Auditor General's Report

Reports of the Performance Audit of the Redevelopment of Bruce Stadium

Report 7 Stadium Financial Model

PA98/11

September 2000

The Speaker
ACT Legislative Assembly
South Building
London Circuit
CANBERRA ACT 2601

Dear Mr Speaker

In accordance with section 17 of the *Auditor-General Act 1996*, I transmit to the Speaker my report titled *Bruce Stadium Redevelopment: Report 7 Stadium Financial Model* for presentation to the Legislative Assembly by the Speaker. This Report is one of twelve reports arising from my performance audit of the Bruce Stadium redevelopment.

Yours sincerely,

John A Parkinson

GUIDE TO THE REPORTS OF THE AUDIT

The redevelopment of Bruce Stadium project involved a wide range of activities, including construction, financing, marketing, operating the Stadium and bidding for and hosting Olympic soccer. Each of these activities was important to the redevelopment project and therefore was included in the performance audit.

For convenience of compilation and publication, the results of the Audit are provided in a series of reports. It should be noted that the reports are not intended to stand alone. For a complete understanding of the Audit's outcome, readers need to refer to all reports. The Audit has been reported in a series of 12 reports as outlined below. The reports are shown diagrammatically in the accompanying chart.

Report 1 Summary Report This report summarises all aspects of the Audit. It lists the Audit's objectives and opinions and contains chapters on the outcomes and components of the redevelopment, factors that contributed to the outcome and the Audit's methodology. The report contains synopses of each of the other reports of the Audit.

Report 2 Value for Money The question of whether the cost incurred in redeveloping the Stadium represents value for money is most important in the overall assessment of the redevelopment project. This report provides an opinion on whether the costs incurred in redeveloping the Stadium represent value for money for the Territory.

Report 3 Costs and Benefits This report provides an opinion on whether the economic benefits from redeveloping and operating the Stadium and hosting Olympic soccer are, or will be, greater than the costs incurred in redeveloping and operating the Stadium and hosting Olympic soccer.

Report 4 Decision to Redevelop the Stadium In July 1996, SOCOG invited the Territory to submit a bid to host Olympic soccer. In September 1996 the Cabinet agreed to submit a bid and to upgrade the Stadium should the bid be successful. This report provides an opinion on whether the decision to redevelop the Stadium was made with the aid of relevant, accurate and complete information. The report discusses redevelopment proposals in 1993 and 1994, the bids in 1995 and September 1996 and related capital works proposals.

Report 5 Selection of the Project Manager This report provides an opinion on whether the selection of the project manager was based on

sound management practices. The report summarises the Government's purchasing policy and includes a comparison of the selection process used with the policy. It discusses the tendering process, the probity review and the project management agreement.

Report 6 Financing Arrangements The total cost of the redevelopment was originally estimated at $27m. This was to be financed by a $12m appropriation with the balance to be provided by sales of Stadium products (e.g. a passholder program, naming rights and corporate suites) and borrowings. Considerable work was undertaken and costs incurred in efforts to have a financing structure developed. This report provides an opinion on whether the management of the financing arrangements to meet the costs of redeveloping the Stadium was effective. The report outlines the financial structures contemplated and comments on the utility of the final structure developed.

Report 7 Stadium Financial Model The Stadium financial model was a key document referred to in the decision to redevelop the Stadium and was used as an indicator of the commercial viability of the redeveloped Stadium and as a justification for several major decisions. This report provides an opinion on whether it was reasonable to use the model as a reliable primary document for decision making.

Report 8 Actual Costs and Cost Estimates This report provides an opinion on whether the actual costs of the redevelopment were contained within the cost estimates on which Cabinet decisions were based. It also includes reference to costs which were met from funds appropriated for other purposes and identifies the major items that contributed to cost increases. It explains some of the major factors that contributed to the actual costs being significantly in excess of original estimates.

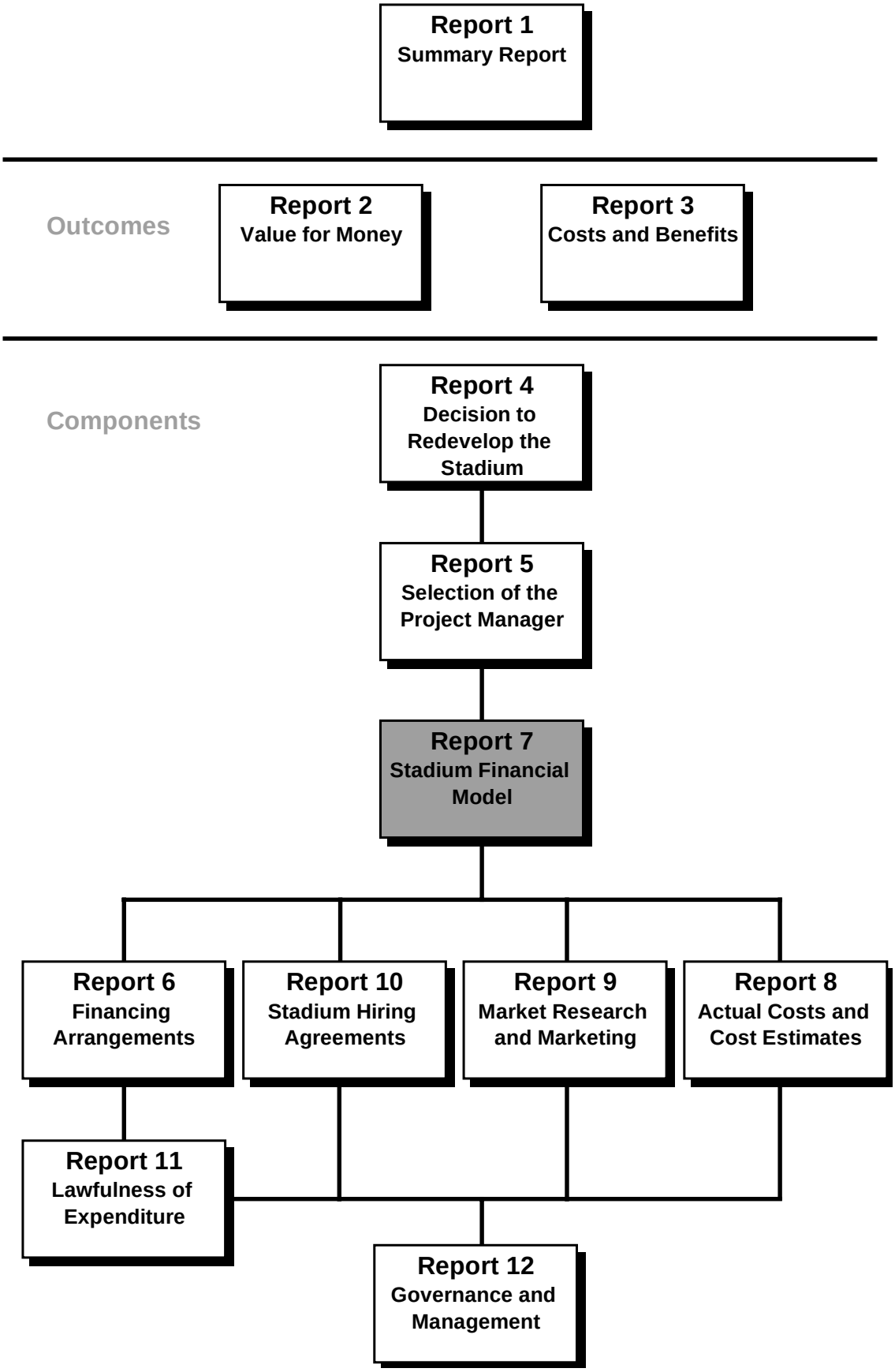
Report 9 Market Research and Marketing In mid-1998, a consortium was appointed to market and sell the Stadium's products. Only a fraction of the forecast revenue was raised. This report provides an opinion on whether the management of market research and marketing has contributed to the commercial viability of the Stadium's operations. Comments are provided on marketing research and the selection and monitoring of the marketing consortium.

Report 10 Stadium Hiring Agreements The redevelopment plan included negotiation of new hiring agreements with the major hirers of the Stadium. Negotiations with the hirers commenced in July 1997 and continued throughout 1998. The agreements included large revenue assurance guarantees, particularly for one hirer. This report provides an opinion on whether the negotiation of the Stadium hiring agreements has contributed, or will contribute, to the commercial viability of the Stadium's operations. The report discusses the Heads of Agreements settled with the teams, negotiation principles agreed by the Cabinet and the revenue assurance guarantees.

Report 11 Lawfulness of Expenditure After funds appropriated for the redevelopment were exhausted, funds were provided from the Central Financing Unit of the Chief Minister's Department. This report provides an opinion on whether the payments made for the redevelopment in excess of the amounts appropriated were lawful and whether the overnight borrowing on 30 June 1998 was lawful.

Report 12 Governance and Management This Report comments on the governance framework in the Territory and those arrangements specifically set up to oversight and manage all aspects of the project to redevelop and operate the Stadium. The Report provides an opinion on whether governance and management arrangements for the redevelopment project were effective. It comments on submissions to the Cabinet, operational management and human resourcing arrangements.

REPORTS OF THE AUDIT



REPORT 7

STADIUM FINANCIAL MODEL

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1 STADIUM FINANCIAL MODEL OVERVIEW

INTRODUCTION

1.1 This Report comments on the Audit's review of the Stadium financial model, which was used in decision making from 1996 to 1999. It addresses the Audit objective to report on whether it was reasonable to use the Stadium financial model as a reliable primary document for decision making.

1.2 The Stadium financial model was first presented to executives in September 1996 by CRI Limited, a consultant who assisted the Government in preparing the bid to host Olympic soccer in Canberra and in formulating a redevelopment plan for the Stadium.[1] The financial model was produced by Graf Consulting International, who had been engaged by CRI to assist in its consultancy work from July to September 1996. In March 1997, CRI Project Management Pty Ltd was appointed as project manager for the redevelopment. Graf Consulting was involved in preparing CRI's successful proposal to project manage the redevelopment and was subsequently sub-contracted by CRI to provide a range of services including financial modelling and business plan preparation.

1.3 Over twenty versions of the model were produced until June 1999. Most versions of the model were produced by the consultant, although later versions were produced under the direction of, or directly by, government executives.

1.4 The model is a computer spreadsheet showing financial projections for the redevelopment and the redeveloped Stadium. The model was intended to be a predictive tool for use in decision making. In particular, it could be used to project cash flows, net present values, returns on investment, borrowing requirements, and revenue flows to the Stadium and its hirers. Although the consultant and executives often refer to the financial model as a 'business plan', the model is not a business plan as conventionally understood.

[1] See *Report 4 – Decision to Redevelop the Stadium.*

1.5 The results produced by the model were used regularly as an indicator of the commercial viability of the redeveloped Stadium and as a justification for a number of major decisions on the Stadium's redevelopment and operation. The model continued to inform official views of the Stadium's commercial viability as late as June 1999.

1.6 The Audit has examined several versions of the model as well as assessments of the model conducted for the Government. *Chapter 2* of this Report provides a general introduction to the model. Later chapters deal with the following versions of the model:

- Version 2 (1996), which was the key financial document in the decision to bid for Olympic soccer and redevelop the Stadium;
- Versions 6 and 7 (1996 and 1997), which were key documents in CRI's successful submission for the role of the redevelopment project manager;
- Versions 11 and 11a (1997), which have been identified by Graf Consulting as fully developed versions of the model; and
- Versions 12d (1998), BRUC1 (1998) and AA (1999), which were produced under the direction of, or directly by, executives, and were the final versions of the model produced.

1.7 In addition, the Audit examined a major independent review of the model, conducted by Arthur Andersen in 1997 (referred to in this Report as the Andersen Review).

BACKGROUND

Versions of the Model Examined in this Report

1.8 Several versions of the model have been examined because of their significance to decision making and to provide an indication of the changes which were made to the model's projections throughout its development from September 1996 to June 1999.

Version 2 (19 September 1996)

1.9 *Version 2* of the Stadium financial model was the only significant financial analysis of the redevelopment project undertaken in late 1996. It was the key financial document referred to in the decision to proceed

with the redevelopment and in turn shaped the conception of the project.

1.10 *Version 2* was the central document referred to in the Cabinet submission of 20 September 1996 (*Canberra — an Olympic City*). On the basis of this submission, the Cabinet agreed on 23 September 1996 to bid for Olympic soccer and to redevelop the Stadium if the bid proved successful. In particular, the funding structure to meet the construction cost of $27m, which was outlined in the submission, appears to have been derived from or supported by *Version 2*. This funding structure involved a $12m appropriation by the Government; $8m in upfront 'capital revenue' such as naming rights, corporate suites and passholder joining fees; and $7m in borrowing to be serviced and repaid from future operating revenues.

1.11 *Version 2* provided key data for the Territory's bid document to SOCOG (see *Report 4 — Decision to Redevelop the Stadium*). On the basis of the bid document and subsequent representations, SOCOG decided on 19 December 1996 to make Canberra a host city for Olympic soccer.

1.12 *Version 2* was the key supporting document in the Capital Works Program proposal for the redevelopment, submitted by the Bureau of Sport, Recreation and Racing in December 1996. On the basis of this document, a proposal to redevelop the Stadium was included in the Chief Minister/Treasurer's Cabinet submission of 31 January 1997. This submission, which contained the final version of the 1997-98 Draft Capital Works Program, was agreed to by the Cabinet on 3 February 1997.

1.13 *Version 2* was a key document used in developing the Expressions of Interest (EOI) documentation provided to potential project managers for the redevelopment (see *Report 5 — Selection of the Project Manager*).

Versions 6 (2 December 1996) and 7 (26 February 1997)

1.14 *Version 6* and *Version 7* were key documents in CRI's successful proposals for selection as the redevelopment project manager. The model underpinned CRI's proposals and was regarded by the assessment committee as a major factor in favour of CRI over other applicants and in particular over Lend Lease during the second stage of the assessment of

proposals (see *Report 5 – Selection of the Project Manager)*.

1.15 The selection of CRI as the project manager (and therefore the acceptance of *Version 7*) set the future directions and parameters for the design, size and scope of the redevelopment construction, the financing of the redevelopment, the marketing of the redeveloped Stadium's products and the hiring agreement negotiations with the major hirers.

1.16 In particular, CRI's second stage submission supported the funding structure of $12m in government appropriation, $7m in borrowing and $8m in upfront revenue, by drawing directly upon capital revenue figures presented in *Version 7* of the model.

Versions 11 (14 October 1997) and 11a (20 October 1997)

1.17 *Versions 11* and *11a* have been identified to the Audit by Graf Consulting as the most fully developed versions of the model produced by Graf Consulting. Graf Consulting advised that these versions contained projections capable of being relied upon as a reasonable basis for investment decision making purposes.

1.18 Revenue projections from *Version 11* were referred to extensively in the Cabinet submission of 18 December 1997 (*Bruce Stadium Redevelopment — Hiring Arrangements*). The submission recommended that the contracts with the Raiders and the Brumbies should contain revenue assurance guarantees under which the Stadium would guarantee to 'top-up' any shortfall between the hirers' revenue shares from sales of certain Stadium products as projected in the financial model and the actual shares generated. The Cabinet agreed to the recommendations of the submission on 22 December 1997.

Versions 12d, BRUC1 and AA

1.19 The last version of the model for which Graf Consulting has some responsibility was *Version 12a*, dated 25 March 1998. Graf Consulting has advised[2] that:

> 'Thereafter Graf Consulting modified the Financial Model only in accordance with directions from the Chief Minister's department.

[2] Graf Consulting, 25 May 2000.

This was done by inserting new variables at the direction of the Government'.

1.20 When *Version 12d* was produced on 12 November 1998, the redevelopment was in its final phase and the redeveloped Bruce Stadium was already operational to a considerable extent. *Version 12d* was the last version produced by Graf Consulting under the direction of government executives.

1.21 In November 1998, the Under Treasurer was engaged in arranging finance for the redevelopment. To assist with this, *Version 12d* was revised. The new version produced by executives[3] was *BRUC1* dated 26 November 1998.

1.22 *Version BRUC1* was also a key document referred to in important Cabinet submissions in December 1998 and March 1999. On 16 December 1998 the Chief Minister signed a Cabinet submission (*Bruce Stadium – Financing*) noting the increase in the construction cost of the Stadium from $27.3m to $33.5m. The submission recommended that the Government proceed with the full redevelopment and advised that this was possible without increasing the Government's financial contribution above $12.3m. This advice was based on *Version BRUC1*, which projected that the net cash surpluses from the operation of the Stadium would be high enough to support the increased cost and still produce a net present value (NPV) for the project of $10.705m. On the basis of this submission, the Cabinet agreed to proceed with the full redevelopment.

1.23 A later Cabinet submission signed by the Chief Minister, dated 18 March 1999, referred to the NPV figure of $10.705m in recommending a 'revenue shortfall guarantee' be provided as part of new financing arrangements with the Commonwealth Bank. The Chief Minister advised that 'Based on the current Business Plan, the likelihood of calling on this guarantee is low'. The 'current Business Plan' (i.e. financial model) was *Version BRUC1*.

1.24 The Audit has been advised[4] that *Version AA*, dated 21 June

[3] Mick Lilley, Under Treasurer, and Andrew Clark, Director of Finance, Office of Financial Management.

[4] Andrew Clark, 24 June 1999 and Mick Lilley, 13 January 2000.

1999, was the last version of the model to be produced.

The Andersen Review of the Model

1.25 The chief use of the Andersen Review according to executives at the time, was to deal with the concerns of the hirers about the financial model. It is understood that the Review Report was provided to the hirers and that a personal presentation of the report's finding to the Raiders also occurred.

1.26 The Cabinet submission dated 18 December 1997 (*Bruce Stadium Redevelopment — Hiring Arrangements*) placed reliance on the financial model and on the 'rigorous testing' of the model by Arthur Andersen and a marketing consultant called International Management Group (IMG). This submission sought agreement to negotiate legally binding contracts with the major hirers of Bruce Stadium. As previously stated, the submission recommended that the contracts with the Raiders and the Brumbies should contain revenue assurance guarantees.

1.27 The Cabinet submission dated 16 December 1998 (*Bruce Stadium — Financing*) placed reliance on the testing of and support for the model by Andersen and IMG. The submission recommended an increase in the funding for Bruce Stadium from $27.3m to $33.5m. The Cabinet agreed to the recommendation on 21 December 1998.

1.28 The Andersen Review was also referred to by executives and the Chief Minister on other occasions as testing and supporting the financial model.

