

# **2007/2008 NSW Lease Annual Condition Report**

<b>Executive Summary</b> .....	<b>3</b>
(a) <i>Material Changes in Condition</i> .....	3
(b) <i>Performance against KPI's</i> .....	3
(c) <i>Register of ARTC Infrastructure</i> .....	5
<b>1. Material Changes in Condition</b> .....	<b>6</b>
<b>2. Performance Against KPI's</b> .....	<b>6</b>
(a) <i>Total Transit Time Delay, by KPI Region, by month</i> .....	6
(b) <i>Five Year Rolling Average of Total Transit Time Delay</i> .....	7
(c) <i>Track Geometry</i> .....	8
i. <i>Geometry Values</i> .....	8
ii. <i>Five Year Rolling Average for each Top Value, Line Value, Twist Value, and Gauge Value</i> .....	9
iii. <i>Trending Graphs</i> .....	9
(d) <i>Three-Year Rolling Average of Large Rail Defects</i> .....	13
Large Rail Defects.....	13
(e) <i>Cumulative Number of Sleepers replaced</i> .....	14
i. <i>New Sleepers installed on the four regions of the KPI Network excluding the Hunter Valley (Schedule 7, Cl 2.2(e))</i> .....	14
ii. <i>Sleeper Type on the four regions of the KPI Network on the last day of the ACR period (including sleepers replaced during the reporting period)</i> .....	14
(f) <i>Bridges</i> .....	15
i. <i>Length of Bridges Replaced during Annual Condition Reporting period</i> .....	15
ii. <i>Percentage of Bridges for which repair work warrants a Temporary Speed Restriction, or a reduction in permitted axle load on the last day of the ACR period</i> .....	15
iii. <i>Bridge Type on the entire KPI Network on the last day of the ACR period</i> .....	15
(g) <i>Signal failures, by month</i> .....	16
i. <i>Total signal failures per month for the KPI Network (excluding level crossings)</i> .....	16
(h) <i>Percentage of Healthy Trains Achieving On-Time Exit, on the KPI Network, by month</i> .....	17
i. <i>Scope of Measured Services (5.1)</i> .....	17
ii. <i>Measurement and Calculation (5.2)</i> .....	17
(i) <i>Maximum allowable speed and axle load combination applying on the KPI Network</i> .....	20
(j) <i>Permitted Permanent Speed Restrictions</i> .....	21
<b>3. Register of ARTC Infrastructure</b> .....	<b>24</b>
(a) <i>Building Works added to Assets Register during 2007/08</i> .....	24
<b>4. Infrastructure Investment Program - Major Works</b> .....	<b>25</b>
(b) <i>Major Works Investment Program</i> .....	25
(c) <i>Corridor Works Summary</i> .....	25
(d) <i>Major Works Underway - Indicative Cash Flow</i> .....	26

## Executive Summary

In accordance with the lease, this document presents the Annual Condition Report for NSW Lease Assets. This fourth report covers the period July 2007 to June 2008. September 2004 being the commencement of the lease.

### **(a) Material Changes in Condition**

There have been no adverse changes in the general condition of the Land, the Infrastructure and the ARTC Infrastructure during the period covered by this Annual Condition Report.

### **(b) Performance against KPI's**

#### **Total Transit Time Delay, by KPI region, by month (Schedule 7, CI 2.2(a))**

The Annual Limit was met for fourteen of fifteen KPI Network train categories.

The Hunter Valley required adjustments due to Force Majeure incidents to the results for 2007/08.

Where applicable, adjustments are made to account for Force Majeure or increased maintenance when KPI's are exceeded, otherwise these impacts are ignored.

#### **Five Year Rolling Average of Total Transit Time Delay (Schedule 7, CI 2.2(b))**

As this is only the fourth year of the lease, the Five Year Rolling Average of Total Transit Time Delay will not yet be reported.

#### **Track Geometry (Schedule 7, CI 2.2(c))**

No Geometry measures for Top, Twist, Line and Gauge exceeded the Annual Limits, calculated as per Schedule 7, section 4.1 and 4.2.

As this is only the fourth year of the lease, the Five Year Rolling Average of the Track Geometry measures will not yet be reported.

#### **Three-Year Rolling Average of Large Rail Defects (Schedule 7, CI 2.2(d))**

The Three-Year Rolling Average for Large Rail Defects was 35.3. This is within the limit of 48.86, calculated as per Schedule 7, section 11.4

### **New Sleepers on KPI Network, excluding the Hunter Valley (Schedule 7, CI 2.2(e))**

A total of 1,036,096 sleepers (Timber – 70,603; Steel – 19,592; Concrete – 945,901 and Other - 0) were installed during the reporting period. The Network including the sleepers replaced, now consists of Timber 50.6%, Steel 7.5%, Concrete 41.9% and Other 0.0%.

### **Bridges (Schedule 7, CI 2.2(f))**

6 bridges totalling 543.41m have been replaced with 6 concrete structures totalling 543.41m during the reporting period. This has resulted in a net change to the bridge type and length, from the original list supplied at the date of commencement of the lease.

Currently 5 Bridges are under restriction, which is below the Bridge Limit of 20

### **Signals (Schedule 7, CI 2.2(g))**

The total number of signal failures on the KPI network for each month has been provided.

### **Percentage of Healthy Trains Achieving On-Time Exit, by month (Schedule 7, CI 2.2(h))**

As required by clause 5.2, ARTC has measured the full journey performance of services on the ARTC network (including the NSW Lease network).

The measurement of ARTC's service reliability has been calculated to reflect -

1. the full journey performance of all services (including performance on the CRN network); and
2. the full journey performance of all services (excluding those originating or terminating on the CRN Network)

The YTD Monthly Average % of Healthy Services Achieving On-time Exit (July 2007 – June 2008) is:

1. 95.7% (including CRN Network performance) against a Service Reliability limit of 91.6%. This result is calculated as per lease schedule 7.3 (a) 'Service Reliability Limit' as being the monthly average of Percentage of Healthy Trains Achieving on Time Exit for the year ending 12 months after the lease commencement date (September 2004 to August 2005).
2. 96.8% (excluding CRN Network originating/terminating services) against a Service Reliability limit of 94.0%. As above, the limit is calculated as per lease schedule 7.3 (a) 'Service Reliability Limit'.

**Maximum allowable speed and axle load combinations applying to the KPI Network (Schedule 7, CI 2.2(i))**

Since the commencement of the Lease there has been no change in the maximum allowable speed and axle load combinations on the KPI network.

**Permitted Permanent Speed Restrictions (Schedule 7, CI 2.2(j))**

14 Permanent Speed restrictions were changed between July 2007 and June 2008. They are regarded as Permitted Permanent Speed Restrictions. These changes have the effect of reducing the Base Transit Time on the KPI network.

**(c) Register of ARTC Infrastructure**

**Building Works**

During the reporting period, a total of \$3,757,891.44 of Building Works was completed.

**Infrastructure Investment Programme and Major Works**

A total of \$514,022,000 was invested on the Major Works Investment Program during the reporting period. The following Projects are included in the total spend and were commenced during the period covered by this report;

- North Coast Improvement Works
- Main South Improvement Works
- Hunter Valley Improvement Works
- Train Control Consolidation

A total of \$142,763,630 has been invested in Corridor Works (including RCRM, MPM and Corridor Capital Works) during the reporting period.

During the first four years of the lease, ARTC has invested a total of \$1,321,294,130 in Major Works, Corridor MPM and Capital Works.

A further \$1,675,533,395 will be invested on Major Works in future years.

<b>Summary of Major Works Investment and Corridor MPM &amp; Capital since lease commencement</b>					
	2004 / 05 (from Lease Commencement Date)	2005/06	2006/07	2007/08	Total
Major Works Investment	\$5,695,500	\$83,518,000	\$324,507,000	\$514,022,000	\$927,742,500
Corridor MPM & Capital	\$58,869,000	\$97,234,000	\$94,685,000	\$142,763,630	\$393,551,630
<b>Total</b>	<b>\$64,564,500</b>	<b>\$180,752,000</b>	<b>\$419,192,000</b>	<b>\$656,785,630</b>	<b>\$1,321,294,130</b>

## 1. Material Changes in Condition


There have been no adverse changes in the general condition of the Land, the Infrastructure and the ARTC Infrastructure during the period covered by this Annual Condition Report.

