

2013/2014 NSW Lease Annual Condition Report



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Executive Summary

In accordance with the lease, this document presents the Annual Condition Report for NSW Lease Assets. This tenth report covers the period July 2013 to June 2014. September 2004 being the commencement of the lease. This report also includes the Inland Route which ARTC took control of during the beginning of 2012.

(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.

However, ARTC has recently conducted an Asbestos audit and some buildings / structures have been identified containing asbestos. Issues identified by this audit have been recently raised with Country Rail Contracts and ARTC is waiting for a response.

(b)Performance against KPI's

Total Transit Time Delay, by KPI region, by month (Schedule 7, Cl 2.2(a))

The Annual Limit was met for eight of the 15 KPI Network train categories except the Hunter Valley and the South after adjustments due to Force Majeure* or planned maintenance** in the KPI limits.

9 adjustments were required due to Force Majeure incidents or planned maintenance restrictions to the results for 2013/14.

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

The approved Form Cure Plan (as requested) has been implemented with improvement works programmed to continue for the next two years. This work when complete should see the performance limits being met and progress is reported monthly.



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

The limits for the five year rolling average of total transit time delay were met in nine of the 15 categories after adjustments due to Force Majeure or increased maintenance in the KPI limits. Adjustments due to Force Majeure or increased maintenance have resulted in the XPT category for the West region meeting the limit with only the Hunter and the South exceeding the limit in all train categories.

The annual limits for the Hunter Valley were based on a data set which was at a historical low. Since 2004, there have been significant increases in the coal traffic but the limits have not been revised to reflect this.

The limit for the South was exceeded and remedial works to rectify this are currently being undertaken. Works are still planned for the next two years.

* As defined in Schedule 7 Clause 1.2(k)

** As defined in Schedule 7 Clause 2.3(b)(iii)

Track Geometry (Schedule 7, Cl 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.

The Five Year Rolling Average of the Track Geometry measures was met in all 16 categories.

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

The Three-Year Rolling Average for Large Rail Defects was 59.7. This exceeds the limit of 48.86, calculated as per Schedule 7, section 11.4.

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

A total of 104,070 sleepers (Timber –0; Steel –68,438; Concrete – 35,632 and Other - 0) were installed during the reporting period. The Network including the sleepers replaced, now consists of Timber 23.4%, Steel 10.4%, Concrete 66.2% and Other 0.0%.

Bridges (Schedule 7, Cl 2.2(f))

No nominated bridges have been replaced during the reporting period. This has resulted in no net change to the bridge type and length, from the original list supplied at the date of commencement of the lease.

Currently no Bridges are under restriction and are below the Bridge Limit of 20

Signals (Schedule 7, Cl 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, Cl 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 -

• the full journey performance of all services travelling on the NSW Lease network.

Previous reports included CRN performance. This will no longer be reported as ARTC does not capture CRN performance data.

The YTD Monthly Average % of Healthy Services Achieving On-time Exit (July 2013 – June 2014) is:

• 91.0% 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 reduction in the maximum allowable speed and axle load combinations on the KPI network.

Permitted Permanent Speed Restrictions (Schedule 7, Cl 2.2(j))

Three Permanent Speed restriction notifications were issued between July 2013 and June 2014. All three are regarded as Permitted Permanent Speed Restrictions. These changes are necessary in ARTC's reasonable opinion as a result of an infrastructure configuration change which has been endorsed by all Access Purchasers who have regular access to, or use of, that part of the KPI Network.



(c) Register of ARTC Infrastructure

Building Works

During the reporting period, a total of \$536,258 of Building Works was completed.

(d)Infrastructure Investment Programme and Major Works

A total of \$159,383,299 was invested on the Major Works Investment Program during the reporting period.

A total of \$208,056,913 has been invested in Corridor Works (including RCRM, MPM and Corridor Capital Works) during the reporting period.

During the first ten years of the lease, ARTC has invested a total of \$5,406,297,000 in Major Works, Corridor MPM and Capital Works.

A further \$4,535,407,687 is forecast to be invested on Major Works in future years.

(e)Major Works Investment – Since Lease Commencement

Summ	Summary of Major Works Investment and Corridor MPM & Capital since lease commencement														
	2004 / 05 (\$ '000)	2005/06 (\$'000)	2006/07 (\$'000)	2007/08 (\$`000)	2008/09 (\$`000)	2009/10 (\$`000)	2010/11 (\$`000)	2011/12 (\$'000)	2013/14 (\$'000)	Total (\$'000)					
Major Works Investment	\$5,695	\$83,518	\$324,507	\$514,022	\$517,500	\$615,278	\$490,988	\$843,678	\$159,383	\$4,093,573					
Corridor MPM & Capital	\$58,869	\$97,234	\$94,685	\$142,763	\$164,839	\$120,159	\$140,461	\$139,431	\$162,224	\$1,312,724					
Total	\$64,564	\$180,752	\$419,192	\$656,785	\$682,339	\$735,437	\$631,449	\$983,109	\$321,607	\$5,406,297					



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.

However, ARTC has recently conducted an Asbestos audit and some buildings / structures have been identified containing asbestos. Issues identified by this audit have been recently raised with Country Rail Contracts and ARTC is waiting for a response.

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 and temporary speed restrictions or temporary disturbance to track geometry arising out of maintenance or works as planned. The Final Annual Limit (as agreed with ARTC and RIC), has been met for the KPI Network for all categories except in the Hunter Valley and the South.

Includi	ng For	ce Maje	eure													
Category	Jul-2013	Aug-2013	Sep-2013	Oct-2013	Nov-2013	Dec-2013	Jan-2014	Feb-2014	Mar-2014	Apr-2014	May-2014	Jun-2014	11/12 Period Avg	12/13 Period Avg	13/14 Period Avg	Annual Limit*
							ŀ	lunter Val	ley							
Freight	31.0	18.6	24.6	22.8	29.0	32.9	40.9	25.5	26.4	48.6	34.4	45.2	26.3	21.2	31.7	11.9*
Super Freight	55.6	35.0	46.3	43.1	57.1	59.8	69.5	47.8	49.1	84.9	62.5	77.5	45.8	37.9	57.3	20.9*
XPT	15.0	9.8	14.0	12.8	20.2	16.7	17.9	14.1	12.9	22.8	18.6	20.1	11.8	11.3	16.3	3.5*
								North C	oast							
Freight	0.8	3.8	1.3	1.9	2.6	5.1	6.6	8.0	18.3	3.7	2.2	0.0	9.8	7.3	4.5	39.5*
Super Freight	1.8	7.4	3.7	3.8	4.4	8.5	10.3	7.3	29.4	6.6	2.6	0.0	15.8	12.5	7.2	62.5*
XPT	0.7	3.1	1.6	1.6	1.8	3.2	3.9	0.6	10.8	3.9	1.9	0.0	5.9	4.1	2.8	19.5*
								Sout	h							
Freight	9.3	15.7	15.0	15.7	18.9	16.6	20.0	20.7	23.2	17.0	17.8	17.5	43.6	18.2	17.3	14.5*
Super Freight	22.7	34.6	32.2	32.4	35.5	30.5	37.9	41.3	47.0	34.5	36.0	37.8	87.3	36.4	35.2	25.3*
XPT	8.7	15.2	14.6	14.5	16.3	14.8	16.7	17.9	20.3	15.6	15.8	19.8	37.6	13.5	15.9	8.0*
								Wes	t							
Freight	6.6	4.6	2.6	2.1	1.7	4.1	7.6	4.8	2.3	2.3	2.3	2.1	26.1	19.7	3.6	23.3*
Super Freight	18.8	14.2	6.9	5.1	5.9	13.0	26.4	26.8	17.9	21.8	17.1	10.5	65.6	41.4	15.4	39.8*
XPT	12.5	8.4	2.2	1.3	1.8	4.8	9.8	11.9	13.3	16.9	12.3	6.7	37.4	15.5	8.5	10.3*
								Total	s							
Freight	42.7	43.5	42.6	52.2	58.8	75.1	58.9	70.2	71.7	56.7	64.9	47.6	105.8	66.3	57.1	89.3*
Super Freight	91.1	89.2	84.4	102.9	111.8	144.1	123.2	143.4	147.8	118.3	125.8	98.8	214.5	128.2	115.1	148.6*
XPT	36.5	32.3	30.2	40.1	39.6	48.3	44.5	57.4	59.2	48.5	46.6	36.9	92.6	44.5	43.3	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.

