



Parliamentary Budget Office

# Review of business case cost estimates

Submission to the inquiry into the 2026  
Commonwealth Games Bid

## Parliamentary Budget Office

We provide independent fiscal, economic and financial advice to all members of the Parliament of Victoria. Our objective is to inform policy development and public debate in parliament and the community.

Postal address Parliament House Spring Street East Melbourne Victoria Australia 3002

Email address [enquiries@pbo.vic.gov.au](mailto:enquiries@pbo.vic.gov.au)

Telephone 1300 615 862

Online [pbo.vic.gov.au](http://pbo.vic.gov.au)



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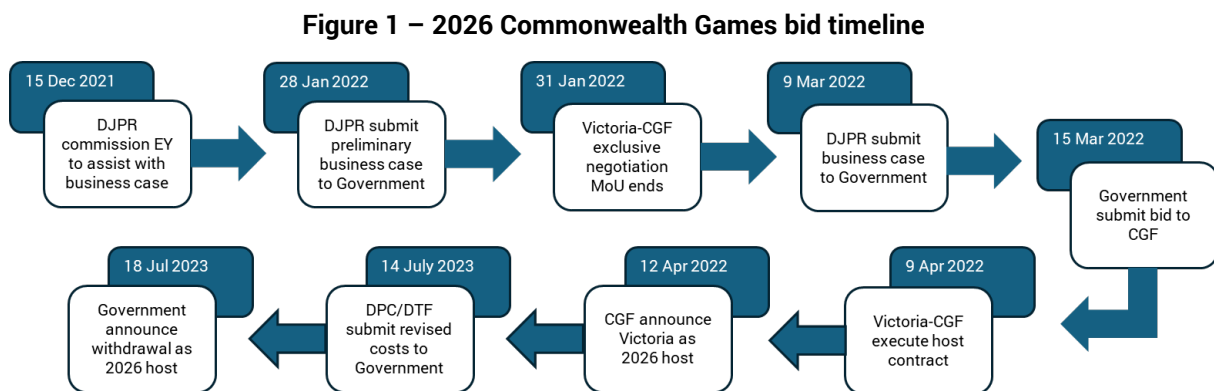
## In brief

In this submission, we analyse the Victorian Government's 2026 Commonwealth Games business case (the business case). We assess the cost estimates against the Department of Treasury and Finance Investment Lifecycle and High Value High Risk business case guidelines (DTF guidelines). We consider scope, methodology, assumptions, and assessment of uncertainty and risk.

### 2026 Commonwealth Games timeline

On 15 December 2021, the then Department of Jobs, Precincts and Regions (DJPR) commissioned Ernst & Young (EY) to assist with the development of a business case for regional Victoria to host the 2026 Commonwealth Games. DJPR and EY commissioned MI Associates to assist with the operating budget and DHW Ludus to assist with the capital budget. EY was given a 6-week timeframe for the business case development, which aligned with a Memorandum of Understanding between the Victorian Government, the Commonwealth Games Federation (CGF) and Commonwealth Games Australia.

DJPR submitted an initial business case to the government on 28 January 2022, which was approved by the Expenditure Review Committee. DJPR submitted the revised (now published) business case on 9 March 2022. The revised business case presented a 'Recommended solution' that Victoria should bid to host the 2026 Commonwealth Games. The government submitted its proposal for regional Victoria to host the games to the CGF on 15 March 2022.



Source: Parliamentary Budget Office.

On 12 April 2022, the CGF announced that Victoria would host the 2026 Commonwealth Games. The Victorian Government planned to host the games across 4 regional hubs in Geelong, Bendigo, Ballarat and Gippsland.

On 18 July 2023, the Victorian Government withdrew from hosting the 2026 Commonwealth Games, citing a sharp escalation in costs. Upon withdrawing, it released:

- the business case, which DJPR submitted to government on 9 March 2022, estimating a “best case” cost of \$2,494 million and a “worst case” cost of \$3,005 million
- a revised Victorian Government cost estimate from June 2023 of \$6,865 million – more than double the “worst case” estimate in the business case.

## Assessing the business case cost against DTF guidelines

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### Overall

The Victorian Government decided to proceed with the 2026 Commonwealth Games bid consistent with the recommended solution in the business case. DTF guidelines suggest a full business case as the basis for making decisions on government investments. However the business case lacked several elements essential for a full business case – including financial accounting of risk and comprehensive accounting of uncertainty – and was more reflective of a preliminary business case. Even as a preliminary, the 2026 Commonwealth Games business case contained estimates that reasonably could have been better informed at the time they were made – most notably the athletes' village estimates.

In parts of the report, the business case states that the cost estimates were “preliminary” and identifies risks associated with the time constraints and confidentiality restrictions. Additionally, it states that further work was required to establish more accurate cost estimates.

The business case was, however, less clear in communicating the extent to which these limitations affect the business case's value in supporting a recommendation. Referring to the two cost outcomes as “best case” and “worst case” potentially gave greater confidence than was due, given the omission of the financial impacts of risks and some elements of uncertainty.

### Scope

DTF guidelines for a full business case suggest consideration of more than a single delivery option. The business case presents a single version of the decentralised model under which regional Victoria hosts the 2026 Commonwealth Games as the sole option (other than the base case of 'no action') and included no consideration of alternative models.

Additionally, the business case lacks several elements commonly included in full business cases. While the business case contains significant detail on many aspects of the proposed 2026 Commonwealth Games, it lacked:

- descriptions of individual capital works required for the athletes' village
- detailed planning and construction timelines
- outlines of financial models for delivering the capital works.

There is no indication, however, that any key elements of the project were 'scoped out' from the cost estimates.

### Methodology

The business case states explicitly that the cost estimates (both operational and capital budgets) were based on a “desktop analysis” approach and were “preliminary” only. This reflected the short time frame, and restrictions on consulting with stakeholders and site visits due to confidentiality requirements.

The operational budget is based on a 'top down' rather than a 'bottom up' approach, with costs based on the 2018 Gold Coast Commonwealth Games, with some adjustments for hosting the games in regional locations. The business case noted this was based on a methodological assumption that *“the baseline is a valid budget to deliver a recent Commonwealth Games in Australia in a semi-regional context”*. It added that *“time has not permitted a more robust 'bottom up' approach as key elements of Games planning are not yet understood.”* (p.69)

The Victorian Government's revised June 2023 cost estimates suggest the adjustments applied for the regional locations were insufficient. A more significantly adjusted 'top down' approach, or more likely a 'bottom up' approach, was necessary for compliance with DTF guidelines for a full business case.