## 2. Performance Against KPI's.

### (a) Total Transit Time Delay, by KPI Region, by month

This section deals with transit time reporting as required under Schedule 7, section 2.2(a) of the lease. The information has been presented in two tables. The first table includes all Temporary Speed Restrictions. The second table excludes abnormal events identified as Force Majeure. The Final Annual Limit (as agreed with ARTC and RIC), has been met for the KPI Network for all categories of train excluding the Hunter Valley KPI Region for the XPT category. The high time loss experienced by the XPT in the Hunter Valley was due to speed restrictions placed in the months of February and March due to worn crossings and poor geometry. These have been rectified and the restrictions have since been lifted.

Including Force Majeure																
Category	Jul-2007	Aug-2007	Sep-2007	Oct-2007	Nov-2007	Dec-2007	Jan-2008	Feb-2008	Mar-2008	Apr-2008	May-2008	Jun-2008	05/06 Period Avg (incl Force Majeure)	06/07 Period Avg (incl Force Majeure)	07/08 Period Avg (incl Force Majeure)	Annual Limit * after Year 3
<b>Hunter Valley</b>																
Freight	6.5	7.6	8.3	7.7	11.0	4.9	5.8	17.8	20.5	14.6	2.6	2.6	7.4	7.5	7.5	11.9*
Super Freight	103	13.1	15.3	15.2	22.7	8.4	11.2	30.0	37.1	23.4	4.8	4.8	10.6	12.4	12.4	20.9*
XPT	3.6	3.0	1.5	3.7	7.7	1.2	2.7	0.0	11.6	5.9	2.1	2.1	5.2	3.4	4.6	3.5*
<b>North Coast</b>																
Freight	7.7	10.1	10.9	11.3	13.2	3.8	13.1	7.6	6.4	12.8	6.9	9.2	12.2	10.4	9.4	39.5*
Super Freight	12.1	16.1	17.6	17.4	19.7	7.3	19.2	11.7	9.3	18.7	11.9	13.9	21.9	18.6	14.6	62.5*
XPT	5.5	6.7	8.1	7.4	8.6	2.0	5.3	5.3	4.7	8.8	2.6	6.8	8.1	7.6	6.0	19.5*
<b>South</b>																
Freight	10.5	6.7	8.9	6.2	10.9	10.2	24.7	19.6	7.7	13.0	6.9	3.2	11.4	9.4	10.7	14.5*
Super Freight	17.7	11.8	15.6	10.8	19.6	18.6	37.8	31.2	16.9	26.4	15.0	6.9	21.2	16.4	19.0	25.3*
XPT	4.5	2.8	3.7	3.1	7.2	5.1	18.7	15.2	6.5	7.1	3.9	2.2	9.5	6.3	6.7	8.0*
<b>West</b>																
Freight	12.4	4.2	0.0	4.8	20.6	14.7	14.9	12.3	8.5	3.4	0.0	0.0	20.9	17.2	8.0	23.3*
Super Freight	22.4	12.6	2.1	9.6	36.3	29.6	36.4	18.7	17.1	8.6	1.5	1.5	42.5	35.3	16.4	39.8*
XPT	1.1	5.2	1.0	4.6	15.0	11.3	14.1	0.6	18.9	4.5	0.6	0.6	17.0	11.4	6.5	10.3*
<b>Totals</b>																
Freight	37.1	28.5	28.0	30.0	55.8	33.6	58.5	57.3	43.0	43.8	16.4	15.0	51.9	44.6	37.3	89.3*
Super Freight	62.5	53.6	50.6	53.0	98.2	63.9	104.6	91.5	80.4	77.2	33.1	27.1	96.2	82.8	66.3	148.6*
XPT	14.8	17.7	14.3	18.8	38.5	19.6	40.7	31.0	41.6	26.3	9.3	11.8	39.8	28.7	23.7	41.3*

 Indicates months that have been affected by a Force Majeure & Increased Maintenance Event

\* Annual Limit as agreed between ARTC and RIC after the first three years of the term.

<b>Excluding Force Majeure</b>																
Category	Jul-2007	Aug-2007	Sep-2007	Oct-2007	Nov-2007	Dec-2007	Jan-2008	Feb-2008	Mar-2008	Apr-2008	May-2008	Jun-2008	05/06 Period Avg (excl Force Majeure)	06/07 Period Avg (excl Force Majeure)	07/08 Period Avg (excl Force Majeure)	Annual Limit * after Year 3
<b>Hunter Valley</b>																
Freight	6.5	5.7	8.3	7.7	11.0	4.9	5.8	17.8	20.5	14.6	2.6	2.6	7.4	7.5	9.0	11.9*
Super Freight	10.3	9.4	15.3	15.2	22.7	8.4	11.2	30.0	37.1	23.4	4.8	4.8	10.6	12.4	16.0	20.9*
XPT	3.6	1.3	1.5	3.7	7.7	1.2	2.7	9.9	11.6	5.9	2.1	2.1	5.2	3.4	4.4	3.5*
<b>North Coast</b>																
Freight	7.7	10.1	10.9	11.3	13.2	3.8	13.1	7.6	6.4	12.8	6.9	9.2	12.2	10.4	9.4	39.5*
Super Freight	12.1	16.1	17.6	17.4	19.7	7.3	19.2	11.7	9.3	18.7	11.9	13.9	21.9	18.6	14.6	62.5*
XPT	5.5	6.7	8.1	7.4	8.6	2.0	5.3	5.3	4.7	8.8	2.6	6.8	8.1	7.6	6.0	19.5*
<b>South</b>																
Freight	10.5	6.7	8.9	6.2	10.9	10.2	24.7	19.6	7.7	13.0	6.9	3.2	11.4	9.4	10.7	14.5*
Super Freight	17.7	11.8	15.6	10.8	19.6	18.6	37.8	31.2	16.9	26.4	15.0	6.9	21.2	16.4	19.0	25.3*
XPT	4.5	2.8	3.7	3.1	7.2	5.1	18.7	15.2	6.5	7.1	3.9	2.2	9.5	6.3	6.7	8.0*
<b>West</b>																
Freight	12.4	4.2	0.0	4.8	20.6	14.7	14.9	12.3	8.5	3.4	0.0	0.0	20.9	17.2	8.0	23.3*
Super Freight	22.4	12.6	2.1	9.6	36.3	29.6	36.4	18.7	17.1	8.6	1.5	1.5	42.5	35.3	16.4	39.8*
XPT	1.1	5.2	1.0	4.6	15.0	11.3	14.1	0.6	18.9	4.5	0.6	0.6	17.0	11.4	6.5	10.3*
<b>Totals</b>																
Freight	37.1	26.7	28.0	30.0	55.8	33.6	58.5	57.3	43.0	43.8	16.4	15.0	51.9	44.6	37.1	89.3*
Super Freight	62.5	49.9	50.6	53.0	98.2	63.9	104.6	91.5	80.4	77.2	33.1	27.1	96.2	82.8	66.0	148.6*
XPT	14.8	16.0	14.3	18.8	38.5	19.6	40.7	31.0	41.6	26.3	9.3	11.8	39.8	28.7	23.6	41.3*



Indicates months that have been affected by a Force Majeure

\* Annual Limit as agreed between ARTC and RIC after the first three years of the term.

The Annual Limit, has been met for the KPI Network for all train categories. Adjustments due to Force Majeure incidents were made to the results for 2007/08.

### (b) Five Year Rolling Average of Total Transit Time Delay

As this is only the fourth year of the lease, the Five Year Rolling Average of Total Transit Time Delay will not yet be reported. This will be reported in later years as data is accumulated.

## (c) Track Geometry

### i. Geometry Values

No geometry measures exceeded the Annual Limits, and track geometry improved in 13 of the 16 measures during 07/08.

