Recent Developments in Victoria
and application for revival of the
Cowra Regional Rail Network

Presentation to Regional Rail Workshop
Frank Lander
Blayney, 10 May 2013
OUTLINE

1. Some Recent Victorian Developments
2. The Cowra Rail Network Revival Study (2009)
3. Critical Issues for a ‘Shortline’ Railway
1. Yaapeet Line Grain Development Project
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1. **Yaapeet Line Grain Development Project**

- Dimboola - Yaapeet railway 84 km
- Major receipt site at Rainbow, 67 km
- Previous years 80 - 100,000 tonnes/year but no grain for several years
- Minimal track maintenance since 1995
  - $5 million to rehabilitate
- Substantial flood damage 2011 - $1 million!
- Conventional wisdom:
  
  *Close line and truck grain to other rail served sites!*
1. Yaapeet Line Grain Development Project

Yaapeet Line Grain Catchment

Road grain paths Farm to silo/port

Yaapeet

Rainbow

Jeparit

ARTC

Melbourne – Adelaide

Approx. 40 km

Dimboola

Hopetoun

Beulah

Warracknabeal

Direct trucking to Portland

280 km

Portland

Murtoa
1. **Yaapeet Line Grain Development Project**

Collaborative Funding Proposal

<table>
<thead>
<tr>
<th>Organization</th>
<th>Project Description</th>
<th>Amount ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GrainCorp</td>
<td>Track upgrade</td>
<td>1.0</td>
</tr>
<tr>
<td>RDV</td>
<td>Track upgrade</td>
<td>1.4</td>
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<tr>
<td>DOT</td>
<td>Track upgrade</td>
<td>2.6</td>
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<tr>
<td>Insurance</td>
<td>Flood repair</td>
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<td><strong>TOTAL TRACK REHAB.</strong></td>
<td></td>
<td><strong>6.0</strong></td>
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<tr>
<td>GrainCorp</td>
<td>Rainbow site development</td>
<td>2.0</td>
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<tr>
<td><strong>TOTAL PROJECT</strong></td>
<td></td>
<td><strong>8.0</strong></td>
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1. Yaapeet Line Grain Development Project

Benefits

<table>
<thead>
<tr>
<th>Description</th>
<th>$ million / yr</th>
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</thead>
<tbody>
<tr>
<td>Reduced grain transport costs (net)</td>
<td>1.3</td>
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<tr>
<td>Reduced grain handling costs</td>
<td>0.7</td>
</tr>
<tr>
<td>Avoided road damage costs</td>
<td>0.1</td>
</tr>
<tr>
<td>Reduced road trauma costs</td>
<td>0.1</td>
</tr>
<tr>
<td>Track maintenance</td>
<td>(0.8)</td>
</tr>
<tr>
<td><strong>NET ANNUAL BENEFITS</strong></td>
<td><strong>1.2</strong></td>
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</tbody>
</table>

BCR = 1.4
2. Toolamba Echuca Line Rehabilitation
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Background

- 67 km cross country line
- Booked out a/c track condition and drought
- Deniliquin rice mill reopened in 2012, processing 300,000 tonnes/yr
- Large export market in 20’ x 9’10” (3m) boxes, but cannot use Bendigo line a/c tunnels
- Cost to rehabilitate Toolamba line = $6.8 million.
2. Toolamba Echuca Line Rehabilitation

Collaborative Funding Approach

- Government provide $6.8 million up front for project
- Shippers to repay half of cost by way of increased track access charges for T – E line section
- Government also raised bridge in metropolitan area
- Rail operator agreed to supply low deck height (1020 mm) wagons.
3. Geelong Grain Improvement Project

Dunolly

Geelong
3. Geelong Grain Improvement Project

Background

- Approx 1 Mtpa grain exported via Geelong Grain Loop with grain from both broad and standard gauge
- Loop was 19 TAL, but ARTC main line is 23 TAL
- Access to Loop controlled by manual ‘C’ box, resulting in delays and restrictions on capacity
- Signalman required at Dunolly for all branch line movements, also resulting in delays.
3. Geelong Grain Improvement Project

The Project

- Upgrade Loop to 23 TAL with remedial track works and D.G. concrete sleepers $2.6
- Eliminate ‘C’ Box and automate functions $2.9
- Signal Dunolly for drivers to operate turnout with key switch and self restoring switches $0.4

TOTAL $5.9
3. **Geelong Grain Improvement Project**

Collaborative Funding Approach

- **GrainCorp** 1.4
- All other grain marketers using facility (by way of a $0.50/tonne levy over 4 yrs) 0.9
- **ARTC** 0.5
- “Other funding” 3.1