The Advice of Graf Consulting on the Appropriate Uses of the Model

1.29 Graf Consulting advised during the conduct of the Audit[5] that *Version 2* of the model was not and should not have been used as a basis for any key decision making.

1.30 Graf Consulting has also advised the Audit that it is incorrect 'to allege that *Versions 6* and *7* of the Financial Model were used by the Government officials to select Graf Consulting above Lend Lease' or that

[5] Graf Consulting, 25 May 2000.

Versions 6 and *7* were relied upon by executives in selecting the project manager. Graf Consulting has also advised that *Versions 6* and *7* 'were not intended to be viewed as reliable forecasting material'.

Audit Comment

1.31 It is clear that *Version 2* was used to support important decisions and actions in late 1996 and early 1997. Official documents at the time indicate that executives accepted that *Version 2* could be relied on for these purposes.

1.32 The Audit is not in a position to resolve whether the consultant represented the model as a reasonable basis for decision making. The focus of the Audit, however, is on whether it was reasonable for executives and the Cabinet to use and rely upon *Version 2* of the model in decision making regardless of whether the preparer of *Version 2* considered it could be used for these purposes.

1.33 In regard to *Version 7*, Graf Consulting's advice to the Audit is inconsistent with the description of the financial model contained in CRI's first and second stage proposal documents. These proposals clearly indicate that the models were intended to be serious, realistic and based on research. As such, the assessment committee would have been expected to examine the model as a significant part of the CRI proposal supporting the financial and other aspects of the proposal.

CONCLUSION

1.34 The Audit has concluded that the large projected revenue increases in all versions of the model were very questionable. In all versions of the model, the improvement in the financial performance of the Stadium is projected to be almost immediate. This was also very questionable.

1.35 In *Version 2*, the Stadium is projected as being transformed from having a small cash deficit in 1995-96 to having a $6.8m cash surplus in 1998-99. This transformation is based on an $8m increase in operating revenue. The increase in operating revenue is based on seemingly unrealistic changes such as an increase in attendance to nearly six times

the 1995-96 level at the same time as ticket prices more than triple. A further $9.6m is projected to be received in upfront capital payments[6] in the 20 month period up to December 1998, most of which is received within a 12 month period.

1.36 The increases in revenue, attendance and ticket prices were so large and so quick in *Version 2* that even a cursory review could not have failed to notice them. It is reasonable to expect therefore that the projections would have been questioned and their achievability tested before *Version 2*'s results were referred to in important documents and relied on for important decisions.

1.37 The evidence available to the Audit suggests that little serious questioning and no detailed analysis of *Version 2* occurred. The entire critical assessment of the model's projections appears to be contained in a single page file note prepared in the Office of Financial Management. This note, which rightly questioned the very high attendance projections, seems to have been the background material for a paragraph in the Under Treasurer's letter of 20 September 1996 to the then Chief Executive of the Chief Minister's Department[7]. This letter advised that the Cabinet submission of 20 September 1996 titled *Canberra — an Olympic City* should contain a comparison of actual and projected attendance and an explanation for the projected increases.

1.38 No considered reason was put forward for why attendance, ticket prices and revenues would increase so dramatically. In the Cabinet submission *Canberra — an Olympic City* and in the subsequent Capital Works proposal the huge increases in revenue are justified solely by a reference to 'the increased earning power of a modern stadium compared to an outdated 1970's vintage Stadium'.

1.39 As reported, Graf Consulting, who prepared *Version 2*, advised the Audit that the model's projections should not have been used as they were not intended to be fully researched projections capable of being relied upon for investment-related decision making. The Audit's review

[6] This was revenue to be received during the construction phase and in the first months of operation from the sale of naming rights, corporate suites, video replay board rights, passholder memberships, and supplier and concession rights. This revenue was to be periodically renewed and was in addition to annual operating revenue from the same sources.

[7] John Walker.

of *Version 2* indicates that the projections were clearly very doubtful.

1.40 *Version 7* was a significant part of CRI's proposal for engagement as project manager for the redevelopment. The process by which CRI was chosen as project manager is discussed in *Report 5 – Selection of the Project Manager*. That Report concludes that there is no evidence that the committee systematically analysed the business plans/financial models submitted by the short listed proponents, CRI and Lend Lease. The Audit's review of *Version 7* supports the view that no systematic analysis of *Version 7*'s projections occurred. The Audit also notes that Graf Consulting has advised the Audit that it did not consider that *Versions 6* and *7* contained, or were required or intended to contain, financial forecasts for the redeveloped Stadium.

1.41 The Lend Lease and CRI models produced very different projections for the redeveloped stadium. The Lend Lease model showed far lower upfront and net operating revenues than the Graf model. As a result, the Lend Lease model showed that the Government would have been required to contribute $17m during the redevelopment and could not expect a return on this investment for 15 years. The CRI model showed that the Government's contribution could be limited to $12m and that the Government could expect a significant stream of surpluses from the Stadium's operations.

1.42 Given the significance attached by the assessment committee to the projections in the two financial models, and the wide differences in projected results between the models, it is reasonable to expect that a careful comparison of the two models would have been conducted and the results of this comparison would have received close attention from the committee. No such comparison occurred.

1.43 *Version 7* of the model projected lower attendance and revenue figures than *Version 2*. Nevertheless, the figures projected in *Version 7* were still far above previous actual figures. The Audit has concluded that the differences between actual figures and those contained in *Version 7* were so great that it is reasonable to expect that executives would have subjected *Version 7* of the model to close scrutiny before accepting it as a financial forecast which was sufficiently reliable to be used in making important decisions about the redevelopment. The Audit is of the view that if *Version 7* had been closely scrutinised, its projections must have been recognised as questionable. This recognition may have led to a review of the proposed financing, design, size and

scope of the redevelopment.

1.44 *Version 7* was an important document. Once CRI was selected as the project manager for the redevelopment, *Version 7* and its underlying concepts became the basis for the amount and source of financing for the redevelopment, the Stadium products to be developed, the marketing of the products, and negotiations of hiring agreements with the major hirers of the Stadium.

1.45 According to Graf Consulting, *Versions 10* to *12a* were properly or fully developed versions of the model. Although *Version 11a* projects smaller capital and operating revenue than *Version 6*, the projections in *Version 11a* are still significantly higher than previous actual results. The cash surplus in 1999-2000 was projected in *Version 11a* to be $1.9m higher than the actual figure in 1995-96. In addition, upfront capital revenue of $7.7m was projected from the sale of products such as naming rights and passholder memberships. The Audit has concluded that, as with previous versions, it was reasonable to expect that executives would have had *Version 11a* of the model subjected to close scrutiny before accepting it as a reasonable financial forecast on which to base investment decisions.

1.46 Other than the independent reviews discussed below the Audit has not located evidence that executives undertook a close review of *Version 11a* or of the other models identified by Graf Consulting as properly or full developed versions of the model (i.e. *Versions 10* to *12a*).

1.47 Independent reviews of *Version 10* were conducted by Arthur Andersen and IMG. These reviews are discussed by the Audit in, respectively, *Chapter 7* of this Report and *Report 9 – Market Research and Marketing*. The Audit has concluded that neither review provided a high level of assurance in regard to the model's projections. Documentation has not been sighted to support the view that a close analysis of either review report was undertaken by executives.

1.48 In the light of the above comments, the Audit has concluded that *Version 11a*, and the other versions of the model identified by Graf Consulting as properly or fully developed, required comprehensive analysis and validation before they could be referred to in official documents or relied upon in decision making.

1.49 Graf Consulting has advised that *Versions 12b* to *12d* were produced under direction from government executives. The Audit has examined the changes made between *Versions 11a* and *12d*. These changes appear to be a balancing act between the pressures of emerging reality and the desire for the model to project results that were consistent with the Government's objectives of appropriating no more than $12.3m and of the Stadium being commercially viable.

1.50 *Version 12d* shows that the Government contribution could be maintained at $12.3m and that the project would produce a small positive NPV. These results are achieved despite reductions in some important revenue projections and a significant known rise in projected construction costs being included in the model. To offset these, other revenue projections have been increased and expense projections reduced.

1.51 Of particular note is the increase in projected revenue from entertainment. These events had not been held at the Stadium for several years. The increase in projected revenue from entertainment does not appear to be supported by any systematic research or reasoning. No documentary evidence has been found by the Audit or provided to it which explains why the projected number of entertainment events was increased from one per year in earlier versions to five per year in *Version 12d*.

1.52 The Audit reviewed the versions of the model prepared by government executives[8] (i.e. after *Version 12d* and including *Versions BRUC1* and *AA)*. The financial model became less realistic during the seven months it was directly prepared by executives and therefore less useful for decision making. After examining the projections in these versions the Audit's view is that the versions prepared by executives were virtually useless for decision making.

1.53 The cash surplus projected to be generated from the redevelopment increased from $76.1m in *Version 12d* to $129.1m in *Version AA*. The capital injection from government is maintained at $12.3m and the NPV increases from $5.2m to $22.5m. These results are achieved by reducing projected payments by a larger amount than the reduction in projected receipts, and by removing the cost of furniture,

[8] Andrew Clark and Mick Lilley.

fittings and equipment (FF&E) from the cost of construction.

1.54 The last version of the model produced by executives – *Version AA* dated 21 June 1999 – was so unreliable it did not project a reasonably accurate result for the 1998-99 financial year despite being prepared only nine days before the financial year ended. By this date, the redevelopment had been completed and the financial model had been in existence for nearly three years. The lack of accuracy is therefore notable. On the other hand, it is unclear what purpose the model was now serving.

1.55 Official documents state that the Andersen Review was commissioned in order to alleviate the concerns of the major hirers about the financial model. The Andersen Review was presented in important Cabinet submissions as being part of a rigorous testing of the financial model which gave a significant degree of confidence that the model's results could be relied upon as sound information on which to base decisions.

1.56 The Audit has concluded that executives[9] should not have accepted the Review Report, or presented it as providing a high level of assurance about the financial model. If the report had been carefully reviewed, and questions asked, the executives would have recognised that the report's content was unreliable for providing even a moderate level of assurance.

1.57 The Review report does not provide a clear statement of its conclusion as required under the relevant Auditing Standard. Conclusions on specific matters are often presented obscurely or avoided. There are numerous basic errors and omissions in the text and tables. Most of the Review Report was material written by Graf Consulting and supplied to Arthur Andersen during the course of the Review.

1.58 The Audit has concluded that the large projected revenue increases in all versions of the model were very questionable. In all versions of the model, the improvement in the financial performance of the Stadium is projected to be almost immediate. This was also very

[9] Moiya Ford, General Manager, Strategic Business Projects, Department of Business, the Arts, Sport and Tourism; Mick Lilley; and Annabelle Pegrum, Chief Executive, Department of Business, the Arts, Sport and Tourism.

questionable.

1.59 The Audit concludes that the large cash surpluses from operations projected in all versions of the model are unlikely to be achieved at least in the foreseeable future. This applies particularly to the last version of the model (*Version AA*) prepared by executives in June 1999.

1.60 The Audit opinion is that it was not reasonable for the Stadium financial model to be used as a reliable primary document for decision making.

DEPARTMENTAL RESPONSE

1.61 In accordance with section 18 of the *Auditor-General Act 1996*, a late draft of this Report was provided to the Chief Executive of the Chief Minister's Department for his consideration and comments. The Chief Executive's response is set out following.

1. "I agree with the report's conclusion that the short term revenue projections in the financial model represented such a change from previous experience that officials should have been more cautious in relying on the predicted outcomes. Commitment to the achievement of these revenue predictions in turn resulted in a delay in accepting that additional direct Government funding needed to be sought. That in turn had consequences for the type of financial arrangements which were pursued.

2. As with most events that appear, with the benefit of hindsight, to have been significantly misguided, there was a quite reasonable basis for proceeding at the time and subsequent actions were pursued logically and diligently.

3. Drawing on the experience at other major venues, the proposition that substantial revenue could be achieved from commercial sources a reasonable. As I have observed in response to other reports, there are good prospects that much of that revenue may well be achieved over the medium term, other than the projected up-front payments.

4. In addition, officials did seek to validate the outcomes of the financial model through the use of two additional expert organisations. I agree that some of the advice received as a result was less than clear and that the summary advice to Ministers on the outcome of these additional checks was more favourable than a closer reading of the material might

support. The very tight timescales imposed by the Olympics provides some explanation for this shortcoming.

5. I believe that it was quite reasonable for Cabinet to rely on the subsequent advice and to take comfort that the predicted outcomes from the financial model had been the subject of expert third party review.

6. The report argues that all of this external advice should have been the subject of further "reasonableness reviews". This is a somewhat difficult argument to sustain. Consultancy advice is sought where officials lack either the available resources or the necessary expertise or knowledge. Officials are obliged to ensure that they understand the nature of the advice received; but if they lack the relevant expertise it may difficult to undertake the reasonableness reviews suggested in the report. The alternative would be to seek yet more consultancy advice, but who would then check the reasonableness of that advice."

CONCLUDING COMMENTS

1.62 The Audit's view on the issues identified in the Chief Executive's response are discussed in the following paragraphs.

1.63 The Chief Executive's comment in *paragraph 1* that 'officials should have been more cautious in relying on the predicted outcomes' in the model is an understated recognition of the issues raised in the Audit's Report on the Stadium financial model.

1.64 As this Report shows, the model was the only financial analysis underpinning the decision in September 1996 to redevelop the Stadium. It was a key factor in the selection of the project manager in early 1997. It was relied upon in important Cabinet submissions on hiring arrangements and financing in 1997 and 1998. It was the basis for revenue targets for the marketing campaign conducted in 1998 and 1999. It continued to inform official views about the financial prospects for the Stadium in late 1999.

1.65 The financial model has been at the heart of decisions made about every aspect of the redevelopment project discussed in this Audit. As this Report shows, over the last four years the financial model has never been subjected to rigorous testing by officials. This is despite the very questionable nature of the projections contained in every version of the

model.

1.66 The Chief Executive states in *paragraph 2* that 'there was a quite reasonable basis for proceeding at the time and subsequent actions were pursued logically and diligently'. The Chief Executive offers no evidence for this statement in regard to the use of the Stadium financial model. The content of this Report raises serious doubts about such a statement. Not only were successive versions of the model relied upon without serious questioning by officials, but during the seven months the model was directly under the control of officials, it became less reliable. As the problems with revenue projections became more obvious, other parts of the model's revenue projections were increased without reason or justification. The Audit cannot agree that there was a quite reasonable basis for proceeding and subsequent actions were pursued logically.

1.67 The Chief Executive states in *paragraph 3* that 'Drawing on the experience at other major venues, the proposition that substantial revenue could be achieved from commercial sources [is] reasonable'. The evidence on other stadiums which has been gathered by the Audit suggests that the experience at Bruce Stadium of financial failure and write-downs is common. The key question, however, is whether the revenue projections in the financial model for Bruce Stadium were reasonable.

1.68 In this regard, the Chief Executive further states in *paragraph 3* that 'there are good prospects that much of that revenue [projected in the model] may well be achieved over the medium term, other than the projected up-front payments'. This is not supported by the Stadium Authority's forward estimates, which show a cash deficit of about $0.9m in 2003-04. This is consistent with the actual deficit in 1998-99 of $1m. The Audit notes that this forward estimate is based on optimistic assumptions about receipts and payments. In contrast with the Stadium Authority's estimates, the latest version of the model sighted by the Audit projected a cash surplus of $3.8m in 2003-04. The Audit is unaware of the 'good prospects' referred to by the Chief Executive that the revenue projections in the model will be achieved in the medium term.

1.69 The Chief Executive states in *paragraph 4* that the advice received from two 'expert organisations' on the model 'was less than clear and that the summary advice to Ministers on the outcome of these additional checks was more favourable than a closer reading of the

material might support'. The Chief Executive's response goes on to say that 'the very tight timescales imposed by the Olympics provides some explanation for this shortcoming'. The Audit notes that the reviews conducted had nothing to do with the Olympics. They were commissioned in response to concerns expressed by the major hirers about the projections in the model. The review reports were received in August and October 1997 and used in Cabinet submissions in December 1997 and December 1998. The statement that the Olympics timetable prevented critical assessment by officials is unsupportable.

1.70 The Chief Executive states in *paragraph 6* that 'Officials are obliged to ensure that they understand the nature of the advice received; but if they lack the relevant expertise it may [be] difficult to undertake the reasonableness reviews suggested in the report. The alternative would be to seek yet more consultancy advice, but who would then check the reasonableness of that advice'. In the Audit's view, if officials lack the expertise to understand the advice of consultants, then an alternative to commissioning further consultancy work might be to seek advice from other officials who do have the necessary expertise. Moreover, if particular officials lack the expertise to understand the advice of consultants, it could be asked why these officials are commissioning, receiving and using this advice to in turn provide advice on major decisions costing tens of millions of dollars to the Territory. Of concern is the inference that it was reasonable for senior officials to provide advice to Cabinet from a position of ignorance.

1.71 The matters raised by the Chief Executive were identified during the Audit and carefully examined. On receipt of the Chief Executive's response they were reconsidered. The Audit's conclusion is that the content of the Chief Executive's response does not change the Audit's opinion.

2 THE MODEL IN GENERAL

INTRODUCTION

2.1 The financial model was first presented by Graf Consulting in September 1996. A final version of the model was produced by executives in June 1999. During the intervening period the model went through numerous versions. This Chapter provides a general examination of the model. In particular it looks at the purposes, structure and basic assumptions of the model.

SIGNIFICANT FINDINGS

- ***The Stadium financial model is a computer spreadsheet showing financial projections for the redevelopment and the redeveloped Stadium.***
- ***Over 20 versions of the model have been prepared since it was first presented in September 1996.***
- ***The model is often referred to as a 'business plan', even though it is not a business plan as conventionally understood.***
- ***Important behavioural relationships assumed by the consultant who developed the model cannot be identified.***
- ***The consultant has identified the three key assumptions behind the projected increased attendance and revenue as the physical redevelopment itself, improved management and aggressive marketing of the Stadium.***
- ***The large projected revenue increases in all versions of the model were very questionable.***
- ***In all versions of the model, the improvement in the financial performance of the Stadium is projected to be almost immediate; this was also very questionable.***

NATURE AND PURPOSE OF THE MODEL

2.2 The Stadium financial model is a computer spreadsheet showing financial projections for the redevelopment and the redeveloped Stadium. The nature and purpose of the financial model, according to Graf Consulting's definition of a fully developed financial model, is:

> 'A fully developed, finely-tuned and functioning financial model able to be used as an interactive business-planning tool, containing fully researched and validated projections, the conclusions of which are capable of being relied upon as a reasonable basis for investment decision-making purposes'.

