

Tertiary Education Report: Lincoln University Programme Business Case: Moving Forward

Date:	27 August 2019	TEC priority:	Medium
Security level:	In Confidence	Report no:	B-19-01065
		Minister's office No:	

ACTION SOUGHT		
	Action sought	Deadline
Hon Chris Hipkins Minister of Education	<p>note that Lincoln University submitted a Programme Business Case to you on 21 August 2019.</p> <p>note that earlier in 2019 Cabinet invited you to report back on Lincoln University's redevelopment plans and the new arrangements for the \$85 million in Crown funding set aside to support Lincoln rebuild its science facilities.</p> <p>agree to support the Programme Business Case.</p> <p>direct officials to draft a Cabinet paper outlining the Programme Business Case and the proposed terms and conditions for Crown support, including payment timings.</p> <p>send this paper to the Minister of Finance and the Minister of Research, Science, and Innovation for their information.</p>	at your earliest convenience
Enclosure: Yes	Round Robin: Yes	

CONTACT FOR TELEPHONE DISCUSSION (IF REQUIRED)			
Name	Position	Telephone	1st contact
S 9(2)(a)	Principal Advisor	S 9(2)(a)	✓
Gillian Dudgeon	Deputy Chief Executive, Delivery		

THE FOLLOWING DEPARTMENTS/AGENCIES HAVE SEEN THIS REPORT

- DPMC MPI ENZ ERO MBIE MoE MFAT
 MPP MSD NZQA NZTE TEC TPK Treasury

- Minister's Office to Complete:** Approved Declined
 Noted Needs change
 Seen Overtaken by Events
 See Minister's Notes Withdrawn

Comments:

Recommendations

Hon Chris Hipkins, Minister of Education

It is recommended that you:

1. **note** that Lincoln University (Lincoln) submitted a Programme Business Case to you on 21 August 2019 outlining a set of projects designed to replace and repair earthquake damaged facilities and to modernise teaching and research;

2. **note** that earlier in 2019 Cabinet invited you to report back on Lincoln's redevelopment plans and the new arrangements for the \$85 million in Crown funding set aside to support Lincoln rebuild its science facilities (CAB-19-MIN-0088.13 refers);

3. **agree** to:

a) support the Programme Business Case;

AGREED / NOT AGREED

b) a Crown contribution of \$85 million, including an at-risk payment of \$10 million subject to achieving the benefits set out in the Programme Business Case;

AGREED / NOT AGREED

c) make payments dependent on achieving the following set of milestones:

- \$5 million on Ministerial endorsement of the Science North Single Stage Business Case (early 2020);
- \$5 million on Ministerial endorsement of the Science North Implementation Business Case (mid-2020);
- \$5 million on completion of the Science South project (early 2021);
- \$30 million on completion of the first stage of Science North (mid-2022);
- \$30 million on full completion of Science North (early 2023);
- \$10 million at-risk payment on realisation of the programme benefits (approximately mid-2025).

AGREED / NOT AGREED

d) a set of established monitoring and accountability arrangements for the programme including:

- establishment of a Programme Governance Oversight Group with an independent chair and membership from Lincoln and the TEC;
- a Council sub-Committee focussed on the programme of work; and
- an independent chair of the Project Control Group, appointed by Lincoln, overseeing the main construction project, Science North.

AGREED / NOT AGREED

4. **direct** officials to draft a Cabinet paper covering the above decisions;

AGREED / NOT AGREED

5. **send** this briefing to the Minister of Finance and the Minister of Research, Science and Innovation for their information.

AGREED / NOT AGREED

6. **agree** to proactively release this briefing following any decisions (alongside other relevant papers) on Lincoln's Programme Business Case and the renegotiation of the Crown funding agreement, with financial and costing information withheld given it may impact on any future procurement processes undertaken by Lincoln.

AGREED / NOT AGREED



Gillian Dudgeon

Deputy Chief Executive, Delivery
Tertiary Education Commission

27 August 2019

Hon Chris Hipkins

Minister of Education

___ / ___ / ___

Executive Summary

1. Lincoln University (Lincoln) has submitted a Programme Business Case to you outlining its revised plans for rebuilding and repairing its facilities which were damaged in the 2010 and 2011 Canterbury earthquakes, and for modernising its teaching and research. The case includes a \$207 million capital programme to be carried out over the next 10 years. The major project is the replacement of its science facilities with a series of new buildings at an estimated cost of **§ 9(2)(j)**. The programme has been designed to complement the new facilities that AgResearch are proposing to build on the Lincoln University site.
2. The programme is wider than just a construction programme, and includes modernising the way Lincoln teaches, undertakes research, and partners with other institutions. This is consistent with the recommendations of the 2017 Lincoln Transformation Board report and many of the concepts in the University of Canterbury/Lincoln partnership proposal.
3. We recommend you support the Programme Business Case. There is a clear need for Lincoln to rebuild its science facilities and we consider that the proposed programme of work is both achievable and affordable. It is significantly less risky and less costly than the previously proposed Joint Facility project. Furthermore, the proposed phased approach to the redevelopment of its campus will provide Lincoln with the flexibility to adjust its capital programme, if required, in response to its financial situation and needs.
4. Lincoln's financial situation has improved significantly over the past year. It reported its third consecutive operating surplus in 2018 and, following the finalisation of its insurance settlement earlier this year, has \$80 million of available cash on hand. Lincoln has also increased its internal capacity and capability for undertaking this programme of work. While some risks remain – particularly around achieving enrolment forecasts – they are now more manageable, and the overall risk to the Crown has significantly reduced compared to the Joint Facility project.
5. The programme of work has also been designed to realise many of the benefits of the former Joint Facility project. These include achieving a greater return on research and development through collaboration and improving connections with industry, as well as increasing the number of land-based sector graduates. Letters of support for the business case have been received from AgResearch, Blinc Innovation and Manaaki Whenua - Landcare Research.
6. As part of the previous Government's decision to support Canterbury tertiary education institutions following the earthquakes, \$85 million has been appropriated in Vote Tertiary Education to support the rebuild of Lincoln's science facilities. However, given the change in Lincoln's plans – specifically, the decision to no longer proceed with the Joint Facility project – earlier in 2019 Cabinet invited you to report back on Lincoln's revised programme of work and the proposed terms and conditions of Crown support.
7. We recommend that the Crown reconfirms the \$85 million in Crown support for Lincoln for the purposes of rebuilding its science facilities. We recommend that payments are linked to Lincoln meeting key programme milestones, including \$10 million being at-risk and payable only on Lincoln achieving the benefits of the programme.
8. If you agree with the recommendations in this paper, officials will draft a Cabinet paper reflecting your decisions. Changes to the Crown funding agreement with Lincoln will be required to reflect the key elements in the new programme and Cabinet decisions.
9. If funding is agreed by Cabinet, the next step in the process is for Lincoln to develop a Single Stage Business Case for its main rebuild project (Science North). Design and planning work is underway and this business case is expected to be submitted to you for endorsement in early 2020.

