

The Treasury

Budget 2017 Information Release

Release Document July 2017

www.treasury.govt.nz/publications/informationreleases/budget/2017

Key to sections of the Official Information Act 1982 under which information has been withheld.

Certain information in this document has been withheld under one or more of the following sections of the Official Information Act, as applicable:

| | | |
|------|--|--------------|
| [1] | to prevent prejudice to the security or defence of New Zealand or the international relations of the government | 6(a) |
| [4] | to prevent prejudice to the maintenance of the law, including the prevention, investigation, and detection of offences, and the right to a fair trial | 6(c) |
| [11] | to damage seriously the economy of New Zealand by disclosing prematurely decisions to change or continue government economic or financial policies relating to the entering into of overseas trade agreements. | 6(e)(vi) |
| [23] | to protect the privacy of natural persons, including deceased people | 9(2)(a) |
| [25] | to protect the commercial position of the person who supplied the information or who is the subject of the information | 9(2)(b)(ii) |
| [26] | to prevent prejudice to the supply of similar information, or information from the same source, and it is in the public interest that such information should continue to be supplied | 9(2)(ba)(i) |
| [27] | to protect information which is subject to an obligation of confidence or which any person has been or could be compelled to provide under the authority of any enactment, where the making available of the information - would be likely otherwise to damage the public interest | 9(2)(ba)(ii) |
| [29] | to avoid prejudice to the substantial economic interests of New Zealand | 9(2)(d) |
| [31] | to maintain the current constitutional conventions protecting collective and individual ministerial responsibility | 9(2)(f)(ii) |
| [33] | to maintain the current constitutional conventions protecting the confidentiality of advice tendered by ministers and officials | 9(2)(f)(iv) |
| [34] | to maintain the effective conduct of public affairs through the free and frank expression of opinions | 9(2)(g)(i) |
| [36] | to maintain legal professional privilege | 9(2)(h) |
| [37] | to enable the Crown to carry out commercial activities without disadvantages or prejudice | 9(2)(i) |
| [38] | to enable the Crown to negotiate without disadvantage or prejudice | 9(2)(j) |
| [39] | to prevent the disclosure of official information for improper gain or improper advantage | 9(2)(k) |
| [40] | Not in scope | |

In preparing this Information Release, the Treasury has considered the public interest considerations in section 9(1) and section 18 of the Official Information Act.

Treasury Report: KiwiRail Holdings Ltd: Capital Requirements

| | | | |
|--------------|---------------|---------------------|-----------|
| Date: | 23 March 2017 | Report No: | T2017/496 |
| | | File Number: | SE-2-25-0 |

Action Sought

| | Action Sought | Deadline |
|---|---|--|
| Minister of Finance (Hon Steven Joyce) | Agree to support a multi-year appropriation for \$450m of capital funding for KHL over the two year period to FY19 as part of Budget 2017 | Prior to finalisation of Budget 2017 decisions |
| Minister of Transport (Hon Simon Bridges) | | |
| Associate Minister of Finance (Hon Amy Adams) | | |
| Minister for State Owned Enterprises (Hon Todd McClay) | | |
| | Agree that the capital funding provided by the Crown be conditional on KHL providing certain information to allow Ministers to understand the outcomes of the funding provided | |

Contact for Telephone Discussion (if required)

| Name | Position | Telephone | 1st Contact |
|---------------|---|-----------|-------------|
| [23] | | | ✓ |
| Chris Gregory | Manager, Commercial Operations - Governance and Performance | [39] | [23] |

Actions for the Minister's Office Staff (if required)

| | |
|--|--|
| Return the signed report to Treasury. | |
| Note any feedback on the quality of the report | |

Enclosure: Yes (attached)

Treasury Report: KiwiRail Holdings Ltd: Capital Requirements

Executive Summary

KiwiRail Holdings Ltd (KHL) submitted an initial request for a commitment of [33] KHL was forecasting to require [33] of capital expenditure over the [33] to operate its rail and inter-island ferry operations. KHL expects to fund [33] of the forecast capital expenditure from earnings generated from its operations. [33]

In light of the Crown's fiscal pressures, KHL has (i) revised its forecast capital expenditure to [33] and (ii) reduced the level of committed capital funding that it is seeking from the Crown to two years of unfunded capital expenditure (i.e. FY18 and FY19).

KHL's decision to reduce its request for capital expenditure was made following completion of the drafting of this report. In light of this, we have adjusted the Executive Summary to focus on the first two years of KHL's financial forecast. However, the body of the report presents analysis of KHL's forecast capital expenditure requirements for the [33]

We note that this report does not address funding sought by KHL for (i) upgrades to the Wellington metro lines (\$98m), (ii) its uninsured costs in relation to the reinstatement of the South Island Transport Corridor [33] and (iii) a proposal to acquire the vessel Kaitaki (expected to be debt funded). These matters are addressed in separate reports.

Summary of KHL's Capital Requirements

The table below analyses KHL's (i) historical earnings for the four year period to FY16, (ii) budgeted earnings for FY17f, (iii) revised forecast earnings for FY17r, (iv) forecast earnings for the two year period to FY19, and (v) the total historical and forecast earnings for the two years (shown as Hist. and F'cst in the table).

Table 1: Summary of Historical and Forecast KHL Earnings

| \$m | FY13 | FY14 | FY15 | FY16 | [25] |
|--------------------------------|------------|------------|------------|------------|------|
| EBITDA¹ | 105 | 77 | 91 | 76 | |
| Asset Sales | 6 | 2 | 18 | 22 | |
| Other | (60) | 51 | (57) | (54) | |
| Total Cash Available | 54 | 130 | 51 | 44 | |
| Network | 165 | 145 | 153 | 155 | |
| Rolling Stock | 100 | 55 | 57 | 50 | |
| Other | 39 | 49 | 39 | 49 | |
| Total capex² | 304 | 249 | 249 | 254 | |
| Crown Funding | 250 | 119 | 198 | 210 | |

1 Earnings Before Interest, Tax, Depreciation and Amortisation (EBITDA) is a measure of financial performance.

2 Forecast capex is as per the revised 'deferred' alternative provided by KHL

We make the following observations:

- KHL has revised its FY17 EBITDA [25] revision in EBITDA is primarily due to lost revenue resulting from (i) the closure of the Main North Line (which runs from Christchurch to Picton) as a result of the earthquake, and (ii) temporary closure of the Midland line (which runs from Greymouth to Christchurch) as a result of damage sustained due to a fire in the Cass region (further detail on KHL's earnings revision is provided in Appendix 4).
- KHL is forecasting [33] compared to the previous two year period. The forecast capital expenditure over the two year period comprises [33] for the rail network infrastructure and [33] for rolling stock. Our analysis of KHL's capital expenditure concludes that while some of this expenditure could be deferred to future periods, it is unlikely that any of the capital expenditure forecast by KHL can be avoided.
- KHL is forecasting to generate [25] of cash that will be available to fund the capital expenditure. The cash is primarily forecast to be generated from (i) [25] of EBITDA over the two year period, and (ii) [25]
 - KHL is forecasting a [25] in EBITDA over the two year period to FY19 compared to EBITDA generated in FY16 and FY17r. [34]

– [25]

If KHL is not able to generate the forecast increase in earnings, it is most likely to result in deferral of capital expenditure into future periods.

KHL is requesting the Crown to commit capital funding over the two year period of [33] to the funding provided in Budget 2015. The increase in the level of funding requested by KHL is primarily due to:

- An increase in the level of capital expenditure forecast to maintain the rail network infrastructure at a standard that KHL considers meets customer requirements and allows for the safe operation of the rail network (discussed further in paragraphs 10 to 31); and
- A decision by KHL to bring forward replacement of its aging fleet of locomotives. The locomotive fleet is aged and will require replacement. The key question is for how long can replacement of the fleet be deferred? The capital expenditure forecast includes funding for the acquisition of (i) 15 new locomotives that are already on order, and (ii) [25]

A decision to defer funding for replacement of these locomotives may result in higher maintenance costs, operational inefficiencies and a heightened risk of failure. On balance, we favour KHL receiving sufficient funding to continue the preparatory work [25]

The Treasury View

The impact to KHL's FY17r reforecast earnings from the damaged sustained to the rail network in the Kaikoura earthquake and a fire in the Cass region is significant and gives rise to the following risks:

- A high risk of downside to KHL's earnings forecast for FY18 and FY19. Any reduction in KHL earnings is likely to result in further deferral of capital expenditure; and
- A risk that KHL could need additional capital support from the Crown if FY18 earnings and the level of Crown funding provided are not sufficient to cover the minimum level of capital expenditure to safely operate the rail network.

In light of these matters, we consider the most prudent course of action is for the Crown to commit to providing \$450m funding for the two year period to FY19 as requested by KHL.

The funding should be in the form of a multi-year appropriation that will provide KHL with the flexibility to bring forward funding into FY18 if it is required (at the expense of KHL having a lower level of funding available in FY19).

However, the proposed funding commitment should be conditional on KHL providing certain information (listed in paragraph 95 of this report) to allow Ministers to clearly understand the outcomes of the funding provided.

We also draw Ministers' attention to KHL's planning for two large capital investment decisions. [37]

[25]

[37]

[37]

Review of the Current Policy Settings for Rail

KHL owns and manages assets and infrastructure with long term lives. Decisions made in regard to KHL's assets and infrastructure have a long term impact. The KHL Board and management need to make decisions based on informed judgements on their ability to access capital funding over the long term.

The outcome of this report (consistent with previous budgets) is a recommendation for short-term capital funding for KHL. It is difficult to envisage a situation under the current budgetary constraints and policy settings for rail funding where there would be a different outcome.

In our view, this is a sub-optimal outcome. An infrastructure business such as KHL needs a level of funding certainty to optimally manage assets and infrastructure over its useful life. While taking a short term approach to funding KHL may be viable for a period of time (and it appears that KHL has made improvements under such an approach) eventually deterioration and aging of the infrastructure will need to be addressed.

We therefore recommend that Ministers request the Ministry to undertake a review of the current policy settings for rail. This review should explore:

- [34]

-

-

-

Consultation

This report has been prepared by the Treasury in conjunction with the Ministry of Transport.

A draft of this report was provided to KHL for review. KHL has responded in a letter to the Treasury (attached this report). The KHL Board accept the need to revise their request for capital funding to two years but expect that Ministers will direct agencies to resolve the ongoing structure and funding framework for rail and to provide consensus on the role of rail within the broader integrated strategy.

Recommended Action

We recommend that you:

- a **agree** to support a multi-year appropriation for \$450m of capital funding to KiwiRail Holdings Ltd (KHL) over the two year period to FY19 as part of Budget 2017.

Agree/disagree
Minister of Finance

Agree/disagree
Minister of Transport

Agree/disagree
Associate Minister of Finance

Agree/disagree
Minister for State Owned Enterprises

- b **agree** that the capital funding provided by the Crown be conditional on KHL providing certain information (listed in paragraph 95 of this report) to allow Ministers to understand the outcomes of the funding provided.

Agree/disagree
Minister of Finance

Agree/disagree
Minister of Transport

Agree/disagree
Associate Minister of Finance

Agree/disagree
Minister for State Owned Enterprises

- c **agree** for KHL to explore alternatives to ^[37] subject to there being no secured claims against (i) the Crown, and (ii) KHL's underlying business operations.

Agree/disagree
Minister of Finance

Agree/disagree
Minister of Transport

Agree/disagree
Associate Minister of Finance

Agree/disagree
Minister for State Owned Enterprises

- d [37]

- e **invite** the Ministry of Transport to engage with the Treasury, the New Zealand Transport Agency and KHL to develop a terms of reference for a review of (i) the policy for planning and funding of investment decisions for rail transport in New Zealand, and ^[34] , and report back to the Minister of Finance, Minister for State Owned Enterprises and the Minister of Transport.