The capital budget methodology is based on a 'bottom up' approach, in that capital projects are described and costed individually (albeit not to a level of detail necessarily consistent with a full business case). It appears that issues relating to capital cost estimates related more to assumptions about cost escalation and the athletes' village (see 'Assumptions').

## Assumptions

### Cost escalation

The business case does not provide a clear explanation of the cost escalation rates it uses to escalate:

- the 2018 Commonwealth Games operating budget to 2026
- the capital budget, expressed in real 2022 dollars, to the proposed 2026 construction timeline.

As a result, it is not clear whether the rates adequately considered general price pressures which were starting to materialise by late 2021, including from Victoria's planned infrastructure pipeline. It is also unclear whether the cost escalation rates accurately reflected potential additional cost pressures from the compressed timeframe.

The Victorian Government's revised June 2023 cost estimates include \$2.005 billion for factors including '*hyper-escalation driven by compressed timelines*' and '*regional supply constraints and broader inflationary pressures across the economy*.' This suggests the escalation rates used in the business case may not have been sufficient.

### Construction costs for the athletes' village

The business case states that the Victorian Government would pay for the portion of the athletes' village that would later be used for social housing (325 dwellings). It also states that the costs of development for the rest of the athletes' village (1,175 dwellings) would be "*absorbed by the private sector through the sale of the remaining housing stock to the open market,*" as those dwellings are "*assumed to be delivered under a development agreement*".

The Victorian Government's revised June 2023 cost estimates state that due to CGF requirements and land shortages, the government would need to build demountable structures for the athletes' village, meaning the original assumption and delivery model no longer held. As a result, the cost estimate for the athletes' village rose from \$200-\$250 million to \$1,023 million.

It appears this assumption was poorly informed. Information about available land parcels in regional locations and CGF requirements should have been available to the government and their engaged consultants at the time the business case was prepared, or at least before a formal bid was submitted.

## Uncertainty and risk

DTF's guidelines for a full business case require an estimate of the project budget which includes both uncertainty and risk.

Uncertainty relates to variation in factors explicitly considered in estimating the project budget – such as the adjustment of baseline operational costs for delivery across multiple locations. Risk relates to events that would affect the cost of the project that are not explicitly considered in estimating the project budget – for example, whether there is enough accommodation in the regional locations beyond the athletes' village.

### Uncertainty

The business case incorporates the financial implications of some uncertainty inherent in its estimation, but it does not appear to do so comprehensively. Notably, the business case does not make clear precisely how some uncertainties are addressed. For example, while the business case indicates it adjusted the baseline (2018 Commonwealth Games) costs for security, it does not comprehensively describe what these adjustments were.

While the business case describes its cost estimates as 'preliminary' and identifies further work required, it is not consistent with DTF guidelines in that:

- the cost estimate range (around + or - 10%) is much narrower than the range recommended by the DTF guidelines for cost estimates at a similar stage of development
- the upper cost estimate is labelled as a "worst case," but does not factor in the cost-related risks, nor uncertainties associated with the limitations of the analysis.

The business case also misses the opportunity to consider uncertainty in the sensitivity analysis; the brief sensitivity analysis in the business case only calculates the cost-benefit ratio based on the "best case" and "worst case" estimates.

### Risk

DTF guidelines require that full business cases identify and quantify cost-related risks, and integrate these into the project budget or cost estimates.

The business case outlined a risk assessment methodology and identified a range of risks. These included 15 cost-related risks, all of which were upside risks – if they occurred, they would increase costs. It assigned each risk a rating and recommended risk mitigation approaches. However, there is no indication that any estimate of the financial impact of the identified cost-related risks was included in the cost estimates.

Additionally, some of the key risks identified were risks associated with the truncated timeline and preparation, rather than true project risks. In particular, 2 of these risks were:

- *'a lack of time to undertake due diligence prior to the heads of agreement being signed could create a commercial or delivery risk'*
- *'a lack of time to prepare for the games could impact cost, quality and benefits realisation'.*

# About this submission

## Request

On 5 February 2024, Mr David Limbrick MP, Chair of the Select Committee on the Commonwealth Games Bid (the Committee), invited the Parliamentary Budget Officer to provide an independent submission to the Committee's inquiry into the 2026 Commonwealth Games Bid (the Inquiry).

## Inquiry terms of reference

On 2 August 2023, the Legislative Council agreed to the following motion:

That a Select Committee of nine members be appointed to inquire into, consider and report on the 2026 Commonwealth Games and the progress of the regional infrastructure build, including but not limited to:

- a. the potential failures in governance, probity and procurement processes in the Victorian Government's bid, contract, and termination of the 2026 Commonwealth Games;
- b. the impacts of the contract termination of the Commonwealth Games on Victoria's reputation, business community, tourism, and major events;
- c. the Victorian Government advice received from government departments, councils, agencies, consultants, and contractors;
- d. the potential of undue influence by the executive on the independence of the public service;
- e. the timeline, progress and budget of the Victorian Government's regional infrastructure and housing build;
- f. the impact on community, social, amateur, and professional sport in Victoria;
- g. any other relevant matter.

## Scope

In this submission, we respond directly to the request from David Limbrick MP, Chair of the Committee, which stated:

*'It is a matter of public record that the estimate for the cost of the games escalated significantly between the submission of the business case to the Government in March 2022 and the cancellation of the Games in July 2023. I seek your advice on whether the methodology, assumptions and scope of the business case was sound.'*

Our submission assesses the cost estimates in the Commonwealth Games 2026 Business Case against the Department of Treasury and Finance Investment Lifecycle and High Value High Risk business case guidelines (DTF guidelines) and supplementary guidelines, with reference to the Victorian Government's revised June 2023 cost estimates. We consider their:

- scope
- methodology
- assumptions
- assessment of uncertainty

- assessment of risk

Attachment A provides page number references against the Committee's request.

Attachment B provides page number references against the inquiry terms of reference.

