A Guide to understanding the Infrastructure and Engineering Business Plan 2013-1015

KiwiRail's Infrastructure and Engineering Business Plan 2013-2015 is based on a robust assessment of risk, opportunity and priorities for rail over the next 30 years. As always, safety lies at the core of what we do and will never be compromised.

The level of planning shown by the document is evidence of our systematic and careful approach to a difficult situation that is not unique to us. We are not taking a slash and burn approach; rather we are looking at our business in detail, how we do the business and how we can progressively change that to match our resources over the longer term.

Reductions in headcount are but one element of the strategy and are aligned with that strategy in terms of which parts of the business they will occur. Just like any other business, KiwiRail has to make calls around priorities when managing our assets and use our money prudently. We have a 30 year task ahead and need to balance our priorities according to the needs of safety followed by our market needs.

From the day any asset is put into service – be it a piece of rail, a sleeper, a bridge, it starts to wear out. In the ideal world you do just enough maintenance and renewals each year to ensure that across all the assets you stay in a satisfactory position. It's common knowledge that prior to 2004 the network was starved of investment and it was wearing out faster than it was renewed. This went on for a long time, so when the Crown bought back the network in 2004 there was an enormous legacy of catch-up renewals. From 2005-2011 the investment progressively ramped up and we were renewing the network faster than it was wearing out. This meant the legacy of catch-up renewals was being reduced. However that legacy has not been eliminated and will not. Depending on the type of asset clearing the legacy will take between 20-40 years. In the period 2012-2015 spending will be matched with priorities and customer demand.

There is no way we expect to be back at 2004-2006 levels by the end of spending restrictions. The network will be in better shape than it has been in the past under Crown ownership. This plan sets out how that will be achieved.

Further information about some of the content in the plan is outlined below:

Asset Management
The Business Plan regularly uses the word decline. This term needs to be understood in context – we have plans for managing the assets and safely matching their service potential to customer requirements and priorities. In some cases the use of this word does mean that service levels will decline but as always safety will not be compromised.

Minor lines
All decisions in this area are subject to consultation. Line closures are dependent on Minister's approval.

24 August 2012

Infrastructure and Engineering
Business Plan 2013-2015

KiwiRail

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1 EXECUTIVE SUMMARY AND OUTCOMES

KiwiRail's vision is to be a sustainable business, which, given the history of rail in NZ is an ambitious target. Our shareholders have supported this vision by agreeing to invest $1.2b.

In 2010, KiwiRail submitted our plan which committed us to delivering a commercially–focussed, self-sustaining rail and ferry business. Two years later it is clear we are operating in a significantly different environment that has been significantly affected by unanticipated events like the Christchurch earthquake and adverse economic conditions. With this in mind it was appropriate to review our plans to ensure they were still on target to meet our goals and if not to update them to ensure they are.

The review found that while previous plans did consider economic uncertainties they did not reflect the full impact of the financial situation we are now operating in or the on-going effects of events like the earthquakes which no one could foresee.

Simply, if we continued to spend as we set out in our 2010 plan our funding would run out before we are ready for it to, leaving us with a gap between our earnings and spending.

We are confronting this situation by making changes to the business so we can still meet our goal of contributing to KiwiRail becoming a sustainable business by 2020.

In order to achieve this we need to reduce expenditure and fundamentally change the way we do things while at the same time lifting productivity.

This business plan develops in some detail the basis for our "2012/13 Plan on a Page".

1.1 I & E PLAN ON A PAGE 2012/2013

Growth	Operational Excellence	Cost Containment	People	Innovation
• Determine long term sustainable infrastructure cost • Agree Freight SLA including target customer service levels which do not compromise growth	• SIRIUS implemented in Palmerston North with business case for national rollout approved and committed • Process re-engineering for Golden Triangle and selected Premier Train corridors to achieve lower cost, more efficient delivery without compromising customer offering • Productive timeslots available and integrated with train paths • Full Electronic Worksite Protection Business Case completed	• $200m cost reduction FY13-15 including 40% lower track renewals in FY14 • Hold OPEX approx $30m or 35% below unconstrained FY13 inputs • Productivity drive including: - Cost/sleeper down 15% - Utilisation major plant up - Less heat runs	• Track Staff Competency package for senior field staff • Graduate recruitment & support programme • Shift core business definition from delivery of rail infrastructure to availability of reliable infrastructure • High level of open communication and engagement with RMTU to secure MECA renewal and business re-engineering initiatives • Reposition Train Control to secure advocacy from Freight and Metro operations • 12 month rolling LTIFR less than 13 and MTIFR below 50 • Operating irregularities with maintenance personnel to rolling 25pa by end of FY13 • Sort Midland operating procedures to shift risk from very high to high • Nationally consistent signalling rules implemented • Engagement improvement • Bed in Medical Standards	• Virtual team across Train Control and Operation of Freight and Metros • Fully re-engineered bulletin planning, distribution and work process • Track inspection methods and technology plan • Initial Electronic worksite Protection to limit SPAD risk to worksite staff

1.2 NETWORK OPERATING EXPENSES

Extrapolation of I & E FY12 operating expenditure levels into FY13 and beyond is not financially sustainable. I & E are in this position because:

- The Group revenue position is lower than TAP projections – from which the I & E spend profile was originally developed (and)
- The drop in capital expenditure – in particular the Major Projects coupled with a change to the nature of some projects has reduced the level of expenditure reasonably able to be capitalised

The table below shows the Budget Network EBITDA of ($64.**6**m) against the Forecast FY12 EBITDA of ($57.8m).

PROFIT & LOSS ($M)	Forecast	Budget	Business Plan	
	FY12	FY13	FY14	FY15
Revenue	34.5	34.8	34.4	35.8
Labour Related Costs	94.1	88.4	74.0	80.8
Less: Capital	60.4	42.3	38.2	44.2
Less: Operational	33.7	46.1	35.8	36.6
External Operating Costs	38.7	30.9	45.1	47.0
Internal Expenses	19.9	22.5	20.1	20.1
EBITDA	**-57.8**	**-64.6**	**-66.6**	**-67.9**

To achieve the FY13 EBITDA of $64.6m as submitted in the business plan, we need to reduce overall labour costs in Network by $18m which equates to approximately 170- 220 FTEs.

1.3 NETWORK RENEWAL AND UPGRADE EXPENDITURE

At the same time there is a material gap between Group affordable levels of capital expenditure, Crown equity injections, and medium term network investment requirements. KiwiRail has committed to the goal of being a sustainable railway; it is not tenable to seek additional Crown funding at this time without investigating options for re-engineering the way we do business.

This business plan takes an initial $200m from the I & E baseline renewals and upgrade projects plan between 2013 and 2016. Taking a long-term perspective this equates to approximately a 1.5 year deferral in a 40 year programme.

The proposed uplift primarily in Track Renewals beyond 2015 by $30m per annum has also been removed from the long term programme, its re-insertion will be subject to better substantiation of the need, and acceptable Group revenue and EBITDA achievements.

This business plan is based on the following core elements with respect to Opex, renewals and upgrades.

During FY13:

- Track renewals 20% below FY12, the Structures renewals taking a greater cut which is materially lower than FY12
- Third main works slow materially
- Achieve a substantial reduction in operating expenditure coupled with a more intense drive for productivity by means including:
  - Reduction in head count across the maintenance and support parts of the business (20%)
  - An even greater proportionate reduction in the overhead costs
  - Reductions in the headcount across renewals
  - Closer management of inventory
  - Efficiency (cost per unit of production) gains including:
    - Closer management of working hours, penal rates and allowances
    - Controls on work being released – higher threshold of cost and
    - delivery plan required
    - To the greatest extent possible not using major plant and our resources generally in short possession windows
    - Much stronger "within" I & E KPIs linking all support services to productivity
- Different delivery strategies depending on the nature of the line segment – and the mix of internal and external resources available.

During FY14 & FY15:

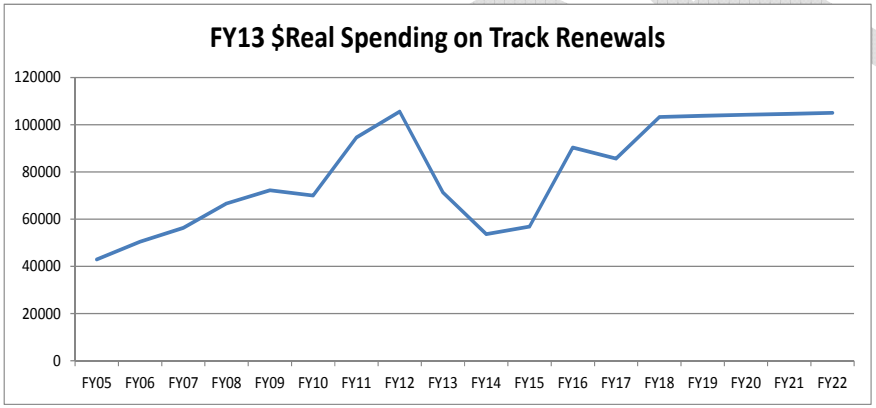
- Further reduction in renewals expenditure to around 2007/2008 levels
- Re-engineering of internal processes and delivery options
- Some further reduction of headcount across the business

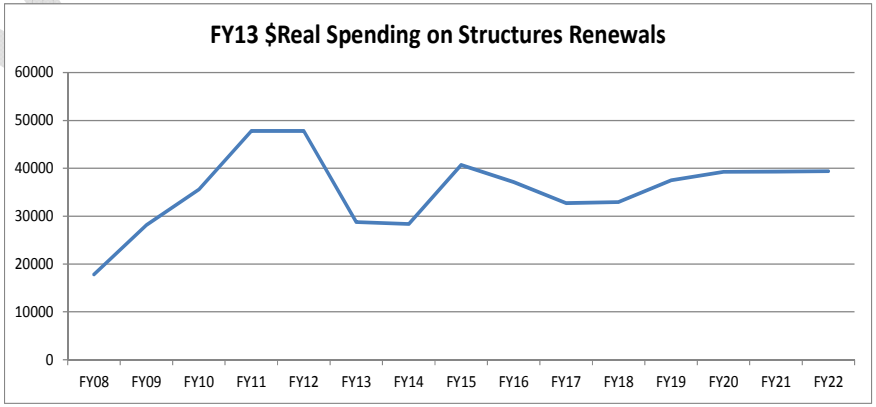
From FY16 grow renewals and upgrades back to agreed levels which in FY18 will either be the same in real terms as FY12 or greater given the size of the bow wave created and the extent to which funding lines can be secured. The spend profile is shown in the table on the next page.

All amounts show in ($000s)	Budget 2013	Budget 2014	Budget 2015	Budget 2016	Budget 2017	Budget 2018	Budget 2019	Budget 2020	Budget 2021	Budget 2022
Line Segment & Yard Upgrades	29,979	32,850	54,824	27,750	29,065	38,265	9,000	9,000	9,000	9,000
Other Upgrades Projects (JOG)	1,100	-	-							
Plant & Equipment	24,015	7,400	10,300	7,800	8,300	8,800	9,300	9,800	10,300	10,800
Signals and Telecommunications	5,800	4,600	4,300	4,390	4,108	4,219	4,333	4,450	4,570	4,693
Structures	29,350	29,050	42,720	40,000	36,215	37,463	43,744	45,060	46,412	47,800
Track & Formation	68,974	49,611	56,925	88,900	90,552	112,115	115,816	119,620	123,525	127,535
Traction & Electrical	938	938	1,206	1,206	1,849	1,899	1,950	2,003	2,056	2,111
Level Crossing Upgrades	500	500	500	500	500	500	500	500	500	500
Metro Renewals – Freight portion	6,469	6,714	6,714	6,714	6,714	6,714	6,714	6,714	6,714	6,714
Metro Renewals – Passenger portion	24,445	22,739	24,380	19,400	21,850	22,184	20,849	11,437	11,437	11,437
Metro Projects	124,468	10,232	-							
Total Capex	**316,039**	**164,634**	**201,368**	**196,659**	**199,152**	**232,158**	**212,206**	**208,583**	**213,616**	**219,693**

The targets are very ambitious and require sustained management focus and high levels of staff, customer and RMTU engagement.

The reductions are greatest in the track and structures renewals shown in the graphs below





At best the customer service levels in FY13 will be around but no better than FY12 levels in some line segments. The network will experience falling performance and carry a higher disruption-risk profile. This risk will be managed to limit the impact as much as is practicable on premier corridors

In FY14 - FY15 the asset will decline, disruption risk will grow, asset failure risk will grow and the legacy bow wave will get bigger. Even when expenditure gets back to current levels, it will take time to pull back from the decline and regain an improving performance trend to underpin increasing service reliability expectations.

Our main targets are summarised in the form of a report card below; the details are found in the main document.

Delivery Commitments FY13	**Result at half year**	**Result at year end**
Customer Service Levels		
Full alignment of business plans – with performance monitored by formal KPIs and defined access rights/obligations		
TSR - For each key route no more than four weeks above TSR levels set in section 3 (seasonal variations accepted)		
H40 – Track Stability targets in section 3 delivered		
Rail Failures – Rail failure limits in section 3 not exceeded		
Derailments – Derailment limits in section 3 not exceeded		
Signals - Failure limits in section 3 not exceeded		
Radio - No more than 60 radio network faults involving field call outs or double crewing		
Input Delivery Levels		
Track renewal volumes per the table in section 6		
Rail Grinding programme delivered		
Renewal work programmes per sections 6 delivered per budgets and programmes • Structures • Signals & Telecommunications • Traction and Electrical • Plant & Equipment		
Upgrade work programme per section 7 delivered per budgets and programmes		
Culture and staff relationship		
Shift the core business definition from delivery of rail infrastructure to availability of reliable rail infrastructure		
Maintain a high level of open communications with RMTU and staff to secure MECA renewal aligned with the business re-engineering initiatives		
Productivity Levels		
Increase in amount of productive timeslots available for working on track		
Major improvement in benchmarked utilisation of selected major plant.		
Investment versus performance maintenance measured in terms of • Maintenance and renewal spend vs Star and Class 1 faults by key route • Maintenance and renewal spend vs Mainline Derailments by key route • Maintenance and renewal spend per GTK		
Ratios of base wages to total salary costs		
Cost per sleeper installed = $200 being a 15% reduction in cost compared to FY12		
Percentage of planned maintenance jobs completed		
Nationally consistent signalling rules		
Change to track inspection methods and technologies		
Improvement in available productive time on track measured by • Samples of delay between train having passed site and authority to enter track being given		

Delivery Commitments FY13	Result at half year	Result at year end
• Sample of time between requirement to vacate track and train arrival at site		
Transition path to lower cost more efficient long term delivery of maintenance, renewals and upgrades on the Golden Triangle routes secured by Dec 2012		
Equivalent exercise to Golden Triangle applied to all Line Segments		
Safety and Risk Management		
Track Occupancy Occurrence and Near Collision Maintenance Personnel – rolling 12 month average at 25 by end of FY13		
12 month rolling average LTIFR less than 10 through-out year		
12 month rolling average MTIFR less than 50 by 30 June 2013		
All risks identified as "Very High" repositioned as "High" or lower by Dec 2012 • Midland Line Signalling • Protection of workers on worksites from Rail Vehicles • Management of H40 process • Serious Private level crossing accident		
Organisation Development		
Track Staff Competencies • Engineering competencies established and in place • All Track Field Engineers trained to defined competency levels by Dec 2013 • Fully documented re-engineered processes, fully trained staff prior to H40 season		
Fully re-engineered bulletin planning, distribution and work protection processes by March 2013		
Sirius processes fully deployed • Central Region – July 2012 • Southern Region – December 2012 • Northern Region – July 2013		
Maximo deployment in Palmerston North proves the case for the rest of the country		
Maximo per original scope successfully deployed nationwide • Central Region – June 2013 • Southern Region – August 2013 • Northern Region – January 2014		

Progress against these milestones will be monitored regularly and there will be a full "report card" to directors at the six month and 12 month milestone.

1.4 MECHANICAL OPERATING EXPENSES

The table below shows the budgeted EBITDA for Mechanical Workshops of ($0.9m) against FY12 Forecast of $3.5m.

Profit & Loss ($m)	Forecast	Budget	Business Plan	
	FY12	FY13	FY14	FY15
Revenue	4.0	0.7	0.3	0.3
Labour Related Costs	21.3	18.4	14.8	15.3
Less: Capital	10.4	8.1	6.2	6.4
Operational	10.9	10.3	8.6	8.9
External Operating Costs	-13.8	-11.1	-10.8	-11.1
Internal Expenses	3.4	2.4	2.4	2.4
EBITDA	**3.5**	**-0.9**	**0.1**	**0.1**

The difference is principally explained by the sale/closure of Hillside.

1.5 GUIDE TO REST OF BUSINESS PLAN

The rest of the Business Plan follows the order below

Section 2: Overall Network Priorities

This describes by line segment the nature of the business activity I & E is supporting, and provides context for the spending priorities.

Section 3: Key Transit Time and Reliability Targets

This describes the targets we will deliver at the funding levels in this Business Plan.

Section 4: Linkage to Network's Business Model

This section provides the linkage between the business plan and the Key Result Areas (KRA) that I & E use as an internal management tool. This is set at a relatively high level; the actual KRAs will be negotiated with managers and reflected in individual staff KPI's.

Section 5: Operating Expenses

This is divided into three sub-sections:

- 5.1 to 5.3 takes a macro view of the overall changes we must make to the methods of doing business to contribute to KiwiRail becoming a sustainable business.
- 5.4 to 5.10 examine the level of resources and types of opportunities that need to be pursued driven in mainly by the Regional Managers supported from head office.
- 5.11 to 5.16 examine the business changes needed at the centre of I & E, driven mainly from Network Performance, Engineering and Corporate Services.

Sections 6 Network Renewals

These examine by asset group the overall renewal priorities and spend profile over the business plan period. They will each be supplemented by the capital spend spread-sheets used in the PCGs that will be used as the baseline from which actual performance is assessed.

For the track asset the documentation will go into one further layer of detail covering the annual renewals programme.

Section 7 Network Upgrades

This describes by line segment the Upgrades funded over the business plan period the years beyond that.

Section 8 Mechanical

This describes initiatives at Hillside, Hutt Workshops and within the Mechanical Group generally.

Section 9

This section covers the assumptions in areas not directly controlled by I & E but where budget and delivery of service are critical for the success of I & E initiatives. It covers:

- IT
- Property

KiwiRail - Infrastructure & Engineering (Consolidated) Profit and Lost Statement for the period 1 July 2012 to 30 June 2013	Budget Jul 12	Budget Aug 12	Budget Sep 12	Budget Oct 12	Budget Nov 12	Budget Dec 12	Budget Jan 13	Budget Feb 13	Budget Mar 13	Budget Apr 13	Budget May 13	Budget Jun 13	Budget 2013
Revenue													
Freight	-	-	-	-	-	-	-	-	-	-	-	-	-
FAF	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Freight (Incl FAF)	-	-	-	-	-	-	-	-	-	-	-	-	-
Passenger	-	-	-	-	-	-	-	-	-	-	-	-	-
Auckland Metro	1,542	1,542	1,542	1,542	1,542	1,542	1,542	1,542	1,542	1,542	1,542	1,542	18,505
Other Trading	1,291	1,348	1,276	1,190	1,183	1,190	1,190	1,169	1,190	1,183	1,190	1,183	14,585
Total Trading Revenue	2,834	2,890	2,819	2,732	2,725	2,732	2,732	2,711	2,732	2,725	2,732	2,725	33,091
Service Fee	-	-	-	-	-	-	-	-	-	-	-	-	-
External Revenue	**2,834**	**2,890**	**2,819**	**2,732**	**2,725**	**2,732**	**2,732**	**2,711**	**2,732**	**2,725**	**2,732**	**2,725**	**33,091**
Total Internal Revenue	**148**	**148**	**148**	**148**	**148**	**148**	**148**	**148**	**148**	**148**	**148**	**148**	**1,776**
Total Revenue	**2,982**	**3,038**	**2,967**	**2,880**	**2,873**	**2,880**	**2,880**	**2,859**	**2,880**	**2,873**	**2,880**	**2,873**	**34,867**
Labour and related costs - Operational	7,682	7,776	7,593	7,464	7,326	7,284	7,869	6,792	6,907	7,275	7,183	7,253	88,405
Labour and related costs - Capitalised	(3,389)	(3,454)	(3,241)	(3,021)	(3,030)	(2,967)	(3,865)	(3,865)	(3,865)	(3,865)	(3,865)	(3,865)	(42,294)
Labour Costs	**4,293**	**4,322**	**4,352**	**4,443**	**4,296**	**4,317**	**4,003**	**2,927**	**3,042**	**3,410**	**3,318**	**3,388**	**46,110**
Fuel and Traction electricity	223	223	222	222	222	220	218	217	215	215	215	215	2,628
External services	3,585	3,585	3,585	3,585	3,585	3,585	3,585	3,585	3,585	3,585	3,585	3,585	43,017
Contractor Linehaul Costs	-	-	-	-	-	-	-	-	-	-	-	-	-
Lease and Rentals	278	286	276	246	233	224	222	222	212	193	192	193	2,776
Track Access Costs	-	-	-	-	-	-	-	-	-	-	-	-	-
Materials & Supplies	(3,080)	(3,117)	(2,903)	(2,726)	(2,741)	(2,671)	(2,747)	(2,758)	(2,767)	(2,767)	(2,768)	(2,768)	(33,814)
Incidents, Casualties & Insurance	24	24	23	20	20	20	18	18	17	17	17	17	236
Other Expenses	1,399	1,389	1,381	1,390	1,346	1,335	1,335	1,300	1,291	1,289	1,289	1,289	16,033
External Operating Costs	**2,428**	**2,390**	**2,584**	**2,738**	**2,664**	**2,712**	**2,631**	**2,583**	**2,553**	**2,532**	**2,530**	**2,532**	**30,877**
Total Internal Expenses	**1,965**	**1,885**	**1,871**	**1,841**	**1,857**	**1,854**	**1,907**	**1,837**	**1,893**	**1,848**	**1,885**	**1,867**	**22,510**
Net Operating Expenditure	**8,686**	**8,596**	**8,807**	**9,023**	**8,818**	**8,882**	**8,541**	**7,346**	**7,488**	**7,791**	**7,733**	**7,787**	**99,497**
EBITDA before restructuring	**(5,704)**	**(5,558)**	**(5,840)**	**(6,142)**	**(5,944)**	**(6,002)**	**(5,660)**	**(4,487)**	**(4,608)**	**(4,917)**	**(4,853)**	**(4,914)**	**(64,631)**
Restructuring costs	1,833	1,833	1,833	2,913	1,833	1,833	120	-	-	-	-	-	12,200
EBITDA after restructuring	**(7,538)**	**(7,391)**	**(7,674)**	**(9,056)**	**(7,778)**	**(7,835)**	**(5,780)**	**(4,487)**	**(4,608)**	**(4,917)**	**(4,853)**	**(4,914)**	**(76,831)**
Corporate Depn Recharge	-	-	-	-	-	-	-	-	-	-	-	-	-
EBITDA after Corp Depn Recharge	**(7,538)**	**(7,391)**	**(7,674)**	**(9,056)**	**(7,778)**	**(7,835)**	**(5,780)**	**(4,487)**	**(4,608)**	**(4,917)**	**(4,853)**	**(4,914)**	**(76,831)**
Depreciation & Amortisation	18,623	18,623	18,623	18,621	18,621	18,621	18,621	18,621	18,621	18,621	18,621	18,621	223,458
EBIT excluding Grants	**(26,161)**	**(26,015)**	**(26,297)**	**(27,677)**	**(26,399)**	**(26,456)**	**(24,401)**	**(23,108)**	**(23,229)**	**(23,538)**	**(23,474)**	**(23,535)**	**(300,289)**
Capital Grants - Metro Developments	15,044	19,038	8,051	6,547	5,246	8,419	9,082	8,423	5,238	4,813	4,306	30,261	124,468
Capital Grants - Rail Upgrade & Growth	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital grants - Internal	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Grants - GWRC Annual Renewals	422	422	422	528	422	422	369	369	422	633	422	422	5,276
Capital Grants - MOT Deferred Renewals	900	900	900	943	1,250	1,250	1,500	1,200	1,200	1,200	1,500	1,500	14,243
Capital Grants - ARTA Annual Renewals	394	394	394	493	394	394	345	345	394	591	394	394	4,926
Capital Grants - Public Policy	42	42	42	42	42	42	42	42	42	42	42	42	500
Capital Grants - Other	225	225	225	225	225	225	225	225	225	225	225	225	2,700
Capital Grant Revenue	**17,027**	**21,020**	**10,034**	**8,777**	**7,579**	**10,752**	**11,563**	**10,604**	**7,521**	**7,504**	**6,889**	**32,844**	**152,113**
EBIT including Grants	**(9,134)**	**(4,994)**	**(16,263)**	**(18,900)**	**(18,820)**	**(15,704)**	**(12,839)**	**(12,504)**	**(15,708)**	**(16,034)**	**(16,585)**	**9,309**	**(148,175)**
F/X (gains) / losses	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest (income)	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest expense	-	-	-	-	-	-	-	-	-	-	-	-	-
NET SURPLUS/(DEFICIT)	**(9,134)**	**(4,994)**	**(16,263)**	**(18,900)**	**(18,820)**	**(15,704)**	**(12,839)**	**(12,504)**	**(15,708)**	**(16,034)**	**(16,585)**	**9,309**	**(148,175)**

2 OVERALL NETWORK PRIORITIES

2.1 CONTEXT

This Business Plan reflects the result of constraining the Infrastructure and Engineering budget to the level afforded by projections of revenues and operating costs across KRG.

In November 2011 an optimised infrastructure plan was endorsed for planning purposes pending development of a Group Business Plan. The subsequent reductions in the Infrastructure capital budget from $210m to $166m in FY13 and greater levels of restraint $237m to $135m in FY14 have been accommodated through:

- Deferral and/or cancellation of upgrade projects on the Main Trunk
- Slower starts to the Milk Route and Coal Route projects
- Substantial reduction in the spend on timber bridges
- Accepting a higher level of unplanned disruption (slips, erosion etc)
- Reduction in other classes of track renewals to accommodate the 10 yearly cycle of the rail grinding programme

There is generally scope to accommodate a short-term drop in capital spending without overly compromising the long-term performance of the asset and its support to the business if there is a real prospect of catching-up in later years. We will need to overview the recent history of rail where with the exception of the period 2008-2012, deferrals have been permanent, and the bow wave has continued to grow.

In November 2011 our assessment of the gap between the Group “affordable” in the long haul and the full network long-term sustainable I & E spend was $30m per annum.

In this Business Plan none of the $30m per annum is allowed for and a further $200m capital spend was removed from FY13-FY16.

The key items that drive the I & E cost model are:

- The full network business model, related line segment priorities and associated service levels driven from bottom line safety considerations first overlaid with customer service expectations
- The methods of conducting business
- The legacy timber assets – either in sleepers, bridge structural elements, poles etc
- Our assessments of acceptable risk and mitigations

The primary levers that I & E has available to it are decisions on the way it delivers service, and the extent to which the Group is prepared to accept the performance risks and increasing liabilities associated with renewing legacy assets at levels below that which asset models suggest it should.

This Business Plan has I & E’s best view on a compromise between desirable and affordable budgets in a time of significant Group constraints.

2.2 LINE SEGMENT VIEW

KRG examines its business by line segments per the list below:

- Main Trunk
- Golden Triangle
- Lower North Island
- West Coast
- Southern South Island
- Auckland Metro
- Wellington Metro
- Minor Lines

These segments generally represent a consistent and discrete cluster of rail business activity. Physically they sometimes overlap on individual lines, as an example the section Pukekohe to Hamilton is in both the Main Trunk and Golden Triangle segments, while the section Palmerston North to Marton is in the Main Trunk and Lower North Island segments.

The line segment priorities and the priorities for the individual lines within them are debated and resolved within the IAC. The sections below outline in very short-form the "big ideas" for each line segment that have emerged from that process.

2.2.1 MAIN TRUNK

NIMT

Transit Time Reduction for Time Sensitive Traffic

TAP targeted reduction of transit time on the NIMT by 2 hours by end FY12 and achieving 95% reliability for high value time sensitive product.

This transit time reduction for selected trains will primarily be achieved through terminal and above rail mainline operating improvements and rolling-stock strategies; infrastructure works play a lesser role. Where infrastructure works do under-pin the transit time objective is through the range of interventions aimed at delivering improved reliability and therefore greater predictability of all services.

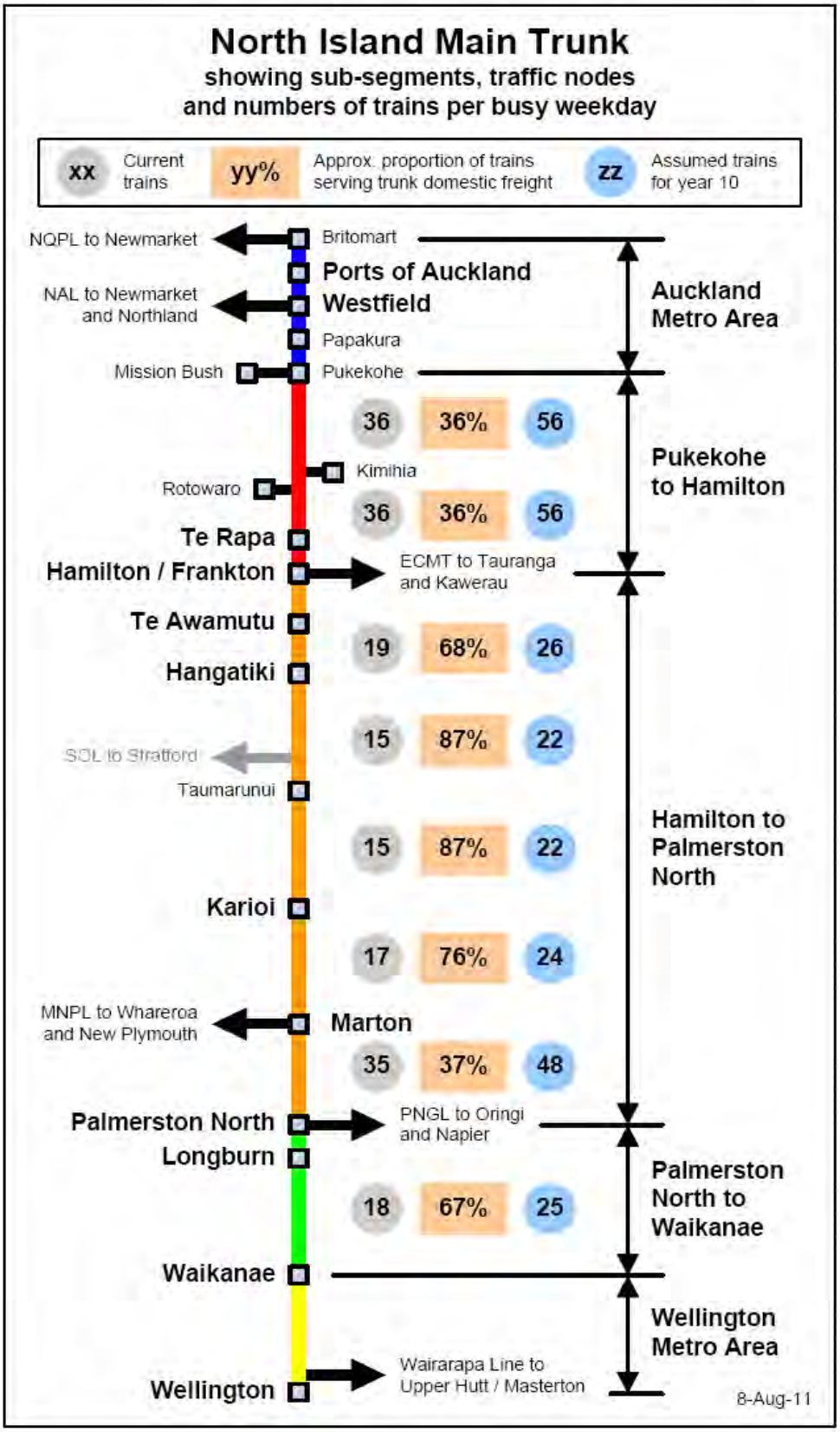
This business plan tackles the transit time goal primarily through reducing the likelihood of failure delays (such as though resulting from congestion, faults, slips and incidents). While there are speed benefits from some measures (such as minor curve easements in conjunction with off-line bridge renewals), these are a minor contribution relative to the Operations and Rolling Stock strategy.

Evaluations done during FY12 determined that major realignments will not achieve an appropriate return in the next 5 years; these initiatives are not funded in this business plan.

Other traffics

The diagram that follows shows the current traffic level and the assumed traffic for year 10. It also provides an estimate of the proportion of trains that are predominantly catering for the time sensitive domestic market. From a network perspective the volume growth

does not pose significant problems in most sub-segments, hence the business plan focus on reliability is appropriate for this traffic as well.



The Upgrades and Renewals section of this Business Plan show most NIMT specific initiatives. A further theme focussed on in FY13-15 will be identifying certain sub-segments where we will focus intensely on developing whole of segment delivery plans across all asset groups. In FY13 these areas will be

- Raurimu Spiral
- Pukekohe to Hamilton (see Golden Triangle section)
- One other section TBD where track stability is an issue

Areas for later focus will include the "Taumarunui Bridges" section

MNL

The business plan is directed towards supporting time critical train services with maximum train length/weight based on Aratere lane meters (640m) and Dashwood Pass & Picton gradients (1700t).

There is however a significant proviso to that goal which reflects the fact that the MNL occupies terrain where the costs of weather-protection will be very high and in many cases outweigh the benefit. KRG accepts that there is a residual service disruption risk arising from a likelihood of weather events causing closures of between 24-72 hours for which limited road bridging service contingency plans should be developed.

The shipping strategy materially impacts the investment plan for this line.

- For RoRo to be viable it appears likely that around 30 minutes may need to come off the transit time which could necessitate further investment, noting that to date MNL transit time has not been a problem so we may not have pushed the limits of whats possible with the existing infrastructure.
- A long-term assumption for the moment is that Clifford Bay is constructed, but it would not be complete for at least 5-7 years. Where genuine choice exists between investing south or north of the turn-off, it should be done to the south. However it is premature to make decisions that could materially reduce performance north of the turn-off.

2.2.2 GOLDEN TRIANGLE

The Golden Triangle had the highest internal cash flow with the November 2010 TAP showing Net Internal Cash-flow of $109m over the 10 year period, ($182m over the last 5 years) assuming growth averaging 4% over the 10 year period.

