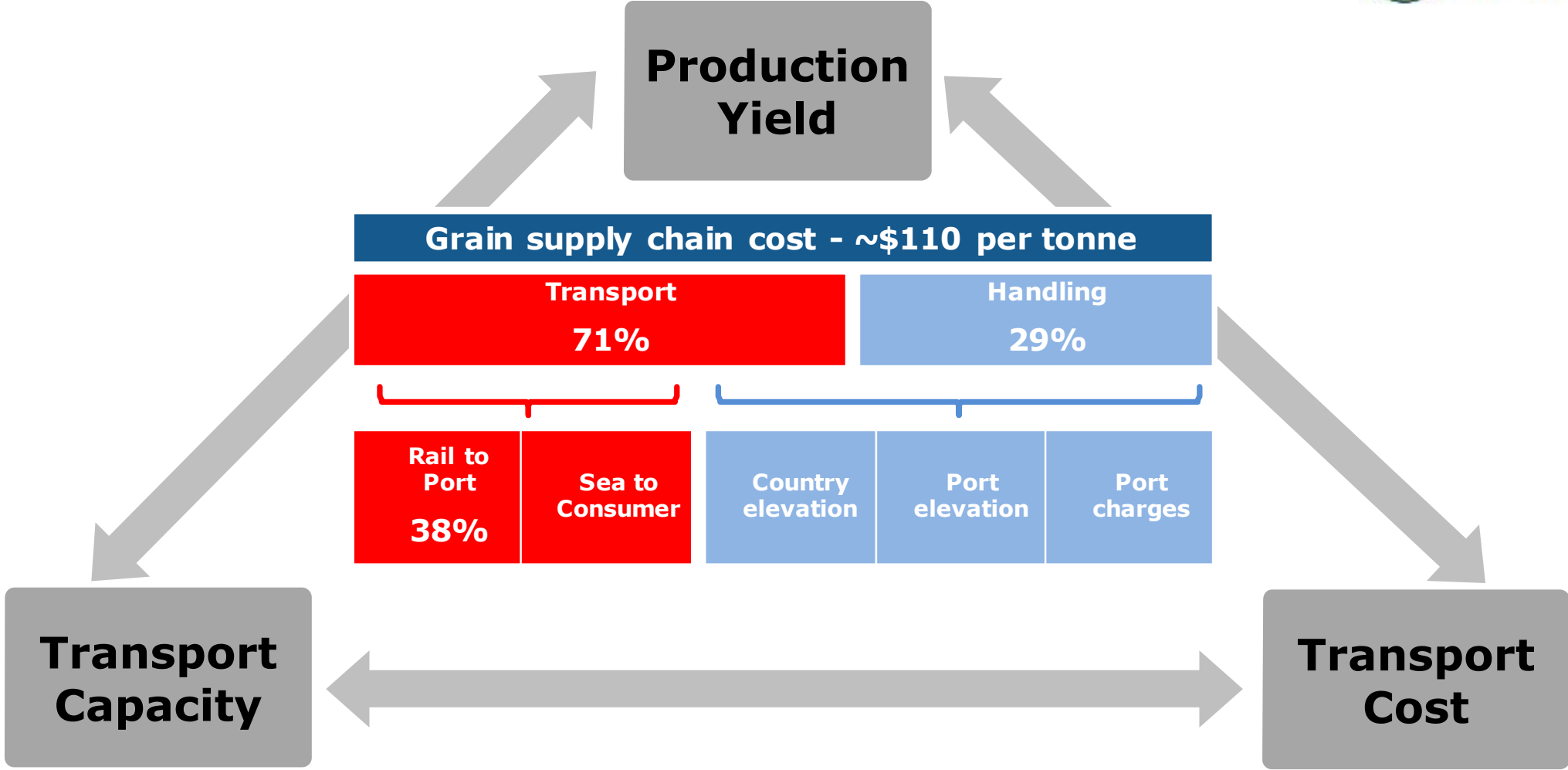
**Projected World
Wheat Imports
Growth to 2050**

**Import Wheat
Consumption Share**



Sources: USDA, US Wheat Associates

What is holding us back?