### Limitations

This submission is based on public information. We assess the business case cost estimates against the DTF guidelines, with reference to the government's revised June 2023 cost estimates, parliamentary inquiry hearings and other public commentary. We do not provide an independent set of cost estimates for the 2026 Commonwealth Games.

This submission does not assess the:

- process and timing of the business case
- broader content of the business case, such as identifying the different options available to government, the benefit estimates, and the delivery case.

We prepared this submission on 18 March 2024.

# Background

On 12 April 2022, the Commonwealth Games Federation (CGF) announced that Victoria would host the 2026 Commonwealth Games. The Victorian Government planned to host the games across 4 regional hubs in Geelong, Bendigo, Ballarat and Gippsland.

On 18 July 2023, the Victorian Government withdrew from hosting the games, citing a sharp escalation in costs. Upon withdrawing, it released:

- the 2026 Commonwealth Games business case, which the then Department of Jobs, Precincts and Regions (DJPR) submitted to government on 9 March 2022, estimating a “best case” cost of \$2,494 million and a “worst case” cost of \$3,005 million
- a revised Victorian Government cost estimate from June 2023 of \$6,865 million, which was more than double the “worst case” estimate in the business case.

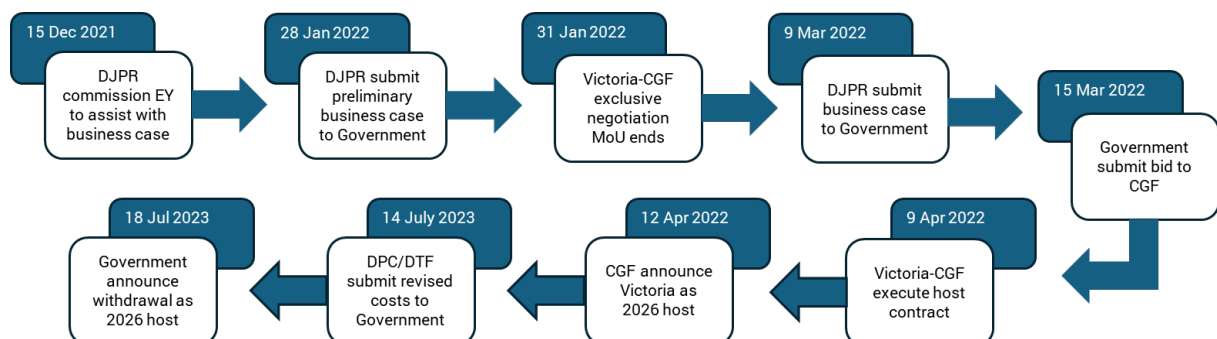
## Development of the Commonwealth Games 2026 Business Case

The business case states that in early December 2021, Visit Victoria held preliminary discussions with the Commonwealth Games Federation (CGF) and Commonwealth Games Australia (CGA) about the concept of hosting the 2026 Commonwealth Games in regional Victoria.

On 15 December 2021:

- the Victorian Government, CGF and CGA signed a Memorandum of Understanding to undertake an exclusive evaluation and due diligence process for Victoria to host the 2026 Commonwealth Games, which expired on 31 January 2022
- DJPR commissioned Ernst & Young (EY) as lead consultant to assist developing a business case for the 2026 Commonwealth Games bid, with a 6-week timeframe for completion reflecting the MoU. DJPR and EY commissioned MI Associates to assist with the operating budget, and DHW Ludus to assist with the capital budget. The government has not published the DJPR scope of works under which DJPR commissioned EY.

**Figure 2 – 2026 Commonwealth Games bid timeline**



Source: Parliamentary Budget Office.

On 28 January 2022, DJPR submitted an initial version of the business case to the government. It appears that this initial business case received Expenditure Review Committee (ERC) approval. DJPR submitted the revised business case (the version later published by the government) on 9 March 2022. This informed the government's decision whether to proceed with a formal proposal to the CGF. The revised business case identifies the changes made between the initial 28 January 2022 version and the revised 9 March 2022 version. These are material but not fundamental to the business case.

Following government approval to proceed with the bid to host the 2026 Commonwealth Games:

- the Victorian Government submitted the formal bid to the CGF on 15 March 2022
- the Host Contract between the Victorian Government and CGF was executed on 9 April 2022
- the CGF announced that Victoria would host the 2026 Commonwealth Games on 12 April 2022.

We note that it is difficult to establish all the relevant dates in the government's decision-making process for hosting the 2026 Commonwealth Games in late 2021 and early 2022. The Department of Premier and Cabinet provided a timeline of the 2026 Commonwealth Games bidding process and subsequent cancellation to the Select Committee inquiry, but while this contained details of key dates during the cancellation phase, it referred to only a few key events during the initial consideration of hosting the games, and only provided months rather than specific dates.

### Business case recommendations

The business case presented a single 'recommended solution' to host the 2026 games across 4 regional hubs in Geelong, Bendigo, Ballarat and Gippsland:

*'Given CGF's urgent need to confirm the host of the 2026 Games and its willingness to be flexible with future delivery models, there is an opportunity for the Victorian Government to create an event that delivers a unique set of benefits that align with its broader policy priorities. The proposed delivery model (or 'recommended solution') was developed in consultation with key members of DJPR, Visit Victoria and major sport event specialists.'* (p.33)

It also recommended the government did not delay making a decision:

*'CGF and Victoria are currently under negotiations on the delivery model, fee structures and roles and responsibilities of the parties. On 31 March 2022, CGF will make a decision on whether Regional Victoria should deliver the Games. As a result, it is not recommended to delay a decision to proceed (or not) with the CGF.'* (p.32)

The business case presented cost estimates for hosting the 2026 Commonwealth Games, which it referred to as "conservative":

*'The funding sought is a gross cost of the capital and operating expenditures required to deliver the Games. This is considered to be a conservative estimate, as we have accounted for a larger number of sports than is expected to feature. In addition, this gross cost will be offset by operating revenues and funding received from other funding sources (e.g. Federal and Local Government and other State Government programs).'* (p.98)

## Victorian Government revised June 2023 cost estimates

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Upon withdrawing from hosting the 2026 Commonwealth Games on 18 July 2023, the Victorian Government released revised cost estimates dated June 2023. The content of this documents is reproduced in full below.