Excludi	ng Fore	ce Maje	eure													
Category	Jul-2013	Aug-2013	Sep-2013	Oct-2013	Nov-2013	Dec-2013	Jan-2014	Feb-2014	Mar-2014	Apr-2014	May-2014	Jun-2014	11/12 Period Avg	12/13 Period Avg	13/14Period Avg	Annual Limit*
							ŀ	lunter Val	ley							
Freight	31.0	18.6	24.6	22.8	29.0	32.9	40.9	25.5	26.4	48.6	34.4	45.2	25.8	21.2	31.7	11.9*
Super Freight	55.6	35.0	46.3	43.1	57.1	59.8	69.5	47.8	49.1	84.9	62.5	77.5	45.1	37.9	57.3	20.9*
XPT	15.0	9.8	14.0	12.8	20.2	16.7	17.9	14.1	12.9	22.8	18.6	20.1	11.6	11.3	16.3	3.5*
								North C	oast							
Freight	0.8	3.8	1.3	1.9	2.6	5.1	6.6	8.0	18.3	3.7	0.0	0.0	5.4	6.1	4.3	39.5*
Super Freight	1.8	7.4	3.7	3.8	4.4	8.5	10.3	7.3	29.4	6.6	0.0	0.0	9.6	10.7	6.9	62.5*
ХРТ	0.7	3.1	1.6	1.6	1.8	3.2	3.9	0.6	10.8	3.9	0.0	0.0	3.2	3.2	2.6	19.5*
								Sout	h							
Freight	9.3	15.7	15.0	15.7	18.9	16.6	20.0	20.7	23.2	17.0	17.8	17.5	43.5	17.9	17.3	14.5*
Super Freight	22.7	34.6	32.2	32.4	35.5	30.5	37.9	41.3	47.0	34.5	36.0	37.8	87.1	35.9	35.2	25.3*
XPT	8.7	15.2	14.6	14.5	16.3	14.8	16.7	17.9	20.3	15.6	15.8	19.8	37.5	13.3	15.9	8.0*
								Wes	t							
Freight	6.6	4.6	2.6	2.1	1.7	4.1	7.6	4.8	2.3	2.3	2.3	2.1	10.8	6.7	3.6	23.3*
Super Freight	18.8	14.2	6.9	5.1	5.9	13.0	26.4	26.8	17.9	21.8	17.1	10.5	21.0	13.1	15.4	39.8*
ХРТ	12.5	8.4	2.2	1.3	1.8	4.8	9.8	11.9	13.3	16.9	12.3	6.7	3.0	1.0	8.5	10.3*
								Total	s							
Freight	47.6	42.7	43.5	42.6	52.2	58.8	75.1	58.9	70.2	71.7	54.6	64.9	85.5	51.9	56.9	89.3*
Super Freight	98.8	91.1	89.2	84.4	102.9	111.8	144.1	123.2	143.4	147.8	115.7	125.8	162.7	97.5	114.9	148.6*
XPT	36.9	36.5	32.3	30.2	40.1	39.6	48.3	44.5	57.4	59.2	46.7	46.6	55.2	28.9	43.2	41.3*

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

The Annual Limit has been met in eight of the 15 categories for the KPI Network for all train categories except the Hunter Valley and the South. 1 adjustment due to a Force Majeure incident and temporary speed restrictions or temporary disturbance to track geometry arising out of maintenance or works as planned was made to the results for 2013/14.

The annual limits for the Hunter Valley were based on a data set which was at a historical low. Since 2004, there have been significant increases in the coal traffic but the limits have not been revised to reflect this.

The annual limits for the South have been exceeded. The approved Form Cure Plan (as requested) has been implemented with improvement works programmed to continue for the next two years. This work when complete should see the performance limits being met and progress is reported monthly to Country Rail Contracts.



Gap to Moree

The Annual Limit for total transit time delay has been exceeded for the Gap to Moree section. The majority of restrictions are due to geometry issues at fixed points.

8 adjustments were required due to Force Majeure* incidents or increased maintenance** restrictions to the results for 2013/14.

Includi	ng Foro	ce Majeu	ıre													
Category	Jul-2013	Aug-2013	Sep-2013	Oct-2013	Nov-2013	Dec-2013	Jan-2014	Feb-2014	Mar-2014	Apr-2014	May-2014	Jun-2014	11/12 Period Avg	12/13 Period Avg	13/14 Period Avg	Annual Limit*
								Gap More	e							4
Freight	25.3	19.6	22.1	21.5	30.5	39.9	63.9	47.5	29.2	25.6	26.7	30.1	16.9	25.0	31.8	23.3*
XPT	24.1	15.8	19.6	18.1	30.3	45.5	73.6	53.5	23.3	20.1	21.1	23.8	14.7	24.3	30.7	20.5*



Indicates months that have been affected by a Force Majeure

Exclud	ing For	ce Maje	ure													
Category	Jul-2013	Aug-2013	Sep-2013	Oct-2013	Nov-2013	Dec-2013	Jan-2014	Feb-2014	Mar-2014	Apr-2014	May-2014	Jun-2014	11/12 Period Avg	12/13 Period Avg	13/14 Period Avg	Annual Limit*
								Gap Moree								
Freight	24.0	19.6	20.8	21.5	30.5	39.9	63.9	47.5	23.7	20.1	21.2	24.5	14.9	23.3	29.8	23.3*
ХРТ	18.1	15.8	18.5	18.1	30.3	45.5	73.6	53.5	19.8	16.7	17.7	20.4	12.7	21.5	29.0	20.5*

* As defined in Schedule 7 Clause 1.2(k)

** As defined in Schedule 7 Clause 2.3(b)(iii)



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

The limit for the Five Year Rolling Average of Total Transit Time Delay has not been met for the KPI network for all train categories in the Hunter Valley and the South and for the XPT & Super Freight category in the West (before any adjustments have been applied).

Including Force	Majeure						
Category	09/10 Period Avg	10/11 Period Avg	11/12 Period Avg	12/13 Period Avg	13/14 Period Avg	09/10 – 13/14 Five Year Rolling Average	Five Year Limit*
			Hunter V	alley	<u> </u>		
Freight	7.8	17.8	26.3	21.2	31.7	20.9	10.8*
Super Freight	13.3	30.5	45.8	37.9	57.3	37.0	19.0*
ХРТ	4.7	8.9	11.8	11.3	16.3	10.6	3.2*
			North Co	oast			
Freight	4.9	5.1	9.8	7.3	4.5	6.3	35.9*
Super Freight	8.9	9.6	15.8	12.5	7.2	10.8	56.9*
ХРТ	3.9	3.7	5.9	4.1	2.8	4.1	17.7*
			Sout	h			
Freight	11.5	17.9	43.6	18.2	17.3	21.7	13.2*
Super Freight	24.9	35.7	87.3	36.4	35.2	43.9	23.0*
ХРТ	8.6	14.1	37.6	13.5	15.9	17.9	7.3*
			Wes	t			
Freight	10.9	23.6	26.1	19.7	3.6	16.8	21.2*
Super Freight	20.0	43.7	65.6	41.4	15.4	37.2	36.2*
ХРТ	4.0	19.2	37.4	15.5	8.5	16.9	9.3*
			Total	s			
Freight	24.8	35.0	64.5	105.8	57.1	65.7	81.1*
Super Freight	50.8	67.1	119.5	214.5	115.1	128.9	135.0*
XPT	23.4	21.2	46.0	92.6	43.3	49.5	37.5*

Indicates months that have been affected by a Force Majeure

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



Excluding Force	Majeure						
Category	09/10 Period Avg	10/11 Period Avg	11/12 Period Avg	12/13 Period Avg	13/14 Period Avg	09/10 – 13/14 Five Year Rolling Average	Five Year Limit*
			Hunter V	alley			
Freight	6.7	16.4	25.8	21.2	31.7	20.4	10.8*
Super Freight	11.3	28.2	45.1	37.9	57.3	36.0	19.0*
ХРТ	3.8	7.9	11.6	11.3	16.3	10.2	3.2*
			North Co	past			
Freight	4.3	3.1	5.4	6.1	4.3	4.6	35.9*
Super Freight	7.7	5.8	9.6	10.7	6.9	8.1	56.9*
ХРТ	3.5	2.0	3.2	3.2	2.6	2.9	17.7*
			Sout	ı			
Freight	9.3	17.5	43.5	17.9	17.3	21.1	13.2*
Super Freight	21.6	35.1	87.1	35.9	35.2	43.0	23.0*
ХРТ	8.1	14.0	37.5	13.3	15.9	17.7	7.3*
			Wes	t			
Freight	7.5	11.3	10.8	6.7	3.6	8.0	21.2*
Super Freight	14.4	23.4	21.0	13.1	15.4	17.5	36.2*
ХРТ	1.6	2.3	3.0	1.0	8.5	3.3	9.3*
			Total	s			
Freight	27.7	48.3	85.5	51.9	56.9	54.1	81.1*
Super Freight	55.0	92.5	162.7	97.5	114.9	104.5	135.0*
ХРТ	17.0	26.2	55.2	28.9	43.2	34.1	37.5*

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

The limits for the five year rolling average of total transit time delay were met in nine of the 15 categories after adjustments due to Force Majeure or increased maintenance in the KPI limits. Adjustments due to Force Majeure or increased maintenance have resulted in the SuperFreight & XPT category for the West region meeting the limit with only the Hunter and the South exceeding the limit in all train categories.