Auckland-Hamilton-Tauranga

Various government papers continually point to the importance of this area to NZ Inc. Rail already plays a significant role, and is seen as having the potential to play a greater role in the future. The Port of Tauranga's 2009 publication "Take a Look at Our Future" identifies that the port has sufficient adjacent storage capacity to operate an over 1 million TEU business. All this land can be rail served suggesting significant potential for rail growth.

For the last four years KRN had access to external funding (JOG $13m) for rail enhancements in the Waikato area. This has been supplemented in FY13 with an allowance of $2.0m from KRG. The work completed means by the end of FY13 the main line network will be configured in a manner that allows for 900m trains.

There is a rolling stock operational "sweet spot" on this line segment consisting of single DL headed train around 780m (120TEU) long with the next step up being a double DL

headed train 900m long (150 TEU). The main line network has been configured to support those configurations. Once the network can support that, KRF can respond to the increasing demand with variable (rolling stock) increases in capacity rather than a KRN step change fixed cost increase in main line infrastructure capacity.

Clearly increasing train length allows for greater tonnage but from a network perspective as the segment gets busier it gets increasingly important to have consistent train lengths so any train can pass any other train.

By the end of FY13 the route will have the capacity to handle most volume scenarios so provided things are running relatively smoothly the issue KRG faces in this segment is not one of overall route capacity.

The immediate challenge this business plan has addresses are related to route quality and terminal capacity;

1. the fact that the underlying track asset is not up to the long-term task, and because it is single track the disruption implications of delivering the renewals required in a traditional manner are likely to be incompatible with the service offering – this will worsen over time

2. being a single track section any unplanned disruption has a major cascade; the situation worsens the busier the line gets

3. terminals at either end currently do not have the capacity to accommodate longer trains with a single move.

Our priorities now that the main line capacity is almost achieved are to focus on 1-3 above.

The growth in volumes brought about by Maersk/Fonterra decisions presents a welcome opportunity to move early and swiftly on changing the way maintenance and renewals are delivered on the MetroPort route as well as confirming the terminal capacity issues. As per the NIMT we will focus on whole of segment delivery plans. In FY13 these will be

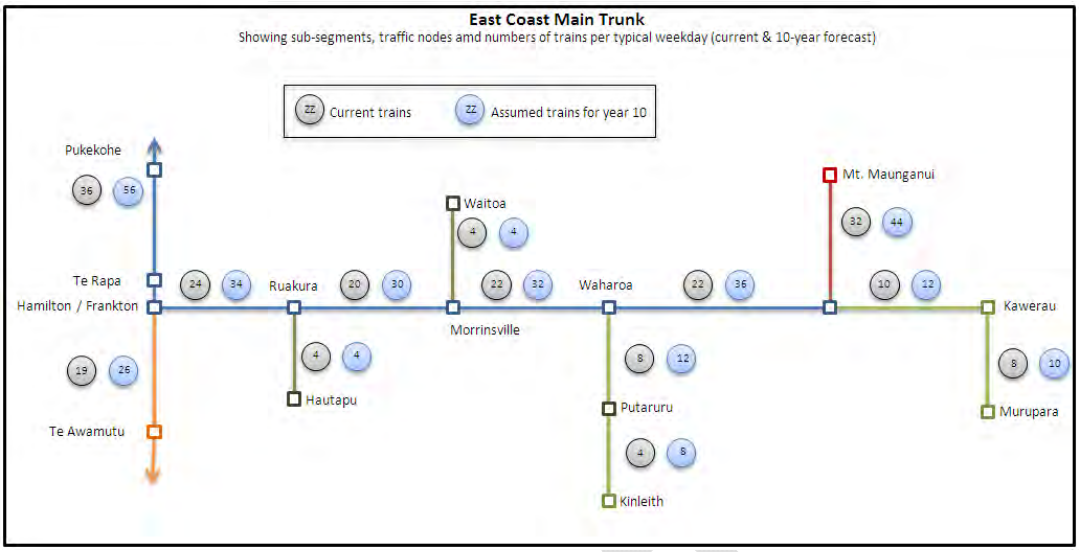
- Pukekohe to Hamilton
- Hamilton to Mt Maunganui

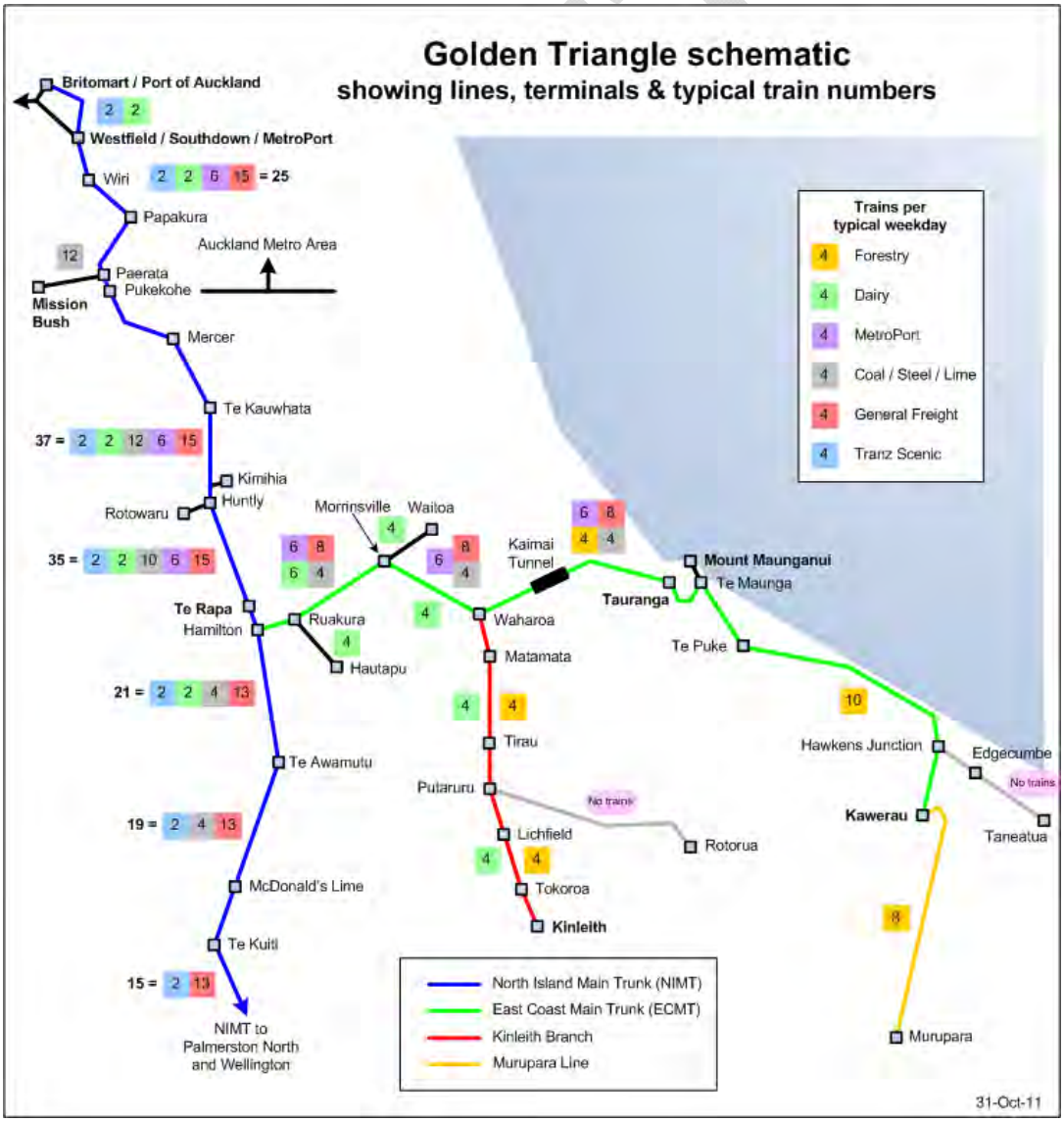
In later years we will address the Mt Maunganui to Murupara section.

Forestry

On the eastern forestry routes Murupara to Mt Maunganui the planned increase in length of 2 loops to 1000m provides sufficient capacity for 5 (times) 2200 tonne trains per day. This is the practical limit on this route, noting the Murupara to Kawerau section is more demanding than the Kawerau Mt Maunganui sector, and allows for 2.3m tonnes per annum on the line.

Our priority is to deliver this capacity concurrently with the signalling renewals programme in the area.


East Coast Main Trunk
Showing sub-segments, traffic nodes amd numbers of trains per typical weekday (current & 10-year forecast)
Current trains
Assumed trains for year 10
Pukekohe
Te Rapa
Hamilton / Frankton
Ruakura
Waitoa
Morrinsville
Waharoa
Mt. Maunganui
Kawerau
Hautapu
Putaruru
Murupara
Te Awamutu
Kinleith


Golden Triangle schematic
showing lines, terminals & typical train numbers
Britomart / Port of Auckland
Westfield / Southdown / MetroPort
Wiri
Papakura
Auckland Metro Area
Paerata
Pukekohe
Mission Bush
Mercer
Te Kauwhata
Kimihia
Huntly
Rotowaru
Morrinsville
Waitoa
Kaimai Tunnel
Mount Maunganui
Te Maunga
Tauranga
Te Rapa
Hamilton
Ruakura
Hautapu
Waharoa
Matamata
Te Puke
Tirau
Hawkens Junction
Edgecumbe
Te Awamutu
Putaruru
Lichfield
Rotorua
Kawerau
Taneatua
McDonald's Lime
Tokoroa
Kinleith
Te Kuiti
NIMT to Palmerston North and Wellington
Murupara
Trains per typical weekday
Forestry
Dairy
MetroPort
Coal / Steel / Lime
General Freight
Tranz Scenic
North Island Main Trunk (NIMT)
East Coast Main Trunk (ECMT)
Kinleith Branch
Murupara Line
31-Oct-11

Yards

A task for the remainder of FY12 is to determine the most effective upgrade and renewal/maintenance initiatives in the key rail yards of Southdown, Te Rapa, Sulphur Point/Tauranga and Mt Maunganui and where possible start that investment which will continue into FY13 and beyond.

The Yard part of the Upgrade Section expands on this more fully.

2.2.3 LOWER NORTH ISLAND

Milk Route - Oringi to Whareroa

This is a Group 2 line on the basis that Freight is carrying a highly time sensitive product. The network strategy is to ensure Freight has the capacity to run a reliable supply of milk tankers in, and ensure Fonterra can move finished product by rail to its choice of northern and eastern export ports.

There are to be fundamental changes to the way we operate the part of line (moving from TWC to CTC in the Marton to Whareroa section) which improves both efficiency and safety. This will be fully operational by the full Milk season starting October 2013.

Additional capacity is to be delivered through a number of measures including: a progressive changeover to CTC; selective loop extensions; 20-wagon milk trains ascending the Westmere bank; and improvements to Whareroa yard. Transit times remain constant apart from modest improvements as CTC is introduced (safety, capacity and reliability are the main benefits arising from CTC).

No curve or grade easing is contemplated in the business plan period

New Plymouth to Whareroa

The intuitive long term picture suggests that Port of Taranaki will continue to diminish in importance and the overall commercial outlook for the line is negative. There was some discussion therefore on whether this section of line should be Group 3 “Manage to sustain status quo“, or Group 4 “Safely Manage Decline”. The conclusion reached at this time is that there is not sufficient evidence to deliberately downgrade the line so it remains at Group 3 but that will be kept under review.

The business plan accepts there may be some minor performance decline but at this stage the Plan proposes no step changes to condition or capacity of this section of the line over the 10 year period.

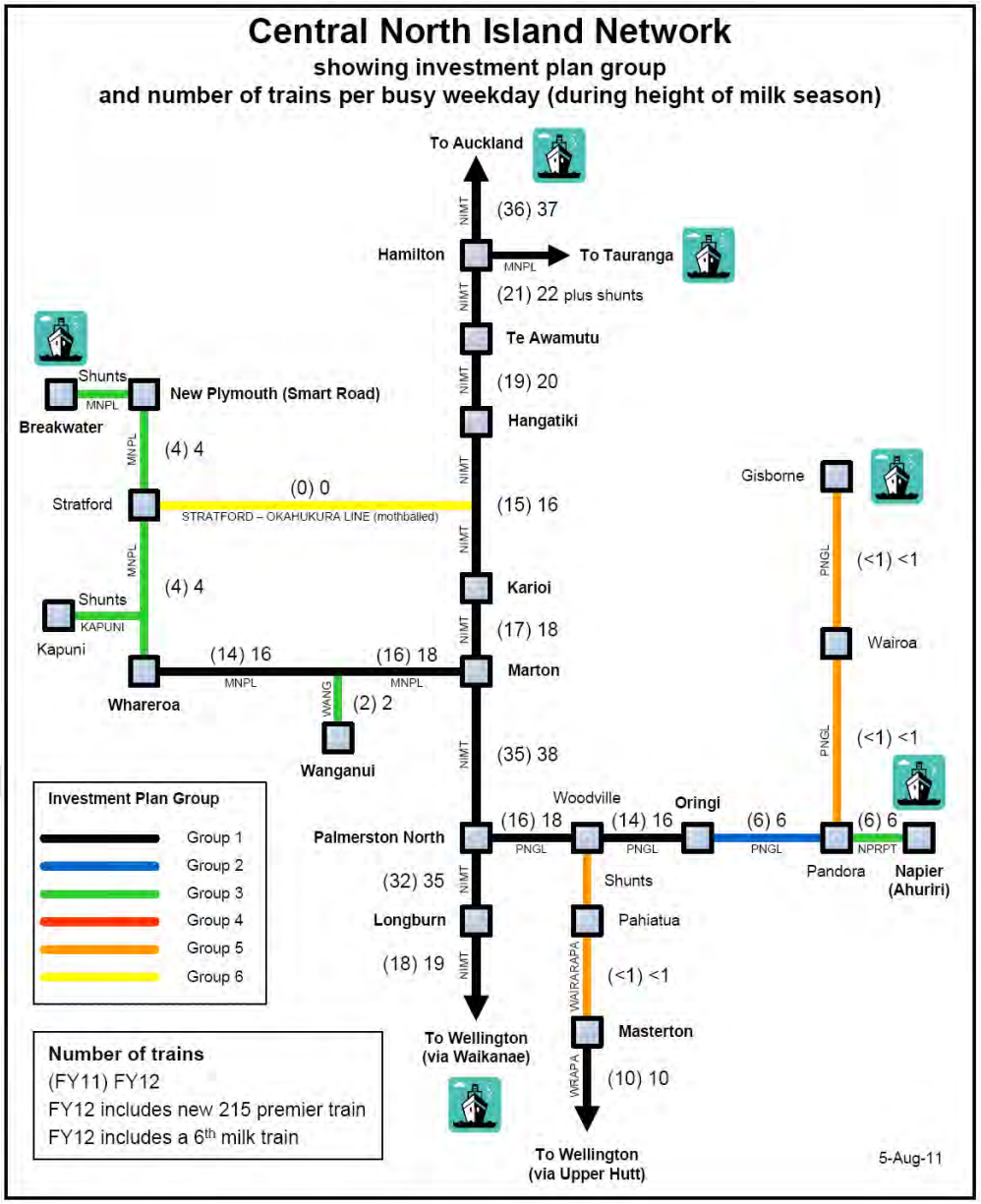
Where a genuine choice exists, spend on the MNPL should be prioritised east rather than west of Whareroa.

Oringi to Napier

North of Oringi there is a mixture of export and domestic traffic, with relatively minor bulk flows of fertiliser from Awatoto. Fonterra is making significant use of the Port of Napier for its lower North Island exports and recent announcements suggest this will increase further. Oringi to Napier also serves other primary exporters; in general these are relatively short hauls. Domestic traffic (and fertiliser traffic) generated within the Hawkes Bay is generally medium to long haul, which makes a good contribution to other parts of the network.

There are no capacity issues on this line. Transit times are acceptable and TWC (supplemented by CTC between Hastings and Napier) is an appropriate signalling system. Consequently, there are no plans for upgrade works on this line.

Oringi to Napier is deemed Group 2. There are no revenue developments on the planning horizon to suggest that this classification may change upwards, the business may review whether it should be a Group 3 line noting the presence of 6 steel viaducts with low capacity ratings which will require attention in the future or create a limit to growth.



2.2.4 WEST COAST

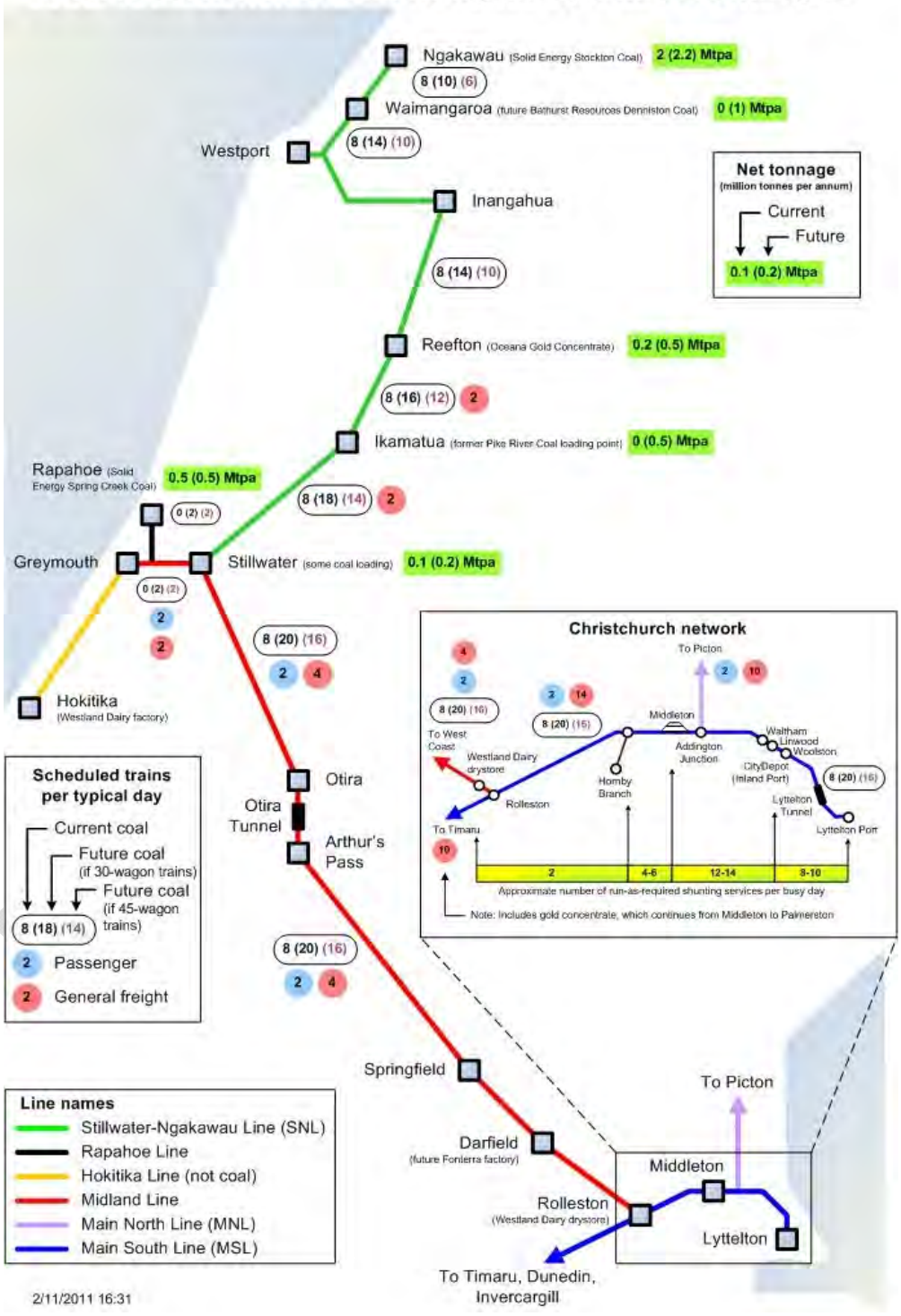
Coal and Alpine Routes – excluding the Christchurch – Rolleston Segment

For the foreseeable future (30 plus years) the line will remain diesel hauled, single track with crossing loops and a long single track tunnel with controlled ventilation. This poses a practical constraint on the number of train movements over any 24 hour period. No alternative model is contemplated.

The business plan assumes there is an acceptable resolution to the Solid Energy carriage agreement, although KRG/SE will spend the majority of FY12 getting to that acceptable commercial position. The assumed outcome is that the parties (SE, KRG, POL) will work to grow the market in an orderly manner with improvements in capacity to volumes that will not exceed 4.5m - 5.0m tonnes per annum.

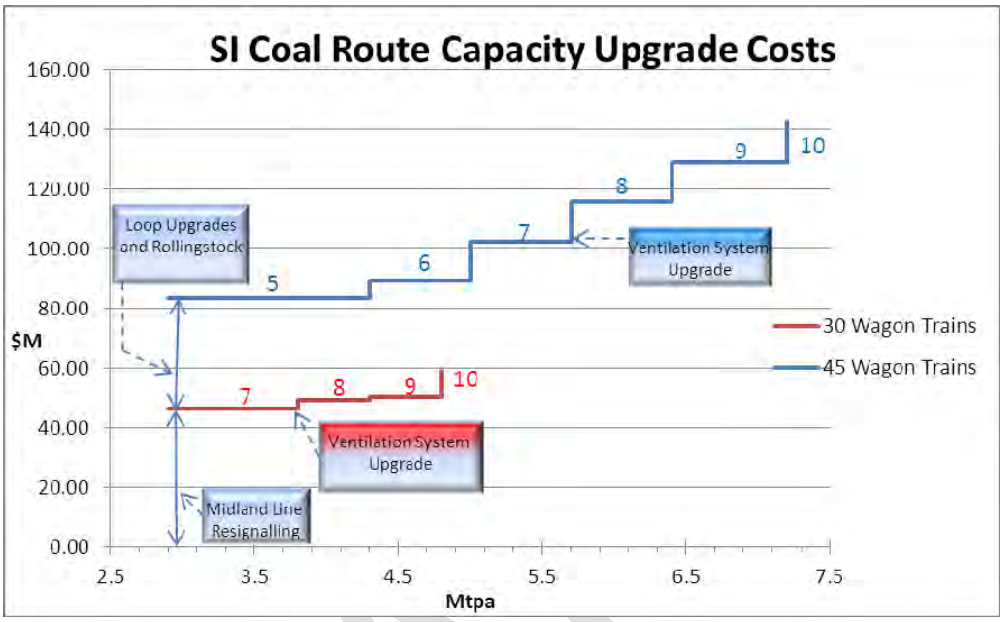
The overarching network goal is to remove the constraints that limit KRF's ability to offer a predictable and cost effective cycle of full wagons heading east, and empties heading west with wagon/loco turnaround optimised and downtime kept to a minimum without penalising other general traffics. The traffic flow model is shown on the following page.

Coal route schematic showing lines, trains & tonnages



The network that delivers this will be one engineered to accommodate more frequent 30 wagon (not 45 wagons) trains hauled by diesel, with upgraded signalling and tunnel ventilation delivered under a Project mandate.

The financial rationale for the 30 v 45 wagon decision is shown in the graph below.



Lyttelton to Rolleston

There are proposals to significantly increase the shunt traffic between the Port of Lyttelton and the inland port at Woolston. When this occurs it will be necessary to remodel both Woolston Yard and the associated signalling to ensure that coal trains are not delayed by shunting activities and vice versa

Currently a review of Mechanical depot facilities in Christchurch is underway. Property is also commissioning work on yard options. This will likely see the rationalisation of sites in Christchurch which will in turn impact on the rail infrastructure.

The majority of the existing signalling infrastructure in the Addington to Heathcote section is obsolete and allowance is made in other Line Segment budgets for its replacement with technology similar to that currently being deployed in Auckland. The Addington Signal Box would transfer to NTCC once the area is re-signalled.

As a result of the recent earthquakes the 3,300V signalling power supply serving this section has become fragile with a resulting loss of reliability and will be replaced under the Coal Route project.

Hokitika

Following completion of renewals in FY12 this will be maintained as a Group 3 line accommodating 18 tonne axle loads appropriate for the wagons from Westland Dairy.

2.2.5 SOUTHERN SOUTH ISLAND

Growth in domestic and import/export traffic will underpin the future of the line. The most significant is milk-related product from Edendale, but there are a variety of other well-established primary-produce flows.

The only significant bulk traffics are containerised coal from Nightcaps to Temuka (for road bridging to Fonterra's Clandeboye factory), which is a very important traffic in revenue terms for the Ohai branch, and gold-slurry from Reefton to Palmerston

The plan does not include any provision for a rail link to Clandeboye.

For the foreseeable future (30 years) the line will remain single track with crossing loops.

The line has significant latent capacity, with the only pinch points potentially arising in the next 10 years likely between Dunedin and Edendale and within Christchurch itself. The operational constraint on train size is the undulating section between Oamaru and Sawyers Bay. No alternative model is contemplated.

If Holcim decides to go ahead with its proposed cement plant at Weston (south of Oamaru), then a further bulk traffic (cement and clinker to Timaru Port) will arise albeit over a relatively short section of line (94km). The decision to begin the upgrading work to cater for the cement traffic hinges on Holcim's decision and is fully funded in the proposal agreed with Holcim. The business plan has no allowance for enabling works.

Christchurch area – see also 2.2.4 above

Concurrently with the Property and Mechanical business initiatives and post-earthquake reviews, there is need in FY13 to examine how the various customers are served in the Christchurch area. KRG will have to make explicit trade-offs between the revenue benefit of giving customers direct siding connections and the increasing complexity and cost of the signalling system and loss of network capacity that these multiple connections impose on the Network.

The business plan has made a limited allowance for design and physical work in this area – see Upgrade section.

Dunedin area

The business plan makes a modest allowance for improvements to the signalling and train control in the section between Port Chalmers and Mosgiel – see Upgrade section below.

Wairio

During FY12 the Wairio Line will undergo a step change in quality and this means KRN reduces reactive maintenance time and costs allowing staff to be more focussed on the MSL.

2.2.6 WELLINGTON METRO AREA

Commercial and operational contracts between KRG as Access Provider/Network Controller and GWRC as the funder of metro rail services are nearing execution and will be in effect for FY13.

For the first time the Network part of the business has the opportunity to earn/lose margin on the basis of its support of the reliability and punctuality of the Metro Passenger Services. The relationship between KRG and GWRC will be more formal in recognition of the metro policy which has Metro Passenger and Mechanical Services being fully contestable.

The funding arrangements will remain complex but transparent. The tables below give a thumb-nail sketch.

Funder = GWRC	Summary Basis
Maintenance and Operation Fee	Re-imbursement of actual costs – capped to forecast level Underspend returned to GWRC
Incident Fee	Actual Costs - uncapped
Renewals Fee - Routine	Re-imbursement of actual costs – against an agreed renewals budget
Performance Fee	Stepped between ($160,000) and [TBA] % on all costs depending on actual Reliability and Punctuality

Funder = Crown	Summary Basis
Renewals Fee – Catch Up	Crown appropriation delivered through MOT

Funder = KRF	Summary Basis
Maintenance and Operation Fee Renewals Fee - Routine	Part of the I & E costs to be covered by Freight earnings
Incident Fee	Actual Costs

BAU service delivery will be conducted in an environment of ongoing, but relative to the past 4 years, modest levels of accelerated renewals.

2.2.7 AUCKLAND METRO AREA

Auckland metro arrangements which came into force from 1 May 2012 are intentionally as close to a carbon-copy of Wellington. The major differences are:

- AT will be taking a more hands on approach to EMU procurement and depot construction
- BAU is further away relative to Wellington with DART/AEP/EMU projects all yet to run their course
- The performance fee effective from January 2012ranges from -$160,000 to 11% on all costs

The principal Auckland customer milestone date this business plan is built on is:

- AT having a full set of EMUs and operating a new timetable by January 2015
- KRG operating a new premier train timetable, and a minimum of 16 Auckland Tauranga services per day.

The metro service milestone events are:

- Re-signalling (with two exceptions) complete by June 2012
- MBL second connection completed by end FY13
- Bridge clearances complete by June 2012
- Mainline track work complete for Depot by October 2012
- Britomart and Papakura track rearrangements and related signal rearrangements complete by February 2013

- Track Freeze – upgrading of all track to required standard for electrification complete by February 2013
- Building track and OLE complete for Depot by June 2013
- First EMU delivered by June 2013
- Traction OLE and substations complete August 2013
- Last (of 57) EMU delivered January 2015

2.2.8 MINOR LINES

The assumptions we have made for Group 5 and 6 lines are:

NAL – Group 4

Stays open but the Level of Service and hence maintenance and renewals will be held to the minimum needed to hold the line operative for FY13-15. The backlog of renewal requirements and the cost of upgrading the line from 14 tonne axle loads is not provided for in this business plan.

Dargaville – Group 5

KRG closes the final 11kms, creates a railhead at Tangowahine and does works on the line to get condition to a level where it is possible to run two daily return low speed shunts from the railhead to Portland.

Napier to Gisborne – Group 5

KRG continues operations through to Wairoa (295km) but over the next 24 months mothballs the line beyond Wairoa to Gisborne (391km). As part of the exercise KRG hands over a portion of the line between the 357km and 391km for use by local interests

Masterton – Woodville – Group 5

Stays open and is retained as an alternative (back-up) low speed north-south link plus serving dairy and possibly forestry traffic. This will require some one off track and structures expenditure. Debate is needed on whether this is a legitimate draw down on the BSIP money as there are some real scour and erosion risks on this line.

SOL – Group 6

Stays mothballed.

Line Group Summary

The direction charted above translates into priorities by Line Groups shown below.

Group 1 Objective: Increase performance - reduce temporary and permanent speed restrictions, reduce risk of disruptions

- Metro Lines only

Group 2 Objective: Hold constant or minor improvements for next few years with view towards performance improvements in year 3-4 onwards – or sooner where specifically targeted

- NIMT
- ECMT Frankton to Mt Maunganui

Group 2A Objective: Accept decline over next 2-3 years then revert to Group 2 status

- MNL
- Milk Route
- MSL (Rolleston to Invercargill)
- Oringi to Napier
- Coal Routes
- Golden Triangle Eastern Forestry

Group 3 - 318km Objective: Accept decline over next 2-3 years then hold constant

- Golden Triangle Feeders
- Whareroa to New Plymouth
- Hokitika

Group 4 - 179km Objective: Accept decline until decision on future is taken

- Northland
- Gracefield

Group 5 - 425km Objective: Safely manage decline

- Northland minor lines
- Napier Gisborne – pending final decision
- North Wairarapa allowing to accommodate future North South Junction upgrade works

Group 6 - 143km Objective: Mothball

- SOL
- Rotorua (49kms) and Taneatua (26kms) stay mothballed

3 KEY TRANSIT TIME AND RELIABILITY PERFORMANCE TARGETS

The performance we are targeting in FY13-15 is shown in the tables attached.

Track Performance

- TSR
- H40s
- Mainline Derailments
- Yard Derailments

In summary the targets show declining performance reflecting the reduced spend profile. The exception is yard derailments which will be targeted.

Signals and Communications Performance

Generally the KPIS show an improvement in performance over the period driven in part by the end of major disruptive works such as DART and AEP, and the overall investment in communications reliability.

This projection needs to be held under review as an absolute reduction in “failures” will not necessarily translate to an improvement in performance where service reliability is the KPI and the number of services is increasing.

Signals and communications resilience is under the microscope to determine the level of real risk to reliability.