Purpose

1. This paper provides you with advice on Lincoln's Programme Business Case, *Moving Forward*, for its campus redevelopment and modernisation programme. Decisions need to be made on support for the programme and on the terms and conditions associated with the \$85 million which has previously been set aside to contribute to the rebuild of Lincoln's science facilities.

Background

Canterbury TEIs received Crown support for their rebuilds following the earthquakes...

2. Following the 2010 and 2011 Canterbury earthquakes, the previous Government decided to provide financial support to the three Canterbury-based tertiary education institutions (TEIs) to assist them to rebuild and upgrade their campuses. It was expected that each institution would use its own cash reserves and any insurance settlements towards the rebuilding, and that Crown funding would supplement this.
3. The University of Canterbury (UC) received \$260 million¹ to build new science facilities and upgrade its engineering facilities while Ara Institute of Technology (then Christchurch Polytechnic Institute of Technology) received \$19 million to upgrade and expand its trades training facilities.
4. In 2014, Cabinet agreed in-principle to provide up to \$100 million to Lincoln to help rebuild its science facilities with an additional \$7.5 million paid immediately. In 2017, following a Project Business Case, Cabinet agreed to provide up to \$85 million to Lincoln for a joint development with AgResearch subject to joint Ministers endorsing an Implementation Business Case (IBC) for the project (CAB-17-MIN-0312.01 refers).

...however, the rebuild at Lincoln has faced numerous delays...

5. The development at Lincoln has been a long, slow process with many delays during the design and business case development process. Lincoln has also experienced some serious financial issues since the earthquakes, including delays in settling its insurance claim. A high-level timeline is attached in Appendix A.
6. An incomplete IBC for the Joint Facility project was submitted to you and the Minister of Finance in late 2018 seeking approval and the release of the \$85 million of Crown funding (B-18-00844 refers). However, the costs of the Joint Facility project had increased substantially from what was originally planned and, as a result, there was considerable concern about the affordability of the build programme for Lincoln and the associated risks to the Crown.
7. In December 2018, you wrote to Lincoln and AgResearch informing them you were deferring making a decision on the IBC until the outstanding issues were resolved. AgResearch subsequently decided to construct its own facilities rather than proceed with a joint building with Lincoln. It was envisaged that AgResearch would lead the initial precinct developments, and Lincoln would follow once it had resolved its funding issues and re-scoped the project to ensure that it was affordable.

...and Lincoln has now submitted a Programme Business Case for its redevelopment...

8. Lincoln submitted its Programme Business Case, *Moving Forward*, to you on 21 August 2019. It outlines Lincoln's revised plans for rebuilding and repairing its campus following the Canterbury earthquakes, and for modernising its teaching and research. We briefed you in July 2019 on the draft Programme Business Case (AM-19-00827 refers). There has been no substantive change to the business case since that time.

¹ Less \$8 million that UC repaid to the Crown as part of the insurance settlement risk sharing arrangements.

9. The Programme Business Case enables you to reconsider the terms and conditions of the Crown's \$85 million contribution to the rebuild of Lincoln's science facilities. As part of the Budget 2019 technical initiatives package, the \$85 million in Crown funding was transferred into 2019/20 and outyears (CAB-19-MIN-0088.13 refers). Cabinet invited you to report back later in 2019 on Lincoln's revised development plans for the rebuild of science facilities and new arrangements for Crown funding.
10. While the funding set aside remains linked to the rebuild of Lincoln's science facilities, many of the decisions and terms of Crown funding that were made as part of the 2017 Cabinet decision are no longer applicable or relevant given the change in project timings and construction plans.

...while AgResearch's business case is about to be considered by Ministers

11. AgResearch's business case for its development at Lincoln is about to be submitted to its shareholding Ministers for approval. The Lincoln Council has reached agreement with AgResearch to sell a portion of land on Lincoln's campus to AgResearch **S 9(2)(i)**. This recognises the significant benefits for the university in having AgResearch on-site and closely connected to Lincoln. Lincoln's redevelopment plans outlined in the Programme Business Case have been designed to complement the new facilities that AgResearch are proposing to build. Ngāi Tahu has formally confirmed that it is comfortable with the sale of land to AgResearch.

The Programme Business Case

The programme includes a significant amount of capital works...

12. Lincoln has developed a \$307 million capital programme for the next ten years. This is comprised of a \$207 campus redevelopment plan and \$100 million of business-as-usual capital expenditure (e.g. IT and library costs). The majority of the \$207 million capital redevelopment spend is projected to occur in the next three years.
13. Rather than one large building as per the Joint Facility project, Lincoln is now looking at a smaller, staged set of developments (the overall size still being smaller than its share of the Joint Facility). This phased approach will allow Lincoln to fit in with AgResearch's development, to manage decanting and demolition of the Burns building (its main earthquake-damaged science building) and to address seismic issues across a range of buildings on campus. It will also mean the projects are more manageable and the phasing can be modified if financial, timing, or other pressures arise. Nevertheless, it is still a large programme of work.
14. The overall programme is comprised of the following:

Project	Estimated cost	Description
New science facilities	S 9(2)(i)	Science North: A series of new science buildings which are fit for modern research, teaching and learning that are adjacent to the new AgResearch development with an estimated cost of around S 9(2)(i) to be completed by 2023. Science South: A S 9(2)(i) facility due to be completed by early 2021. An additional set of projects that includes the refurbishment of the Johnstone Memorial Laboratory and upgrade of the science glasshouses.
Replacing and upgrading student support facilities	S 9(2)(i)	This includes the library, gym, and student union facilities and will provide much needed facilities for students on campus. Planning is well underway for the upgraded sport and recreation centre, which will provide facilities for the sport and recreation courses and the High-Performance Sport Centres.
Repairing earthquake damage	S 9(2)(i)	Repairing earthquake damage of essential facilities including the library, Hudson Hall, School of Landscape Architecture, and Southland Hall.
Demolition of the Burns building	S 9(2)(i)	Demolition of the old Burns building which was substantially damaged in the earthquakes and is not fit for modern teaching and learning.