Track Geometry

i. Geometry Values

No geometry measures exceeded the Annual Limits. Track geometry improved in 9 of the 16 measures during 2013/14.

South

Region	Measure	Annual Limit *	09/10	10/11	11/12	12/13	13/14	13/14 vs Annual Limit
South	Тор	10.62	8.24	8.57	8.67	7.73	7.67	TARGET MET
	Twist	6.69	5.95	6.32	6.26	5.65	5.51	TARGET MET
	Line	10.20	7.90	7.92	7.93	7.73	7.72	TARGET MET
	Gauge	6.48	4.52	4.51	4.59	4.57	4.60	TARGET MET

North Coast

Region	Measure	Annual Limit *	09/10	10/11	11/12	12/13	13/14	13/14 vs Annual Limit
North	Тор	9.11	6.36	6.92	7.30	7.54	7.56	TARGET MET
	Twist	6.55	4.70	4.79	4.92	4.98	4.99	TARGET MET
	Line	13.52	10.99	11.12	11.17	11.22	11.18	TARGET MET
	Gauge	6.89	5.47	5.62	5.73	5.86	5.91	TARGET MET

West

Region	Measure	Annual Limit *	09/10	10/11	11/12	12/13	13/14	13/14 vs Annual Limit
West	Тор	11.17	9.34	9.62	8.43	5.87	6.01	TARGET MET
	Twist	6.89	5.71	5.71	5.04	4.19	4.29	TARGET MET
	Line	8.31	5.46	5.48	4.99	4.32	4.44	TARGET MET
	Gauge	5.83	4.36	4.36	4.21	4.07	3.94	TARGET MET

Inland Route

Region	Measure	Annual Limit *	09/10	10/11	11/12	12/13	13/14	13/14 vs Annual Limit
Inland	Тор	12.46	11.57	11.13	11.28	11.29	11.11	TARGET MET
	Twist	8.06	7.89	7.15	7.33	7.62	7.33	TARGET MET
	Line	10.79	8.63	8.13	8.01	7.88	7.85	TARGET MET
	Gauge	6.46	5.81	5.43	5.34	5.25	5.18	TARGET MET

* Annual Limit as requested in 06/07 report addendum.



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

The Five Year Rolling Average Track Geometry limit was met in all 16 measures.

South

Region	Measure	5 Year Limit *	09/10 - 13/14 Average	09/10 - 13/14 vs 5 Year Limit
South	Тор	9.44	8.18	TARGET MET
	Twist	6.30	5.94	TARGET MET
	Line	8.91	7.84	TARGET MET
	Gauge	5.94	4.56	TARGET MET

North Coast

Region	Measure	5 Year Limit *	09/10 - 13/14 Average	09/10 - 13/14 vs 5 Year Limit
North	Тор	7.99	7.14	TARGET MET
	Twist	5.90	4.88	TARGET MET
	Line	11.92	11.14	TARGET MET
	Gauge	6.64	5.72	TARGET MET

West

Region	Measure	5 Year Limit *	09/10 - 13/14 Average	09/10 - 13/14 vs 5 Year Limit
West	Тор	10.52	7.85	TARGET MET
	Twist	6.74	4.99	TARGET MET
	Line	6.45	4.94	TARGET MET
	Gauge	4.66	4.19	TARGET MET

Inland Route

Region	Measure	5 Year Limit *	09/10 - 13/14 Average	09/10 - 13/14 vs 5 Year Limit
Inland	Тор	11.30	11.28	TARGET MET
	Twist	7.75	7.47	TARGET MET
	Line	9.22	8.10	TARGET MET
	Gauge	5.84	5.40	TARGET MET

* 5 Year Limit as requested in 07/08 report addendum.

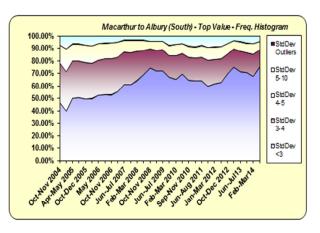


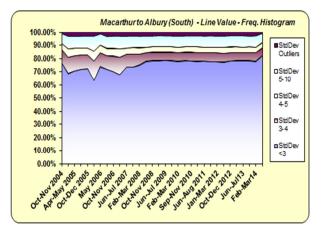
iii. Trending Graphs

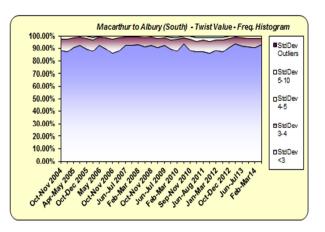
The trending graphs consist of all geometry readings taken for a KPI region up to 30 June 2014. A rising slope in the graph shows an improvement in track geometry.

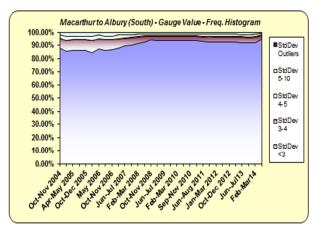
South (Jun 14)	StdDev <3	StdDev 3-4	StdDev 4-5	StdDev 5-10	StdDev Outliers	
Тор	75.33%	13.96%	6.14%	4.57%	0.00%	
Twist	93.11%	4.88%	1.55%	0.46%	0.00%	
Versine	82.44%	5.49%	3.84%	7.40%	0.83%	
Gauge	94.58%	3.42%	1.26%	0.75%	0.00%	

South (July 2013 to June 2014)



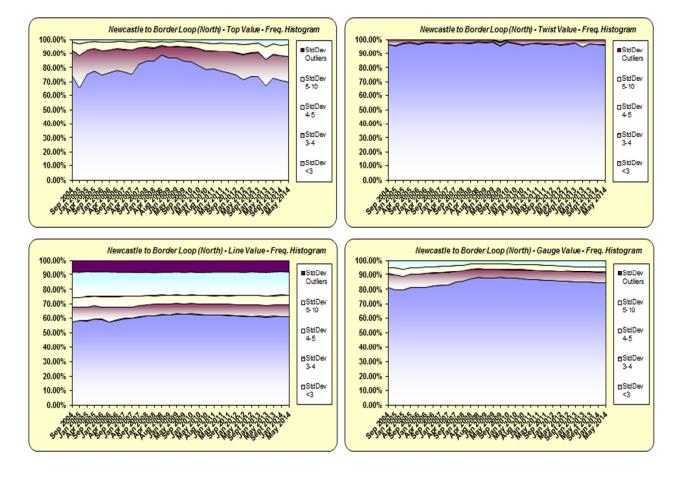






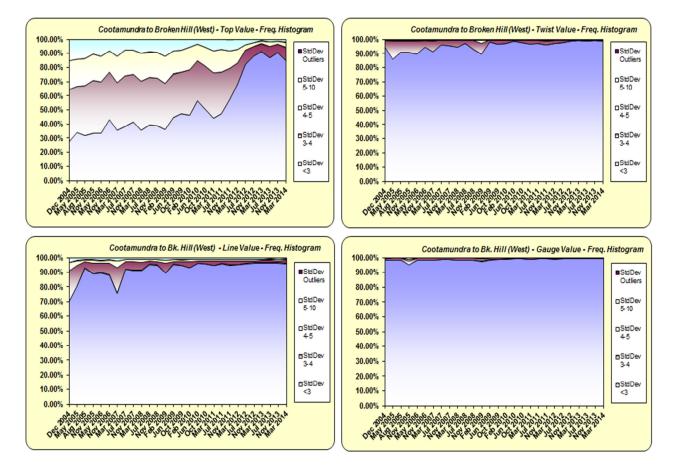


North Coast (J	North Coast (July 2013 to June 2014)											
North Coast (May 14)	StdDev <3	StdDev 3-4	StdDev 4-5	StdDev 5-10	StdDev Outliers							
Тор	70.08%	17.81%	8.41%	3.71%	0.00%							
Twist	96.25%	3.36%	0.34%	0.05%	0.00%							
Versine	60.91%	8.67%	6.28%	15.76%	8.38%							
Gauge	84.46%	7.10%	3.85%	4.56%	0.03%							