Figure 3 – Victorian Government revised June 2023 cost estimates

\$million	Business case		July 2023 estimate
	Worst case	Best case	
<b>Infrastructure</b>	<b>1,004</b>	<b>639</b>	<b>1,673</b>
Athletes' villages*	250	200	1,023
Competition venues	745	430	650
Other capital investments	9	9	-
<b>Operations</b>	<b>2,001</b>	<b>1,855</b>	<b>3,187</b>
General operations	1,149	1,124	1,440
Temporary overlay	291	257	499
Transport	110	110	306
Police and security	201	201	492
Contingency	250	163	450
<b>Additional cost pressures**</b>	<b>-</b>	<b>-</b>	<b>2,005</b>
<b>Total</b>	<b>3,005</b>	<b>2,494</b>	<b>6,865</b>

*\*Under Commonwealth Games Federation requirements there were strict conditions placed on the location of the athletes' villages and there was limited land that met this criteria. The requirements for housing during the Games, as compared to after the Games, and land not being suitable at this time for permanent housing in Ballarat means that it was necessary to shift to building a high proportion of temporary demountable structures, which significantly reduced any potential private sector interest. Market soundings have also indicated cost escalation would further increase the required budget.'*

*\*\*The Office of the Commonwealth Games have identified significant additional cost pressures to the budget that have been reviewed by the Department of Treasury and Finance and the Department of Premier and Cabinet. These could amount to approximately \$2 billion and include but are not limited to:*

- *Hyper-escalation driven by compressed timeframes*
- *Regional supply constraints and broader inflationary pressures across the economy*
- *Accommodation shortfalls in the regions increasing cost*
- *Major sporting code displacement.*

Source: Victorian Government.

The cost estimates provided in the business case differ materially from those provided when the Victorian Government announced it was cancelling the 2026 Commonwealth Games. They differ in size, source and construction.

The business case was developed by DJPR, in collaboration with consultants EY, DHW Ludus and MI Associates. Compared to the revised June 2023 estimates, the business case included cost estimates against all line items except for the additional cost pressures.

The revised June 2023 estimates included updated cost estimates from the Commonwealth Games Organising Committee for most elements with some costs, such as transport and security, provided from other Victorian public sector agencies. Crucially, this estimate included cost estimates for additional cost pressures, which reflect likely realised cost-related risks. This inclusion means the updated estimates are likely more consistent with the DTF guidelines.

The business case presented a cost estimate for the 2026 Commonwealth Games between \$2,494 million and \$3,005 million. The revised June 2023 estimates put the cost of the games at \$6,865 million, with \$2,005 million in additional cost pressures. The updated estimates are 128% higher than the business case’s “worst case”.

## Investment Lifecycle and High Value High Risk guidelines

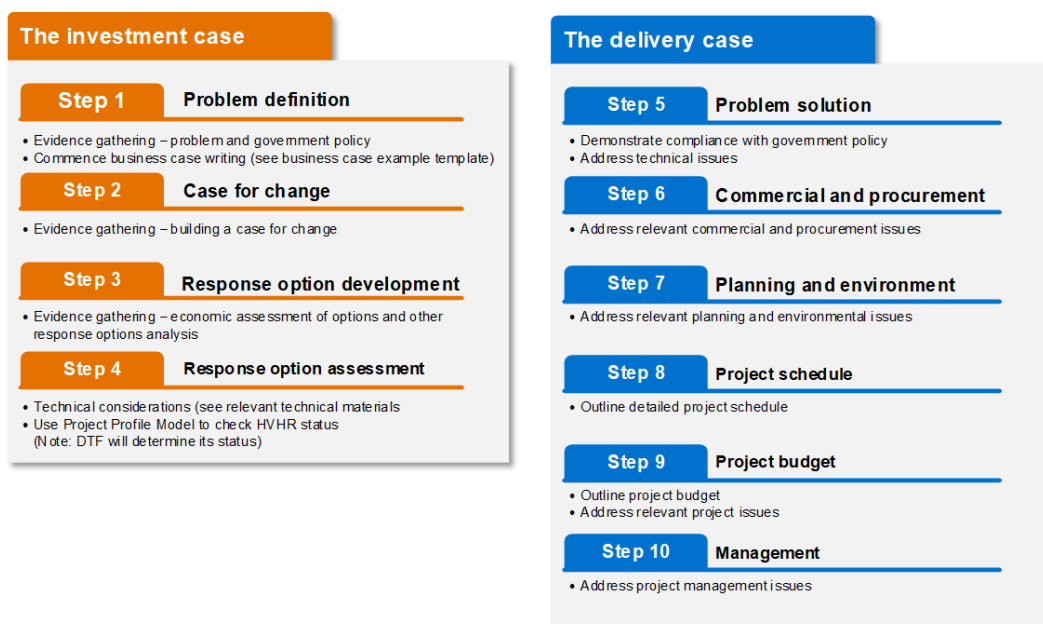
The Department of Treasury and Finance Investment Lifecycle and High Value High Risk Guidelines (DTF guidelines) provide a framework against which DTF and decision-makers can compare and assess standard and non-standard business cases. The DTF guidelines seek to promote good practice in the detailed examination of proposed investments.

The DTF guidelines state that they are applicable to any investment proposal and are designed to be flexible for different types of government investment. The 2026 Commonwealth Games qualifies as a ‘High Value High Risk’ proposal under the guidelines as it has a total estimated investment (TEI) over \$250 million. The DTF guidelines state that business cases have 2 key sections:

- Investment case – this sets out the rationale for the investment, provides evidence of the scale of need, measures the impact of the problem (or opportunity), analyses response options, and establishes whether these have sufficient value.
- Delivery case – this shows how the preferred solution can successfully deliver the intended benefits on time and on budget.

The DTF guidelines provide detailed specifications for the content of each section of a business case.

**Figure 4 – DTF guidelines on business case section**



Source: DTF guidelines.

The DTF guidelines state that there are circumstances where the government may make specific decisions before the completion of the business case, but that:

- government decisions on investments should be based on a full business case
- the purpose of preliminary business cases is to seek funding for the development of a full business case.