Agree/disagree
Minister of Finance

Agree/disagree
Minister of Transport

Agree/disagree
Associate Minister of Finance

Agree/disagree
Minister for State Owned Enterprises

Chris Gregory
Manager, Commercial Operations - Governance and Performance

Steven Joyce
Minister of Finance

Hon Simon Bridges
Associate Minister of Finance, Minister of Transport

Hon Amy Adams
Associate Minister of Finance

Hon Todd McClay
Minister for State Owned Enterprises

Treasury Report: KiwiRail Holdings Ltd: Capital Requirements

Introduction

1. KHL is forecasting to require ^[33] of capital expenditure ^[33] to operate its rail and inter-island ferry operations. KHL expects to fund ^[33] of the forecast capital expenditure from earnings generated from its operations. The company is forecasting to need ^[33] of capital from the Crown to fund the shortfall ^[33]
2. KHL's request for capital funding is in addition to other requests it has made for funding as part of Budget 2017:
 - Rollover of KHL's debt facility provided by the Crown (\$174m)
 - Funding for upgrades to the Wellington metro lines (\$98m)
 - Funding for the KHL's costs that are not met by insurance proceeds in relation to the reinstatement of the South Island Transport Corridor following the Kaikoura earthquake ^[33]
3. This report addresses KHL's request for capital funding. The other requests noted above have been addressed in other work streams as part of Budget 2017.
4. ^[23]
5. We provide a summary of KHL's historical financial statements in Appendix 1 and a brief chronology of KHL's history in Appendix 2. The Minister of Finance has also requested further analysis be undertaken on the historical rail network capital expenditure. We have requested this analysis from KHL, but it was not supplied to the Treasury at the date of this report. KHL has informed the Treasury that it intends to provide part of this analysis on 23 March.
6. The purpose of this report is to:
 - Summarise the findings of the analysis undertaken; and
 - Make recommendations on the amount of capital funding to be provided to KHL as part of Budget 2017

Forecast Capital Expenditure

7. The table below compares a summary of KHL's actual capital expenditure for the last five years to KHL's forecast capital programme for ^[33]

Table 2: KHL Historical and Forecast Capital Expenditure

| \$m | FY13 | FY14 | FY15 | FY16 |
|---------------|-------------|-------------|-------------|-------------|
| Rail network | 165 | 145 | 153 | 155 |
| Rolling stock | 100 | 55 | 57 | 50 |
| Other | 39 | 49 | 39 | 49 |
| Total | 304 | 249 | 249 | 254 |

8. We comment on each category of capital expenditure below.

- [33]
- KHL has provided two alternatives for the rail network expenditure. The ‘deferred’ alternative (which is presented in the table above) [33]

The ‘resilient’ alternative requires [33]
These alternatives are discussed further below.
- KHL is forecasting to spend [33] on rolling stock including the purchase of locomotives and wagons. Rolling stock capital expenditure comprises [33] of the total.

9. We analyse each element of capital expenditure further below.

Rail Network Infrastructure

10. KHL has presented three alternatives for rail network capital expenditure. The table below presents a comparison of the actual rail network capital expenditure to the forecast capital expenditure for the ‘deferred’ and ‘resilient’ alternatives provided by KHL.

Table 3: KHL Forecast Rail Network Infrastructure Capital Expenditure

| \$m | FY13 | FY14 | FY15 | FY16 |
|-------------------|------|------|------|------|
| Actual | 165 | 145 | 153 | 155 |
| Resilient | | | | |
| Deferred | | | | |
| Difference | | | | |

11. KHL’s alternatives for rail network capital expenditure comprise:

- Future proofed: replace assets with modern world class equivalents. This alternative would result in a step change or progressive improvement across all lines. However, KHL has not costed this alternative as it is not considered to be affordable.
- Resilient: meets the level of service required by current customers. This alternative would result in a progressive improvement in priority routes and a significant increase in civil resilience. KHL project that [33]
- Deferred: Meets the customers’ minimum service level by maintaining a safe level of operation. This alternative does not keep pace with renewal rates and results in asset decline and deferral of expenditure. [25], [33]

12. We comment below on (i) KHL’s approach to management of the rail network, and (ii) further analysis of the ‘deferred’ alternative.

Overview of KHL's Rail Network Management

13. The advice received by the Treasury is that KHL has made significant progress over the last 10 years in increasing its understanding of the rail network infrastructure, and implementing greater professional discipline in its management. KHL appears to have shifted from a highly reactive approach to addressing imminently failing or failed assets in the late 1990s, to a more pro-active whole-of-life approach with forecasts out to 2045. While these practices are not fully developed, greater confidence can be taken in KHL knowing which intervention should be taken and when.
14. The improvements in asset management are demonstrated by the improvements in (i) the Track Quality Index (TQI) and, (ii) the labour unit costs.
15. The TQI is a measure of deviation from the theoretically optimal alignment of a span of track (a lower TQI score indicates less deviation from the optimal alignment). The chart below presents the TQI for the North Island Main Trunk, Golden Triangle (Metroport) and Midland line (the Coal route) since 1992.

Figure 1: Track Quality Index since 1992

[25]

16. The chart shows a significant improvement in the TQI scores since 2005. The relatively lower improvement in the TQI for the Coal Route is primarily due to the complexity of this line.
17. KHL also appears to have maintained fairly constant unit rates in nominal terms (i.e. slight reduction in real terms) for installing sleepers and rail with staff or small contractors, and procured its bridges and other individual civil assets in the general construction market at competitive rates.
18. The chart below presents the nominal labour unit cost for laying sleepers over the period since 2014.

Figure 2: Unit Labour Costs for Re-sleeping

[25]

19. The chart shows a slight improvement over time in nominal labour unit costs. While this measure needs to be considered in the context of the specific work undertaken, it is an indicator of an improvement in labour costs. While achieving step gains is a challenge in a labour-intensive activities, [25]

Analysis of the Impact of the Forecast Rail Network Expenditure

20. KHL builds up its forecast capital expenditure for the rail network by designating lines into priority investment groups as determined by customer and market expectations. These investment groupings range from “Step Change in Performance” to “Mothball (i.e. no traffic volume across the track)”.
21. The charts on the following pages present the investment grouping for each line on the rail network for the ‘deferred’ and ‘resilient’ alternatives. The key differences between the alternatives are, under the deferred alternative the:
 - [25]
 -
 -
22. We also provide an analysis of the key customers and performance drivers for each line segment in Appendix 5.

Figure 3: Resilient Alternative

[25]

Figure 4: Deferred Alternative

[25]

23. The table below presents a comparison of historical and forecast capital expenditure for rail network infrastructure by category.