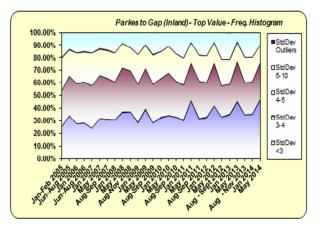


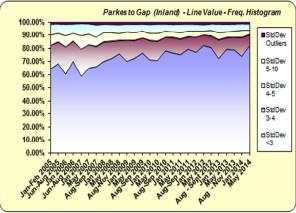
West (July	West (July 2013 to June 2014)												
West (Mar 14)	StdDev <3	StdDev 3-4	StdDev 4-5	StdDev 5-10	StdDev Outliers								
Тор	84.72%	9.48%	3.67%	2.13%	0.00%								
Twist	98.62%	1.09%	0.21%	0.08%	0.00%								
Versine	95.81%	2.41%	0.89%	0.80%	0.09%								
Gauge	99.35%	0.42%	0.13%	0.10%	0.00%								

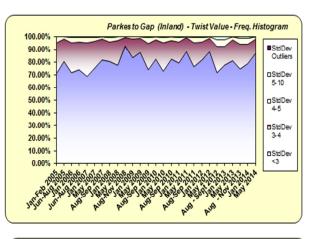


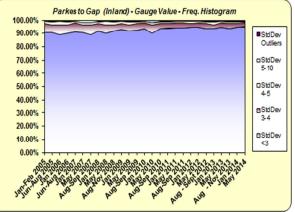


Inland Rou	nland Route (July 2013 to June 2014)											
Inland (May 14)	StdDev <3	StdDev 3-4	StdDev 4-5	StdDev 5-10	StdDev Outliers							
Тор	46.81%	29.22%	14.40%	9.57%	0.00%							
Twist	86.26%	11.84%	1.51%	0.39%	0.00%							
Versine	82.27%	8.09%	3.08%	4.87%	1.68%							
Gauge	94.95%	3.19%	0.77%	1.09%	0.00%							











(c) 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 exceeded due to a high percentage of reported Vertical Split Head defects during the past 3 years.

	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	3 Year Rolling Average
Inland	1	4	0	3	2	8	2	1	5	7	4.3
North	9	11	14	10	16	5	8	16	10	20	15.3
South	25	18	31	7	1	5	27	41	41	34	38.7
West	0	1	4	3	4	2	8	0	3	1	1.3
Total	35	34	49	23	23	20	45	58	59	62	59.7

The three year rolling average of 59.7 during 2013/14 is above the large rail defect limit of 48.86. This is the second instance that the limit has not been met since the commencement of the lease.

48 of the 62 Large rail defects reported during 2013/14 were Vertical Split Head defects and 27 of these were located in the South.



(d)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	08/09	09/10	10/11	11/12	12/13	13/14
Timber	49,678	181,872	127,497	70,603	18,132	2,036	100	1040	0	0
Steel	2,618	6,768	22,958	19,592	1,175	1,147	19,410	9956	15,500	68,438
Concrete	532	11,622	209,335	945,901	446,672	356,923	216,531	803,284	96,360	35,632
Other	0	0	0	0	0	0	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	08/09	09/10	10/11	11/12	12/13	13/14
Timber	67.4%	67.3%	63.6%	55.5%	49.1%	42.9%	41.0%	23.1%	25.1%	23.4%
Steel	11.1%	11.0%	10.9%	7.5%	7.8%	7.5%	7.9%	8.4%	9.3%	10.4%
Concrete	21.5%	21.7%	25.5%	37.5%	43.1%	49.6%	51.1%	68.5%	65.6%	66.2%
Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0%

The table above was revised in 2012/13 to include the sleeper numbers for the Gap to North Star line.



(e)Bridges

i. Length of Bridges Replaced during Annual Condition Reporting period

No nominated bridges have been replaced during the reporting period. This has resulted in no net change to the bridge type and length during 2013/14, 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.

No Temporary Speed Restrictions are applied to Bridges and is below the Bridge Limit of 20.

	Number of Speed Restricted Bridges												
	11/12 Total Length(m)	11/12 No of Bridges:	12/13 Total Length(m)	12/13 No of Bridges:	13/14 Total Length(m)	13/14 No of Bridges:	% of Bridges:						
Timber	0	0	0	0	0	0	0						
Iron	0	0	0	0	0	0	0						
Masonry	0	0	0	0	0	0	0						
Steel	138.5	4	21.42	1	0	0	0						
Concrete	0	0	0	0	0	0	0						
Other (incl. brick)	0	0	0	0	0	0	0						
Total	138.5	4	21.42	1	0	0	0.0%						

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

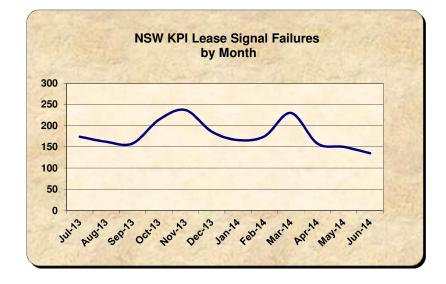
	Ś	Summary of	KPI Network	Bridge Types	3	
	11/12 Total Length(m)	11/12 No of Bridges:	12/13 Total Length(m)	12/13 No of Bridges:	13/14 Total Length(m)	13/14 No of Bridges:
Timber	264.7	17	264.7	17	264.7	17
Iron	260.5	3	260.5	3	260.5	3
Masonry	54.9	1	54.9	1	54.9	1
Steel	16,524.30	327	16,362.51	320	16,362.51	320
Concrete	5,504.40	426	5,628.19	433	5,628.19	433
Other (incl. brick)	946.6	24	946.6	24	946.6	24
Total	23,555.4	798	23,517.4	798	23,517.4	798



(f) 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	08/09	09/10	10/11	11/12	12/13	13/14
July	-	106	104	176	150	136	150	153	172	174
Aug	-	88	123	202	158	116	164	132	166	162
Sept	44	86	131	264	135	149	183	152	147	158
Oct	89	124	126	274	209	184	163	148	137	214
Nov	93	130	165	234	167	230	142	210	194	237
Dec	117	143	189	239	174	206	179	139	199	186
Jan	115	179	191	224	224	255	163	215	243	166
Feb	115	155	229	204	177	189	176	182	170	175
Mar	107	113	222	197	179	209	146	172	181	230
Apr	74	110	179	195	175	239	122	164	151	158
Мау	115	116	162	151	154	146	144	178	170	150
Jun	94	125	161	141	111	128	86	112	126	135





(g)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 Graph 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 graph below illustrates the KPI performance for July 2013 – June 2014.

Graph 1: shows the full journey performance of all services.

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

Number of Healthy Trains achieving On Time x 100 exit for a month

Number of Healthy Trains for a month.

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

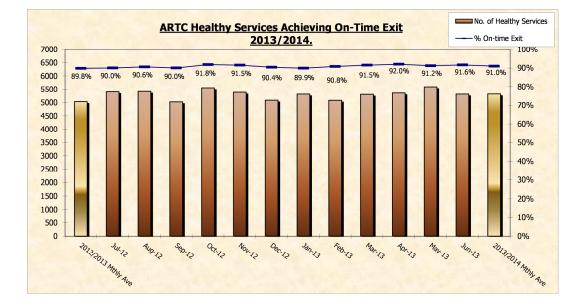
• The parties acknowledge that definition of Healthy Train in this clause 5 is intended to be consistent with the definition of Healthy Train as contemplated in Access Agreements. If there is a material change in the definition of Healthy Train as contemplated in Access Agreements, ARTC and the Lessor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







The monthly average for 2013/14 of 91.0% is below the Service Reliability limit of 94.0%. 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).

The monthly average number of healthy services during 2012/13 was 5033 trains but has increased significantly during 2013/14 to 5320. As the number of services increase, the ability for a delayed service to recover lost time becomes more difficult. The monthly average number of healthy services as reported in 2004/05 was 3055 trains.



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

As per lease schedule 7 clause 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 were 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.

KPI Region	Segment	General Freight	Super Freighter	ХРТ
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 @ 21 TAL	160kph @ 19 TAL
South	Macarthur to Albury	80kph @ 23 TAL	115kph @ 21 TAL	160kph @ 19 TAL
South	Moss Vale to Unanderra	80kph @ 23 TAL	115kph @ 19.5 TAL	NA
West	Parkes (Goobang) to Broken Hill	^(c) 100kph @ 23 TAL	115kph @ 21 TAL	145kph @ 19 TAL
West	Cootamundra to Stockinbingal, Stockinbingal to Parkes (Goobang)	^{(a) & (c)} 100kph @ 23 TAL ^(d) 80kph @ 25 TAL	^(b) 115kph @ 21 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.