...but it also involves implementing new ways of working...

15. The programme is wider than just a build programme, and involves modernising research, teaching, and learning as envisaged by the 2017 Transformation Board report. Around \$25 million in operational funding has been earmarked to implement these “new ways of operating”. These aspects of the programme include:

- **Expanding the multi-disciplinary Centres of Excellence** – this work is underway with three centres already established (Designing Future Productive Landscapes; Foods for Future Consumers; and Sustainable Tourism for Regions, Landscapes and Communities).
- **Blended and online learning** – this will involve not only modernising current programmes, but allow new programmes to be developed and delivered on a modular basis to attract students unable to study full-time.
- **A new land-based post-graduate school** – this is a joint initiative with UC which will look to create more multi-disciplinary graduates and facilitate more productive and effective collaboration with the Crown Research Institutes (CRIs) at Lincoln.
- **The Children’s University** – this is a joint initiative with UC which engages 7 to 17 year olds in exciting and innovative learning activities and experiences outside of the classroom to raise young people’s aspirations for higher education and encourage lifelong learning.
- **Expanding partnerships** – this includes with AgResearch, continued support for Blinc Innovation (formerly the Lincoln Hub), other CRIs, Ngāi Tahu, UC and other universities.

...which will deliver a range of benefits for New Zealand and Lincoln...

16. Lincoln has designed the programme to capture as many of the benefits associated with the Joint Facility project as possible. The programme is expected to deliver the following benefits for New Zealand as a whole, particularly the land-based sector:

- greater return on research and development through collaboration and improving connections with industry;
- an increase in the number of land-based sector graduates; and
- improving the global competitiveness of the land-based sector.

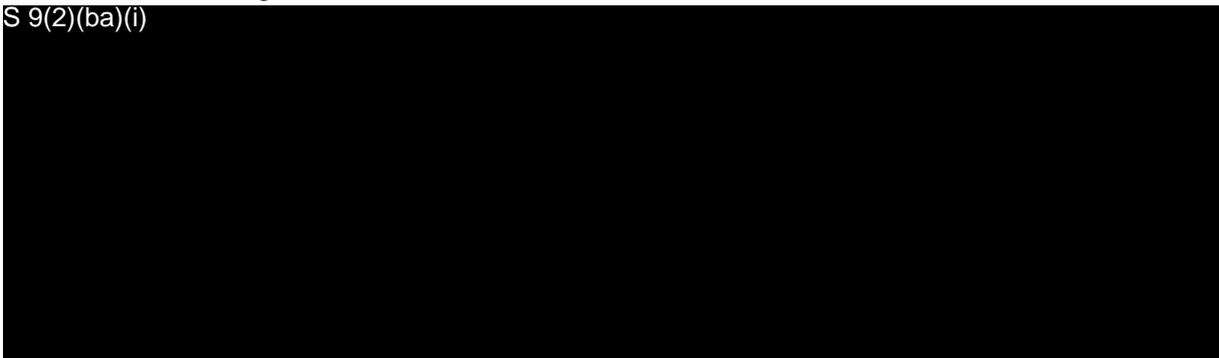
17. The direct benefits sought for Lincoln and its partners are:

- increased consumer confidence in Lincoln;
- improved ability for Lincoln to attract and grow talent – both staff and students;
- greater collaboration to produce better outcomes than Lincoln could as a standalone university; and
- improved financial outcomes.

...with the programme of work affordable with the Crown’s contribution

18. Lincoln’s \$307 million capital programme for the next ten years is to be funded through a range of sources including:

S 9(2)(ba)(i)



19. The \$25 million in operating expenditure to implement the new ways of working is included in Lincoln's financial model.

Assessment of the Programme Business Case

20. Officials have undertaken a thorough assessment of the Programme Business Case and can confirm that it meets the Better Business Case requirements. Further analysis on the Programme Business Case, particularly regarding the risks and affordability of the programme, is provided in Appendix B.
21. In summary, there is a clear need for Lincoln to rebuild its science facilities following the 2010 and 2011 Canterbury earthquakes and to develop facilities that can deliver modern teaching and learning. We consider the current proposed programme of work is both achievable and affordable. It is significantly less risky and less costly than the previously proposed Joint Facility project. Furthermore, the proposed phased approach to the redevelopment of its campus will allow Lincoln the flexibility to adjust its capital programme, if required, in response to its financial situation or other pressures.
22. Lincoln's financial situation has improved significantly over the past year. It reported its third consecutive operating surplus in 2018, and following the finalisation of its insurance settlement earlier this year, it currently has \$80 million of available cash on hand. Lincoln has also increased its internal capacity and capability for undertaking this programme of work. While some risks remain – particularly around achieving enrolment forecasts – they are now more manageable, and the overall risk to the Crown has significantly reduced compared to the Joint Facility project.
23. The programme of work has also been designed to realise many of the benefits of the former Joint Facility project. These include achieving a greater return on research and development through collaboration and improving connections with industry, and increasing the number of land-based sector graduates.

Ministerial decisions

We recommend that you support the Programme Business Case...

24. Based on our analysis, we recommend that you support the Programme Business Case. If you agree, you also need to make decisions on:
- the amount of Crown funding to be provided to Lincoln;
 - the profile of the funding and the conditions for release of funding; and
 - accountability and monitoring arrangements.

...and we recommend you reconfirm the \$85 million in Crown support to Lincoln...

25. We consider the full \$85 million that is set aside in Vote Tertiary Education to support the rebuild of Lincoln's facilities should be provided.
26. We have considered lower amounts of Crown support as part of our analysis. However, a careful balance is needed. On one hand, you do not want to provide too much Crown support to Lincoln if it can afford to fund more of the development itself, and to ensure the programme is delivered efficiently. However on the other hand, you do not want to put too much pressure on Lincoln's financial position given there are risks associated with any development of this scale.
27. Reducing the level of Crown support impacts Lincoln's ability to manage the risks it will likely face during the programme. If it is set too low, it increases the likelihood that Lincoln will seek further Crown funding in future to deliver the programme. The pressure point will be in 2023 when cash reserves have been reduced but operating surpluses have not yet increased.