#### South

Region	Measure	Annual Limit *	05/06	06/07	07/08	07/08 vs Annual Limit
South	Top	10.62	9.17	8.79	8.06	TARGET MET
	Twist	6.69	6.26	6.20	5.81	TARGET MET
	Line	10.20	9.15	9.05	8.51	TARGET MET
	Gauge	6.48	6.03	5.90	5.33	TARGET MET

#### North Coast

Region	Measure	Annual Limit *	05/06	06/07	07/08	07/08 vs Annual Limit
North	Top	9.11	7.18	7.09	6.32	TARGET MET
	Twist	6.55	5.04	5.03	4.76	TARGET MET
	Line	13.52	11.68	11.61	11.20	TARGET MET
	Gauge	6.89	6.62	6.47	5.85	TARGET MET

#### West

Region	Measure	Annual Limit *	05/06	06/07	07/08	07/08 vs Annual Limit
West	Top	11.17	10.88	10.34	10.29	TARGET MET
	Twist	6.89	6.86	6.22	5.62	TARGET MET
	Line	8.31	6.35	7.01	6.12	TARGET MET
	Gauge	5.83	4.60	4.57	4.32	TARGET MET

#### Inland Route

Region	Measure	Annual Limit *	05/06	06/07	07/08	07/08 vs Annual Limit
Inland	Top	12.46	11.20	10.92	11.11	TARGET MET
	Twist	8.06	7.61	7.45	7.55	TARGET MET
	Line	10.79	9.00	8.88	8.95	TARGET MET
	Gauge	6.46	6.04	5.99	5.80	TARGET MET

\* Annual Limit as requested in 07/08 report addendum.



ii. **Five Year Rolling Average for each Top Value, Line Value, Twist Value, and Gauge Value.**

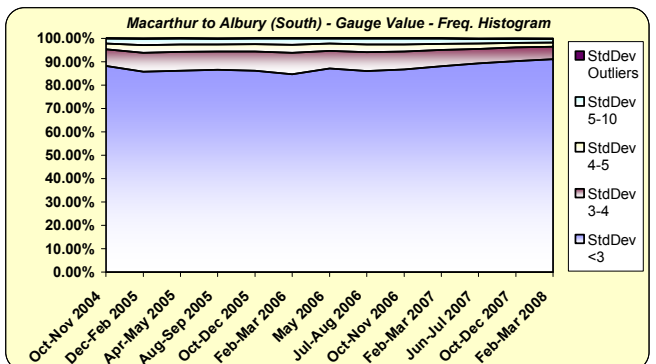
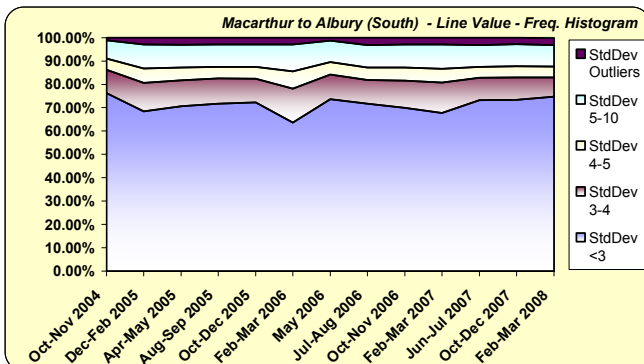
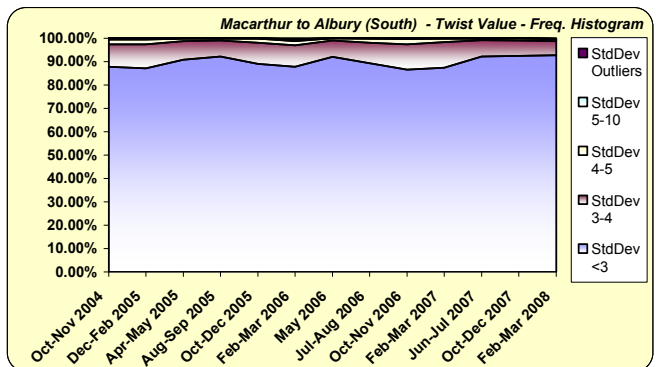
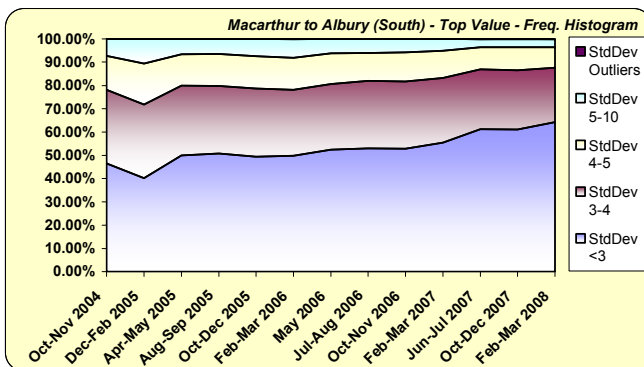
As this is only the fourth year of the lease, the Five Year Rolling Average of Track Geometry will not yet be reported. This will be reported in later years as data is accumulated.

iii. **Trending Graphs**

The trending graphs consist of all geometry readings taken for a KPI region up to 30 June 2008. A rising slope in the graph shows an improvement in track geometry.

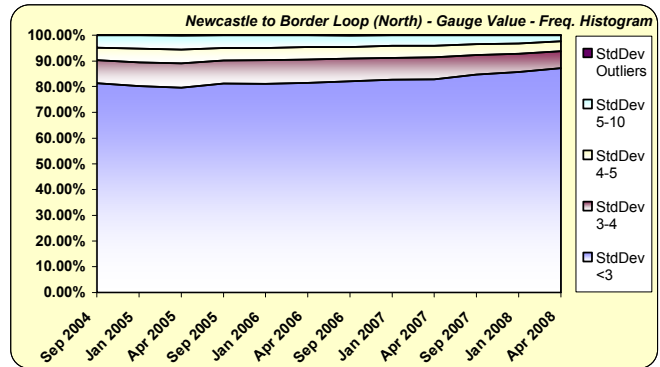
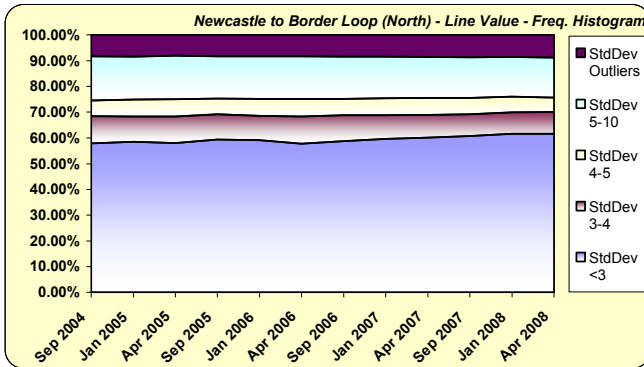
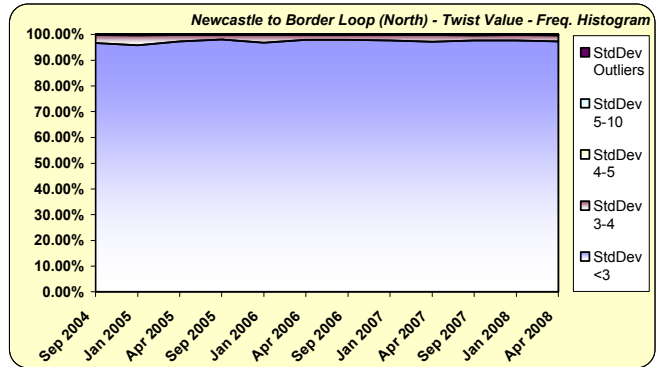
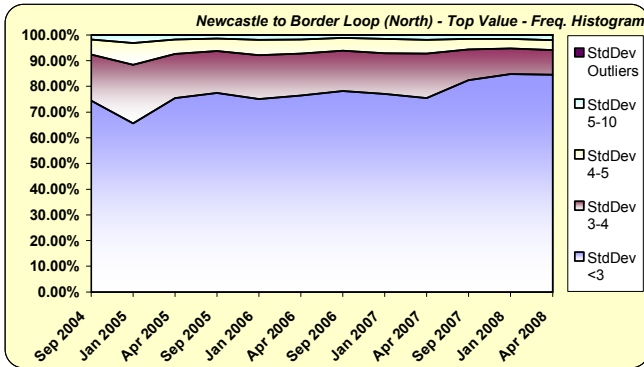
**South (July 2007 to June 2008)**