3.1 TRACK PERFORMANCE DELIVERED UNDER PROPOSED BUDGET

TSRS		NIMT (excl Metro)	MNL	Westfield to Mt Maunganui (incl NIMT)	Murupara to Mt Maunganui	Waharoa to Kinleith	Oringi to Whareroa (incl NIMT)	Oringi to Napier Port	Whareroa to New Plymouth	Coal Route (Ngakawau & Rapahoe to Lyttelton)	MSL
Line Group Priority		2	2A	2	2A	3	2A	2A	3	2A	2A
Route Length (kms) Mins/100km at start of year Mins/100km at end FY12 Mins/100km at end FY15 Notes		572 5.6 5.2 4.4 **	348 7.2 7.2 7.5 **	234 9.0 7.3 6.0	143	66	219 5.5 4.1 4.6 *	140	83	421 8.6 8.6 8.1	602 6.0 5.7 5.7 *
TSR FY12 – start of year	Target	32	25	21	None set	None set	12	None set	None set	36	36
TSR FY12 – by year end	Target Lowest during FY12 Highest during FY12 Actual 21 January 2012 Current Mins/100km	30.00 15.00 34.00 0.00	25.00 10.00 38.00 0.00	17.00 10.00 40.00 0.00	None set 41.00 28.72	None set 16.00 24.17	9.00 9.00 13.00 0.00	None set 18.00 12.83	None set 0.00	36.00 25.00 40.00 0.00	34.00 26.00 48.00 0.00
TSR FY13 – by year end	Optimum Position Credible constrained range	25.00 25-30	25.00 35-30	14.00 16.00	None set	None set	9-11 15.00	None set	None set	34.00 35-40	34.00 35-40
TSR FY14 – by year end	Optimum Position Credible constrained range	25.00 30-35	25.00 30-35	14.00 20.00	None set	None set	9-11 17.00	None set	None set	34.00 40-45	34.00 35-40
TSR FY15 – by year end	Optimum Position Credible constrained range	25.00 35-40	25.00 35-40	14.00 25.00	None set	None set	9-11 20.00	None set	None set	34.00 45-50	34.00 40-45

* In off season periods – some relaxation is acceptable as that is when network undertakes remedial works

* Seasonality rules apply to Milk Route and MSL south of Dunedin – ie greater relaxation in Winter traded off for summer compliance

** Particular focus around October to December

Points to Note: Step change required to bring MetroPort overall into line with NIMT; General target on lines with express more time critical freight is 5.0mins per 100kms; and Lower rate acceptable on MNL and Coal Route with current timetables

Wellington Metro

		NIMT	Hutt Valley	Johnsonville	Wairarapa	Capital
TSR FY12	Target	2.5	2.0	2.0	6.0	6.0
TSR FY13	Target	2.5	2.0	2.0	6.0	6.0
TSR FY14	Target	2.5	2.0	2.0	6.0	6.0

Auckland Metro

NIMT (via Waterfront)	NIMT (via Newmarket)	Western Line
2.0	2.0	2.0
2.0	2.0	2.0
2.0	2.0	2.0

H40s

		NIMT (excl Metro)	MNL	Westfield to Mt Maunganui (incl NIMT)	Murupara to Mt Maunganui	Waharoa to Kinleith	Oringi to Whareroa (incl NIMT)	Oringi to Napier Port	Whareroa to New Plymouth	Coal Route (Ngakawau & Rapahoe to Lyttelton)	MSL	Auckland Metro	Wellington Metro (excl Johnsonville)
Line Group Priority		2	2A	2	2A	3	2A	2A	3	2A	2A	1	1
Length (kms)		572	348	234	143	66	219	140	83	421	602	188	230
Kms under H40 FY12 – start	Actual	59	27	12	119	43				64	63	4	4
Kms under H40 FY12 – April 2012	Actual	49	27	18	111	40				72	57	7	6
Kms under H40 FY12 – worst	Actual												
Kms under H40 FY13 – start	Target	44	27	18	111	40	0	0	0	72	57	7	6
Kms under H40 FY13 – not to exceed	Target	59	27	12	119	43	0	0	0	64	63	4	4
Kms under H40 FY14 – start	Target	44	27	18	111	40	0	0	0	72	57	7	6
Kms under H40 FY14 – not to exceed	Target	59	27	12	119	43	0	0	0	64	63	4	4
Kms under H40 FY15 – start	Target	44	27	18	111	40	0	0	0	72	57	7	6
Kms under H40 FY15 – not to exceed	Target	59	27	12	119	43	0	0	0	64	63	4	4

Heat Buckles

	FY11	FY12	FY13	FY14	FY15
Within H40 Areas	Actual	Actual	TBD	TBD	TBD
Outside H40 Areas	Actual	Actual	<5% of total	<5% of total	<5% of total

Rail Failures

		NIMT (excl Metro)	MNL	Westfield to Mt Maunganui (incl NIMT)	Mururpara to Mt Maunganui	Waharoa to Kinleith	Oringi to Whareroa (incl NIMT)	Oringi to Napier Port	Whareroa to New Plymouth	Coal Route (Ngakawau & Rapahoe to Lyttelton)	MSL	Auckland Metro	Wellington Metro	Total
Track Length (kms)		646	348	234	143	66	219	140	83	421	619	188	239	
Faults per 100km last measure		7.7	3.4	4.4	2.8		1.4	2.9	12.0	6.6	5.0	2.7	1.7	
Faults per 100km FY12		4.6	0.9	4.4	5.6		1.8	2.1	10.8	4.3	2.3	2.7	1.7	
Faults per 100km FY14		0.0												
FY11 -	Actual	50	12	15	4		3	4	10	29	31	5	4	180
FY12 – to date	Actual Forecast	30 *60*	3 *6*	15 *30*	8 *16*		4 *8*	3 *6*	9 *18*	19 *38*	14 *28*	5 *10*	4 *8*	118 *177*
FY13 – total	Target Not to exceed	15 30	9 12	15 25	6 8		4 6	6 8	15 20	30 40	30 35	2 6	2 6	120 150
FY14 - total	Target Not to exceed													126 158
FY15 - total	Target Not to exceed													132 166

Main Line Derailments - Infrastructure

FY11 Actuals	Source MO Derailments	12
FY12 – as at mid Jan 2012 FY12 – by year end	Actual Forecast Target	14 28 12
FY13 – by year end	Target Not to exceed	15 20
FY14 – by year end	Target Not to exceed	20 25
FY15 – by year end	Target Not to exceed	20 30

Yard Derailments – Infrastructure Cause

FY11 Actuals	Source TO DRM	120
FY12 – as at mid Jan 2012 FY12 – by year end	Actual Forecast Target	64 128 90
FY13 – by year end	Target Not to exceed	75 90
FY14 – by year end	Target Not to exceed	60 75
FY15 – by year end	Target Not to exceed	60 75

3.2 SIGNALS & COMMUNICATIONS PERFORMANCE DELIVERED UNDER PROPOSED BUDGET

Signal Failures

		NIMT (excl Metro)	MNL	Westfield to Mt Maunganui (incl NIMT)	Mt Maunganui to Murupara & Kinleith	Oringi to Whareroa (incl NIMT)	Oringi to Napier Port	Whareroa to New Plymouth	Coal Route (Ngakawau & Rapahoe to Lyttelton)	MSL	Auckland Metro	Wellington Metro)
Faults FY12 – 6 months annualised	Target	1595	668	1356	382	224	130	110	754	538	1100	702
Faults FY13 – by year end	Target	1435	668	1220	382	224	137	116	754	565	1100	597
Faults FY14 – by year end	Target	1364	668	1220	382	224	143	121	754	593	550	567
Faults FY15 – by year end	Target	1295	668	1101	382	224	150	127	754	623	468	482
Target FY13		10%	0%	10%	0%	0%	-5%	-5%	0%	-5%	0%	15%
Target FY14		5%	0%	5%	0%	0%	-5%	-5%	0%	-5%	50%	5%
Target FY15		5%	0%	5%	0%	0%	-5%	-5%	0%	-5%	15%	15%

Star Faults

		NIMT (excl Metro)	MNL	Westfield to Mt Maunganui (incl NIMT)	Mt Maunganui to Mururpara	Waharoa to Kinleith	Oringi to Whareroa (incl NIMT)	Oringi to Napier Port	Whareroa to New Plymouth	Coal Route (Ngakawau & Rapahoe to Lyttelton)	MSL	Auckland Metro	Wellington Metro	Total
Track Length (kms)		646	348	234	143	66	219	140	83	421	619	188	239	
ML Faults per 100km FY12		14.2	4.6	33.9	28	13.6	15.1	18.5	3.6	45.4	19.7	96.4	43.6	
ML Faults per 100km FY13		14.2	4.6	33.9	28	13.6	15.1	18.5	3.6	45.4	19.7	96.4	43.6	
ML Faults per 100km FY15														
FY12 – last measure	MainL count	71	16	69	40	9	32	26	3	177	119	94	86	
FY12 – last measure	MainC count													
FY12 – last measure	MainR count	21	0	47	0	0	1	0	0	22	3	87	18	
	Total Main Line	**92**	**16**	**116**	**40**	**9**	**33**	**26**	**3**	**199**	**122**	**181**	**104**	**941**
FY12 – last measure	Link count	0	0	0	0	0	4	7	0	6	0	26	1	44
FY12 – last measure	Loops count	123	92	72	44	12	47	15	31	197	163	19	58	873
FY12 – last measure	**Total count**	**215**	**108**	**188**	**84**	**21**	**84**	**48**	**34**	**402**	**285**	**226**	**163**	**1858**
FY13 – target	MainLine Target	92	16	116	40	9	33	26	3	199	122	181	104	941
	Loops & Link Target	123	92	72	44	12	51	22	31	203	163	45	59	917
	Total count	**215**	**108**	**188**	**84**	**21**	**84**	**48**	**34**	**402**	**285**	**226**	**163**	**1858**
FY14 – target	MainLine Target	92	17	110	42	9	35	27	3	209	128	172	99	943
	Loops & Link Target	123	97	68	46	13	54	23	33	213	171	43	56	939
	Total count	**215**	**113**	**179**	**88**	**22**	**89**	**50**	**36**	**422**	**299**	**215**	**155**	**1882**
FY15 - target	MainLine Target	46	18	105	44	10	36	29	3	219	135	163	94	902
	Loops & Link Target	117	101	65	49	13	56	24	34	224	180	41	53	957
	Total count	**163**	**119**	**170**	**93**	**23**	**92**	**53**	**37**	**443**	**314**	**204**	**147**	**1859**

Class 1 Faults

		NIMT (excl Metro)	MNL	Westfield to Mt Maunganui (incl NIMT)	Mt Maunganui to Mururpara	Waharoa to Kinleith	Oringi to Whareroa (incl NIMT)	Oringi to Napier Port	Whareroa to New Plymouth	Coal Route (Ngakawau & Rapahoe to Lyttelton)	MSL	Auckland Metro	Wellington Metro	Total
Track Length (kms)		646	348	234	143	66	219	140	83	421	619	188	239	
ML Faults per 100km FY12		89.0	45.1	129.9	104.4	39.3	105.6	129.0	79.5	180.3	108.9	227.4	75.0	
ML Faults per 100km FY13		84.5	45.1	123.4	99.2	41.2	105.6	135.5	87.5	180.3	108.9	216.1	71.2	
ML Faults per 100km FY15														
FY12 – last measure	MainL count	475	157	286	149	26	226	181	66	756	659	232	138	
FY12 – last measure	MainC count												1	
FY12 – last measure	MainR count	100	0	158	0	0	5	0	0	34	15	195	40	
	Total Main Line	**575**	**157**	**444**	**149**	**26**	**231**	**181**	**66**	**790**	**674**	**427**	**179**	**3899**
FY12 – last measure	Link count	0	0	0	0	5	6	5	0	4	0	19	11	**50**
FY12 – last measure	Loops count	301	66	97	40	27	89	16	25	170	185	10	46	**1072**
FY12 – last measure	**Total count**	**876**	**223**	**541**	**189**	**58**	**326**	**202**	**91**	**964**	**859**	**456**	**236**	**5021**
FY13 – target	MainLine Target	546	157	422	142	27	231	190	73	790	674	406	170	**3827**
	Loops & Link Target	286	66	92	38	34	95	22	28	174	185	28	54	**1101**
	Total count	**832**	**223**	**514**	**180**	**61**	**326**	**212**	**100**	**964**	**859**	**433**	**224**	**4928**
FY14 – target	MainLine Target	546	165	401	149	29	243	200	76	830	708	385	162	**3892**
	Loops & Link Target	286	69	88	40	35	100	23	29	183	194	26	51	**1124**
	Total count	**832**	**234**	**488**	**189**	**64**	**342**	**223**	**105**	**1012**	**902**	**412**	**213**	**5016**
FY15 - target	MainLine Target	273	173	381	156	30	255	210	80	871	743	366	153	**3691**
	Loops & Link Target	272	73	83	42	37	105	24	30	192	204	25	49	**1135**
	Total count	**545**	**246**	**464**	**198**	**67**	**359**	**234**	**110**	**1063**	**947**	**391**	**202**	**4826**

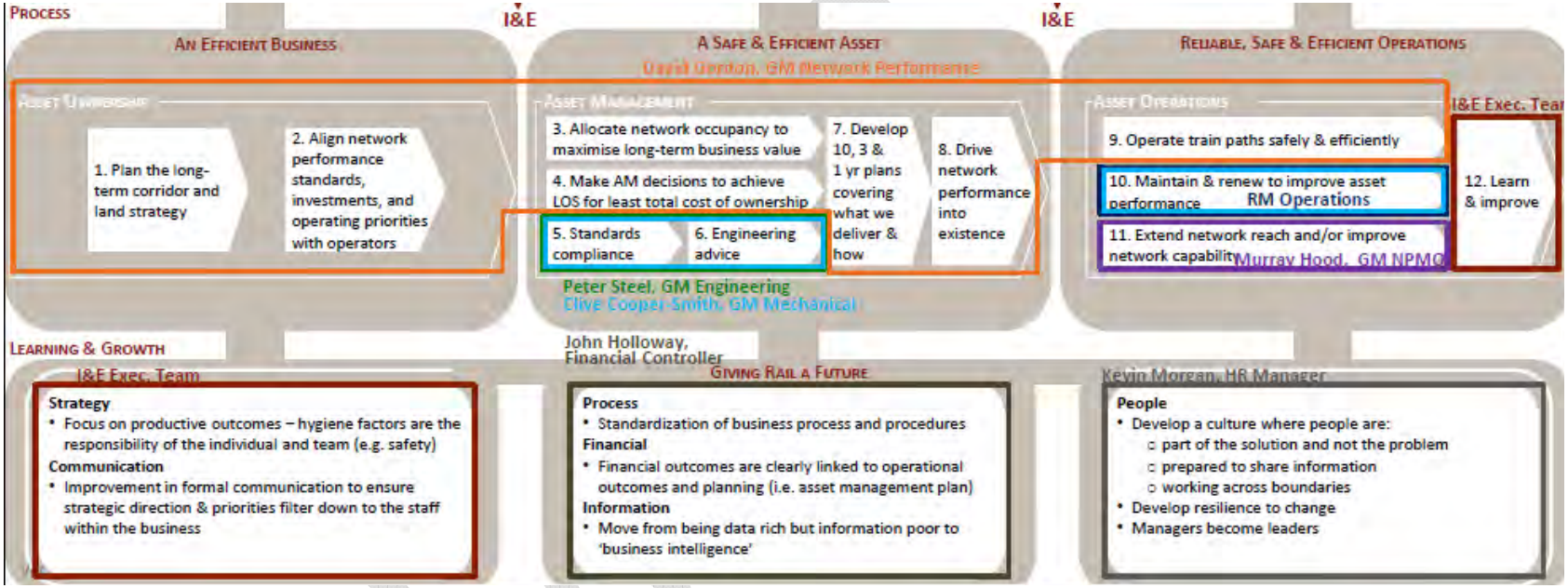
3.3 BRIDGE CONDITION MEASURES

Overall Goal – no more than 50,000 hours of P1's outstanding at any point

		NIMT (excl Metro)	MNL	Westfield to Mt Maunganui (incl NIMT)	Murupara to Mt Maunganui	Waharoa to Kinleith	Oringi to Whareroa (incl NIMT)	Oringi to Napier Port	Whareroa to New Plymouth	Coal Route (Ngakawau & Rapahoe to Lyttelton)	MSL	Auckland Metro	Wellington Metro	North of Waitakere	Others NEC	Total
Investment Group		2	2A	2	2A	3	2A	2A	3	2A	2A	1	1	4	Misc	
FY12 – P1's last measure	Target – (at each quarter)	1764	4535	6484	2672	-	1651	692	400	11448	9953	3774	3325	5926	1923	54547
FY13 – Avg P1's outstanding	Target – (at each quarter)	1499	4535	5511	2672	-	1651	692	420	12020	10451	3585	3325	6222	2019	54604
FY14 – Avg P1's outstanding	Target – (at each quarter)	1499	4535	5511	2672	-	1651	692	441	12020	10451	3406	3159	6533	2120	54691
FY15 – Avg P1's outstanding	Target – (at each quarter)	1499	4535	5511	2672	-	1651	692	441	12020	10451	3236	3001	6860	2226	54796

4 LINKAGE TO NETWORK'S BUSINESS MODEL – KRA 1 TO 12

4.1 OVERVIEW



The map above outlines 12 Key Result Areas (KRAs) which support KRG's overall business goal to make reliable infrastructure available for transport of which rail is a part . To a substantial extent they define BAU, but for any given period there will be specific initiatives that have greater focus. The sections below identify those areas which will see greater focus in FY13

4.2 INDIVIDUAL KRAS

4.2.1 KRA1 PLAN THE LONG-TERM CORRIDOR & LAND STRATEGY

Predominantly BAU but with special focus on:

- The Auckland metropolitan area to ensure the new Auckland Council planning documents underpin KRG's rail business objectives including decisions on location of Inland Ports/Freight hubs.
- The Upper North Island (Northland, Auckland, Waikato, BOP) – working with decision makers to embed the significance of rail and related distribution areas into the transport planning and in particular
  - Position provision for double tracking of the ECMT as an NZ Inc project worthy of external funding
  - Inform thinking on location of Inland Ports/Freight hubs.

4.2.2 KRA 2 NETWORK PERFORMANCE STANDARDS, INVESTMENTS AND OPERATING PRIORITIES ALIGNED WITH OPERATORS

Predominantly building on business processes initiated during 2012 but with special focus on:

- Stronger alignment between train planning, loco and rolling stock strategy, and route performance specifications
- More formal alignment on work programmes in the Auckland and Wellington Metro areas with the respective authorities consistent with the revised Access Agreement and Common Access Terms processes
- Better reporting of Yard works and coordination between Freight, Property and Network.
- Reaching Access Agreements and SLAs between I & E and customers
- Establishing long-term average costs of network infrastructure

4.2.3 KRA 3: ALLOCATE NETWORK OCCUPANCY TO MAXIMISE LONG TERM BUSINESS VALUE

This will be a key focus for FY13 with particular attention being paid to:

- Integration of the Sirius driven planning changes with BOL/ possession planning
- Whole of line focus on particular network segments being
  - MetroPort route – see sections 2.2.1 and 2.2.2
  - Selected NIMT segments – see section 2.2.1 above
  - More formal alignment possession in the Auckland and Wellington Metro consistent with the revised Access Agreement and Common Access Terms processes for timetables and possessions.

One of the major initiatives (refer to section 4.1) that resides under this KRA is:

- Business re-engineering – Productive timeslots available for working on track.

4.2.4 KRA 4: MAKE ASSET MANAGEMENT DECISIONS TO ACHIEVE LOS FOR LEAST TOTAL COST OF OWNERSHIP

This will be substantially business as usual progressing through asset groups, but there will be particular attention paid to:

- Data integrity issues associated with Sirius driven recording and reporting changes
- Closer alignment between asset quality reporting and production systems – Sirius.

4.2.5 KRA 5: ENSURE COMPLIANCE THROUGH PROVIDING SAFETY CASES, CODES & STANDARDS, AND AUDIT SERVICES

There will be a series of initiative during FY13 the principal ones being

- Codes and code supplements progressively on line.
- Increase the competency of internal investigators
- Review of RISSB standards and develop plan for application of appropriate ones into KRG
- Complete implementation of internal audit regime.
- Mechanical initiatives to be confirmed by August 2012

4.2.6 KRA 6 PROVIDE KIWIRAIL WITH ENGINEERING ADVICE

- Network Engineering initiatives – see section 5.12
- Mechanical initiatives to be confirmed by August 2012

4.2.7 KRA 7: DEVELOP 10, 3 AND 1 YEAR PLANS COVERING WHAT WE DELIVER AND HOW

This will be predominantly BAU consolidating the individual segment plans and broadening their circulation.

4.2.8 KRA 8: DRIVE NETWORK PERFORMANCE INTO EXISTENCE

This KRA encompasses most of the major change initiatives being:

- Cost Reduction and Business re-engineering project generally
- Business re-engineering: Golden Triangle
- Business re-engineering: Productive timeslots available for working on track
- Business re-engineering: Others
- Business re-engineering: Sirius.

4.2.9 KRA9: OPERATE TRAIN PATHS SAFELY AND EFFICIENTLY

Predominantly BAU with incremental efficiencies with particular focus on:

- Improving the safety of worksites and providing efficient on and off time instructions – Impact report and responses to other investigations - strong link to KRA13 and KRA14.
- Completing Auckland signals integration, and commencing integration of Auckland traction control.

4.2.10 KRA10: MAINTAIN AND RENEW TO IMPROVE ASSET PERFORMANCE

See commentaries below in sections 4 to 9 below, noting that this also includes the major business initiative.

- New Technology: Rail Grinding

4.2.11 KRA12: EXTEND NETWORK REACH AND/OR IMPROVE CAPABILITY

See commentaries under Upgrades section 10 below.

4.2.12 KRA10: LEARN & IMPROVE

Predominantly BAU but:

- Continue to allocate modest funding to Project Innovate so that there is funding for innovations and good ideas can be evaluated and where justified can be put in place.
- Re start the Betterways scheme as a means of encouraging and capturing ideas for change and improvement from all staff. Connect Betterways to Project Innovate where ideas require evaluation and implementation as a project.

4.3 SUPPORT AND OVER-ARCHING IMPERATIVES

4.3.1 SAFETY & RISK MANAGEMENT

- Corporate safety strategy confirmed and implemented (direction and funding provision by Corporate)
- Corporate Risk policy implemented.
- ASR in place for the rest of the country.

4.3.2 FINANCIAL MANAGEMENT

This will be a key focus in FY13 and beyond as the I & E business is under considerable pressure to realign its cost base, particularly the internal labour costs. Finance will work with the business to better understand the cost drivers as we go through the process of reducing labour and operating costs in line with the significant reduction in capital expenditure from FY13 to FY15. In particular, Finance will:

- Support the overall cost reduction programme providing relevant information to allow sensible decisions to be made;
- Provide suitable financial, cost, project and other management information to the business as part of BAU performance; and
- Liaise with the Corporate office to ensure I & E delivers its budgeted earnings under the Group Business Plan

4.3.3 PEOPLE MANAGEMENT AND ORGANISATION DEVELOPMENT

The commentary at section 5 outlines most of the initiative; however in addition, two of the major change initiatives reside under this KRA.

- Culture change
- Business re-engineering: Track Staff competency.

4.3.4 INFORMATION MANAGEMENT

See commentary in section 9.

5 NETWORK OPERATING EXPENSES

5.1 OVERVIEW

Improved productivity and efficiency is required in order for I and E to contribute to KiwiRail's goal of becoming a sustainable business. An approach in this business plan that simply yields a reduction in inputs and equivalent reduction in outputs and an increase in risk will not achieve this. There must be changes to the way we do things and a big lift in productivity.

The underlying premise is that more frequent trains will run reliably to timetable and that KR I & E's possessions to deliver infrastructure maintenance, renewal and upgrade will be significantly more constrained than they are currently.

To address with this I & E must change to planning and delivery practices to provide for flexibility in terms of location, programme and budget

It is critical to KRG's vision that a sustainable infrastructure delivery capability is available to KiwiRail but not critical that KiwiRail is the sole supplier of that delivery capacity.

The core initiatives and their objectives identified in the Group Business Plan directed specifically toward efficiency and productivity in I & E are listed below.

Initiative	Objective	Accountability
Culture Change	Shift core business definition from delivery of rail infrastructure to availability of reliable rail infrastructure.	GM I & E
Business Re-engineering: Golden Triangle	By December 2012 secure a transition path to lower cost more efficient long-term delivery of maintenance, renewals and upgrades on the Golden Triangle routes.	Network Performance
Business Re-engineering: Productive timeslots available for working on track	Increase productive time available for on-track work by line segment measured in terms of slots of: - < than 2 hour productive time - 2- 6 hours productive time - 6 - 12 hours productive time - > 12 hours productive time	Network Performance
Business Re-engineering: Others	Remove transaction inefficiencies and costs from core processes starting with. - Network Authorities and Freight Planners - Train Control, LSMs, Veolia and TMW despatchers - Nationally consistent signals rules - Track Inspection technologies.	 Network Performance Network Performance Engineering & Training Engineering
New Technology: Rail Grinding	Improve ride quality, reduce wheel wear and reduce rail replacement rates from FY15 onwards by 50% ($5-6m) per annum from current levels on the basis that re-profiled rail will have a normalised rail life of 300MGT.	Engineering
Business Re-engineering: Track Staff Competency	Track Engineering having sufficient expert knowledge on the asset base for improved asset management. Track Field Engineering staff having increased skill level to ensure interventions are better and consistently targeted. Sustainable model for both to extend across contractor sector to advantage of KRG, its staff and contractors	Engineering and Training
Business Re-engineering Sirius	Greater productivity and lower cost interventions through - Introducing best practice asset management - Earlier engagement of informed engineering input at pre-planning stages - Improved planning and optimised scheduling of maintenance, renewals and upgrades. - Improved visibility and links of strategic priorities and Area deliverables.	All
Business Re-engineering – Access Agreements and SLAs between I & E and customers	Full alignment of business plans – with performance monitored by formal KPIs and defined access rights/obligations.	Network Performance

Commentary These changes have far reaching implications. There is a tension between KiwiRail's utilisation of its own people and equipment for on-going business activity to create this sustainable infrastructure delivery capability, and the imperative for increasingly utilising more productive work opportunities and the need for flexibility and responsibility. KRI&E is committed to very high levels of engagement, honesty and disclosure with RMTU, staff and contractors.

5.2 OPERATING EXPENSES AND CAPITALISATION – AND METHODS OF DELIVERY

Extrapolation of I & E FY12 operating expenditure levels into FY13 and beyond is not financially sustainable. I & E are in this position because:

- The Group revenue position is lower than TAP projections – from which the I & E spend profile was originally developed (and)
- The drop in capital expenditure – in particular the Major Projects coupled with a change to the nature of some projects has reduced the level of expenditure reasonably able to be capitalised

The table below shows the Budget Network EBITDA of ($64.6m) against the Forecast FY12 EBITDA of ($57.8m).

PROFIT & LOSS ($M)	Forecast	Budget	Business Plan	
	FY12	FY13	FY14	FY15
Revenue	34.5	34.8	34.4	35.8
Labour Related Costs	94.1	88.4	74.0	80.8
Less: Capital	60.4	42.3	38.2	44.2
Less: Operational	33.7	46.1	35.8	36.6
External Operating Costs	38.7	30.9	45.1	47.0
Internal Expenses	19.9	22.5	20.1	20.1
EBITDA	**-57.8**	**-64.6**	**-66.6**	**-67.9**

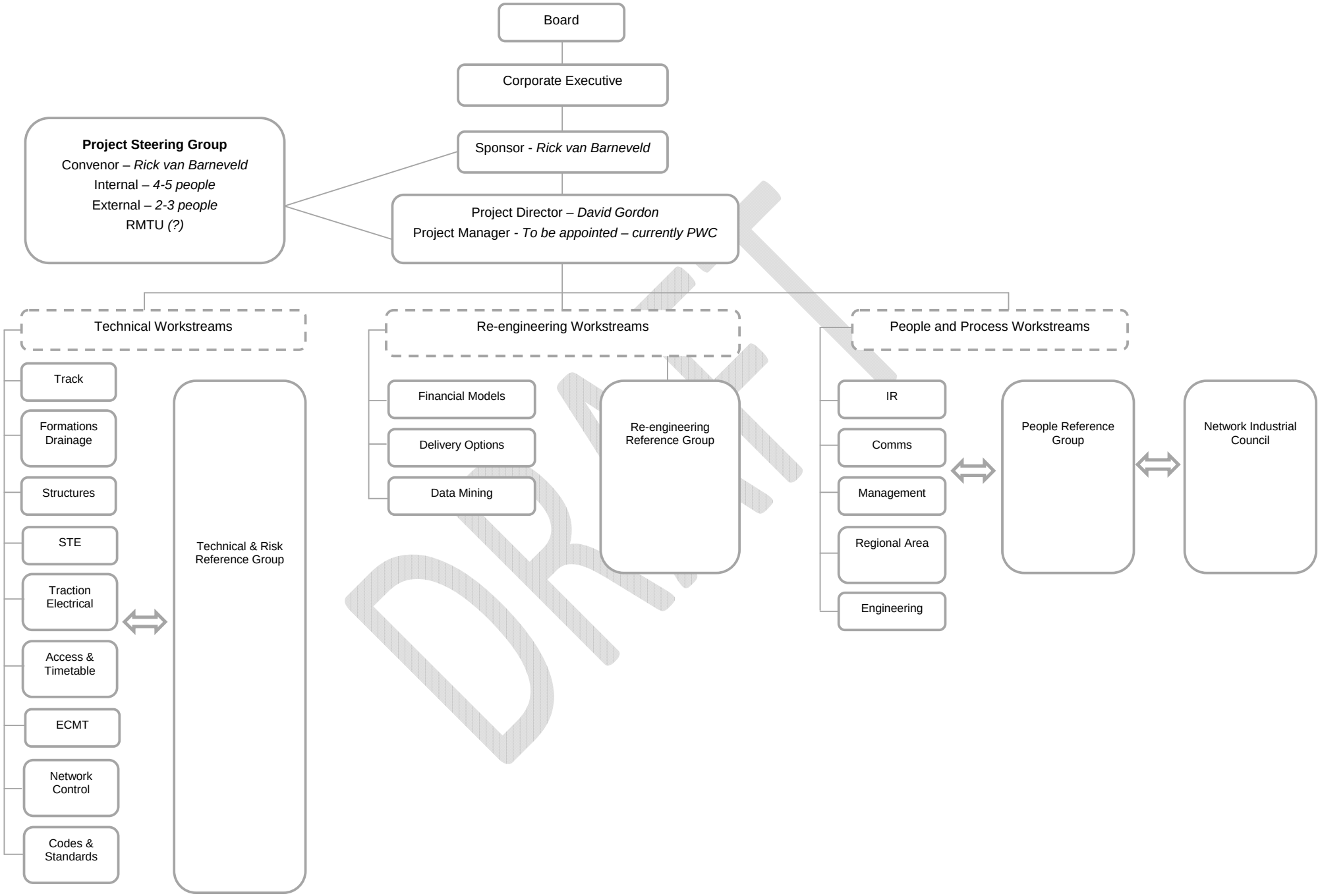
To achieve the FY13 EBITDA of $64.6m as submitted in the business plan, we need to reduce overall labour costs in Network by $18m which equates to approximately 170- 220 FTEs.

The core initiative and related objective identified in the Group Business Plan directed specifically toward cost reduction is;

Initiative	Objective	Accountability	Ref in this plan
Cost Reduction	Reduction in size of the organisation and subsequent spending capped at budget levels	Network Performance	Section 4.3 – 4.17 – and in the table below

The task list, management and organisation structure is shown in the following diagram.

For greater detail refer to the Project Charter document.


Board
Corporate Executive
Project Steering Group
Convenor – Rick van Barneveld
Internal – 4-5 people
External – 2-3 people
RMTU (?)
Sponsor - Rick van Barneveld
Project Director – David Gordon
Project Manager - To be appointed – currently PWC
Technical Workstreams
Track
Formations Drainage
Structures
STE
Traction Electrical
Access & Timetable
ECMT
Network Control
Codes & Standards
Technical & Risk Reference Group
Re-engineering Workstreams
Financial Models
Delivery Options
Data Mining
Re-engineering Reference Group
People and Process Workstreams
IR
Comms
Management
Regional Area
Engineering
People Reference Group
Network Industrial Council

5.3 MAINTENANCE AND WORK DELIVERY FUNCTIONS

Resources in this business plan have been sized to safely and efficiently deliver service performance and asset compliance through a combination of maintenance and renewals works.

Those service performance targets, inspection and maintenance frequencies, and renewals work lists are set by other parts of the business. Our customers have accepted that to achieve the savings required, the targets must be revised downwards, and they carry higher disruption risks, and potentially slower I & E response to incidents and disruptions. From an I & E perspective the goal must be to limit the downside of cost reduction by increasing productivity and better targeting work.

While there is a mix of internal and external resources already in place it will be changed more aggressively than before consistent with the drivers in section 4.1.

There is no doubt that appropriate engagement with the RMTU is essential if we are to deliver the changes.

The resource size and mix is to be kept under review with the intention to be able respond to changing business needs as best possible. Current resources and targets are summarised below, generally by technical discipline, with brief commentary. These should be read in the context of the overarching requirement to achieve on-going productivity improvements and to demonstrate them with appropriate measures.

The key change is the introduction of the Sirius work planning and management tool – this does require additional resources but will deliver much improved planning and work allocation, reduce duplication, as well as provide better data for analysis and future planning.

Management Structure

The existing 3 Regional and 10 Area organisation structure will be kept under review with the prospect of further consolidation being essential to reduce ongoing costs.

The budget, with compensating adjustments across the operations structure, allows for changes proposed within the Areas nationally to maximize the value from Sirius and implement what was learned from the Palmerston North and Greymouth trials.

The cost structure carried into the business plan assumes

Opportunities that will be pursued in the Business Plan year

We must change the way in particular how track renewals and maintenance are delivered. As identified in 4.1 this cannot be a just a change from in-house to external resources which can simply undermine staff relationships and only substitutes one set of fixed costs for another. Changes must encompass

- When and how we work – for example do we reduce the amount of work every day and concentrate resources in fixed period.
- (if so) is there an in-house arrangement which could allow this to work, or do we need to look at hybrid models that could potentially have staff embedded in contractor's businesses?

The business re-engineering tasks related to Golden Triangle, Productive Time Slots on Track and Track Staff Competency are key to finding solutions to this.

Other initiatives within the national resources are described in the sections that follow – all have embedded in them business re-engineering concepts.

5.4 TRACK SERVICES

The resource levels in the table below will deliver compliance with code inspection requirements and the KPIs in section 3.

	FY12	FY13	FY14	FY15
Track Inspectors	14	TBD	TBD	TBD
Maintenance Staff	195	TBD	TBD	TBD
Field Engineer Maintenance	11	TBD	TBD	TBD
Renewals Staff	69	TBD	TBD	TBD
Field Engineer Renewals	10	TBD	TBD	TBD
Destress (incl SFT)	56	TBD	TBD	TBD

Track Inspections

Track inspection resource is adequate at present. If we need to add extra in metro areas this would be funded by the regional authorities.

Opportunities that will be pursued in the Business Plan year:

- The Plant & Equipment renewals budget provides for enhanced track inspection capability with the EM80 upgrade. This will enable more/better inspections and hence better track condition understanding and maintenance.
- The management of the EM80 is being reviewed as part of the upgrade project (section 7) to deliver an improved inspection and response regime but will not fully kick in until FY14. Various data collection technologies may also be introduced.

Track Maintenance

Resources

Track maintenance resource is generally adequate for main line work at present although there is still a considerable backlog of work to be managed.

An early task is to get a much more definitive metrics on the size of the outstanding work task and stop using words such as “considerable, major” etc.

Hot rail management is an issue in most places and our approach urgently needs improvement. A project is in hand to assist with processes to improve this with the key deliverables being

- Review and update of processes
- Introduction of new rail stress measurement technology
- Investment in training as the number #1 priority for delivery from the HR team as part of the major business re-engineering task – to be completed prior to start of.

Once the new processes are in place and relevant data is up to date, this is not expected to require more resource than currently exists.

Opportunities that will be pursued in the Business Plan year will be driven out of the Track stream from the Business Re-engineering and Cost Reduction Exercise:

Track Renewals

Resources

In-house renewals/de-stress resource levels have proved sufficient to deal with current quantum and practice noting that there was already considerable use of contract resources for specialist and peak workloads.

As the table above shows the in-house resources in FY13 will decline, or in the alternate we need to change the cost structure. Furthermore our targeting of this activity into the most productive track access slots will almost certainly result in some re-engineering of our activities.