- ^(a) 80kph @ 21 TAL increased to 80kph @ 23 TAL on 11 March 2011
- ^(b) 100kph @ 19.5 TAL increased to 115kph @ 21 TAL on 11 March 2011
- ^(c) 80kph @ 23 TAL increased to 100kph @ 23 TAL on 1 May 2014
- ^(d) 40kph @ 25 TAL increased to 80kph @ 25 TAL on 1 May 2014



(i) Permitted Permanent Speed Restrictions

- i) Three Permanent Speed restriction notifications were issued between July 2013 and June 2014.
 - All three permanent speed restriction notifications are regarded as permitted as per Schedule 7, section 1.2(aa) (iv) as they are necessary in ARTC's reasonable opinion as a result of an infrastructure configuration change which has been endorsed by all Access Purchasers who have regular access to, or use of, that part of the KPI Network.

			West								
	West-P	arkes to	Broken	Hill Sec	tion 1C.						
The following speeds were revised on 20 December 2013 due to											
	curve works.										
Down Up											
km	Normal	XPT	Normal	XPT	Comments						
446.160	70	70	40	40	no change						
448.302					Goobang Junction						
448.320	115	115			delete						
448.320	110	110			insert						
453.342			115	115	delete						
453.342	453.342 110 110 insert										
453.417	115	145			no change						

	North North - Werris Creek to Moree Section 4.										
The follow	The following speeds were revised on 22 May 2014 due to Burrington Road										
	level crossing upgrade.										
	Do	wn	L	Jp							
km	Normal	XPT	Normal	XPT	Comments						
641.485	100	130	80	90	no change						
658.870					Dunvants Cotton Sdg						
658.951		100			insert						
659.770		120(LX)			delete						
659.830				120(LX)	delete						
660.599	95	105	100	130	no change						



North – Broadmeadow to Brisbane Section 1B.

The following speeds were revised on 4 October 2013 due to consolidation of existing speeds and CANT Deficiency Upgrade.

Note: The columns marked "EP" are for Extra Performance trains but are not being used until commissioned into use. The majority of changes to the speed boards are to reflect the requirements of safeworking rule ANSG 604 (page 30), as the speed boards have been re-located to the curve tangent points rather than where they were located in advance of the curves.

MAITLAND - AG	CACIA RIDGE						
LOCATION	KILOMETRAGE		DOWN			UP	
LOCHTION	KILONEIKHUL	Normal	ХРТ	EP	Normal	ХРТ	EP
MAITLAND	192.548						
	192,900	X25	-		-	-	
	192.950		85		X25	X25	
	193.200	80	85				
	194.565	X25	X25				
	194.620	80	85	85			
TELARAH	194.739						
	197.305		110			85	
	199.880	70	75	75	80	1 10	85
	200.253	80	85	85	70	75	75
MINDARIBBA	203.390	X50					
	203.440				X50(OL)		
	205.020	X50(OL)					
	205.086				X50		
	205.100	70	75	75	80	85	85
	206.539	90	95	95	70	75	75
	210.602	80	85	85	90	95	95
	211.480	X50					
	211.460				X50(OL)		
PATERSON	212.379						
	213.359	75	80	80	80	85	85
	213.360	X50(OL)					
	213.681	110	125	110	75	80	80
	216.004		120			125	
	216.104		125			120	
	217.234	75	75	75	110	125	1 10
	217.872		85	80		75	75
MARTINS CREEK	218.532						
QUARRYSIDING	219.176						
	219.979		80			85	
	220.997	100	125	100	75	80	80
KILBRIDE	222.700	X50					
	222.765				X50(OL)		
	223.962		105			125	
	224.355	X50(OL)					
	224.420				X50		
	224.825	75	85	75	100	105	100
	225.444		75			85	
HILLDALE	226.372						
	227.436	70		70	75		75
	228.281	80	85	85	70	75	70
	231.296		100			85	
WALLAROBBA	231.673						
	233.477	75	80	80	80	100	85
	233.901						
WALLAROBBA	234.000						
LOOP	235.345		120			80	
	236.788		100			120	
	237.541		80			100	
	242.098	90	115	95	75	80	80



			DOWN		UP		
LOCATION	KILOMETRAGE	Normal	XPT	EP	Normal	ХРТ	EF
DUNGOG	245.199						
	245.540	65	70	70	90	115	95
	245.822	70	115	75	65	70	70
	246.360	X50		10	-	10	
	246.435		1 1		X50(OL)		
	248.025	X50(OL)	++		100(00)		
	248.100	100(02)			X50		
	248.477		75			115	
MONKERAI	254.026						
STROUD ROAD	267.305		++				
STROOD ROAD	274.803	100	105	100	70	75	75
	276.409	100	115			105	
WEISMANTELS	278.109						
TELOPHANEED	278.616	70	75	75	100	115	10
	280.420		80		100	75	
	280.968		85				
	283.264		75			85	
	285.856	75	80		70	75	
	287.940	65	70	70	75	90	75
	289.675	65	75	70	13	70	
		80	120	85	65	75	70
	290.107	00	120	- 00	65	13	0
			++				<u> </u>
	290.370						<u> </u>
	290.517	UE0					
	291.500	X50			VEO(OL)		
CRAVEN	291.580	HOF			X50(OL)		
STRATFORD	291.760	X35					
BALLOON LOOP							
JUNCTION	291.843						
	292.361		85			120	
	292.783	95	105	95	80	85	8
	293.102	115	125	115	95	105	95
	293.155	X50(OL)					
	293.240				X50		
	295.043		120			125	
	295.143		125			120	
	296.264	70	75	75	115	125	11
	297.234	75			70		
	300.009	70			75		
BERRICO	301.896						
	303.131		85			75	
	304.730		75			85	
GLOUCES TER	309.358						
	314.917	65	70	70	70	75	75
	316.357	70	75	75	65	70	70
	320.440	60	65	65	70	75	75
	321.832	70	75	75	60	65	65
BULLIAC	323.979						
	324.833	X40 (OL)	X40 (OL)		40 (OL)	40 (OL)	
	324.915				X40	X40	



	DOWN UP											
LOCATION	KILOMETRAGE		DUWN			UP						
		Normal	XPT	EP	Normal	XPT	EP					
	332.146	65	70	70	70	75	75					
	333.221	70	75	75	65	70	70					
BUNDOOK	334.539											
	336.033	65	70	70	70	75	75					
	337.147	70	75	75	65	70	70					
	341.060	95	100	95	70	75	75					
MT GEORGE	341.919											
	345.089		115			100						
	347.095	70	75	75	95	115	95					
	349.015	85	95	85	70	75	75					
	352.097	70	75	75	85	95	85					
	352.333		100			75						
	353.614		75			100						
	360.273											
	360.100	X25			1							
	360.180				X50(OL)							
KILLAWARRA	360.892											
	361.755	X50(OL)	1		1							
	361.755	X40 (OL)	X40 (OL)		40 (OL)	40 (OL)						
	361.840	110(00)	1110 (04)		X40	X40						
WINGHAM	367.004											
monwi	367.349	60	65	65	70	75	75					
	367.827	70	75	75	60	65	65					
	370.998	80	85	85	70	75	75					
	373.109		110	0.5	70	85	- 13					
	375.023		85			110						
		70		76	00		05					
74055	375.396	70	75	75	80	85	85					
TAREE	378.173		(0)	(0	70		- 76					
	378.705	55	60	60	70	75	75					
	379.139	65	75	75	55	60	60					
	380.082	75	85		65	75						
	381.056	80	10-	85	75	17	75					
	381.783		105			85						
	385.197		85			105						
	385.718	70	75	75	80	85	85					
LANSDOWN ENG	387.872											
SIDING	391.558	80	110	85	70	75	75					
MELINGA	392.774											
	394.272		85			110						
	395.417	70	75	75	80	85	85					
COOPERNOOK	403.585											
	407.549	80	85	85	70	75	75					
	408.576	100	100	100	80	85	85					
	411.931	80	85	85	100	100	100					
	413.039	70	75	75	80	85	85					
	413.474	90	100	90	70	75	75					
	415.161	95	105	95	90	100	90					
	415.850	X25			-							
	415.960				X50 (OL)							
JOHNS RIVER	417.062											
	417.860	X50 (OL)			1							