South (Mar 08)	StdDev <3	StdDev 3-4	StdDev 4-5	StdDev 5-10	StdDev Outliers
<b>Top</b>	<b>64.31%</b>	<b>23.27%</b>	<b>8.79%</b>	<b>3.47%</b>	<b>0.01%</b>
<b>Twist</b>	<b>92.65%</b>	<b>6.11%</b>	<b>0.96%</b>	<b>0.12%</b>	<b>0.00%</b>
<b>Versine</b>	<b>74.78%</b>	<b>8.20%</b>	<b>4.63%</b>	<b>9.21%</b>	<b>3.02%</b>
<b>Gauge</b>	<b>91.09%</b>	<b>5.36%</b>	<b>1.78%</b>	<b>1.58%</b>	<b>0.03%</b>



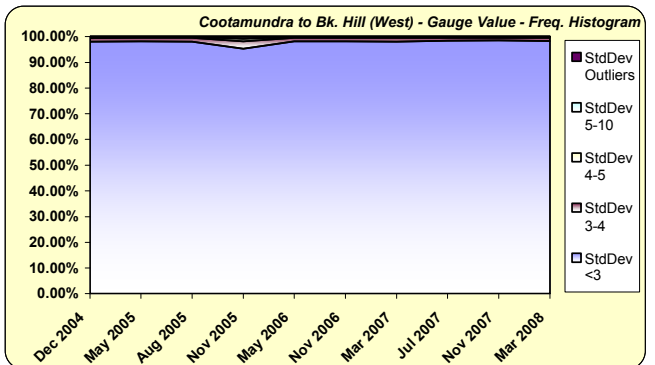
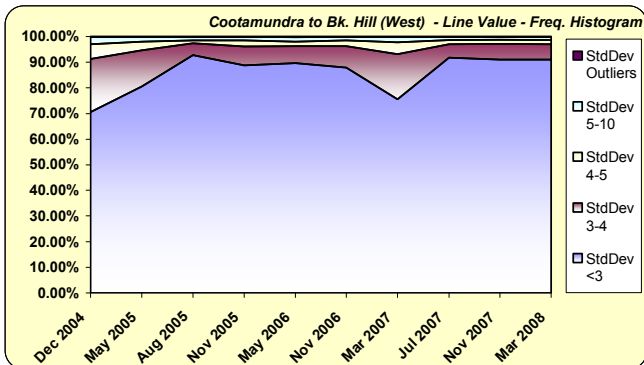
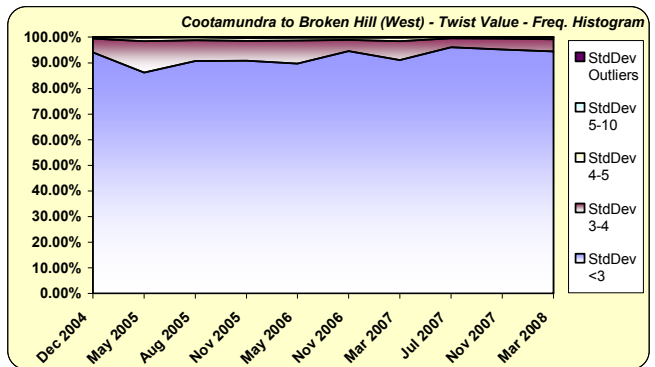
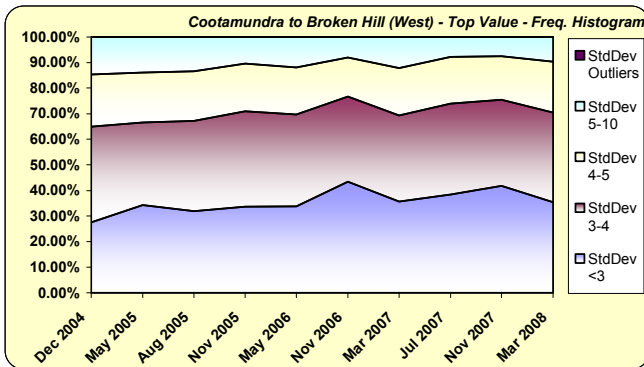
**North Coast (July 2007 to June 2008)**

North Coast (Apr 08)	StdDev <3	StdDev 3-4	StdDev 4-5	StdDev 5-10	StdDev  Outliers
Top	84.53%	9.61%	3.82%	2.02%	0.02%
Twist	97.22%	2.41%	0.28%	0.09%	0.00%
Versine	61.64%	8.35%	5.63%	15.55%	8.84%
Gauge	87.17%	6.59%	3.87%	2.36%	0.01%



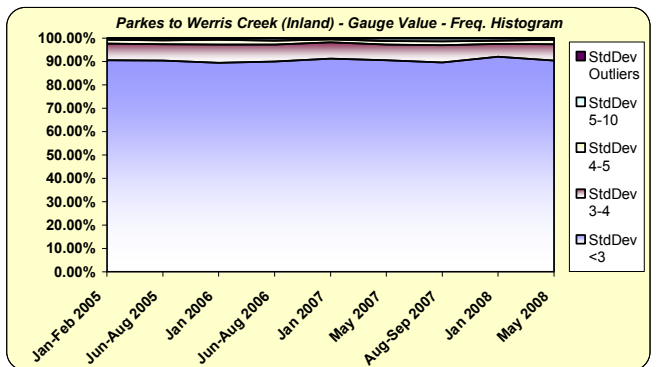
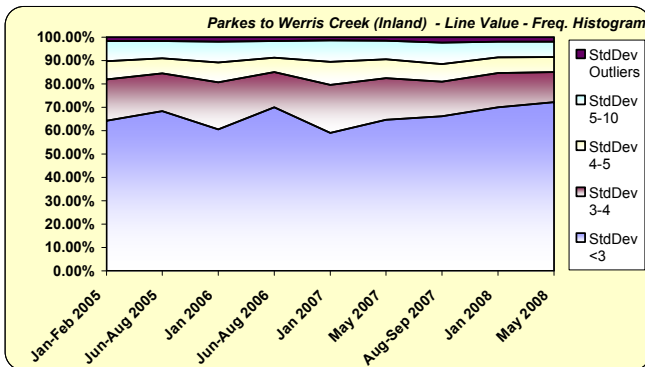
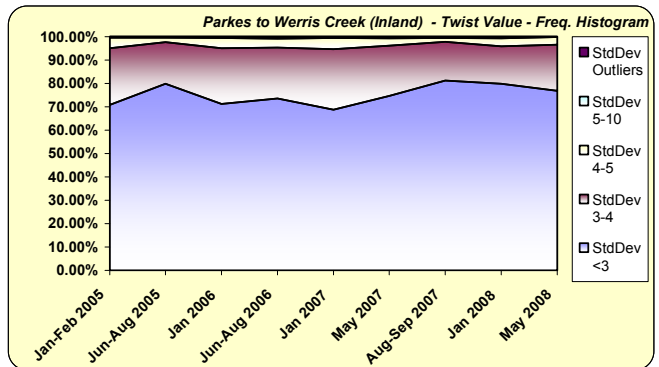
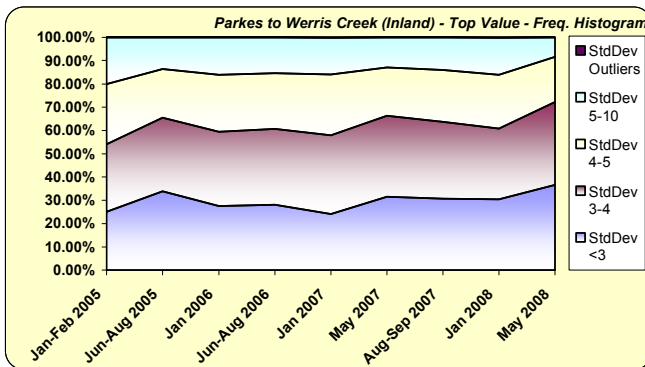
**West (July 2007 to June 2008)**