*'The Government may make specific commitments, announcements and/or decisions before a business case is completed. Where this occurs, a business case is still required. The investment case remains important to demonstrate the investment rationale, and economic analysis of cost and benefits, however a full options assessment may not be necessary. The delivery case section will, in most cases, be the primary focus of the business case.'* (p.6)

*'The preliminary business case allows departments and agencies to test the investment case with Government prior to committing to the development of a full business case. In some circumstances, particularly for large and complex projects, it may be appropriate to develop a preliminary business case that seeks funding for further development into a full business case. The full business case is the most comprehensive business case and should be used for investment decision-making.'* (p.9)

### Technical guidelines: *Risk, time, cost and contingency*

This submission also draws on guidance in the supplementary Office of Projects Victoria technical guidelines: *'Risk, time, cost and contingency; Identifying, quantifying and managing risk, time, cost and contingency'*.

The Executive Summary to these technical guidelines states:

*'These Risk, Time, Cost, and Contingency technical guidelines have been developed by the Office of Projects Victoria to assist project teams plan, propose, and deliver projects through the Department of Treasury and Finance's Investment Lifecycle. They are applicable to investments funded through the Budget process where a business case must be prepared, with additional requirements applicable to High Value High Risk (HVHR) projects.*

*The guidelines introduce an integrated approach to risk, time, cost, and contingency identification, quantification, and management, to promote consistency in related project management practices, estimates, terminology, and reporting. They detail the underlying concepts to improve the level of understanding of project teams, outline the steps for implementation, and prescribe minimum estimating requirements and methods and practices. Risk, Time, Cost, and Contingency reporting requirements are also summarised to provide clarity for project teams and agencies.'* (p. vi)

# Scope

## In this section

In this section we consider:

- DTF guidelines on how business cases should outline the project scope for preparing cost estimates
- how the scope of the cost estimates in the 2026 Commonwealth Games business case aligns to these guidelines.

## Summary

The DTF guidelines suggest that business cases provide an explicit statement of scope for cost estimates. While the 2026 Commonwealth Games business case does not explicitly present a statement of scope, the cost estimates clearly refer to the 'recommended solution' of a regional delivery model.

The business case contains significant detail on many aspects of the proposed regional model, but would require more detail in a range of areas to comply with DTF guidelines for a full business case.

DTF guidelines suggest business cases present multiple options for consideration. However, the business case presents a base case (do nothing) option and a single option for consideration – that of regional Victoria hosting the 2026 Commonwealth Games based on a decentralised model in 4 locations. It does not provide analysis of how this option was developed, and does not discuss alternative options, such as alternative regional Victoria delivery models.

## Scope statement

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### DTF guidelines

A well-defined project scope is crucial to constructing an accurate base cost estimate. Without an accurate scope, individual cost components cannot clearly be traced back to the scope statement. For a full business case, the DTF guidelines state that:

*'The project budget estimate including: base cost estimate, base risk allocation and contingency should be based on a project scope statement at the preliminary design estimate level.'* (p.73)

The DTF guidelines further explain the 'preliminary design estimate' as follows:

*This estimate is used to provide the approved budget estimate for the project, i.e., the business case budget estimate. Project design is likely to be in the order of 10 per cent to 40 per cent. Costing at this stage is expected to be a robust, defensible, risk-adjusted estimate with an appropriate contingency allowance. The estimate should be based on a well-defined project scope, a breakdown of project costs (e.g., using elemental estimating techniques) supported by reference to relevant benchmark project examples and adjusted for risk and uncertainty.* (p.12)

The *Risk, time, cost and contingency* technical guidelines provide further specific guidance on how a full business case should establish the scope for cost estimates. It states that:

*'The project scope forms the basis for the time, risk, and cost estimates. The appropriate management of scope may prevent unnecessary work or ensure critical tasks are not omitted.'* (p.8)

## Scope statement in the business case

The business case does not provide an explicit statement of the scope of its cost estimates; however, the cost estimates clearly refer to the 'recommended solution' for regional Victoria to host the 2026 Commonwealth Games, which is detailed in Section 3 of the business case.

The business case contains significant detail on many aspects of the proposed 2026 Commonwealth Games. It defines the key elements of the scope, such as the:

- length of event – 11 days
- number of events – 29 female events, 28 male events, 8 mixed gender events, and 10 para events
- development and use of 4 athlete villages (Ballarat, Bendigo, Geelong and Gippsland) servicing 7,424 athletes and team officials with a total 11,102 beds provided, with breakdowns by location
- use of 29 venues across regional Victoria, including 3 new venues, 21 existing venues, and 5 pop-up/temporary venues, with a detailed outline of proposed infrastructure spending by location and facility (p.49 and Appendix), including capital projects required for:
  - new infrastructure
  - permanent upgrades
  - temporary overlays.

The latest DTF guidelines provide limited detail on what elements the scope should include; based on previous guidelines (*Preparing Project Budgets for Business Cases*), a full business case should have additionally included more detailed:

- descriptions of capital works required for each venue
- descriptions of plans for the athletes' villages
- descriptions of financial models for delivering the capital works (design and construct, alliance, public–private partnership, etc.)
- planning and construction schedule.

The business case clearly notes further work that needs to be done in some of these areas, for example:

*'These are early stage cost estimates (no consultation with venue operators and councils has been able to be undertaken, similarly detailed site visits and design work has not been possible at this early stage). Costs will further be developed and refined as the State moves through the bidding and planning process.'* (p.6)

*'Consultation was not possible with venue operators to assess the current state of venues. Further, detailed design has not been undertaken on the permanent upgrades and new infrastructure required.'* (p.65)

Importantly, the scope of the cost estimates appears to cover all the key elements of the project – i.e. there is no indication that any key elements of the project are 'scoped out'.

## Alternative project options

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### DTF guidelines on project options

The DTF guidelines suggest that full business cases should set out more than one realistic option for consideration by decision makers, and identify a preferred option. The DTF guidelines state:

*'Only after agencies have identified a preferred response option should project options be considered. Project options explore how the preferred response option might be implemented.'* (p.27)

*'Agencies need to develop and set out realistic and feasible project options to address the underlying problem and meet the overall investment benefits. These project options should be aligned to the preferred response option and may be comprised of service changes, assets or other actions proposed. The initial project options scoping looks at a variety of scoped asset and non-asset solutions for the purpose of selecting the preferred project option.'*

*'Business cases that are weakest in this area often propose just three options: do nothing, do something that is unfeasible, or do what the business case is proposing. This strategy should be avoided, and Government should be able to consider several feasible alternatives.'* (p.28)

### Project options in the business case

The business case presents a base case (do nothing) option and a single option for consideration – that of regional Victoria hosting the 2026 Commonwealth Games based on a decentralised model in 4 locations.