28. Two other considerations to take into account are:

- The level of Crown support was set in mid-2017. Since that time, construction costs have increased by 6% per annum in Christchurch and are expected to continue at a similar level.
- The 2017 Cabinet decision contained a clause that any insurance proceeds related to building damage over \$20 million were to be offset against the Crown contribution. However, as previously advised, the final insurance settlement of \$45 million was a global settlement and did not separate out payments relating to building damage, business continuity insurance, and claim preparation costs. It is therefore technically not possible to separate out the amounts relating to building damage for the purpose of determining what may be owed to the Crown. Our best estimate is that the amount due to the Crown would be in the region of **S 9(2)(ba)(i)** although this could be argued.

29. Lincoln has undertaken financial modelling at our request assuming the Crown contribution is reduced to \$75 million or \$80 million (see Appendix D). We consider a Crown contribution of \$75 million is too low for Lincoln to be able to manage the risks appropriately. At \$80 million the programme would likely be manageable but it would be tight. At \$85 million, we consider the programme would be affordable and allow Lincoln to manage any risks that are likely to occur.

...with a payment profile that reflects achievement of milestones...

30. We recommend a payment profile which reflects the achievement of major milestones throughout the programme. This is consistent with the principle underlying the current profile. However, the current profile contains a large upfront payment, which was to take account of the fact that the insurance settlement had not been received. This is no longer necessary. The current funding profile also has the final \$5 million to only be paid based on the delivery of the overall programme benefits (i.e. it is “at-risk”). We suggest this approach is continued.

31. We propose the \$85 million Crown contribution is structured as follows to create the best incentives for the successful delivery of the full set of benefits of the programme:

Payment	Milestone	Expected date	Government financial year
\$5m	Endorsement of the Science North Single Stage Business Case	Early 2020	2019/20
\$5m	Endorsement of the Science North IBC	Mid-2020	2020/21
\$5m	Completion of the Science South project	Early 2021	2020/21
\$30m	Completion of the first stage of Science North	Mid-2022	2021/22
\$30m	Completion of Science North	Early 2023	2022/23
\$10m	Achievement of the agreed benefits	Mid-2025	2024/25

...and clear monitoring and accountability arrangements

32. The monitoring and accountability arrangements can be simplified considerably compared to those written into the current Crown funding agreement given the project is no longer being jointly run with AgResearch. In discussions with Lincoln, we consider the following arrangements would ensure sufficient monitoring and accountability:

- Quarterly reporting against milestones set out in the business case;
- the establishment of a Programme Governance Oversight Group (GOG), with an independent chair and representatives from Lincoln and the TEC (this is the same model that was successfully used for UC’s rebuild programme);
- the Capital Assets sub-Committee of Lincoln’s Council will ensure there is appropriate scrutiny over the programme at the Council level;

- Lincoln has recently established and resourced a Programme Management Office to oversee the capital and non-capital projects in the programme – each project will have an appropriate project plan, and be subject to ongoing monitoring;
 - Lincoln has proposed, and we support, the establishment of a Project Control Group (PCG), with an independent expert as Chair, to oversee the large Science North project. This person would attend the GOG and the Council Capital Assets Committee regularly.
33. There is currently also an independent financial advisor to Lincoln’s Council who was appointed at the end of 2015 as a result of Lincoln’s financial issues. The purpose of his appointment was to work with Lincoln to improve financial reporting and management. Financial systems and reporting have improved significantly since that time. Furthermore, Lincoln’s financial position is much stronger and it is forecast to remain financially sustainable in the medium-term.
34. Lincoln’s Council is of the view that this role is no longer required. We agree and consider the above monitoring and accountability arrangements are sufficient. As such, we propose that the independent financial advisor appointment is discontinued but that the funding agreement contains a provision for an independent programme advisor to be appointed to the Council by the Chief Executive of the TEC and the Chancellor, if any risks arise that indicate the programme is not going to plan (e.g. significant cost overruns, delays, failure to deliver benefits or financial risk to Lincoln). This would allow such an intervention to be put in place quickly and early, and for a person to be appointed with the appropriate skills to assist depending on the nature of the issue.
35. There is also the opportunity to add people onto the Council with experience in major construction and change programmes through the upcoming series of Ministerial appointments to Lincoln’s Council, and through the Council’s own appointments.

What if Crown funding is not provided?

36. If no Crown support was provided, it would undermine Lincoln’s financial sustainability. Lincoln would have to rely on its own resources to rebuild and upgrade its campus. The funds available for capital investment would be around \$120 million, rather than the \$207 million in this programme. Lincoln could look to sell further assets but there would be limited other opportunities to raise any significant cash.
37. We consider borrowing or a Public Private Partnership (PPP) would not be appropriate options to fill the gap left by the Crown funding. The 2014 business case investigated in detail whether borrowing or a PPP was an appropriate way of financing the build project rather than relying on Crown support. Borrowing would add significant costs for Lincoln and would undermine its medium- and long-term financial viability. Furthermore, in the absence of Crown support, Lincoln may not be financially secure enough to obtain a borrowing consent from the Secretary for Education. The cost of a PPP would be even higher than borrowing. It is likely that a 7% rate of return would be expected² – about double the interest rate for borrowing – which would adversely impact on Lincoln’s long-term financial viability.
38. We consider the following would be likely if Crown funding was not provided:
- Lincoln would look to construct basic low-cost warehouse type buildings to replace some of the unsuitable/demolished science facilities;
 - the earthquake-damaged Burns building would not be demolished, but some parts of it might be upgraded for interim use (e.g. teaching labs and the traditional lecture theatres);
 - the opportunity to invest in student facilities would be severely limited;

² Based on the PGG Wrightson, AgResearch, Blinc Innovation PPP for the new building on the AgResearch site at Lincoln, and in discussions with Ngāi Tahu.

- Lincoln would continue to have difficulties attracting domestic students and international growth may be impacted;
 - it would be less attractive for staff, which would further undermine both teaching and research;
 - it would reduce the opportunities to collaborate with AgResearch and maximise the benefits of having AgResearch on campus, which would impact on the proposed benefits for not only Lincoln but also industry and New Zealand;
39. Overall, it is likely to create a downward spiral of performance and negatively impact on Lincoln's long-term viability and sustainability. It would also reduce Lincoln's ability to better position our land-based sectors to make a greater contribution to a sustainable economy and environmental sustainability through world class teaching and research.