West (Mar 08)	StdDev <3	StdDev 3-4	StdDev 4-5	StdDev 5-10	StdDev Outliers
Top	35.48%	34.89%	19.93%	9.70%	0.00%
Twist	94.45%	4.73%	0.75%	0.07%	0.00%
Versine	91.09%	5.93%	1.59%	1.30%	0.09%
Gauge	98.21%	1.28%	0.38%	0.14%	0.00%



**Inland Route (July 2007 to June 2008)**

Inland (May 2008)	StdDev <3	StdDev 3-4	StdDev 4-5	StdDev 5-10	StdDev Outliers
Top	36.59%	35.60%	19.39%	8.43%	0.00%
Twist	76.80%	19.76%	3.25%	0.20%	0.00%
Versine	72.14%	12.89%	6.45%	6.49%	2.03%
Gauge	90.38%	6.94%	1.91%	0.77%	0.00%



**(d) Three-Year Rolling Average of Large Rail Defects**

**Large Rail Defects**

Shown below is the Three –Year Rolling Average of Large Rail Defects occurring on the four KPI regions. All years record the non-Vertical and Vertical Split Head defects. The large rail defect limit of 48.86 (as per correspondence of October 2005) was not exceeded.

	03/04	04/05	05/06	06/07	07/08	3 Year Rolling Average
<b>Inland</b>	1	1	4	0	3	2.3
<b>North</b>	4	9	11	14	10	11.7
<b>South</b>	22	25	18	31	7	18.7
<b>West</b>	7	0	1	4	3	2.7
<b>Total</b>	34	35	34	49	23	35.3

The three year rolling average has decreased from 39.4 in 2006/2007 to 35.3 in 2007/2008 and is still below the large rail defect limit of 48.86

**(e) Cumulative Number of Sleepers replaced**

**i. New Sleepers installed on the four regions of the KPI Network excluding the Hunter Valley (Schedule 7, CI 2.2(e))**

	04/05	05/06	06/07	07/08
<b>Timber</b>	49,678	181,872	127,497	70,603
<b>Steel</b>	2,618	6,768	22,958	19,592
<b>Concrete</b>	532	11,622	209,335	945,901
<b>Other</b>	0	0	0	0

**ii. Sleeper Type on the four regions of the KPI Network on the last day of the ACR period (including sleepers replaced during the reporting period)**

	04/05	05/06	06/07	07/08
<b>Timber</b>	67.4%	67.3%	63.6%	50.6%
<b>Steel</b>	11.1%	11.0%	10.9%	7.5%
<b>Concrete</b>	21.5%	21.7%	25.5%	41.9%
<b>Other</b>	0.0%	0.0%	0.0%	0.0%

**(f) Bridges**

**i. Length of Bridges Replaced during Annual Condition Reporting period**

6 steel bridges totalling 543.41m have been replaced with 6 concrete structures totalling 543.41m during the reporting period. This has resulted in a net change to the bridge type and length, from the original list supplied at the date of commencement of the lease.

**ii. Percentage of Bridges for which repair work warrants a Temporary Speed Restriction, or a reduction in permitted axle load on the last day of the ACR period.**

Temporary Speed Restrictions are applied to 5 Bridges, well below the Bridge Limit of 20.

<b>Number of Speed Restricted Bridges</b>							
	05/06 Total Length(m)	05/06 No of Bridges:	06/07 Total Length(m)	06/07 No of Bridges:	07/08 Total Length(m)	07/08 No of Bridges:	% of Bridges:
Timber	0	0	50.0	1	0	0	0%
Iron	145.2	1	145.2	1	145.2	1	33.3%
Masonry	0	0	0		0	0	0%
Steel	668.9	4	871.4	5	381	3	0.90%
Concrete	0	0	0		0	0	0%
Other (incl. brick)	0	0			70.65	1	4.17%
<b>Total</b>	<b>814.1</b>	<b>5</b>	<b>1066.6</b>	<b>7</b>	<b>596.9</b>	<b>5</b>	<b>0.63%</b>

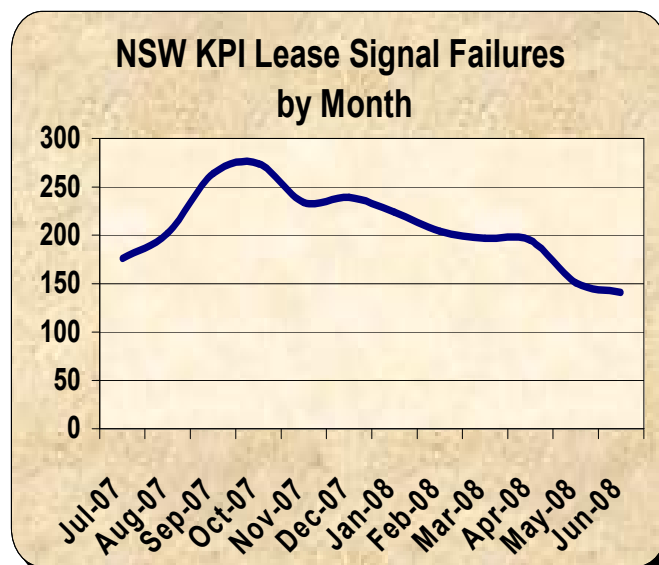
**iii. Bridge Type on the entire KPI Network on the last day of the ACR period.**

<b>Summary of KPI Network Bridge Types</b>						
	05/06 Total Length(m)	05/06 No of Bridges:	06/07 Total Length(m)	06/07 No of Bridges:	07/08 Total Length(m)	07/08 No of Bridges:
Timber	264.7	17	264.7	17	264.7	17
Iron	460.5	4	260.5	3	260.5	3
Masonry	54.9	1	54.9	1	54.9	1
Steel	17205.4	342	17193.2	341	16649.79	335
Concrete	4630.0	410	4842.0	412	5385.41	418
Other (incl. brick)	946.6	24	946.6	24	946.6	24
<b>Total</b>	<b>23562.1</b>	<b>798</b>	<b>23561.9</b>	<b>798</b>	<b>23561.9</b>	<b>798</b>

**(g) Signal failures, by month**

**i. Total signal failures per month for the KPI Network (excluding level crossings)**

	04/05	05/06	06/07	07/08
July	-	106	104	176
Aug	-	88	123	202
Sept	44	86	131	264
Oct	89	124	126	274
Nov	93	130	165	234
Dec	117	143	189	239
Jan	115	179	191	224
Feb	115	155	229	204
Mar	107	113	222	197
Apr	74	110	179	195
May	115	116	162	151
Jun	94	125	161	141



For completeness, the numbers for previous years have been updated with the latest available data.



**(h) Percentage of Healthy Trains Achieving On-Time Exit, on the KPI Network, by month**

**i. Scope of Measured Services (5.1)**

- Application of this clause 5 will be to all Trains that are contracted to a scheduled train path and which pass across a part of the KPI Network.  
*All scheduled ARTC services which pass across a part of the KPI Network, (ie the South, West, Inland route and North Coast regions) have been included in the report.*
- Trains contracted to a scheduled train path are those that have a network entry and exit location and time specified in an Access Agreement.  
*ARTC contracted scheduled services that have a network entry/exit location and time specified have been included in the report.*
- Trains operating under cyclic arrangements such as those carrying coal are not subject to the application of this measure.  
*The cyclical services referred to in clause 5.1 (c) have been excluded from the measurement.*

**ii. Measurement and Calculation (5.2)**

- (a) For each month, ARTC will, in accordance with clause 5.2(b), identify Trains as a Healthy Train or otherwise and Healthy Trains as achieving On Time exit or otherwise. ARTC will calculate Percentage of Healthy Trains Achieving On Time Exit in accordance with clause 5.2(f) of this Schedule 7.  
*Refer to the Graphs below.*
- A "**Healthy Train**" means a Train that, having regard to the Daily Train Plan applicable on the day:
  - presents to the ARTC network On Time, is configured to operate to its schedule and operates in a way that it remains able to maintain its schedule;
  - or
  - is running late only due to causes within the ARTC network but only where the root cause is not due to:
    - any act or omission of an Access Purchaser; or
    - any defect, breakdown or other failure of any Train or Rolling Stock; or
    - is running On Time, regardless of previous delays.