Table 4: Deferred Alternative Rail Network Capital Expenditure

| \$m | FY13 | FY14 | FY15 | FY16 | [25] |
|-----------------------------|-------------|-------------|-------------|-------------|------|
| Line Segment Upgrades | 24 | 30 | 29 | 30 | |
| Public Safety Upgrades | 1 | - | 1 | 1 | |
| Incidents | - | 6 | 3 | 7 | |
| Plant and Equipment | 32 | 6 | 3 | 5 | |
| Signals and Telecoms | 4 | 4 | 5 | 5 | |
| Structures | 30 | 21 | 28 | 41 | |
| Civils | | 9 | 11 | | |
| Track | 77 | 62 | 65 | 60 | |
| Traction & Electrical | 1 | 1 | 1 | 1 | |
| Metro | 179 | 99 | 51 | 29 | |
| Grants | (182) | (93) | (45) | (33) | |
| Total | 166 | 145 | 153 | 155 | |
| MNL adjustment | | | | | |
| Unreconciled | | | | | |
| Deferred alternative | | | | | |

24. We note the following:

- The large metro projects undertaken in FY12 and FY13 on the Auckland and Wellington networks have now been completed. We note that the capital expenditure forecast excludes the impact of the Citv Rail Link in Auckland. the development of a [25]
- [25]
- The majority of the forecast increase in expenditure is to replace aged structures and undertake work on the formation and track.
- The MNL adjustment reflects KHL's assessment of the level of capital expenditure that will be avoided as a result of the Main North Line (MNL) being out of service. KHL has built up its capital expenditure programme using a 'bottom up approach' assuming the Main North Line is operational. The MNL adjustment reflects KHL's best estimate of the capital expenditure that will be avoided as a result with the current status of the MNL (note that the re-instatement costs of the MNL are being considered separately in Budget 2017).

25. We have also analysed operational metrics for the rail network infrastructure. The table below presents a comparison of the historical data for key metrics for rail network capital expenditure to the forecast average metrics [33] for the 'deferred' and 'resilient' alternatives.

Table 5: Rail Network Operational Metrics

| Metric | FY13 | FY14 | FY15 | FY16 | [25] |
|-------------------------|------|------|------|------|------|
| New sleepers laid (000) | 101 | 67 | 82 | | |
| New rail laid (km) | 29 | 24 | 20 | | |
| Lines de-stressed (km) | 155 | 130 | 126 | 93 | |

26. The data shows that KHL is forecasting a significant increase in both the number of sleepers laid and the length of line de-stressed under the 'deferred' alternative. The Treasury has received independent advice that the operational metrics for the 'deferred' alternative are consistent with a movement towards the long term renewal rate for these metrics.

Other rail network expenditure

27. We make the following observations on other key elements of forecast capital expenditure for the rail network:

- [25]

-

The Treasury's View

28. We have undertaken a high level review of KHL's forecast capital expenditure for the rail network and held discussions with KHL senior executives. Based on this analysis, undertaken in a limited time period, the capital expenditure forecast put forward for the rail network appears reasonable based on the assumed retention of the current network over the long-term. We have not become aware of any opportunities to avoid capital expenditure that does not involve closure of lines (discussed further below).

29. We note that, in the short term, it is possible to defer rail network expenditure at the expense of an increase in the number of speed restrictions and a reduction in performance of the rail network. It is important to note, [25]

30. In the course of undertaking our work we have identified a limited number of potential opportunities to defer network expenditure (these are listed in the table below).

Table 6: Potential Opportunities to Defer Expenditure

[25]

31. In summary, there is potential to explore deferral of up to ^[25] of capital expenditure. However, it is important to note that (i) any deferral is likely to result in a higher cost in the future, and (ii) we have not tested these opportunities with KHL senior management.

Rolling Stock

32. KHL is forecasting ^[25] years. The table below presents a comparison of historical and forecast capital expenditure on rolling stock.

Table 7: Rolling Stock Capital Expenditure

| \$m | FY13 | FY14 | FY15 | FY16 |
|--------------------|------------|-----------|-----------|-----------|
| Locomotives | | | | |
| Purchases | 39 | 12 | 20 | - |
| Other | 18 | 18 | 16 | 21 |
| Wagons | | | | |
| Purchases | 22 | 12 | 3 | 14 |
| Other | 8 | 9 | 12 | 7 |
| Other | 13 | 4 | 6 | |
| Total | 100 | 55 | 57 | 50 |

33. We make the following observations:

3

[25]

- KHL's forecast capital expenditure on rolling stock of [25]
- The increase in forecast expenditure is primarily due KHL revising its strategy for management of the rolling stock fleet to bring forward previously deferred replacement of locomotives (discussed further below).
- [25]

Our independent advice, is that the forecast capital expenditure for wagons is consistent with the normal cycle of replacement of the fleet.

KHL's Revised Locomotive Strategy

34. KHL has revised its locomotive strategy to bring forward the replacement of aged locomotives and shunts in the fleet. The figures below summarise KHL's planned replacement of locomotive and shunts over the period to FY33.

[25]

35. The revised fleet strategy sets out the planned replacement of:

- the recently decommissioned electric locomotive (EF) fleet [25]

- [25]

-

36. The revised locomotive fleet strategy is expected to result in:

- [25]

This change is illustrated in the chart below which present the expected changes to the age of the fleet over time. The bars in the chart show the number of units by age at the respective point in time; the red bars highlight locomotives that are greater than 30 years old.

Figure 7: Age Profile of KHL's Locomotive and Shunt Fleet

[25]

- Improvements to the key performance measures for the fleet of (i) availability of locomotives, and (ii) Mean Distance Between Failures (MDBF). Availability measures the % of the locomotive fleet that is available for service at a point in time. KHL's fleet availability is currently [25] KHL is targeting to increase this measure to [25] MDBF is a measure of reliability of the locomotive fleet. KHL's MDBF for the fleet is currently around [25] and it is targeting a MDBF of [25]
- KHL expect that the planned reduction in the number of classes in locomotives overtime will result in other operational efficiencies including a lower level of unplanned maintenance, carrying a smaller inventory of spares and improved labour efficiencies.

The Treasury's View

37. We are informed that the typical useful life of a locomotive is 30 years. However, the useful life can be extended with additional maintenance. KHL has commissioned 48 DL locomotives over the last six years. Other than the DL class of locomotives, the last class of locomotives to be commissioned was the EF class in 1988. A decision has already been made (and publicly announced) to decommission the EF class. In our view, it is not a question of whether the locomotive fleet needs to be replaced, rather the key questions are (i) for how long can replacement of the fleet be deferred?, and (ii) how should the fleet be replaced?