There is no analysis of how this option was developed, and no alternative options considered, such as alternative regional Victoria delivery models. This is contrary to the DTF guidelines, which note that where project options are removed from the evaluation, these should be discussed, and reasons provided for their omission.

The business case also states that:

*'While the proposed model will deliver a range of benefits, it should be noted that the distributed model comes at additional cost that would not necessarily be incurred in a more centralised delivery model.'* (p.11)

However, there is no quantitative assessment of these additional costs, nor of the benefits of a more centralised model.

# Methodology

## In this section

In this section we consider:

- DTF guidelines on methodologies for preparing business case cost estimates
- how the cost estimate methodologies used in the 2026 Commonwealth Games business case align to these guidelines.

## Summary

The business case states explicitly that its cost estimates are based on a 'desktop analysis' approach, reflecting the short time frame, and restrictions on consulting with stakeholders and site visits due to confidentiality requirements.

DTF guidelines state that 'top down' estimates are typically only employed early in the project cycle, for preliminary but not full business cases. The operational budget in the business case is based on a 'top down' approach, with costs based on the 2018 Gold Coast Commonwealth Games, factoring in some adjustments for hosting the games in regional locations. The Victorian Government's revised June 2023 cost estimates suggest the adjustments applied for the regional locations were insufficient. A 'bottom up' approach, or at least a more significantly adjusted 'top down' approach, was necessary for a full business case in compliance with the DTF guidelines.

The capital budget methodology is a 'bottom up' approach, in that individual capital projects are described and costed individually (albeit not to a level of detail consistent with a full business case).

## DTF guidelines

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The DTF guidelines provide guidance on cost estimate methodologies for full business cases, although these are not prescriptive. They state:

*'This guideline does not specify an estimating methodology as projects need to use the appropriate methodology for the particular investment type. It does advocate the need for appropriately skilled estimators, insightful and meaningful reviews by peers, and for the senior responsible owner to confirm it represents best in market and is defensible.'* (p.70)

The *Risk, Time, Cost and Contingency* technical guidance provides the following detail on 'top down' and 'bottom up' approaches:

*A top-down estimate sets a forecasted cost/duration for a project, usually without undertaking a detailed cost analysis. This implies the overall project estimate is made first, and then the estimated project duration or budget value is allocated to the sub-tasks required to complete the project. This type of estimate is not accurate and is typically only employed:*

- *early in the project lifecycle for option selection (before the business case) or for preliminary business cases*
- *where there is a fixed budget or duration, and scope is made to fit a budget or timeframe*

- *where there is enough data available on an analogous project to know that the funds/time allocated top-down to the lower levels are realistic.*

*The detailed build-up is developed from the bottom up. To be accurate, this kind of calculation requires detailed design specifications and a good understanding of the project and its interactions. Bottom-up estimating is characterised by determining the individual activity costs and time durations and rolling it up from the 'bottom' to an overall total estimate. (p.48)*

## Operating budget methodology in the business case

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The business case operating budget was explicitly based on desktop analysis without stakeholder consultation or site visits. It noted explicitly that the resulting cost estimates were "preliminary" and required further work. The business case states that:

*'The Games MI Associates were commissioned by DJPR and EY to develop the operating budget for the 2026 Games. Input was also provided by DHW Ludus on the estimated overlay costs. The operating budget was developed based on an analysis of previous Commonwealth Games budgets and the proposed sports program for the 2026 Games.*

*The operating budget was developed based on:*

- *The estimated budget has been built on a 'top down' basis and baselined from the Gold Coast 2018 Commonwealth Games.*
- *Time has not permitted a more robust 'bottom up' approach as key elements of Games planning are not yet understood*
- *The estimated budget assumes that the baseline is a valid budget to deliver a recent Commonwealth Games in Australia in a semi-regional context*
- *Adjustments have been made to the baseline where the proposed budget will be materially different to the Gold Coast 2018 Games.'* (p.69)

A 'top down' approach – which bases costs on the 2018 Gold Coast Commonwealth Games, with adjustment for the regional context – is in principle a reasonable approach for a preliminary estimate. However, the DTF guidelines state that such estimates are typically employed only for project option selection purposes or preliminary business cases. This is not consistent with the use of this business case as a full business case to support a government decision.

Furthermore, the business case provides very limited information on the specific adjustments to the cost estimates to account for the regional context. We identified 3 relevant assumptions, which are stated (but not quantified), on p.138 of the business case:

- *'Security costs are expected to be higher than the baseline given the geographic split of the regions. Games time security costs are a function of resources (people and equipment).'*
- *'There will be additional costs for logistics, accommodation and overtime etc. for contract security and police to operate across the 4 regional locations plus Melbourne.'*
- *'There will be inefficiencies created by delivering the Games Operations across multiple sites and across regional Victoria (where distances are greater, base venue infrastructure less developed and base support services are less sophisticated). Duplicating Village Operations across four sites will increase costs.'*

The Victorian Government's revised June 2023 cost estimates for each component of the operational budget – 'general operations', 'temporary overlay', 'transport', and 'police and security' – are well above the "worst case" estimates in the business case. Based on these revised estimates, it appears:

- the adjustments to the 2018 Gold Coast Commonwealth Games costs to account for the regional context were insufficient
- a more significantly adjusted 'top down' approach – or more likely a 'bottom up' approach – was necessary, consistent with DTF guidelines for a full business case.

## Capital budget methodology in the business case

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The capital budget for the 2026 Commonwealth Games mainly comprised the cost to:

- develop the athletes' village
- construct, upgrade, or provide temporary overlays for the proposed competition venues.