Consultation

40. The Treasury, the Ministry for Business, Innovation and Employment (MBIE), the Ministry for Primary Industries (MPI) and the Ministry of Education have been briefed on the Lincoln Programme Business Case and have had the opportunity to review, make comment, and seek further information. These agencies have also been consulted in the preparation of this briefing and their comments included. All agree with the recommendation to support the Programme Business Case. The Department of Prime Minister and Cabinet has been informed.
41. Treasury is of the view that Lincoln should only be given \$80 million (with the final at-risk payment reduced to \$5 million) to recognise the insurance risk sharing arrangements as per the 2017 Cabinet decision. However, as discussed in paragraphs 28 and 66-68, the exact level of insurance off-setting is difficult to determine because it was a global settlement and not attributable to any particular loss. This was due to the insurers not wanting to accept Lincoln's arguments about structural steel damage in the Hilgendorf and Burns buildings in particular, as it would have flow-on effects for other claims.
42. In addition, we would be concerned that reducing the at-risk payment from \$10 million to \$5 million would not provide enough incentive for Lincoln to focus on the wider benefits of the programme and rather than just the delivery of the buildings. Alternatively, retaining a \$10 million at-risk payment but reducing the milestone payments to \$70 million would compromise affordability.
43. Our proposal of \$85 million in Crown support, with a \$10 million at-risk payment, is effectively a middle ground. It ensures the programme remains affordable yet gives sufficient incentive for both the completion of the build programme and the realisation of the benefits.
44. MBIE suggested potentially strengthening the incentives on Lincoln by having a significant part of the Crown contribution structured as an interest-free suspensory loan. This type of arrangement was considered in the 2014 business case and rejected due to the risks to Lincoln. We consider the risks to Lincoln would be too high with this type of arrangement.

Next steps

45. We recommend that you forward this briefing to the Minister of Finance for his information as he is a signatory to the Crown funding agreement with Lincoln. We also suggest you forward this briefing to the Minister of Research, Science and Innovation, especially given she is separately considering the AgResearch rebuild business case.
46. If you agree with the recommendations in this paper, we can prepare a paper for you to take to Cabinet seeking support of Lincoln's programme and to make the necessary changes to funding. Given the nature of the changes to the programme and the proposed funding profile, substantial

changes to the Crown funding agreement will be required. To avoid complexity, we propose a new agreement be drafted reflecting the changes to the programme and the new terms and conditions associated with the funding.

47. Lincoln has already begun developing a Single Stage Business Case for the Science North project. This is expected to be completed later in 2019. An Independent Quality Assurance (IQA) review will be undertaken before it is submitted to you for endorsement in early 2020.

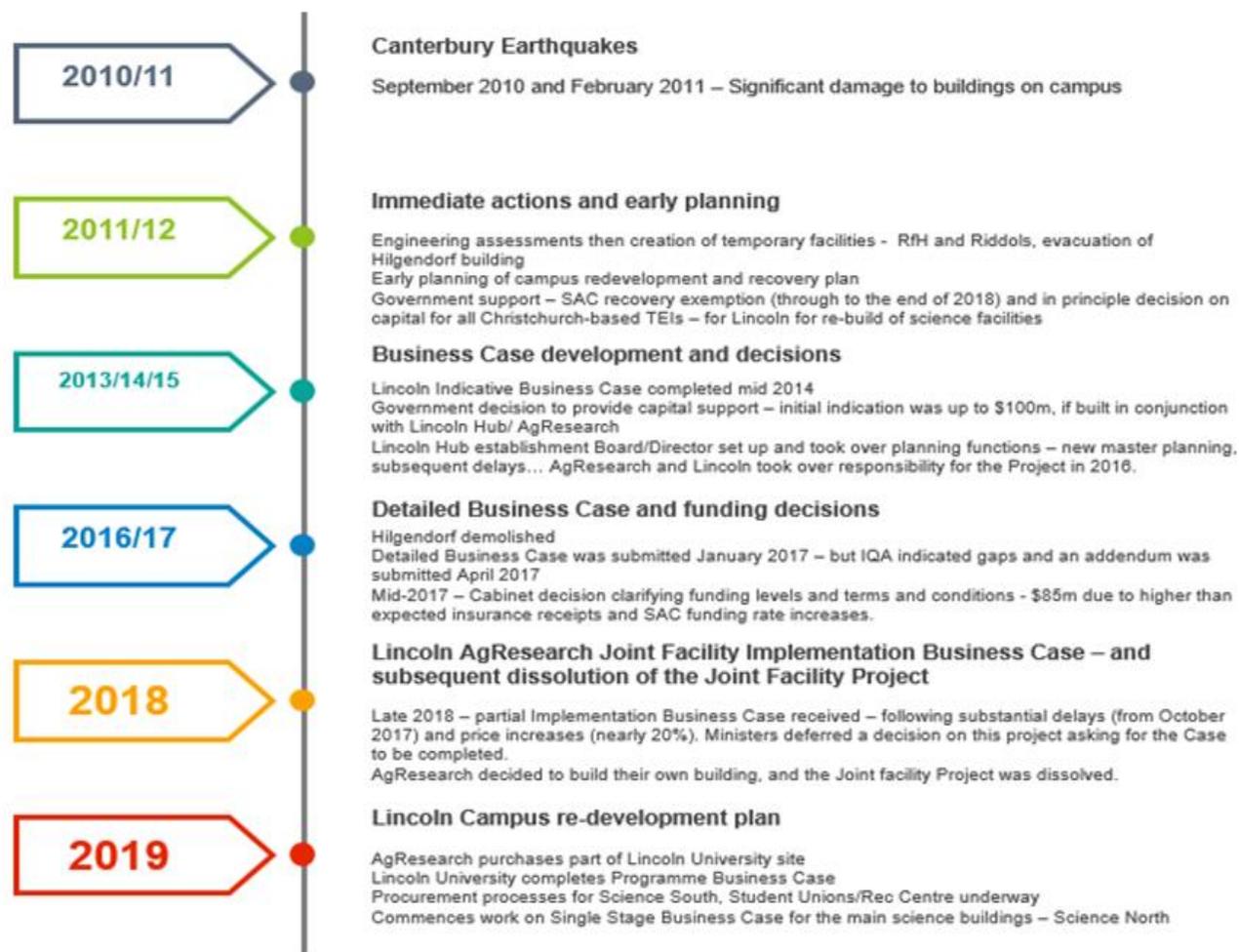
48. The next steps are summarised in the table below:

Action	Date
Cabinet decisions on funding	September 2019
Crown funding agreement finalised and signed	October 2019
Programme GOG established and monitoring systems set up	November 2019
Science North Single Stage Business Case submitted to you for endorsement (following IQA)	Early 2020
Science North Implementation Business case submitted to you for endorsement (following IQA)	Mid-2020

Appendix A: Summary timeline

Lincoln University Campus Redevelopment

A condensed history



Appendix B: Assessment of the Programme Business Case

The Programme Business Case builds off work done in previous cases...