			DOWN			UP	
LOCATION	KILOMETRAGE	Normal	ХРТ	EP	Normal	ХРТ	EP
	417.930		1		X25		
	419.443	70	75	75	95	105	95
	424.683	80	85	85	70	75	75
	427.448	70	75	75	80	85	85
KEND ALL	433.019						
	433.756	80	85	85	70	75	75
	436.321	85	95	90	80	85	85
	441.673	70	75	75	85	95	90
KERE WONG	445.105	X50					
	445.180				X50(OL)		
	446.805	X50(OL)					
	449.133	115	120	115	70	75	75
WAUCHOPE	455.045						
	459.852	80	85	85	115	120	1 15
	462.020	90	115	90	80	85	85
	464.747		100			115	
	467.287	70	75	75	90	100	90
	471.301	80	90	85	70	75	75
	472.394	115	120	115	80	90	85
	472.470						
TELEGRAPH POINT	472.735						
	478.168	110		110	115		115
	485.449	105	115	105	110	120	110
KUND ABUNG	487.226						
	487.929	90	100	90	105	115	10
	488.346	70	75	75	90	100	90
	499.837	80	85	85	70	75	75
	501.729	85	90	90	80	85	85
	503.572						
KEMPSEY	504.219						
	505.130	X40 (OL)	X40 (OL)		40 (OL)	40 (OL)	
	505.210				X40	X40	
	510.541	115	160	115	85	90	90
	513.823		125			160	
	516.797	85	95	85	115	125	1 15
	517.292	70	75	75	85	95	85
TAMBAN	520.547						
	521.519		80			75	
	522.647	95	110	95	70	80	75
	523.180	105		105	95		95
	525.524	80	85	85	105	110	10
	526.065	70	75	75	80	85	85
	534.556						
	535.170						
	535.731		85			75	
	538.548		75			85	
EUNGAI	542.199	80	85	85	70	75	75
	545.758	70	75	75	80	85	85
MACKSVILLE	552.420						
	553.472	80	85	85	70	75	75
	555.813	70	75	75	80	85	85



MAITLAND - AC	ACIA RIDGE						
LOCATION	KUOMETRACE		DOWN			UP	
LUCATION	KILOMETRAGE	Normal	ХРТ	EP	Normal	ХРТ	EP
	558.278	60	65	65	70	75	75
	558.872	70	85	75	60	65	65
	560.334		75		1	85	
	563.480	X40	X40		-	-	
	563.560	40 (OL)	40 (OL)		X40 (OL)	X40 (OL)	
	564.465	75	80	80	70	75	75
NAMBUCCA HEADS	564.676						
	566.283	80	85	85	75	80	80
	572.175	90	95	95	80	85	85
	574.310	110	110	110	90	95	95
	579.407	100	105	100	110	110	1 10
	580.918		1 1				
URUNGA	581.448	85	90	85	100	105	100
	583.383	110	120	110	85	90	85
	586.463						
RALEIGH	588.114	70	75	75	110	120	110
	593.569	100	105	100	70	75	75
	596.379						
BONVILLE	598.000	-	- 1		100	110	
	598.310	80	90			· ·	
	598.880				80	90	
	599.200	95	100		-	-	
	600.668	,,,	100				
SAWTELL	601.998		140			105	
SAWTELL	605.952		140			100	
BOAMBEE BEACH	606.800				115	140	
BOANDEE BEACH		70	75	75			100
	607.037 607.558	100	105	100	100	140	100
		100	105	100	70	13	15
	607.847		440			105	
COFFS HARBOUR	608.609	70	110 75	75	100	105	100
	611.093	70	/5	75	100	110	100
	(10.00		- 76	76			
	618.99	70	75	75	65	70	70
LANDRIGANS	619.870	60	65		-	-	
	620.260	-	- 70		60	65	
	620.600	65	70		-	-	
	627.775						
CORAMBA	627.960		00				
	630.689		90			75	
	633.014		75			90	
	639.529						
	639.912		95			75	
	640.180	X50					
	640.250				X50(OL)		
	641.060						
NANA GLEN	641.990	70	75		80	95	
	642.000	X50(OL)					
	642.070				X50		
	642.156		75			95	
	646.289		85			75	
	648.417		75			85	



LOCATION	KUONETRAGE		DOWN		UP			
LOCATION	KILOMETRAGE	Normal	ХРТ	EP	Normal	ХРТ	EP	
	651.245	90	110	90	70	75	75	
	651.590				70 (WLO)	75 (WLO)		
	651.700				40 (WLO)	40 (WLO)		
	651.881				1			
	652.062							
GLENRE AGH	654.045	80	85	85	90	110	90	
	662.463	100	125	100	80	85	85	
	663.786							
KUNGALA	664.460							
	665.918	80	85	85	100	125	100	
	668.177		115			85		
	671.259		85		1	115		
	674.383	110	125	110	80	85	85	
	679.575		120			125		
	679.675		125			120		
	680.064	80	85	85	110	125	110	
	682.600	X50	X50					
	682.670	50 (OL)	50 (OL)		X50 (OL)	X50 (OL)		
	683.269							
	683.422							
BRAUNSTONE	683.770	80	85		70	75		
	684.400	X50 (OL)	X50 (OL)		50 (OL)	50 (OL)		
	684.480				X50	X50		
	688.143	70	75	75	80	85	85	
	695.721							
GRAFTON CITY	695.748							
	695.833	60	65	65	70	75	75	
	696.146	75	80	80	60	65	65	
	698.848							
	699.278	100	130	110	75	- 90	80	
GRAFTON	699.362							
	700.357		120			130		
	700.457		130			120		
	700.995		120			130		
	701.095		130			120		
	701.803		120			130		
	701.903		130			120		
	702.410		120			130		
	702.510		130			120		
	702.851		120			130		
	702.951		130			120		
	703.399		120			130		
	703.499		130			120		
	704.180		120		100	130	110	
	704.422	80	85	85				
	705.578	60	65	65	80	85	85	
	705.901	70	95	75	60	65	65	
KYARRAN	708.164		75			95		
	708.513	85	90	90	70	75	75	



MAITLAND - AC	ACIA RIDGE						
LOCATION	KUONETRACE		DOWN			UP	
LOCATION	KILOMETRAGE	Normal	ХРТ	EP	Normal	ХРТ	EP
	712.195				X50(OL)		
	712.986						
	713.139	70	75	75	85	90	90
	713.636						
	713.785	X50(OL)					
	713.845				X50		
	714.578	80	85	85	70	75	75
	717.998	70	75	75	80	85	85
	719.904	80	85	85	70	75	75
	723.423	60	65	65	80	85	85
	723.827	80	85	85	60	65	65
	724.793		95			85	
	727.130		85			95	
	728.661	70	75	75	80	85	85
	732.991	100	135	100	70	75	75
	736.258		110			135	
	738.656						
LAWRENCE ROAD	739.222		100			110	
	739.620		105			100	
	742.866						
	743.457	70	75	75	100	105	100
	743.938	80	85	85	70	75	75
	744.632		105			85	
	746.130		85			105	
	746.402	70	75	75	80	- 85	85
	746.836	85	90	90	70	75	75
	756.505						
CAMIRA CREEK	757.244	75	80	80	85	90	90
	758.485	100	105	100	75	80	80
	758.933		120			105	
	761.756	80	85	85	100	120	100
	763.368	70	75	75	80	85	85
	763.876	115	125	115	70	75	75
	769.554	85	90	90	115	125	115
	771.610	100	100	100	85	90	90
	776.160	X50					
	776.250				X50(OL)		
	776.226						
RAPPVILLE	776.268						
	776.444		105			100	
	778.140	X50(OL)	100		10.7		
	782.267	115	130	115	100	105	100
	778.540				×50		
	785.310		120			130	
	785.410		130			120	
	786.182		120			130	
	787.253		125			120	
	788.956		120			125	
	789.056	L	125			120	



LOCATION	KILOMETRAGE	DOWN		UP			
	KILOHEIKHGL	Normal	ХРТ	EP	Normal	ХРТ	EP
	789.600		120			125	
	789.700		125			120	
	793.621		115			125	
	793.666						
	794.066		120			115	
LEEVILLE	799.446	100	105	100	115	120	115
	803.966	75	80	75	100	105	100
	805.590						
CASINO	807.135	70	75		75	80	
	808.141	90	95	90	70	75	75
	809.080	X50	X50				
NAMMOONA LOOP	809.150				X50	X50	
SOUTH END	809.608						
NAMMOONA BALLAST SIDING SOUTH END	809.987						
NAMMOONA	810.363						
NAMMOONA	810.410						
BALLAST SIDING NORTH END	810.743			95			90
	810.820	X50	X50				
	810.888						
NAMMOONA LOOP	810.900				X50	X50	
NORTH END	816.121	115	125	115	90	95	95
	818.603		120			125	
	818.703		125			120	
	824.083	70	80	80	115	125	115
	825.012		120			- 30	
KYOGLE	828.138		75	75		120	80
	829.206	60	65	65	70	75	75
	833.564		75			65	
	833.798						
	834.467	115	125	115	60	75	65
	834.898		120			125	
	834.998		125			120	
	836.217	X50					
KYOGLE LOOP	836.306				X50 (OL)		
	837.110						
	837.930	X50 (OL)					
	838.005	, , ,			×50		
	838.841		120			125	
	838.941		125			120	1
	839.374	80	85	85	115	125	115
	839.950	70	75	75	80	85	85
	840.463	80	85	85	70	75	75
	841.409	100	125	115	80	85	85
	846.451	70	80	75	100	125	115
	847.112		75			80	
	849.308		95			75	
	850.821		75			95	
	859.676	60	65	65	70	75	75