38. There is a lead time of approximately three years from undertaking a requirements study to commissioning of the first locomotive. [25]

For the purposes of Budget 2017, at a minimum KHL [25]

ever, a decision does not need to be made in Budget 2017 to fund the [33] locomotives. The decision of whether to fund (or otherwise) the [33] locomotives could be deferred [33]

40. The decision of whether to commit to funding the full cost of the [25] is less clear cut. The [25] is replacing locomotives that were commissioned 37 to 48 years ago. A decision to defer funding for replacement of these locomotives will result in higher maintenance costs, operational inefficiencies and a heightened risk of failure. On balance we favour KHL receiving sufficient funding to continue the work to commission the [25] but further detail is required from KHL on (i) the timing of key decisions, and (ii) the planned outlay of capital expenditure for the fleet.

41. [25]

Other capex (i.e. IIL, property, corporate)

42. The table below presents KHL's other forecast capital expenditure.

Table 8: KHL Forecast Other Capital Expenditure

| \$m | FY13 | FY14 | FY15 | FY16 |
|---------------|-----------|-----------|-----------|-----------|
| Interislander | 5 | 8 | 8 | 24 |
| Scenic | 5 | - | - | 1 |
| Property | 13 | 18 | 6 | - |
| Facilities | - | - | 9 | 16 |
| Corporate | 16 | 23 | 16 | 8 |
| Total | 39 | 49 | 39 | 49 |

43. The Treasury has not identified any opportunities to avoid or defer KHL's other forecast capital expenditure. We comment on each of these items below.

Interislander

44. The key assumption's underpinning KHL's capital expenditure forecast for the inter-island ferry fleet include:

- [25]
-

4 [25]

45. [25]

46.

Scenic, Property and Corporate

47. These items include capital expenditure forecast for the Scenic rail passenger services, KHL's property portfolio and the head office. The forecast capital expenditure for these items is on average [25] per year and makes up [25] of the total forecast capital expenditure.

KHL Forecast Contribution

48. KHL is forecasting to contribute [25] to fund the capital expenditure [25] year period. In substance, this represents the level of contribution provided by customers for use of the rail and ferry transport network, less KHL's operating costs.

49. The table below analyses KHL's (i) historical earnings for the four year period to FY16, (ii) budgeted earnings for FY17f, (iii) revised forecast earnings for FY17r, and (iv) [33]

Table 9: Summary of Historical and Forecast KHL Earnings

| \$m | FY13 | FY14 | FY15 | FY16 |
|-----------------------------|------------|------------|------------|------------|
| Revenue | 727 | 741 | 721 | 694 |
| Expenses | 621 | 664 | 630 | 618 |
| EBITDA⁵ | 105 | 77 | 91 | 76 |
| EBITDA % | 14% | 10% | 13% | 11% |
| Asset Sales | 6 | 2 | 18 | 22 |
| Other | (60) | 51 | (57) | (54) |
| Total Cash Available | 54 | 130 | 51 | 44 |
| Total capex* | 304 | 249 | 249 | 254 |
| Crown Funding | 250 | 119 | 198 | 210 |

50. We make the following observations:

- EBITDA declined by \$29m (28%) in the period from FY13 to FY16. The factors that have contributed to the movement in historical EBITDA include:
 - a \$30m decline in revenue from bulk freight primarily due to reduced coal and bulk milk volume. This has been mitigated by growth in IMEX freight revenue. KHL revenue is analysed in further detail below.
 - a \$10m decline in EBITDA due to (i) the loss Wellington metro contract, and (ii) the loss of the Auckland Metro Maintenance contract in FY16.

⁵ Earnings Before Interest, Tax, Depreciation and Amortisation (EBITDA) is a measure of financial performance.

- Increased costs as result of [25] FY15, and \$6m of one-off restructuring costs in FY16.
- \$27m of cost savings from productivity initiatives implemented in FY16. The productivity initiatives include a reduction of 242 employees, changes in rostering to reduce overtime, reduction in the vehicle fleet and a general reduction in overhead and discretionary expenditure.
- The FY17f figures exclude the impact on KHL's business operations from the Kaikoura earthquake. KHL has now provided the Treasury with a revised forecast for FY17 incorporating the impact of the earthquake (presented in the table as FY17r). KHL is now forecasting:

- [25]

-

-

- KHL is forecasting earnings to increase at a Compound Annual Growth Rate (CAGR) of [25]

The forecast increase

in earnings is based on the following assumptions:

[25]

-

Analysis of KHL historical and forecast revenue

51. The table below analyses KHL's (i) historical revenue for the four year period to FY16, (ii) budgeted revenue for FY17f, and (iii) forecast revenue for [25]

It is important to note that the figures presented above were prepared prior to KHL issuing its revised earnings forecast (FY17r).

Table 10: KHL Historical and Forecast Revenue

| \$m | FY13 | FY14 | FY15 | FY16 |
|----------------------------|------------|------------|------------|------------|
| Bulk | 100 | 96 | 91 | 71 |
| Forestry | 50 | 50 | 52 | 50 |
| Domestic | 95 | 101 | 104 | 107 |
| IMEX | 133 | 130 | 131 | 146 |
| Total Freight | 378 | 377 | 379 | 374 |
| Passenger | 66 | 57 | 70 | 73 |
| CV | 55 | 56 | 55 | 53 |
| Total Interislander | 121 | 113 | 125 | 126 |
| Scenic | 20 | 21 | 25 | 30 |
| Property | 30 | 32 | 39 | 41 |
| Metro | 44 | 53 | 54 | 60 |
| Other | 134 | 145 | 99 | 63 |
| Revenue | 727 | 741 | 721 | 694 |

52. We make the following observations:

- Revenue from bulk freight declined by 29% over the four year period to FY16 largely due to a (i) reduction in Solid Energy's coal extraction, and (ii) changes in bulk milk volume following the refurbishment of Fonterra's Pahiatua milk plant which resulted in less bulk milk being transported to the Whareroa plant in New Plymouth. [25]
- Forestry revenue has remained flat since FY13. [25]
- Domestic revenue has grown at a CAGR of c.4% over the four years to FY16. [25]
- Import/Export (IMEX) revenue has grown at a CAGR of 3% over the period to FY16. [25]
- Interislander has experienced modest growth in revenue over the period to FY16. [25]

Treasury view on KHL’s forecasts

53. In our view, it will be challenging for KHL to achieve the forecast level of growth in EBITDA.

- [34]

-

-

54. Like most businesses KHL’s operations are vulnerable to adverse events (e.g. Kaikoura earthquake, fires in the Cass region) and changes in customer’s circumstances [25]. However, the high level of fixed costs in KHL’s business mean that it is more difficult to respond to adverse events which result in a significant loss of revenue. There is a greater level of variability to KHL’s earnings as a result.

