

#### HUNTER VALLEY MAJOR WORKS

Presentation to Capacity Improvement Forum

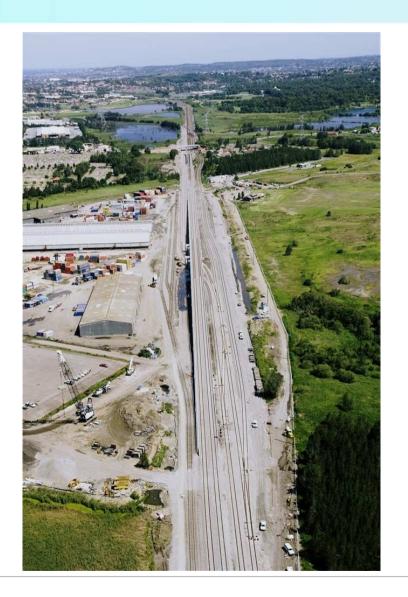
March 2008



# **Completed Projects**



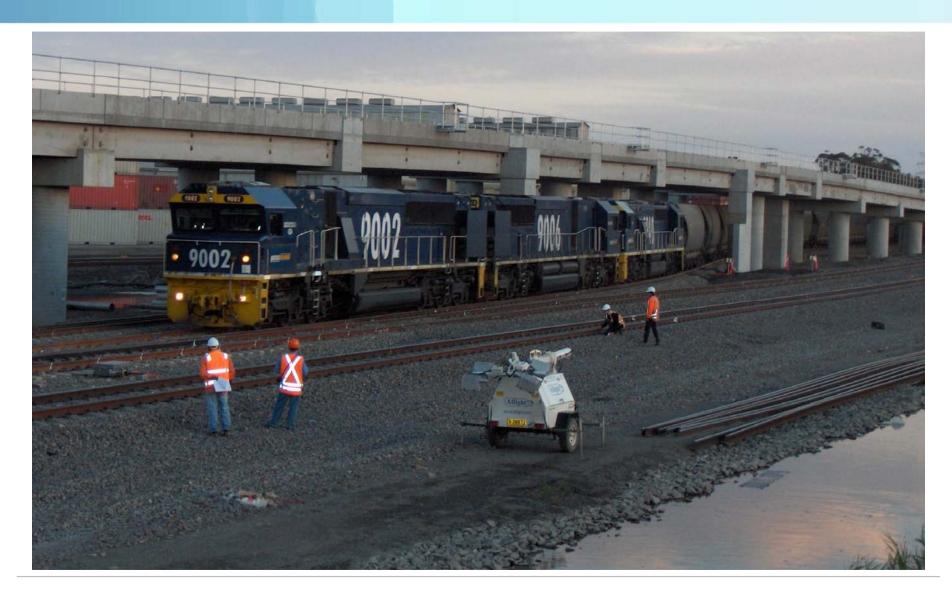
- \$80M Project
- Commissioned on Time in November 2006