			DOWN		UP		
LOCATION	KILOMETRAGE	Managal			Managal		50
		Normal	ХРТ	EP	Normal	ХРТ	EP
	862.527	X50			10000		
	862.900				X50(OL)		
LOADSTONE	864.470	X50(OL)					
	864.550					X50	
	875.988						<u> </u>
	884.988		70			65	
NSW/QLD BORDER	885.060		-				
	886.220	70	75	75	60	70	65
	887.707						
GLEN APP	891.592		80			75	
	892.026	85	95	85	70	80	75
	895.442	70	75	75	85	95	85
	896.019	65	70	70	70	75	75
	900.690	100	105	100	65	70	70
	902.002		125			105	
	904.639		105			125	
TAMROOKUM	908.861		10.0				
	912.964	115	120	115	100	105	100
	919.052	100	105	100	115	120	115
	919.352	115	125	115	100	105	100
	922.600						
	922.800	100	105	100	115	125	115
SDG (TURN OUTS REMOVED)	925.583	90		90	100		100
	926.141		100			105	
	929.764	115	125	115	90	100	90
	930.870	X25					
BROMELTON -51	000 050				105 (01)		
POINTS	930.950		100		X25 (OL)	105	
	931.338		120			125	
	931.438		125			120	
	931.752	NOE (01)					
BROMELTON	932.570	X25 (OL)			VOF		
	932.650	100	44.5	100	X25	1.00	
BROMELTON -52 POINTS	935.018	100	110	100	115	125	115
- Garris	935.403	110	100	110	100	4.40	100
	940.494	90	100	90	110	110	110
	940.927	100	110	100	90	100	90
	945.606	115	125	115	100	110	100
	952.452	95	100	95	115	125	115
	953.836	115	125	115	95	100	95
DEENDANK	955.134	X50					
GREENBANK	955.340				X50 (OL)		
	956.875	X50 (OL)					
	956.565		407		X50		
	958.640	95	105	95	115	125	115
	962.410		95			105	
	963.419		105			95	
	967.326	90	95		95	105	
	969.423			90			95
	971.568				90	95	90



3. Register of ARTC Infrastructure.

(a) Building Works added to Assets Register during 2013/14

Location	Asset No	Asset	Cost
Narrabri	0021197	Shed	\$111,164.30
Narrabri	0021198	Car park	\$5,969.53
Narrabri	0021199	Air conditioning	\$1,409.54
Narrabri	0021200	Water tank & fuel supply	\$3,275.54
Ivanhoe	0021450	Replace 13 Air conditioners	\$35,625.46
Parkes	0021735	Shed	\$23,727.27
Coffs Harbour	0021772	PC Refurbish buildings	\$21,460.01
Coffs Harbour	0021773	PC Refurbish buildings	\$12,144.97
Gunnedah	0022009	Car park	\$11,276.98
Gunnedah	0022011	Signage	\$1,798.00
Gunnedah	0022012	Provisioning centre set up	\$11,689.07
Narrabri	0022014	Provisioning centre set up	\$5,858.27
Casino	0022166	Provisioning centre upgrade building	\$58,859.05
Goulburn		Re-furb of Provisioning Centre	\$75,000
Junee		New air con for Comms Room	\$25,000
Junee		Upgrade to fire alarm system	\$20,000
Junee		Stormwater upgrade	\$26,000
Junee		Bird prevention	\$28,000
Wagga		Repairs to driveway	\$30,000
Cootamundra West		Repairs Station building & signal box	\$28,000
TOTAL			\$536,258



4. Infrastructure Investment Program - Major Works

(a) Major Works Investment Program

Major Project	2013/14	Planned Expenditure beyond 2013/14	Total Forecast
Southern Sydney Freight Line	\$2,993,297	\$4,879,000	\$947,032,488
Hunter Valley	\$96,093,622	\$651,258,791	\$2,055,907,225
Third Party	\$4,073,677	\$1,832,205	\$13,591,114
Ballast Remediation Program	\$8,612,898	\$25,882,117	\$79,194,361
Interstate Future Capacity		\$268,574,998	\$268,574,998
Metropolitan Freight Network	\$30,710,256	\$69,921,916	\$196,750,413
Main South Improvement Works	\$6,682,412	\$819,491	\$498,102,860
Productivity Package	\$10,240,613	\$5,988,273	\$473,021,080
Wayside	-\$23,475		\$3,233,147
Major Works Program Total	\$159,383,299	\$1,029,156,791	\$4,535,407,687

Project costs for NSW only have been used

(b)Corridor Works Summary

	2010/11	2011/12	2012/13	2013/14
Corridor RCRM	\$38,127,167	\$45,799,573	\$44,574,327	\$45,832,959
Corridor MPM	\$51,269,850	\$54,472,626	\$70,448,228	\$89,015,671
Corridor Capital	\$51,064,281	\$39,158,642	\$77,036,238	\$73,208,283
Corridor Works Program Total	\$140,461,298	\$139,430,840	\$192,058,794	\$208,056,913



(c)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 Southern Sydney Freight Line	2013/14	Beyond 2014	Total Forecast
South Sydney Freight Line	\$1,639,570	\$4,879,000	\$945,203,933
SSFL Finalisation Works	\$1,353,727	φ4,879,000	\$1,828,554
South Sydney Freight Line Total	\$2,993,297	\$4,879,000	\$947,032,488
	\$2,333,237	\$4,879,000	\$347,032,400
Hunter Valley	2013/14	Beyond 2014	Total Forecast
Maitland to Minimbah Third Road - Stage 1	\$24,685	\$81,920	\$142,701,225
ARTC Inventory - Ansaldo	-\$1,941,970		
Bengalla Crossing Loop	\$731,388		\$19,406,049
Koolbury Passing Loop	\$79,263		\$16,631,137
Liverpool Range Duplication	-\$5,086		\$5,463,820
Maitland to Minimbah Third Road - Stage 2	\$6,613,601	\$1,641,386	\$355,023,899
Scone Reconfiguration	\$4,514,510	\$2,498,638	\$8,622,392
Aerosol (Murrumbo) Valley Loop - 370km	\$39,536		\$14,723,534
Radio Hut (Yarrawa) loop - 319 km	\$238,500		\$15,294,024
Parkville Loop Extension	-\$44,332		\$10,606,522
Wingen Passing Loop - 332 km	\$376,844	\$20,446,765	\$20,975,000
Widden Creek Loop (353km Loop)	\$116,334		\$2,034,797
Wilpinjong Loop	\$165,393		\$17,948,201
Bylong Loop Extension	-\$155,645		\$25,535,632
Alliance costs clearing project - UHVA	-\$185,913		
Nundah – Third Track	\$1,174,983	\$135,542	\$82,578,627
Hexham Relief Roads Stage 1	\$56,373,004	\$62,130,996	\$138,891,486
AANCSA PM Costs Clearing Account	\$722,535		
Ulan Plus PM Costs Clearing Account	\$501,309		
UHVA PM Costs Clearing Account	\$54,099		
Bells Gate Passing Loop	-\$75,882		\$20,565,255
Pages River Passing Loop	\$49,184		\$22,687,866
Chilcotts Creek Passing Loop	\$1,256,948	\$231,148	\$30,605,875
Burilda Passing Loop	\$10,291		\$12,949,018
Muswellbrook Junction Upgrade	\$770		\$1,411,335
Drayton Junction Upgrade (Capital)	-\$435,110		\$19,920,160

Note: Hunter Valley projects beyond 2014 are dependent on tonnages above current contracted volumes.