**TOTAL** 5.9
4. Implement Train Order Working for Benalla - Oaklands Line
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Background

- 125 km B – O line rehabilitated and standardised in 2009 as part of the NE Rail Gauge Standardisation Project
- Electric staff working allowed only one train/day on line
- Conflict when GrainCorp and Cargill both wanted to access grain sites
- Resulted in considerable grain having to move by road when accumulating at port
- Cost to implement Train Order Working (ARTC Phoenix) = $200,000
4. Implement Train Order Working for Benalla - Oaklands Line

Collaborative Funding Proposal

- Department of Transport will fund project from available maintenance funds
- GrainCorp and Cargill agree to a $/tonne levy for all grain until $200,000 cap is reached (approx 2 years).
The Cowra Rail Network Revival Study
The Cowra Rail Network Revival Study

Scope of Study

- Determine freight task available to a regional rail operator
- Estimate competitive road freight rates
- Develop a train operations plan that would support a competitive rail service
- Develop a rail cost model appropriate for the proposed branch line operations
- Determine the capital cost to rehabilitate the track and the ongoing maintenance costs
- Quantify social benefits
- Undertake economic analysis
Traffic Potential

Grain Traffic

- Considerable volumes of export and domestic grain could be handled by a dedicated grain train operating to ports and local domestic mills.
- Train 2 x 2000 HP locos with 22 x 19 TAL grain wagons.

Intermodal Traffic

- Intermodal terminal at Cowra could attract in excess of 10,000 TEU/yr, mostly grain and minerals
- This intermodal train would operate to Blayney, with wagons then attached to other regional freight services
- Also through traffic between Blayney and Melbourne.
The Cowra Rail Network Revival Study

Review by Booz & Co.

- Very high track upgrade costs, especially for south of Cowra
- Low export and domestic grain tonnages
- Low intermodal traffic and no bridge traffic
- Similar train operating cost inputs, but higher per tonne train operating costs due to lower traffic demand
- Rail operator could cover above rail operating costs but minimal contribution to track capital and maintenance costs

- Overall project BCR = 0.54
The Cowra Rail Network Revival Study

SAMROM Response to Booz Review

- Agreed with Booz that SAMROM had underestimated cost to rehabilitate Cowra – Blayney line section
- However, track south of Cowra was in very good condition and Booz had overstated rehabilitation cost
- Booz track maintenance costs not consistent with what a shortline rail operator could achieve
- Agreed that SAMROM’s grain and intermodal estimates were high, but considered Booz overly pessimistic
- Given a higher traffic demand train operating costs should be much lower than Booz
Conclusion

SAMROM incorporated and/or modified Booz comments where appropriate to give a “composite” model. This gave:

- Total grain, export + domestic: 145 kt/year
- Intermodal through Cowra: 7,300 TEU/year
- Initial track rehabilitation cost: $20 M
- Cyclic MPM (5 years): $16 M
- Routine track maintenance: $1.2 M/year
- Community benefits: $1.4 M/year
- Transport cost savings: $2.4 M/year
- Overall project BCR = 1.18
The foregoing study evaluated a Cowra shortline railway as an economic concept and concluded that it was potentially viable.

- Above rail operator viable and pay access charges
- Government funding for capital works offset by community benefits and avoided road costs.

It addressed all capital investment and treated the required return on investment as a “cost”, but did not identify who would be making the investment.

Also stipulated that ongoing routine maintenance should be met from access charges.
Critical Issues for a ‘Shortline’ Railway

Track Ownership / Management

Benefits of Vertical Integration:

✓ Train operator knows what track condition is required
✓ Strong motivation to lobby for and coordinate investment funding
✓ Able to address risk

The Open Access Issue:

✓ Must be a “Chinese Wall” between track management and train operations
✓ Must not preclude other operators
✓ Key issue is not “competition”, but “alternative operators”.
Critical Issues for a ‘Shortline’ Railway

Intermodal Terminal

✓ Key opportunity for Council participation:
  – provision of land
  – road access and utilities
  – low risk
  – demonstrates “skin in the game” to lever investment
  – ensures cooperation

✓ Fit for purpose (cf. Victorian experience)

✓ Leased by a terminal operator responsible for supplying equipment and operation (could be the rail operator)

✓ Must be structured as an “independent” terminal operator.
Critical Issues for a ‘Shortline’ Railway

Investor / Operator

✓ Current Australian Operators:
  – Institutional investor
  – Government operator
  – Independent operator
  – Cashed up Ausie investor

✓ Appropriate investment criteria

✓ Larger companies can achieve economies of scale

✓ Key to a “regional” railway is that the focus is on the region it serves – it makes a go of that or its nothing!
Coming soon to a railway near you!