55. The impact of variability in KHL’s earnings is a reduction in the level of its contribution to fund capital expenditure. This results in either (i) a greater contribution being required from the Crown to fund the capital expenditure, or (ii) deferral of capital expenditure projects that KHL is no longer able to fund.

56. [34]

Line Closures

57. KHL has suggested that optimising the rail network by closing minor lines could reduce the forecast level of capital expenditure by up to [25]. The table below presents KHL's forecast impact on capital expenditure as a result closing the minor lines:

Table 11: KHL Forecast Savings from Line Closures

[25]

58. These lines are characterised by (i) a need for significant expenditure to replace aged infrastructure ([25]), and (ii) the financial loss to operate these lines due to the low level of freight volume.
59. KHL provided the option to close minor lines as part of the Turn Around Plan (2010) and the Commercial Review (2014). [25]

[34]

60. Closure of the minor lines would result a reduction in the option value to enhance the rail network if freight flows change. Patterns of freight do change, not least with natural disasters and shifts in the flow of commodities, but also with domestic flow changes. For example:

- [25]
-
-

61. KHL inform us that closure of the minor lines is only likely to have a minor impact on the size of the rolling stock fleet.

The Treasury's View

62. The annual cost for KHL to operate these lines represents the cost of preserving the option to use the rail network to accommodate future changes in freight flows. [34]
63. As noted previously, the alternative to close these lines has been presented to Ministers previously. On both occasions a decision was made not to close these lines.

64. [34]

[33], [34]

—

[33], [34]

[33], [34]

Crown Contribution

84. The analysis above shows that KHL is not forecast to generate sufficient cash flow from its operations to fund the level of capital expenditure that it considers is required to operate the rail network. In our view, there is no viable outcome that does not involve the Crown continuing to provide a level of funding for KHL in Budget 2017.
85. The table below compares KHL's capital request to historical capital provided by the Crown for the last five years.

Table 12: Historical and Forecast Crown Funding

| \$m | FY13 | FY14 | FY15 | FY16 |
|---------------|------|------|------|------|
| Crown Funding | 250 | 119 | 198 | 210 |

86. In the last five years, the Crown has provided \$967m of capital to KHL to meet its unfunded capital expenditure. KHL is forecasting to require [33]
87. The Crown has also provided funding to KHL in the form of grants and debt. Since the acquisition of the rolling stock and ferries from Toll Holdings Ltd in 2008, the Crown has provided c.\$3.3b of cash funding to KHL in the form of grants, equity and debt. This figure excludes (i) the \$690m of capital contributed by the Crown to acquire the business operations from Toll Holdings, and (ii) the \$3.3b of railway land owned by the New Zealand Railway Corporation and leased to KHL for a nominal rent.

Budget 2017 Capital Allowance

88. [33]

KHL's Revised Request

89. In light of the Crown's fiscal pressures, KHL has reduced the level of committed capital funding that it is seeking from the Crown to two years of unfunded capital expenditure (i.e. FY18 and FY19). This amounts to a commitment from the Crown of c.\$450m over the two year period.
90. It is likely that KHL will need to revise its planned capital expenditure programme in light of its decision to request funding for a shorter period. For example, KHL may need to revisit the viability of some projects that span beyond the two year period that KHL is seeking a funding commitment for. This is likely to remove some of the

potential opportunities to defer rail network capital expenditure noted earlier in this report.

The Treasury View

91. ^[34]

92.

93.

94. In light of these matters, we consider the most prudent course of action is for the Crown to commit to providing \$450m funding for the two year period to FY19 as requested by KHL. The funding should be in the form of a multi-year appropriation that would provide KHL with the flexibility to bring forward funding into FY18 if it is required (at the expense of having a lower level of funding available in FY19).

95. In our view, the proposed funding commitment should be conditional on KHL providing the following:

- A revised capital expenditure plan over the two year period that reflects the level of committed funding by the Crown
- Key milestones for the capital expenditure plan that demonstrate the expected delivery of key outcomes (this is to allow the Treasury to report performance on the use of funding provided)
- A revised cash flow forecast highlighting KHL's intended calls on the Crown funding over the two year period (this is to provide the Treasury with notice on the approximate timing of the funding being called by KHL)
- Detail on any progress made in securing funding from other sources ^[25]
- Consulting with Ministers on any business cases arising from Board decisions to replace the locomotive fleet and the outcome of KHL's review of the inter-island ferry fleet
- Separate reporting for the use of funding provided to KHL by the Crown for the purposes of meeting the uninsured costs to reinstate the South Island Transport Corridor

96. Provision of this information creates an obligation on the Treasury to actively monitor KHL's performance in achieving outcomes against its revised capital expenditure plan for which funding has been provided. The Treasury is currently recruiting to (i)

increase the level of resource to manage its relationship with KHL, and (ii) co-ordinate with other agencies and organisations involved in the transport sector (e.g. the Ministry, NZTA, shipping lines, ports etc).

The process of funding KHL

97. KHL owns and manages assets and infrastructure with long term lives. Decisions made in regard to KHL's assets and infrastructure have a long term impact. This is similar to other managers of infrastructure assets such as Transpower (owner and operator of the electricity transmission grid) and Air New Zealand. While, these companies operate under different funding models, they both are able to make long term decisions based on informed judgements on their ability to access capital funding.
98. KHL is currently funded through a combination of customer revenue and Crown funding. The company does not generate sufficient cash flow from the level of customer revenue it receives after deducting its operating costs to fund the level of capital expenditure required to maintain the rail network. Therefore a level of Crown funding is required. However, the appropriate balance between the level of funding provided by the customers (i.e. users of the rail network) and the Crown (in its role as both owner of (i) the company, and (ii) public policy in New Zealand) is not clear.
99. The outcome of this report (consistent with previous budgets) is a recommendation for short-term capital funding for KHL. It is difficult to envisage a situation under the current budgetary constraints and policy settings for rail funding where there would be a different outcome.
100. In our view, this is a sub-optimal outcome. An infrastructure business such as KHL needs a level of funding certainty to optimally manage assets and infrastructure over its useful life. While taking a short term approach to funding KHL may be viable for a period of time (and it appears that KHL has made improvements under such approach) eventually deterioration and aging of the infrastructure will need to be addressed.