Project			
Hunter Valley cont.	2013/14	Beyond 2014	Total Forecast
Watermark Loop	\$958,025	\$669,000	\$19,733,601
South Gunnedah Loop	\$142,921	\$19,498,491	\$22,170,317
Bengalla Loop Extension	-\$24,146		\$1,525,119
Hunter Valley Congestion Projects	\$161,899	\$386,426	\$850,000
Kooragang Departure Roads	\$642,991		\$1,344,332
Bylong East Duplication	\$293,833		\$2,234,236
Bengalla West Loop Extension	\$5,269		\$206,330
Coggan Creek West	\$132		\$238,324
Gulgong to Tallawang Track Upgrade	-\$541		
Collygra Loop	\$13,682		\$132,243
Hexham to Kooragang 3rd Track	\$8,989		\$802,176
Farley to Maitland 3rd Track		\$20,000	\$583,445
Nundah 3rd Track Extension	\$26,060		\$298,494
Togar North Crossing Loop	\$128,066	\$20,134,792	\$20,464,000
Recycled Structural Material	\$263,837	-\$267,952	-\$1
No.3 Departure Road at KCT	\$4,663,890		\$31,125,461
KCT Bypass Road Realignment	\$253,350		\$1,428,608
Kooragang Arrival Roads Stage 2	\$502,057	\$36,450,581	\$38,049,008
Gunnedah Yard Upgrade	\$4,215,458	\$14,054,797	\$18,490,000
Drayton Down Relief Hub	\$8,422,503	\$13,858,423	\$22,410,683
Whittingham Down Relief Hub	\$445,856	\$37,462,872	\$38,367,830
Ardglen to Kankool Duplication		\$88,699	\$90,134
ARTC Network Control Optimisation (ANCO)	\$197,391	\$29,577,179	\$29,774,570
Kooragang Arrival Roads Stage 3	\$1,826,607		\$1,826,607
HVMP PM Costs Clearing Account	\$724,047	-\$724,047	
Arrival Roads Signalling Optimisation	\$1,428,813	\$5,737,529	\$7,166,342
Hexham to Kooragang Resignalling	\$285,963	\$363,037	\$649,000
Mt Thorley Branch Signalling Enhancement	\$307,431	\$682,568	\$989,999
Bengalla to Mangoola Train 1 Extension		\$40,000,000	\$40,000,000
Bengalla to Mangoola Train 2 Extension		\$24,500,000	\$24,500,000
Bengalla to Mangoola Train 3 Extension		\$35,700,001	\$35,700,001
Carrington Train Park Up		\$25,900,000	\$25,900,000
Hunter Valley ATMS		\$260,000,000	\$260,000,000
Other Hunter Valley			\$424,280,511
Hunter Valley Total	\$96,093,622	\$651,258,791	\$2,055,907,225

Note: Hunter Valley projects beyond 2014 are dependent on tonnages above current contracted volumes.



Project			
Third Party	2013/14	Beyond 2014	Total Forecast
Philip St, Gloucester, L/Xing, RTA	\$285,388		\$829,506
Primrose St, Wingham L/Xing - RTA	\$120,898		\$1,025,163
Nammoona LCIP RTA 809.010KM	\$311,806		\$652,739
Koolhan LCIP RTA 706.321Km	\$391,907		\$481,284
Macksville LCIP RTA 552.758Km	\$11,431		\$1,006,916
Rossglen LCIP RTA 428.407km	\$752,478		\$966,629
Martins Creek Rd, LCIP RTA 218.680km	\$505		\$103,628
Low Cost L/Xing Warning Device Project	\$7,766		\$7,766
NC LCIP Minor Upgrade Sites	\$3,699		\$54,992
Henty West Track Upgrade	\$121,081		\$1,116,667
Bruxner Hwy Casino LCIP	\$186,116	\$863,000	\$1,049,116
Muswellbrook to Bengalla Jct	\$80,720	\$969,205	\$1,049,925
Dandaloo Rd Narromine Designs 12-13 LCIP	\$508,244		\$508,244
Gwyerville Rd, Moree Designs 12-13 LCIP	\$793,952		\$793,952
TfNSW Pedestrian L/Xing - Marulan Yard	\$23,833		\$23,833
Goondah Rd Bowning LCIP 1314 Design	\$86,327		\$86,327
NC LCIP Minor WKS Construct 13-14	\$201,376		\$201,376
HV LCIP Minor WKS - Construct 13-14	\$42,880		\$42,880
HV LCIP Minor WKS - Cobbora Rd	\$45,870		\$45,870
HV LCIP Minor WKS - Coopers Cnr	\$44,970		\$44,970
LCIP - Birriwa/Gulgong/Dunedoo/Liamena	\$52,430		\$52,430
Other Third Party			\$3,446,902
Third Party Total	\$4,073,677	\$1,832,205	\$13,591,114
Ballast Remediation Program	2013/14	Beyond 2014	Total Forecast

Ballast Remediation Program	2013/14	Beyond 2014	Total Forecast
Various projects – Macarthur to Albury	\$8,612,898	\$25,882,117	\$79,194,361
Ballast Remediation Program Total	\$8,612,898	\$25,882,117	\$79,194,361



Project			
Interstate Future Capacity	2013/14	Beyond 2014	Total Forecast
Camira Creek loop extension		\$17,910,784	\$17,910,784
Grafton City loop extension		\$18,448,108	\$18,448,108
Coramba loop extension		\$16,882,632	\$16,882,632
Landrigans loop extension		\$17,389,111	\$17,389,111
Raleigh loop extension		\$17,389,111	\$17,389,111
Tamban loop extension		\$19,001,551	\$19,001,551
Kundabung loop extension		\$19,571,598	\$19,571,598
Kendall loop extension		\$20,158,746	\$20,158,746
Coopernook loop extension		\$16,882,632	\$16,882,632
Gloucester loop extension		\$17,910,784	\$17,910,784
Weismantals loop extension		\$18,448,108	\$18,448,108
Ingleburn loop		\$16,390,905	\$16,390,905
Passing Lane 2 northern extension		\$52,190,927	\$52,190,927
Interstate Future Capacity Total	\$0	\$268,574,998	\$268,574,998

Note: Interstate Future Capacity projects are subject to financial analysis and project approval.

Metropolitan Freight Network	2013/14	Beyond 2014	Total Forecast
Port Botany Rail Upgrade - Stage 2	\$30,704,451	\$17,421,916	\$101,779,999
Hexham Loop	\$5,804		\$15,310,414
Port Botany Stage 3		\$52,500,000	\$52,500,000
Other Metropolitan Freight Network			\$27,160,000
Metropolitan Freight Network Total	\$30,710,256	\$69,921,916	\$196,750,413

Main South Improvement Works	2013/14	Beyond 2014	Total Forecast
Passing Lanes on Single Track		\$819,491	\$110,267,062
Program Management - SIA	\$297,037		\$42,689,786
CRS & Assoc Works Bethungra-June	\$6,385,375		\$6,398,655
Other Main South Improvement Works			\$338,747,358
Main South Improvement Works Total	\$6,682,412	\$819,491	\$498,102,860



Project				
Productivity Package	2013/14	Beyond 2014	Total Forecast	
North Coast Curve Easing	\$5,953,236		\$108,571,339	
Concrete Resleepering Parkes-Broken Hill	\$4,301,582	\$5,988,273	\$260,318,273	
Albury - Melbourne Rerailing	-\$14,204		\$79,193,097	
Other Productivity Package			\$24,938,371	
Productivity Package Total	\$10,240,613	\$5,988,273	\$473,021,080	
Wayside	2013/14	Beyond 2014	Total Forecast	
Wayside Pool - Equipment Installation	-\$23,475		\$3,233,147	
Wayside Total	-\$23,475		\$3,233,147	
TOTAL	\$159,383,299	\$1,029,156,791	\$4,535,407,687	

(d)Major Works Investment – Since Lease Commencement

Summary of Major Works Investment and Corridor MPM & Capital since lease commencement											
	2004 / 05 (\$ '000)	2005 / 06 (\$`000)	2006 / 07 (\$`000)	2007 / 08 (\$`000)	2008 / 09 (\$'000)	2009 / 10 (\$'000)	2010 / 11 (\$'000)	2011 / 12 (\$'000)	2012 / 13 (\$'000)	2013 / 14 (\$`000)	Total (\$'000)
Major Works Investment	\$5,695	\$83,518	\$324,507	\$514,022	\$517,500	\$615,278	\$490,988	\$843,678	\$539,004	\$159,383	\$4,093,573
Corridor MPM & Capital	\$58,869	\$97,234	\$94,685	\$142,763	\$164,839	\$120,159	\$140,461	\$139,431	\$192,059	\$162,224	\$1,312,724
Total	\$64,564	\$180,752	\$419,192	\$656,785	\$682,339	\$735,437	\$631,449	\$983,109	\$731,063	\$321,607	\$5,406,297