2.3 The model was therefore intended to be a predictive tool for use in decision making. In particular, it could be used to project cash flows, net present values, returns on investment, borrowing requirements, and revenue flows to the Stadium and the hirers. This type of information is commonly used to assist in decisions on whether to make capital investments.

VERSIONS OF THE MODEL PRODUCED

2.4 Over 20 versions of the model have been prepared since it was first presented to executives in September 1996. The model has been produced in two formats.

2.5 The first version of the model (*Version 2*, dated on or about 19 September 1996) is 66 pages long. The length and format of *Version 2* continued until *Version 7* dated 26 February 1997. These versions are usually designated *BRUCER* followed by a version number.

2.6 In April 1997 Graf Consulting prepared a new version of the model which was considerably longer and more detailed than previous versions. This new format of 150 to 170 pages was designated *BRUV* followed by a number and sometimes a letter. *BRUV04* was produced on 23 June 1997. The last version in the *BRUV* series was *Version 12d* of 12 November 1998.

2.7 All of these versions were produced by Graf Consulting. Graf Consulting has advised, however, that the versions from *12b* to *12d* were produced under direction from government executives. After *12d*, Office of Financial Management executives[10] produced their own versions of the model in the same format as the *BRUV* series. The Audit has been provided with a version identified as *BRUC1*, dated 26 November 1998, and the latest version, identified as *AA*, dated 21 June 1999.

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[10] Andrew Clark and Mick Lilley.

2.8 Some versions appear in two or more variants. The Audit has been provided with three different variants of *Version 2*, dated 18, 19 and 20 September 1996, and two variants of *Version 5*, dated 7 November 1996.

2.9 *Table 2.1* on the following page lists all versions and variants seen by the Audit in full or in part.

COMPARISON WITH A CONVENTIONAL BUSINESS PLAN

2.10 Although the financial model is often referred to in various documents as a 'business plan', the model is not a business plan as conventionally understood. As previously pointed out, the model is a computer spreadsheet showing financial projections for the redevelopment and the redeveloped Stadium.

2.11 Generally speaking, a business plan is a single, consolidated and readable document that presents the objectives of a business proposal and the resources required to meet those objectives. It should provide a marketing plan presenting a systematic, detailed and realistic assessment of the market (i.e. customers and competitors) and a financial plan that is similarly systematic, detailed and realistic. Cash flow projections for the life of the project and the calculation of a net present value using a discount rate are standard parts of the financial plan. A considered assessment of the risks associated with the project would be presented, including a discussion of the assumptions that underpin the financial plan. It is important that sensitivity analysis of the main variables is conducted and preferably summarised in 'scenarios' showing worst, best and middling outcomes. A business plan will usually include a framework for measuring progress and evaluating results.

Table 2.1 – Versions of the Stadium Financial Model

Version	Date and Time Printed
	BRUCER Series
2	18 September 1996 (09:42)
2	19 September 1996 (09:00)
2	20 September 1996 (09:10)
3	24 September 1996 (16:16)
5	7 November 1996 (16:53)
5	7 November 1996 (23:28)
6	2 December 1996 (06:44)
7	26 February 1997 (19:50)
	BRUV Series
4	23 June 1997 (11.54)
8a	31 July 1997 (14:57)
9	31 July 1997 (18:24)
9a	8 August 1997 (11:07)
10	19 August 1997 (13:18)
10b	2 October 1997 (12:25)
10c	2 October 1997 (12:25)
11	14 October 1997 (12:48)
11a	20 October 1997 (16:21)
12	12 February 1998 (11:41)
12a	25 March 1998 (17:25)
	Executives' Series
12c	5 November 1998 (16:32)
12d	12 November 1998 (17:31)
BRUC1	26 November 1998 (14:10)
AA	21 June 1999 (15:31)

2.12 Several documents were produced in 1997 that were similar to a conventional business plan. CRI's first and second stage proposals for selection as project manager for the redevelopment, presented in January and February 1997 respectively, contain some text on the model, but do not include a clear and complete description of the model's structure, assumptions and data sources.

2.13 A document called *Outline Draft Business Plan* dated 26 May 1997 states that 'This business plan, which is currently being documented, is intended to be read in conjunction with our detailed

financial model'. This document, however, is similar to the Functional Design Brief for the redevelopment and does not contain any of the elements of a business plan listed previously.

2.14 In July 1997 Graf Consulting produced a document called *Business Plan Assumptions* which is more like a conventional business plan. This document, however, does not contain important elements of a business plan and is lacking in rigorous analysis. It is uncertain whether this document was provided to executives. It was prepared specifically for Arthur Andersen, who used it as the basis for its review of the financial model (see *Chapter 7*).

Audit Comment

2.15 The use of the term 'business plan' as a synonym for the financial model has created some confusion. A business plan was never produced. The financial model by itself is an incomplete document for decision making. It does not provide an analysis of the structure of the model, its assumptions, or the evidence and analysis that lies behind the assumptions. An understanding of the structure of the model and the revenue and expense assumptions can only be gained from a close examination of the model. It does not appear that executives examined the model in order to be reasonably informed about its structure and assumptions.

2.16 An examination of the model does not reveal anything about the evidence and analysis which lies behind the assumptions in the model. This is an important matter. The model projects very large increases in stadium revenue. These increases are based on general assumptions about the determinants of demand for Stadium services (discussed later) and on a number of specific assumptions about event numbers, attendance, and spending on capital and operating revenue items. These general and specific assumptions should have been closely scrutinised before the projections in the model were accepted and relied upon by executives and the Cabinet for decision making. Such scrutiny required a carefully prepared document stating and assessing the bases for these assumptions.

2.17 A further element of such an analysis would have been a properly conducted sensitivity analysis to test the effects on financial projections of changes in significant variables. Such an analysis would have assisted in identifying the considerable risks inherent in the project. A sensitivity analysis of this nature does not appear to have been performed or

requested.

2.18 The problems identified would have been answered by a conventional and properly researched business plan or similar documentation. The Audit does not have in mind the production of a glossy promotional document, but a detailed and rigorous analysis of whether the redevelopment was likely to work as intended. Such a document was never prepared and there is no evidence that executives ever insisted or even expected that it be provided. This was particularly significant during the early stages of the project when decisions were being made about whether and how to proceed with the project.

STRUCTURE OF THE FINANCIAL MODEL

2.19 The model contains revenue and expense categories common to most stadiums. Revenue categories include tickets, food and beverages, merchandise, annual passholder subscriptions, corporate box and suite rental, naming rights, and signage and advertising. The model contains direct assumptions about some of these revenue categories, e.g. naming rights. In other cases, assumptions are made about quantity and price, which are then multiplied together to give revenue. For example, assumptions are made about the number of events, attendance at each type of event, and ticket prices for each type of spectator at each type of event. These are multiplied together to produce projected ticket revenue.

2.20 The model's projections about the size and timing of attendance, ticket prices, per head spending on food and beverages, naming rights and so on, are determined by the preparer of the model. These projections are entered into the model, which then calculates overall projected results for the Stadium.

Audit Comment

2.21 The absence of relevant supporting documentation on the model means that important behavioural relationships assumed by the modeller cannot be identified or analysed. For example, it is unclear whether the modeller believed that increasing ticket prices will have any effect on ticket sales.

2.22 It was not necessary for the modeller to produce a formal predictive model with explicit and precise behavioural relationships such

as, for example, that a 10% increase in ticket prices leads to a 5% decrease in the number of tickets sold. There were advantages, however, in addressing important behavioural relationships such as the relationship between price and quantity demanded. This would have assisted the user of the model to assess the plausibility of the model's projections and their usefulness in decision making.

GENERAL ASSUMPTIONS

2.23 All versions of the model show significant increases in attendance and revenue compared with historical levels at the Stadium. Graf Consulting has identified the key assumptions underpinning these increases as the redevelopment itself, aggressive marketing, and improved management of the Stadium. These three assumptions were noted in Cabinet submissions in 1996 and 1997.

Audit Comment

2.24 Little evidence has been presented to the Audit that the three general assumptions underpinning the model would result in the projected increases in attendance and revenue shown in the different versions of the model.

2.25 In the absence of such evidence, the Audit makes the following comments.

2.26 The quality of a football stadium is of some importance in determining attendance and prices paid. Clearly though, other factors are also important, such as the public's interest in football, the quality of the competition and the success of the local teams.

2.27 The redevelopment has been constructed largely as planned. The financial performance to date is discussed in *Report 3 – Costs and Benefits*. This evidence provides no support for the assumption that redeveloping the Stadium would generate significant increases in attendance and revenue.

2.28 Aggressive marketing of a product may result in increased sales. It is, however, only one factor influencing the demand for a product. Nearly $1m was spent on marketing in 1998-99. While there are concerns about the quality of the marketing, and Graf Consulting has

raised concerns about the arrangements for and timing of the marketing, it remains the case that a large amount of money has been spent on marketing with limited results. This is discussed further in *Report 9 – Market Research and Marketing*.

2.29 The improved management of the Stadium envisaged by Graf Consulting involved adopting an arrangement which Graf has described as a 'commercial' structure. This is defined by Graf Consulting as:

> 'A "***commercial***" and much more hands-on approach where there is a full complement of professional staff, commercially experienced and suitably qualified, and where the management of the facility also directly manages the key operational aspects such as marketing, sales, catering, merchandising, ticketing and restaurants and where there is a much higher level of involvement by the management of the Stadium in the running of the Stadium during major events.'

2.30 The 'commercial' management structure as envisaged by Graf Consulting was not introduced. A 'full complement of professional staff, commercially experienced and suitably qualified' was not appointed to run the Stadium and to take responsibility for important functions such as marketing and advertising.

2.31 To summarise, according to Graf Consulting, three general assumptions underpin the revenue projections in the model. Of these assumptions, two have been fully or partly implemented; the redevelopment has been completed as planned; and a marketing campaign has been conducted, albeit differently than intended by Graf Consulting. The third assumption, which was appointment of a full complement of professional staff, has not occurred. Although two of the assumptions have been fully or partly implemented the large revenue projections in the model have not been achieved. The Audit does not see any reasons why implementation of the third assumption would result in the revenue projections being achieved.

Further Audit Comment

2.32 The Audit has concluded that the large projected revenue increases in all versions of the model were very questionable. Some specific concerns in regard to particular versions of the model are raised in the following Chapters. Generally, the Audit's own research on the

performance of other stadiums and stadium redevelopments suggests that they impose financial burdens on governments and are routinely written down or written off in financial statements.

2.33 Poor financial performance, reflected in a significant write-down in 1998-99, has resulted from the Bruce Stadium redevelopment (see *Report 3 – Costs and Benefits*). This is despite the redevelopment having been constructed largely as planned and despite a costly marketing campaign. *Table 2.2* compares the actual results for the Stadium in 1995-96 and 1998-99 with projected results in *Version 7* of the model. *Version 7* was presented by CRI/Graf Consulting in early 1997 as containing realistic and conservative best estimates based on research and market assessment (see *Chapter 4 – Versions 6 and 7 of the Model*).

Table 2.2 – Comparison of Version 7 of the Financial Model with Actual Results in 1995-96 and 1998-99

	Bruce Stadium Trust 1995-96 (actual) $000		Bruce Stadium 1998-99 (actual) $000		The Model (v. 7) 1998-99 (projected) $000	
Receipts	1,251		1,680		6,905	
Payments	1,300		2,696		2,586	
Net cash result	–49	(deficit)	–1,016	(deficit)	4,319	(surplus)

Note: The actual figures for 1995-96 and 1998-99 are for net cash deficits from operating activities. To make the figures comparable, receipts in 1995-96 exclude an $111,000 appropriation. The Audit notes that the estimated result for 1999-2000 shows a further worsening of the 1998-99 result. Version 7's receipts are made up of $6,176,375 in 'operational revenue' and $729,095 in 'capital revenue'. The larger part of capital revenue (about $8m) was to be received in 1997-98

2.34 The Audit further notes that the projections in the model were questioned by the two major hirers of the Stadium. Both the Brumbies and the Raiders had serious reservations about the projections in various versions of the model (see *Chapter 7* in this Report). Given the hirers' intimate knowledge of the Canberra market for Stadium services, their reservations should have carried some weight.

2.35 Further, qualitative market research of the Canberra market conducted by the Stadium's sales and marketing consortium in October 1998 raised serious questions about the model's projected revenue from passholders and corporate entertainment (see *Report 9 – Market Research and Marketing*).

TIMING OF RECEIPT OF REVENUES IN THE MODEL

2.36 All versions of the model make an additional and important assumption about the timing of revenue. In all versions, the improvement in the financial performance of the Stadium is projected to be almost immediate. Peak attendance and operational revenue is usually projected to be reached in the second year of operation and maintained thereafter. There is no apparent recognition in the model of the time it takes to increase sales in a business. In addition, large capital revenue is projected to be received early in the project. This revenue was a key part of the funding structure for the redevelopment.

2.37 The timing of revenue projections would not be worthy of attention if the model had projected relatively small increases in attendance and revenue. Given the enormity of the changes projected, however, not to include a lengthy startup period is questionable. The Audit notes that this point was made by both Arthur Andersen and IMG in regard to the passholder program (see *Chapter 7* and *Report 9 – Market Research and Marketing*).

CONCLUSION

2.38 The Stadium financial model is a computer spreadsheet showing financial projections for the redevelopment and the redeveloped Stadium. Over 20 versions of the model have been prepared since it was first presented to officials in September 1996.

2.39 Although the consultant and executives often refer to the financial model as a 'business plan', the model is not a business plan as conventionally understood. Important behaviourial relationships assumed by the modeller cannot be identified or analysed.

2.40 Graf Consulting has identified three key assumptions which it considers would generate the increased attendance and revenue shown in the model. There is little evidence, however, that the projected increases in the different versions of the model would result from the implementation of these three general assumptions. Two of the assumptions have been fully or partly implemented with little effect on revenues.

2.41 The Audit has concluded that the large projected revenue

increases in all versions of the model were very questionable. In all versions of the model, the improvement in the financial performance of the Stadium was projected to be almost immediate. This was also very questionable.

3 VERSION 2 OF THE MODEL

INTRODUCTION

3.1 In July 1996 CRI was engaged to manage the ACT's submission to SOCOG and to 'formulate a draft business plan justifying the capital expenditure supporting the upgrade and incorporating potential revenue sources, contributions to capital and negotiating outcomes with the Stadium users'.

3.2 A business plan, as conventionally understood, was not produced, however a sub-consultant employed by CRI – Graf Consulting – presented a financial model on or about 19 September 1996. This model was designated *Version 2* (*Version 1* was apparently not presented). The model projected future cash flows and venue and tenant shares of revenue on a computer spreadsheet.

3.3 *Version 2* of the financial model was used in late 1996 and early 1997 by executives and its results were relied on by the Cabinet in several major decisions about the redevelopment and the Olympic soccer bid. Graf Consulting has advised during the conduct of the Audit[11] that *Version 2* of the model was not presented as suitable for use by executives and should not have been used in any key decision making.

3.4 This Chapter presents the main uses of *Version 2* and then reports on the reasonableness of using *Version 2* as an aid to decision making. It does this by comparing the model's projected figures with actual results for the Stadium in 1995-96, which was the most recent financial year at the time.

SIGNIFICANT FINDINGS FROM THIS CHAPTER

- ***Version 2 of the model was used by executives and its results were relied upon by the Cabinet as a key document in major decisions to bid for Olympic soccer and redevelop the Stadium.***

[11] Graf Consulting, 25 May 2000.

- ***Executives did not subject Version 2 to reasonable critical examination before its results were referred to in important documents and used to support important decisions.***
- ***Version 2 was an unsuitable document for use in decision making.***
- ***The consultant who prepared Version 2 has advised the Audit that it was an unsuitable document for use in decision making.***

OFFICIAL USES OF VERSION 2 OF THE MODEL

3.5 The Stadium financial model was the only significant financial analysis of the Stadium redevelopment undertaken in late 1996. It was the key financial document in the decision to proceed with the redevelopment and in turn shaped the conception of the project.

The Cabinet Submission of 20 September 1996

3.6 *Version 2* of the Stadium financial model was the central document referred to in the Cabinet submission of 20 September 1996 titled *Canberra — An Olympic City*. On the basis of this submission, the Cabinet agreed on 23 September 1996 to bid for Olympic soccer and to redevelop the Stadium if the bid proved successful.

3.7 The submission places great reliance on the financial model (also called a 'business plan' in the submission). It states that:

> 'CRI Limited have proposed a financial model to support a development plan which will ensure the Stadium is upgraded to meet the requirements set out by FIFA and existing tenants'.

3.8 The funding structure to meet the construction cost of $27m is outlined in the submission: $12m from the Government; $8m in upfront 'capital revenue' from naming rights, corporate suites, key monies and passholder joining fees; and $7m in borrowing to be serviced by future operating revenues. These figures appear to be derived from or supported by *Version 2*.

3.9 The submission notes that:

> 'The revenue increases projected by the consultant are based on assumptions which are dependent on the [redevelopment] masterplan proceeding in its entirety'.

3.10 The masterplan included increased seating, more corporate boxes, a video scoreboard, roofing, and upgrade of concessions and spectator facilities. The submission stated:

> 'It is acknowledged that they [the revenue increases] are an increase in recent outcomes but this reflects the increased earning power of a modern stadium compared to an outdated 1970's vintage stadium'.

3.11 *Version 2* was made available to the Under Treasurer[12] as a supporting document to the submission. The projections in the model were referred to by the Under Treasurer in his letter on the submission of 20 September 1996, which was provided to the then Chief Executive of the Chief Minister's Department[13].

3.12 Several documents prepared after the submission make clear that reliance was placed on the model as containing sound projections of revenue and expenses for the redeveloped Stadium, and therefore as indicating the level of government appropriation required. The then General Manager of the Bureau of Sport, Recreation and Racing[14] advised the Chief Minister in February 1997 that:

> 'To enable the Bruce Stadium to be redeveloped, with minimum Capital injection from Government, a consultant was engaged to develop a business plan and conceptual design. The business plan contained facts and figures regarding the anticipated revenue and expenditure that the Bruce Stadium could generate if operated on a commercial basis, and made high level assumptions of the amount it could comfortably borrow and raise in revenue which could be used to fund the redevelopment'.