*The services measured meet the criteria of a Healthy Train service as per clause 5.2 (b).*

- **"On Time"** means scheduled time at a location including a fifteen minute tolerance.  
*On-time performance for all services measured are in accordance with the definition of 'On-time'*
- Measurement will be undertaken using ARTC's access management system.  
*The services measured have been calculated using ARTC's access management system*
- The identification of a Train as a Healthy Train or otherwise, and the identification of a Healthy Train as achieving On Time Exit will be made having regard to performance with respect to a scheduled train path as it exists over the whole of the ARTC network, including that subject to this Deed. As such, exit performance of a Train will be measured at the location where the Train exits the ARTC network, including that subject to this Deed.  
*As defined by clause 5.2 (e), ARTC has measured the full journey performance of services on the ARTC network (incl the NSW Lease network).  
For example, a Sydney – Melbourne service is considered to exit the ARTC Network at Dynon and conversely will enter the ARTC Network at Dynon for Melbourne – Sydney services.*

*The graphs below illustrate the KPI performance for July 2007 – June 2008.*

*Graph 1: shows the full journey performance of all services (including performance on the CRN network),*

*Graph 2: shows the full journey performance of all services (excluding those originating or terminating on the CRN Network)*

- **(b) "Percentage of Healthy Trains Achieving On-Time Exit"** for a month will be calculated as:

$$\frac{\text{Number of Healthy Trains achieving On Time exit for a month}}{\text{Number of Healthy Trains for a month.}} \times 100$$

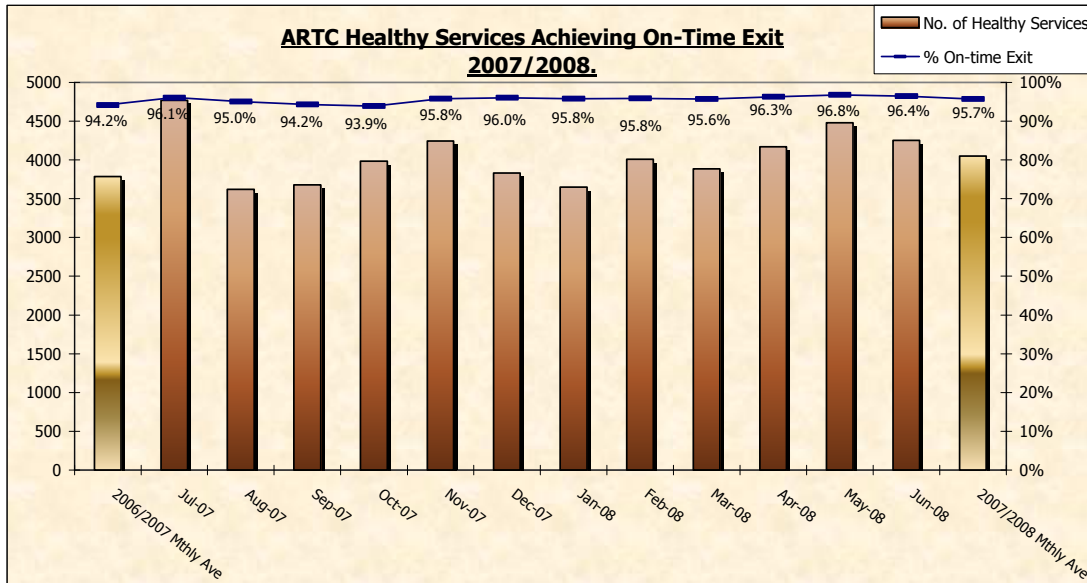
*The % of Healthy Services achieving On-time Exit has been calculated in line with the above formula.*

- The parties acknowledge that definition of Healthy Train in this clause 5 is intended to be consistent the definition of Healthy Train as contemplated in Access Agreements. If there is a material change in the definition of Healthy Train as contemplated in Access Agreements, ARTC and the Lessor will review the definition of Healthy Train in this clause 5.

*There has been no change to the definition of a Healthy Service as contemplated in clause 5 of the Access Agreement.*

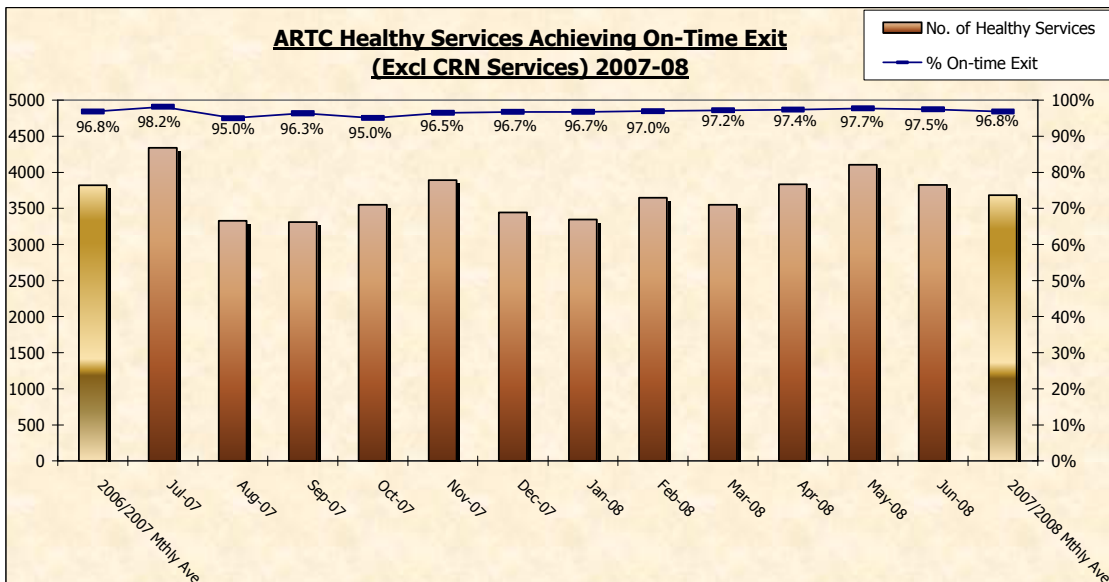
The CityRail Southern Highlands passenger services have been included in the on time exit of healthy services calculation since December 2005.

**Graph 1 - All Healthy Services with an On-time Exit (including CRN Network performance):**



The monthly average including CRN services for 07/08 of 95.7% exceeds the Service Reliability limit of 91.6%. The result is calculated as per lease schedule 7.3 (a) 'Service Reliability Limit as being the monthly average of Percentage of Healthy Trains Achieving on Time Exit for the year ending 12 months after the lease commencement date (September 2004 to August 2005).

**Graph 2 - All Healthy Services with an On-time Exit (excluding CRN Network originating/terminating services):**



The monthly average excluding CRN services for 07/08 of 96.8% exceeds the Service Reliability limit of 94.0%. The limit is calculated as per lease schedule 7.3 (a) 'Service Reliability Limit' as being the monthly average of Percentage of Healthy Trains Achieving on Time Exit for the year ending 12 months after the lease commencement date (September 2004 to August 2005).

**(i) Maximum allowable speed and axle load combination applying on the KPI Network**

As per lease schedule 2.1 (d) (ii), the maximum allowable speed and axle load combinations applying from the lease commencement date to five years after the commencement date are to be not less than that at commencement date.

The table below describes the maximum allowable speed and axle load combination on the KPI network as at the final business day of the reporting period.