The DHW Ludus Facilities Assessment appendix to the business case summarises the capital budget 'desktop analysis' methodology used to estimate the cost of capital works for each proposed venue (p.25):

*'To estimate capital costs, an 'order of magnitude' exercise was undertaken, based on:*

- *Increments of \$25 million (agreed with Ernst & Young and the State Government of Victoria)*
- *Benchmarks for similar projects*
- *Heavy caveats given capital works have not been fully scoped, nor have key aspects such as building condition been ascertained*
- *Capital costs being presented in 2022 dollars, and no consideration of aspects such as labour scarcity in regional Victoria (p.25)'*

The business case contains the following further statement of the limitations of the capital budget methodology:

*'Given the confidential nature of the investment, a desktop assessment was undertaken. Consultation was not possible with venue operators to assess the current state of venues. Further, detailed design has not been undertaken on the permanent upgrades and new infrastructure required.'* (p.65)

The business case outlines a range of further work required, including physical site inspections, detailed master planning and improvements to capital cost estimates (DHW Ludus Facilities Assessment Appendix p.272).

Nonetheless, the capital budget methodology is a 'bottom up' approach, in that each capital project is described and costed individually (although not conducted to a level of detail consistent with DTF guidelines for a full business case).

The revised athletes' village cost estimate presented in the government's June 2023 costing was well above the business case estimate, however this appears to be due to the assumption relating to the development agreement with the private sector (discussed under 'Assumptions'). It is not clear to what extent the \$2,005 million identified in the Victorian Government's revised cost estimates as 'Additional cost pressures' related to capital costs.

# Assumptions

## In this section

In this section we consider:

- DTF guidelines on the use of assumptions in preparing business case cost estimates
- how the assumptions used in the 2026 Commonwealth Games business case cost estimates align to these guidelines.

## Summary

The business case does not provide clear explanations of its cost escalation rate assumptions. As a result, it is not clear whether the rates adequately considered general price pressures which were starting to materialise by late 2021, including from Victoria's planned infrastructure pipeline, or potential additional cost pressures from the compressed timeframe.

The business case assumed that the costs of development for most of the athletes' village (1,175 of a total 1500 dwellings) would be "absorbed by the private sector through the sale of the remaining housing stock to the open market," as those dwellings are "assumed to be delivered under a development agreement." However, the Victorian Government's revised June 2023 cost estimates state that due to CGF requirements and land shortages, the government would need to build demountable structures for the athletes' village, meaning the original assumption and delivery model no longer held. As a result, the cost estimate for the athletes' village rose from \$200-\$250 million to \$1,023 million.

It appears this assumption was poorly informed. Information about available land parcels in regional locations and CGF requirements should have been available at the time the business case was prepared, or at least before a formal bid was submitted.

## DTF guidelines

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The DTF guidelines state that cost estimates in full business cases should include:

*'An explanation of key assumptions, such as:*

- *assumptions used to develop the estimated project cost for each project option;*
  - *estimated unit costs of the project option. Where possible include costs per unit of output, e.g., cost per hospital bed, and building unit, e.g., cost per square metre;*
  - *relevant benchmarking of other projects, assets, facilities if similar work has been undertaken before; and/or*
  - *component costs, such as industry accepted rates or reliable unit costs, e.g., cost/km'. (p.34)*

The *Risk, Time, Cost and Contingency* technical guidelines adds the following detail relating to cost escalation:

*"escalation is included as a component of project estimates to fund future cost increases resulting from inflationary factors over the life of the project. An escalation allowance is applied to the project cash flow (the base cost estimate in the financial years in which the expenditure will occur).*

*The escalation rate should be calculated from actual or forecast composite index series (e.g. consumer, producer, construction or other appropriate price indices) that reflect the characteristics of the project (e.g. proportion of labour versus material costs within the estimate, widening or narrowing of profit margins due to changes in market conditions, increases or decreases in the prices of direct inputs or changes in productivity resulting in changes to the quantity of direct inputs per unit of output)." (p.25)*

## Cost escalation assumptions in the business case

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Cost escalation assumptions are important to the magnitude of costs for medium- or long-term projects. Cost escalation was particularly crucial for estimating the cost of the 2026 Commonwealth Games because:

- the 'top down' approach to the operating budget was based on escalating the cost of the 2018 Gold Coast Commonwealth Games
- there were potential cost pressures associated with the delivery of infrastructure in a tight timeframe, particularly in regional areas
- already by late 2021, there were early signs of increasing cost pressures in the economy, including a known risk of cost escalation associated with Victoria's pipeline of construction projects (CPI rose 3.8% over the year to June 2021, and 3.0% over the year to September 2021).

However, we note the Victorian Government 2021–22 budget update, the latest government forecasts available at that time, forecast a return to low inflation.

### Cost escalation in the business case

Cost escalation describes the rate at which costs are expected to rise over time. It is difficult to assess whether the business case cost escalation assumptions were appropriate, as there is no clear statement of the rates used to escalate:

- the 2018 Commonwealth Games' operating budget to 2026
- the capital budget to the proposed 2026 construction timeline.

This lack of explanation of the cost escalation assumptions is not consistent with the DTF guidelines.

We cannot observe nor necessarily derive the escalation rates used in the business case for operating and capital costs. We can, however, derive the inflation rate used to convert between the published real and nominal cost estimates from 2021–22 to 2026–27, which were an average of:

- 2.5% per year for the operational budget
- 2.3% per year for the capital budget.

These rates were used for both "best case" and "worst case" estimates. If these were used as the cost escalation rates, as well as the inflation rate, they appear too modest. This is borne out by their alignment with longer-term structural assumptions for inflation rather than project, timing and location specific factors, and the increased cost escalation in the Victorian Government's revised June 2023 cost estimates.

### Updated cost escalation

The Victorian Government's revised June 2023 cost estimates include an additional \$2.005 billion for factors including:

- hyper-escalation driven by compressed timelines
- regional supply constraints
- broader inflationary pressures across the economy.

These revised costings do not provide a breakdown of the \$2.005 billion cost or explain this in any detail. However, the size of this additional cost further confirms that the cost escalation rates used in the business case were too modest, and that:

- higher cost escalation should have been factored into the “worst case” estimate
- the risk of even higher cost escalation due to the compressed timeframe and regional locations should have been considered in a risk allocation.