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[12] Mick Lilley.

[13] John Walker.

[14] Mark Owens.

The Olympic Bid Document of 30 September 1996

3.13 *Version 2* provided key data for the ACT's bid document to SOCOG (see *Report 4 — Decision to Redevelop the Stadium*). On the basis of the bid document and subsequent representations, SOCOG decided on 19 December 1996 to make Canberra a host city for Olympic soccer.

3.14 The bid document presented the funding structure contained in the Cabinet submission of 20 September 1996: $12m from the ACT Government; $8m from the sale of corporate suites, passholders and so on; and $7m in borrowing serviced by operating revenues. As discussed previously, this funding structure was apparently derived from *Version 2*. The physical redevelopment plan for the Stadium, which formed the cornerstone of the bid, had been justified financially in the Cabinet submission by reference to *Version 2*.

3.15 The attendance projections in *Version 2* of the model were reproduced in an appendix to the Olympic bid document. The importance of the model to the bid document was stressed by executives at the time. On 14 February 1997, the then General Manager of BSRR[15] described the model as:

> 'an integral part of the bid to SOCOG to host part of the Olympic Football competition'.

3.16 A letter from an official to the Government Solicitor on 15 January 1997 states that the model was prepared for two reasons: for the SOCOG bid and for BSRR to seek funding from the Government for the redevelopment.

Capital Works Proposal

3.17 *Version 2* of the model was the key supporting document in the Capital Works Program proposal for the redevelopment, submitted by BSRR in December 1996. This proposal was included in the Chief Minister/Treasurer's Cabinet submission of 31 January 1997. This submission, which contained the final version of the 1997-98 Draft Capital Works Program, was agreed to by the Cabinet on

[15] Mark Owens.

3 February 1997.

3.18 *Version 2* of the model was attached to the Capital Works proposal. While other documents, including a 'benefits study' by OFM, are referred to in the proposal, the model was the chief document used to support the development plan. In particular, the proposal stated that it was the 'significant increases in revenue… projected by the consultant' which underpinned the financing of the redevelopment.

3.19 According to the Cabinet submission of 6 March 1997 (*Bruce Stadium Redevelopment — Recommended Tender*), the funding structure in the Capital Works proposal was prepared by CRI in September 1996 and 'based on a business planning exercise' (i.e. the financial model). As stated previously, one of the reasons for the preparation of the model was to seek funding from the Government for the redevelopment.

Specifications for the Selection of a Project Manager

3.20 *Version 2* of the model was a key document used in developing the Expressions of Interest (EOI) documentation provided to potential project managers for the redevelopment (see *Report 5 — Selection of the Project Manager*).

3.21 The Cabinet submission of 6 March 1997 (*Bruce Stadium Redevelopment — Recommended Tender*) states that:

> 'In anticipation of a successful outcome to the bid to host Olympic Football in November 1996, the Bureau of Sport, Recreation and Racing prepared [tender] documentation, based on the financial package developed by CRI'.

3.22 The funding structure envisaged by the Government was outlined to potential proponents for project manager in an information session in January 1997 presented by, among others, the then General Manager of BSRR[16]. A $27m redevelopment would be paid for by $12m from the Government; '$8m through the sale of naming rights, sponsorship etc; and $7m through a loan serviced by a split of user revenue'.

3.23 It was explained to the potential proponents that 'A Business

[16] Mark Owens.

Planning exercise recently undertaken by the Bureau indicated that the forecasted revenue and debt servicing could be achieved'.

Audit Comment

3.24 The various documents sighted by the Audit show the importance of *Version 2* in early decision making concerning the redevelopment.

OFFICIAL REVIEW OF VERSION 2

3.25 The importance given to *Version 2* has been described in the earlier parts of this Chapter. Given the uses to which *Version 2* was put, it is reasonable to expect that it would have been subjected to a careful review before it was accepted. The Audit has attempted to determine whether such a review occurred. The Audit has found no indication that it did.

AUDIT REVIEW OF VERSION 2

3.26 As a careful review of *Version 2* was not conducted, the Audit carried out its own review. The purpose of this review was to identify whether *Version 2* could be relied upon as a basis for decision making without further investigation and validation.

3.27 As part of its review the Audit compared *Version 2* of the model with actual results for Bruce Stadium in 1995-96. This was the last full financial year prior to the preparation of *Version 2*. The Audit also reviewed total net cash inflow and net present value figures for the life of the project.

Comparison of Actual and Projected Net Revenue

3.28 *Table 3.1* compares the actual cash flows from operations for the Bruce Stadium Trust[17] in 1995-96 with the projected cash flows from operations for 1998-99 in *Version 2*.

[17] The Bruce Stadium Trust was formerly responsible for managing the operations of Bruce Stadium. The Trust was part of the Bureau of Sport, Recreation and Racing within the Department of BASAT.

Table 3.1 – Comparing Version 2 of the Financial Model with Actual Results

	Bruce Stadium Trust 1995-96 (actual) $000	The Model (v. 2) 1998-99 (projected) $000
Receipts	1,251	9,229
Payments	1,300	2,472
Net cash result	–49 (deficit)	6,757 (surplus)

Note: To make the figures comparable, receipts in 1995-96 exclude an $111,000 appropriation. Version 2's receipts are made up of $8,457,851 in 'operational revenue' and $770,759 in 'capital revenue'. The larger part of capital revenue (over $8m) was to be received in 1997-98.

3.29 *Table 3.1* shows that *Version 2* projected an $8m (638%) increase in receipts between 1995-96 and 1998-99. Payments, on the other hand, are projected to increase by only $1.2m. As a result, the small actual net cash deficit of $49,000 in 1995-96 is converted into a projected $6.8m surplus by 1998-99.

Audit Comment

3.30 The projected large increase in the net cash surplus in 1998-99 clearly required further investigation and validation.

Long Term Net Cash Surpluses

3.31 *Version 2* projects that the redevelopment will generate nearly $360m of cash surpluses over thirty three years or an average of $11m each year. That is, on average, the Stadium was projected as generating every year cash surpluses nearly equal to the Government's once only capital contribution of $12m envisaged under the funding structure.

3.32 *Version 2* estimated that the undiscounted cash surplus over the life of the project ($360m) had a net present value (NPV) of $105m. This, however, is a mistake. *Version 2* presents a monthly cash flow summary in which almost all of the construction payments are incorrectly treated as receipts rather than as payments. As a result the projected NPV for the whole project is overstated by $47m. Removing this error reduces the NPV projected by *Version 2* from $105m to $58m.

Audit Comment

3.33 The high total cash surpluses projected to be generated by the redevelopment clearly required further investigation and validation before acceptance. The mistake in the NPV identified by the Audit would also generate doubt about the reliability of the model.

Capital Revenue

3.34 *Version 2* projected upfront capital revenue in the 20 month period from May 1997 to December 1998 to be $9.6m. This comprised revenue from naming rights ($2.4m); corporate suites ($1.5m); video board rights ($0.8m); passholders ($3.7m) and other sources such as food and beverage concessions ($1.3m). Of this revenue, $8.7m would be received in 12 months (1997-98). The figures were therefore sufficient to meet the $8m required from upfront revenue under the funding structure.

3.35 Periodic renewals of capital revenue items were shown as an additional $61m over the life of the project.

Audit Comment

3.36 The amount of upfront capital revenue projected in the model was large. The actual receipt of this revenue, in the period projected, was essential for the proposed funding structure to work. A large part of these receipts were to be used towards meeting the redevelopment's construction costs. If these receipts were not received, when and as projected, the construction could not be completed to full specifications without larger borrowing or a larger appropriation by the Government. Considering the size of the projected upfront capital revenue and the importance to the project of the receipt of this revenue, investigation and validation were essential.

Attendance

3.37 Attendance figures in *Version 2* have a significant effect on projected revenue from tickets, merchandise, and food and beverages (worth $6.5m to the venue in 1998-99). *Table 3.2* compares projected attendance figures for 1998-99 with actual attendance in 1995-96.

Table 3.2 – Comparing Attendance Figures in Version 2 of the Financial Model with Actual Results

	1995-96 Actual		1998-99 Projected	
Major League	104,247	(10)	295,012	(14)
Minor League	0	(0)	43,750	(7)
Rugby Union	56,544	(6)	235,724	(11)
Soccer	36,540	(18)	114,550	(11)
Entertainment	0	(0)	17,752	(1)
Other Events	0	(0)	127,300	(11)
Total	**197,331**	**(34)**	**834,088**	**(55)**

Note: Number of games or events is shown in parentheses.

3.38 As *Table 3.2* shows, *Version 2* projects that attendance at major rugby league games will nearly triple in three years from 104,247 to 295,012. Rugby union attendance more than quadruples from 56,544 to 235,724 and soccer attendance more than triples from 36,540 to 114,550.

3.39 The other three attendance categories are local ACT rugby league games; entertainments such as outdoor concerts; and other events comprising four school events, three community events and four exhibition sports events. None of these events was held at the Stadium in 1995-96. Concerts had not been held at Bruce Stadium since 1994. The only major 'exhibition sport' played at the Stadium had been Australian football. In 1995, two AFL games attracted crowds of more than 11,000 each. The reconfiguration of the redeveloped playing arena, however, made it impossible to play Australian football at the Stadium. A game of American football at Bruce Stadium on 28 June 1995 attracted 222 patrons.

3.40 The projected increase in total attendance at the Stadium from 1995-96 to 1998-99 is 636,757 (or 323%) in *Version 2*.

3.41 The projected increase in total *paying* attendance was greater still. The actual attendance figure for 1995-96 includes a significant number of people who received complimentary passes and so did not pay to attend. *Version 2*, however, assumes that all of those attending pay. The Audit estimates that the paying attendance in 1995-96 was 142,766. The model's projected increase in total paying attendance from 1995-96 to 1998-99 was therefore 691,322 (or 484%).

3.42 Further, the projected increase in paying attendance to nearly six times the 1995-96 level occurs at the same time as average ticket prices are projected to more than triple.

Audit Comment

3.43 The enormous increases in attendance and average ticket prices projected by *Version 2* undoubtedly should have been investigated and validated before they were accepted.

Concluding Comment on the Audit Review of Version 2

3.44 The Audit's review of *Version 2* shows that the data it contained were sufficiently doubtful to require a thorough review of the model before it was accepted and used as a source of information for making important decisions about the redevelopment.

INTENDED PURPOSE OF THE FINANCIAL MODEL

Advice Received from Graf Consulting

3.45 Graf Consulting advised during the conduct of the Audit[18] that *Version 2* of the model was not presented as suitable for use by executives and should not have been used as a basis for any key decision making undertaken in late 1996 and early 1997.

3.46 Graf Consulting advised:

> 'Graf Consulting did not represent that *Version 2* was a reliable basis for Government officials to use in making major decisions about the redevelopment and the Olympic bid. In fact Graf Consulting specifically advised otherwise'.

3.47 Graf Consulting further advised that *Version 2*:

> 'was a demonstration tool to indicate the commercial approach to running a stadium. [The figures in *Version 2*] were never presented as reliable, researched forecasts and it is unreasonable to conclude that they were. It was made expressly clear to

[18] Graf Consulting, 25 May 2000.

Government officials that these figures were demonstrative and not predictive of any actual financial outcome'.

3.48 Graf Consulting also advised:

'The material in the demonstration model was not intended to be accurate or relied upon, but was being used to demonstrate conceptual mechanics and hence was not intended to be numerically reliable.'

'The officials advising the Chief Minister were fully aware of the nature and purpose of *Version 2*.'

'Graf Consulting was never made aware that *Version 2* would ever be used or relied upon by the Government as the basis of any financial submission.'

'The figures contained in *Version 2* were not used as the basis of the funding structure [of $12m plus $8m plus $7]. The Funding Structure was the result of Graf Consulting's experience and was not dependent upon the figures set out in *Version 2*.'

Audit Comment

3.49 As previously explained it is clear that *Version 2* was used to support important decisions and actions in late 1996 and early 1997. Official documents at the time indicate that executives accepted that *Version 2* could be relied on for these purposes. Graf Consulting, however, has strongly denied that Graf Consulting represented *Version 2* as providing a reasonable basis for decision making. Little documentation on this matter was prepared at the time which could assist the Audit to clarify this situation.

3.50 The Audit cannot resolve whether the consultant represented the model as a reasonable basis for decision making. The focus of the Audit however is on whether it was reasonable for executives and the Cabinet to use and rely upon *Version 2* of the model in decision making regardless of whether the preparer of *Version 2* considered it could be used for these purposes.

3.51 In regard to the specific matter of the relationship between *Version 2* of the model and the funding structure, the Audit notes that a

facsimile letter from CRI to the General Manager of BSRR,[19] on 18 September 1996, shows how the funding structure was derived from, or supported by *Version 2*. Pages from *Version 2* of the model were attached to the letter.

3.52 Graf Consulting has advised the Audit that the 'facsimile was generated by CRI, not Graf Consulting' and 'was not a Graf Consulting document'. CRI has advised the Audit, that the letter to the General Manager of BSRR presented a 'conceptual breakdown of how the $27 million could be financed'.

3.53 Whatever the intended purpose of the letter according to CRI, the letter does show the funding structure being derived from or supported by *Version 2*. Whether it was reasonable for executives and the Cabinet to use and rely upon this letter is discussed in *Report 4 – Decision to Redevelop the Stadium*. The relationship between the funding structure and the model is also discussed in *Chapter 4* of this Report.

CONCLUSION

3.54 In *Version 2*, the Stadium is projected as being transformed from having a small cash deficit in 1995-96 to having a $6.8m cash surplus in 1998-99. This transformation is based on an $8m increase in operating revenue. The increase in operating revenue is based on seemingly unrealistic changes such as an increase in attendance to nearly six times the 1995-96 level at the same time as ticket prices are more than tripled. A further $9.6m is projected to be received in upfront capital payments in the 20 month period up to December 1998, most of which is received within a 12 month period.

3.55 The increases in revenue, attendance and ticket prices were so large and so quick in *Version 2* that even a cursory review could not have failed to notice them. It is reasonable to expect therefore that the projections would have been questioned and their achievability validated before *Version 2*'s results were referred to in important documents and relied on for important decisions.

3.56 The evidence available to the Audit suggests that little serious

[19] Mark Owens.

questioning and no detailed analysis of *Version 2* occurred. The entire critical assessment of the model's projections appears to be contained in a single page file note prepared in the Office of Financial Management. This note, which rightly questioned the very high attendance projections, seems to have been the background material for a paragraph in the Under Treasurer's letter of 20 September 1996 to the then Chief Executive of the Chief Minister's Department[20]. This letter advised that the Cabinet submission of 20 September 1996 *Canberra — an Olympic City* should contain a comparison of actual and projected attendance and an explanation for the projected increases.

3.57 No considered reason was put forward for why attendance, ticket prices and revenues would increase so dramatically. In the Cabinet submission *Canberra — An Olympic City* and in the subsequent Capital Works proposal the huge increases in revenue are justified solely by the reference to 'the increased earning power of a modern stadium compared to an outdated 1970's vintage Stadium'.

3.58 As reported, Graf Consulting, who prepared *Version 2*, advised the Audit that the model's projections should not have been used as they were not intended to be fully researched projections capable of being relied upon for investment decision making. The Audit's review of *Version 2* indicates that the projections were clearly very questionable and clearly should not have been relied on.

[20] John Walker.

4 VERSIONS 6 AND 7 OF THE MODEL

INTRODUCTION

4.1 On 19 December 1996, SOCOG announced that Canberra had been selected to host part of the Olympic soccer tournament in 2000.

4.2 On 23 December 1996, expressions of interest were called for a project manager for the redevelopment of the Stadium. CRI lodged a first stage proposal in January 1997 and a second stage proposal on 27 February 1997 (see *Report 5 – Selection of the Project Manager*). Both CRI proposals incorporated new versions of the Stadium financial model. The first stage proposal included *Version 6* (dated 2 December 1996) and the second stage proposal included *Version 7* (dated 26 February 1997). *Versions 6* and *7* were prepared by Graf Consulting, which had also prepared *Version 2* in September 1996.

4.3 *Versions 6* and *7* were key documents in CRI's successful proposal. In particular, *Version 7* was regarded by the assessment committee as a major factor in favour of CRI over the other shortlisted proponent: Lend Lease.

4.4 In order to assess whether it was reasonable for executives to accept and use *Version 7* as a reliable forecast which was superior to the Lend Lease model the Audit reviewed the changes made between *Versions 2* and *7*, and compared *Version 7* with the Lend Lease model.

4.5 As with *Version 2* Graf Consulting has advised the Audit that *Versions 6* and *7* were not meant to contain reliable forecasts. The actual and intended uses of *Versions 6* and *7* are therefore also addressed in this Chapter.

SIGNIFICANT FINDINGS

- ***Versions 6 and 7 projected lower attendance and revenue figures than Version 2, but still showed figures which were much higher than actual results for 1995-96.***
- ***Version 7 of the financial model projected significantly higher attendance and revenue figures than the financial projections produced by Lend Lease.***

- ***Attendance and revenue figures in Version 7 were so much higher than recent results or the Lend Lease projections that it was reasonable to expect that the assessment committee should have conducted a detailed analysis of the competing models.***
- ***No detailed analysis of Version 7 or the Lend Lease model was undertaken by the assessment committee.***
- ***Graf Consulting has advised the Audit that Versions 6 and 7 were not meant to be reliable forecasts.***

USES OF VERSIONS 6 AND 7

4.6 *Versions 6* and *7* were key documents in CRI's successful proposals to be selected to be the redevelopment project manager. These versions underpinned CRI's proposals and were regarded by the assessment committee as a major factor in favour of CRI over other applicants and in particular over Lend Lease during the second stage of the assessment of proposals (see *Report 5 – Selection of the Project Manager)*.

4.7 The Cabinet submission of 6 March 1997 (*Bruce Stadium Redevelopment – Recommended Tenderer*) presented eight reasons why CRI was selected to undertake the redevelopment. The first reason was that CRI:

> 'provided a sound business plan which examined all possible sources of private sector revenue and at the same time enhanced the viability of the three major hirers, the Raiders, Brumbies and Cosmos'.

4.8 *Versions 6* and *7* were also accepted and used without reservation in the Office of Financial Management's Cost Benefit Study of the Stadium prepared in May 1997. The results of this Study were widely and publicly used by the Government.

4.9 The selection of CRI as the project manager (and therefore the acceptance of *Version 7*) set the future directions and parameters for the design, size and scope of the redevelopment, financing of the redevelopment, the marketing of the redeveloped Stadium's products and the hiring agreement negotiations with the major hirers.