<b>KPI Region</b>	<b>Segment</b>	<b>General Freight</b>	<b>Super Freighter</b>	<b>XPT</b>
Inland Route	Werris Creek to The Gap	80kph @ 23 TAL	115kph @ 19.5 TAL	160kph @ 19 TAL
North Coast	Maitland to Qld Border	80kph @ 23 TAL	115kph @ 19.5 TAL	160kph @ 19 TAL
South	Macarthur to Albury	80kph @ 23 TAL	115kph @ 19.5 TAL	160kph @ 19 TAL
South	Moss Vale to Unanderra	80kph @ 23 TAL	115kph @ 19.5 TAL	NA
West	Parkes (Goobang) to Broken Hill	80kph @ 23 TAL	115kph @ 21 TAL	145kph @ 19 TAL
West	Cootamundra to Stockinbingal, Stockinbingal to Parkes (Goobang)	80kph @ 21 TAL	100kph @ 19.5 TAL	NA
Inland Route	Parkes (Goobang) to Narromine Narromine to Dubbo Dubbo to Merrygoen Gulgong to Merrygoen	80kph @ 21 TAL	100kph @ 19.5 TAL	NA
Inland Route	Merrygoen to Binnaway Binnaway to The Gap	80kph @ 21 TAL	100kph @ 19.5 TAL	100kph @ 19 TAL

Maximum allowable speed and axle load combinations for the KPI network are not less than that as at the commencement date.

**(j) Permitted Permanent Speed Restrictions**

- i) 14 Permanent Speed restrictions were changed between July 2007 and June 2008.
- The following 14 permanent speed restrictions are regarded as permitted as per Schedule 7, section 1.2(aa) (i) as they have the effect of reducing the Base Transit Time.

Permanent speed restrictions were changed as a result of the following Major Works:

- Installation of signalled level crossing predictor equipment
- Track re-alignment
- Track upgrade

All of these works have the effect of reducing transit time.

**West**

<b>West - Cootamundra to Parkes Section 8</b>						
The following speeds were revised on 24 July 2007 - TOC 1537 due to track re-alignment.						
	Down		Up			
km	Norm	XPT	Norm	XPT	Comment	
554.620	30		100		delete	
555.626	100		30		delete	

<b>West - Dubbo to Werris Creek Section 6</b>						
The following speeds were revised during January 2008 - TOC 1538 following renewal works.						
	Down		Up			
km	Norm	XPT	Norm	XPT	Comment	
452.845	80		100		amend	
453.495	20				delete	
453.565			20		delete	
454.215	80				delete	

<b>West - Parkes to Broken Hill Section 1C</b>						
The following speeds were revised on 24 July 2007 - TOC 1537 due to track re-alignment.						
	Down		Up			
km	Norm	XPT	Norm	XPT	Comment	
1120.280	70	70			no change	
1123.986	40	40	70	70	amend	
1125.900	X25	X25			insert	
1126.050			X25	X25	insert	
1126.650			40	40	insert	

<b>West - Dubbo to Werris Creek Section 6</b>						
The following speeds were revised on 17 October 2007 - TOC 1577 following renewal works.						
	Down		Up			
km	Norm	XPT	Norm	XPT	Comment	
449.610	60				amend	
449.900	20				delete	
449.970			60		insert	

**South**

<b>South - Sydney to Albury Section 1.</b>					
The following speeds were revised on 18 October 2007 - TOC 1537.					
km	Down		Up		Comment
	Norm	XPT	Norm	XPT	
642.700	95	95			no change
643.400			115	160	no change
644.680	70	80			no change
644.750	X30				insert
644.910	30				insert
645.385			70	80	insert
645.530		X50			insert
645.550			70	80	delete
645.623				X50	insert
645.800					delete
645.890					delete
645.970			X25	X30	delete
646.500		X30	30		insert
646.600			40	40	delete
646.640				X20*	insert
646.665	70	80			insert
648.566			70	80	delete
648.586			70*	80*	insert

\* Boards are placed on wrong side

<b>South - Sydney to Albury Section 1.</b>					
The following speeds were revised on 17 January 2008 - TOC 1620 the crossovers were previously posted at 25km/h.					
km	Down		Up		Comment
	Norm	XPT	Norm	XPT	
421.300			100	115	no change
424.945	X50	X50			insert
425.212			X50	X50	insert
425.770	100	110			no change
426.270			95	100	no change
427.087	X50	X50			insert
427.315			X50	X50	insert
428.090	90	90			no change
428.650			100	120	no change
429.010	X25	X25			no change

<b>South - Sydney to Albury Section 1.</b>					
The following speeds were revised on 18 October 2007 - TOC 1537.					
km	Down		Up		Comment
	Norm	XPT	Norm	XPT	
643.400			115	160	delete
644.586	70	80			insert
644.680	70	80			delete
644.680			115	160	insert
644.860	25	25			insert
645.550			70	80	delete
645.554	X50	X50	70	80	insert
645.623			X50	X50	insert
645.800	40	40			delete
645.890	X25	X30			delete
645.970			X25	X30	delete
645.986	X8	X8			insert
646.018			X8	X8	insert
646.515	X25	X25			insert
646.515			X25	X25	insert
646.515			50	50	insert
646.550			X25	X25	insert
646.600	70	80	40	40	delete
646.662	70	80			insert
648.566			70	80	delete
648.586			70	80	insert



North

North - Broadmeadow to Werris Creek Section 3 & West - Muswellbrook to Dubbo Section 5					
The following speeds were revised on 3 August 2007 - TOC 1552.					
km	Down		Up		Comment
	Norm	XPT	Norm	XPT	
285.250	50	95			
286.430	80	90	50	95	
286.470	X55	X60			
286.640	80	90	*X55	*X60	
287.930	*50	*55	*80	*90	
288.040	*X25				
288.260	70	75			
288.260			*50	*55	
288.450	X50		80	90	
288.670			80	80	
288.783					
288.810			*X50		
288.850	35	45			
288.870	*X25				
288.980###			*X20^^^		<i>amended</i>
289.200			35	45	
289.210###			50		<i>inserted</i>

### refer West section pages Muswellbrook - Dubbo and amend to X20

^^ to reflect what is posted on ground

\* on loop

North - Broadmeadow to Werris Creek Section 3					
The following speeds were revised on 28 April 2008 - TOC 1579.					
km	Down		Up		Comment
	Norm	XPT	Norm	XPT	
224.020			115	130	
224.020			115	125	Up sign on Down Main
224.320	95	105			
224.320	100	115			Down sign on Up Main
225.430			100	115	
224.430			95	105	Up sign on Down Main
225.600	X70	X85			Down sign on Up Main
225.720	X70	X85			
225.730	115	130			
225.730	105	125			Down sign on Up Main
225.755			X70	X85	Up sign on Down Main
225.875			X70	X85	
227.149			105	125	
227.449	115	130			Down sign on Up Main
231.300			115	130	
234.240	X75				
234.270			115	130	Up sign on Down Main
234.288	X75				Down sign on Up Main
234.421	X55				
234.761			X70		
235.430	115	130			

North - Coal Train working Whittingham - Mt Thorley					
The following speeds were revised on 28 April 2008 - TOC 1579.					
km	Down		Up		Comment
	Norm	XPT	Norm	XPT	
233.999					
234.348			X70		amend
234.570	55				no change
234.588			X70		amend
234.610			55		delete
234.631	55				no change
234.674			55		delete
234.910	60				no change
235.260			60		delete
235.560	80				delete
235.900			60		delete
235.926			70		insert
236.245	X40				no change
236.320	80		X40		no change
242.520			80		no change

North - Broadmeadow to Brisbane Section 1B.					
The following speeds were revised on 24 October 2007 - TOC 1586.					
km	Down		Up		Comment
	Norm	XPT	Norm	XPT	
825.310	115	125			delete
826.074	115	125			insert

North - Broadmeadow to Brisbane Section 1B.					
The following speeds were revised on 14 December 2007 - TOC 1606 due to the installation of a level crossing predictor system.					
km	Down		Up		Comment
	Norm	XPT	Norm	XPT	
814.370	75	80			no change
816.240			75	80	delete
816.480	115	125			no change
816.850			75	80	insert
824.040	95	110	115	125	no change

North - Broadmeadow to Brisbane Section 1B.					
The following speeds were revised on 7 February 2008 - TOC 1625 due to the extension of the Namoona loop.					
km	Down		Up		Comment
	Norm	XPT	Norm	XPT	
808.400	90	95			no change
809.080	X50	X50			insert
809.150			X50	X50	insert
810.200			90	95	no change
810.410	85	90			no change
810.820	X50	X50			insert
810.900			X50	X50	insert
812.200			85	90	no change