Policy for funding of Rail Transport

101. This section outlines a number of factors that need to be addressed in an attempt to resolve the longer-term structure and funding of the rail network in New Zealand.
102. The Government considered KHL's Commercial Review and a related Treasury report in 2014 and has subsequently expressed the Government's support for a national rail network.
103. This report highlights that a number of issues exist under the current policy settings for funding of rail transport in New Zealand. The analysis shows that it is likely that requests from KHL for capital from the Crown will continue for a number of years into the future, most probably in the range of \$200m or more per year, if the current rail network configuration is to be maintained. As the company's financial situation is unlikely to materially change from one year to the next, the Government will be faced with the same capital investment decisions each year.
104. In the absence of a commitment from the Crown to provide long term funding, KHL is seeking a commitment from the Government to review the funding mechanism for rail, with the intention of giving KHL some certainty to manage its business and investment programme accordingly.
105. The KHL Board seek a degree of certainty about future funding in order to plan and optimise the capital programme and negotiate good prices from locomotive and other

suppliers. Effective asset management systems require at least a medium term approach (capital projects and network line developments span several years) and there is an efficiency loss with a short term funding approach for a long-term asset configuration. Without funding certainty, the KHL Board is limited in its ability to make quality decisions that are required to strongly signal to customers commitments of performance and reliability.

Funding of rail network

106. We propose that officials develop terms of reference that canvas the options for the long term funding of the rail network and the basis by which such options can be evaluated. [34]

107.

108.

109.

110.

111.

112.

113.

114.

[34]

[34]

Next Steps

121. The next steps in the process for Budget 2017 are:

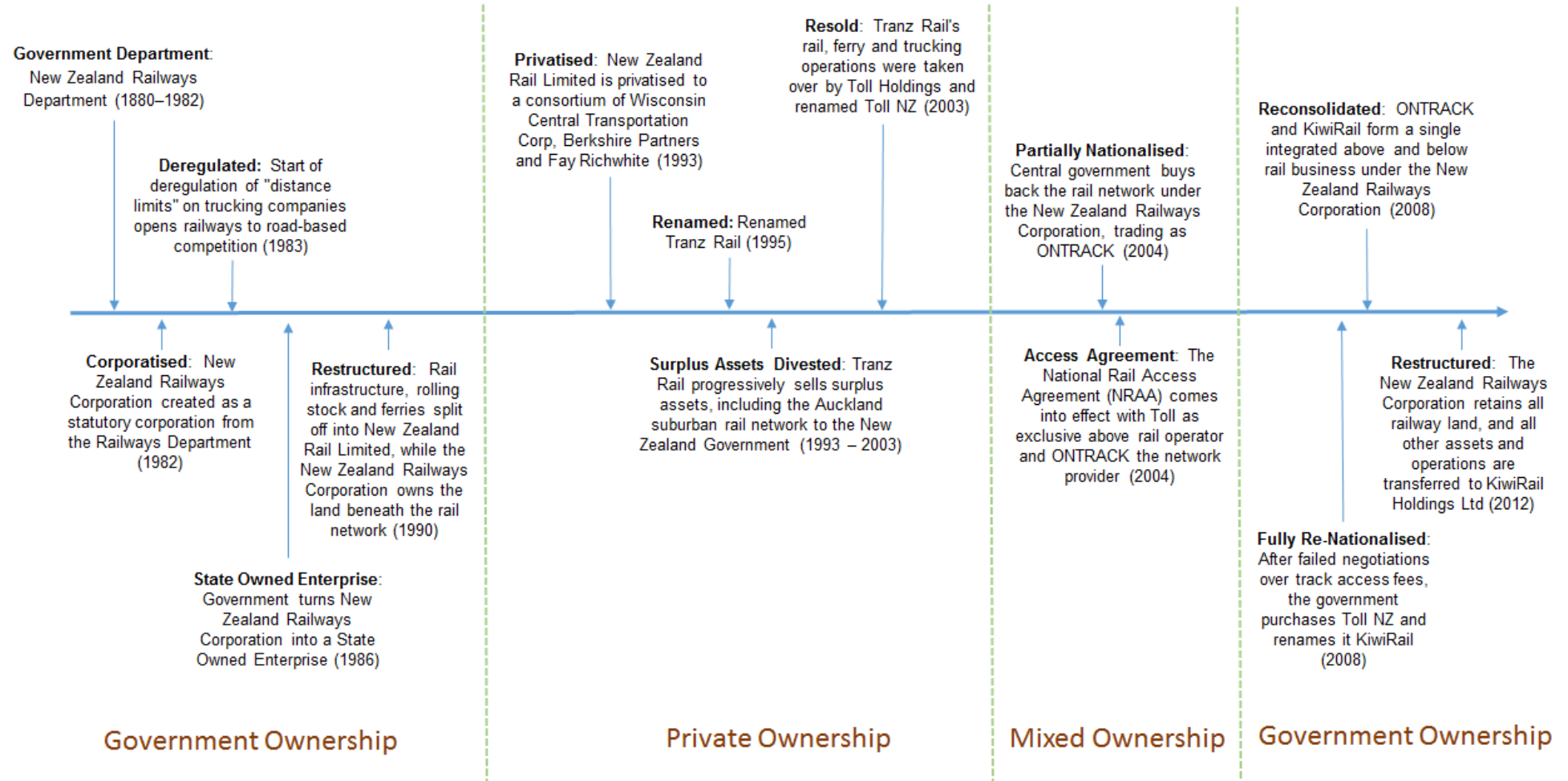
- Investment Ministers meeting scheduled for 27 March
- Final Budget Ministers meeting scheduled for 3 April