4.10 In particular, CRI's second stage submission supported the

funding structure of $12m in government appropriation, $7m in borrowing and $8m in upfront revenue, by drawing directly upon capital revenue figures presented in *Version 7* of the model.

Audit Comment

4.11 Clearly *Version 7* was a very important document. It is therefore reasonable to expect that it would have been subjected to comprehensive review before it was accepted and relied upon.

OFFICIAL REVIEW OF VERSIONS 6 AND 7

4.12 The Audit attempted to ascertain whether *Versions 6* and *7* had been reviewed before they were accepted and relied upon. The Audit has not identified that any comprehensive review occurred.

AUDIT REVIEW OF VERSION 7

4.13 The Audit reviewed *Version 6* and *Version 7* as a comprehensive review does not appear to have been performed by executives. The purpose of the review was to identify whether *Version 6* and *Version 7* could be relied upon as a basis for decision making without further investigation and validation. The results of the review follow. Except where noted, the comments on *Version 7* apply also to *Version 6*.

Comparison of Version 7 with Version 2 and Actual Results in 1995-96

4.14 In the previous Chapter a comparison of *Version 2*'s projections with actual results in 1995-96 was described. The Audit concluded that *Version 2*'s projections should have been investigated and validated before they were relied upon.

4.15 The Audit has similarly compared *Version 7* with *Version 2* and with actual 1995-96 results to assist in forming an opinion as to whether *Version 7* could be reasonably relied upon for decision making.

Total Net Revenue

4.16 *Table 4.1* provides a comparison of total receipts, payments and

actual net results for 1995-96 and the projected results in *Version 2* and *Version 7*.

Table 4.1 – Comparison of Versions 2 and 7 of the Financial Model with Actual Results in 1995-96

	Bruce Stadium Trust 1995-96 (actual) $000		The Model (v. 2) 1998-99 (projected) $000		The Model (v. 7) 1998-99 (projected) $000	
Receipts	1,251		9,229		6,905	
Payments	1,300		2,472		2,586	
Net cash result	–49	(deficit)	6,757	(surplus)	4,319	(surplus)

Note: To make the figures comparable, receipts in 1995-96 exclude an $111,000 appropriation. Version 2's receipts are made up of $8,457,851 in 'operational revenue' and $770,759 in 'capital revenue'. The larger part of capital revenue (over $8m) was to be received in 1997-98. Similarly, in Version 7, 'operational revenue' is $6,176,375 and 'capital revenue' is $729,095.

4.17 As shown in *Table 4.1* total projected revenue to the Stadium in 1998-99 falls from $9.2m in *Version 2* to $6.9m in *Version 7*. Although this was a significant fall, projected revenue in *Version 7* was still $5.7m more than the actual result in 1995-96. Expenses in *Version 7* are $0.1m more than in *Version 2*. The net projected cash surplus falls from $6.8m in *Version 2* to $4.3m in *Version 7*. This was still $4.4m more than the actual result in 1995-96.

4.18 As commented in the previous Chapter, *Version 2* treats almost all of the construction costs as cash receipts. As a result the projected net present value (NPV) is overstated by $47m. This mistake continued in *Version 6* but was corrected in *Version 7*. As a result, the estimated NPV for the project over thirty years fell from $75m in *Version 6* to $28m in *Version 7*.

Audit Comment

4.19 Although *Version 7*'s projections were closer to recent actual results, the increases were still so large that doubts ought to have existed about their achievability. These doubts required that investigation and validation occurred prior to *Version 7* being accepted as a reasonable basis for decision making.

Capital Revenue

4.20 Projected upfront capital revenue for the twenty months from May 1997 to December 1998 was $9.6m in *Version 2*. This fell to $8.9m in *Version 7*.

4.21 The figures show that the upfront capital revenue projected in *Version 7* was still sufficient to meet the level of upfront funding of $8m required under the financial structure presented by CRI.

Audit Comment

4.22 Upfront capital revenue projections remained high in *Version 7*. Receipt of the upfront capital revenue was very important as the $8m was intended to cover a major part of the construction cost of the redevelopment. If this amount was not received, when and as projected, the construction could not be completed to full specifications without larger borrowing or a larger appropriation by the Government. The upfront capital revenue projection obviously needed investigation and validation.

Attendance

4.23 *Table 4.2* compares the projected number of events and total attendance for 1998-99 in *Versions 2* and *7* with actual figures for 1995-96.

Table 4.2 – Comparison of Actual (1995-96) and Projected (1998-99) Attendance Figures

	Actual (1995-96)	Version 2	Version 7
Number of Events	34	55	55
Attendance	197,331	834,088	697,088

4.24 The number of events (55) stayed the same in *Version 7* as in *Version 2*, and therefore continued to be significantly higher than the actual number of events held in 1995-96.

4.25 The total attendance projection fell from 834,088 to 697,088 between *Version 2* and *Version 7*. The entire fall was due to a reduction in anticipated public seating sales. Sales of premium seats to passholders

and for suites and boxes remained the same. The breakdown of attendance by revenue category shows the following changes in attendance projections:

- major rugby league (Raiders and finals matches) attendance fell from 295,012 to 253,012;
- rugby union (Brumbies and international matches) attendance fell from 235,724 to 181,724; and
- other events (school and community events and exhibition sports) attendance fell from 127,300 to 86,300.

4.26 Projected attendances in the other three event categories of soccer (114,550), minor rugby league (43,750) and entertainment (17,752) remained the same.

4.27 *Version 7* projected an increase in total attendance at the Stadium from 1995-96 to 1998-99 of 499,757 (or 253%). Like *Version 2*, *Version 7* assumed that all patrons were paying customers. Paying attendance in 1995-96 was 142,766. *Version 7*'s projected increase in paying customers was therefore 554,322 (or 387%).

4.28 Some of the ticket prices assumed in *Version 7* are lower than those in *Version 2*; some are higher; and some stay the same. The overall effect was that average ticket prices fell slightly.

4.29 The increase in paying attendance in *Version 7* to nearly four times the 1995-96 level was projected to occur at the same time as average ticket prices more than tripled.

Audit Comment

4.30 The projected increase in the number of events and the high projected attendances and ticket prices compared with past attendances should have been sufficient to raise doubts about the projections, leading to investigation and validation.

Conclusion on the Audit Review of Version 7

4.31 In the previous Chapter, the Audit concluded that *Version 2* contained such large increases in attendance and revenue that it was reasonable to expect that executives would have subjected the model to

close and sustained scrutiny before accepting the model's results in support of decision making.

4.32 The Audit has concluded that the differences between past actual figures and those contained in *Version 7* were also so great that it was reasonable to expect that executives should have subjected *Version 7* to close scrutiny before accepting it as a reasonable financial forecast. There is no evidence that this type of scrutiny occurred. The *Version 7* projections were accepted without any proper attempt at investigation or validation.

4.33 While *Version 7* of the model projected lower attendance and revenue figures than *Version 2*, the figures in the model were still far above past actual figures for the Stadium.

4.34 The Audit's review of *Version 7* revealed that, as with *Version 2*, it contained many questionable projections. The Audit's view is that it should not have been relied upon for decision making.

COMPARISON OF VERSION 7 WITH THE LEND LEASE MODEL

4.35 Lend Lease and CRI were the shortlisted candidates in the second round of the selection process for a project manager. As mentioned previously, *Version 7* was finalised on 26 February 1997 and was submitted with CRI's second stage proposal on 27 February 1997. The Lend Lease model was finalised and submitted on the same days. Price Waterhouse prepared the model for Lend Lease. The Lend Lease proposal contained spreadsheets of its model as attachments and had a 28 page chapter on the financing plan in which the assumptions in its model were summarised and explained.

Lend Lease Model Financing Options

4.36 Lend Lease provided a range of 8 funding options for the redevelopment of the Stadium. All of the Lend Lease options provided that funds would largely have to come from the Government's capital contribution and borrowing. That is, Lend Lease's model projected little upfront capital revenue (CRI predicted $8.9m of upfront capital revenue). Lend Lease's first option involved a total project cost of $26.7m to be funded by:

- an ACT Government contribution of $17m;
- borrowing of $7.4m;
- ordinary equity of $0.8m; and
- rights equity of $1.5m.

4.37 Ordinary equity would be contributed by private investors seeking a conventional return on their equity. In this regard, Lend Lease provided a letter of commitment to take up some part of the ordinary equity of $0.8m.

4.38 Rights equity would be 'upfront payments in return for certain key rights or concessions associated with Bruce Stadium. These rights include the right to operate Stadium business, catering rights and possibly naming rights'. Letters were included in the Lend Lease submission from two companies indicating their preparedness to make up-front payments to secure stadium operating rights and catering rights.

4.39 Lend Lease's estimate of revenue from rights equity of $1.5m was a far lower estimate of upfront revenue than *Version 7*'s estimate of $8.9m in capital revenue

4.40 Borrowing of $7.4m in Lend Lease's first option was similar to CRI's funding proposal which had borrowing of $7m. The operating surpluses which were to service and repay this borrowing were, however, far lower in the Lend Lease model than in the CRI model.

Comparison of Version 7 Projections with the Lend Lease Model Projections and Actual Results

4.41 The Audit compared *Version 7* with the Lend Lease financial model in order to identify whether it is reasonable to expect that further investigation of the models should have been conducted by the assessment committee.

4.42 *Table 4.3* summarises the results of the comparison for the 1998-99 net cash surplus projections excluding capital revenue.

Table 4.3 – Comparison of Projections in the Graf and Lend Lease Models

	Version 7	Lend Lease

	1998-99 $000	1998-99 $000
Operating Receipts	6,176	2,446
Payments	2,586	1,607
Cash Surplus	3,590	839

4.43 *Table 4.3* shows *Version 7*'s projected operating revenue of $6.2m and expenses (excluding interest) of $2.6m in 1998-99. The projected operating surplus was therefore $3.6m.

4.44 *Table 4.3* shows the Lend Lease model projected annual operating revenue of $2.4m and expenses (excluding interest) of $1.6m. The projected operating surplus was $0.8m.

Audit Comment

4.45 As can be seen from the table, the Lend Lease projections are far lower than the projections in *Version 7*. They were also much closer to actual 1995-96 results. The differences between *Version 7* and Lend Lease are so large that it is reasonable to expect that the assessment committee would have identified the reasons for the differences and closely reviewed whether the higher *Version 7* projections could be achieved. The assessment committee did not do this.

Capital Revenue

4.46 As pointed out previously, Lend Lease's estimate of revenue from rights equity of $1.5m was a far lower estimate of up-front revenue than *Version 7*'s estimate of $8.9m in capital revenue.

4.47 The different projections for capital revenue were the key difference between the funding structures presented in the CRI and Lend Lease submissions. Given Lend Lease's lower projection of upfront revenue and a similar level of borrowing, the Lend Lease proposal necessarily involved a higher government capital contribution ($17m) than the CRI figure of $12m.

Audit Comment

4.48 Given the importance of capital revenue to the CRI proposal and the far higher level of capital revenue in *Version 7* than in the Lend Lease

model, it is reasonable to expect that this particular part of the model's projections would have been subject to close scrutiny by the assessment committee. It was not.

Return on Investment

4.49 The Lend Lease model projects that the Government would not receive any return on its $17m investment, whereas *Version 7* projects a large return to the Government on its $12m investment.

4.50 The Lend Lease model projects operating surpluses just sufficient to meet debt servicing and repayment of borrowings. *Version 7* projects an operating surplus in 1998-99 which is $2.8m higher than the Lend Lease projection. *Version 7* projections for operating surpluses thereafter grow by about $0.25m annually. *Version 7* also included $57.4m in periodic capital revenue renewals which would be received over the life of the project. These renewals were in addition to the $8.9m in upfront capital revenue received early in the project. The operating surpluses projected by *Version 7* were much greater than Lend Lease's operating surplus projections.

Audit Comment

4.51 As with other components of the models the large difference in return on investment should have alerted the assessment committee that investigation and validation of *Version 7* was essential.

Attendance Projections

4.52 A sense of the more modest assumptions which underpin the Lend Lease model can be gained from a comparison of event and attendance projections in *Version 7* with projections in the Lend Lease proposal. *Table 4.4* shows that the Lend Lease model projected figures that were far lower than the figures projected in *Version 7*. The Lend Lease figures were also much closer to the actual results for the Stadium presented in *Table 4.2*.

Table 4.4 – Comparison of Event and Attendance Projections for 1998-99 and Actual Figures for 1995-96

	Version 7 1998-99	Lend Lease 1998-99

Number of Events	55	34
Attendance	697,088	326,250

4.53 The Lend Lease proposal provides a clear discussion of the basis for all of the attendance projections in its model.

4.54 In regard to rugby league, the Lend Lease submission notes that the Raiders already have high attendance per head of local population compared with other rugby league teams. As a result, it suggests that the redevelopment of the Stadium may not result in increases in total attendance, but rather in 'the conversion of complementary to paid attendance, and an increase in seated, premium seating and packaging options'. The Lend Lease submission also commented that the Brumbies face a similar challenge: to consolidate attendance and increase average ticket prices.

4.55 The Lend Lease model assumes attendance at rugby union and major rugby league to be 270,000. Actual attendance in 1995-96 was 161,791. *Version 7* assumes a much larger attendance of 434,736.

4.56 In regard to soccer, the Lend Lease submission notes that the Cosmos' 'attendances have been relatively low, reflecting the on field performance of the team'. The Lend Lease model assumes soccer attendance for the Cosmos and one international match to be 56,250. Soccer attendance in 1995-96 was 36,540. *Version 7* assumes soccer attendance of 114,550.

4.57 The Lend Lease model did not have an 'Other Events' attendance category or a local rugby league category. In regard to entertainment, the Lend Lease submission states that 'concert events are potentially lucrative additional events for the Bruce Stadium market, but the market is limited'. The submission contains a description of the market for large outdoor concerts and concludes that 'it is anticipated that the Stadium will host a concert once every three to five years'. As a result, no projections were included in Lend Lease's model for this occasional revenue source.

Audit Comment

4.58 The large differences between projected attendances in the two models should also have led the assessment committee to investigate and validate *Version 7*'s projections before *Version 7* was accepted.

Conclusion on Audit Comparison of Version 7 and the Lend Lease Model

4.59 The Lend Lease and *Version 7* models produced very different projections for the redeveloped Stadium. The Lend Lease model showed far lower upfront revenue and operating surpluses than *Version 7*. As a result, the Lend Lease model, under its first option, shows that the Government would have to contribute $17m during the redevelopment and could not expect a return on this investment for 15 years. *Version 7* was much more optimistic projecting that the Government's contribution could be limited to $12m and that the Government could expect a significant stream of surpluses from operations.

4.60 *Version 7* was a significant part of CRI's successful proposal for selection as project manager for the redevelopment. Major reasons for the assessment committee's selection of CRI were that CRI provided 'a sound business plan' and 'a financial offer which maintained the government's maximum commitment of $12.3m towards the redevelopment'.

4.61 In a response received during the Audit, an executive[21] who was also a member of the assessment committee, advised that Lend Lease's financial offer was less attractive than CRI's because 'Lend Lease could not meet the $12m Government contribution upper limit'. The advice also stated that 'Lend Lease's financial offer did not guarantee the Government contribution of $12m'. The implication is that CRI's offer did.

4.62 The importance of the financial model in the assessment committee's decision making is clear from the above comments. Lend Lease's modelling showed that a maximum government contribution of $12m was not possible for the redevelopment. The CRI model showed that it was possible. The assessment committee apparently accepted that the model *(Version 7)* presented in CRI's proposal was realistic and reliable enough to provide a high level of assurance that the CRI funding structure, with a maximum government contribution of $12m, could be achieved.

4.63 Given the significance attached by the committee to the

[21] Mick Lilley, 15 September 1999.

projections in the two financial models and the wide differences in projected results between the models, it is reasonable to expect that a careful comparison of the two models would have been conducted and that the results of this comparison would have received close attention from the committee.

4.64 The process by which CRI was chosen as project manager is discussed in *Report 5 – Selection of the Project Manager*. That Report concludes that there is no evidence that the committee systematically analysed the business plans/financial models submitted by CRI and Lend Lease. The Audit's review of *Version 7* as described in this Chapter supports the view that no systematic analysis of *Version 7*'s projections occurred.

4.65 The Audit has not identified anything in the CRI proposal which would explain the large difference in projected revenue between *Version 7* and the Lend Lease model. Both CRI and Lend Lease were required to provide the same scale of redevelopment. Both envisaged that the main users would be rugby union, rugby league and soccer. Both proposed revenue sharing arrangements with the major hirers.

4.66 The Audit also notes that the Lend Lease model's projections were closer than *Version 7*'s projections to actual results prior to and since the redevelopment.

SUITABILITY OF VERSIONS 6 AND 7 FOR USE ACCORDING TO GRAF CONSULTING

4.67 Graf Consulting has advised the Audit[22] that it is incorrect 'to allege that *Versions 6* and *7* of the Financial Model were used by the Government officials to select Graf Consulting above Lend Lease' or that *Versions 6* and *7* were relied upon by executives in selecting the project manager. Graf Consulting's basis for this view is as follows.

> 'The same officials who had been involved in the pre-Bid stage, and who understood that *Version 2* was not a forecasting tool, dealt with the Expressions of Interest. They understood that *Versions 6* and *7* were still in the developmental stage and that the figures in them were not intended to be viewed as reliable

[22] Graf Consulting, 25 May 2000.

forecasting material. All of the figures in *Versions 6* and *7* had the same status as the figures in *Version 2*.'

4.68 On the basis of these arguments, Graf Consulting advised the Audit that:

> 'It is not useful or reasonable to closely compare *Versions 6* and *7* with *Version 2* in order to appraise the reliability of *Versions 6* and *7*… [as] *Versions 6* and *7* also constituted work in progress at the earliest stages… [and] were not represented as reliable forecasting tools'.
>
> It is 'invalid and valueless' 'to compare actual attendance and revenue with the figures in *Versions 2* and *7*' because neither '*Version 2* nor *Version 7* contain finalised forecasts of attendance or revenue'.
>
> It is 'unreasonable and misleading' to compare *Version 7* with the Lend Lease model because whereas 'The Lend Lease model contained forecasts and financial projections', '*Version 7* did not contain, and was not required or intended to contain, forecasts and was not a Fully Developed Financial Model'.