Opportunities that will be pursued in the Business Plan year will be driven out of the Track stream from the Business Re-engineering and Cost Reduction Exercise and will include:

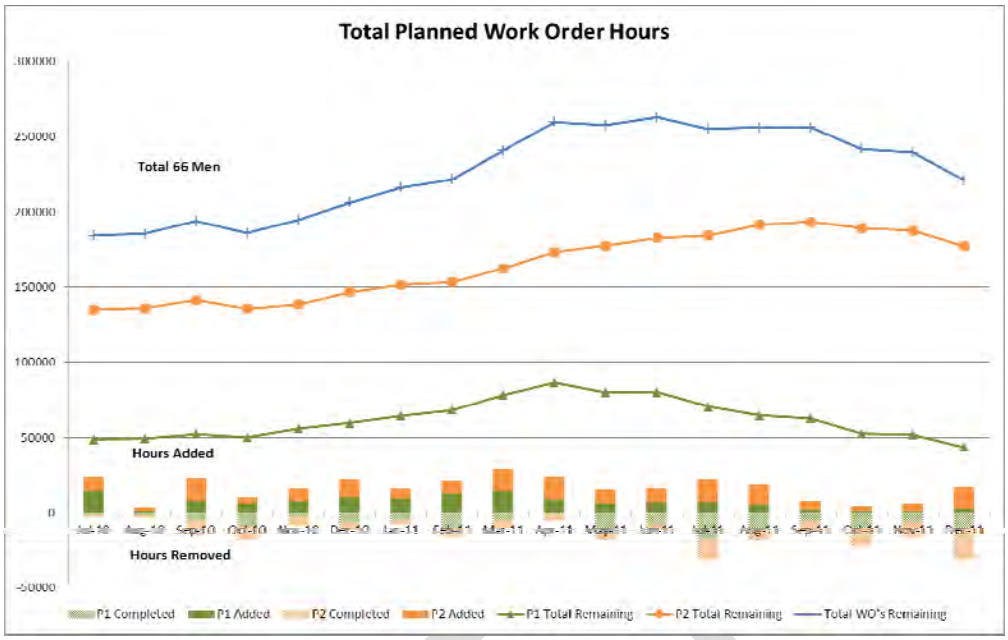
- Improved planning, contract management and QA to carefully scope & specify the work required and establish appropriate risk and performance management arrangements. Includes starting rollout of tablet type platform to the frontline.
- It is expected that change and introduction of a range of delivery mediums will result in cost reductions or productivity improvements albeit that the principal drivers are responsiveness and flexibility across work types and locations. The immediate candidate activities are:
  - De-stress
  - Drainage
  - Bridge re-sleeper
  - Level crossing upgrades
  - Concrete sleeper install

5.5 STRUCTURES SERVICES

Current resource is set at levels designed to achieve compliance measured in terms of:

- 50,000 man hours outstanding PI (must complete within 6 months) work-orders at any point in time across all Line Groups
- Reducing P2 man hours (complete or re-inspect within 18 months) across all line Group
- 6 yearly cycle of inspection for all structures regardless of line Group or bridge type

The graph below which shows current status against those targets indicates that, assuming our methods are efficient, maintenance resource levels are right or perhaps a little above what is required for those targets.



However for the present the table that follows shows a static resource level; but the text identifies possible efficiencies.

	FY12	FY13	FY14	FY15
Inspectors	14	[TBD]	[TBD]	[TBD]
Maintenance Staff	66	[TBD]	[TBD]	TBD]
Structures Field Engineers	3	[TBD]	[TBD]	TBD]

Structures Inspection

The inspection requirement is currently 6 yearly.

There is a general inspection backlog in the South Island and a particular problem with culvert inspections, some of which are many year's overdue and will be cleared up.

Opportunities that will be pursued in the Business Plan year will be driven out of the Structures and Formation and Drainage streams from the Business Re-engineering and Cost Reduction Exercise and are likely to include:

- The Structures Inspector resource will remain under review and each time a vacancy occurs can be adjusted by attrition
- Revisit Code inspection frequency for concrete and steel vs old timber
- We will examine staffing in areas with low levels of timber
- Special under-bridge Inspection Vehicle may reduce inspection cost.
- Inspection and data capture tools will be investigated to reduce administration time and avoid lapses.

Structures Maintenance

Budget currently assumes reducing the current maintenance resource by 10%. Where such changes are made they will be based on analysis of work load and asset requirements (or line closures).

Opportunities that will be pursued in the Business Plan year will be driven out of the Structures and Formation and Drainage streams from the Business Re-engineering and Cost Reduction Exercise and are likely to include:

- Continue to utilise contractor maintenance gangs so that greater volume variability is retained
- Could we re-prioritise by re looking at selected line work banks and identifying a different priority?
- Review whether P1 and P2 urgency is correct ie 6/18 months
- To what extent would a focus on more preventative maintenance reduce the future work bank?

Renewals

All renewals work is carried out by external resources, with limited internal support at changeover times so there is limited impact on expenses.

5.6 SIGNALS & TELECOMS & ELECTRICAL & TRACTION

Putting aside the Metro Traction areas which are 100% funded by the AT and GWRC respectively, savings of around 15% are needed through a combination of FTEs and the way we work.

The table below shows continuation of status quo with all future numbers to be determined

	FY12	FY13	FY14	FY15
Signals Technician and Maintainers	104	[TBD]	[TBD]	[TBD]
Communications Technicians and Maintainers	21	[TBD]	TBD]	[TBD]
Electrician	1	[TBD]	TBD]	[TBD]
Signals Prefabrication Depot	5	[TBD]	TBD]	[TBD]
Traction NIMT	18	[TBD]	TBD]	[TBD]
Traction Metro Wellington	28	[TBD]	TBD]	[TBD]
Traction Metro Auckland	0	[TBD]	TBD]	[TBD]

Opportunities that will be pursued in the Business Plan year will be driven out of the STE and Traction streams from the Business Re-engineering and Cost Reduction Exercise and are likely to include:

- Reconsider code workloads based on usage vs time noting that new equipment generally needs less/different interventions.
- Signals Line Mechanics – Midland pole line is the primary work and a decision on resignalling of the Midland Line will confirm the future of this activity.
- Relay Repairs – future work load depends on relays and other equipment overhaul requirements – driven by code and by types of equipment installed. We need a more detailed understanding of future work – this is being developed and will be confirmed by the report above
- Move NIMT traction control into NTCC by end January 2013.
- Consider cross skilling to improve flexibility & response and reduce travel costs.
  - Signals & comms – working party addressing
  - Signals & elect – introduce at working party

- Signals & traction – needs further investigation at understand if there is an opportunity

- Consider balance of maintainer and technician resources.

Renewals

Resources

- Upgrades generally use external resource as far as possible
- Renewals are small % of total so there is little impact on resourcing.
- Resource constraints that compromise upgrade delivery will need further consideration

5.7 LOGISTICS AND PRODUCTION & INVENTORY

Material reporting changes will be made prior to commencement of FY13. During FY13 we will review the resources under these revised reporting lines.

Changes in the lead-in to FY13 and consequential efficiency gains targeted are

- Consolidation of the Purchase & Inventory and Materials Coordinator resource with the equivalent Workshops group
  - Reduction in total Group numbers
  - Reduced Group average inventory balance
- Consolidation of the Plant & Equipment resource into the Workshops group
  - Reduction in total Group numbers
- Railweld to the Workshops Group – potential to operate for lesser period each year
- Signals Assembly to Workshops Group – no specific changes identified but will be reviewed alongside relay repairs

	FY12	FY13	FY14	FY15
Managed under Mechanical and Workshops				
P&E	34	TBD	TBD	TBD
Purchase & Inventory	5	TBD	TBD	TBD
Materials Coordinator	7	TBD	TBD	TBD
Signals assembly	3	TBD	TBD	TBD
Managed under Network Performance				
National Resources	37	TBD	TBD	TBD
Rail Weld Depot	6	TBD	TBD	TBD

Opportunities that will be pursued in the Business Plan year will be driven out of the Track stream from the Business Re-engineering and Cost Reduction Exercise and may include:

- Tamper crews right sizing – may mean increasing from 3 back to 4 to improve productivity but potentially fewer tampers operating noting that there is a project to introduce 3 new tampers by the end of FY13
- Mothball the Ballast Cleaning fleet for 3 years
- Review & optimise machine utilisation vs crewing vs location vs planning work for current scenario
- PDA for fitters to reduce paper work effort and improve compliance info – current Innovate project waiting business case approval.

5.8 PROJECTS

There will be fewer projects hence the staff numbers in the table will fall.

In general terms while there are projects that we can efficiently support in-house, and there is a medium term prospect that this will continue, there is no immediately compelling case to change status quo. However at this time the medium term looks uncertain and we cannot afford to be left with a fixed cost hence decisions need to be made soon.

The table below is a placeholder for what is carried into the business plan at this time.

	FY12	FY13	FY14	FY15
Wellington	15	TBD	TBD	TBD
DART/AEP	14	TBD	TBD	TBD
FE	2	TBD	TBD	TBD
FE	2	TBD	TBD	TBD
FE	1	TBD	TBD	TBD

Opportunities that will be pursued in the Business Plan year will be driven out of the Track and Regional/Area review streams from the Business Re-engineering and Cost Reduction Exercise and may include:

- Consider reducing Wellington resource and focusing primarily on technical and management capability to direct other regional resources and/or external as required.
- Volume of work in Auckland and contestability may require reconsideration of resourcing and contracting arrangements

5.9 PROTECTORS

The amount of capital work is declining, and under the business re-engineering we are looking for better ways to organise and deliver possessions. Logic suggests that the protection resource should reduce, but there is not sufficient evidence at this time to make decisions on the extent of any change.

The bottom line is that workers must be safe, and the safest time to work is when trains aren't running. The balance to be struck in the re-engineering exercises is between the amount work currently requiring protectors can be moved into alternative times when different protection methods are available, and the cost and disruption of those changes.

The table below is therefore simply a placeholder – all numbers are subject to review

	FY12	FY13	FY14	FY15
Auckland	9	TBD	TBD	TBD
Hamilton	1	TBD	TBD	TBD
Tauranga	1	TBD	TBD	TBD
Wellington	10	TBD	TBD	TBD
Palmerston North	2	TBD	TBD	TBD
Dunedin	1	TBD	TBD	TBD

Opportunities that will be pursued in the Business Plan year will be driven out of the Track and Regional/Area review streams from the Business Re-engineering and Cost Reduction Exercise and may include:

- Without focused management the Protection resource will become inefficient; how the Protection resource is managed will be part of any review
- Sirius will enable better use of protector resources by improving visibility of upcoming work and availability of resources.
- EWPS – safety and productivity opportunities once rolled out.

5.10 OTHER MAINTENANCE FUNCTIONS

Vegetation

There is currently $3.0m pa multiyear contract with Treescape to manage vegetation in the corridor. In the past couple of years we have been able to boost this from other funding sources such as Upgrade projects and Public Good and as a result have made considerable progress bringing vegetation under control, improving safety and reliability and improving compliance with biosecurity requirements.

The $3.0m pa is not enough to complete necessary catch up work, and risks some locations regressing as plants grow again after recent treatment. This is already being observed in some locations that benefited from extra work in the last 2 years. An analysis of Northern Region suggests an extra $1.0-$2.5m is required next FY and an equivalent provision in future years.

The budget does not provide for this level of expenditure.

KRG is required to comply with the Biosecurity Act and this is likely to lead to various TLA requirements to undertake work. The quantum of this is unknown, and we carry this risk into the business plan.

Drainage and Formation General

The historical approach in times of financial constraint is to reduce expenditure on the corridor and focus on track and sleeper faults. This is often necessary but it's well understood that this short-term solution undermines long-term sustainability.

Going into the FY13 business plan year we do not have a definitive view of the correct balance of work above and below ballast levels in a constrained financial environment.

Opportunities that will be pursued in the Business Plan year will be driven out of the Structures and Formation and Drainage streams from the Business Re-engineering and Cost Reduction Exercise and are likely to include:

- Establishment within Engineering Group of a team from Track and Structures with direct accountability and KPIs for below ballast assets (drainage, formation, culverts and slopes)

5.11 BUSINESS RE-ENGINEERING- PLANNING AND SIRIUS

In sections 5.1 and 5.3 there is discussion on the major elements around business re-engineering tasks the outputs of which must be embedded in BAU. The threads drawn together under this business plan are:

- Strategic Asset management planning
- Tactical (1+1yr) asset management work planning, key resource allocation and timetable and access planning
- An asset management system.

The means by which this will be achieved are:

(i.) Re-enforcing strategic asset management planning within the Group

This is driven by two parallel BAU initiatives:

- delivery of an agreed set of asset knowledge initiatives (KRA4) and
- strengthening of asset/system competencies in I & E.

The latter involves SMEs in track, structures and STTE being accountable for the integrity of the individual and integrated databases in Sirius or other systems. This will be delivered from within the Engineering Group and includes accountability for the completion of the STTE data collection.

The key deliverables under KRA4, delivery dates and accountabilities are

Subject Matter	Acct	Support	Final Due to IAC
Sleepers	N Perf	Eng	Aug 12
Mainline Turnouts	N Perf	Eng	Aug 12
Non-traction Electrical Assets	Eng	N Perf	Oct 12
Timber Bridges – re forecast	Eng	N Perf	Oct 12
De-stress	N Per	Eng	Oct 12
Updated AMP	N Perf	Eng	Feb 13
Formation, Slopes and Drainage	Eng	N Perf	Feb 13
Steel Viaducts and Trusses	Eng	N Perf	May 13
Ballast	N Perf	Eng	May 13
NIMT traction assets	Eng	N Perf	May 13

(ii.) Implementing tactical AMP planning

In the Centre

There will be a team formed beneath Network Performance with accountability for developing, facilitating and reporting on delivery national renewals, and possibly some yet to be determined maintenance interventions.

This team will co-locate and integrate its planning with that of the timetable and access planning activities and the national resources team.

With respect to timetable and access the business plan takes the position that most of the "field" productivity improvements are strongly dependent on the efficiency of the

possession, which itself is a combination of the planning and the delivery of the slot on the day. In our view improvements in maintenance and renewal productivity between 5% - 15% are available if we can get the worksite possession and train path plans properly integrated.

The business critical success factor is that central and field planners processes, the Authorities processes and the train planning process are **fully** integrated.

To achieve this within the historic Authorities roles:

- The role of the Access Provider covering Timetable Committees per the CAT and Access Agreements, and their related Possession sub-committees will be brought together into a single team that will also encompass Authorities and network modelling.
- There will be a more modern and comprehensible form of Bulletin communication (per Impac recommendations, and covered in FY13 IT budget)
- The activities will be co-located with the national planning and national resource activities
- There will be closer alignment with Freight's and the Metro Operators' Train Planning and a re-engineering of processes to achieve this (The network authorities team will have its performance rated against outcomes achieved in the field.

The major projects residing in this area are:

- Business re-engineering: Productive timeslots available for working on track
- Business re-engineering: Others
  - Network Authorities and Freight Planning
  - Train Control, LSMs, Veolia and TMW despatch

The allocation of national plant will also co-exist with these activities.

No additional resources are required.

The key "external" relationship will be with the Regional Managers and the planning positions in the field.

In the Field

This is the business change associated with Sirius currently rolling out across the country. The implementation of these practices will proceed irrespective of the timing or scope of the final IT solution. The delivery deadlines are.

Area	Status at start of FY13	Complete by Date
Palmerston North	75% complete	
Wellington	10% complete	
Napier	85% complete	
Taranaki	90% complete	
Greymouth	60% complete	
Christchurch	0%	Start December 12
Dunedin	0%	Start December12
Hamilton S	0%	Start April 13
Hamilton E	0%	Start June 13
Auckland	0%	Start July 13

Accountabilities:

- Accountability for delivery of the strategic AMP (KRA4) is shared on an agreed task basis between Engineering and Network Performance
- Accountability for the roll-out is with the Sirius team ultimately reporting to Network Performance
- Accountability for the integration of the central planning function is with Network Performance
- Accountability for the performance of the field planners is with the Regional Managers.

(iii.) Implementing the IT system

The delivery of the IBM product system sits beneath a steering group from I & E, Finance and IT. The day to day driving of the project is with IT. This business plan has two base assumptions

- The trial site at Palmerston North is delivered for the agreed value, and performs to a level that enables the spend for the remaining sites to be rolled out
- The subsequent roll out dates based on the successful Palmerston North outcome are forecast as shown in the table below

Region	Training	System go live	Complete by
Central	Jan 13	March 13	June 13
Southern	April 13	May 13	August 13
Northern	Sept 13	October 13	Jan 14

Changes to these assumptions will need to be formally agreed through I & E LT processes.

5.12 BUSINESS CHANGES - NETWORK ENGINEERING SERVICES

In late 2011, the Network Engineering Group completed an organisation review against current and future activities. That highlighted a number of areas where it was under-resourced to deliver the tasks in the business plan at the time. In FY13 there will be changes in emphasis and a recruitment programme based on the priorities agreed as part of the review updated to fit this Business Plan.

The 2011 organisational review had identified that for the previously planned level of spending, an increase of 14 FTEs (on the current level of in-house and consultant resources) would be required to deliver technical services and project activities.

As part of the current review of activities for 2013, we have reconsidered the previously proposed increases in technical activities. These have been reduced from the levels proposed to retain current levels for the following areas of activity:

- Structures inspections
- Running rights
- Renewal planning
- Signals support for train control

The table below shows resource levels funded in FY13 versus establishment in FY12

Area	FY12 in-house	FY12 contractor	FY13 in-house	FY13 contractor
Projects/Management	7.0	5.5	5.7	4.0
Track	9.3	1	12.4	1.3
Structures	18.3	22.7	18.3	15.1
Signals & Telecoms	17.1	2.9	17.5	1.9
Traction	6.8	0.0	7.6	0.0
Rules, audit and risk	6.1	0.0	6.1	0.0
Total	**64.6**	**32.1**	**67.6**	**22.3**

This equates to a reduction of 6.8 FTE in comparison with the originally proposed increase of 14 positions.

Issues for each technical area from this change are as follows:

- Structures: We intend to maintain our Subject Matter Expertise in-house, and the reduction in Structures effort will translate to a reduction in external FTEs for design and delivery of structures renewal projects.
- Signals & Telecoms: With the Radio Network project projects coming to an end, there will be a reduction of one external and one internal FTE
- Track: The previous resource modelling identified that Track Engineering are under resourced. The current intention is for three additional internal FTEs hired to expand activities related to improved technical support and asset management input to the management of the track asset under constrained budgets.
- Traction & Electrical: Traction will need to support the completion and commencement of operation of the Auckland Metro traction system and a small increase in resources is needed for this.
- Operating Standards & Mechanical: There will be no change in internal or external FTEs next year.
- Projects: As per 2011's Engineering FTE modelling work, Projects' engineering work relating to level crossing risk assessment and Sirius will begin to reduce, which will translate into a reduction of one internal FTE and two external FTEs

As part of these numbers there is an allowance for establishing an Auckland based Engineering team of 6 staff comprising two Track, three S&T and one Traction staff members, supporting Auckland and national technical activities. This will generally be achieved through a shift of staff from metro project work.

Opportunities that will be pursued in the Business Plan year will be driven out of the People and Engineering streams from the Business Re-engineering and Cost Reduction Exercise.

Other initiatives in FY13 driven from the Engineering group include:

Track

- Rail Grinding
- EM80 Upgrade
- Compliance process development – support of training and Area based delivery of activity
- Technical interaction – renewals to delivery
- Track and Engineering Inspections – Inspection tools/HRV for track inspections. Process update following ECMT project. Metro Track inspection process

- Input to training and competence development
- 1:24 turnout design for Auckland 3rd Main
- Concrete sleeper design for mainline turnout installations
- Composite sleeper trial as alternative to hardwood

Structures

- Painting technologies for steel bridges. Bridge 41MNPL and Bridge 13 Hokitika line. Preliminary work to allow future painting of the Makatote Viaduct.
- Sirius Maximo – data transfer and commencement of workorder management under Sirius
- Bridge changeover Block of Line working time – selection of design options to fit track access. Steel ballast deck bridge project implemented and reviewed.
- Structures Risk management project completed
- Formation/drainage activities – integrated management of corridor risk/performance activities and structure for reporting of field performance.
- Development of Bridge Condition Index
- Development of Asset Management Plan for viaducts and trusses.

Traction

- Technical leadership and input to completion and livening of the Auckland Metro traction system
- Support for WMUP project activities in Wellington
- Sirius Maximo – commencement of workorder management under Sirius
- Development of systems for reliability engineering supported by Sirius

STE

- Technical Leadership of Midland Line signalling project
- Taking over Technical management of new systems from project teams – Auckland signalling, CIMW, radio network
- Sirius Maximo – commencement of workorder management under Sirius
- Reliability engineering analysis of system performance based on Sirius data - aligned with code review of inspection and maintenance requirements.

Codes and Operating Standards

- Improved internet access to operating and code documents
- EWWP project input to development and implementation
- Internal Audit programme development to focus on issues with highest risk and value returns
- Plain English review of selected sections of Rules documents
- Implementation of Automatic Signalling Rules/Alternative Track Signalling Rules across the network.
- Further input to Worksite Safety Rules for the Auckland Metro to support current improvements in safety trends.

General

- Risk management through organisational change
- Implementation of Visual Reporting

- Completion of ALCAM Level Crossing risk assessment project and establishment of follow on management systems.

5.13 BUSINESS CHANGES - NETWORK CONTROL SERVICE

The focus during FY11 and FY12 was on building people and systems capability and managing NTCC accountability for events such as Auckland re-signalling, WRRP, RWC etc. The focus in FY13 onwards is improving customer alignment and service, building on the prior years' investments, and mitigating the service disruption risk from retirements due to having a number of employees with 40 plus years' service.

The "allocation" roles of Timetable, Train Paths and Access Optimisation are covered above in section 5.12

Business Plan Initiatives under the Control Services Delivery roles are under consultation with the draft Network Control Strategic Plan, with a final recommendation due to the August IAC. Subject to that consultation the major initiatives are

Train Control

Two graduate streams will enter the roster in 2013, and the budget proposes a third stream to mitigate the retirement risks noted above, and to provide for better management of the substantial leave liability built up over the past 7 years.

There will be much greater attention paid to performance as it is experienced by customers in the field.

Signal Boxes

All services to the Auckland metro area other than Pukekohe will be delivered by NTCC in FY13.

The timing of Addington centralisation will be determined through the Coal Route and Christchurch re-signalling projects (section 7), but the working assumption is that it will be centralised within 3 years.

The timing of Petone and Taita centralisation is driven by the Wellington catch-up project; the plan at this time is to consolidate these into NTCC in late FY13 /early FY14. The TAC with GWRC and the Network Control budget is predicated on this being delivered by WMUP.

Within the period of the business plan there are no proposals to centralise Pukekohe, Te Rapa or Wellington A Box, but during FY14 we will establish the business case for change which may accelerate centralisation.

Traction Control

Control of the Auckland electrified network will be delivered from NTCC. This initiative, funded by AEP and managed by Projects is based on the pre EMU engineering commissioning being delivered by the Project by August 2013, with switching for EMU introduction and on-going customer service run out of NTCC thereafter.

Costs will be borne by AEP until 1 September 2013 thereafter they will be funded through Auckland Metro TAC which has to be negotiated with AT.

The goal is to move traction control of the NIMT from Palmerston North to NTCC by 31 January 2013.

Network Support Services (155)

This service will be consolidated with traction control through-out FY13-FY14; the budget shows a reduction in head count.

Opportunities that will be pursued in the Business Plan year will be driven out of the Network Control stream from the Business Re-engineering and Cost Reduction Exercise.

5.14 BUSINESS CHANGES - RISK MITIGATION

The table below shows the top nine I & E Risks developed through the Corporate Risk Manual and the specific initiatives covered by this Business Plan.

Risk	Funded Initiatives
Failure of Train Control systems on the Midland Line	Section 7.4
Protection of workers on worksites from Rail Vehicles	Section 5.12 and 5.13
Management of H40 process	Section 5.4 and 5.15
Private level crossings	Private Level Crossing project – public good
Track Geometry out of code causing derailment	Sections 5.4 and 6.1
Severe weather incident	Section 5.12 and 5.13
Failure of structural asset	Section 5.5 and 6.2
Failure of formation asset	Section 5.5 and 6.2
Public Level crossing accident	Section 5.6 and 6.3

5.15 BUSINESS CHANGES - HR ORGANISATIONAL ISSUES

Aside from BAU the following items which provide the most significant productivity and safety benefits and are funded in this business plan.

Medical Standards

The introduction of medical standards (NRSS3) is designed to deliver a qualitative impact on safety. Through it we can demonstrate:

- Adherence to standards which will minimise risk to the public and rail staff through sudden loss of safety function relating to a medical condition
- Consistency across the rail industry which is in line with international best practice
- Improvement in injury data and avoidance of some long-term claims.

To manage the impact of implementation on the business, a staged approach of employee alignment to the NRSS frequency of medical assessment will occur. All employees will be assessed by April 2014.

The table below outlines the number of assessments that are due in the next 5 years and forecast direct cost. This only includes Category 1-3 of Network employees.

Year	Total	$
2012	256	49,440
2013	289	56,040
2014	297	57,240
2015	321	62,280
2016	314	61,200

** These figures exclude Mechanical's periodics.*

There is potential for between 10 to 108 employees requiring medical retirement over the next five years. Health improvement plans (if appropriate in the circumstances) will be a pre requisite to medical retirement. The impact of staff in critical safety roles being temporarily transferred to other positions may cause significant impact on available resources.

Based on the above forecasts $750,000 per year is budgeted.

Career Progression Framework

Through establishing the Career Progression Framework we are:

- Investing in skill development aligned to the future requirements
- Investing in wages to ensure competitiveness with the external market by providing median market wages for appropriately skilled workforce
- Ensuring pay progression is linked to the demonstration of the required skill and competency.

Productivity measurements that support gains or improvements are required to justify the success of the framework. Management commitment to the framework is a key driver. The staff need to be given the opportunities to complete on the job tasks. The link to the National Qualifications Framework, managed by Competenz should encourage staff to progress through the framework as they will be achieving unit standards.

The cost of moving staff to the market median is spread over three years. The third and final market rate adjustment will be paid on 1 July 2013. 3% of total costs have been budgeted for the year 2012-13. The Progression Framework included provision for going back to the market in 2013.

Review of Safety Management

The Group wide proposed top down change in the safety structure will create a period of uncertainty. Effective change management will need to be undertaken to bring about the realisation of benefits as outlined in the change document.

While supportive of the strategy to bring the business together, expectations of objective timeframes will need to be negotiated and integrated as part of normal business planning rather than set at a corporate level.

Training Programmes

The following programme has been identified to give the best safety/productivity outcomes for the business and accordingly funding has been committed to as part of this Business Plan.

Track Field Engineer skill matrix/pathway

There is currently limited formal technical training provided for Field Engineers. This poses a risk as Field Engineers are a vital ingredient for our success.

A Field Engineer skill matrix/pathway is to be developed. This pathway will include new Field Engineers. This will be scoped out in detail by 24 December 2012.

Track Stability Analysis and Heat Management have been identified as a priority module within the skill matrix/pathway due to it being a significant safety/performance risk for the 2012/13 season.

Therefore a training solution project proposal will set out an approach to develop trial and implement a training package using a mix of internal and external resources. Significant SME resource will be required to support the process. Training will be delivered by 31 July 2012.

This module will provide important learning's as we move forward with the remaining skill/ pathway matrix.

The I & E training team will not be able to fully resource this work in addition to its current training commitments. External resource for course content and delivery will be required and has been committed too.

Automatic Signalling and Track Safety Rule Rollout

The Automatic Signalling Rules and Track Safety Rules training programme will be delivered to the central and southern regions once the pilot programme in the northern region has been reviewed and review actions have been implemented December 2012

The training numbers will be in the region of 2000. The new rule will be in place nation-wide by December 2013

5.16 BUSINESS CHANGES - FINANCE SUPPORT FOR PRODUCTIVITY

Network Finance is set up as a standalone BU finance function providing financial accounting and reporting to Corporate Finance, management accounting and related advisory support to the business; as well as all transactional functions (including accounts payable, accounts receivable, time recording capture and credit control) for the Network and Property business. In addition, the team is also responsible for the financial and management accounting responsibilities of the Mechanical Workshops.

Although Network Finance reports to the business, it has functional responsibilities to Corporate Finance, including monthly and ad hoc reporting, budgeting and supporting a range of corporate function including treasury, procurement, payroll, etc. where required.

The two Mechanical Workshops (Hutt and Hillside) have their own discrete finance functions responsible for all accounting, budgeting and reporting (excluding transactional functions which are carried out by the AP/AR team in Freight).

Corporate Finance has a stated objective of centralising certain business unit finance functions (systems permitting) over the next few years to achieve overall operational efficiencies across; through standardised processes and controls which will also provide for cost efficiencies in the medium to long term.

Centralisation of current I & E finance functions to Corporate over the next three years includes:

- Property accounting/ reporting (December 2012);
- Transactional processing - AP, AR, credit control (early FY13); and
- Financial accounting/reporting functions (by FY15).

The table below shows I & E's FY12 resource levels and reduction based on potential changes as a result of centralisation over the next three to four years.

Network	FY12	FY13	FY14	FY15
Financial Controller	1	0.5	-	-
Management	3	2	2	1
Accounting/Other	11	10	9.5	6
Transactional	5	-	-	-
Total	**20**	**12.5**	**11.5**	**7**

Mechanical Workshops*	FY12	FY13	FY14	FY15
Management	2	1	1	1
Accounting/Other	4	2.5	2.5	1.5
Transactional	2	0.5	0.5	0.5
Total	**8**	**4**	**4**	**3**

** Assumes the sale/closure of the Hillside workshop with no staff remaining in with KRG.*

The overall changes will equate to a likely reduction of around 18 FTE in I & E (13 FTE in Network and 5 FTE in Workshops), with the majority moving to an equivalent centralised function in Corporate.

It will be key to retain a core finance function in the business to provide the requisite management accounting, reporting and advisory support to the I & E business unit. The focus of the future team will be to support the use of Maximo, job and unit costing, productivity initiatives and management reporting.

5.17 BUDGETS

KiwiRail – Infrastructure & Engineering (Consolidated) Budgeted Profit and Loss Statement for the period 1 July 2012 to 30 June 2013	Budget 2013
Revenue	
Freight	$ -
FAF	$ -
Total Freight (Incl FAF)	$ -
Passenger	$ -
Auckland Metro	$ 18,505
Other Trading	$ 14,585
Total Trading Revenue	$ 33,090
Service Fee	$ -
External Revenue	$ **33,090**
Total Internal Revenue	$ **1,776**
Total Revenue	$ **34,866**
Labour and related costs - Operational	$ 88,405
Labour and related costs - Capitalised	(42,294)
Labour Costs	$ **46,111**
Fuel and Traction Electricity	$ 2,628
External Services	$ 43,017
Contractor Linehaul Costs	$ -
Lease and Rentals	$ 2,776
Track Access Costs	$ -
Materials & Supplies	(33,814)
Incidents, Casualties & Insurance	$ 236
Other Expenses	$ 16,033
External Operating Costs	$ **30,876**
Total Internal Expenses	$ **22,510**
Net Operating Expenditure	$ **99,497**
EBITDA before Restructuring	**(64,631)**
Restructuring costs	$ 12,200
EBITDA after Restructuring Costs	**(76,831)**
Depreciation & Amortisation	$ 223,458
EBIT excluding Grants	**(300,289)**
Capital Grants - Metro Developments	$ 124,468
Capital Grants - GWRC Annual Renewals	$ 5,276
Capital Grants - MOT Deferred Renewals	$ 14,243
Capital Grants - ARTA Annual Renewals	$ 4,926
Capital Grants - Public Policy	$ 500
Capital Grants - Other	$ 2,700
Capital Grant Revenue	$ **152,113**
EBIT including Grants	**(148,176)**
F/X (gains) / losses	$ -
Interest (Income)	$ -
Interest Expense	$ -
NET SURPLUS/(DEFICIT)	**(148,176)**

Track Access Charge – Auckland Metro Services

Maintenance Services	
Track Inspection	TBD
Track Maintenance	TBD
Structural Inspection	TBD
Structural Maintenance	TBD
Traction Inspection	$ -
Traction Maintenance	$ -
EM80 Inspections	TBD
NDT Inspections	TBD
Communications	TBD
Signals Inspection	TBD
Signals Maintenance	TBD
Vegetation Control	TBD
Graffiti	TBD
Night Maintenance - Track	TBD
Night Maintenance - Signals	TBD
Night Working Bonus Traction	TBD
Special Events	TBD
Protection	TBD
Tamping / Track Stab.	TBD
Other	TBD
Total Maintenance Services Cost	$ -
Network Services	
Operations Manager	$ 204,072
Train Control	$ 1,332,395
Network Authorities	$ 16,645
Traction and Operations Support	$ 4,602
National Signal Boxes	$ 190,252
Total Operational Cost	$ **1,747,966**
Management Services - Directly Attributable Costs	
OIL Directly Attributable Costs	TBD
KiwiRail Network Attibutable Costs	TBD
Total Directly Attributable Costs	$ -
Management Services - Overhead Costs	
KiwiRail Network Overheads	TBD
KiwiRail Group Overheads	TBD
Total Overheads	$ -
Total Cost - Not To Exceed	**8,100,000**
Incident Services	
Incident Response	
Total Incident Cost	**Actual**

Track Access Charge – Wellington Metro Services

Maintenance Services	
Track Inspection	$ 140,111
Track Maintenance	$ 1,266,973
Structural Inspection	$ 39,452
Structural Maintenance	$ 250,577
Traction Inspection	$ 298,800
Traction Maintenance	$ 1,326,800
EM80 Inspections	$ 33,985
NDT Inspections	$ 59,178
Communications	$ 277,463
Signals Inspection	$ 569,151
Signals Maintenance	$ 442,537
Vegetation Control	$ 395,122
Graffiti	$ 87,805
Night Maintenance - Track	$ 200,000
Night Maintenance - Signals	$ 180,000
Night Working Bonus Traction	$ -
Special Events	$ -
Protection	$ 33,816
Tamping / Track Stab.	$ 115,444
Other	$ 60,000
Total Maintenance Services Cost	$ **5,777,214**
Network Services	
Operations Manager	$ 102,036
Train Control	$ 666,197
Network Authorities	$ 27,284
Traction and Operations Support	$ 238,071
National Signal Boxes	$ 634,174
Total Operational Cost	$ **1,667,762**
Management Services - Directly Attributable Costs	
OIL Directly Attributable Costs	$ 981,096
KiwiRail Network Attibutable Costs	$ 633,722
Total Directly Attributable Costs	$ **1,614,818**
Management Services - Overhead Costs	
KiwiRail Network Overheads	$ 747,430
KiwiRail Group Overheads	$ 54,811
Total Overheads	$ **802,241**
Total Cost	$ **9,862,035**
Incident Services	
Incident Response	
Total Incident Cost	**Actual**

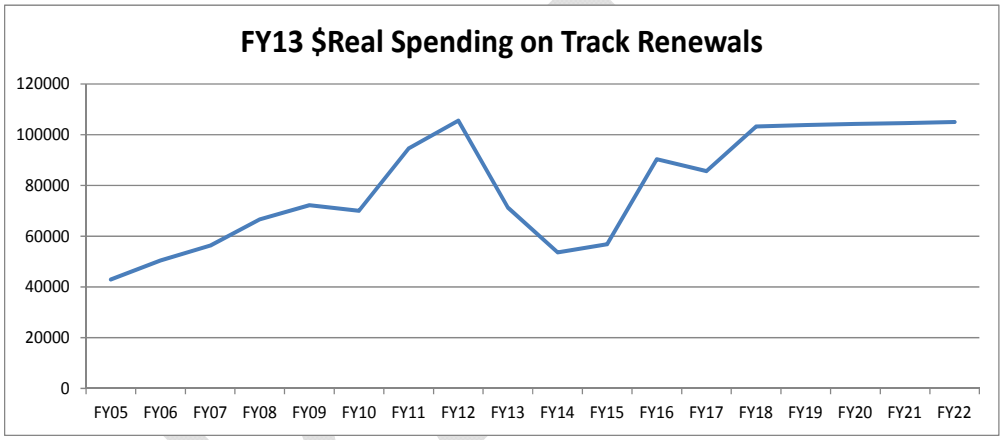
6 NETWORK RENEWALS

6.1 TRACK RENEWALS

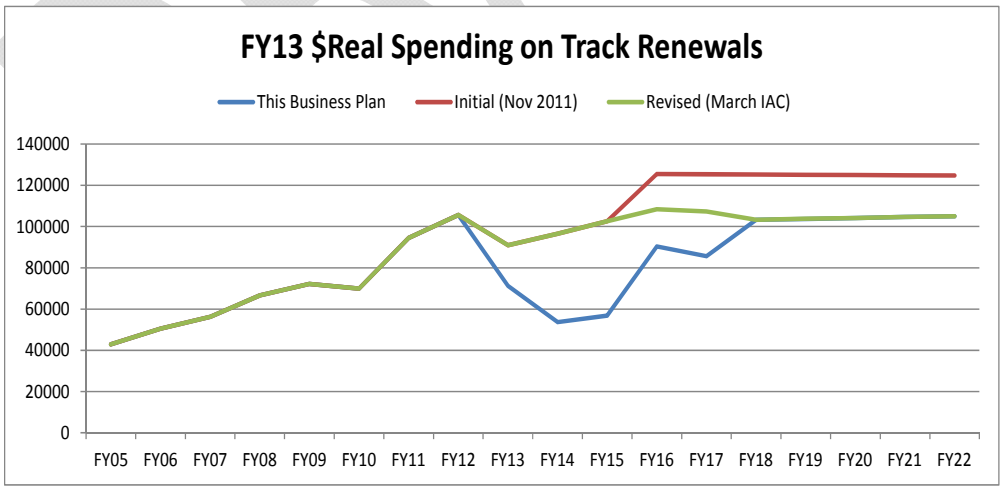
The track renewal task has been substantially reduced in real terms from FY12 levels. The cuts relative to the draft business plan are

- FY13 – 20% reduction
- FY14 – 45% reduction
- FY15 – 50% reduction

The profile of track renewals spend is shown in the table below:



The comparison to alterative profiles discussed with the Group is shown below:



What these graphs show is that the spend in FY14-15 is similar in real terms to the spend in FY06. The spend returns to FY12 levels in FY16-17 but does not rise, unless there is a marked improvement in Group financial performance to the levels that remove the backlog (the red line).