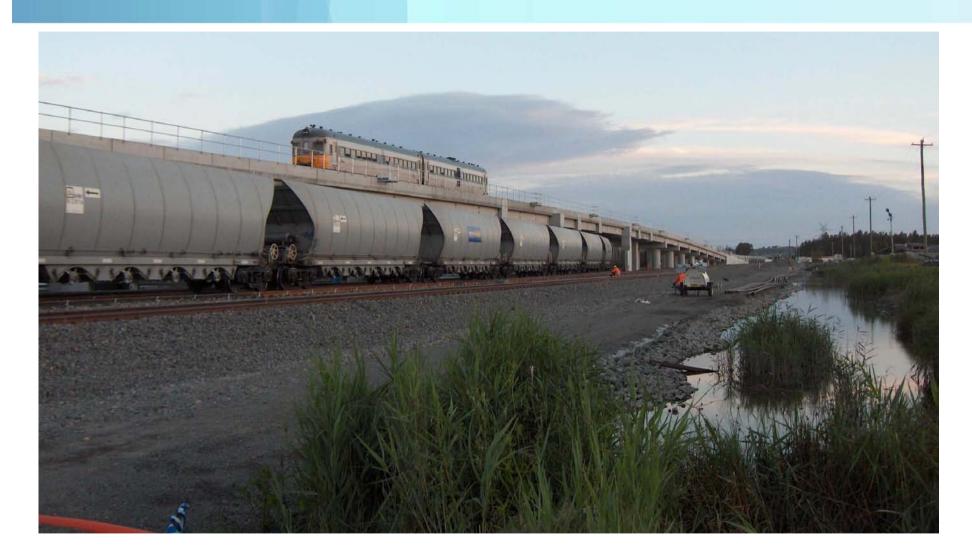








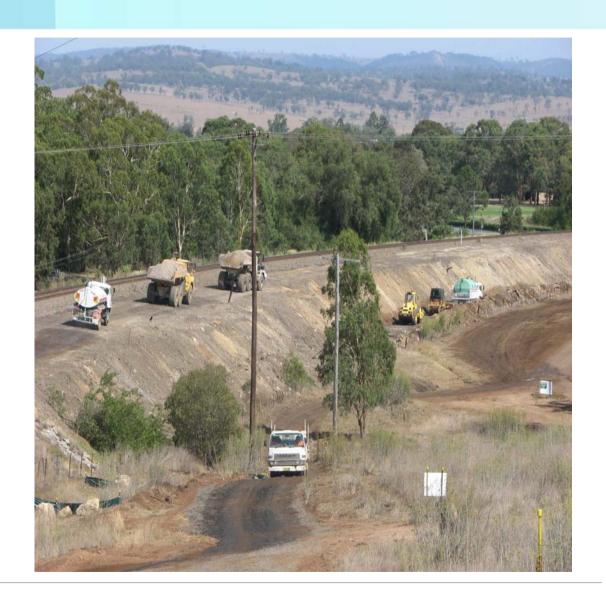






#### Muswellbrook Loop Extension

- \$11.02M Project
- Completed early, in May 2007





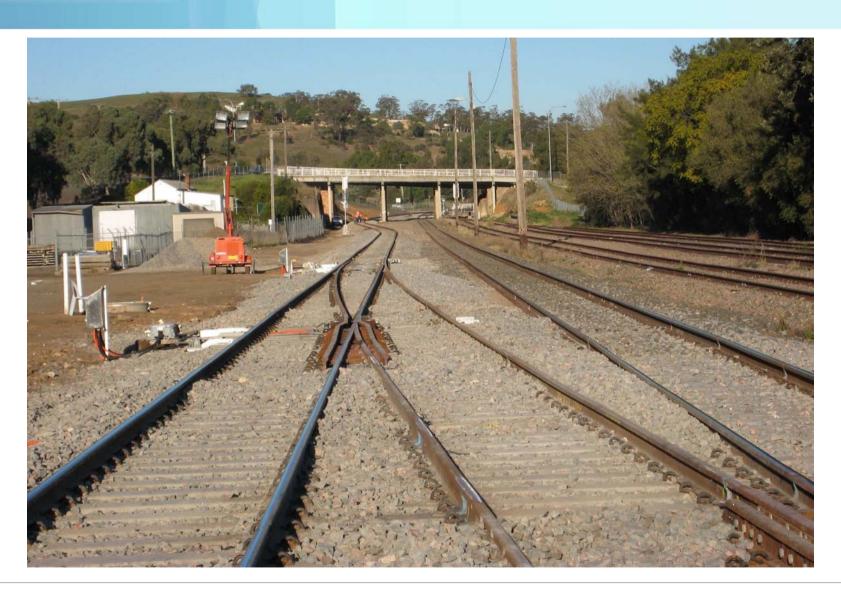
### Muswellbrook Loop Extension



Up train on the Muswellbrook Loop Extension



### Muswellbrook Loop Extension





#### Gunnedah Loop

- \$10M Project
- Completed on time in December 2007





### Gunnedah Loop





### Gunnedah Loop





#### Train Control Consolidation

- Amalgamation of Area Controllers, Signaller and Train Controller
- Reduction of staff from 250 to 100
- Closure of signal boxes.
   Remoting functions to single point at Broadmeadow
- Upgrade of significant signalling systems
- Removal of old unreliable equipment with new equipment







