



Office of Hon Bill English

Deputy Prime Minister
Minister of Finance
Minister Responsible for HNZC

11 AUG 2015

Andrew Riddell
fyi-request-2926-551c4d43@requests.fyi.org.nz

Dear Andrew Riddell

Thank you for your Official Information Act request, received on 13 July 2015. You requested the following:

"Cabinet paper CAB 15 (181) Funding for Kiwirail, dated 30 March 2015, refers to a cost benefit study undertaken in the third bullet point of paragraph 44. Please provide a copy of this cost benefit analysis.

Paragraph 44 of this cabinet paper also states "During 2014, the Treasury, the Ministry of Transport and NZTA undertook an assessment of the economic and policy considerations for continuing to fund KiwiRail at the levels required." Please provide a schedule of all documents that were produced as part of this assessment, including a summary of the content of each document and the date it was prepared."

Information Being Released

Please find enclosed the following documents:

Item	Date	Document Description	Decision
1.	23 January 2015	Treasury Report entitled KiwiRail: Briefing ahead of meeting on 27 January 2015. This report gave Ministers a briefing on options for the Crown in regard to KiwiRail and also the Cost Benefit Analysis Treasury undertook on KiwiRail.	Release in part
2.	28 July 2015	Schedule of the documents used to produce the above Treasury Report, including a summary of the content of each document and the date it was prepared	Release in full (see next page)

I have decided to release the relevant parts of the document listed above, subject to information being withheld under one or more of the following sections of the Official Information Act, as applicable:

- personal contact details of officials, under section 9(2)(a) – to protect the privacy of natural persons, including deceased people,
- advice still under consideration, section 9(2)(f)(iv) – to maintain the current constitutional conventions protecting the confidentiality of advice tendered by Ministers and officials,
- commercially sensitive information, under section 9(2)(b)(ii) – to protect the commercial position of the person who supplied the information, or who is the subject of the information, and
- to enable the Crown to carry out commercial activities without disadvantage and prejudice, under section 9(2)(i).

Response to be Published Online

Please note that this letter (with your personal details removed) and enclosed documents may be published on the Treasury website.

This fully covers the information you requested. You have the right to ask the Ombudsman to investigate and review my decision.

Yours sincerely

A handwritten signature in black ink, appearing to read "Bill English". The signature is fluid and cursive, with a large initial "B" and "E".

Hon Bill English
Minister of Finance

Treasury Report: KiwiRail: Briefing ahead of meeting on 27 January 2015

Date:	23 January 2015	Report No:	T2015/40
		File Number:	SE-2-13-1

Action Sought

	Action Sought	Deadline
Minister of Finance (Hon Bill English)	Agree to meet with officials, either immediately after meeting with KiwiRail, or separately	27 January 2015
Associate Minister of Finance (Hon Steven Joyce)	Agree to meet with officials, either immediately after meeting with KiwiRail, or separately	27 January 2015
Associate Minister of Finance (Hon Paula Bennett)	For your information.	None
Minister of Transport (Hon Simon Bridges)	Agree to meet with officials, either immediately after meeting with KiwiRail, or separately	27 January 2015
Minister for State Owned Enterprises (Hon Todd McClay)	Agree to meet with officials, either immediately after meeting with KiwiRail, or separately	27 January 2015

Contact for Telephone Discussion (if required)

Name	Position	Telephone	1st Contact	
Ant Shaw	Senior Analyst, Governance and Performance	04 917 6160 (wk)	N/A	✓
Dieter Katz	Principal Advisor, National Infrastructure Unit	04 917 6264 (wk)	N/A	
Fiona Chan	Manager, Governance and Performance	04 917 6103 (wk)	[Withheld under s9(2)(a)]	

Actions for Ministers Offices' Staff (if required)

Return the signed report to Treasury.