This reduction in spend is a material change in direction. The cascade into actual units of production has not been fully worked through, so the status quo assumption is to take the original forecast levels and reduce them proportionately by the size of the spending reduction.

The table below shows the core track renewal product initially proposed for FY13. The numbers for FY14-15 will be produced by the end November 2012 .

Element	Units	FY13
Concrete sleepers	no.	107,000
Timber Hardwood sleepers	no.	1,000 Trk 3,800 Br
TPR cascaded	no.	14,800
Rail replacement	NI km SI km	18 15
Rail Grinding	km	900
Turnouts – main line	no.	16
Turnouts – yards	no.	23
Level Crossings civil works	no.	59
Ballast Cleaning	km	0

The ADB rates used to build up the budget are:

Element	FY13
Sleeper installed – per 10,000	$2.15m
Rail installed – new per km	$0.23m
Rail installed – second hand per km	$0.12m
Standard Turnouts - each	$111,000
Level Crossings - each	$46,000
Level Crossings civil works	59

Some track unit rates are significantly dependent on commodity prices and forex. The forward view assumes no major change, but there is both up and down side risk to physical quantities and/or budget if a change occurs.

The table below, using data from the Track Asset Management Papers, illustrates the gap between the big ticket renewal items budged, and the volumes in the AMP. A strategically important project for FY13 is to establish the long run average costs of infrastructure generally, of which track is the most expensive part.

Item	Average 3 year volumes in the March Budget (Green Line)	Average 3 year volumes with proportionate reduction (Blue Line)	Average 3 year volumes the AMP view recommends
Concrete sleepers	120,000	80,000	171,000
Hardwood Sleepers	13,000	13,000	13,000
TPR Sleeper Cascade	20,000	12,000	25,000
Rail – assuming grinding	25kms	25kms	55kms
Rail Grinding	Not in earlier AMP		Not in earlier AMP
Turnouts – mainline	40	20-25	40
Turnouts – yards	24	10-15	Not in earlier AMP
Ballast Cleaning	30kms	Nil to 30 kms	500km – (overstated)
De-stress	250km	250km	250km

Sleepers

The replacement rate should be based on AMP methodology using the replacement assumptions and asset condition basis outlined in that working paper. This requirement assumes that 60,000 timber sleepers are recovered over the next three years that are of sufficient quality to be re-used in less demanding applications.

Conclusions: The overall sleeper asset condition will decline over the business plan period.

Rail Replacement & Grinding

Replacement rate is based on AMP methodology using the replacement assumptions and asset condition basis shown in the attachment

The modelling assumes that rail grinding delivers a rail life of at least 400 million gross tonnes for 50 kg/m rail on straight track. This assumption is likely to be conservative and will be refined as empirical evidence is collected. The expected result of grinding is that significantly lower rates of rail renewal will be required in the medium term. Our strategy over FY13-14 is to continue with the current higher rates of renewal and cascade the replaced rail to less demanding applications until the benefits of the grinding programme are confirmed.

Conclusions: The rail replacement programme and grinding will mean the overall rail condition will improve over the business plan period. if rail grinding is confirmed we have sufficient confidence to say the overall rate of rail replacement will reduce.

Turnout replacement

Replacement rate is below the AMP requirements for the main line and while there is no equivalent AMP rate for yards experience with yard derailments points to the fact that the replacement rate is materially below what the AMP would likely require.

Conclusion: Asset condition will decline over the business plan period on the main line and in yards.

Ballast Cleaning

Budget assumes the ballast cleaner group is re-positioned over FY13 and FY14 with the crew having their time split between the BCG and the FlashButt welder.

Budget is based on investing in ballast ploughs fitted to hi-rail vehicles increasing the amount of ballast recovered from shoulders and decreasing the amount of new ballast supplied.

Conclusion: Asset condition will decline over the business plan period.

De-stress

Budget assumes 270km of de-stress (equivalent to previous years).

A much greater level of attention will be paid to the management of this programme in terms of site selection and timing relative to other works in the same area.

The lag KPI to be monitored is the extent of de-stress work that is on areas where there has been joint elimination works in the past 2 years.

Conclusion: Asset condition is expected to decline marginally over the business plan period as there will be less de-stress done on new worksites and more as BAU.

Joint elimination

Budget assumes 5,000 welds per annum @ $450 per weld.

A much greater level of attention will be paid to the management of this programme in terms of site selection and timing relative to other works in the same area – see de-stress above.

Currently information on location of welds, and the extent to which the work is undone by subsequent track interventions is absent, but there is waste which will be taken out of the system in FY13.

Conclusion: Asset condition will decline slightly over the business plan period.

Formation and Gopher

Budget assumes 6 km of track is undercut using either the gopher or other methods.

Conclusion: Asset condition will decline slightly over the business plan period unless there is a re-allocation from the Structures renewals budget in FY14-15.

The overall manifestation of network performance we are delivering with this is:

- Track Quality index – rising on all key line segments but at a relatively slow rate
- Numbers of star and class 1 faults – static or rising, but variable by line segment
- Numbers of class 2 faults – static or rising , but variable by line segment
- Rail failures – increasing
- H40s on key routes – static to modest decline

The table below showed the renewal investment focus on the track asset, by Line Group relative to the last two years prior to the scale of the budget constraints being applied in this business plan (the Green Line).

Line Group –	FY13	Reason
Group 1 Lines		
Metro Lines	Similar	TM5
Group 2 Lines		
NIMT – Waikanae to Hamilton	Lower	TM1
NIMT – Hamilton to Pukekohe	Higher	TM2
ECMT – Hamilton to POT	Higher	TM2
Group 2A Lines		
Milk Route	Lower.	TM1
MNL	Lower	TM3
MSL	Lower	TM3
Coal Routes	Higher	TM4
Oringi to Napier	Lower	TM3
Golden Triangle Forestry	Higher	TM4
Other lines with changes to approach		
Hokitika	Lower	TM5
Wairio	Lower	TM5

TM1 = Acceptable track metrics in this segment, short-term redirection of investment will not be prejudicial to business performance.

TM2 = Essential to get track asset ahead of future demands in a high revenue area

TM3 = Track metrics are acceptable in this segment, short term redirection of investment will flow through to poorer performance but this will not be prejudicial to the customer base

TM4 = Track metrics are unacceptable and pose a safety risk and prejudicial to the customer base

TM5 = Over past two years have had high catch-up investments, will now fall

For this business plan:

The **relative allocation** of resources will be the same under the reduced funding using similar logic to the above.

However because the overall level of renewals is materially lower improvements the impact will be measured in terms of greater or lesser overall declines in performance rather than improvements.

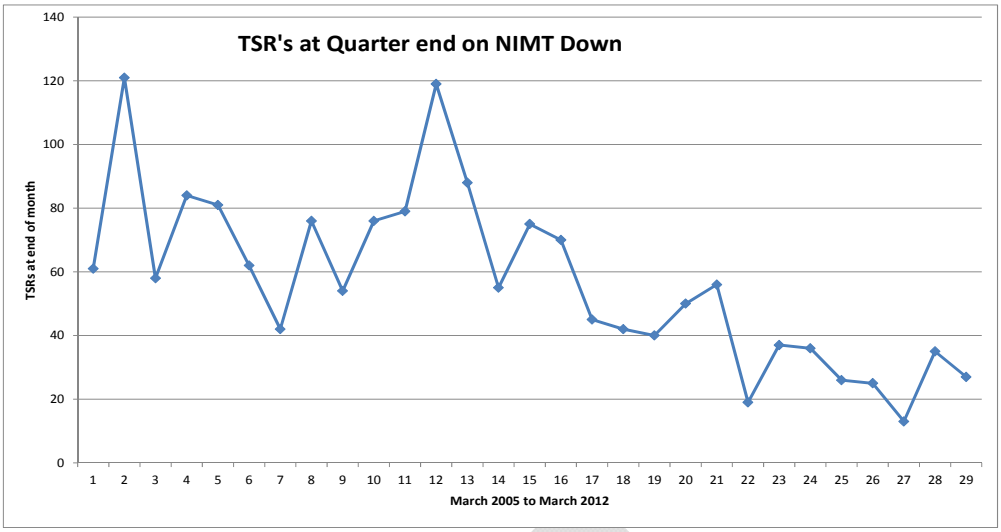
None of the track performance metrics go the right way in this business plan.

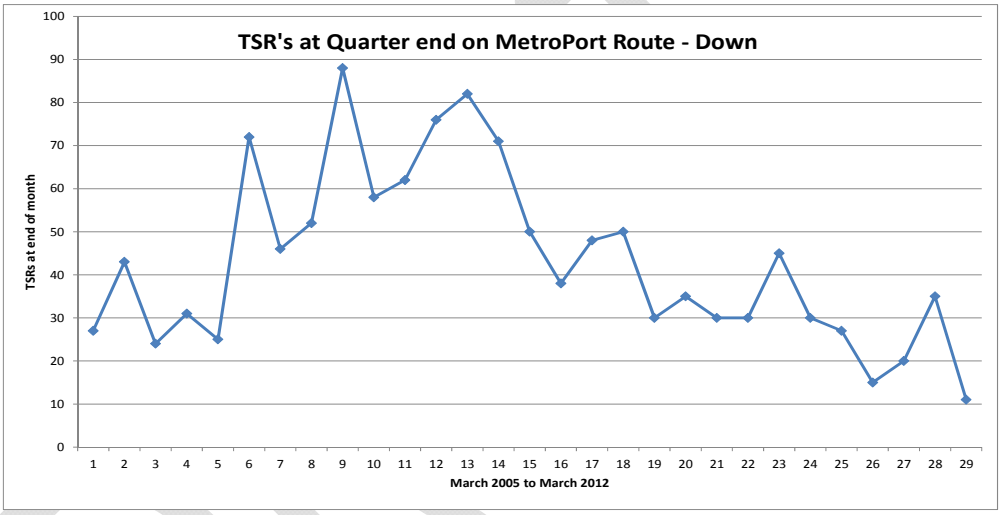
Implications for customer service

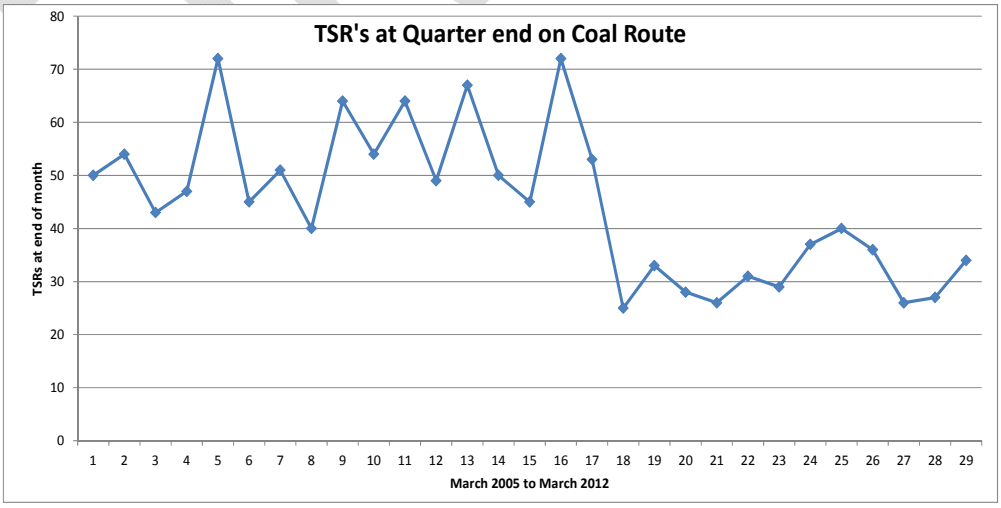
Below is a time series review of TSRs from March 2005 to March 2012 for the major lines. Although there is some variability there is a clear downward trend in TSRs over the past 4-5 years. This is instructive for a couple of reasons:

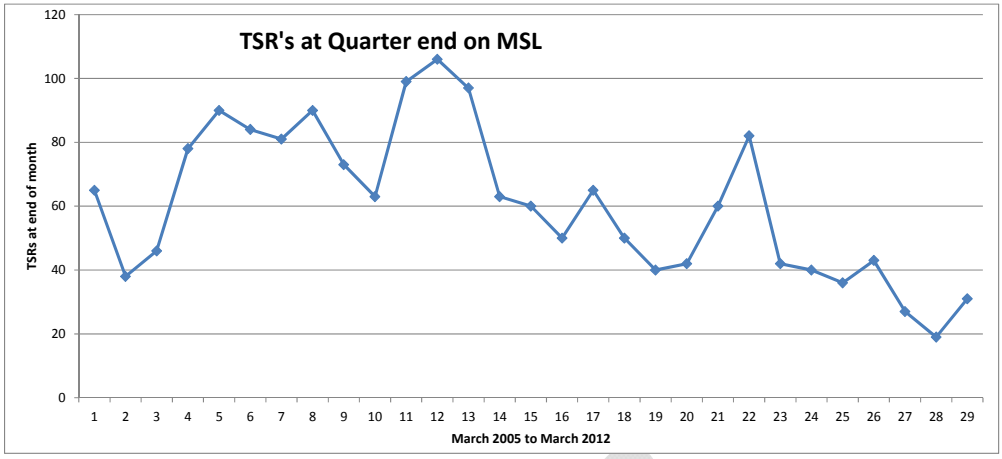
- During 2005-2007 the level of investment was relatively low and disjointed as there was a change of supplier and limited ramp up
- Once work starts in earnest there are generally some early/easy wins over the initial period (Coal Route, Milk Route, MNL are good examples of that)
- Thereafter it is a more steady decline based on continued investment

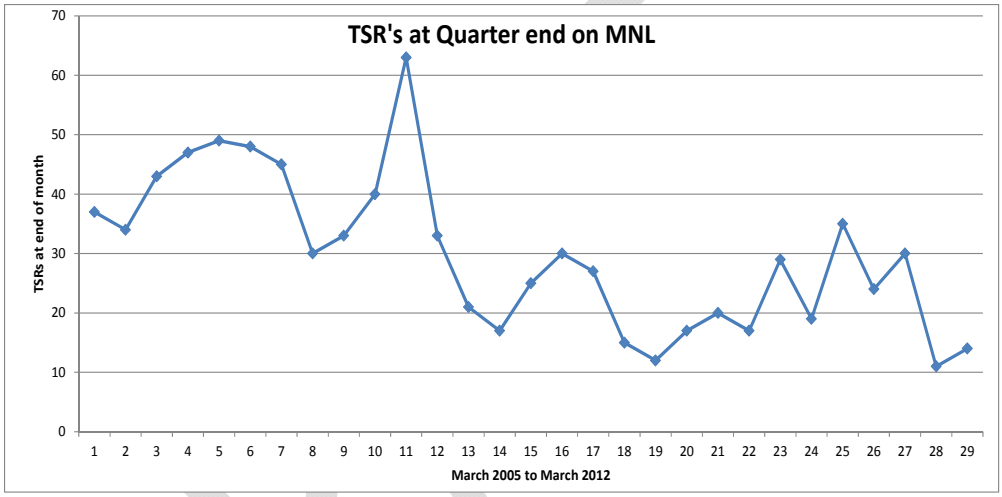
We suggest what this means for 2013-2016 reduced spend period is that TSRs will start to rise back up the curve, but given we are operating off a better base asset, and spend is not curtailed to 2002-2005 levels TSR's won't rise to the business crippling levels of 2007-2008, but closer to the toe of the initial easy wins in 2008-2009.

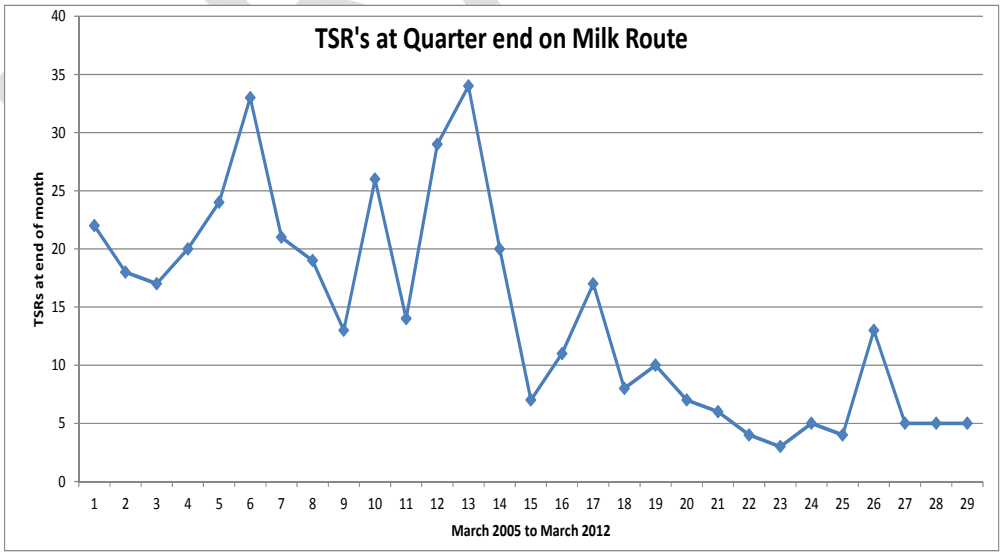

TSR's at Quarter end on NIMT Down
TSRs at end of month
March 2005 to March 2012


TSR's at Quarter end on MetroPort Route - Down
TSRs at end of month
March 2005 to March 2012


TSR's at Quarter end on Coal Route
TSRs at end of month
March 2005 to March 2012


TSR's at Quarter end on MSL
TSRs at end of month
March 2005 to March 2012


TSR's at Quarter end on MNL
TSRs at end of month
March 2005 to March 2012


TSR's at Quarter end on Milk Route
TSRs at end of month
March 2005 to March 2012

Credible TSR outcomes arising from the deferrals are:

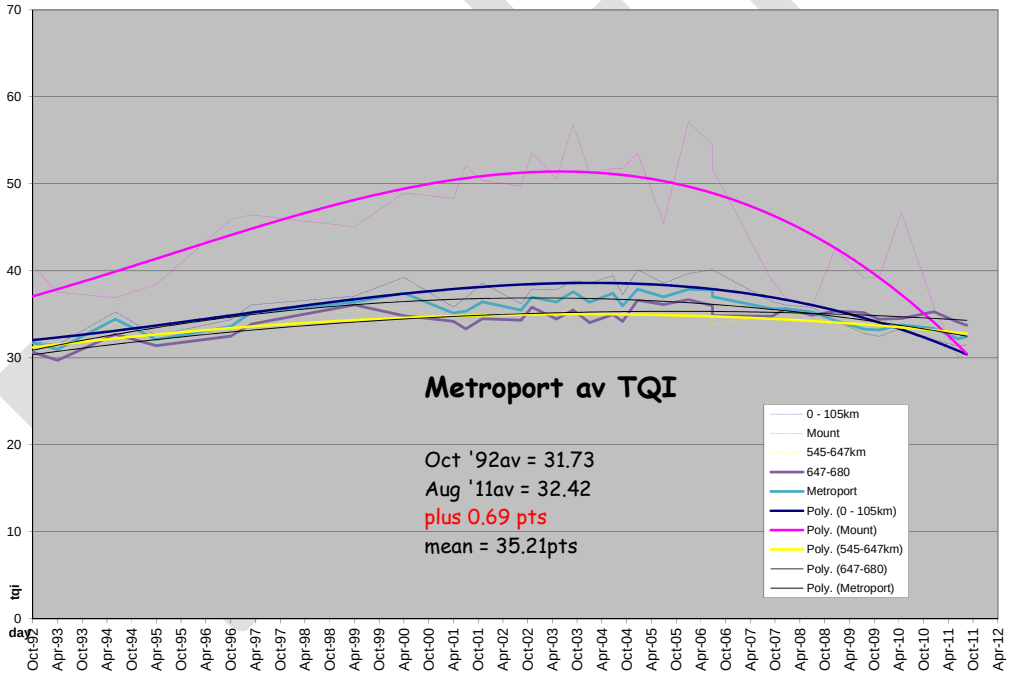
Route	TSR targeted with original spend levels	TSR credible future range – revised spend levels
NIMT	28	35- 40
MetroPort	17	25-30
Coal	36	45–50
MSL	34	40-45
MNL	25	35-40
Milk	9	20

The business should allow for an increase of around 5% per annum in the kms under H40 from the calendar 2013 onwards.

Derailments will due to infrastructure causes will increase.

Implications for Asset Quality - TQI

TQI graphs for the main lines all show a similar positive (downward) trend to that for the MetroPort route below.



The key finding we can take from the graphs is that it takes a long time for the investments to filter through to TQI, but clearly the investments improve quality. A realistic assessment is that quality will start to fall, and we should expect over the period FY14-FY16 to go back up the curve at a rate no slower than we came down.

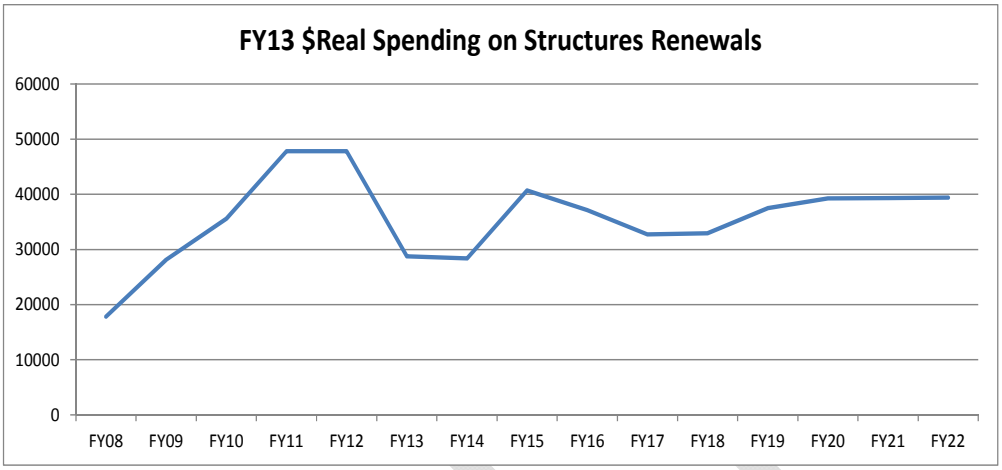
Track		Metric	FY13 ($M)	Comments	FY13 ($M)	FY14 ($M)	FY15 ($M)
Major Renewals							
89361	**Relay**						
	- North of Waitakere		$ -		$ -		
	- Main Trunk		$ 385,183		$ 385,183		
	- Golden Triangle		$ 243,784		$ 243,784		
	- Central North Island		$ 115,764		$ 115,764		
	- West Coast		$ 32,288		$ 32,288		
	- South of Christchurch		$ 16,144		$ 16,144		
	- Yards		$ 237,421		$ 237,421		
	- Auckland Metro		$ 343,512		$ 343,512		
	- Wellington Metro		$ 586,852		$ 586,852		
	- Others				$ -		
	- Not Yet Allocated						
	SUBTOTAL RELAY		**$ 1,960,948**		**$ 1,960,948**	**$ -**	**$ -**
89362	**Rerail**						
	- North of Waitakere		$ 486,285		$ 486,285		
	- Main Trunk		$ 1,182,978		$ 1,182,978		
	- Golden Triangle		$ 1,224,144		$ 1,224,144		
	- Central North Island		$ 1,033,847		$ 1,033,847		
	- West Coast		$ 2,631,514		$ 2,631,514		
	- South of Christchurch		$ 283,650		$ 283,650		
	- Wairio		$ -		$ -		
	- Yards		$ 50,965		$ 50,965		
	- Auckland Metro		$ 156,668		$ 156,668		
	- Wellington Metro		$ 1,025,682		$ 1,025,682		
	- Others						
	- Not Yet Allocated						
	SUBTOTAL RERAIL		**$ 8,075,732**		**$ 8,075,732**	**$ -**	**$ -**
89365	**Face Resleepering**						
	- North of Waitakere		$ 95,368		$ 95,368		
	- Main Trunk		$ 7,802,281		$ 7,802,281		
	- Golden Triangle		$ 2,419,379		$ 2,419,379		
	- Central North Island		$ 1,417,283		$ 1,417,283		
	- West Coast		$ 2,309,654		$ 2,309,654		
	- South of Christchurch		$ 2,825,004		$ 2,825,004		
	- Wairio		$ -		$ -		
	- Yards		$ -		$ -		
	- Auckland Metro		$ 2,010,225		$ 2,010,225		
	- Wellington Metro		$ 1,065,142		$ 1,065,142		
	- Others						
	- Not Yet Allocated						
	SUBTOTAL FACE RESLEEPERING		**$ 19,944,335**		**$ 19,944,335**	**$ -**	**$ -**
89366	**Spot Resleepering**						
	- North of Waitakere		$ 658,470		$ 658,470		
	- Main Trunk		$ 672,062		$ 672,062		
	- Golden Triangle		$ 1,302,380		$ 1,302,380		
	- Central North Island		$ 968,551		$ 968,551		
	- West Coast		$ 447,060		$ 447,060		
	- South of Christchurch		$ 804,892		$ 804,892		
	- Wairio		$ -		$ -		
	- Yards		$ -		$ -		
	- Auckland Metro		$ 81,696		$ 81,696		
	- Wellington Metro		$ 795,335		$ 795,335		
	- Others						
	- Not Yet Allocated						
	SUBTOTAL SPOT RESLEEPERING		**$ 5,730,446**		**$ 5,730,446**	**$ -**	**$ -**
89367	**Turnouts installation / replacement**						
	- North of Waitakere		$ -		$ -		
	- Main Trunk		$ 894,758		$ 894,758		
	- Golden Triangle		$ 1,066,449		$ 1,066,449		
	- Central North Island		$ 442,476		$ 442,476		
	- West Coast		$ 365,469		$ 365,469		
	- South of Christchurch		$ 474,843		$ 474,843		
	- Wairio		$ -		$ -		
	- Yards		$ -		$ -		
	- Auckland Metro		$ 715,735		$ 715,735		
	- Wellington Metro		$ 589,524		$ 589,524		
	- Others		$ -		$ -		
	- Not Yet Allocated						
	SUBTOTAL TURNOUTS INSTALLATION/ REPLACEMENT		**$ 4,549,254**		**$ 4,549,254**	**$ -**	**$ -**
89370	**Level Crossing upgrades**						
	- North of Waitakere		$ 141,350		$ 141,350		
	- Main Trunk		$ 717,484		$ 717,484		
	- Golden Triangle		$ 228,771		$ 228,771		
	- Central North Island		$ 605,396		$ 605,396		
	- West Coast		$ 224,432		$ 224,432		
	- South of Christchurch		$ 280,426		$ 280,426		
	- Wairio		$ -		$ -		
	- Yards		$ 95,639		$ 95,639		
89389	- Auckland Metro		$ -		$ -		
89409	- Wellington Metro		$ 342,562	$150k	$ 342,562		
	- Others						
	- Not Yet Allocated						
	SUBTOTAL LEVEL CROSSING UPGRADES		**$ 2,636,059**		**$ 2,636,059**	**$ -**	**$ -**
Major Track Renewals							
	- North of Waitakere		$ 1,381,473		$ 1,381,473	-	-
	- Main Trunk		$ 11,654,745		$ 11,654,745	-	-
	- Golden Triangle		$ 6,484,906		$ 6,484,906	-	-
	- Central North Island		$ 4,583,317		$ 4,583,317	-	-
	- West Coast		$ 6,010,417		$ 6,010,417	-	-
	- South of Christchurch		$ 4,684,959		$ 4,684,959	-	-
	- Wairio				$ -	-	-
	- Yards		$ 384,025		$ 384,025	-	-
	- Auckland Metro		$ 4,378,129	Includes Passenger & Freight Yard budgets	$ 4,378,129	-	-
	- Wellington Metro		$ 4,700,000		$ 4,700,000	-	-
	- Others				$ -		
	SUBTOTAL MAJOR RENEWALS		**$ 44,261,970**		**$ 44,261,970**	**$ -**	**$ -**
Minor Renewals							
89376	**Ballast Cleaning Operations**						
	SUBTOTAL Ballast Cleaning Operations		$ -	Ballast cleaner will be parked up for FY13	$ -		
89368	**Ballast Supplied**						
	- North of Waitakere				$ -		
	- Main Trunk				$ -		
	- Golden Triangle				$ -		
	- Central North Island				$ -		
	- West Coast				$ -		
	- South of Christchurch				$ -		
	- Wairio				$ -		
	- Auckland Metro		$ 50,000		$ 50,000		