49. The Programme Business Case builds off work undertaken as part of Lincoln's previous business cases – in particular, the 2014 case which presented the need for new science buildings. However, it also includes:

- an updated programme of capital works based on greater understanding of the seismic risks associated with current buildings and the damage sustained;
- revised EFTS projections which are now at a more sensible and moderate level;
- consistency with the 2017 Transformation Board recommendations related to modernising teaching and learning;
- elements of the UC/Lincoln partnership proposal related to research collaboration, joint programmes and the land-based post-graduate school; and
- decisions made by AgResearch to locate its new facilities on the Lincoln University site.

...which clearly outlined the need for new science facilities...

50. The 2010/11 Canterbury earthquakes caused substantial damage to Lincoln's facilities. A total of around 14,000 square metres of space was evacuated. This included science, research and teaching facilities, historic buildings, as well as student services facilities. The Hilgendorf building (one of the two key science facilities on campus) was subsequently demolished in 2015/16 due to health and safety concerns. It accounted for around 30% of Lincoln's total floor space.

51. In addition, many of the facilities, which were built in the 1960s, have reached the end of their useful life. They are not fit for modern research and teaching, and face compliance issues with the building code and MPI standards. The 2014 business case fully investigated the costs and benefits of building new science facilities against upgrading existing facilities. Not only was upgrading existing facilities more costly, it would also have meant that facilities were not future-proofed or fit for modern teaching and learning, given how they had been built.

...and this programme addresses Lincoln's current and future facilities requirements...

52. The Programme Business Case is based on a detailed facilities needs assessment which took into account:

- currently modelled and forecast student numbers;
- modern research and teaching requirements;
- flexibility, and future proofed design to it can easily respond to future changes; and
- efficiency gains through better scheduling and timetabling.

...and it is consistent with Lincoln's strategic direction...

53. The programme includes a range of projects focussed on modernising and transforming the way in which Lincoln delivers its teaching and research. These projects are consistent with the 2017 Transformation Board report, the earlier work on the Lincoln Hub, and the UC/Lincoln partnership proposal – particularly with regard to increased collaboration and partnerships.

54. Although you recently decided not to proceed with the UC/Lincoln partnership proposal (B-19-00928 refers), you encouraged Lincoln to continue to work closely with UC, other universities, and CRIs to improve the capability and capacity of the land-based sector, ensure that high quality research continues to address the challenges the sector is facing, and to contribute to Lincoln's ongoing financial viability. The Programme Business Case responds to the matters which you outlined in your letter to the Lincoln Chancellor.

55. The business case is supported by AgResearch, Blinc Innovation, and Manaaki Whenua - Landcare Research. Letters of support have been provided from each of these organisations.

...and the risks have reduced in comparison to the Joint Facility project...

56. There were significant risks associated with the Joint Facility project, particularly financial risks as the cost of the project grew and funding sources were uncertain. These were clearly outlined in the IQA undertaken on the Joint Facility IBC. The scope and design of this programme has reduced those risks. The table below highlights the main risks associated with the Joint Facility project and how these have been mitigated in this programme.

Risk with Joint Facility project	Comment
Funding sources were not secured	<ul style="list-style-type: none"> Insurance settlement now secured and at a greater level than expected (\$45 million compared to \$20 million). Borrowings no longer required. Still requires a programme of asset sales but this is now more tangible and achievable.
Project of work was not affordable	<ul style="list-style-type: none"> No longer reliant on significant increases in EFTS as with the Joint Facility project. Sensitivity analysis suggests that there is significantly less funding pressure and an ability to manage financial shocks. There were significant risks of cost escalation with the Joint Facility – while this risk remains, because the projects are staged there are more opportunities to re-plan or scale the project if required.
Capability was questioned	<ul style="list-style-type: none"> Lincoln has set up a dedicated capital projects team and recruited external experts to run the programme of work. Leadership and management appear to be much more engaged and focussed on the programme than previously. Lincoln propose to use an external expert to Chair the Project Control Group for the major Science North project.
The complex governance structures were questioned	<ul style="list-style-type: none"> Complexity is significantly reduced (given it is no longer a joint project with AgResearch). Programme proposes a traditional programme and project structure similar to that successfully used by UC. Three upcoming Ministerial Council appointments can be used to address any skill gaps.

...while financial modelling shows that the programme is affordable...

57. Lincoln reported its third consecutive operating surplus in 2018 and settled its final insurance claim for \$45 million earlier in the year. Compared to late 2018, when it was seeking endorsement of the Joint Facility IBC, it has now secured its main sources of funding. In addition, the size and scale of the science buildings have been reduced. This better reflects student number forecasts, and the decision to opt for a modern functional set of buildings, rather than an iconic facility. The cost difference is around \$50 million.

S 9(2)(ba)(i)

58. The above graphs show Lincoln is forecasting ongoing operating surpluses over the next decade, largely on the back of increased student numbers and ongoing tight financial management. It also shows that with the Crown's \$85 million contribution, Lincoln's cash levels remain strong over the forecast period and well above its minimum working capital level of \$15 million. The phased approach of the campus redevelopment assists Lincoln's cash position.

...although profitability is still based on increasing enrolments...

59. Total EFTS are expected to increase **S 9(2)(b)(ii)**. The enrolment forecasts are more sensible than those submitted as part of the Joint Facility IBC.
60. International EFTS are expected to grow by **S 9(2)(b)(ii)** over the forecast period, which appears realistic given current trends. Domestic EFTS are expected to **S 9(2)(b)(ii)** when a substantial amount of the new campus development has been completed. Lincoln is also developing new programmes and additional partnerships to help drive domestic enrolment growth. In line with recent trends, and due to the post-graduate school and the collaborations with AgResearch and UC, post-graduate EFTS are expected to increase faster than undergraduate EFTS.