Enclosure: Yes (attached)

Treasury Report: KiwiRail: Briefing ahead of meeting on 27 January 2015

Executive Summary

Meeting on 27 January 2015

A suggested agenda and approach to Ministers' meeting with KiwiRail and officials at 4pm on Tuesday 27 January 2015 is:

	Agenda Item	Discussion between	Suggested time
1	Presentation by KiwiRail on its new plan	Ministers, KiwiRail, officials	15 minutes
2	Ministers' questions for KiwiRail on its plan	Ministers, KiwiRail, officials	15 minutes
3	Discussion on policy considerations and next steps	Ministers and officials only	15 minutes

If it is impractical to have time at the end of the meeting to discuss the policy considerations and next steps with Ministers without KiwiRail being present, we request another meeting between officials and Ministers be set up shortly thereafter. We are seeking direction as to whether further analysis is required prior to any engagement with Cabinet, or whether initial early engagement with Cabinet is preferred, and in what form that may take.

Cost Benefit Analysis

We have been asked to reassess some of the assumptions underlying the cost benefit analysis in our previous report on KiwiRail in December (Treasury Report T2014/1805 refers) regarding the net social cost of continuing to fund rail at the levels being sought. If we take a more optimistic approach and amend the assumptions regarding the cost to KiwiRail's customers if rail was discontinued and the range of the possible future subsidy, we conclude that the net social cost would be lower than our previous assessment:

Network configuration option: \$ millions	Keep status quo		[Withheld under s9(2)(f)]	
	T2014/1805 (more pessimistic)	Amended (more optimistic)	T2014/1805 (more pessimistic)	Amended (more optimistic)
Net Social cost	\$150 - \$232	\$85 - \$200	\$124 - \$206	\$55 - \$170

Whilst the assumptions underlying the analysis of this nature are subjective and some require further work to validate, we believe it will not change the conclusion that there is a net social cost of continuing to fund rail at the levels required.

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Recommended Action

We recommend that you **agree** to meet with officials to discuss the options available to the Government with respect to KiwiRail and next steps, either immediately following the meeting scheduled for 27 January 2015, or at a separately scheduled meeting shortly thereafter.

Agree/disagree
Minister of Finance

Agree/disagree
Associate Minister of Finance

Agree/disagree
Minister of Transport

Agree/disagree
Minister for State Owned Enterprises

Fiona Chan
Manager, Governance and Performance

Hon Bill English
Minister of Finance

Hon Steven Joyce
Associate Minister of Finance

Hon Simon Bridges
Minister of Transport

Hon Todd McClay
Minister for State Owned Enterprises

Purpose of Report

1. Ministers have a meeting with KiwiRail and officials at 4pm on Tuesday 27 January to discuss KiwiRail's new plan and the options available for the Government with respect to the future of the business.
2. We recently provided advice to Ministers on KiwiRail's new plan and the associated policy considerations (Treasury Report T2014/1805 refers), and that report forms the basis of our comprehensive advice ahead of the meeting. This report discusses a number of issues that have been drawn to our attention since then, and that seem relevant to ministers' deliberations.

Meeting on 27 January

3. KiwiRail's Chief Executive, Mr Peter Reidy, and Chair, Mr John Spender, will attend the meeting on 27 January, along with officials from Treasury, the Ministry of Transport and possibly the New Zealand Transport Agency (NZTA), should Ministers agree.
4. KiwiRail intends to present its new plan to Ministers at the meeting, with its key objective being to gain certainty of its future and a clear direction from the Government ahead of Budget 2015.
5. We request some time with Ministers without KiwiRail at the end of the meeting to discuss the options available for the Government (see below). If this is impractical, we request another meeting with Ministers shortly thereafter to discuss options. We are not seeking decisions at the meeting, but are looking for direction as to whether further analysis is required prior to any engagement with Cabinet, or whether initial early engagement with Cabinet is preferred, and in what form that may take. A suggested agenda is included here:

	Agenda Item	Discussion between	Suggested time
1	Presentation by KiwiRail on its new plan	Ministers, KiwiRail, officials	15 minutes
2	Ministers' questions for KiwiRail on its plan	Ministers, KiwiRail, officials	15 minutes
3	Discussion on policy considerations and next steps	Ministers and officials only	15 minutes

Options for Government

Network configuration options

6. As described in T2014/1805, KiwiRail has presented three possible network configuration options for the government. These are summarised in the table below, along with key implications associated with each option. We have also included a 'status quo' option whereby all lines and services currently operating are retained (KiwiRail did not include this option in its plan).