Track		Metric	FY13 ($M)	Comments	FY13 ($M)	FY14 ($M)	FY15 ($M)
	- Wellington Metro				$ -		
	- Yard				$ -		
	- Others		$ -		$ -		
	- Not Yet Allocated		$ 2,950,000		$ 2,950,000		
	Subtotal Ballast Supplied		$ 3,000,000		$ 3,000,000	$ -	$ -
	SUBTOTAL BALLAST CLEANING WORKS	0	**$ 3,000,000**		**$ 3,000,000**	**$ -**	**$ -**
89372	**Destress**						
	- North of Waitakere				$ -		
	- Main Trunk				$ -		
	- Golden Triangle				$ -		
	- Central North Island				$ -		
	- West Coast				$ -		
	- South of Christchurch				$ -		
	- Auckland Metro	3.33	$ 100,000	As per Metro detailed spreadsheet	$ 100,000		
	- Wellington Metro	13.33	$ 400,000	As per Metro detailed spreadsheet	$ 400,000		
	- Others				$ -		
	- Not Yet Allocated	233.33	$ 7,000,000		$ 7,000,000		
	SUBTOTAL DESTRESS (km)	250.00	**$ 7,500,000**		**$ 7,500,000**	**$ -**	**$ -**
89369	**Formation**						
	- North of Waitakere				$ -		
	- Main Trunk				$ -		
	- Golden Triangle				$ -		
	- Central North Island				$ -		
	- West Coast				$ -		
	- South of Christchurch				$ -		
	- Wairio				$ -		
	- Auckland Metro		$ 240,000		$ 240,000		
	- Wellington Metro		$ -		$ -		
	- Others				$ -		
	- Yard				$ -		
	- Not Yet Allocated		$ 9,401,260	TOTAL MINOR BUDGET of $10.5m for Formation, Fastenings & Joint Elim less Metro allocations to these projects	$ 9,401,260		
	SUBTOTAL FORMATION		**$ 9,641,260**		**$ 9,641,260**	**$ -**	**$ -**
89374	**Formation - Gopher operations**						
	SUBTOTAL FORMATION - GOPHER OPERATIONS		$ -	FY13 zero unless funded from Minors	$ -	$ -	
89371	**Installation of Track Fastenings**						
	- North of Waitakere				$ -		
	- Main Trunk				$ -		
	- Golden Triangle				$ -		
	- Central North Island				$ -		
	- West Coast				$ -		
	- South of Christchurch				$ -		
	- Wairio				$ -		
	- Auckland Metro		$ 200,000		$ 200,000		
	- Wellington Metro				$ -		
	- Others				$ -		
	- Yard				$ -		
	- Not Yet Allocated				$ -		
	SUBTOTAL TRACK FASTENINGS		**$ 200,000**		**$ 200,000**	**$ -**	**$ -**
89363	**Joint Elimination**						
	- North of Waitakere				$ -		
	- Main Trunk				$ -		
	- Golden Triangle				$ -		
	- Central North Island				$ -		
	- West Coast				$ -		
	- South of Christchurch				$ -		
	- Wairio				$ -		
	- Auckland Metro		$ 10,000		$ 10,000		
	- Wellington Metro		$ -		$ -		
	- Others				$ -		
	- Yard				$ -		
	- Not Yet Allocated				$ -		
	SUBTOTAL JOINT ELIMINATION		**$ 10,000**		**$ 10,000**	**$ -**	**$ -**
89375	**Mobile Flash Butt Welder**	welds					
	- North of Waitakere				$ -		
	- Main Trunk				$ -		
	- Golden Triangle				$ -		
	- Central North Island				$ -		
	- West Coast				$ -		
	- South of Christchurch		$ 500,000	Bluff	$ 500,000		
	- Wairio	$ 12,000	$ 1,500,000		$ 1,000,000		
	- Auckland Metro				$ -		
	- Wellington Metro				$ -		
	- Others				$ -		
	- Not Yet Allocated				$ -		
	SUBTOTAL MOBILE FLASH BUTT WELDER	$ 12,000	**$ 1,500,000**		**$ 1,500,000**	**$ -**	**$ -**
91477	**Additional Minor Renewals**						
	SUBTOTAL ADDITIONAL MINOR RENEWALS		$ -	No separate budget for FY13; included in Minor renewals	$ -	$ -	$ -
	Subtotal Minor Renewals						
	- North of Waitakere		$ -		$ -	$ -	$ -
	- Main Trunk		$ -		$ -	$ -	$ -
	- Golden Triangle		$ -		$ -	$ -	$ -
	- Central North Island		$ -		$ -	$ -	$ -
	- West Coast		$ -		$ -	$ -	$ -
	- South of Christchurch		$ 500,000		$ 500,000	$ -	$ -
	- Wairio		$ 1,000,000		$ 1,000,000	$ -	$ -
	- Yards		$ -		$ -	$ -	$ -
	- Auckland Metro		$ 600,000		$ 600,000	$ -	$ -
	- Wellington Metro		$ 1,048,740		$ 1,048,740	$ -	$ -
	- Others		$ -		$ -	$ -	$ -
	- Not Yet Allocated		$ 19,351,260	$9.4m for Minors (Formation, Fast & Joint Elim), $7.4m Destress, $3m Ballast	$ 19,351,260	$ -	$ -
	SUBTOTAL MINOR RENEWALS		**$ 22,500,000**		**$ 22,500,000**	**$ -**	**$ -**
89373	**Track Renewals Management**						
	- North of Waitakere		$ 161,916		$ 161,916		
	- Main Trunk		$ 1,366,000		$ 1,366,000		
	- Golden Triangle		$ 760,067		$ 760,067		
	- Central North Island		$ 537,190		$ 537,190		
	- West Coast		$ 704,454		$ 704,454		
	- South of Christchurch		$ 549,103		$ 549,103		
	- Yards		$ 45,010		$ 45,010		
89392	- Auckland Metro		$ 125,000	As per Metro detailed spreadsheet	$ 125,000		
89412	- Wellington Metro		$ 251,260	As per Metro detailed spreadsheet	$ 251,260		
	- Others				$ -		
	- Not Yet Allocated		$ -			$ 4,500,000	$ 4,500,000
	SUBTOTAL TRACK RENEWALS MANAGEMENT		**$ 4,500,000**		**$ 4,500,000**	**$ 4,500,000**	**$ 4,500,000**

Track		Metric	FY13 ($M)	Comments	FY13 ($M)	FY14 ($M)	FY15 ($M)
89377	**Rail Grinding**						
	- North of Waitakere						
	- Main Trunk	1218	$ 5,800,000		$ 5,800,000	$ -	
	- Golden Triangle	189	$ 900,000		$ 900,000	$ -	
	- Central North Island	441	$ 2,100,000		$ 2,100,000		
	- West Coast				$ -		
	- Southern South Island				$ -		
	- Auckland Metro	252	$ 1,200,000		$ 1,200,000		
	- Wellington Metro		$ -		$ -		
	- Others						
	- Not Yet Allocated					$ 11,250,000	$ -
	SUBTOTAL RAIL GRINDING (km)	2100	**$ 10,000,000**	Draft allocation at 12 July 2012; production schedule still to be confirmed	**$ 10,000,000**	**$ 11,250,000**	**$ -**
	Not yet allocated		**$ 15,159**		**$ 15,159**	$ 46,861,000	$ 65,425,000
	TOTAL		$ 81,277,129		**$ 81,277,129**	**$ 62,611,000**	**$ 69,925,000**
Total by Line Segment							
	- North of Waitakere		$ 1,543,389		$ 1,543,389	$ -	$ -
	- Main Trunk		$ 18,820,745		$ 18,820,745	$ -	$ -
	- Golden Triangle		$ 8,144,972		$ 8,144,972	$ -	$ -
	- Central North Island		$ 7,220,507		$ 7,220,507	$ -	$ -
	- West Coast		$ 6,714,871		$ 6,714,871	$ -	$ -
	- South of Christchurch		$ 5,734,062		$ 5,734,062	$ -	$ -
	- Wairio		$ 1,000,000	Mobile Flash Butt Welder	$ 1,000,000	$ -	$ -
	- Yards		$ 429,035		$ 429,035	$ -	$ -
	- Auckland Metro		$ 6,303,129		$ 6,303,129	$ 7,000,000	$ 7,000,000
	- Wellington Metro		$ 6,000,000		$ 6,000,000	$ 6,000,000	$ 6,000,000
	- Others		$ -		$ -	$ -	$ -
	- Not Yet Allocated		$ 19,366,419	$9.4m for Minors (Formation, Fast & Joint Elim), $7.4m Destress, $3m Ballast	$ 19,366,419	$ 49,611,000	$ 56,925,000
TOTAL INCLUDING PASSENGER SHARE OF METRO AREAS			**$ 81,277,129**		**$ 81,277,129**	**$ 62,611,000**	**$ 69,925,000**
	Funding Reconciliation						
	Metro Renewals (Passenger & Freight)	Auckland	$ 6,303,129		$ 6,303,129	$ 7,000,000	$ 7,000,000
		Wellington	$ 6,000,000		$ 6,000,000	$ 6,000,000	$ 6,000,000
METRO RENEWALS (PASSENGER & FREIGHT PORTIONS)			$ 12,303,129		$ 12,303,129	$ 13,000,000	$ 13,000,000
	TRACK BUDGET - FREIGHT PORTION		$ 68,974,000		$ 68,974,000	$ 49,611,000	$ 56,925,000
			$ 81,277,129		**$ 81,277,129**	**$ 62,611,000**	**$ 69,925,000**

6.2 STRUCTURES

The business plan materially reduces spending in FY13 and FY14 with spending then moving up to levels similar to FY10 as shown in the graph below.



KRG has the line group goals defined in section 2.2.8. The areas where the budget decisions run against those strategies are identified below.

Short term horizon

- Milk Route – modest increased risk of TSRs or surprises from structures
- Frankton to Mt Manganui – not moving as fast as possible to completely remove timber (1 year slower than achievable)
- MNL – greater acceptance of weather risks

Medium to long-term horizon

- NIMT – uncertainty, which will be quantified in FY13 on adequacy of provision for Steel Viaducts over 10-15 year horizon
- Coal Route and Oringi to Napier – uncertainty, which will be quantified in FY13 on adequacy of provision for Steel Viaducts over 10-15 year horizon

This renewals plan was constructed in part at a time when the extent of the reduction in track renewals was not contemplated.

A key deliverable by the November IAC is a reassessment of whether in FY14-15 more funding should be diverted from the bridge asset to the under ballast asset.

6.2.1 TIMBER REPLACEMENT

This business plan is based on the assumption that we can limit timber renewals for FY13 and FY14 without taking significant additional safety risk; although there will be performance risks

Using the same Line Group categories we can show the overall focus of the timber structure spend.

Line Group	FY13	FY14	FY15
Group 1 Lines			
Metro Lines	As agreed with Metro Funders		
Group 2 Lines			
NIMT: Waikanae to Hamilton	Nil	Nil	Nil
NIMT: Ham. to Pukekohe	all timber bar 1 bridge removed by Xmas 2012 – remaining bridge planned for FY15		
ECMT – Hamilton to POT	Nil	All timber removed by end of period	
NIMT – PN to Waikanae	Nil	Nil	Nil
Group 2A Lines			
Milk Route	Nil	Nil	Similar
MNL	Nil	Nil	One off spend
MSL	Low	Low but higher than historic levels	Medium but higher than historic levels
Coal Routes	25% of historic levels	50% Historic levels	Back to historic high levels
Oringi to Napier	Nil	Nil	Low
Golden Triangle Forestry	Nil	Nil	Low
Others			
Hokitika	Nil	Nil	Nil
Wairio	Nil	Nil	Nil

6.2.2 OTHER STRUCTURES

Viaducts

The first major life extension – Makatote – is budgeted at $12m spread evenly across FY15 and FY16 of which $1.2M is required for strengthening key structural elements to extend life by 50+ years.

Once the ratings review is complete we will re-rate all the viaducts and an AMP will be in place by December 2012.

Other Works

We are budgeting a reduced level of works for FY13 & FY14 in the other areas which includes:

- Culverts
- Sea and river protection
- Slope stability / ground engineering
- Steel corrosion and concrete bridges

As a consequence of the reduced spends we will hold a contingency of $4.0m per annum for event-driven renewals in FY13 and FY14. The goal is not to spend it, but for budgeting purposes we should assume it is spent.

Structures			FY13 ($M)	Comments on status of development	Project Manager	FY13 ($M)	FY14 ($M)	FY15 ($M)	FY16 ($M)	FY17 ($M)	FY18 ($M)	FY19 ($M)	FY20 ($M)
GROUND ENGINEERING & TUNNELS													
91799	- Auckland Metro		$ -			$ -	$ 750,000	$ 750,000					
91746	- Wellington Metro		$ 360,000			$ 360,000	$ 1,020,000	$ -	$ -	$ -	$ -	$ -	$ -
	- Others	BATCH		Slope stability studies									
	- Not Yet Allocated		$ 1,500,000			$ 1,500,000	$ 1,500,000	$ 3,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000
	SUBTOTAL Ground Engineering and Tunnels		**$ 1,860,000**			**$ 1,860,000**	**$ 3,270,000**	**$ 3,750,000**	**$ 5,000,000**	**$ 5,000,000**	**$ 5,000,000**	**$ 5,000,000**	**$ 5,000,000**
CULVERTS					L Kirwan								
	- Wellington Metro		$ 75,000			$ 75,000							
91900	- Not Yet Allocated		$ 1,000,000			$ 1,000,000	$ 1,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000
	SUBTOTAL CULVERTS		**$ 1,075,000**			**$ 1,075,000**	**$ 1,000,000**	**$ 3,000,000**	**$ 3,000,000**	**$ 3,000,000**	**$ 3,000,000**	**$ 3,000,000**	**$ 3,000,000**
RIVERS / SEA WALLS													
	- Northland	NAL											
	- NIMT	NIMT											
				Clarence: Coastal Protection Works 229.8 - 230.8 km.									
				Project approved during March. FY13		$ 2,000,000							
91887	- MNL	MNL	$ 2,000,000	spend forecasted for July-Oct	T Davies								
	- Golden Triangle	ECMT											
	- Milk Route	MNPL											
		PNGL											
	- Central North Island												
				Otira-Jacksons investigation into risks									
91870	- West Coast Coal	MID		from natural hazards	C Cruttwell	$ -	$ 500,000						
	- Westland Dairy	HOKI											
	- Southern South Island	MSL											
				Br 114 WL Erosion Protection									
91796	- Others	WL		Construction.	C Cruttwell								
	- Not Yet Allocated		$ 300,000	Coastal protection, monitoring		$ 300,000	$ 1,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000
	SUBTOTAL RIVERS / SEA WALLS		**$ 2,300,000**			**$ 2,300,000**	**$ 1,500,000**	**$ 3,000,000**	**$ 3,000,000**	**$ 3,000,000**	**$ 3,000,000**	**$ 3,000,000**	**$ 3,000,000**
STRUCTURES – Other than rail bridges													
	- Not Yet Allocated		$ -						$ 500,000	$ 500,000	$ 500,000	$ 500,000	$ 500,000
	SUBTOTAL Structures - Other than rail bridges		**$ -**			**$ -**	**$ -**	**$ -**	**$ 500,000**	**$ 500,000**	**$ 500,000**	**$ 500,000**	**$ 500,000**
STEEL & CONCRETE BRIDGE RENEWALS													
	- Northland												
	- NIMT	NIMT			various								
	- MNL	MNL											
	- Golden Triangle	ECMT											
				Incl Br 41 MNPL (painting of Central									
	- Milk Route	MNPL		span - truss)	MK								
	- Central North Island	PNGL						$ -					
	- West Coast Coal	MID											
	- Westland Dairy	HOKI	$ 3,200,000	Br 13 HOKI.	JC	$ 3,200,000	$ 300,000						
	- Southern South Island	MSL			RG			$ -					
				Impact Beams within Auckland Metro		$ 250,000							
91711	- Auckland Metro		$ 250,000	including Br 8 NAL									
				Corrosion Protection Tactical Plan									
	- Others	BATCH		Study Investigation Planning	ES								
	- Not Yet Allocated	Rapa	$ -										
	SUBTOTAL STEEL & CONCRETE BRIDGES		**$ 3,450,000**			**$ 3,450,000**	**$ 300,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
VIADUCTS													
	- Northland	NAL											
	- NIMT	NIMT		Br 179 NIMT (Makatote)	MK			$ 6,000,000	$ 6,000,000				
	- MNL	MNL											
	- Golden Triangle	ECMT											
	- Milk Route	MNPL											
				Br 145 PNGL FY13; Br 156 PNGL									
	- Central North Island	PNGL		FY14; various PNGL viaducts FY15		$ -	$ -	$ -					
	- West Coast Coal	MID											
	- Westland Dairy	HOKI											
	- Southern South Island	MSL											
				Study/Investigation/Planning - 91859				$ 1,000,000					
	- Others	BATCH		PERF for $240,000	RG								
	- Not Yet Allocated		$ 1,000,000			$ 1,000,000	$ 1,000,000						
	SUBTOTAL VIADUCTS		**$ 1,000,000**			**$ 1,000,000**	**$ 1,000,000**	**$ 7,000,000**	**$ 6,000,000**	**$ -**	**$ -**	**$ -**	**$ -**
DESIGN FEES for future years structure programme													
	- Not Yet Allocated		$ 1,000,000			$ 1,000,000	$ 1,500,000	$ 1,500,000					
`	**SUBTOTAL DESIGN FEES FUTURE YEARS**		**$ 1,000,000**			**$ 1,000,000**	**$ 1,500,000**	**$ 1,500,000**	**$ 1,000,000**	**$ 1,000,000**	**$ 1,000,000**	**$ 1,000,000**	**$ 1,000,000**
TIMBER BRIDGE REPLACEMENT PROGRAMME													
	Northland	NAL											

Structures			FY13 ($M)	Comments on status of development	Project Manager	FY13 ($M)	FY14 ($M)	FY15 ($M)	FY16 ($M)	FY17 ($M)	FY18 ($M)	FY19 ($M)	FY20 ($M)
						$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	NIMT												
91738	Br 299 & 300 NIMT Bridge Replacement		$ 2,500,000	} A2H Package A NIMT	M Breslin	$ 2,500,000							
91519	Br 312 NIMT Renewal		$ 1,000,000	} A2H Package A NIMT	M Breslin	$ 1,000,000							
				Auckland Metro Bridge									
91739	Br 332 NIMT Renewal		$ 560,000	} A2H Package A NIMT	M Breslin	$ 560,000							
	Br 272 NIMT (running beams)		$ -			$ -							
91853	Br 273 NIMT				R Scott		$ 500,000	$ 4,000,000					
91852	Br 279-282 NIMT		$ 9,000,000		R Scott	$ 9,000,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -
				Joint budget for these bridges -					$ 10,000,000				
	Br 201 - 209, 229, 241 NIMT	NIMT		investigations & options reports	MK								
91729	Br 202 NIMT Timber Bridge Elimination Stage 1						$ 1,000,000						
91737	Br 241 NIMT Timber Bridge Elimination Stage 1						$ 1,000,000						
	Br 38A NIMT												
			$ 13,060,000			$ 13,060,000	$ 2,500,000	$ 4,000,000	$ 10,000,000	$ -	$ -	$ -	$ -
	MNL												
			$ -			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Golden Triangle	ECMT											
91720	Br 50 ECMT			To coincide with Apata loop extension.									
91849	Br 52 ECMT					$ -	$ 1,500,000						
91848	Br 28 ECMT					$ -	$ 1,500,000						
	Br 6 ECMT						$ 1,000,000						
			$ -			$ -	$ 4,000,000	$ -	$ -	$ -	$ -	$ -	$ -
	Milk Route	MNPL											
91298	Br 9 PNGL Railbeam renewal		$ -		JC	$ -							
	Br 21 PNGL (railbeams)					$ -	$ 250,000						
	Br 22 PNGL (railbeams)					$ -	$ 250,000						
	Br 15A PNGL (replace timber spans)					$ -							
	Br 15CA PNGL (TSEP)						$ -		$ 750,000				
	Br 20CA PNGL (TSEP)						$ -		$ 750,000				
	Br 26A PNGL (new bridge)						$ -		$ 600,000				
				Forecast increased Feb for Br 30 & 31									
91847	Br 30 &31 PNGL			PNGL not previously included									
	Br 44 MNPL (Pier 9)					$ -	$ 300,000						
			$ -			$ -	$ 800,000	$ -	$ 2,100,000	$ -	$ -	$ -	$ -
	Central North Island	PNGL											
	Br 156 PNGL new railbeams				Hamish F								
	Br 161 PNGL					$ -			$ 300,000				
	Br 204 PNGL												
	TSEPs (168, 170, 170CA, 177, 178)					$ -			$ 400,000				
			$ -			$ -	$ -	$ -	$ 700,000	$ -	$ -	$ -	$ -
	West Coast Coal												
				BOL cancelled June 6th; will carry over									
91104	Br 41 MID			to FY13	Hamish F								
90600	Br 43 MID Renewal				Hamish F								
91616	Br 61 MID Renewal		$ 1,200,000	Detailed design approved Apr12	Aurecon	$ 1,200,000							
91617	Br 72 MID Renewal			Detailed design approved Apr12	Aurecon		$ 2,000,000						
91604	Br 10 SNL Renewal			Options Reports	Aurecon		$ 600,000						
91612	Br 127 SNL Renewal		$ 300,000	Options Reports	Aurecon	$ 300,000							
91608	Br 14 Rapahoe Renewal		$ -	Options Reports	Aurecon		$ 500,000						
	TSEPs												
			$ 1,500,000			$ 1,500,000	$ 3,100,000	$ -	$ -	$ -	$ -	$ -	$ -
	Westland Dairy												
91888	Br 8 HOKI - steel span & timber replacement			Additional works added March 2012									
91889	Br 10 HOKI - bracing renewal			Additional works added March 2012									
91890	Br 21 HOKI - culvert replacement			Additional works added March 2012									
	Not yet Allocated												
			$ -			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Southern South Island												
91047	Br 105 MSL Renewal			Delayed until 2013/14 due to funding	C Young		$ 4,000,000						
91471	Br 321 MSL Renewal		$ 1,000,000		C Young	$ 1,000,000							
91843	Br 352 MSL				C Young								
91844	Br 359 MSL				C Young								
91893	MSL - Minor Bridge Replacement 2012				C Young								
	Br 107 MSL						$ 670,000						
	Br 119 MSL						$ 670,000						
	Br 133 MSL						$ 670,000						
	Br 194 MSL						$ 2,000,000						
			$ 1,000,000			$ 1,000,000	$ 8,010,000	$ -	$ -	$ -	$ -	$ -	$ -
	Others												

Structures			FY13 ($M)	Comments on status of development	Project Manager	FY13 ($M)	FY14 ($M)	FY15 ($M)	FY16 ($M)	FY17 ($M)	FY18 ($M)	FY19 ($M)	FY20 ($M)
91476	Br 65 WL - Design & Investigation		$ 65,000	Wellington Metro	ND	$ 65,000							
	Br 107CA WL			Wairarapa Line		$ -							
	Br 65 WL - Build			Wellington Metro		$ -	$ 405,000	$ 595,000					
	Br 56 WL			Wellington Metro			$ 50,000	$ 750,000					
			$ 65,000			$ 65,000	$ 455,000	$ 1,345,000	$ -	$ -	$ -	$ -	$ -
	SUBTOTAL TIMBER BRIDGES		**$ 15,625,000**			**$ 15,625,000**	**$ 18,865,000**	**$ 5,345,000**	**$ 12,800,000**	**$ -**	**$ -**	**$ -**	**$ -**
STRUCTURES MINOR CAPEX													
	- NIMT												
	- MNL												
	- Golden Triangle												
	- Central North Island												
	- West Coast Coal												
	- Westland Dairy												
	- Southern South Island												
	- Auckland Metro		$ 690,000	Includes $400k Br 8 Newmarket & Br 48 NAL tyfo wrapping		$ 690,000							
	- Wellington Metro												
	- Others		$ -	Includes $40k for NAL									
91462	- Not Yet Allocated		$ 3,000,000			$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000
	SUBTOTAL STRUCTURES MINOR CAPEX		**$ 3,690,000**		**K Redman & G Boorman**	**$ 3,690,000**	**$ 3,000,000**	**$ 3,000,000**	**$ 3,000,000**	**$ 3,000,000**	**$ 3,000,000**	**$ 3,000,000**	**$ 3,000,000**
UNALLOCATED													
	Unallocated / (Overallocated)		**($ 1,650,000)**	Overallocated FY13: Clarence $2m, less $350k general		**($ 1,650,000)**	**($ 2,760,000)**	$ 15,800,000	$ 5,700,000	$ 20,715,000	$ 21,963,000	$ 28,244,000	$ 29,560,000
	Minor Capex (for Contractors, to be managed by MSE)		$ 2,000,000			$ 2,000,000	$ 1,000,000	$ 1,000,000					
	Contingency held for scale back risks		$ 1,000,000			$ 1,000,000	$ 1,000,000	$ 1,000,000					
	SUBTOTAL CONTINGENCY		$ 3,000,000			$ 3,000,000	$ 2,000,000	$ 2,000,000	$ -	$ -	$ -	$ -	$ -
	TOTAL		**$ 31,350,000**			**$ 31,350,000**	**$ 29,675,000**	**$ 44,395,000**	**$ 40,000,000**	**$ 36,215,000**	**$ 37,463,000**	**$ 43,744,000**	**$ 45,060,000**
	Split by Line Segment			**Split by Line Segment**									
	Golden Triangle		$ -	Golden Triangle		$ -	$ -	$ -					
	Central North Island		$ -	Central North Island		$ -	$ 800,000	$ -					
	Main Trunk		$ 14,500,000	Main Trunk		$ 14,500,000	$ 2,500,000	$ 10,000,000					
	West Coast		$ 4,700,000	West Coast		$ 4,700,000	$ 3,900,000	$ -					
	South of Chch		$ 1,000,000	South of Chch		$ 1,000,000	$ 8,010,000	$ -					
	Auckland Metro		$ 1,500,000	Auckland Metro		$ 1,500,000	$ 750,000	$ 750,000					
	Wellington Metro		$ 500,000	Wellington Metro		$ 500,000	$ 1,475,000	$ 1,345,000					
	Others / Not yet Allocated		$ 6,150,000	Others / Not yet Allocated		$ 6,150,000	$ 6,240,000	$ 30,300,000					
	Contingency		$ 3,000,000			$ 3,000,000	$ 2,000,000	$ 2,000,000					
	SUBTOTAL - Structures funding		**$ 31,350,000**	**SUBTOTAL**		**$ 31,350,000**	**$ 29,675,000**	**$ 44,395,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
	Funding Reconciliation												
	Structures Budget - Freight Funding		$ 27,750,000			$ 27,750,000	$ 29,000,725	$ 42,720,725					
	NZTA - Br 13 HOKI		$ 1,600,000	Funding from NZTA based on about 50% of total costs (Steel Bridge)		$ 1,600,000							
				Subtotal		$ 29,350,000	$ 29,000,725	$ 42,720,725					
	Auckland Metro		$ 1,500,000	Linking to individual Metro spreadsheets		$ 1,500,000	$ 549,016	$ 549,016					
	Wellington Metro		$ 500,000	Linking to individual Metro spreadsheets		$ 500,000	$ 1,125,259	$ 1,125,259					
			$ 31,350,000			$ 31,350,000	$ 30,675,000	$ 44,395,000					

6.3 SIGNALS AND TELECOMMUNICATIONS

Overall

A substantial part of the signals and telecommunications renewals is being subsumed by the capital upgrade projects. The levels of renewal expenditure are therefore relatively modest; items of note are covered below.

General

We have continued with the allocation of $1.8m per annum for general non – specified renewals which generally have a value of less than $20k per job.

Main Trunk

Renewals of CTC and NIMT SCADA have been combined with the BSIP initiatives identified in section 7.1.

Golden Triangle

Renewal of CTC and fibre has been coordinated with the Forestry loop work identified in section 7.2 but stay as renewals. It is possible this work may be partially deferred until FY14 or FY15.

Lower North Island

Renewals work on the Whareroa to Marton section delivered through Milk Route project in section 7.3.

West Coast

Most renewals delivered through the Coal Route project in section 7.4.

Southern South Island

Renewals in Christchurch and Dunedin are covered in section 7.5.

Radio Communications

The agreed scope of radio network upgrade project concludes in FY12; all nodes on the network have had some measure of improvement, and the network as a whole is significantly less vulnerable in the event of single point failures. The renewals plan allows for the benefits to be consolidated in FY13.

Product being delivered not described elsewhere

- 10 level crossing monitors – unless funding can come from Public Good for funding of a further 10
- 10 upgraded, 1 renewed and 2 third party level crossings – Public Good funded
- 50 shelf mounted relays eliminated

Signals renewals delivered elsewhere

- Wellington Metro area
  - Power supply
  - Searchlight signal elimination

    - Petone and Taita junctions to CBI
- NICE
- Fibre Waikanae to Palmerston North
- Milk Route stage 1
- Coal Route
- Christchurch area
- Dunedin area
- ECMT FOTS and work around Forestry loops
- AEP

Signals and Telecommunications					Project Manager	FY13 ($M)	FY14 ($M)	FY15 ($M)	FY16 ($M)	FY17 ($M)	FY18 ($M)	FY19 ($M)	FY20 ($M)
GENERAL													
	National												
91171	Harvest monitor LCA monitoring systems	Renewals	$ 95,000		J Skilton	$ 95,000	$ 195,000	$ 195,000	$ 195,000	$ 195,000	$ 195,000	$ 195,000	$ 195,000
91172	Nickel Cadmium Battery Replacements	Renewals	$ 104,000		J Skilton	$ 104,000	$ 104,000	$ 104,000	$ 104,000	$ 104,000	$ 104,000	$ 104,000	$ 104,000
91490	Install signalling & interlocking on Turnouts	Renewals	$ 350,000		R Wadsworth	$ 350,000	$ 350,000	$ 350,000	$ 350,000	$ 350,000	$ 350,000	$ 350,000	$ 350,000
	Power Supply renewal	Renewals	$ -			$ -	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000
	Obsolete Track Circuit Elimination	Renewals	$ 100,000		J Skilton	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000
	Searchlight Signal Elimination	Renewals	$ -			$ -	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000
	Shelf Mount Relay Elimination	Renewals	$ 100,000		J Skilton	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000
	FOTS Diversity	Renewals	$ 200,000		J Skilton	$ 200,000	$ 200,000						
	Realflex Upgrade	Renewals						$ 300,000					
	Signals Projects	Renewals	$ 40,000		J Skilton	$ 40,000	$ 40,000	$ 40,000	$ 40,000	$ 759,000	$ 870,000	$ 984,000	$ 1,101,000
	NIMT												
	Sig Box Rationalisation Te Rapa	Renewals							$ 500,000				
	Pukekohe Resignal	Renewals							$ 2,000,000				
	Less contribution from AT								-$ 1,500,000				
	MNL												
	Golden Triangle												
91056	Hamilton-Ngaruawahia, ECMT, Kinleith Branch CTC System Replacement	Renewals	$ 200,000	Project deferred to FY13. Waiting for a comms project to be completed	J Skilton	$ 200,000							
	Te Puke to Hawkens CTC replacement	Renewals	$ 1,500,000			$ 1,500,000	$ 1,300,000	$ -					
91776	ECMT Fibre Optic cable connect signal Loc's	Renewals	$ 75,877		T Burke	$ 75,877							
	ECMT FOTS	Renewals	$ 200,000	24/2/12 JTS advised to transfer to FY13	T Burke	$ 200,000	$ -	$ -					
	Milk Route												
91630	Manawatu Gorge Replacement tunnel radios	Renewals	$ 40,558	Update 15/11/11: work now planned for April-June 2012	K Robinson	$ 40,558							
	Central North Island												
	Wellington to Napier FOTS	Renewals	$ -			$ -	$ 200,000						
	West Coast Coal												
90869	Otira Tunnel Communications and CTC Upgrade		$ 110,000			$ 110,000							
	Southern South Island												
91495	Denmark St pedestrian gates level crossing	Renewals	$ 237,786		J Skilton	$ 237,786							
	Less third party recovery		-$ 190,000			-$ 190,000							
	F1 CTC Replacement MSL	Renewals			J Skilton			$ 450,000					
	MSL Cable replacement	Renewals			J Skilton			$ 200,000					
	General Renewals	Renewals	$ 1,800,000		R Wadsworth	$ 1,800,000	$ 1,800,000	$ 1,800,000	$ 1,800,000	$ 1,800,000	$ 1,800,000	$ 1,800,000	$ 1,800,000
	Not specified / (Overallocated)		($ 183,221)	Includes $300k Radio Network project carry over		($ 183,221)	($ 189,000)	($ 39,000)					
			$ 4,780,000			$ 4,780,000	$ 4,400,000	$ 3,800,000	$ 3,889,000	$ 3,608,000	$ 3,719,000	$ 3,833,000	$ 3,950,000
RADIO COMMUNICATION													
90187	Radio upgrade, non site installations	Renewals	$ 220,000	{	G Cooper	$ 220,000							
90188	Radio network installations	Renewals	$ 500,000	Additional funding to complete current project scope {	G Cooper	$ 500,000							
	Extra Radio Upgrades		$ 300,000			$ 300,000	$ 200,000	$ 500,000	$ 500,000	$ 500,000	$ 500,000	$ 500,000	$ 500,000
			$ 1,020,000			$ 1,020,000	$ 200,000	$ 500,000	$ 500,000	$ 500,000	$ 500,000	$ 500,000	$ 500,000
90757	**Weigh In Motion Improvements**		$ -	Final project completion costs	P Coles	$ -	$ -	$ -					
	Total renewals		$ 5,800,000			$ 5,800,000	$ 4,600,000	$ 4,300,000	$ 4,389,000	$ 4,108,000	$ 4,219,000	$ 4,333,000	$ 4,450,000

6.4 TRACTION & ELECTRICAL

NIMT 25kV System

Renewals stay constant over the period targeting known issues. The controls of the system, which pose a greater risk to service continuity, are covered in the signals and telecommunications budget within Upgrades.

By the end of FY13 we will develop an AMP (section 5.11) that has two potential futures for the 25kV system being continued operation for the foreseeable future or shut down in around 10 years if at that time the EFs are withdrawn from service.

General electrical and lighting towers

This is the subject of an AMP investigation to be completed by early FY13.

The Business Plan anticipates that it will highlight an asset group beyond normal life expired thresholds, and inconsistent with modern electrical standards meaning many modest changes to the infrastructure may trigger a requirement to upgrade. We will also be asking the question “why are we still in the 11kV business?” and whether there are alternative delivery models for what is generic power supply.

We have $600k per annum for renewals in FY13 growing to $800k in outer years

	Traction & Electrical	FY13 ($M)	Comments	Project Manager	FY13 ($M)	FY14 ($M)	FY15 ($M)	FY16 ($M)	FY17 ($M)	FY18 ($M)	FY19 ($M)	FY20 ($M)
General Electrical												
	Northland - NAL											
	NIMT											
	MNL											
	Golden Triangle - ECMT											
	Milk Route MNPL PNGL											
	Central North Island											
	West Coast Coal - MID											
	Midland 3.3kV - Cable Tunnels 9 & 10			L Scott	$ -	$ 100,000						
	Midland 3.3kv - Cable Kowhai Bridge	$ 20,000		L Scott	$ 20,000							
	Arthurs Pass 3.3kv substation	$ 60,000		L Scott	$ 60,000							
91443	Otira Tunnel High Voltage Electrical - Equipment renewal	$ 42,543		L Scott	$ 42,543	$ -						
	Westland Dairy - HOKI											
	Southern South Island - MSL											
	Others											
	Not Yet Allocated											
93 Acct Programmed Renewals Electrical												
	Floodwork Lighting Towers remedial renewals	$ 200,000			$ 200,000							
	3.3kV pole line - Midland & Heathcote to Rolleston on MSL	$ 50,000			$ 50,000							
	Minor yard lighting upgrades Coal Route	$ 60,000			$ 60,000							
	General electrical renewals	$ 100,000			$ 100,000							
89343	**SUBTOTAL 93 Acct Programmed Renewals Electrical**	$ 410,000		L Scott	$ 410,000	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ 400,000
	General Electrical Improvements NOS	$ -			$ -	$ 320,000	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ 400,000
91297	Network lighting towers - height safety upgrade	$ 60,000		A Stokes	$ 60,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	SUBTOTAL GENERAL ELECTRICAL - FREIGHT	**$ 592,543**			**$ 592,543**	**$ 820,000**	**$ 800,000**	**$ 800,000**	**$ 800,000**	**$ 800,000**	**$ 800,000**	**$ 800,000**
NIMT Electrical												
91588	NIMTE Rukuhia Pad mounted poles and Te Kawa leaning poles	$ 200,000		M Keenan	$ 200,000	$ 200,000	$ -	$ -	$ -	$ -	$ -	$ -
	Wellington yard Cleaning Shelter sub replace 11kV switchgear	$ 50,000	Project moved to FY14 with design starting in the last part of FY13 due to budget constraints. Funding with GWRC to be resolved.	A Neilson	$ 50,000	$ 200,000						
	NIMTE VCB midlife overhaul (vacuum circuit breakers)	$ 80,000		A Neilson	$ 80,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -
91543	NIMT 25kv Electrified Area - Minor Traction Renewals	$ 16,000		A Neilson	$ 16,000	$ -						
	Future unspecified works	$ -			$ -	**$ 18,000**	**$ 406,000**	**$ 406,000**	**$ 1,049,000**	**$ 1,099,000**	**$ 1,150,000**	**$ 1,203,000**
	SUBTOTAL NIMT ELECTRICAL	**$ 346,000**			**$ 346,000**	**$ 418,000**	**$ 406,000**	**$ 406,000**	**$ 1,049,000**	**$ 1,099,000**	**$ 1,150,000**	**$ 1,203,000**
	Total traction	**$ 938,543**			**$ 938,543**	**$ 1,238,000**	**$ 1,206,000**	**$ 1,206,000**	**$ 1,849,000**	**$ 1,899,000**	**$ 1,950,000**	**$ 2,003,000**

6.5 PLANT AND EQUIPMENT RENEWALS

The business plan provides for relatively high levels of capital expenditure to clean out the legacy assets and to drive productivity. The investment generally is based on the following business models.