4.69 Graf Consulting's advice to the Audit is inconsistent with the description of the financial model contained in CRI's first and second stage proposal documents. The proposals clearly indicate that the models were intended to be serious, realistic and based on research. For example, the CRI proposals contain the following comments:

> 'Following our demographic research and market assessment, we have prepared detailed revenue models which illustrate the potential level of capital and operating revenues and costs.'
>
> 'Our financial model… is based on a realistic assessment of the anticipated revenues over the financing period.'
>
> 'The Business Plan projections are best estimates based on a sound understanding of the business circumstances of the primary users of Bruce Stadium. We also recognise that the business of sport is in a state of flux and therefore we have taken a conservative approach to some revenue items.'

Audit Comment

4.70 In view of the comments contained in the CRI proposals, the

Audit has concluded that *Versions 6* and *7* of the financial model were presented as being considered and realistic financial analyses.

4.71 It was therefore reasonable for the assessment committee to take *Versions 6* and *7* into account for the purposes of selecting a project manager. Given the importance placed on the financial model by the assessment committee, however, in the Audit's view it was essential for the committee to examine the models submitted to the committee closely and critically before accepting a particular model as reliable and superior to models submitted by competing organisations.

4.72 The advice of Graf Consulting[23] included that, unlike the Lend Lease model, the Graf model 'did not contain, and was not required or intended to contain, forecasts'. Detailed analysis by the assessment committee of the two models would have focussed attention on the large revenue and attendance projections in the Graf model. This in turn should have led the assessment committee to question the proponents further. Such questioning may have identified that Graf Consulting did not consider that its model contained, or was required or intended to contain, financial forecasts for the redeveloped Stadium.

CONCLUSION

4.73 *Versions 6* and *7* of the CRI financial model were key documents in CRI's successful proposals to be selected as the redevelopment project manager. The model was given a significant weighting by the assessment committee in choosing CRI over the other short-listed applicant: Lend Lease.

4.74 *Version 7* of the model projected lower attendance and revenue figures than *Version 2*. Nevertheless, the figures projected in *Version 7* were still far above previous actual figures. The Audit has concluded that the differences between actual figures and those contained in *Version 7* were so great that it is reasonable to expect that executives would have subjected *Version 7* of the model to close scrutiny before accepting it as a reasonable financial forecast which was sufficiently reliable to be used in making important decisions about the redevelopment. The Audit is of the view that if *Version 7* had been

[23] Graf Consulting, 25 May 2000.

closely scrutinised, its projections must have been recognised as questionable. This recognition may have led to a review of the proposed financing, design, size and scope of the redevelopment.

4.75 The Lend Lease and CRI models produced very different projections for the redeveloped stadium. The Lend Lease model showed far lower upfront revenues and operating surpluses than *Version 7*. As a result, the Lend Lease model showed that the Government would have been required to contribute $17m during the redevelopment and could not expect a return on this investment for 15 years. The CRI model shows that the Government's contribution could be limited to $12m and that the Government could expect a significant stream of surpluses from operations.

4.76 Given the significance attached by the committee to the projections in the two financial models and the wide differences in projected results between the models, it is reasonable to expect that a careful comparison of the two models would have been conducted and that the results of this comparison would have received close attention from the committee.

4.77 The process by which CRI was chosen as project manager is discussed in *Report 5 – Selection of the Project Manager*. That Report concludes that there is no evidence that the committee systematically analysed the business plans/financial models submitted by CRI and Lend Lease. The Audit's review of *Version 7* as described in this Chapter supports the view that no systematic analysis of *Version 7*'s projections occurred. The Audit also notes that Graf Consulting has represented to the Audit that Graf Consulting did not consider that *Versions 6* and *7* contained, or were required or intended to contain, financial forecasts for the redeveloped Stadium.

4.78 *Version 7* was a very important document. Once CRI was selected as the project manager for the redevelopment, *Version 7* and its underlying concepts became the basis for the amount and source of financing for the redevelopment, the Stadium products to be developed, the marketing of the products, and the negotiation of hiring agreements with the major hirers of the Stadium.

5 VERSIONS 11 AND 11A OF THE MODEL

INTRODUCTION

5.1 Graf Consulting has advised[24] the Audit that *Versions 10* (19 August 1997) to *12a* (25 March 1998) of the model were properly developed versions of the financial model and that *Versions 11* (14 October 1997) and *11a* (20 October 1997) in particular were the most fully developed versions of the model.

5.2 *Version 11* was referred to extensively in the Cabinet submission of 18 December 1997 titled *Bruce Stadium Redevelopment — Hiring Arrangements*. As previously mentioned, on the basis of this submission the Cabinet agreed that hirers' agreements with the Raiders and Brumbies could contain revenue assurance guarantees.

5.3 In *Chapter 4* of this Report, the Audit concluded that the projections in *Versions 6* and *7* were so much higher than recent actual results that it was reasonable to expect that executives would have subjected *Versions 6* and *7* to close scrutiny before accepting them as reasonable financial forecasts on which decisions could be based. As no such review had been conducted by executives, the Audit reviewed *Version 7*'s projections. The Audit concluded that the projections raised extensive doubts and therefore that *Version 7*'s results should not have been accepted as a basis for decision making without further investigation and validation.

5.4 This Chapter compares projections in *Version 11a* (20 October 1997) with projections in *Version 6* (issued on 2 December 1996) and with actual results in 1995-96 in order to see whether the Audit's conclusion in regard to *Versions 6* and *7* also applies to *Version 11a*. The projections in *Version 6* discussed below were unchanged in *Version 7*. The figures contained in *Version 11a* are similar to those contained in *Versions 10*, *11*, *12* and *12a*.

[24] Graf Consulting, 25 May 2000.

SIGNIFICANT FINDINGS

- ***Version 11a is acknowledged by its preparer as capable of being relied upon as a reasonable basis for investment decision making purposes.***
- ***Version 11a has revenue projections which are lower than those contained in Version 6, but which are significantly higher than past actual results.***
- ***It is reasonable to expect that executives would have subjected Version 11a of the model to close review before accepting it as a reasonable financial forecast.***
- ***The Audit has not located or been provided with documentary evidence that executives undertook a close review of Versions 11 or 11a.***

THE IMPORTANCE OF VERSIONS 11 AND 11A

Fully Developed Financial Models

5.5 *Version 10* of the financial model was presented to executives on 19 August 1997, eleven months after the first version of the model (*Version 2*) was presented.

5.6 According to Graf Consulting[25], *Version 10* is the first version of the model which could be regarded as 'properly developed'. *Version 11* (14 October 1997) and *Version 11a* (20 October 1997) are regarded by Graf Consulting as 'fully developed'.

5.7 Graf Consulting defines a 'fully developed financial model' as:

> 'A fully developed, finely-tuned and functioning financial model able to be used as an interactive business-planning tool, containing fully researched and validated projections, the conclusions of which are capable of being relied upon as a reasonable basis for investment decision-making purposes'.

5.8 The Audit has been advised by Graf Consulting that *Versions 12* and *12a* were also fully developed financial models, although *Version*

[25] Graf Consulting, 25 May 2000.

12a 'contained numerous adjustments made at the direction of Government officials'. *Version 12a* was issued on 25 March 1998. Graf Consulting advised:

> 'Thereafter Graf Consulting modified the Financial Model only in accordance with directions from the Chief Minister's department. This was done by inserting new variables at the direction of the Government.'

5.9 *Versions 11* and *11a* have been identified by Graf Consulting as the most fully developed versions of the model produced. According to Graf Consulting these versions contain projections which are capable of being relied upon as a reasonable basis for investment decision making purposes. Versions produced prior to *Version 10* should not have been relied upon for decision making according to Graf Consulting.

Cabinet Submission of 18 December 1997

5.10 Revenue projections from *Version 11* were referred to extensively in the Cabinet submission of 18 December 1997 titled *Bruce Stadium Redevelopment — Hiring Arrangements*.

5.11 As discussed in the previous Chapter, this submission sought the agreement of the executive to negotiate legally binding contracts with the major hirers of Bruce Stadium. The submission recommended that the contracts with the Raiders and the Brumbies should contain revenue assurance guarantees under which the Stadium would guarantee to 'top-up' any shortfall between revenues to the hirers from important Stadium products projected in the financial model and actual revenues received. Similar assurances could also be extended to the Cosmos if requested.

5.12 In regard to negotiations, the submission commented:

> 'Ultimately it came down to the argument that if the Business Plan [the financial model] was valid and achievable, the share of the revenue generated by the Stadium and available to the hirers should be identified and assured in the hiring agreement. Graf's advice, as the author of the Plan, was that such an arrangement would not compromise the integrity of the Plan, given the conservative nature of the revenue assumptions contained within it and the fact that these assumptions had been independently tested.'

5.13 Graf Consulting has advised[26] the Audit that:

> 'At no stage did Graf or CRI advise any government official that providing revenue assurances or guarantees would not compromise the Business Plan'.

5.14 In particular, the Graf advice stated that:

> 'The business planning structure recommended by Graf depended on a joint marketing arrangement whereby all stakeholders were committed to the success of the program.
>
> To countenance the notion of revenue assurances to the codes would remove any incentive or motivation on behalf of the hirers to support the joint marketing program, because they would get the money anyway.'

5.15 CRI has provided a written statement[27] in support of Graf Consulting which includes:

> 'Government were made aware by Graf Consulting that underwriting revenues would negate the value of the Business Plan'.

Audit Comment

5.16 It is clear that executives placed reliance on the financial model in advising that revenue assurance guarantees could be given with considerable confidence that they would not be required. The Under Treasurer,[28] advised the Chief Minister in the Cabinet brief on the Cabinet submission of 18 December 1997 that 'The risk involved with assuring these amounts is minimal'.

COMPARISON OF VERSION 11A WITH VERSION 6

5.17 *Version 11a* was issued by Graf Consulting on 20 October 1997 and has been identified by Graf Consulting as being a fully developed version of the financial model reasonably capable of being relied upon for investment decision-making purposes. The Audit has compared

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[26] Graf Consulting, 25 May 2000.

[27] CRI, 10 May 2000, supplied to the Audit by Graf Consulting, 25 May 2000.

[28] Mick Lilley.

projections in *Version 6* (issued on 2 December 1996) and *Version 11a* with actual results in 1995-96.

5.18 The purpose of this comparison was to identify whether the Audit's conclusion in regard to *Versions 6* and *7* – that they contained doubtful projections, which needed to be investigated and validated before reliance could be placed on them – also applied to *Version 11a*.

5.19 *Table 5.1* compares operating receipts and payments in *Versions 6* and *11a* with actual results for 1995-96. The years chosen for comparison from *Versions 6* and *11a* are 1998-99 and 1999-2000 respectively. These are the second operational years in each of the models and are therefore comparable.

Table 5.1 – Comparison of Projections in Versions 6 and 11a of the Graf Financial Model with Actual Figures for 1995-96

	Actual 1995-96 $000		Version 6 1998-99 $000		Version 11a 1999-2000 $000	
Operating Receipts	1,251		6,176		5,150	
Payments	1,300		2,586		3,232	
Net Cash Result	–49	(deficit)	3,590	(surplus)	1,918	(surplus)

5.20 *Table 5.1* shows that projected operating receipts in the second operational year are $1m lower in *Version 11a* than in *Version 6*. The cash surplus falls by $1.7m.

5.21 In addition, a comparison of first term capital revenue shows that the projected cashflow from this source falls by $1.2m, from $8.9m in *Version 6* to $7.7m in *Version 11a*. The Audit notes that these amounts are projected to be received over a twenty month period in *Version 6* and over a twelve month period in *Version 11a*. No capital revenue was received in 1995-96.

5.22 The Audit notes that the figures for *Version 6* are the same as those contained in *Version 7* issued on 26 February 1997. The figures in *Version 11a* are similar to those contained in *Versions 10, 11, 12* and *12a*.

Audit Comment

5.23 While *Version 11a* projects smaller capital and operating revenue than *Version 6*, the projections in *Version 11a* are still significantly higher than past actual results. The cash surplus in 1999-2000 was projected in *Version 11a* to be $1.9m higher than the actual result in 1995-96. In addition, upfront capital revenue of $7.7m was projected. This would increase the surplus to $9.6m.

5.24 The Audit has concluded that while *Version 11a* contained lower revenue projections than *Version 6*, the projections were still open to significant doubt. As with earlier versions of the model, it was reasonable to expect that executives should have subjected *Version 11a* of the model to close scrutiny before accepting it as a reasonable financial forecast on which to base decisions.

5.25 Other than the independent reviews mentioned later, the Audit has not located any documentary evidence that executives undertook a close scrutiny of *Version 11a* or of any of the other models identified by Graf Consulting as properly or fully developed versions of the model (i.e. *Versions 10* to *12a*). No such analysis has been provided to the Audit.

Independent Review

5.26 Independent reviews of *Version 10* were conducted by Arthur Andersen and IMG. These reviews are discussed by the Audit in, respectively, *Chapter 7* and *Report 9 – Market Research and Marketing*. The Audit has concluded that neither review provided a high level of assurance in regard to the model's projections. Documentation has not been sighted to support the view that a close analysis of either Review Report was undertaken by executives.

CONCLUSION

5.27 According to Graf Consulting *Version 11* is a 'fully developed financial model'. This version was referred to extensively in the Cabinet submission of 18 December 1997 titled *Bruce Stadium Redevelopment — Hiring Arrangements*.

5.28 While *Version 11a* projects smaller capital and operating revenue than *Version 6*, the projections in *Version 11a* are still much higher than

previous actual results.

5.29 Other than the independent reviews mentioned in the next paragraph, the Audit has not located any evidence that officials or executives undertook a close review of *Version 11a* or of any of the other models identified by Graf Consulting as properly or full developed versions of the model (i.e. *Versions 10* to *12a*).

5.30 Independent reviews of *Version 10* were conducted by Arthur Andersen and IMG. These reviews are discussed by the Audit in, respectively, *Chapter 7* and *Report 9 – Market Research and Marketing*. The Audit has concluded that neither review provided a high level of assurance in regard to the model's projections.

5.31 In the light of the above comments, the Audit has concluded that *Version 11a*, and the other versions of the model identified by Graf Consulting as properly or fully developed, required comprehensive analysis and validation before they could be used in official documents or relied upon for decision making. No such analysis or review was undertaken by executives.

6 THE LAST VERSIONS OF THE MODEL

INTRODUCTION

6.1 The last version of the model for which Graf Consulting has some responsibility was *Version 12a*, dated 25 March 1998. Graf Consulting has advised[29] that:

> 'Thereafter Graf Consulting modified the Financial Model only in accordance with directions from the Chief Minister's department. This was done by inserting new variables at the direction of the Government'.

6.2 The arrangement for Graf Consulting to physically make changes to the model, based on government officials' instructions, appears to have continued until 12 November 1998 with the completion of *Version 12d*. Subsequent versions of the model were prepared by Office of Financial Management executives.[30] Two of these versions have been available to the Audit. The first, dated 26 November 1998 and designated *BRUC1*, was prepared to assist with arranging finance for the redevelopment (see *Report 6 – Financing Arrangements*). *BRUC1* results were apparently referred to in major Cabinet submissions in December 1998 and March 1999. The second version from this period sighted by the Audit was dated 21 June 1999 and designated *AA*. It was the last version of the model to be prepared.

6.3 This Chapter compares *Version 11a* dated 20 October 1997, discussed in the previous Chapter, and *Version 12d* to see if significant changes occurred during the period Graf Consulting was working under the direction of executives. This Chapter also compares *Versions 12d*, *BRUC1* and *AA* to identify the projections in the model which changed significantly when executives were directly responsible for the model.

6.4 When *Version AA* was produced, the construction of the Stadium was complete and the 1998-99 financial year had only 9 days to go. This Chapter therefore compares *Version AA* with actual outcomes for 1998-99 in order to test the short term reliability of the final version of the

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[29] Graf Consulting, 25 May 2000.

[30] Andrew Clark and Mick Lilley.

model.

SIGNIFICANT FINDINGS

- ***Version 12d (12 November 1998) produced slightly less optimistic results than Version 11a but nevertheless projected that the government contribution would be $12.3m and that the project would produce a small, positive Net Present Value.***
- ***Versions BRUC1 and AA produced more optimistic results than Version 12d.***
- ***The last version of the model produced by government executives — Version AA dated 21 June 1999 — was so unreliable it did not project a reasonably accurate result for the 1998-99 financial year.***

THE IMPORTANCE OF THE LAST VERSIONS OF THE MODEL

6.5 When *Version 12d* was produced on 12 November 1998, the redevelopment was in its final phase and the redeveloped Stadium was already operational to a considerable extent. *Version 12d* was the last version produced by Graf Consulting under the direction of government executives.

6.6 In November 1998, the Under Treasurer was engaged in arranging finance for the redevelopment. As part of this process, *Version 12d* was revised. The new version produced by executives was *BRUC1* dated 26 November 1998.

6.7 *Version BRUC1* was also a key document referred to in important Cabinet submissions in December 1998 and March 1999. On 16 December 1998 the Chief Minister signed a Cabinet submission (*Bruce Stadium – Financing*) noting the increase in the construction cost of the Stadium from $27.3m to $33.5m. The submission recommended that the Government proceed with the full redevelopment and advised that this was possible without increasing the Government's financial contribution above $12.3m. This advice was based on *Version BRUC1*, which projected that the operating cash surpluses from the operation of the Stadium would be high enough to support the increased cost and still produce a net present value (NPV) for the project of $10.705m. On the basis of this submission, the Cabinet agreed to proceed with the full redevelopment.

6.8 A later Cabinet submission signed by the Chief Minister, dated 18 March 1999, referred to the NPV figure of $10.705m in recommending a 'revenue shortfall guarantee' be provided as part of new financing arrangements with the Commonwealth Bank. The Chief Minister advised that 'Based on the current Business Plan, the likelihood of calling on this guarantee is low'. The current Business Plan was *BRUC1*.

6.9 The Audit has been advised[31] that *Version AA*, dated 21 June 1999, was the last version of the model to be produced. On 8 December 1999 the Audit asked the Under Treasurer to provide copies of any version of the model produced since 21 June 1999 or to confirm that this version was the last produced. The Under Treasurer's reply[32] suggests that no later versions of the model were produced. None has been provided to the Audit.

COMPARISON OF VERSION 12D WITH VERSION 11A

6.10 This section compares *Versions 11a* and *12d* in regard to attendance projections and cash flow projections.

Attendance

6.11 *Table 6.1* compares attendance projections in *Versions 11a* and *12d*.