Namoona Loop - length 1656m

North - Broadmeadow to Brisbane Section 1B.					
The following speeds were revised on 21 April 2008 - TOC 1651 due to the upgrade of the Braunstone loop.					
km	Down		Up		Comment
	Norm	XPT	Norm	XPT	
682.500			80	85	no change
682.600	X50	X50			insert
682.670	50*	50*	X50	X50	insert
683.270	70	75	70	70	no change
683.770	80	85	70	75	no change
684.400	X50	X50	50*	50*	insert
684.480			X50	X50	insert
687.800			80	85	no change

\* On loop

### 3. Register of ARTC Infrastructure.

#### (a) Building Works added to Assets Register during 2007/08

Location	Asset No	Asset	Cost
COOTAMUNDRA	0011224	STOREROOM	\$38,914.82
MOSS VALE	0011713	PROVISIONING CENTRE	\$203,814.36
KOORAGANG BUILDING	0011760	BUILDING AIR CONDITIONING	\$10,000.00
KOORAGANG BUILDING	0011762	BUILDING FLOOR COVERING	\$10,000.00
KOORAGANG BUILDING	0011763	BUILDING AMENITIES	\$10,000.00
KOORAGANG BUILDING	0011764	BUILDING COSTS	\$361,458.62
WAGGA WAGGA	0011784	ASSET MAINTENANCE BUILDING	\$1,269,270.04
WAGGA WAGGA	0011785	ASSET MAINTENANCE AIR CONDITIONING	\$239,031.00
WAGGA WAGGA	0011786	ASSET MAINTENANCE SECURITY	\$30,020.81
WAGGA WAGGA	0011787	PROVISIONING CENTRE BUILDING	\$1,076,598.60
WAGGA WAGGA	0011788	PROVISIONING CENTRE AIR CONDITIONING	\$88,572.11
WAGGA WAGGA	0011789	PROVISIONING CENTRE SECURITY	\$41,105.95
WAGGA WAGGA	0011790	PROVISIONING CENTRE CAR PARK	\$310,528.92
WAGGA WAGGA	0011791	CAR PARK LIGHTING	\$68,576.21
<b>TOTAL</b>			<b>\$3,757,891.44</b>



## 4. Infrastructure Investment Program - Major Works

### (b) Major Works Investment Program

Major Project	2007/08	Future Expenditure	Total Budget
North Coast Improvement Works	\$157,862,000	\$27,653,000	\$185,515,000
Main South Improvement Works	\$211,683,000	\$286,199,000	\$497,882,000
Southern Sydney Freight Lines	\$4,769,000	\$302,360,000	\$307,129,000
Western NSW Improvement Works	\$33,273,000	\$29,335,000	\$62,608,000
Hunter Valley Improvement Works	\$77,565,000	\$888,251,000	\$965,816,000
Train Control Consolidation	\$27,346,000	\$588,000	\$27,934,000
Wayside	\$171,000	\$0	\$171,000
Communications Upgrade	\$618,000	\$190,000	\$808,000
Australian Land Transport Development Funding	\$346,000	\$0	\$346,000
Plant & Equipment	\$389,000	\$2,400,000	\$2,789,000
<b>Major Works Program Total</b>	<b>\$514,022,000</b>	<b>\$1,536,976,000</b>	<b>\$2,050,998,000</b>

### (c) Corridor Works Summary

	2005/06	2006/07	2007/08
Corridor RCRM	\$43,894,000	\$39,884,000	\$39,361,441
Corridor MPM	\$64,184,000	\$59,088,000	\$68,944,252
Corridor Capital	\$33,050,000	\$35,597,000	\$34,457,937
<b>Corridor Works Program Total</b>	<b>\$141,128,000</b>	<b>\$134,569,000</b>	<b>\$142,763,630</b>

**(d) Major Works Underway - Indicative Cash Flow**

The indicative year to year cash flows for the Major Works Investment Program is detailed in the following table:

Project	2008/09	Beyond 2009	Total Forecast
<b>Hunter</b>			
Sandgate Grade Separation	\$516,000		\$79,405,906
Newdell Junction Upgrade	\$4,842,430	\$6,460,702	\$12,000,061
80km approach	\$172,000		\$1,320,110
Ulan Line Signalling & CTC	\$2,546,100		\$16,899,999
Muswellbrook Ext Loop & New Junction	\$49,000		\$10,999,816
Antiene to Grasstree Stage 1 Duplication	\$19,221,130		\$35,499,682
Ulan Line Loops	\$9,971,993		\$30,522,523
Drayton Junction Remodelling & Upgrade		\$12,000,000	\$12,001,454
Crossing Loop Extensions	\$9,330,032	\$19,137,000	\$54,126,945
Bi-Directional Signalling	\$38,647,807	\$143,000	\$40,075,934
Third Track Provision	\$50,289,495	\$45,238,000	\$100,051,353
ARTC overheads - US&S	\$319,003		\$1,448,183
ARTC Inventory - US&S	\$11,029		\$45,148
Program Management - US&S	\$732,384		\$5,677,077
St Helliens to Muswellbrook Duplication	\$22,471,316	\$140,000	\$27,093,432
Program Management - TEJV	\$493,176		\$2,309,007
ARTC Overheads - TEJV	\$62,422		\$516,038
Muswellbrook to Bengalla Duplication		\$29,992,000	\$30,000,000
Muswellbrook to Koolbury Duplication		\$34,992,000	\$35,000,000
Liverpool Range Deviation		\$289,995,000	\$290,000,000
Maitland to Minimbah Third Road		\$269,955,433	\$270,000,000
Aerosol Valley Loop - 370km	\$4,958,000	\$5,000,000	\$9,999,553
Worondi Loop	\$4,987,000	\$4,973,000	\$9,999,947
Ulan Line - Tunnel Ventilation Investigations	\$605,000		\$647,725
<b>Hunter Valley Total</b>	<b>\$170,225,317</b>	<b>\$718,026,135</b>	<b>\$1,075,639,892</b>



**Australian Rail Track Corporation Ltd.**  
NSW Annual Condition Report (July 07 to June 08)

<b>North Coast</b>	<b>2008/09</b>	<b>Beyond 2009</b>	<b>Total Forecast</b>
Crossing Loop Extensions	\$7,613,671	\$0	\$69,796,857
Crossing Loop Upgrades	\$577,203	\$0	\$6,167,819
Bridge Rehabilitation	\$353,714	\$0	\$8,432,930
Concrete Re-sleepering	\$11,630,718	\$0	\$122,646,336
Resilient Fasteners	\$361,410	\$0	\$400,000
ARTC Overheads - TEJV	\$550,000	\$0	\$4,719,177
Casino - Acacia Ridge CTC	\$1,213,072	\$0	\$21,288,921
Program Management - TEJV	\$4,300,550	\$0	\$20,544,840
Program Management - US&S	\$984,000	\$0	\$4,588,071
ARTC Overheads - US&S	\$69,000	\$0	\$900,360
<b>North Coast Total</b>	<b>\$27,653,338</b>	<b>\$0</b>	<b>\$259,485,310</b>

<b>Main South</b>	<b>2008/09</b>	<b>Beyond 2009</b>	<b>Total Forecast</b>
Weld straightening Main South	\$3,340,500		\$3,340,500
Reposition speed boards Main South	\$1,589,000		\$1,589,000
Passing Lanes on Single Track	\$129,152,714	\$19,630,548	\$148,783,262
Concrete resleepering Main South	\$79,981,199		\$79,981,199
ARTC Overheads - SIA	\$960,000		\$960,000
Program Management - SIA	\$3,695,279		\$3,695,279
<b>Main South Total</b>	<b>\$218,718,692</b>	<b>\$19,630,548</b>	<b>\$238,349,240</b>

<b>TCC</b>	<b>2008/09</b>	<b>Beyond 2009</b>	<b>Total Forecast</b>
TCC – North	\$197,715		\$30,413,811
TCC - South	\$3,600,361		\$71,645,141
<b>TCC Total</b>	<b>\$3,768,076</b>		<b>\$102,058,952</b>
<b>TOTAL</b>	<b>\$420,365,423</b>	<b>\$737,656,683</b>	<b>\$1,675,533,395</b>