...and there are a range of risks which could affect affordability

61. Lincoln has undertaken a range of sensitivity analysis as part of its financial modelling. This includes analysing the impacts of lower domestic and international enrolment growth, delays to construction of the main science buildings (Science North), and construction cost increases. Appendix C provides a summary of downside scenarios where a number of these impacts occur in combination.
62. We have summarised these risks in the table below based on their likelihood of occurring, impact on affordability of the programme and Lincoln's financial sustainability, and the extent to which they can be successfully mitigated.

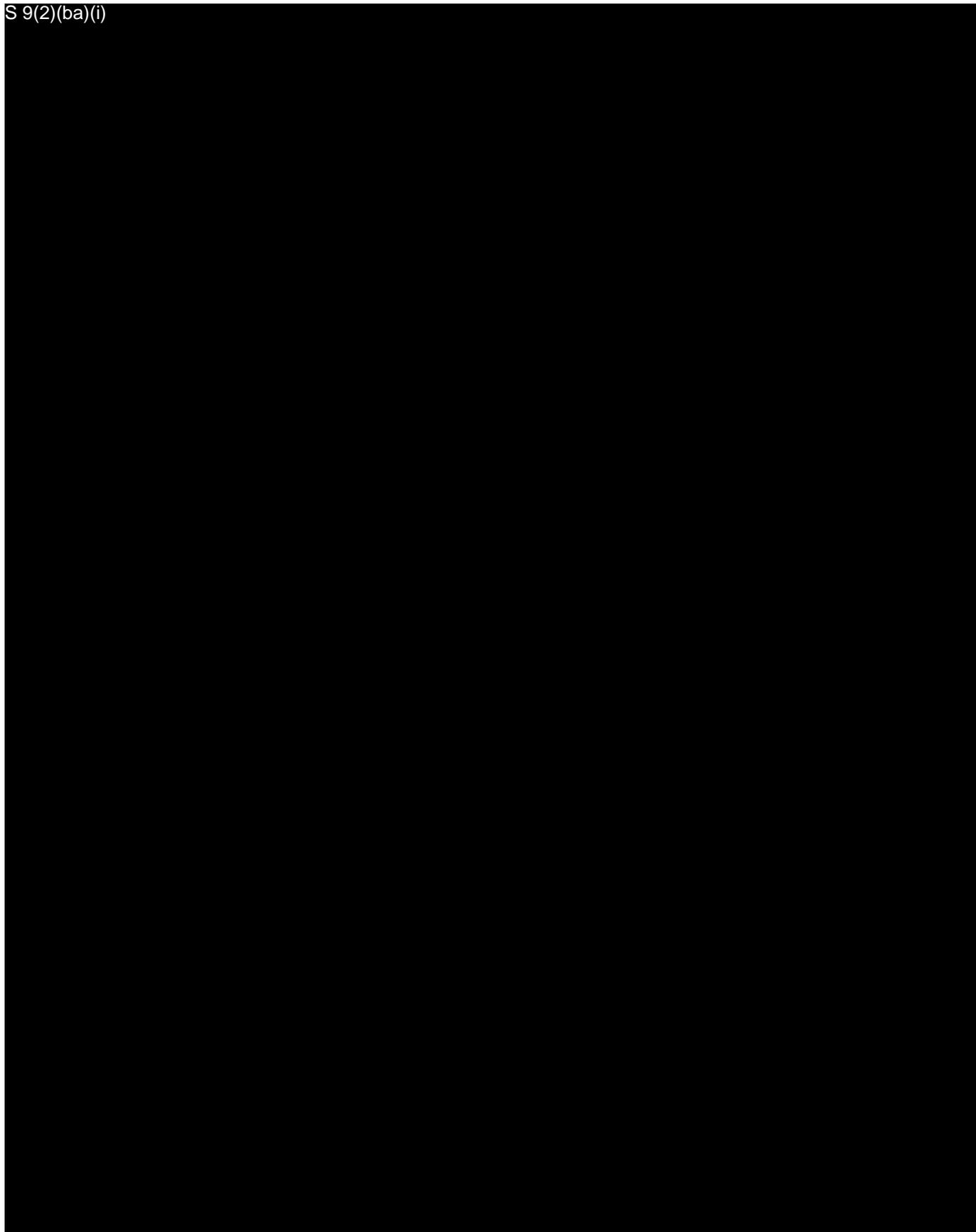
Risk	Likelihood	Impact	Mitigations
Failure to achieve domestic EFTS growth forecasts	Domestic EFTS have fallen at Lincoln in recent years and achieving the forecasts would represent a major turnaround. New facilities and new programmes will help but considerable effort will be required. It is a difficult market given the relative attractiveness of careers in the land-based sector and competition from other universities.	Modelling undertaken where domestic growth is halved shows the programme remains affordable and there are no cash flow issues, but surpluses decrease and there is an impact on long-term financial viability.	Lincoln has developed a detailed short-term EFTS strategy but it will need to be regularly reviewed. Options include new programmes, new delivery modes, partnerships with others, and strengthened marketing efforts. Potential for scaling back and delaying capital programme S 9(2)(j) worth of expenditure has been identified) or increasing asset sales.
Failure to achieve international EFTS growth targets	Lincoln has recorded strong international EFTS growth over recent years, as has the university sector as a whole. Lincoln is forecasting modest EFTS growth going forward relative to past trends, with a focus on post-graduate (which are attractive to international students). However, there is always a risk of an adverse incident which affects the international market.	International students comprise around 40% of Lincoln's EFTS, so it would have a considerable impact. Modelling undertaken where no international growth occurs shows programme remains affordable and there are no cash flow issues, but surpluses decrease and there is an impact on long-term financial viability.	Continued development of new post-graduate programmes, investment in the land-based post-graduate school, partnerships with others. Lincoln is also working to ensure it is not over reliant on students from only one country. Programme and asset mitigations as above.
Build cost escalation	Only limited work has been done on the design of Science North – how it is designed and procured will impact on this risk.	Modelling undertaken which shows a 10% price increase on Science North shows limited impact and the overall programme remains affordable.	Ensure appropriate contingency is provided for. Procurement processes which allow for value engineering. Programme and asset mitigations as above.
Delays on construction	The timeframes are relatively tight and there is always the risk of delays in construction projects	One year delay of Science North has been modelled. Has limited financial impact with a slight reduction in the expenditure profile offset by a delay in EFTS growth.	Limited mitigation options given design timeframes are tight. However, depends on market conditions and with smaller scale projects there are more firms available.