Sources: Farm Institute

Rail, not grain handling, is the 'bottleneck'



All figures refer to Victoria (for major grains including export container packing)

1. High Rail Cost



\$10/t
above
best practice



Additional Cost
to Victorian growers
~\$45 million pa

2. Rail Operating Complexity

Multiple grain owners

~17 owners at every site

Front-ended programme

80% exported in 6 months

Complex rail operation

Track 2 gauges
2 track owners

Rail 3 rail providers



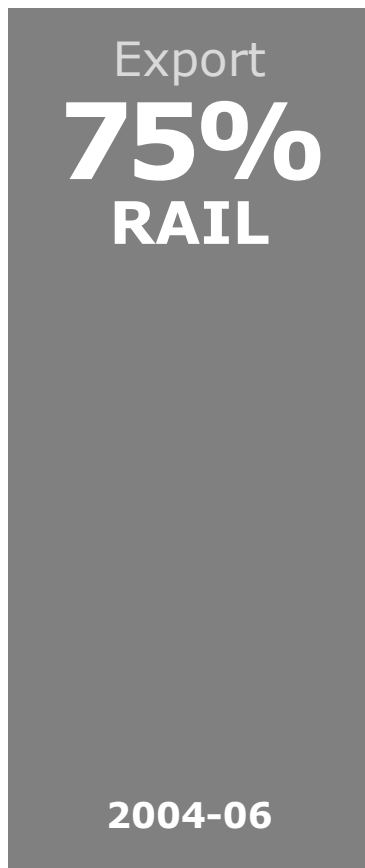
Low rail utilisation

Accessing railable grain parcels

Variable export task

Inability to move resources

3. Less Rail Capacity



More trucks

- Higher transport cost
- Delivery complexity
- Less export capacity

+ community impact

- Road repair costs
- Reduced road safety

All figures refer to Victoria (for major grains)