Table 1: Network Configuration Options

	Configuration option	Key implications
1	Retain status quo [Withheld under s9(2)(f)(iv)]	<ul style="list-style-type: none"> • Funding of [s9(2)(b)(ii)] likely to be required over next three years. • Continual requirement for significant Crown investment from year four onwards.
2	Trim network [Withheld under s9(2)(f)(iv)]	<ul style="list-style-type: none"> • Funding of [s9(2)(b)(ii)] likely to be required over next three years.

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	[Withheld under s9(2)(f)(iv)]	<ul style="list-style-type: none">Continual requirement for significant Crown investment from year four onwards.
3	Retain Golden Triangle only i.e. [Withheld under s9(2)(f)(iv)]	<ul style="list-style-type: none">Significant reduction in ongoing Crown funding requirements.Significant one-off "change costs" and associated Crown funding.Major change from status quo and we recommend further work be undertaken to assess the implications and process for change.
4	Full closure i.e. close all freight only lines (but retain metropolitan services in Auckland and Wellington)	<ul style="list-style-type: none">No ongoing Crown funding requirementsSignificant one-off "change costs" and associated Crown fundingMajor change from status quo and we recommend further work be undertaken to assess the implications and process for change.

Ownership/Funding options

7. Our report assumed that if rail is not closed down, ownership/funding options would be considered subsequent to ministers' consideration of the network configuration options.

[Withheld under s9(2)(f)(iv)]

Management options

8. [Withheld under s9(2)(f)(iv)]

9.

Cost Benefit Analysis

10. We have given further consideration to the possibility that we may have been too pessimistic in our cost benefit analysis. There are four components of our cost benefit analysis that may warrant further consideration. We conclude that two of these may warrant adjustment to the cost benefit analysis (cost to KiwiRail's customers and Crown subsidy). However, these do not change our initial conclusion (in T2014/1805) that there is a material net social cost of continuing to fund rail at the levels required:

No cost to KiwiRail's customers if rail was discontinued

11. We assumed there would be no cost to KiwiRail's customers if rail was discontinued. This was on the basis that there are viable alternative transport modes available for

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most of its customers, and KiwiRail should therefore be setting its prices at the highest possible levels i.e. almost to the point of indifference where customers are indifferent between using rail and competing modes, taking all customers' costs and benefits into account.

12. [Withheld under s9(2)(b)(ii) and s9(2)(g)(i)]

Option value associated with retaining rail

13. Our assessment of the option value associated with retaining rail was based on analysis of the company's forecasts as a whole, rather than on a railway line by railway line basis. This was due to the fact that the true cash flows for each line segment cannot be calculated without some form of arbitrary cost allocation of common/unallocated costs to each line (these unallocated costs total approximately \$160 million per annum¹).
14. It is possible that a line by line analysis would produce a somewhat higher option value, on the grounds that a future Government would have the ability to close rail down except for the lines that add value, but this is probably only realistic in respect of the [Withheld under s9(2)(b)(ii)] given the interdependence of the other routes. A more sophisticated analysis of option values could be worthwhile, but at this stage we do not anticipate that it would make a game-changing difference.

Subsidy reduces in line with KiwiRail's forecasts

15. Table 4 below shows a comparison between KiwiRail's forecast annualised funding requirements over the next 30 years with Treasury's assessment that funding levels are unlikely to materially reduce from current levels. The comparisons are shown for both the status quo and KiwiRail's 'Trimmed Network' scenario [Withheld under s9(2)(b)(ii)] [Withheld under s9(2)(b)(ii)]

Table 4: Comparison of KiwiRail's and Treasury's forecast funding assumptions

Midpoint of ranges (\$ millions)	Keep status quo [Withheld under s9(2)(f)(iv)]		[Withheld under s9(2)(f)] (i.e. KiwiRail's 'Trimmed Network' scenario)			
	KiwiRail's forecast	Treasury mid-point Assumption	Variance	KiwiRail's forecast	Treasury mid-point Assumption	Variance
Average annual subsidy ²	[s9(2)(b)(ii)]	210	[s9(2)(b)(ii)]	[s9(2)(b)(ii)]	190	[s9(2)(b)(ii)]