- \$13.5M Project
- Stages 1 and 2 commissioned January 2008
- Final stages forecast for completion April 2008
- Strategy Required by Q1 2008





#### More Completed Projects;

- 80km/hr running on Minimbah and Nundah Banks, a \$1.2M Project completed on time in November 2006 (stage 1)
- Togar Loop Extension, a \$4.0M project completed on time in May 2007
- Murulla Loop Extension, a \$4.8M project completed on time in May 2007
- Werris Creek Loop Extension, completed on time as part of the Main Line TCC project in December 2007



#### Projects That Have Commenced Construction (incl those at tender);

- Antiene to Grasstree Duplication target completion of August 2008
   early per strategy
- St Heliers to Muswellbrook Duplication target completion of March 2009 early per strategy
- Bi-Directional Signalling Grasstree to St Heliers target March 2009 early per strategy
- Mangoola Loop target June 2008 early per strategy



- Wollar Loop target May 2008 early per strategy
- Ardglen Loop Extension Target June 2008 3 months late per strategy
- Willow Tree Target May 2008 4 months late per strategy
- Curlewis Loop Extension target July 2008 On time per strategy
- Breeza Loop Extension target July 2008 On time per strategy



- Emerald Hill Loop Extension target August 2008 early per strategy
- Werris Creek to Gunnedah CTC Target July 2008 on time per strategy



#### Projects that are currently at detailed design phase, include;

- Bi-Directional Signalling Maitland to Branxton target March 2009 early per strategy
- Minimbah Bank 3<sup>rd</sup> Road target March 2010 2 months late per strategy (may come forward if it can be commissioned under traffic)
- Newdell Junction target June 2010 early per strategy
- Bylong Loop Target Q4 2008 on time



#### **HUNTER VALLEY CORRIDOR 2007-2012 CAPACITY STRATEGY – PROGRESS**

Prepared by: G Withford Date: 3 March 2008

	2006-2011 STRATEGY TIMING	2007-2012 STRATEGY TIMING	Commissioned Cost (\$M)		Performance; (Note; 'On time' is within 3 months of strategy date given the inflexible nature of the possession regime, ie 4 x possessions per year)
Newcastle – Muswellbrook	<u>'</u>				
Sandgate Grade Separation	By 1 <sup>st</sup> half 2007	Completed	\$80.00	Completed Nov 2006	Early
80km/hr approaching Minimbah Bank	By 1 <sup>st</sup> half 2007	Completed	\$0.60	Completed Nov 2006 - st 1	Early
Muswellbrook Loop & Junction	By 2 <sup>nd</sup> half 2007	Completed	\$11.02	Completed May 2007	Early
Minimbah Bank 10 min headway	By 2 <sup>nd</sup> half 2007	Deleted	\$0.00	Deleted	Deleted
80km/hr approaching Nundah Bank	By 1 <sup>st</sup> half 2007	Completed	\$0.60	Completed Nov 2006 - st 1	Early
Nundah Bank 10 min headway	By 2 <sup>nd</sup> half 2007	Deleted	\$0.00	Deleted	Deleted
Antiene to Grasstree Duplication	By 2008	By Q1 2009		Target August 2008	Early
Bidirectional Signalling Maitland to Branxton	By 2009	By Q3 2009		Target June 2009	Early
Bidirectional Signalling Whittingham to Newdell	By 2008	Deleted		Deleted	Deleted
Minimbah Bank 3 <sup>rd</sup> Road	By 2010	By Q4 2009		Target March 2010	On time
Newdell Junction	By 2009	By Q1 2010		Target Q1 2010	Early
St Heliers – Muswellbrook Duplication	By 2009	By Q3 2009		Target March 2009	Early
Nundah Bank 3 <sup>rd</sup> Road	By 2011	Deleted		Deleted	Deleted
Drayton Junction Upgrade	By 2011	By 2011		Target by 2011	Not Commenced
Bidirectional Signalling Newdell to Drayton	By 2010	Deleted		Deleted	Deleted
Bidirectional Signalling Grasstree – St Heliers	By 2009	By Q3 2009		Target March 2009	Early
Allandale Resignalling for 8-minute headways	New	By Q3 2009		Target March 2009	Early
Minimbah – Maitland 3 <sup>rd</sup> Road	New	By 2012		By 2012	Not Commenced