63. A failure to achieve enrolment forecasts has the biggest impact on the affordability of the programme and Lincoln's financial sustainability.
64. Scenario 3 in Appendix C shows the financial impact of all four risks occurring in combination. It shows ongoing deficits from 2023 and the medium- and long-term financial sustainability of Lincoln under threat (although there would be no short-term concerns). Affordability would be tested, but cash remains above \$15 million over the entire forecast period. We consider the probability of all these risks occurring at the same time and the mitigations having no impact as low.
65. Appendix D shows the risk scenarios with different levels of Crown contribution. At \$75 million the project is not affordable while at \$80 million it is marginal.
66. While \$85 million has been set aside in Vote Tertiary Education to support the rebuild of Lincoln's science facilities, the 2017 Cabinet decision contained a clause that any insurance proceeds related to building damage over \$20 million were to be offset against the Crown contribution. The final insurance settlement of \$45 million received by Lincoln was a global settlement and included business continuity and claim settlement payments in addition to actual settlement on the science buildings.
67. The insurers took this approach as they were not prepared to attribute particular amounts to particular buildings because of a dispute over the damage (or otherwise) to structural steel within the buildings. This was at the heart of the disagreement between Lincoln and its insurers. Insurers were concerned that this would set a precedent for other similar claims.
68. As such, it is technically not possible to apply the formula in the 2017 Cabinet decision and the Crown Funding Agreement. We can only roughly estimate what the risk sharing arrangements might be, which would be in the range of **S 9(2)(ba)(i)**. However, it would also be possible to argue an amount less than that. As comparison, UC had an insurance settlement of over \$550 million and repaid \$8 million to the Crown as part of the risk sharing arrangements for similar attribution reasons.

Appendix C: Financial sensitivity analysis

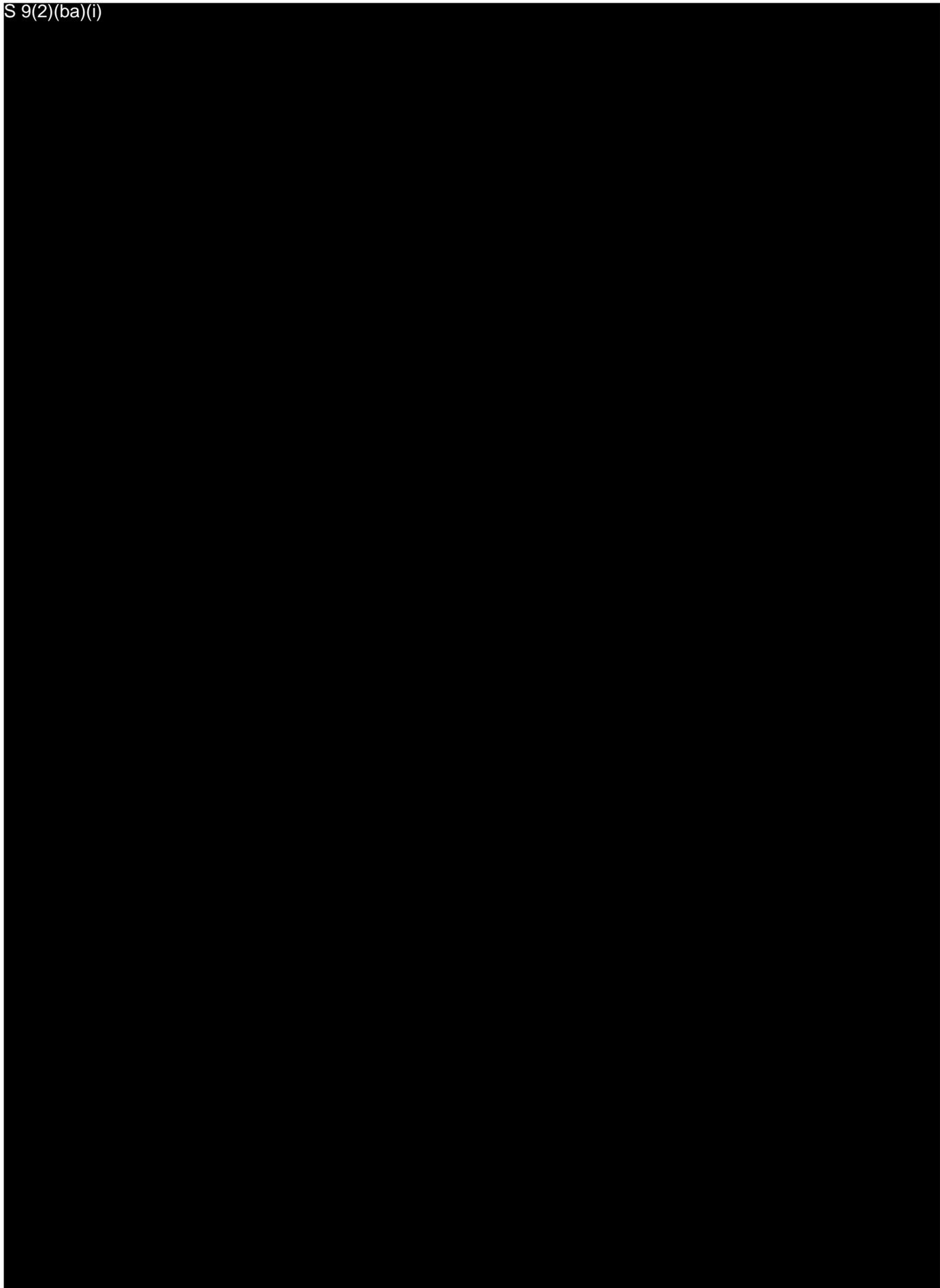
70. These graphs show the results of sensitivity analysis undertaken on Lincoln's financial forecasts to prove affordability. They do not include the impact of any mitigations being implemented. The green line shows the baseline, while the blue line shows the sensitivity.

S 9(2)(ba)(i)



Appendix D: Modelling impact of different levels of Crown contribution

S 9(2)(ba)(i)



S 9(2)(ba)(i)