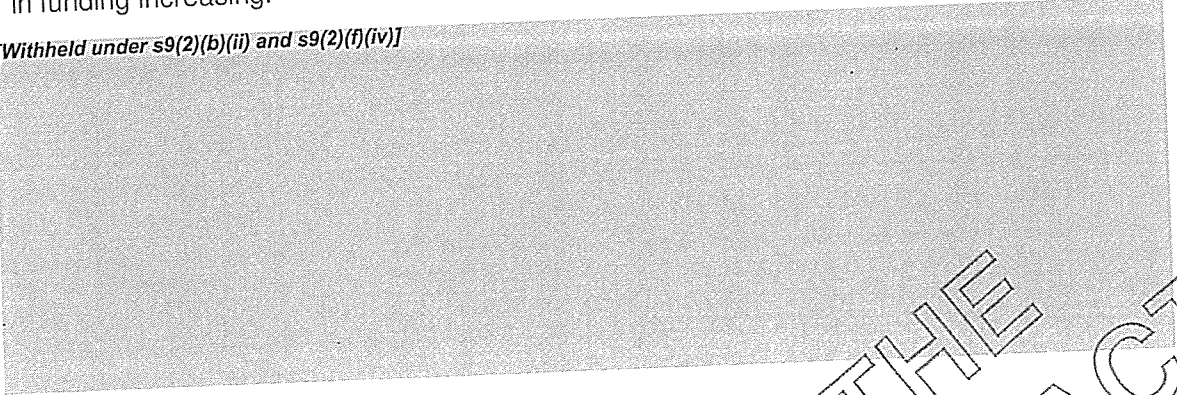
16. As illustrated above, the variances are material, and we have reflected KiwiRail's forecasts in the new cost benefit analysis table attached in Appendix 1. We have not amended the upper end of the likely subsidy range, but have reduced the lower end of the range to be equal to KiwiRail's estimates as reflected in the table above. However, we remain comfortable with our assessment of the likely ongoing funding requirements for the business, given its performance in recent years (with further discussion on the rationale for our assessment in T2014/1805). We recognise that opportunities exist to reduce funding over time, and KiwiRail should continue to do all it can to crystallise

[s9(2)(b)(ii)]

This has been calculated by annualising the Net Present Value over 30 years at 8%.

those opportunities. However, in T2014/1805 we also identified risks that could result in funding increasing.

17. [Withheld under s9(2)(b)(ii) and s9(2)(f)(iv)]



Economic cost of taxation

18. We have included in our evaluation an economic cost of taxation of around \$40 million p.a. (20% of the subsidy). This cost is often ignored in evaluations of other Government spending decisions. Nevertheless, we consider it a real cost that should be taken account of. Future tax reductions (or avoidance of tax increases) are an option for Government and savings by way of reduced subsidies to rail would contribute to the probability of those occurring, or to the magnitude or timing of any such tax cuts. We consider it appropriate, therefore, to take the cost of taxation into account in any evaluation that could influence a decision on whether or not to spend money.

Overall impact of amended assumptions

19. The table below reflects amendments to our cost benefit analysis as discussed above. As a result, our estimate of the total net social cost has decreased, and the range has increased – reflecting the significant uncertainty surrounding what the average annual subsidy could be over 30 years.

\$ millions	Keep status quo		[Withheld under s9(2)(i)]	
	T2014/1805 (more pessimistic)	Amended (more optimistic)	T2014/1805 (more pessimistic)	Amended (more optimistic)
Net Social cost	\$150 - \$232	\$85 - \$200	\$124 - \$206	\$55 - \$170

20. We expect KiwiRail to voice its concerns to Ministers at the meeting on the 27th as to the comprehensiveness of the work done on the public policy case for rail, and may also disagree with the values applied to some of the aspects in our cost benefit analysis. As noted in T2014/1805, a cost benefit analysis of this nature contains significant subjective elements, and it is likely that if the equivalent analysis was undertaken by another party, different weightings or interpretations of the costs and benefits would likely be applied which could result in different conclusions. We reiterate that the public policy conclusions we have drawn that indicate support for major down-sizing of the rail network are not yet of decision-making quality, and more comprehensive analysis would be needed before such decisions were made.

Appendix 1: Clarification of public policy case for rail

Contents

Public Policy Case

- Page 2 sets out our public policy story. This reflects our amended cost benefit analysis (which is more optimistic than that presented in T2014/1805)
- Page 3 sets out the rationale behind our conclusion, and some questions and answers.