[31] Andrew Clark, 24 June 1999.

[32] Mick Lilley, 13 January 2000.

Table 6.1 – Attendance Projections in Versions 11a and 12d

	Version 11a	Version 12d
Major Rugby League	209,256	146,828
Minor Rugby League	43,750	6,250
Rugby Union	107,712	107,712
Soccer	84,548	126,796
Entertainment	17,668	88,340
Other	86,300	28,200
Total	**549,234**	**504,126**

6.12 *Table 6.1* shows that projected total attendance falls from 549,234 in *Version 11a* to 504,126 in *Version 12d*. Attendance falls for three of the six attendance categories. It rises in two categories, soccer and entertainment, and remains unchanged for rugby union.

Audit Comment

6.13 While the total projected attendance falls from *Version 11a* to *Version 12d*, questions remain about some of the projections. In particular, the increases in projected attendance for soccer and entertainment are very questionable. The increase in entertainment from one event every year to five events a year is particularly questionable and is also very important in the cash flow projections in *Version 12d*.

Cash flow

6.14 In *Table 6.2* the Audit has arranged the projections from the model into the form of a conventional cash flow statement. The figures given are for the thirty three year life of the project and have not been discounted.

6.15 The following comments are made on each line item in *Table 6.2*.

6.16 ***Operating Receipts*** — Operating receipts fall from $319.4m in *Version 11a* to $311.8m in *Version 12d*. Comments are provided in the following paragraphs on the major components of operating receipts (i.e. ‘capital revenue’ and ‘operating revenue’).

Table 6.2 – Comparison of Projected Cash Flows over Thirty Three Years for Versions 11a and 12d

	11a $m	12d $m
Operating Receipts	319.4	311.9
Operating Payments	(218.8)	(206.8)
Net cash inflow (outflow) from operating activities	*100.6*	*105.1*
Purchase of property, plant and equipment	(27.6)	(41.2)
Net cash inflow (outflow) from investing activities	*(27.6)*	*(41.2)*
Proceeds of borrowings	7.2	27.4
Capital injection from government	12.3	12.3
Repayment of borrowings	(7.2)	(27.4)
Net cash inflow (outflow) from financing activities	*12.3*	*12.3*
Cash surplus generated	**85.3**	**76.1**
Net Present Value	**12.5**	**5.2**

6.17 Capital revenue falls from $37.8m in *Version 11a* to $25.7m in *Version 12d*, suggesting executives reassessed earlier projections of capital revenue from naming rights, corporate suite upfront payments and passholder joining fees. For example, upfront payments for corporate suites are abandoned in *Version 12d*. Some of the decrease in capital revenue is offset by increases in operating revenue from some of the same sources. Capital revenue from naming rights and passholders falls but operating revenue from these sources rise.

6.18 Operating revenue rises slightly, from $281.6m to $286.2m. This is despite a large fall in corporate suite and open box rental projections of $11.7m. Offsetting this fall are increases in passholder subscriptions ($7.3m) and ticket revenue ($5.6m).

6.19 The rise in ticket revenue occurs despite a fall in projected attendance. Public seating ticket prices are the same in *Versions 11a* and *12d*. Average premium ticket prices, however, are higher in *Version 12d*.

6.20 Most importantly, while total attendance falls, the attendance at entertainment events is projected to increase fivefold. *Version 12d* assumes five entertainment events a year compared with one event per year assumed in *Version 11a* (and all earlier versions).

6.21 As ticket prices for entertainment are much higher than for any other category of event, the effect on the model's results of assuming five entertainment events is very large. In *Version 11a*, entertainment contributes $0.9m (12%) to gross annual ticket revenue of $7.4m. In *Version 12d*, entertainment contributes $4.6m (46%) to gross ticket revenue of $9.9m. A relatively minor source of ticket revenue projected in all earlier models becomes by far the biggest source of ticket revenue in *Version 12d*.

6.22 *Version 12d* relies heavily on entertainment events. If revenue from entertainment events (including revenue from ticket, food and beverage, and merchandise sales) had remained the same in *Version 12d* as it was in *Version 11a*, projected gross operating revenue would have been reduced by 22% ($4.6m) annually.

6.23 ***Operating Payments*** — Operating payments fall from $218.8m in *Version 11a* to $206.8m in *Version 12d*.

6.24 Within operating payments the main reduction is in projected marketing payments. These had already been reduced significantly in *Version 12* (12 February 1998). Interest payments on borrowing, however, increased from $3.5m to $19.4m. This is due to the increase in projected borrowings in *Version 12d*.

6.25 ***Purchase of Property, Plant and Equipment*** — The purchase of property, plant and equipment rises from $27.6 to $41.2m reflecting the known increased cost of the redevelopment construction (see *Report 8 – Actual Costs and Cost Estimates*). This is a reasonable reflection of the actual increase in construction costs.

6.26 ***Proceeds of Borrowing, Capital Injection and Repayment of Borrowings*** — As the $12.3m capital injection from government remains constant, the borrowing projection had to be increased from $7.2m to $27.4m to meet the increased cost of construction. Consequently projected repayments of the borrowings had to be increased from $7.2m to $27.4m.

6.27 ***Cash Surplus*** — After the passage of a year between preparation of the two versions of the model, and making significant changes, the projected cash surplus to be generated by the redevelopment over thirty three years only falls by $9.2m, from $85.3m to $76.1m.

6.28 ***Net Present Value*** — *Table 6.2* also shows the net present value for the redevelopment. This falls from $12.5m in *Version 11a* to $5.2m in *Version 12d*. It is noted that the first version of the model (*Version 2*) projected a net present value of $105m.

Audit Comment

6.29 The changes made between *Versions 11a* and *12d* appear to be a balancing act between the pressures of emerging reality and the desire for the model to project results consistent with the Government's objectives of appropriating no more than $12.3m and of the Stadium being commercially viable.

6.30 *Version 12d* continues to project a government contribution of $12.3m and a small positive NPV. These results are achieved in *Version 12d* despite the significant rise in projected construction costs and reductions in important revenue projections. To achieve these results other revenue projections are raised and expense projections reduced.

6.31 Of particular note is the increase in projected revenue from entertainment. These events had not been held at the Stadium for several years and the increase in projected revenue from entertainment is not supported by any systematic research or reasoning. No evidence has been found by the Audit or provided to it which explains why the projected number of entertainment events was increased by executives from one to five per year in *Version 12d*.

COMPARISON OF VERSIONS 12D, BRUC1 AND AA

6.32 *Table 6.3* compares the projected undiscounted cash flows for the project presented in *Versions 12d*, *BRUC1* and *AA*. The purpose of this review was to see if the projections in the model changed significantly when executives were directly responsible for the model.

Table 6.3 – Comparison of Projected Cash Flows over Thirty Three Years for Versions 12d, BRUC1 and AA

	12d $m	BRUC1	AA
Operating Receipts	311.9	270.3	269.7
Operating Payments	(206.8)	(143.9)	(118.2)
Net cash inflow (outflow) from operating activities	*105.1*	*126.4*	*151.5*
Purchase of property, plant and equipment	(41.2)	(41.2)	(34.7)
Net cash inflow (outflow) from investing activities	*(41.2)*	*(41.2)*	*(34.7)*
Proceeds of borrowings	27.4	28.4	19.3
Capital injection from government	12.3	12.3	12.3
Repayment of borrowings	(27.4)	(28.4)	(19.3)
Net cash inflow (outflow) from financing activities	*12.3*	*12.3*	*12.3*
Cash surplus	**76.1**	**97.5**	**129.1**
Net Present Value	**5.2**	**10.8**	**22.5**

6.33 While projected operating receipts fall by $42m from *Version 12d* to *Version AA*, projected payments are reduced by even more ($89m). As a result even though projected receipts fall, the cash surplus from operating activities increases by $46m between the two versions. No documentation has been found by the Audit, or provided to it, which explains why payment projections were reduced to such an extent.

6.34 The projected net cash outflow from investing activities has been reduced by $6m in *Version AA* by removing furniture, fittings and equipment (FF&E) from the cost of construction. As explained in *Report 3 – Costs and Benefits*, FF&E is a necessary part of the redevelopment cost. It is interesting that FF&E was included in *Versions 12d* and *BRUC1*, but excluded from the final version of the model.

6.35 The result of these adjustments is that the projected cash surplus from the redevelopment increases from $76.1m to $129.1m. The capital injection from government is maintained at $12.3m and the NPV increases from $5.2m to $22.5m.

Audit Comment

6.36 The Audit's review disclosed that the final version of the model, which was prepared by executives, projected the redevelopment as generating much better financial results than did the version prepared prior to the executives taking over preparation. In the Audit view the financial model became less realistic and useful for decision making during the seven months it was directly prepared by executives.

COMPARISON OF VERSION AA WITH ACTUAL RESULTS

6.37 *Version AA* was prepared only nine days before the end of the 1998-99 financial year. It is reasonable therefore to expect that the projected results in the model for 1998-99 would be reasonably close to actual results.

6.38 *Table 6.4* compares *Version AA*'s cash flow projections for 1998-99 with actual results for 1998-99.

Table 6.4 – Projected and Actual Cash Flow from Operating Activities, 1998-99

	AA	Actual
Receipts	4.7	1.7
Payments	0.7	2.7
Cash Surplus (Deficit)	**4.0**	**(1.0)**

6.39 *Table 6.4* shows that projections for both receipts and payments were inaccurate. Receipts were overstated by $3m and payments were understated by $2m. The model projected a cash surplus of $4m. The actual outcome was a cash deficit of $1m.

Audit Comment

6.40 The Audit comparison shows that *Version AA* was so unreliable it did not produce even a broadly accurate projection for a financial year which had only nine days to go.

6.41 By 21 June 1999 the redevelopment had been completed and the financial model had been in existence for nearly three years. The lack of accuracy is therefore remarkable. On the other hand, it is unclear what useful purpose the model was now serving.

CONCLUSION

6.42 The changes made between *Versions 11a* and *12d* appear to be a balancing act between the pressures of emerging reality and the desire for the model to project results that were consistent with the Government's objectives of appropriating no more than $12.3m and of the Stadium being commercially viable.

6.43 *Version 12d* projects that the government contribution will be $12.3m and that the project will produce a small positive NPV. These results are projected to be achieved although significant known rises in projected construction costs and reductions in some important revenue projections had been included in the model. It seems that to offset these adjustments (which made the projected end result worse) other revenue projections were increased and expense projections reduced.

6.44 Of particular note is the increase in projected revenue from entertainment. These events had not been held at the Stadium for several years and the increase in projected revenue from entertainment does not appear to be supported by any systematic research or reasoning. No evidence has been found by the Audit or provided to it which explains why the projected number of entertainment events was increased from one event per year in all earlier versions to five per year in *Version 12d*.

6.45 The projected cash surplus to be generated from the redevelopment increased from $76.1m in *Version 12d* to $129.1m in *Version AA*. The capital injection from government was maintained at $12.3m and the NPV increased from $5.2m to $22.5m. These results were achieved by reducing projected payments by a larger amount than the reduction in projected receipts, and removing the cost of FF&E from the cost of construction. The Audit has not been able to identify any reason to justify these changes.

6.46 The Audit can only conclude that the financial model became less realistic during the seven months it was directly prepared by executives. It therefore became less useful for any sensible decision making in this time.

7 THE REVIEW OF MAJOR ASSUMPTIONS BY ARTHUR ANDERSEN

INTRODUCTION

7.1 Graf Consulting prepared a version of the Stadium financial model in April 1997 which was considerably longer and more detailed than the previous versions. This version was used in negotiations during April and May 1997 with the Raiders, Brumbies and Cosmos on hirers' agreements for the use of the Stadium.

7.2 Official documentation from July 1997 onwards states that during negotiations both the Brumbies and Raiders raised concerns about the revenue projections in the financial model (see *Report 9 — Market Research and Marketing*). In response to these concerns, a consulting firm, Arthur Andersen, was engaged to perform a review of the model. A report was presented by Andersen on 19 August 1997.

7.3 The Andersen Review Report was provided to the Brumbies and Raiders, and referred to in two major Cabinet submissions. The submissions indicated that the report contributed to a high level of assurance about the revenue projections presented in the financial model.

7.4 This Chapter assesses whether it was reasonable to present the Andersen Review Report as providing a high level of assurance about the financial model. The Report was the major review of the model and is therefore dealt with in this Report. A report by IMG, also referred to in this Chapter, is dealt with in *Report 9 — Market Research and Marketing*.

SIGNIFICANT FINDINGS FROM THIS CHAPTER

- ***The Andersen Review Report should not have been represented as providing a high level of assurance about the reliability of the projections in the financial model.***

THE IMPORTANCE OF THE ANDERSEN REVIEW

Purpose of the Review

7.5 Several official documents from July and August 1997 state that the Andersen review was commissioned in order to address the concerns of the major hirers about the revenue projections contained in the financial model. For example, the General Manager of Strategic Business Projects[33], advised the Chief Minister on 8 August 1997 that:

> 'The codes [major hirers] have expressed concerns over some of the assumptions in [the] plan, and to alleviate these we have engaged Arthur Andersen to audit the business plan and validate the assumptions contained in it.'

7.6 The two major hirers have advised the Audit that 'alarm bells were ringing' for them during negotiations in April to June 1997 and that the financial model was a matter of great concern. They state that these concerns were being expressed to officials and Graf Consulting. It is known that there were concerns about the model before then. One representative of a major hirer wrote a three page note on *Version 5* or *6* in late 1996 or early 1997 that concluded that the plan was 'extremely risky'.

7.7 It is clear that concerns about the project and the financial model were being expressed in June and July 1997. The notes of one major hirer's meeting with executives and Graf Consulting in July 1997 refers to the hirer's 'major concerns' about the financial arrangements. One projection is described as 'unrealistic' and there are 'doubts that attendance can be doubled along with ticket prices doubling over the next five years, as estimated in the plan'.

Audit Comment

7.8 The initial intended use of the Review Report is clear. This was to convince the hirers that the model's projections could be achieved. As it turned out, the Review Report did not convince the hirers. The Report was, however, referred to in significant Cabinet submissions in 1997 and 1998. It appears that the Andersen Review was accepted by executives

[33] Moiya Ford.

as providing a high degree of assurance about the achievability of the financial model.

Presentation of the Reviewer's Results to the Major Hirers

7.9 It is understood that the Review Report was provided to the hirers and that a personal presentation of the Report's finding to the Raiders also occurred.

Audit Comment

7.10 As previously stated the presentation of the Report to the hirers did not eliminate the hirers' doubts about the financial model.

Reference to the Andersen Report in Cabinet Submissions

7.11 In the Cabinet submission dated 18 December 1997 (*Bruce Stadium Redevelopment — Hiring Arrangements*) agreement was sought to negotiate legally binding contracts with the major hirers of Bruce Stadium. The submission recommended that the contracts with the Raiders and the Brumbies should contain revenue assurance guarantees under which the Stadium would 'top-up' any shortfall between revenue shares of the hirers projected in the Stadium financial model (or 'Business Plan') and the actual revenue shares generated through actual sales (see *Report 10 — Stadium Hiring Agreements*). It was also recommended that similar assurances could be extended to the Cosmos if requested during negotiations. All of these recommendations were agreed to by the Cabinet on 22 December 1997.

7.12 The submission makes clear the reliance placed on the financial model and on the 'rigorous testing' of the model by Arthur Andersen and a marketing consultant called International Management Group (IMG). For example:

> 'The assumptions behind the Plan have been tested and supported by both Arthur Andersen Pty Ltd and the International Marketing *[sic]* Group of America (IMG).'

7.13 In regard to the financial model's revenue assumptions, the submission concludes:

> 'We can… have a significant degree of confidence in the commercial viability of the new Stadium, given the rigorous testing of the Business Plan'.

7.14 In regard to the recommendation that revenue assurances be given to the hirers, the submission states that:

> 'The degree of independent testing to which the Plan has been subjected provides a significant degree of confidence that any top-up, if indeed necessary, will be minimal'.

7.15 The Under Treasurer's[34] brief to the Chief Minister in regard to the submission stated that:

> 'The risk involved with assuring these amounts is minimal given that the Business Plan has been rigorously tested by Arthur Andersen and IMG'.

7.16 A Cabinet submission dated 16 December 1998 (*Bruce Stadium — Financing*), advising that the cost of the redevelopment of the Stadium had increased from $27.3m to $33.5m, states:

> 'A business plan prepared by Graf, demonstrated how the new Bruce Stadium could generate ongoing returns sufficient to support the redevelopment in this manner. The assumptions behind the plan were tested and supported by Arthur Andersen Pty Ltd and International Management Group of America Pty Ltd (IMG).'

7.17 The Cabinet noted the increased cost of $33.5m and agreed to proceed with the full redevelopment.

Audit Comment

7.18 The above references to the independent testing of the Stadium financial model by Andersen and IMG in the Cabinet submissions indicate the importance given to these reviews.

[34] Mick Lilley.

Other Uses

7.19 The Andersen Review was also referred to by executives and the Chief Minister as testing and supporting the financial model.

7.20 For example, on 27 August 1997, the Chief Minister informed the Legislative Assembly that:

> 'The preferred financial business plan has been independently audited by Arthur Andersen and they support the assumptions that are contained in it'.

Audit Comment

7.21 These other uses also indicate the importance given to the Andersen review.

CONDUCT OF THE REVIEW

7.22 Arthur Andersen was approached by the General Manager of Strategic Business Projects[35], to perform a review of the financial projections in the model. Andersen sent a proposal for the review to the General Manager on 25 June 1997. A 'draft copy of the job proposal letter' was also sent by Andersen to Graf Consulting on 26 June 1997.

7.23 The General Manager agreed to Andersen's proposal in a letter to Andersen dated 15 July 1997. A contract was attached to the letter which stated hourly rates for the consultant but did not specify a total amount for the contract. The consultant's letter of 25 June 1997 appears to have served as the statement of tasks to be performed. This stated the task as follows: 'to review the projected cashflows of the Stadium… for the purpose of issuing a report commenting upon the compilation of the model and its assumptions'. The contract was signed by the Chief Executive of the Department of Business, the Arts, Sport and Tourism[36] on 17 July 1997.

7.24 It appears that Andersen was already engaged on the Review when the contract was sent to Andersen on 15 July 1997. The agenda

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[35] Moiya Ford.

[36] Annabelle Pegrum.

papers for the Project Control Group[37] meeting of 2 July 1997 state that:

> 'Arthur Andersen have been provided with electronic and hard copies of the financial model and have commenced their audit of the mechanics of the model and their review of the underlying assumptions. They expect to complete their work in approximately two weeks'.