GrainCorp

Project Regeneration

Reduce rail
cost by

> \$5_{pt}

**1 million
tonnes**
of grain
returned to rail



1. Upgrade rail capability



**\$200M investment
across network of
Primary Sites**

New facilities

- Fast elevator
- Pre-position bins

Update existing

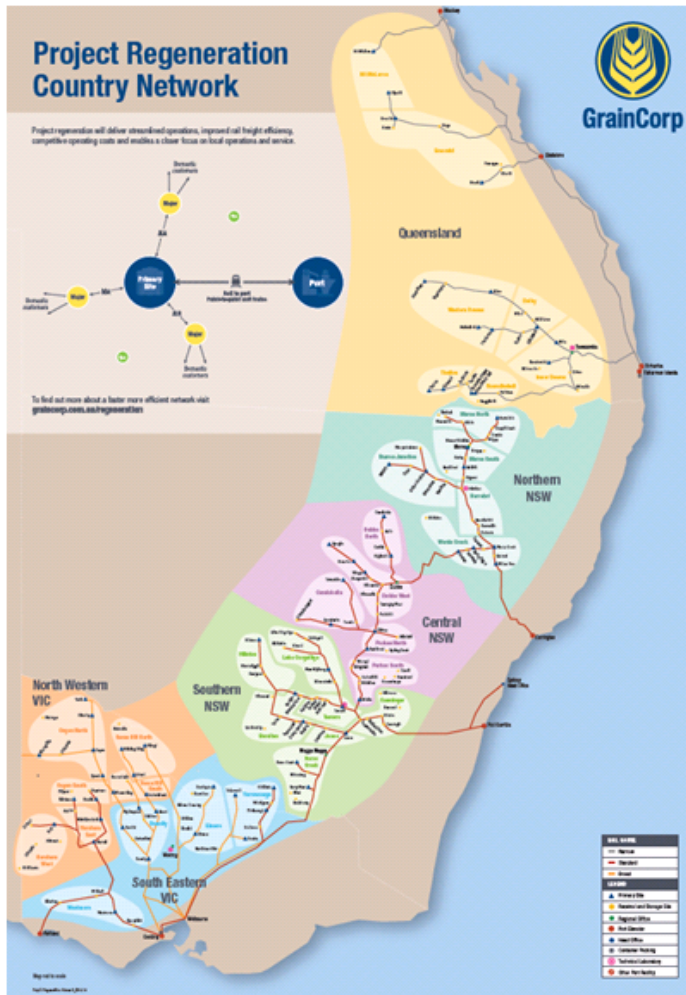
- Convert silo(s)
- Automation

**Support new
efficient and
reliable rail
operating model**

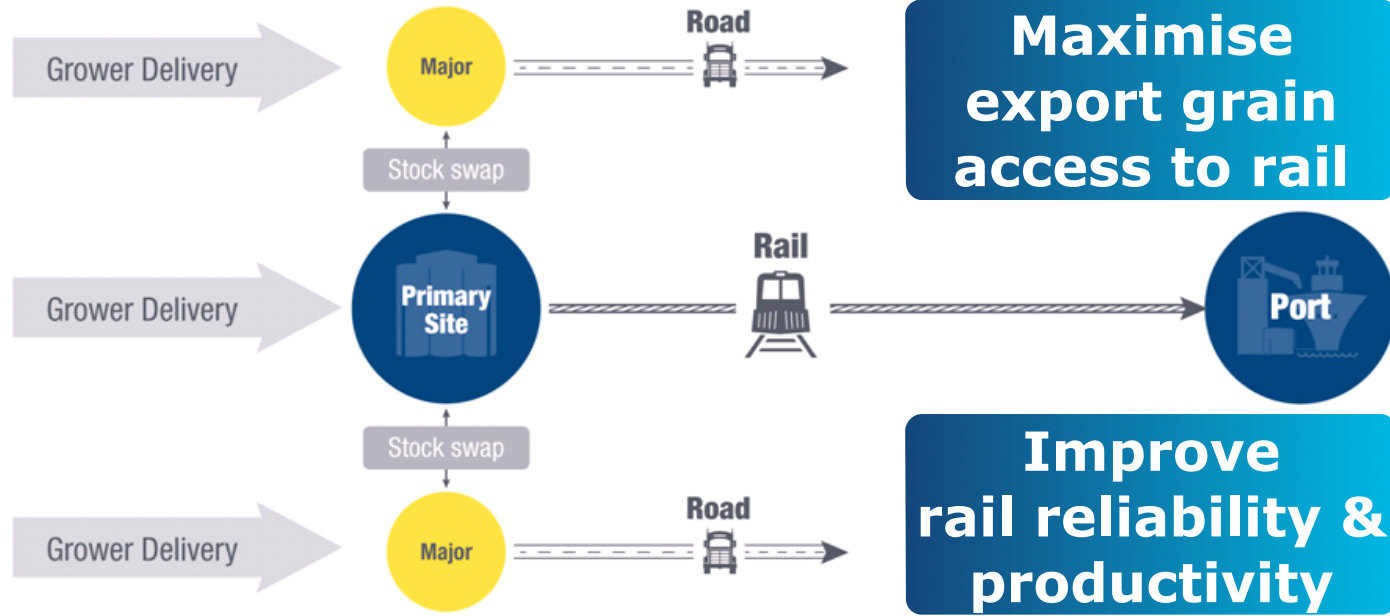
Faster cycling trains

- Export rail from Primary Sites
- Pre-positioning grain for loading to rail
- Fast loading trains from a single point
- Operating point to point unit trains

2. Simplify rail logistics



Bundled handling & transport



Swapping grain to rail sites

Government supporting investment required



Sho
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**Upgrade government owned sidings +
Flexible track operating arrangements**

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**Increasing track payload
Gauge standardisation**

Challenges and Opportunities Today

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Panel Discussion