Technical Annex

- Page 5 sets out the benefits and costs of making a change, ~~from the point of view of the status quo.~~ It is based on the same numbers, amended as discussed in this report.

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Public Policy Story	Keep all lines	[s9(2)(i)]	Keep golden triangle only
Cost of rail: Annualised subsidy (including economic cost of taxation)	\$180-276m	\$151-252m	\$30-46m
Public Policy Question: What are the public policy benefits that the taxpayer gets for paying the subsidy?			
Avoided CO₂ emissions from sending freight by rail	\$7.5-12.5m	\$7.5-12.5m	\$1-5m
The option value ...of retaining rail in case future developments make rail desirable. Our analysis suggests that this is very small because the changes in the general business environment that would be required to make rail profitable would need to be of such magnitude as to render it very unlikely.	\$1.8-3m	\$1.8-3m	\$0.3-0.5m
Private benefits to KiwiRail's customers <i>[Withheld under s9(2)(b)(ii)]</i>	\$10-40m	\$10-40m	\$2-7m
Fewer accidents and less road congestion ...as a result of fewer trucks. These figures equal the additional RUC minus the additional road construction costs and safety impacts. They suggest that the additional revenue from RUC paid by the additional trucks would likely be more than sufficient to expand and improve the road network so there is no increase in accidents or congestion.	-\$44 to 24m	-\$38 to 28m	-\$16 to 35m
Avoided decommissioning and mothballing costs Indications are that they would be around \$600 – 900 million, which for comparison purposes we annualised at \$47 – 72 million.	\$48-72m	\$45-70m	\$5-15m
<u>Shortfall in benefits from continuing to fund</u>	\$85 - 200m	\$55-170m	\$37 to -16m

The Rationale

The rationale behind the result is that although rail is cheaper than road transport on a per-km basis, much of the freight must be transferred to or from a truck at one or other end of the journey, depending on whether the freight is being exported or imported. For domestic freight, there is double handling at both ends. These transfers add considerably to costs and to the time it takes for freight to reach its destination.

A supply chain that includes rail is therefore often significantly more resource-intensive and expensive than one that relies on trucks or coastal shipping only, unless distances are large, freight is not time-sensitive, volumes are large and/or the nature of the freight makes pick-up at the factory or mine feasible. KiwiRail's bulk freight (e.g. coal and timber) and Import/Export (e.g. milk powder) markets generally have these characteristics, but its domestic market (which traverses most of the network) does not.

Q & A

1. Why is the option value so low?

A: An option value does not arise until KiwiRail's accounts turn positive, which it doesn't forecast to happen until after 30 years. That value must then be multiplied by the expected probability of that happening, which we expect to be relatively low, and then it must be discounted to the present. Discounting over 30 years reduces values by around 90%.

2. Would motorists' road experience be worse as a result of so many more trucks on the road?

A: Not necessarily. The cost benefit table includes our estimate of the cost of improving roads sufficiently so that the overall road experience (travel times, perceived congestion and rate of accidents) does not deteriorate. The net benefit at the bottom of the table is after taking those costs into account.

3. Should ministers take into account motorists' willingness to pay to keep those trucks away by keeping freight on rail?

A: That 'willingness to pay' is already taken account of in the cost benefit table. To treat it as an additional consideration would be double counting.

4. Is it realistic to assume that there is no private cost to rail users if the rail network is closed down?

A: Probably not. We put in zeros in the previous Treasury report T2014/1805 because firstly, we have no information, and secondly,
[Withheld under s9(2)(b)(ii) and s9(2)(i)]

5. Is it realistic to assume that NZTA could improve the roads quickly enough so that the additional trucks would cause no impact on motorists' road experience?

A: Improving the roads would clearly take some time. But we assume that closing down part or the whole of the network would also take time. The extent to which the two actions are matched will depend on how the whole process is managed.

6. The additional Road User Charges (RUC) revenue will accrue over time, but the road improvements would need to be carried out straight away. How would NZTA do that, given it has no surplus cash?

A: NZTA would need to be given a loan to bridge the time period. This need not have any net economic cost, although it would increase the Government's debt temporarily.

7. [Withheld under s9(2)(b)(ii)]

8. Ports may also suffer costs of change, and some may suffer permanent increases in freight handling costs. Was this taken into account?