7.25 The minutes for this meeting record that 'Government agree to commission Arthur Andersen to complete an Audit of the Business Plan and to present the Report to the Codes' (i.e. hirers). A letter from Graf Consulting to the three hirers, dated 2 July 1997, advised that 'Arthur Andersen have recently been appointed' to conduct a review of the financial model.

7.26 On 17 July 1997, representatives of Graf Consulting and Arthur Andersen met to discuss the Review. Information supplied at that meeting included the latest available version of the model (*BRUV06*) and a first draft copy of a document called *Business Plan Assumptions*.

7.27 In the letter from an executive[38] of 15 July 1997, a draft report was requested by 25 July 1997. A draft of the Andersen Review Report was supplied by 29 July 1997. It dealt with *BRUV06* and *BRUV07*. These were not the same documents as *BRUCER6* and *BRUCER 7* (called *Versions 6* and *7* in previous Chapters). Contact between Graf Consulting and Andersen continued after the submission of the draft report, with Graf Consulting providing extracts from *BRUV8a* on 31 July 1997 and various historical attendance data for the Stadium on 5 August 1997.

7.28 The agenda papers for the Project Control Group meeting of 14 August 1997 state that:

> 'Although the Arthur Andersen draft report has not been finalised, we understand that the report concludes:
>
> - The audit of the mechanics and structure of the financial model confirms that the model is satisfactory, and

[37] For information on the Project Control Group, see *Report 12 – Governance and Management*.

[38] Moiya Ford.

- The assumptions used in *Version 9* of the model are reasonable'.

7.29 A final report was provided on 19 August 1997. The final report says it is a review of *Version 10* of the model, but the text occasionally deals with earlier versions.

7.30 The agenda papers for the Project Control Group meeting of 11 September 1997 note that:

> 'The Arthur Andersen Report has been finalised and the Report concludes:
>
> - The audit of the mechanics and structure of the financial model confirms that the model is satisfactory, and
> - The assumptions used in *Version 10* of the model are reasonable'.

THE NATURE OF A REVIEW

7.31 Andersen undertook to conduct its review 'in accordance with Statement of Auditing Practice/Related Services AUP/RS1 Review Engagements'[39]. This is a pronouncement issued by the Institute of Chartered Accountants in Australia and the Australian Society of Certified Practising Accountants.

7.32 AUP/RS1 was superseded by AUS 902 on 1 July 1996, a year before Andersen was contracted to do its review. The two pronouncements mentioned contain the same basic requirements and are very similar in their wording. It is noted that AUP/RS1 is a Statement of Auditing Practice; AUS 902 is an Auditing Standard.

7.33 In summary, the relevant Standards explain that a review is one of three types of 'Audit and audit related services'. Such engagements 'involve a systematic examination for which audit-based skills… are required'; and 'result in an independent, written report that provides assurance or information from which the user can derive assurance'.

7.34 The Standards also explain that a review is a less extensive audit

[39] Arthur Andersen, 25 June 1997 and 19 August 1997.

procedure than an audit.

> 'An audit engagement is designed to provide a high but not absolute level of assurance on an accountability matter'.

7.35 By contrast,

> 'A review engagement provides a moderate level of assurance that the information subject to review is free of material misstatement. The Report provides this assurance in the form of negative assurance'.

7.36 A statement of negative assurance arising from a review engagement for a financial report is expected to be given in the following form:

> 'that nothing has come to the auditor's attention based on the review that causes the auditor to believe that the financial report is not presented fairly in accordance with the identified financial reporting framework'.

7.37 Auditing Standards also include that:

> 'for the purpose of expressing negative assurance in the review report, the auditor should obtain sufficient appropriate evidence primarily through inquiry and analytical procedures to be able to draw conclusions'.

7.38 The Audit also notes that the Standards require a reviewer to 'plan and perform the review with an attitude of professional scepticism'.

Audit Comment

7.39 In saying that it would perform a review of the model and its assumptions in conformity with AUP/RS1 (AUS 902), Andersen undertook to draw conclusions based on evidence and to provide a moderate level of assurance to the client on the model and its assumptions.

7.40 It is clear that Andersen did not undertake to conduct work and prepare a report which would provide any more than a moderate level of assurance. The work was a review and not an audit.

GENERAL COMMENT ON THE ANDERSEN REVIEW

7.41 The Audit examined the Andersen Report for the purpose of determining whether it was reasonable to accept the Report as providing a high or moderate level of assurance about the financial model.

7.42 From its examination the Audit noted the following matters.

Use of Material Prepared by Graf Consulting

7.43 The Review Report is in the form of a five page letter with thirty nine pages of supporting material. These thirty nine pages comprise a title page, two pages listing the contents, thirty pages of *Appendix 1 – Review of Major Assumptions* and six pages of *Appendix 2 – Background Information*. *Appendix 1* has a running heading stating 'Prepared by Arthur Andersen'. *Appendix 2* has a running heading stating 'Prepared by Graf Consulting'.

7.44 Most of the Review Report consists of material written by Graf Consulting and supplied to Arthur Andersen during the course of the Review. The larger part of this material was presented as the work of Arthur Andersen.

7.45 Most of *Appendix 1* was written by Graf Consulting and supplied to Arthur Andersen in a document called *Business Plan Assumptions*. About three fifths of *Appendix 1* is taken from *Business Plan Assumptions*, with little or no change to the text. Of the remaining material, some parts are identified in *Appendix 1* as based on material supplied by Graf. Other parts reproduce figures contained in *Version 10* of the model. Some other parts appear to have been supplied by Graf Consulting subsequent to the provision of *Business Plan Assumptions*.

7.46 Whereas *Appendix 2* is identified as prepared by Graf Consulting, no indication is given to the reader of the extent to which the structure and most of the content of *Appendix 1* are the work of Graf Consulting.

7.47 Parts of the material written by Graf Consulting are presented by Andersen as evidence or findings. For example, in regard to the passholder program, Andersen concludes:

> 'We believe [our] projected sales of 1,700 new members are reasonable in the light of the 19,000 members and 20,000 strong

> waiting list for membership of the Sydney Cricket Ground and the Sydney football Stadium. The recent Olympic Stadium Gold Pass sales also achieved over 12,000 new members in the same Sydney Market.'

7.48 This passage is taken word for word from *Business Plan Assumptions*, with the exception of the word 'our', which is not in the Andersen Report.

Audit Comment

7.49 The Audit identified the preceding points by comparing material supplied by Graf Consulting with the content of the Andersen Report. It is uncertain whether this material was available to executives who received the Andersen Report. If the material was available, a review of the Andersen Report should have revealed the same points which the Audit has noted above. It is reasonable to expect that this would have led to questioning of the Andersen Report.

Unclear Conclusions

7.50 Andersen did not provide a clear statement of its conclusion.

7.51 Under the Auditing Standards which Andersen had stated it was following, a Review Report should contain 'a clear written expression of negative assurance'. The Standards make clear the obligation of the auditor to provide a written statement of negative assurance or, if matters have come to the auditor's attention which prevent such a conclusion, the auditor should provide separate sections headed 'Qualification' and 'Qualified Review Statement'. This was not done in the Report.

7.52 In addition to the lack of a general conclusion, as required under Auditing Standards, conclusions on specific matters were often not presented or were presented unclearly.

7.53 The Report includes a sensitivity analysis which is presented in such a way as to not make clear the significant conclusion that small changes in a few variables take the redevelopment's financial results from positive to negative. The Report has a table which contains the information for this conclusion, but the table does not add the figures in the table to show the result and there is no discussion of the result in the

accompanying text.

Audit Comment

7.54 The lack of clear general and specific conclusions would have been readily apparent from a reasonably careful reading of the Report. Andersen should have been asked to clarify these matters before the Report was accepted and relied upon.

Errors and Omissions

7.55 There are numerous basic errors and omissions in the text and tables. The following examples are illustrative.

- The Review Report states that 'For each year from 1990 to 1995 (inclusive) there have been 11 "regular season" Rugby Union games held at Bruce Stadium'. This is wrong. The actual number was nil in each year. This mistake is reproduced from Business Plan Assumptions.
- The number of seats in a suite at the Sydney Football Stadium is reported as 12 in one table of the Review Report and 20 in another table.
- The Review Report says it presents details of the average spending by spectators at various stadiums in a table. No table with this information is presented.

Audit Comment

7.56 These errors and omissions could have been identified by a careful reading of the Report. It is reasonable to expect that if these mistakes had been identified, Andersen would have been requested to correct them before the Report was accepted and relied upon.

COMMENTS ON THE REVIEW REPORT'S COVERING LETTER

7.57 As previously stated one component of the Andersen Report was a five page letter containing general comments. The following comments deal with some of the matters noted from a review of the general comments contained in the letter.

Critical Assumptions and Risk Factors

7.58 The covering letter includes a number of critical assumptions and risk factors 'which the report states might have a material impact on the future financial performance of the Stadium'.

7.59 An undifferentiated and general list of possible influences are presented such as:

- 'the state of the sport and leisure industry in Australia in general and Canberra in particular';
- 'the demand for sporting and entertainment activities, both in Australia in general and Canberra in particular'; and
- 'general risks associated with commencement of a new business'.

7.60 The risk factors identified are not assessed or ranked as to their specific potential effects on the Stadium's financial performance.

Audit Comment

7.61 This section of the Review Report contains little useful content. This can be readily identified by a reader.

Sensitivity Analysis

7.62 As previously stated a sensitivity analysis is included in the covering letter. The analysis takes the form of a table showing decreases in net cash flow in 2001-02 which would arise from a change in five of the model's assumptions. Five figures are presented showing the results of these changes and a sixth figure is presented showing the 'Base case net cash flow'.

Audit Comments

7.63 This analysis is limited and presented in a form which is not readily understandable. There is no text to explain how the analysis was conducted or what the implications are. There is no total figure to show the change in the net cash flow under the less optimistic assumptions identified. The figures provided show that for quite small variations in five variables such as spectator numbers and operating payments, the

projected cash flow for 2001-02 changes from a positive figure ($558,544) to a negative figure (–$205,984). Although the result can be calculated from the table, this point is not made in the table or the text.

COMMENTS ON APPENDIX 1

7.64 The Audit has carefully reviewed *Appendix 1* of the Andersen Report. The Audit's review has identified numerous instances in the appendix where there are ambiguities, errors, omissions and unclear explanations. It is unnecessary in this Report to describe each of these instances. There are sufficient of these for the Audit to conclude that *Appendix 1* does not contribute to a high or even moderate level of assurance that the financial model's projections could be achieved.

7.65 The Audit further notes that, as with the IMG Review, also commissioned in 1997, Andersen was not required to conduct market research of the Canberra market (see *Report 9 — Market Research and Marketing*). In the case of the Andersen Review, the desk research conducted was of a particularly limited kind given Andersen's heavy reliance on work prepared and supplied to Andersen by Graf Consulting.

CONCLUSION

7.66 Official documents state that the Andersen Review was commissioned in order to alleviate the concerns of the major hirers about the financial model. The Andersen Review was presented in important Cabinet submissions as being part of rigorous testing of the financial model which gave a significant degree of confidence that the model's results could be relied upon in decision making.

7.67 The Audit reviewed the Report. The general tone of the Review Report is clearly one of acceptance rather than criticism of the model. This is supported by numerous instances in the Report where specific parts of the model are described as 'consistent with comparable venues', 'reasonable by comparison with other venues', 'reasonable', 'achievable', 'attainable', 'expected', 'realistic', 'comparable' and 'typical'.

7.68 The Report appears therefore to provide at least a moderate level of assurance about the assumptions and revenue projections in the model

and the clerical accuracy of the model. The amount of time spent on the Review, and the invoiced cost of $47,000, are certainly large enough to suggest that the Review was meant to be a considered piece of work.

7.69 If, however, executives had ensured the Report had been reviewed carefully, and questioned Andersen on the Report, they would have recognised that the Report's content should not have been relied upon for providing even a moderate level of assurance.

7.70 The Review Report does not provide a clear statement of its conclusion as required under the relevant Auditing Standard. Conclusions on specific matters are often presented obscurely or avoided. There are numerous basic errors and omissions in the text and tables. Most of the Review Report was material written by Graf Consulting and supplied to Arthur Andersen during the course of the Review

7.71 It is also noted that Andersen undertook to conduct a review, which provides a 'moderate' level of assurance only. There was no commitment to undertake work to provide a high level of assurance.

7.72 While executives are entitled to use and rely upon consultants' advice, important advice should be carefully reviewed before it is used in support of significant decisions. The Audit has concluded that executives should not have accepted the Review Report, or presented it as providing a high level of assurance about the financial model.

7.73 The Stadium redevelopment was a risky venture with major financial implications for the Government. The financial model was the key document in the Government's understanding of these financial implications. The Andersen Review of the model was identified by executives as being rigorous testing in support of the model. Given these three points, the Audit expected to find considered written assessment of the Andersen Review Report by an officer or officers with financial expertise and an understanding of audit reviews. Such an assessment has not been found by the Audit or provided to the Audit.

Annexure

Reports Published in 1993

1 Management of Capital Works Projects

2 Asbestos Removal Program

3 Various Performance Audits Conducted to 30 June 1993
- **Debt Recovery Operations by the ACT Revenue Office**
- **Publicity Unaccountable Government Activities**
- **Motor Vehicle Driver Testing Procedures**

4 Various Performance Audits
- **Government Home Loans Program**
- **Capital Equipment Purchases**
- **Human Resources Management System (HRMS)**
- **Selection of the ACT Government Banker**

5 Visiting Medical Officers

6 Government Schooling Program

7 Annual Management Report for the Year Ended 30 June 1993

8 Redundancies

9 Overtime and Allowances

10 Family Services Sub-Program

11 Financial Audits with Years Endings to 30 June 1993

Reports Published in 1994

1 Overtime and Allowances - Part 2

2 Department of Health
- **Health Grants**
- **Management of Information Technology**

3 Public Housing Maintenance

4 ACT Treasury
- **Gaming Machine Administration**
- **Banking Arrangements**

5 Annual Management Report for Year Ended 30 June 1994

6 Various Agencies
- **Inter-Agency Charging**
- **Management of Private Trust Monies**

12 Reports were issued prior to 1992. Details can be obtained from the ACT Auditor-General's Office or the ACT Auditor-General's homepage: http://www.audit.act.gov.au.

Annexure (continued)

7 Various Agencies - Overseas Travel - Executives and Others
- Implementation of Major IT Projects

8 Financial Audits with Years Ending to 30 June 1994

9 Performance Indicators Reporting

Reports Published in 1995

1 Government Passenger Cars

2 Whistleblower Investigations Completed to 30 June 1995

3 Canberra Institute of Technology - Comparative Teaching Costs and Effectiveness

4 Government Secondary Colleges

5 Annual Management Report for Year Ended 30 June 1995

6 Contract for Collection of Domestic Garbage/Non-Salary Entitlements for Senior Government Officers

7 ACTEW Benchmarked

8 Financial Audits With Years Ending to 30 June 1995

Reports Published in 1996

1 Legislative Assembly Members - Superannuation Payments/Members' Staff - Allowances and Severance Payments

2 1995 Taxi Plates Auction

3 VMO Contracts

4 Land Joint Ventures

5 Management of Former Sheep Dip Sites

6 Collection of Court Fines

7 Annual Management Report For Year Ended 30 June 1996

8 Australian International Hotel School

9 ACT Cultural Development Funding Program

12 Reports were issued prior to 1992. Details can be obtained from the ACT Auditor-General's Office or the ACT Auditor-General's homepage: http://www.audit.act.gov.au.

Annexure (continued)

Reports Published in 1997

10 Implementation of 1994 Housing Review

11 Financial Audits with Years Ending to 30 June 1996

1 Contracting Pool and Leisure Centres

2 Road and Streetlight Maintenance

3 1995-96 Territory Operating Loss

4 ACT Public Hospitals - Same Day Admissions
Non Government Organisation - Audit of Potential Conflict of Interest

5 Management of Leave Liabilities

6 The Canberra Hospital Management's Salaried Specialists Private Practice

7 ACT Community Care - Disability Program and Community Nursing

8 Salaried Specialists' Use of Private Practice Privileges

9 Fleet Leasing Arrangements

10 Public Interest Disclosures - Lease Variation Charges
- Corrective Services

11 Annual Management Report for Year Ended 30 June 1997

12 Financial Audits with Years Ending to 30 June 1997

13 Management of Nursing Services

Reports Published in 1998

1 Management of Preschool Education

2 Lease Variation Charges - Follow-up Review

3 Major IT Projects - Follow-up Review

4 Annual Management Report for Year Ended 30 June 1998

5 Management of Housing Assistance

6 Assembly Members' Superannuation and Severance Payments to Former Members' Staffers

12 Reports were issued prior to 1992. Details can be obtained from the ACT Auditor-General's Office or the ACT Auditor-General's homepage: http://www.audit.act.gov.au.

Annexure (continued)

7 Magistrates Court Bail Processes

8 Territory Operating Losses and Financial Position

9 Financial Audits with Years Ending To 30 June 1998

10 Management of Schools Repairs and Maintenance

11 Overtime Payment To A Former Legislative Assembly Member's Staffer

Reports Published in 1999

1 Stamp Duty on Motor Vehicle Registrations

2 The Management of Year 2000 Risks

3 Annual Management Report for the Year Ended 30 June 1999

4 Financial Audits with Years Ending To 30 June 1999

Reports Published in 2000

1. Bruce Stadium Redevelopment — Summary Report

2. Bruce Stadium Redevelopment — Value for Money

3. Bruce Stadium Redevelopment — Costs and Benefits

4. Bruce Stadium Redevelopment — Decision to Redevelop the Stadium

5. Bruce Stadium Redevelopment — Selection of the Project Manager

6. Bruce Stadium Redevelopment — Financing Arrangements

7. Bruce Stadium Redevelopment — Stadium Financial Model

8. Bruce Stadium Redevelopment — Actual Costs and Cost Estimates

9. Bruce Stadium Redevelopment — Market Research and Marketing

10. Bruce Stadium Redevelopment — Stadium Hiring Agreements

11. Bruce Stadium Redevelopment — Lawfulness of Expenditure

12. Bruce Stadium Redevelopment — Governance and Management

12 Reports were issued prior to 1992. Details can be obtained from the ACT Auditor-General's Office or the ACT Auditor-General's homepage: http://www.audit.act.gov.au.

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