Muswellbrook – Ulan					
Ulan Line CTC	By 2 <sup>nd</sup> half 2007	By Q1 2008	tba	Stage 1 and Stage 2, commissioned January 2008, Completion targeted for April 2008	Late
Mangoola (304km) Loop	By 2008	By Q4 2008		Target June 2008	Early
Rylestone Rd (381km) Loop	By 2008	By Q4 2008		Target November 2008	On Time
Wollar (410km) Loop	By 2009	By Q4 2008		Target May 2008	Early
Aerosol Valley (370km) Loop	By 2010	By 2010		Target 2010	On Time
Worondi (348km) Loop	By 2010	By 2010		Target 2010	On Time
Radio Hut (319km) Loop	New	By 2012		Target 2012	On Time
Muswellbrook – Bengalla Duplication	New	By 2012		Target 2012	Not Commenced
Togar Loop Extension	By 2 <sup>nd</sup> half 2007	Completed	\$4.00	Completed May 07	On Time
Togar Loop Extension	By 2 <sup>nd</sup> half 2007	Completed	\$4.00	Completed May 07	On Time
Murulla Loop Extension	By 2 <sup>nd</sup> half 2007	Completed		Completed May 07	On Time
Gunnedah Loop (RIC)	By 2 <sup>nd</sup> half 2007	By Q1 2008	\$10.00	Completed December 2007	On Time
Werris Creek – Narrabri Power Operation (RIC)	By 2 <sup>nd</sup> half 2007	Deleted		Deleted	Deleted
Ardglen Loop Extension	By 2008	By Q2 2008		Target for Jun 2008	On Time
Willow Tree Loop Extension	By 2008	By Q1 2008		Target for May 2008	Late
Werris Creek Loop Extension	By 2008	Completed	tba	Completed December 2007	On Time
Werris Creek Bypass	New	By 2011		Target 2011	Not Commenced
Quirindi Loop Extension	By 2009	Deleted		Deleted	Deleted
Ardglen – Kankool Duplication	By 2009	Deleted		Deleted	Deleted
Parkville Loop Extension	By 2009	By 2011		Target 2011	Not Commenced
Curlewis Loop Extension (RIC)	By 2009	By Q3 2008		Target July 2008	On time
Werris Creek to Gunnedah CTC (RIC)	By 2009	By Q3 2008		Target July 2008	On time



Muswellbrook - Narrabri - continued				
Gunnedah – Narrabri CTC (RIC)	By 2010	By 2010	Target March 2009 - tbc by RIC	Early
Koolbury Passing Loop	By 2010	Deleted	Deleted	Deleted
Murrurundi Loop Extension	By 2010	By 2011	Target 2011	Not Commenced
Burilda Loop Extension (422.360km)	By 2010	By 2012	Target 2012	Not Commenced
Emerald Hill Loop Extension (RIC)	By 2010	By 2010	Target August 2008	Early
Boggabri Loop Extension (RIC)	New	By 2010	Target Novemeber 2008 - tbc by RIC	Early
Breeza Loop Extension (RIC) (433.900km)	New	By Q3 2008	Target July 2008	On time
Quipolly Passing Loop (402.014km)	New	By 2011	Target 2011	On Time
Braefield Passing Loop (386.010km)	New	By 2010	Target 2010	Not Commenced
Watermark Passing Loop (RIC) (455.600km)	New	By 2011	Target 2011	Not Commenced
Wingen Passing Loop	New	By 2012	Target 2012	Not Commenced
South Gunnedah Passing Loop	New	By 2012	Target 2012	Not Commenced
Muswellbrook – Koolbury Duplication	New	By 2011	Target 2011	Not Commenced
New Liverpool Range Alignment	New	By 2012	Target 2012	Not Commenced
Scone Reconfiguration	New	By 2011	Target 2011	Not Commenced