A: We have no information on such costs. [Withheld under s9(2)(b)(i)]

See the answer to question 4 above. Secondly, we considered that the financial consequences for ports are not necessarily net negative. It is conceivable that the freeing up of rail yards for other purposes would enable some ports to improve their logistical operations so as to result in a net overall improvement in productivity.

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Technical Annex

Cost Benefit Analysis table (costs and benefits of making a change)³:

CBA of KiwiRail's three options (compared with status quo) – annualised

\$ millions p.a. All values converted to annualised equivalents	Close all lines	Keep golden triangle	[s9(2)(i)]
Benefits			
Avoided subsidy	\$150-230m	\$125-192 m	\$7-37 m
Avoided economic cost of taxation ⁴ – 20% of subsidy	\$30-46 m	\$25-35 m	\$2-8 m
Additional road user charges	\$100-150 m	\$75-115 m	\$4-6.5 m
Costs			
Lost option value of retaining rail	\$1.8-3 m	\$1.4-2.6 m	~\$0 m
Decommissioning and mothballing costs (annualised)	\$48-72 m	\$37-63 m	\$0.5-5.5 m
Increased CO ₂ emissions	\$7.5-12.5 m	\$4-10m	~\$0 m
Road safety impacts ⁵	\$15-25 m	\$7-19m	~\$0 m
Private costs to rail users ⁶	\$10-40 m	\$8-33 m	~\$0 m
Increased road expenditure ⁷	\$73-117 m	\$51-74 m	~\$0 m
Net social benefit of making a change p.a.⁸	\$85 to \$200 m	\$84 to \$176 m	\$13 to \$44 m

³ This differs from table 10 in the Treasury report in that it looks at the costs and benefits of change from the point of view of the status quo. It also differs in that it includes updated assumptions about the avoided subsidy and the private costs to rail users. The table in the Treasury report looked at the costs and benefits of having a rail network from the point of view of having no rail network.

⁴ A national cost benefit analysis needs to recognise the economic cost of tax that is used to pay for the subsidy. This has been estimated at 20% of the cost of raising tax revenue. In this case, it is 20% of the fiscal cost of the subsidy.

⁵ This could be road expenditure incurred to mitigate the increased accident rate that would otherwise occur.

⁶ Assumes 2.5-10% of KiwiRail's freight revenue.

⁷ Additional maintenance costs and improvements to mitigate the increased congestion that would otherwise occur.

⁸ These ranges are not an arithmetical sum of the numbers above. They were derived from the above numbers using a Monte Carlo simulation.

Schedule of all documents used in the creation of the CBA assessment

Document	Brief Description and Date
KiwiRail calcs for Briefing for Ministers Meeting 27 Jan-15	Treasury spreadsheet analysis including cashflow forecasts as provided by KiwiRail out to FY45 - no specific date.
Rail mode shares	Email from Ministry of Transport detailing KiwiRail's share of transport between Auckland and Christchurch - dated 9 December 2014.
Option values: KiwiRail Public Policy Case	DRAFT Ministry of Transport Assessment paper on the option value of New Zealand's rail network - 27 November 2014.
Rail Impacts Version 6.2	NZTA Rail freight public value project (RAIL 2043). Estimation of the State highway impacts arising from mode shift of rail freight - December 2014.
KiwiRail Freight Truck Equivalents	Ministry of Transport estimates of the conversion in tonnage moved on NZ Rail Network to Road Truck Move Equivalents - December 2014.
KiwiRail CBA calculations	Treasury spreadsheet analysis determining costs and benefit from shifting rail transport onto road - no specific date.
RUC Paper	Ministry of Transport paper on the heavy vehicles contribution to the Road User Charges - September 2014.
Freight data - for NZTA - KiwiRail project	NZTA analysis on the impact on State Highway 2 from the closure of the Gisborne to Napier line - June 2014.
Project Brief: 2014 Review of KiwiRail	Project Brief: 2014 Review of KiwiRail - 9 June 2014.
AECOM Review of KiwiRail Capital Programme: Summary and Main Reports	AECOM's summary and main reports from its review of KiwiRail's Capital Programme - February 2013.
History and Future of Rail in NZ	Research Report prepared by NZIER on the history and future of rail in NZ - June 2009.

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