Appendix 1: KHL Financial Statement Years ending 30 June and Six Months ended 31 December 2016 (per CFISnet)

| Income statement (NZ\$m) | 2012/13 | 2013/14 | 2014/15 | 2015/16 | HY 2016/17 |
|----------------------------------|----------------|----------------|----------------|----------------|-------------------|
| Revenue | 726.8 | 740.9 | 720.6 | 694.0 | 298.3 |
| Opex | 618.8 | 663.4 | 630.1 | 618.1 | 287.3 |
| EBITDAF | 108.0 | 77.5 | 90.5 | 75.9 | 11.0 |
| margin | 14.5% | 10.4% | 12.3% | 10.9% | 3.7% |
| Fair value adjustments | - | 7.2 | (8.9) | (9.2) | - |
| Depreciation & amortisation | 61.9 | 69.7 | 68.8 | 67.5 | 32.9 |
| Other (gains) / losses | 396.6 | 329.8 | 225.5 | 216.6 | (1.4) |
| EBIT | (350.5) | (329.2) | (194.8) | (210.0) | (20.5) |
| Extraordinary (income) / exp. | (181.7) | (93.4) | (44.6) | (24.6) | 0.1 |
| Net interest (income) / exp. | 6.1 | 9.2 | 17.8 | 14.3 | 2.8 |
| Tax expense | 0.0 | (0.0) | - | - | - |
| NPAT | (174.8) | (245.1) | (168.0) | (199.8) | (23.4) |
| Cash flows (NZ\$m) | 2012/13 | 2013/14 | 2014/15 | 2015/16 | HY 2016/17 |
| Operating activities | | | | | |
| From customers & Crown | 754.9 | 736.7 | 726.5 | 698.9 | 300.3 |
| To suppliers & employees | (655.3) | (657.9) | (642.6) | (609.8) | (311.1) |
| Net interest received / (paid) | (24.3) | (13.0) | (12.1) | (10.8) | (5.3) |
| Other inflows / (outflows) | 0.0 | 0.0 | 0.0 | - | - |
| | 75.3 | 65.8 | 71.8 | 78.3 | (16.1) |
| Investing activities | | | | | |
| Sale of fixed assets | - | 2.8 | 4.5 | 3.5 | 0.3 |
| Purchase of fixed assets | (478.2) | (342.3) | (293.7) | (291.1) | (134.0) |
| Other inflows / (outflows) | 181.7 | 93.4 | 44.6 | 32.9 | 14.6 |
| | (296.5) | (246.1) | (244.6) | (254.7) | (119.1) |
| Financing activities | | | | | |
| Increase / (decrease) borrowings | (322.6) | 12.1 | (4.0) | (5.0) | (2.8) |
| Dividends | - | - | - | - | - |
| Other inflows / (outflows) | 572.5 | 118.8 | 211.4 | 227.9 | 145.2 |
| | 249.9 | 130.9 | 207.3 | 222.9 | 142.4 |
| Cash position | | | | | |
| Opening cash | 36.1 | 64.8 | 15.4 | 50.0 | 96.5 |
| Increase / (decrease) in cash | 28.7 | (49.4) | 34.5 | 46.5 | 7.2 |
| Closing cash | 64.8 | 15.4 | 50.0 | 96.5 | 103.7 |

| Balance sheet (NZ\$m) | 2012/13 | 2013/14 | 2014/15 | 2015/16 | HY 2016/17 |
|---------------------------------------|----------------|--------------|--------------|--------------|----------------|
| Current assets | | | | | |
| Cash & ST investments | 64.8 | 15.4 | 50.0 | 96.5 | 103.7 |
| Inventories | 54.0 | 58.7 | 56.5 | 63.1 | 68.2 |
| Debtors & prepayments | 88.4 | 93.4 | 87.6 | 87.5 | 93.6 |
| Other | 4.1 | 2.6 | 6.5 | 0.2 | 1.1 |
| | 211.3 | 170.1 | 200.6 | 247.3 | 266.6 |
| Non-current assets | | | | | |
| Fixed assets | 792.6 | 712.0 | 675.9 | 670.4 | 774.4 |
| Intangible assets | 0.4 | 0.3 | 0.6 | 0.8 | 2.0 |
| Other assets | 5.3 | 40.3 | 71.5 | 70.8 | 72.7 |
| | 798.3 | 752.6 | 748.0 | 741.9 | 849.1 |
| Total assets | 1,009.6 | 922.7 | 948.6 | 989.2 | 1,115.7 |
| Current liabilities | | | | | |
| Interest-bearing debt | 4.6 | 18.0 | 31.2 | 10.2 | 12.1 |
| Accounts payable | 92.4 | 90.5 | 83.4 | 94.6 | 110.9 |
| Other | 65.6 | 80.3 | 72.3 | 67.6 | 62.1 |
| | 162.6 | 188.8 | 186.9 | 172.4 | 185.1 |
| Non-current liabilities | | | | | |
| Interest-bearing debt | 208.2 | 207.7 | 190.3 | 208.3 | 216.3 |
| Interest-bearing lease | - | - | - | - | - |
| Other | 51.3 | 49.1 | 51.1 | 60.3 | 43.7 |
| | 259.5 | 256.9 | 241.4 | 268.7 | 260.0 |
| Equity | | | | | |
| Share capital | 87.0 | 205.8 | 403.8 | 613.6 | 753.6 |
| Retained earnings | 442.3 | 235.4 | 94.2 | (87.4) | (105.0) |
| Revaluation reserve | 56.2 | 37.6 | 22.6 | 22.6 | 22.6 |
| Other | 2.0 | (1.8) | (0.2) | (0.6) | (0.5) |
| | 587.5 | 477.0 | 520.4 | 548.1 | 670.7 |
| Total liabilities & equity | 1,009.6 | 922.7 | 948.6 | 989.2 | 1,115.8 |

Appendix 2: Chronology of New Zealand Railways: Structure, Forms and Ownership



Appendix 3: The New Zealand Rail Sector Structure

The New Zealand rail sector can be divided into three distinct areas and entities:

Railway Land



Railway Infrastructure



Metropolitan Rail



Lease of Land

Track Maintenance

Track Access Arrangement

The rail sector was restructured in December 2012 with the demerger of all rail freight infrastructure, rolling stock, ferries, and plant and equipment into KiwiRail Holdings Limited (KiwiRail) from New Zealand Railways Corporation (NZRC). NZRC retained ownership of all railway land.

[25]

[25]

[25]