Completed Projects
Construction Has Commenced or tenders called
Deleted Projects
Late Projects

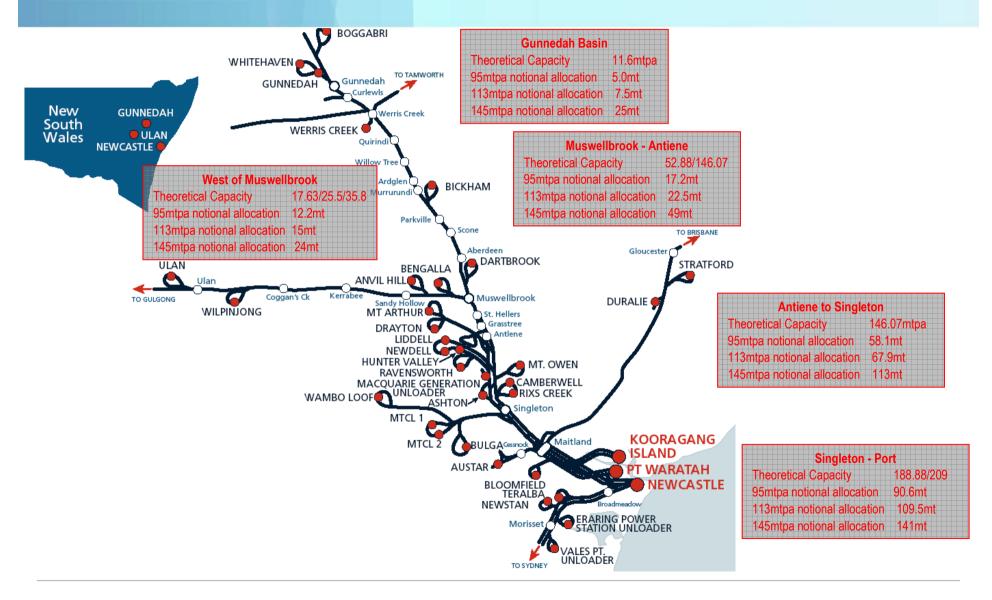
#### Conclusion



- Resource Constrained environment
- 4 x 2 day Possession per year of which projects can be completed/commissioned without adverse impact of throughput
- Unprecedented on time completion by the Hunter Valley Major Works Team
- Total value of commissioned projects to date is \$126M
- Value of work currently under construction or at tender is \$122M
- Value of work at final design with construction to commence within 6-12 months is \$141M
- Value of next 5 year spend is \$988M



#### Forecast Outlook





#### FORECAST OUTLOOK

	Unconstrained Rail Theoretical Capacity	95mtpa Notional Allocation	113mtpa Notional Allocation	145 mtpa Notional Allocation
Gunnedah Basin	11.6mtp	5.0mt	7.5mt	25mt
West of Muswellbrook	17.63mtpa/25.5mt/35.8mt	12.2mt	15mt	24mt
Muswellbrook - Antiene	52.88mtpa/146.07mt	17.2mt	22.5	49mt
Antiene - Singleton	146.07mtpa	58.1mt	67.9mt	113mt
Singleton - Port	188.88mtpa/209mtpa	90.6mt	109.5mt	141mt