Concrete sleeper task

- The supply of sleepers will be with outside contractors (covered in Track Renewal Budget)
- All 40+ year wagons for transporting sleepers will be out of the fleet and new wagons (ex Hillside) owned by Network towed by Freight will be in use

Rail Replacement Task

- Post grinding in FY14 it is forecast that rail replacement will fall significantly based on average life of 300MGT. This means the EWR (Rail Wagon Replacement) task has been deferred and in future the numbers of wagons required should fall.
- Scope exists to review the manning of the rail weld depot with contract resources delivering the services for a lesser amount of time each year.

Ballast Cleaning and Replacement task

- The purchase of ballast remains a Track Renewal accountability
- The delivery of ballast by rail to sites will remain a split accountability
- Freight locos and drivers delivering to site
- Ballast in wagons owned and filled by Network and XXXX

The operation of the ballast cleaner group will be changed to fit an agreed SLA between Freight and Network with respect to access opportunities and supply of Freight resources. In, in FY13-FY14 we are reducing the extent of ballast cleaning while we address other track priorities and re-deploying the crew to the MFBW.

Purchase of the additional YJ ballast wagons has been deferred until at least such time as the ballast cleaning task returns to a higher level.

Tamping, Line and Levelling Tasks

- Replacement of 3 tampers is budgeted
- Continued operation of 3 other tampers
- All machines operated by KRN

Measurement Tasks

We have investigated replacement options and developed a strategy to minimise capital expenditure in the expectation that emerging technology will obviate the need for some of the equipment. This is described further below.

The present

- Service currently provided by a KRN owned specialist vehicle solely equipped for measurement.
- Equivalent replacement for a specialist vehicle would cost in the order of $10m capex plus operating costs – or an equivalent leasing cost arrangement

The long term future (prospective)

- Wagons and locos conducting day to day business having instrumentation fitted to routinely deliver condition data noting that this is developing technology which is not yet at a stage where rail organisations are prepared to rely on this as the primary source of data

The technology is there at the moment for the future state, but not yet in use as a primary source of track information.

The budget we propose is based on the following strategy, which will have to be accompanied by a change in the track code and our safety system.

- An allowance for some measurement equipment for Freight rolling stock – actual technology still to be confirmed
- An allowance for the communications and data processing systems necessary to accept the higher volumes of routine data and link to Sirius, and the track engineering approval processes
- Allowance to re-platform the current measurement system on the existing car – the goal being a life extension of 5-8 years.

Rail Welding Task

No material plant investment is planned in the 3 year period. To reduce the fixed cost of this activity with reduced rail replacement and the wind down of major projects we will look at an outsourced partnership to operate the Otahuhu rail weld facility.

General Maintenance Task

Minor plant is shown as a capitalised lease.

Plant & Equipment Summary

By the end of FY15, if this programme is approved, KRN will have substantially eliminated the legacy assets from the business and thereafter be on a more routine renewal path.

Plant & Equipment		FY13 ($M)	Comments	Project Manager	FY13 ($M)	FY14 ($M)	FY15 ($M)	FY16 ($M)	FY17 ($M)	FY18 ($M)	FY19 ($M)	FY20 ($M)
Renewals Budget												
	P&E Renewals											
91917	Track machine engine overhauls	$ 200,000	5 engine overhauls planned & scheduled	D Fortune	$ 200,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000
91673	TMMP - Track Machine Maintenance Programme	$ 815,000	Scheduled maintenance.	P Morton	$ 815,000	$ 1,940,000	$ 1,530,000	$ 1,530,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000
91624	TRP - Tamper Replacement Programme	$ 11,278,696	3 x tamper & regulator pairs.	D Fortune	$11,278,696	$ -	$ -	$ -				
	P&E Upgrades											
91109	Under Bridge Inspection Vehicle	$ 200,000		D Fortune	$ 200,000	$ 200,000	$ 200,000	$ 200,000				
91552	Special purpose high rail trucks	$ 258,875		D Fortune	$ 258,875	$ -	$ -					
91037	Railweld replacement plant (upgrade)	$ 73,702		D Fortune	$ 73,702							
91752	Minor Plant Purchases	$ 1,300,000		P Morton	$ 1,300,000	$ 1,300,000	$ 1,300,000	$ 1,300,000	$ 1,300,000	$ 1,300,000	$ 1,300,000	$ 1,300,000
91784	CSL Upgrade (incl Bogies & Sleeper Handling Crane x2)	$ 240,000		D Fortune	$ 240,000	$ -	$ -					
91830	Load Cells	$ 18,000		D Fortune	$ 18,000							
	Additional Bridge Inspection Vehicle					$ 600,000						
	RM62 Ballast Cleaner Replacement						$ 4,500,000					
	CSL Bulldozer						$ 100,000					
	CSL Gantry					$ 100,000						
	Front End Loaders						$ 40,000					
	Rail Weld - Plant Maintenance & Upgrades					$ 520,000	$ 400,000					
	Other Plant Overhauls							$ 2,000,000				
	EWR hand brake upgrade	$ 50,000	Design req'd - Hillside kitset.	A Hunt	$ 50,000							
91591	VRP - Vehicle (HRV & LIV) Replacement Programme	$ 813,800	Revised numbers represent capitalised leases.	D Fortune	$ 813,800	$ 1,449,000	$ 2,028,600	$ 2,608,200	$ 3,208,200	$ 3,808,200	$ 4,408,200	$ 5,008,200
91631	YL1 - YD Side dump wagon fleet replacement (17 No.)	$ 3,939,066		B Hudson	$ 3,939,066	$ -	$ -					
90723	EP2 - Ballast plough vans (7 No.)	$ 3,006,180		B Hudson	$ 3,006,180	$ -	$ -					
91832	EM80 Life Extension	$ 1,269,218		K Robertson	$ 1,269,218	$ 1,000,000	$ -					
	EM80 Life Extension & Smaller Measurement Vehicles	$ 1,230,782	Remaining budget, not yet approved		$ 1,230,782							
	June 2012 - adjustment to FY13 budget	($676,958)			($676,958)				$ 2,041,800	$ 1,941,800	$ 1,841,800	$ 1,741,800
	Total	**$ 24,016,361**			**$ 24,016,361**	**$ 7,359,000**	**$ 10,348,600**	**$ 7,888,200**	**$ 8,300,000**	**$ 8,800,000**	**$ 9,300,000**	**$ 9,800,000**

6.6 METRO RENEWALS AUCKLAND

The table attached shows total renewals budget for the Auckland Metro Area. This is funded from both Auckland Transport and KiwiRail on pre-agreed percentage basis.

Auckland Transport is a key stakeholder and a major element of managing the renewals programme will be the management of that relationship.

Auckland Metro			TID	Passenger Portion (56.2%)	Freight Portion (42.8%)	FY13 ($M)	Comments
Project #	SWO #						
Major Track Renewals							
		Main Line Renewals					
		NIMT 679.483 Urban Relay New rail / Conc 700mm	66745			$ 255,690	
		NIMT 664 Relay SH rail/SH sleepers	52227			$ 10,332	
		NIMT 664 Relay SH rail/SH sleepers	63159			$ 6,458	
89380		**Relay**					
		NAL 10.56 Urban Rerail New	70084			$ 70,331	
		NAL 20.163 Urban Rerail New	63738			$ 32,255	
		New 0.895 Urban Rerail New	75768			$ 54,082	
		New 2.172 Urban Rerail New	76448				Deferred
89381	3011562	R NAL 27.120 UG Rerail New	REL			$ 2,804	
	3011575	New NAL 10.55 to 10.86	70092				Deferred
	3011561	New NAL 11.3 to 11.52	67894				Deferred
	3011590	New NAL 13.19 to 13.32	76380				Deferred
		Rerail					
		NAL 15.828 Urban Face Resleeper Conc.700mm	61495			$ 241,540	
		NAL 28.746 Urban Face Resleeper Conc.700mm	66805			$ 100,775	
		NAL 33.885 Urban Face Resleeper Conc. 600mm	83495			$ 163,275	
		NAL 2.985 Urban Face Resleeper Conc.700mm	51504			$ 237,381	
		NAL 28.168 Urban Face Resleeper Conc.700mm	66808			$ 182,674	
		NIMT 677.849 Urban Face Resleeper Bridge	58889			$ 31,940	
		NIMT 636.18 Urban Face Resleeper Conc.700mm	50860			$ 205,389	
		NIMT 655.528 Urban Face Resleeper Conc.700mm	93372			$ 47,028	
		NIMT 668.586 Urban Face Resleeper Conc.700mm	58736			$ 767,168	
89384		**Face Resleepering**					
		NAL 0.39 Urban T/O Spot Resleeper 25%	61261			$ 3,125	
		NAL 0.371 Spot Resleeper SH 50%	21893			$ 8,138	
		NIMT 629.15 Urban T/O Spot Resleeper 25%	62178			$ 4,167	
		NIMT 631.818 Urban T/O Spot Resleeper 25%	69144			$ 5,000	
		NIMT 653.4 Urban Spot Resleeper Conc. 25%	93292			$ 37,780	
		NIMT 668.03 T/O Spot Resleeper 25%	24415			$ 5,208	
89385		**Spot Resleepering**					
		NAL 12.7 Urban Turnout New 1:9 50kg	66052			$ 110,210	
		NAL 13.165 Urban Turnout New 1:12 50kg	69147			$ 145,635	
		NIMT 631.847 Urban Turnout New 1:18 50kg	81611			$ 174,716	
		NIMT 663.872 Urban Turnout New 1:9 50kg	67729				Deferred
		NIMT 679.965 Urban Turnout Special Design	66699				Deferred
		NIMT 680.4 Urban Turnout New 1:12 50kg	63387				Deferred
		NIMT 663.904 Urban Turnout New 1:9 50kg	65592				Deferred
89386		**Turnouts (install or replace)**					
89389		**Level Crossing renewals**					
		Subtotal Major Track Renewals		**$ 1,631,542**	**$ 1,271,558**	**$ 2,903,100**	Major renewals **excluding** Yard Renewals
Minor Track Renewals							
		Joint Elimination					
		SUBTOTAL JOINT ELIMINATION		$ 5,620	$ 4,380	$ 10,000	
89387		**Placement of Ballast or fines**					
	3013063	NIMT 648 Urban Ballast - Shoulders LHS	93458			$ 11,000	
		SUBTOTAL BALLAST		$ 28,100	$ 21,900	$ 50,000	
89388		**Formation upgrade**					
		SUBTOTAL FORMATION UPGRADE		$ 134,880	$ 105,120	$ 240,000	
89390		**Installation of track fastenings**					
		SUBTOTAL INSTALLATION OF TRACK FASTENINGS		$ 112,400	$ 87,600	$ 200,000	
		Track Destressing					
		SUBTOTAL DESTRESS		$ 94,830	$ 73,906	$ 168,736	

Auckland Metro			TID	Passenger Portion (56.2%)	Freight Portion (42.8%)	FY13 ($M)	Comments
		Rail Grinding					This work is not yet fully committed but it is probable that it will occur. At this stage retain in budget but confirm final estimate early in FY13 once arrangements settled
		Grinding					
		SUBTOTAL RAIL GRINDING		$ 674,400	$ 525,600	$ 1,200,000	
		Subtotal Minor Track Renewals		**$ 1,050,230**	**$ 818,506**	**$ 1,868,736**	
		Yard Renewals - Passenger (100%)					
		Subtotal Yard Renewals - Passenger		$ 1,302		**$ 1,302**	
		Yard Renewals - Freight (100%)					
		Subtotal Yard Renewals - Freight			**$ 404,738**	**$ 404,738**	
89392	3012425	**Auckland Metro Management salaries**		$ 70,250	$ 54,750	$ 125,000	Forecast includes both OIL & Engineering time
		Operator Contingency		$ -	$ -	$ -	Held by Operators - release at their discretion
		SUBTOTAL TRACK RENEWALS		**$ 2,753,324**	**$ 2,549,552**	**$ 5,302,876**	
Structure Renewals							
		Auckland Structures Renewals					
91799		Auckland Metro 2011-2012 Slope stabilisation works		$ -	$ -	$ -	
91711		Br 8 NAL impact beam		$ 140,500	$ 109,500	$ 250,000	
91739		Br 332 NIMT Renewal		$ 314,720	$ 245,280	$ 560,000	Part of Package A NIMT bridges being renewed
		Br 8 Newmarket transom strengthening & spot painting		$ 224,800	$ 175,200	$ 400,000	
		Br 48 NAL tyfo wrapping		$ 44,960	$ 35,040	$ 80,000	
		Waitakere Tunnel		$ -	$ -	$ -	
		Structures Minor Capital works		$ 118,020	$ 91,980	$ 210,000	
		SUBTOTAL STRUCTURES		**$ 843,000**	**$ 657,000**	**$ 1,500,000**	
Signals Renewals							
		Auckland Signals Renewals					
		Signal Renewals General		$ 174,000	$ 26,000	$ 200,000	Allocation = 87/13
		Cabling Pukekohe - Papakura		$ 174,000	$ 26,000	$ 200,000	Allocation = 87/13
		Turnout Motors Britomart		$ 345,800	$ 4,200	$ 350,000	1.2% of movements are Northern Explorer
91033		Auckland Metro S&T Upgrade					
		SUBTOTAL SIGNALS RENEWALS		**$ 693,800**	**$ 56,200**	**$ 750,000**	
Electrical Renewals							
		Auckland Electrical Renewals					
		Electrical Renewals General		$ 22,480	$ 17,520	$ 40,000	
		SUBTOTAL ELECTRICAL		**$ 22,480**	**$ 17,520**	**$ 40,000**	
		TOTAL		**$ 4,312,604**	**$ 3,280,272**	**$ 7,592,876**	

6.7 METRO RENEWALS WELLINGTON

The table attached shows the total renewals budget for the Wellington Metro Area. This is funded from Greater Wellington Regional Council (GWRC), KiwiRail and Ministry of Transport on pre-agreed percentage basis.

As with the situation in Auckland, a major element of managing the renewals programme will be the management the relationship with GWRC.

Wellington Metro			TID	Passenger Portion (56.4%)		Freight Portion (43.6%)	FY13 ($M)
				MOT	GWRC		
Project #	SWO #						
		Track Renewals 89400 - 89412					
		Major Renewals Mainline			$ 2,564,381	$ 1,985,619	$ 4,550,000
		Major Renewals Level Crossings			$ 84,540	$ 65,460	$ 150,000
		Major Renewals Yards			$ -	$ -	$ -
		Minor Renewals			$ 507,240	$ 392,760	$ 900,000
		Destress			$ 225,440	$ 174,560	$ 400,000
		Wellington Metro Track Renewals Mgmt			$ -	$ -	$ -
		SUBTOTAL TRACK		$ -	**$ 3,381,601**	**$ 2,618,399**	**$ 6,000,000**
		Tunnels 1 & 2 NIMT					
		SUBTOTAL TUNNELS			$ -	**$ 400,000**	**$ 400,000**
		Structures Renewals		Slopes	*87.8%*	*12.2%*	
		SUBTOTAL STRUCTURES		$ -	**$ 435,177**	**$ 103,644**	**$ 538,821**
		Signals Renewals			*87.8%*	*12.2%*	
		SUBTOTAL SIGNALS		**$ 4,197,000**	**$ 424,161**	**$ 58,911**	**$ 4,680,072**
		Traction					
		SUBTOTAL TRACTION		**$ 8,896,000**	**$ 1,035,059**	$ -	**$ 9,931,059**
		Platforms					
		SUBTOTAL PLATFORMS		**$ 1,150,000**	$ -	$ -	**$ 1,150,000**
		TOTAL		**$ 14,243,000**	**$ 5,275,998**	**$ 3,180,954**	**$ 22,699,952**
		Funding Reconciliation					
		Confirmed Funding Sources					
		Steady state renewals			$ 5,275,998	$ 3,180,954	$ 8,456,952
		MOT - catch up renewals		$ 14,243,000			$ 14,243,000
				$ 14,243,000	**$ 5,275,998**	**$ 3,180,954**	**$ 22,699,952**

7 UPGRADES

7.1 MAIN TRUNK UPGRADES

7.1.1 THIRD MAIN AUCKLAND

The expenditure profile is based on the assumption that contributions are received from Auckland Transport for all of Stage 3, but KiwiRail neither seeks nor receives contributions for Stage 2 and therefore the full scope of the third main goes on hold.

The third main is best viewed as seven stages as follows:

- Stage 1 – Otahuhu – Middlemore
- Stage 2 – Middlemore – Puhinui
- Stage 3A – Wiri depot connections
- Stage 3B – Wiri areas connection to stage 2
- Stage 3C – Double track connection to Manukau
- Stage 4 - Wiri South – Papakura – outside the 10 year period
- Stage 5 – Westfield yard (Southdown – Otahuhu)

Stage 1 design and some preparatory earthworks have commenced and are funded from DART 26. With the base assumption now being that the 3rd main is deferred then the scope of work will be changed to at least get some early wins. The revised scope in contemplation for Stage 1 is

- Creation of long arrivals road "within" the Westfield yard – effectively moving the third main from between Otahuhu and Middlemore into the yard and bringing in some of Stage 5
- Less complex works around Otahuhu junction allowing for higher speed entry and exit
- Sufficient enabling works so all portals and services are clear of a future third main alignment.

Stage 2 involves some significant retaining walls and property purchase as well as reconfiguring access to the Middlemore platforms and is forecast to be delayed.

Stage 3A earthworks are currently being undertaken as part of the mainline relocation works required to "plumb in" the EMU Maintenance Depot. It was identified that if this preliminary work is not completed at this stage it will be very difficult to complete the works without significant disruption to mainline operations and the operation of the Depot.

Stage 3B works will proceed.

Stage 3C works will proceed only once agreement for this has been received by AT; however the business plan takes as its base case that agreement is reached.

Stage 4 is not forecast to be required until Metro services from Papakura and Pukekohe are operating at higher frequencies and additional Freight slots are required in the peak periods. No time is set for this, but a working assumption is that it's at least 10 plus years away.

Stage 5 is now part delivered under revised stage 1. The timing/benefit of a second portion being a better connection from Southdown to Westfield has not been determined, but is not an immediate requirement.

Service implications

From the recent modelling, existing Metro and Freight services will begin to increasingly impact on each other with the introduction of Manukau services (15 April 2012) and further increases in Freight requirements. Maintaining the timetable, especially when delays occur, will be further exacerbated when the EMU services commence and the Wiri Depot begins operation. Therefore, while commencement of the 3rd main works will provide benefits as soon as it is available, the latest date by which the first three stages and stage 5 must be completed if Freight and Metro are not to clash would be January 2015 when, based on the manufacturer's current programme, the last of the new EMU fleet is expected to have been delivered and AT have the capability of operating a 10 minute clock face timetable.

This business plan assumes we will **not** hit those dates, meaning there will be service compromise, mitigated to the greatest extent practical with interim works, timetabling and operational procedures.

The business plan cash-flow reflects the following milestones.

- Stage 3A & 3B – FY13
- Stage 3C – FY13 subject to agreement
- Stage 1 – FY13
- Stage 1 residual, Stage 2 FY17
- Stage 5 – FY13

Note that as part of the Mainline Depot works a substantial amount of signalling work is required and the detailed design is underway at present. It is likely to be quite difficult (ie expensive) to redo the design without making provision for the 3rd main and to then redesign it later. However, once it is designed some parts will need to be constructed to ensure the signalling works properly.

All of the above is predicated on AT's ultimate agreement that the 3rd main is the best solution to the future timetable conflicts.

7.1.2 NORTH SOUTH JUNCTION

NSJ strategy proposed has the following as the most probable outcome:

- Residual renewals at the southern end beyond FY15
- Within years 10 -15 there may be a 750m increase in double tracking at the southern end, plus curve easing estimated in current FY13$s at $12m - $14m. This would increase the speed through the NSJ area as a whole, reduce time in the single track area and further de-risk the junction. Preliminary analysis of benefits shows a 60/40 split in favour of passenger. To proceed, the project would have to get an agreed contribution from GWRC in the order of $8-$9m.
- Within years 15 – 25 there may be an increase in double track at the northern end almost up to tunnel 6 estimated in current $s at $40m also requiring GWRC contribution
- The remaining (expensive) central portion will stay single track for the foreseeable future. Other than endeavouring to influence views that this is a valuable NZ Inc

project, and therefore funded by others, no further work is proposed in the central section over the 10 year period.

7.1.3 PASSING LOOPS IN PALMERSTON NORTH TO WAIKANAE SEGMENT

Extensions to 900m of five loops between Palmerston North and Waikanae to reduce waiting time for long trains have been deferred. Of the five loops KRG will only need to fund four as the fifth is at Otaki which is delivered by NZTA for $0 as a result of RONS work. That work starts in FY15.

7.1.4 CTC & COMMUNICATIONS

There are a series of inter-related initiatives listed below:

- CTC to be carried by fibre between Waikanae and Palmerston North to replace the current transmission by radio which suffers from intermittent faults creating delay – this will be in place early FY13
  - Upgrade of Palmerston North to Hamilton link which will be progressed in stages in partnership with other suppliers or users
  - The Te Awamutu to Hamilton section will be in place early FY13
  - Remaining sections TBD
- Traction SCADA replacement
  - RTUs for the 4 main substations will be installed in early FY13
  - Remainder of RTU upgrades will occur once the backbone fibre above is in place.
- S2 CTC between Palmerston North and Hamilton

7.1.5 PLACEHOLDER VALUES

The Tunnel improvements, general clearance, concentrated renewals/upgrades and transit improvement works on NIMT have been removed and will not be delivered unless there is specific change to business prospects.

The budget still contains placeholders for:

- FY13 onwards – allowance for general train control DR and service level enhancements
- FY13 $2.0m, and FY14 onwards $1.0m allowance for opportunity driven upgrades.

7.2 GOLDEN TRIANGLE UPGRADES

Over the three year period we have allowed for:

- Finalising the upgrades to the loops on the ECMT between Hamilton and POT and related signalling works
- Increasing the loop length on the eastern forestry route consistent with the Freight strategy of 55 wagon trains on the Kawerau to Mt Maunganui segment.

In the outer years we have made a placeholder allowance for $3.0m upgrade works per annum.

7.3 LOWER NORTH ISLAND UPGRADES

The investments proposed deliver the track and signalling capacity necessary for Milk season 2013 and beyond.

In summary they are:

- Creation of the 540m loop at Manutahi with CTC – by milk season 2012
- CTC in operation Marton to Whanganui – by milk season 2013.

CTC between Whanganui to Whareroa is not to proceed at this time; but held in review for FY15.

We also hold an on-going allowance of $1.0m per annum for opportunistic upgrades.

7.4 WEST COAST

The investment profile reflects the findings to date from the Coal Route investigation discussed at the IAC November 2011 meeting moderated to deal with the funding limitations in FY13 and FY14. It is based on the 30 wagon more frequent train model discussed in section 2.2.4.

7.5 SOUTHERN SOUTH ISLAND

Dunedin area

Modest $0.3m allowance for planning of long term signals upgrades and delivery of some early wins, thereafter no further funding budgeted in the three year period.

Christchurch area – Lyttelton to Rolleston

FY13 - $1.0m - allowance for planning of long term signals upgrades (based on Coal Route works) and delivery of some easy wins and more modest allowance in outer years for enhancements. This will include the Addington to Heathcote cable route.

The scope of this work will be determined by the Freight driven project currently looking at forecast volumes and demands in the Christchurch area.

7.6 YARDS

We have made a general allowance of $5m in each year for upgrades, as yet not fully specified for yard capacity, operational changes and safety.

This is only for work in KRG yards. Works for sole customer connections/yards will be funded either directly by those customers – e.g. Fonterra at Whareroa or the subject of stand-alone Freight business cases.

This budget does not provide for the scope of work likely to be required in the Christchurch metropolitan area to meet Fonterra's requirements so some re-prioritisation or separate business case will be required.

Note that the Property Budget holds the $s for yard and road paving works.

7.7 KNOWLEDGE AND INNOVATION

We have made a general allowance of $0.50m in FY13 - FY14 for investments in trial productivity improvements and asset knowledge to better inform investment and intervention strategies.

7.8 TRAIN CONTROL ENHANCEMENTS

Disaster Recovery

The scope of this project will be likely to involve some system duplication and potentially re-location of some back-up functions to Tawa data centre, and keeping/integrating some of the commissioning infrastructure for Auckland traction and signals into a DR framework. The scope is not yet sufficiently defined to determine the extent to which these costs should be covered by AEP, IT or Network.

Other initiatives

In the longer term we have put a placeholder allowance to enable changes to operating efficiencies to be realised through technology. The scope is subject to consultation at present.

7.9 CUSTOMER CONNECTIONS

We expect to support Freight secure business by creating customer connections funded either directly by the customer or through arrangements organised by Freight. Many initiatives do not proceed beyond preliminary investigation, and/or have a substantial lag between initial investigation and start.

Upgrades		FY13 ($M)	Comments on status of development	Project Manager	FY13 ($M)	FY14 ($M)	FY15 ($M)	FY16 ($M)	FY17 ($M)	FY18 ($M)	FY19 ($M)	FY20 ($M)	TOTAL
91234	**BSIP**												
AUCKLAND THIRD MAIN													
91234-110	- Stage 1 Otahuhu to Middlemore	$ 5,800,000	} Combined budget for Stage 1/2 FY13		$ 5,800,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 7,800,000
	- Stage 2 Middlemore to Puhinui	$ -	}		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	- Stage 3A Depot "plumb-in"	$ 4,000,000	Total Cost for Stage 3A Depot "plumb-in" $13m	R Hattaway	$ 4,000,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 4,000,000
	- Stage 3B Connections to stage 2	$ -	FY15 - placeholder		$ -		$ 10,070,000						$ 10,070,000
	- Stage 4 Wiri to Papakura	$ -			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
91234-203	- Stage 5 Internal Road Westfield Yard	$ 11,794	Remaining approved budget		$ 11,794	$ -		$ 4,000,000	$ -	$ -			$ 4,011,794
	SUBTOTAL - GROSS COSTS	$ 11,811,794			$ 11,811,794	$ -	$ 10,070,000	$ 4,000,000	$ 13,415,259	$ 24,115,259	$ -	$ -	$ 25,881,794
	Third Main - contributions by others												
	Stage 1 - AT $7.8m from DART	($ 5,800,000)			($5,800,000)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	($ 7,800,000)
	Stage 2 - AT share of capacity created	$ -			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Stage 3A - from Depot Budget	$ -			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Stage 3A - from POA	$ -	Recovered in FY12		$ -	$ -					$ -	$ -	$ -
	Stage 3B - AT share of capacity created	($ 5,019,209)	AT portion of total cost, less recoveries FY12		($5,019,209)	$ -	($8,763,657)				$ -	$ -	($13,782,866)
	Stage 3 - MRL Dual Connection	$ -	Not yet confirmed for FY13			$ -		$ -	$ -	$ -	$ -	$ -	$ -
	Stage 3 - Combined Depot/Third Main	$ -				$ -					$ -	$ -	$ -
	Stage 4 - AT share of capacity created	$ -				$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Stage 5 - AT share of capacity created	$ -				$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	SUBTOTAL - CONTRIBUTIONS	($ 12,819,209)			($ 12,819,209)	$ -	($8,763,657)	$ -	($8,763,657)	($9,377,039)	$ -	$ -	($21,582,866)
	Third Main - Net Costs to KiwiRail								$ -	$ -	$ -	$ -	
	Stage 1	$ -			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Stage 2	$ -	Included on the assumption that contribution shares are agreed		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Stage 3	($ 1,019,209)			($1,019,209)	$ -	$ 1,306,343	$ -	$ -	$ -	$ -	$ -	$ 287,134
	Stage 4	$ -			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Stage 5	$ 11,794			$ 11,794	$ -	$ -	$ 4,000,000	$ -	$ -	$ -	$ -	$ 4,011,794
	Savings from combining stage 1 & 2												$ -
	TOTAL	($ 1,007,415)		J Benson	($1,007,415)	$ -	$ 1,306,343	$ 4,000,000	$ 4,651,602	$ 14,738,220	$ -	$ -	$ 23,688,750
WELLINGTON SOUTH JUNCTION													
91234-150	SOUTH JUNCTION - NET COSTS TO KIWIRAIL				$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
AUCKLAND TO CHRISTCHURCH GENERAL													
91234-000	BSIP Admin	$ 98,317	Forecast = actuals to date plus Murray & Jeanine's time Dec-June	J Benson	$ 98,317	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000			$ 848,317
91234-100	Feasibility Studies -	$ 66,000		J Benson	$ 66,000								$ 66,000
91234-120	Otaki Manukau Realignment	$ -		J Wynands	$ -								$ -
91234-130	Taumarunui Works	$ -			$ -								$ -
91234-140	Passing loop Optimisation Palm North to Waikanae			J Wynands									
	Feasibility												$ -
	Build	$ 30,000			$ 30,000	$ -	$ -	$ -					$ 30,000
	TOTAL	$ 30,000			$ 30,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 30,000
91234-170	EWPP			J Wynands									
	Production	$ 1,200,000			$ 1,200,000								$ 1,200,000
91234-171	Electronic worksite	$ 530,000			$ 530,000								$ 530,000
	TOTAL	$ 1,730,000			$ 1,730,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,730,000
91234-400	Stability Management	$ -		D Headifen	$ -								$ -
91234-401	Stability & Heat Management Training	$ 110,000			$ 110,000								$ 110,000
91234-160	Extension CTC	$ 738,000	Budgets amended per DSG 2/2/12	J Wynands	$ -	$ -							$ -
91234-180	HAM-PNTH Comms Link	$ 2,289,398		D Beesley	$ -	$ -			$ -				$ 9,789,398
	S2 CTC Replacement		Project transferred from Signals			$ 500,000	$ 300,000						$ 800,000
91886	Traction SCADA replacement	$ 17,171	Project transferred from Signals. PERF'd 6/4/12	S van Greunen	$ 17,171	$ 500,000	$ 500,000						$ 1,017,171
91234-190	Marton 4Rsignal speed indicator through 23 points	$ 34,400	Update 17/4/12 - earliest commissioning 15th July, with costs into FY13		$ 34,400								$ 34,400
91234-200	Professional services train delays, fault recording, Data analysis & train delay management	$ 27,300		J Benson	$ 27,300								$ 27,300
91234-201	BSIP Investigation into constraints at passing loops	$ -		J Benson	$ -								$ -
91234-202	BSIP Low cost NIMT minor curve easements		Forecast of $40k as agreed Jan 18th conference call	J Benson									$ -
91234-204	Design & Investigation Southdown for #35 & 36 Road	$ 100,000	Relocated $100K from 91234-140	D Beesley	$ 100,000								$ 100,000
	Clearances/route improvements/stability		Placeholder value only - allowance for tackling key area(s) in coordinated fashion - eg clean-up the Spiral or such like	J Benson			$ -	$ -	$ -	$ -			$ -
	Train Control Functionality		Yet to be determined - placeholder value		$ -	$ -	$ -						$ -

Upgrades		FY13 ($M)	Comments on status of development	Project Manager	FY13 ($M)	FY14 ($M)	FY15 ($M)	FY16 ($M)	FY17 ($M)	FY18 ($M)	FY19 ($M)	FY20 ($M)	TOTAL
	Unallocated - Easy Wins	$ 3,500,000	Includes assistance with Freight intiatives		$ 3,500,000	$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 17,500,000
	Total BSIP	**$ 7,733,171**		J Benson	**$ 7,733,171**	**$ 6,150,000**	**$ 4,256,343**	**$ 6,150,000**	**$ 11,801,602**	**$ 16,888,220**	**$ 2,000,000**	**$ 2,000,000**	**$ 56,979,336**
GOLDEN TRIANGLE													
91845	Eastern Forestry passing loop extensions		Investigation costs for the construction of the loops										$ -
	Loop Awakaponga	$ 1,500,000		D Beesley	$ 1,500,000								$ 1,500,000
	Loop Pongakawa	$ -			$ -								$ -
91882	Auckland Tauranga Route Strategy Investigation												$ -
	Supplementary for MetroPort Loop Enhancements & Upgrades	$ 2,000,000	Allowance for JOG completion	D Beesley	$ 2,000,000								$ 2,000,000
	Capacity General	$ 200,000	Placeholder - assumption that route will need perpetual upgrades		$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 19,200,000
	Total Golden Triangle	**$ 3,700,000**			**$ 3,700,000**	**$ 2,000,000**	**$ 2,000,000**	**$ 3,000,000**	**$ 3,000,000**	**$ 3,000,000**	**$ 3,000,000**	**$ 3,000,000**	**$ 22,700,000**
CENTRAL NORTH ISLAND SEGMENTS													
91586	Milk Route												
91586-01	Whareroa improvement works	$ 245,000		J Barry	$ 245,000								$ 245,000
91586-03	Manutahi Loop	$ 1,070,000		J Barry	$ 1,070,000								$ 1,070,000
91586-06	CTC Manutahi Loop	$ 1,195,000		J Barry	$ 1,195,000								$ 1,195,000
91586-07	CTC Marton to Aramaho	$ 2,772,664		J Barry	$ 2,772,664								$ 2,772,664
91586-08	CTC Aramaho to Whareroa (on hold)	$ -		J Barry	$ -								$ -
91586-10	Fibre Backbone	$ 230,776		J Barry	$ 230,776								$ 230,776
	Stage 2 works (on hold)	$ 986,560			$ 986,560	$ 6,000,000	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,986,560
	Total Central North Island	**$ 6,500,000**			**$ 6,500,000**	**$ 6,000,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 12,500,000**
WEST COAST SEGMENTS													
	Coal												
	Loop Extensions					$ 3,700,000	$ 4,300,000	$ 3,800,000					$ 11,800,000
91745	Power, Comms and Signals	$ 4,000,000		J Skilton	$ 3,657,991	$ 7,000,000	$ 30,000,000	$ 8,300,000					$ 48,957,991
91745-01	SI Coal Route Scoping study			J Skilton									$ -
91745-02	Reefton - Inangahua max line speed increase			J Skilton									$ -
91745-03	Woolston working of trains			R Percival									$ -
91745-04	Br 50 MID Otira Vehicle Crossing			P Meredith	$ 116,478								$ 116,478
91745-05	Midland Line Resignalling - RFT			J Skilton	$ 225,531								$ 225,531
91745-06	Woolston Yard Ducting			P Meredith									$ -
	Total West Coast	**$ 4,000,000**			**$ 4,000,000**	**$ 10,700,000**	**$ 34,300,000**	**$ 12,100,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 61,100,000**
SOUTHERN SOUTH ISLAND SEGMENTS													
	Dunedin Area	$ 300,000	Provisional allowance for signals works in Taieri - Mosgiel - Port Chalmers area		$ 300,000				$ 500,000	$ 5,000,000			$ 5,800,000
	Christchurch Area	$ 1,000,000	Allowance for Addington to Heathcote re-signal		$ 1,000,000	$ 2,000,000	$ 500,000	$ 2,500,000	$ 1,000,000				$ 7,000,000
	Total Southern South Island	**$ 1,300,000**			**$ 1,300,000**	**$ 2,000,000**	**$ 500,000**	**$ 2,500,000**	**$ 1,500,000**	**$ 5,000,000**	**$ -**	**$ -**	**$ 12,800,000**
YARDS													
91906	Westfield No8 Floodlight Tower - Urgent Removal	$ 20,140		A Neilson	$ 20,140								$ 20,140
91896	Te Rapa and Middleton Rail Yards Review	$ 30,000		N Buchanan	$ 30,000								$ 30,000
	Not Yet Allocated	$ 4,949,860			$ 4,949,860	$ 5,000,000	$ 4,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 28,949,860
	Yard Upgrades	**$ 5,000,000**			**$ 5,000,000**	**$ 5,000,000**	**$ 4,000,000**	**$ 3,000,000**	**$ 3,000,000**	**$ 3,000,000**	**$ 3,000,000**	**$ 3,000,000**	**$ 29,000,000**
ASSET KNOWLEDGE													
91865	Capital Asset Planning												
91908	Rewrite of ASR & TSR Pilot Rules				$ -								
	Not yet Allocated	$ 500,000	General allowance carried forward		$ 500,000	$ 500,000	$ 500,000	$ 500,000	$ 500,000	$ 500,000	$ 500,000	$ 500,000	
	Subtotal: Project Cost	$ 500,000											
	Total Asset Knowledge	**$ 500,000**			**$ 500,000**	**$ 500,000**	**$ 500,000**	**$ 500,000**	**$ 500,000**	**$ 500,000**	**$ 500,000**	**$ 500,000**	**$ 4,000,000**
SIRIUS													
90959-05	Project Sirius Change Management Pilot			K Robertson									
	Total Sirius	**$ 761,442**			**$ 761,442**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 761,442**
PROJECT INNOVATE													
91839	Rail Stress Tester purchase & commissioning	$ 14,679		G Smith	$ 14,679								
	Not yet Allocated	$ 485,321			$ 485,321	$ 500,000	$ 500,000	$ 500,000	$ 500,000	$ 500,000	$ 500,000	$ 500,000	
	Total Project Innovate	**$ 500,000**			**$ 500,000**	**$ 500,000**	**$ 500,000**	**$ 500,000**	**$ 500,000**	**$ 500,000**	**$ 500,000**	**$ 500,000**	**$ 4,000,000**
	Grand Total	**$ 29,994,613**			**$ 29,994,613**	**$ 32,850,000**	**$ 46,056,343**	**$ 27,750,000**	**$ 20,301,602**	**$ 28,888,220**	**$ 9,000,000**	**$ 9,000,000**	**$203,840,778**
	Gross up for AKL 3rd Main - 3rd party contributions						$ 8,763,657	$ -	$ 8,763,657	$ 9,377,039	$ -		
	Agreed Budget Limit (FY13 budgets)	**$ 29,994,613**			**$ 29,994,613**	**$ 32,850,000**	**$ 54,820,000**	**$ 27,750,000**	**$ 29,065,259**	**$ 38,265,259**	**$ 9,000,000**	**$ 9,000,000**	

Waikato JOG			FY13 ($M)	Comments	Project Manager	FY13 ($M)
				Total project $15.3m; spend through FY12 forecasted $12.3m		
Golden Triangle				**Project updates received from Daniel 21/5/12**		
90748	ECMT Loops		$ 1,853,385	Tamihana junction improvement, track & signal		$ 1,853,385
91750	Eureka extend passing loop ECMT 15k		$ 15,000	Delay in onsite works, $700k overspend forecasted		$ 15,000
91087	Apata crossing loop		$ 1,083,000	Commissioning planned 15/8/12		$ 1,083,000
91892	Backhaul Telecom Circuits for Tamihana and Eureka		$ 113,300			$ 113,300
91907	Improvement to Wawa Rd Public Siding		$ 1,500	was Tokoroa to Kinleith Yard works.		$ 1,500
			$ 3,066,185	**Daniel Beesley - Project Manager for Waikato JOG funding**		**$ 3,066,185**
				JOG Funding - $13m in total less $12.3m in prior year		**$ 1,100,000**
				Balance - proposed to be funded from I&E Capex		**$ 1,966,185**

8 MECHANICAL ENGINEERING GROUP

8.1 HILLSIDE WORKSHOPS

Following the board decision to advertise Hillside Workshops for sale a Project Manager was hired and the project launched in April 2012. PWC have been hired to act for KiwiRail and the overall project time table through to sale is as follows:

Stage One: Preparation. 16 April / 11 May

Stage Two: Marketing, Offers and Due Diligence – May 4 / June 22

Stage Three: Due Diligence – 25 June / 10 August

Stage Four: August 13 / 24 August

A sale of Hillside offers the opportunity to address the wider issue of outsourcing certain of our South Island heavy and light maintenance. It is assumed that in order to attract a suitable purchaser we will have to make available on-going rail work normally carried out at Hillside on contract. This in itself is not likely to be enough and it follows that there is an opportunity to investigate the possibility of offering up further work from that which is currently undertaken at the depots. In doing this we would be able to reduce the Capex requirement for the Christchurch depot rebuild (no heavy lift requirement) and perhaps even staffing levels (all heavy swap out work to Hillside rather than Christchurch).

In the even that we are unable to secure a purchaser for Hillside, then in line with the completion of the current capital projects we will close the facility, possibly keeping open the loco heavy lift maintenance area if an alternative to the Christchurch rebuild is not in place by that date.

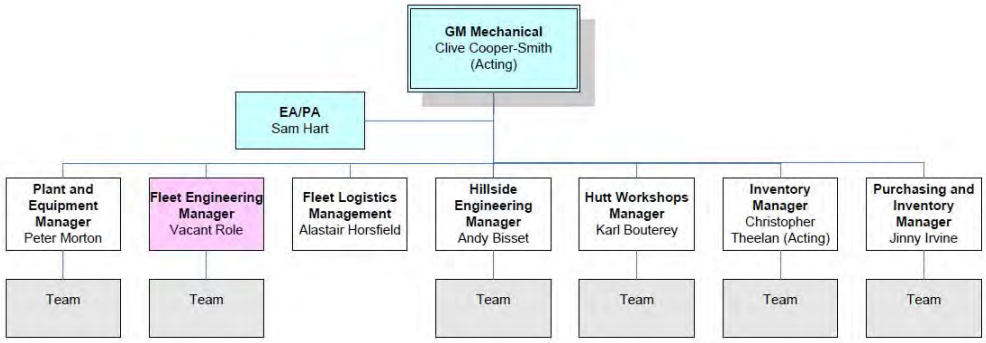
A close down will require a combination of relocation and outsource of the non-capital activity that Hillside currently carries out for KiwiRail.

A likely summary of this would be:

- Foundry – alternate suppliers (NZ and international)
- Rotables – transfer to Hutt Workshops
- Locomotive/wagon maintenance – Hutt and/or Christchurch (or alternative)
- External customers – mostly foundry related

8.2 THE NEW MECHANICAL ENGINEERING GROUP

In May and June of 2012 a re-organisation has been undertaken that will integrate Fleet Engineering, Inventory (both Mechanical and Infrastructure), Hutt and Hillside Workshops and I & E Plant and Equipment.



The goal of this reorganisation is to integrate all of these departments into one organisation that is capable of presenting itself as an integrated engineering solution provider to its internal customers. A project management team reporting to the I & E PMO but integrated within MEG will be created in order to provide end to end control and governance of all MEG projects.

8.3 HUTT WORKSHOPS

Hutt workshop will continue to evolve into KiwiRail's single Heavy Workshop. It will undertake locomotive refurbishment, wagon repair and build and rotable manufacture as its key lines of business.

Plant one will be structurally reinforced as per to consultative report recommendation on the basis that Plant 1 is an essential part of the sites future operations.

8.3.1 BENCHMARKING

During the 2012/13 financial year a comprehensive bench marking exercise will be undertaken in order to establish whether there is reason to move any of our rotable operations into and outsource situation.

8.3.2 PRODUCTIVITY IMPROVEMENT

Measuring and improvement planning will continue across all parts of Hutt with 3 key improvement projects put in place during calendar 2012.

8.4 INVENTORY

During the 12/13 financial year we will move to consolidate the mechanical and Infrastructure inventories. The key outcome here is to combine resources and reduce inventory holdings. At the same time as undertaking this consolidation we will also investigate the option of contract warehousing our basic (box in – box out) inventory.

This consolidation will be run as a project with an 18 month limited term contractor employed to run the project.

Hutt Workshop (Mechanical) Profit & Loss Statement for the period 1 July 2012 to 30 June 2013	Budget Jul 12	Budget Aug 12	Budget Sep 12	Budget Oct 12	Budget Nov 12	Budget Dec 12	Budget Jan 13	Budget Feb 13	Budget Mar 13	Budget Apr 13	Budget May 13	Budget Jun 13	Budget 2013
Revenue													
Freight													
FAF													
Total Freight (Incl FAF)													
Passenger													
Auckland Metro													
Other Trading	25	25	25	25	25	25	25	25	25	25	25	25	300
Total Trading Revenue	25	25	25	25	25	25	25	25	25	25	25	25	300
Service Fee													-
External Revenue	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**300**
Hook and Tow													
Track Access													
Rail Deck													
Maintenance													
Other Internal Revenue													
Total Internal Revenue													
Total Revenue	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**300**
Labour and related costs - Operational	702	702	702	702	702	702	702	702	702	702	702	702	8,421
Labour and related costs - Capitalised	501	501	501	501	501	501	501	501	501	501	501	501	6,016
Labour Costs	**1,203**	**1,203**	**1,203**	**1,203**	**1,203**	**1,203**	**1,203**	**1,203**	**1,203**	**1,203**	**1,203**	**1,203**	**14,437**
Fuel and Traction electricity	2	2	2	2	2	2	2	2	2	2	2	2	21
External services	67	67	67	67	67	67	67	67	67	67	67	67	804
Contractor Linehaul Costs													
Lease and Rentals	21	21	21	21	21	21	21	21	21	21	21	21	246
Track Access Costs													
Materials & Supplies	(1,616)	(1,616)	(1,616)	(1,616)	(1,616)	(1,616)	(1,616)	(1,616)	(1,616)	(1,616)	(1,616)	(1,616)	(19,386)
Incidents, Casualties & Insurance	11	11	11	11	11	11	11	11	11	11	11	11	128
Other Expenses	138	138	138	138	138	138	138	138	138	138	138	138	1,656
External Operating Costs	**(1,378)**	**(1,378)**	**(1,378)**	**(1,378)**	**(1,378)**	**(1,378)**	**(1,378)**	**(1,378)**	**(1,378)**	**(1,378)**	**(1,378)**	**(1,378)**	**(16,531)**
Hook and Tow													
Track Access													
Rail Deck													
Maintenance													
Other Internal Expenses													
Total Internal Expenses													
Net Operating Expenditure	**(174)**	**(174)**	**(174)**	**(174)**	**(174)**	**(174)**	**(174)**	**(174)**	**(174)**	**(174)**	**(174)**	**(174)**	**(2,093)**
EBITDA before restructuring	**199**	**199**	**199**	**199**	**199**	**199**	**199**	**199**	**199**	**199**	**199**	**199**	**2,393**
Restructuring costs				1,080			120						1,200
EBITDA after restructuring	**199**	**199**	**199**	**(881)**	**199**	**199**	**79**	**199**	**199**	**199**	**199**	**199**	**1,193**
Corporate Depn Recharge													
EBITDA after Corp Depn Recharge	**199**	**199**	**199**	**(881)**	**199**	**199**	**79**	**199**	**199**	**199**	**199**	**199**	**1,193**
Depreciation & Amortisation	15	15	15	15	15	15	15	15	15	15	15	15	174
EBIT excluding Grants	**185**	**185**	**185**	**(895)**	**185**	**185**	**65**	**185**	**185**	**185**	**185**	**185**	**1,019**
Capital Grants - Metro Developments													
Capital Grants - Rail Upgrade & Growth													
Capital grants - Internal													
Capital Grants - GWRC Annual Renewals													
Capital Grants - MOT Deferred Renewals													
Capital Grants - ARTA Annual Renewals													
Capital Grants - Public Policy													
Capital Grants - Other													
Capital Grant Revenue													
EBIT including Grants	**185**	**185**	**185**	**(895)**	**185**	**185**	**65**	**185**	**185**	**185**	**185**	**185**	**1,019**
F/X (gains) / losses													
Interest (income)													
Interest expense													
NET SURPLUS/(DEFICIT)	**185**	**185**	**185**	**(895)**	**185**	**185**	**65**	**185**	**185**	**185**	**185**	**185**	**1,019**

Hillside (Mechanical) Profit & Loss Statement for the period 1 July 2012 to 30 June 2013	Budget Jul 12	Budget Aug 12	Budget Sep 12	Budget Oct 12	Budget Nov 12	Budget Dec 12	Budget Jan 13	Budget Feb 13	Budget Mar 13	Budget Apr 13	Budget May 13	Budget Jun 13	Budget 2013
Revenue													
Freight													-
FAF													-
Total Freight (Incl FAF)	-	-	-	-	-	-	-	-	-	-	-	-	-
Passenger													-
Auckland Metro													-
Other Trading	101	158	93	-	-	-	-	-	-	-	-	-	352
Total Trading Revenue	101	158	93	-	-	-	-	-	-	-	-	-	352
Service Fee													-
External Revenue	**101**	**158**	**93**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**352**
Hook and Tow	-	-	-	-	-	-	-	-	-	-	-	-	-
Track Access	-	-	-	-	-	-	-	-	-	-	-	-	-
Rail Deck	-	-	-	-	-	-	-	-	-	-	-	-	-
Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Internal Revenue	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Internal Revenue	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Revenue	**101**	**158**	**93**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**352**
Labour and related costs - Operational	867	961	778	419	419	376	42	45	-	-	-	7	3,915
Labour and related costs - Capitalised	(549)	(615)	(402)	(181)	(190)	(127)	-	-	-	-	-	-	(2,064)
Labour Costs	**318**	**346**	**376**	**238**	**229**	**249**	**42**	**45**	**-**	**-**	**-**	**7**	**1,851**
Fuel and Traction electricity	7	8	7	7	7	5	3	2	-	-	-	-	44
External services	-	-	-	-	-	-	-	-	-	-	-	-	-
Contractor Linehaul Costs	-	-	-	-	-	-	-	-	-	-	-	-	-
Lease and Rentals	100	108	98	69	55	46	44	44	34	15	14	16	646
Track Access Costs	-	-	-	-	-	-	-	-	-	-	-	-	-
Materials & Supplies	(536)	(574)	(360)	(183)	(198)	(128)	21	10	1	1	-	-	(1,946)
Incidents, Casualties & Insurance	6	7	6	3	3	3	0	0	-	-	-	0	28
Other Expenses	117	108	100	109	64	53	53	18	10	8	8	8	653
External Operating Costs	**(306)**	**(343)**	**(149)**	**5**	**(69)**	**(22)**	**122**	**74**	**45**	**24**	**22**	**24**	**(575)**
Hook and Tow	-	-	-	-	-	-	-	-	-	-	-	-	-
Track Access	-	-	-	-	-	-	-	-	-	-	-	-	-
Rail Deck	-	-	-	-	-	-	-	-	-	-	-	-	-
Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Internal Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Internal Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Operating Expenditure	**12**	**3**	**227**	**243**	**160**	**228**	**164**	**120**	**45**	**24**	**22**	**31**	**1,276**
EBITDA before restructuring	**89**	**155**	**(134)**	**(243)**	**(160)**	**(228)**	**(164)**	**(120)**	**(45)**	**(24)**	**(22)**	**(31)**	**(924)**
Restructuring costs													
EBITDA after restructuring	**89**	**155**	**(134)**	**(243)**	**(160)**	**(228)**	**(164)**	**(120)**	**(45)**	**(24)**	**(22)**	**(31)**	**(924)**
Corporate Depn Recharge	-	-	-	-	-	-	-	-	-	-	-	-	-
EBITDA after Corp Depn Recharge	**89**	**155**	**(134)**	**(243)**	**(160)**	**(228)**	**(164)**	**(120)**	**(45)**	**(24)**	**(22)**	**(31)**	**(924)**
Depreciation & Amortisation	106	106	106	103	103	103	103	103	103	103	103	103	1,248
EBIT excluding Grants	**(17)**	**49**	**(239)**	**(346)**	**(263)**	**(331)**	**(268)**	**(223)**	**(148)**	**(127)**	**(125)**	**(134)**	**(2,172)**
Capital Grants - Metro Developments	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Grants - Rail Upgrade & Growth	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital grants - Internal	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Grants - GWRC Annual Renewals	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Grants - MOT Deferred Renewals	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Grants - ARTA Annual Renewals	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Grants - Public Policy	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Grants - Other	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Grant Revenue	-	-	-	-	-	-	-	-	-	-	-	-	-
EBIT including Grants	**(17)**	**49**	**(239)**	**(346)**	**(263)**	**(331)**	**(268)**	**(223)**	**(148)**	**(127)**	**(125)**	**(134)**	**(2,172)**
F/X (gains) / losses	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest (income)	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest expense	-	-	-	-	-	-	-	-	-	-	-	-	-
NET SURPLUS/(DEFICIT)	**(17)**	**49**	**(239)**	**(346)**	**(263)**	**(331)**	**(268)**	**(223)**	**(148)**	**(127)**	**(125)**	**(134)**	**(2,172)**

9 DELIVERY BY OTHERS

9.1 INFORMATION TECHNOLOGY

Operating Support

The business plan assumes status quo with respect to IT support of the non-train control IT infrastructure – meaning those costs are in the Corporate budget.

The business plan also assumes that in the remainder of FY12 IT takes on accountability for integrity and response/support for TWACS and Kupe Servers This is a change from prior years where this work was delivered from the Signals Team.

Capital Projects

In FY13-15 Sirius and enterprise mobility continue as the main focus. Other major works identified are:

- FY13 Bulletin portals – note the Bulletin process is being reworked concurrently with the process re-engineering (section 4.14)
- FY13 Scoping work for CATS replacements
- FY14 CATS replacement – depending on FY13 scoping work
- FY14 Track Warrant Over-run detection
- FY15 Level Crossing Permits

IT costs arising from changes and DR works in train control are funded from the I & E Upgrade budget.

9.2 PROPERTY

The property budget has provisional allowances for renewals and upgrades relevant to I & E.

Each will be subject to business case assessment, and not all items in the attached list will proceed.

However I & E managers need to be aware of potential Property initiatives impacting on assets/activities which are I & E accountabilities.

Item	Primary BU	Location	FY	Name	Description	Est. Cost ($)	Status
30	Freight	Auckland	FY13	Pavement Upgrade of Roading Network at Metroport, Port of Tauranga	A large resurfacing project to remediate the reticulation roads around the Freight Yard at Metroport that are failing in multiple areas.	910,000	
64	Freight	Auckland	FY14	Waste Oil Containment - Westfield Mechanical	Appropriate containment of waste oil is required at Westfield that also provides separation from rain water is required to ensure compliance and minimise environmental impacts. Leaking oil occurs mainly from parked locomotives outside workshop.	120,000	
65	Freight	Auckland	FY15	Development of New Paint Booth - Westfield	Construct a walkway between building 1677 and building 1679 to make one long structure. Equipment will then be retro fitted to create a designated paint booth facility	170,000	
79	Freight	Auckland	FY15	Upgrade Passenger Mechanical Maintenance Depot (Kiwi Street).	There are two buildings on site, the main building and a smaller service shed. In the main building the leaks persist and then the service pits fill with water which impacts on the outputs of the building occupants. In the smaller service shed there is broken Clearlite roof which needs replacing immediately.	520,000	
8	I & E	Auckland	FY13	Construction of Stormwater System - Westfield	The stormwater discharge currently does not have a resource consent. In seeking gain the consent some physical changes to onsite stormwater and wastewater management will be required. It is anticipated that separators may be needed.	390,000	Bus Case (Ind) - In Progress
44	I & E	Auckland	FY13	Reconfiguration of Network Office - Westfield	The second floor within this structure needs to be reconfigured to house new traction control room following AEP.	80,000	Bus Case - In Progress
24	Leasing	Auckland	FY13	Construction of Freight Forwarding Facility (Strait Freight) - Otahuhu	Construction of facility including enabling works and infrastructure for Strait Freight	4,400,000	
31	Leasing	Auckland	FY14	Construction of extension to Toll freight forwarding facility - Southdown	Extension of the main TTL facility. "New Freight Terminal & Offices" extract from Matthew Kenny	26,000,000	
59	Leasing	Auckland	FY13	Purchase SPT Lease - Southdown	Purchase of SPT lease hold interest for future freight purposes	2,990,000	
47	Leasing	Blenheim	FY15	Construction of New Toll warehouse/freight terminal/offices	New Warehouse/Freight Terminal/Offices/Rail Siding. 7500 sq. m	12,000,000	
247	Leasing	Blenheim	FY13	Construction of Enabling works for new Mainfreight site-Spring Creek	Freight customer development	250,000	
9	Freight	Christchurch	FY13	Demolition of Buildings at Linwood Yard	Demolition of all 5 buildings due to non-recoverable earthquake damage.	300,000	Cancelled - See remarks
33	Freight	Christchurch	FY15	Construction of New Admin Facility - Middleton	A new entrance road and admin facility is required to enable consolidation of existing offices and BUs within Middleton	2,270,000	
53	Freight	Christchurch	FY15	Construction of New Goughs Facility - Middleton	New Goughs building needed to relocate Goughs on site to enable site development.	680,000	
67	Freight	Christchurch	FY15	Demolition of Existing Offices - Middleton	Existing facilities, structures and portocoms need to be removed to make way for yard extension.	260,000	
76	Freight	Christchurch	FY15	Refurbishment of Fuel Store - Middleton	The existing fuel store facility is in a poor condition with significant maintenance issues. Refurbishment will be required to ensure legislative compliance.	130,000	
77	Freight	Christchurch	FY14	Construction of New Maintenance, Repair, and Heavy Lift Facility - Middleton	Due to Earthquake damage of existing facilities, with the Christchurch Region, a purpose built New Maintenance, Repair, and Heavy Lift Facility is required at Middleton. The proposed facility will be designed to meet the future deliverables of Freight Mechanical, which will consist of maintenance projects only (no over hauls) with a heavy lift capability also being required to maximise their outputs.	5,000,000	
240	Freight	Christchurch	FY14	Construction of New Passenger Train Wash Facility - Waltham	This project is to provide a new high quality passenger train wash facility for the new AK units that are servicing the South Island (Coastal Pacific & TranzAlpine)	2,080,000	
70	I & E	Christchurch	FY15	Construction of New Storage Area - Christchurch Depot	New secure storage required to ensure that attractive items are kept in a secure safe environment	260,000	
10	Leasing	Christchurch	FY13	Construction of Freight Forwarding Facility - Hornby	Construction of facility including enabling works and infrastructure for Strait Freight (5000m2)	4,000,000	
50	Leasing	Christchurch	FY14	Construction of Freight Forwarding Facility - Hornby	Construction of facility including enabling works and infrastructure for tenant (5000m2)	2,500,000	
23	Leasing	Christchurch	FY13	Extension of Toll Building - Middleton	The existing CT office needs to be moved and the Toll warehouse will then be extended to provide greater leasing revenue.	510,000	Bus Case - On Hold
25	Leasing	Christchurch	FY13	Demolition or Development of Existing Building - Linwood, Ensors Road	Old building with earthquake damage and is currently vacant. Feasibility study to demolish or refurbish	650,000	Bus Case - On Hold
35	Leasing	Christchurch	FY13	Construction of New Building for Tenants - Wilsons Road	Building badly damaged by earthquake. Likely to complete new build for existing tenants in current FY.	100,000	Bus Case - On Hold
71	Freight	Dunedin	FY13	Construction of Separator System CT Site - Dunedin	New separator system is required as the wash bay area drains are not working correctly and wash is going straight to harbour.	120,000	Bus Case - In Progress
251	Freight	Dunedin	FY13	Construction of New Building for CT Site - Dunedin	The freight CT site in Dunedin is currently subleased from Toll Tranzlink with no significant branding to distinguish. Need standalone facility so deliveries/collections come to KiwiRail Freight. Construction of new CT Facilities on site at Container Transfer Terminal – currently branded as Toll.	150,000	
72	Freight	Dunedin	FY15	Yard Re-Paving CT Site - Dunedin	The current yard surface has issues with dust, drainage, and uneven areas, which cause operational difficulties, including H&S risks to forklift movements. This project aims to rectify these issues.	260,000	
246	Leasing	Dunedin	FY13	Construction of Oil Separator System for Goughs - Dunedin	Compliance requirement due to oil to stormwater discharge	100,000	
54	Freight	Greymouth	FY15	Demolition of Mechanical Depot - Greymouth	Utilise the network building for any mechanical work in this area. Consequently the Greymouth Mechanical building is surplus to requirements and will be demolished	120,000	
167	I & E	Greymouth	FY15	Repair Roof of Network Building at Herbert St - Greymouth	The network building is shared with area staff and has workshop with one fitter. The roof currently leaks and will require improvements.	100,000	
19	Mechanical	Hutt	FY15	Demolition of Plant 4 - Hutt Workshops	Demolish and decommission plant 4 workshop, which is currently is a poor condition and has no strategic future. Furthermore, the space with Woburn is required to enable future site development.	320,000	

Item	Primary BU	Location	FY	Name	Description	Est. Cost ($)	Status
20	Mechanical	Hutt	FY15	Demolition of Plant 5 - Hutt Workshops	Demolish and decommission plant 5 workshop, which is currently is a poor condition and has no strategic future. Furthermore, the space with Woburn is required to enable future site development.	320,000	
11	Mechanical	Hutt	FY13	Recladding Southern Wall of Plant 1 - Hutt	This project plans to repair and refurbish the southern wall of Plant 1. It will replace girts with PFC members.	500,000	Consultant Report Complete
15	Freight	Invercargill	FY14	Construction of Freight Operations Facility - Invercargill	Construction of new freight operations and amenities facility to enable future development and make the site more commercially viable.	470,000	
74	Freight	Invercargill	FY15	Construction of New Entrance Roadway - Invercargill	The existing entranceway is currently unsealed and hinders site access.	140,000	Bus Case - On Hold
17	Leasing	Invercargill	FY13	Extension of Toll building - Invercargill	Extend Toll's Freight shed with 60x20m canopy	1,000,000	
52	Leasing	Invercargill	FY14	Construction of Freight Forwarding Facility - Invercargill	Greenfield Site. PBT interested in locating here. Approx. 2,500 sq.m	2,540,000	
16	Leasing	Invercargill	FY13	Construction of Concrete Access Road - Invercargill Freight Yard	This project will construct a finished access road to allow several freight forwarding tenants to access their leased areas.	1,370,000	Ready for Indicative Bus Case - Preliminary report available
18	Freight	Kawerau	FY13	Replacement of Roof and Renew Building Structure - Kawerau	Replace roof on the main workshop and small secondary building alongside. Work includes repairing cladding and all walls, externally and internally of both buildings, and sealing an area of the yard.	460,000	SPP in progress
102	I & E	Levin	FY13	Demolition of Warehouse and Depot - Levin	The scope of this project is to demolish a large warehouse with office and workshop areas in Levin. The building has significant maintenance issues /asbestos roof, and it is not financially viable to maintain.	90,000	
22	Freight	Masterton	FY15	Pavement Upgrade Container Yard - Masterton	Rehabilitate top surface of container yard to provide minimum safety improvement, i.e. suppress dust. Isolated excavation and basecourse hardfill, supply and install new yard sumps with silt traps and connect to existing stormwater system, construct new concrete dish channels, and apply plus 3 coat chipseal.	230,000	
229	I & E	Napier	FY14	Construction of Enclosed Shelter for Sleeper-Cutting Area - Napier	The area currently used to operate the sleeper cutting/grinding machinery is a lean-to and open to all weather conditions. This project will construct a second wall and enclose the ends to protect from rain.	100,000	
56	I & E	Otahuhu	FY15	Construction of MTMV & HRV Maintenance Facility at Railweld Depot	A purpose built facility at Railweld depot Otahuhu that will enable fitting staff to perform maintenance and repairs on the MTMV and HRV fleet in a safe, efficient and comfortable environment.	230,000	
3	I & E	Otira	FY13	Remediation of Settlement Ponds - Otira Tunnel	The settlement ponds in Otira Tunnel are currently not consented and will require physical work to ensure legislative compliance.	260,000	Bus Case - In Progress
28	Leasing	Palmerston North	FY15	Refurbishment of Railway Station - Palmerston North	The internal waiting room requires upgrade as it has had deferred maintenance and a very poor conditional rating. Also, refurbishment of existing building (ground level) is needed to attract external retail tenants. Consider platform canopy options.	330,000	
57	Leasing	Palmerston North	FY14	Construction of New PBT Facility - Palmerston North	A new facility is required at Palmerston North to house the Freight Company PBT. The proposed facility will be approximately 5,000 sqm in size.	2,500,000	
245	Leasing	Palmerston North	FY13	Upgrade of TTL Access Road - Palmerston North	Shared freight customer access road works	290,000	
176	Freight	Picton	FY13	Construction of Yard Entrance Gate & Fencing - Picton	The Freight terminal often experiences unwelcome overnighters, trespassers, and traffic from the ferry terminal passenger entering the yard area.	30,000	
177	Freight	Picton	FY15	Construction of Paved Shared Transit Area - Picton	A large unpaved area is used for parking by Freight during dry-dock periods and InterIslander heavy goods vehicles whilst waiting to board the ferry. The dust issues created from this area are significant.	260,000	
80	Leasing	Tauranga	FY15	Yard Improvements - Tauranga	Sealing of the Yard Area (14,000 sq. m) to generate more income from tenants	1,300,000	
60	Freight	Te Rapa	FY14	Pavement Upgrade Freight Yard - Te Rapa	The current yard surface has issues with dust, drainage, and uneven areas, which cause operational difficulties, including H&S risks to forklift movements. This project aims to rectify these issues.	520,000	
34	Freight	Temuka	FY13	Pavement Upgrade CT Site - Temuka	The current yard surface has issues with dust, drainage, and uneven areas, which cause operational difficulties, including H&S risks to forklift movements. This project is a medium term solution to ensure business continuity whilst long-term strategy regarding Temuka and Timaru is developed.	980,000	Consultant Report in progress
32	Freight	Timaru	FY15	Reconfiguration of Network Office to Accommodate Freight Shunters - Timaru	Upgrade the two storey building to enable inclusion of shunters and provide a greater degree of utility	100,000	
37	Freight	Wellington	FY13	Connection to Separator System of Mechanical Workshop Washbay - Wellington Yards	Wash bay north of the Mechanical Depot needs to be connected to the depots separator system as contaminated run-off from the washbay is overflowing into surrounding ballast.	200,000	Bus Case - In Progress
38	Freight	Wellington	FY13	Construction of New Shared Amenities Building	Demolition of existing building and part of the mechanical store. Construction of a 650 sq. m for admin, kitchen, shower/lockers, offices, meeting/training rooms, etc. Four different units - end result will be one two-storey building and two one-storey buildings linked together.	700,000	In Progress FY12
242	Freight	Wellington	FY13	Upgrade Exterior of Workshop 8 - Wellington	Exterior painting of Loco Dept And existing section of Carriage workshop.	260,000	
40	Leasing	Wellington	FY13	Construction of Freight Forwarding Facility - Wellington	Construction of a new freight forwarding facility with Mainstream within the Wellington yard. Approx. 5,000 sq.m	2,710,000	
63	Leasing	Wellington	FY14	Construction of Freight Forwarding Facility - Wellington	Construction of a new freight forwarding facility with PBT within the Wellington yard. Approx. 11,000 sq.m	9,830,000	
39	Leasing	Wellington	FY13	Construction of Enabling works for new Freight Forwarding - Wellington	Infrastructure such as roading and services are required within the Wellington yard to allow for new freight forwarding facilities.	650,000	Bus Case - On Hold
41	Leasing	Wellington	FY13	Construction of Extension to Toll - Wellington	Toll are looking to extend their Freight forwarding facility by approx. 50m by 20m (400m2)	4,000,000	
45	Freight	Westport	FY15	Refurbishment of Sargeant's Hill Office - Westport	Relocation of freight and network team from Westport Station to Sergeant's Hill facilities.	40,000	