## Construction of the athletes’ village

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The business case budgets \$200-\$250 million for the construction of 4 athletes’ villages across the 4 regional hubs to accommodate athletes and officials. It states that 325 units or houses of a total 1,500 would be used for social housing following the conclusion of the 2026 Commonwealth Games, with the remaining 1,175 to be sold as private homes:

*‘While there will be a significant level of work that will need to be undertaken to determine the ultimate location, mix, design and funding structure arrangements of the athlete villages, the approach for the purposes of this business case has been to assume similar funding arrangements to Melbourne and Gold Coast Commonwealth Games. That is, a net payment by Government to achieve agreed social and affordable housing legacy outcomes, with the remainder of the cost of development absorbed by the private sector through the sale of the remaining housing stock to the open market.’ (p.54)*

The Capital Cost Assumptions Appendix to the business case adds additional detail:

*‘The Games Villages are assumed to be delivered under a development agreement as social and low cost housing and only the net expenses incurred by the Government are reported.’ (p.137)*

On this basis, it appears the government pays for 325 dwellings and the cost of the remainder is “absorbed” by the private sector through the development agreement. However, we note that the business case provides no details around:

- the available sites for the athletes’ villages in the 4 regional locations
- the expected development agreement with the private sector.

In the Victorian Government’s revised June 2023 costing, the cost of constructing the athletes’ villages increased from a range of \$200 million (“best case”) to \$250 million (“worst case”), up to \$1,023 million. The document included the following comments:

*‘Under Commonwealth Games Federation requirements there were strict conditions placed on the location of the athletes’ villages and there was limited land that met this criteria. The requirements for housing during the Games, as compared to after the Games, and land not being suitable at this time for permanent housing in Ballarat means that it was necessary to shift to building a high proportion of temporary demountable structures, which significantly reduced any potential private sector interest. Market soundings have also indicated cost escalation would further increase the required budget.’*

The revised June 2023 costing does not indicate what proportion of the cost increase is due to the reduction in private sector interest, and what proportion is due to cost escalation. However, it appears that the initial assumption for the private sector to “absorb” the cost of 1,175 athletes’ village apartments through a development agreement no longer held.

This raises questions around the appropriateness of the original assumption. Information about available land parcels in regional locations, and CGF requirements for the athletes’ villages, both should have been available to the government and their engaged consultants at the time the business case was prepared, or at least before a formal bid was submitted.

On the question of the availability of land, the business case states:

*‘In addition, the work being done by the Department indicates that access to land for these villages will not be an issue as there is adequate supply of residential zoned land for these developments.’ (p.13)*

It appears that the assertion that “land for these villages will not be an issue” was poorly informed. On face value, further work should have been conducted to assess information available at the time, or to gain greater clarification of CGF requirements before making a formal bid.

# Uncertainty

## In this section

In this section we consider:

- DTF guidelines on the consideration and assessment of uncertainty in preparing business case cost estimates
- how the 2026 Commonwealth Games business case's consideration of uncertainty aligned with these guidelines.

## Summary

The DTF guidelines for a full business case require that the cost estimate includes uncertainty. Uncertainty relates to potential variation in factors included in the model – for example, the uncertainty relating to how to adjust operational costs for delivery across multiple regional locations.

The business case incorporates the financial implications of some uncertainty inherent in its estimation but does not do so comprehensively.

While the business case describes its cost estimates as 'preliminary' and identifies further work required, it is not consistent with DTF guidelines in that:

- the cost estimate range (around + or - 10%) is much narrower than the range recommended by the DTF guidelines for cost estimates at a similar stage of development
- the upper cost estimate is labelled as a "worst case," but does not factor in the cost-related risks, nor uncertainties associated with the limitations of the analysis.

The business case also misses the opportunity to consider uncertainty in the sensitivity analysis; the brief sensitivity analysis in the business case only calculates the cost-benefit ratio based on the "best case" and "worst case" estimates.

## Cost estimate range

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### DTF guidelines

The DTF guidelines provide detailed guidance on the level of accuracy that the cost estimates should provide at different stages of business case development. The DTF guidelines state:

*'Cost estimates for potential investments are an important component of the investment case stage. While it is recognised that this is an early stage of an investment's development, the cost estimates should be sufficiently reliable to provide an 'order of magnitude' of the final cost, expressed as a cost range (\$x-\$y million). The cost estimate will be used as a component of the analysis to determine which project investment options should be considered further in the full business case.'* (p.34)

The DTF guidelines state that the accuracy of cost estimates depends on the stage in the project lifecycle, and provide the expected accuracy at each stage of the process.

Figure 5 – Summary of accuracy required

Section	Processes	Estimate	Description
<b>Investment case</b> (A focus for the preliminary business case)	<b>Investment logic</b> Problem, benefits identification, response options, indicative solutions	Order of magnitude estimate type -40% to +60%	This estimate is used for screening and is based on historical information. Order of magnitude estimates are developed when a quick estimate is needed, and few details are available.
	<b>Project scoping</b> Project option appraisal, define project scope (and options for further consideration) with concept design	Developed concept estimate -20% to +25%	This estimate is based on concept design data. For less complex projects, this level of estimate accuracy is sufficient to robustly compare project options.
<b>Delivery case</b> (A focus for the full business case)	<b>Pre-feasibility</b> Assessment of project options, initial risk and environmental assessment	Developed concept estimate -20% to +25%	For more complex projects, more design information would be expected to reasonably compare project options.
	<b>Feasibility</b> Integration of risk assessment, preliminary design, functional model, whole of life costing and procurement strategy	Preliminary design estimate -15% to +25%	This estimate is used to provide the approved budget estimate for the project, i.e., the business case budget estimate. Costing at this stage is expected to be a robust, defensible, risk-adjusted estimate with an appropriate contingency allowance.
	<b>Procurement</b> Staged tender process including tender preparation and evaluation	Tender estimate -10% to +15%	Prior to going to tender, design specifications will be developed in more detail in order to obtain tender bids.
	<b>Negotiate contract price agreement</b>	Tender price/contract (excluding agency administration cost) -5% to +10%	The tender price or contract estimate is based on the agreed contract price following the tender process.

Source: DTF guidelines.

## Cost estimate range in the business case

Given the limitations outlined repeatedly in the business case, the cost estimates were likely to have been at the early 'Investment case' stage. At this level of accuracy, the recommended cost estimate range is as large as -40% to +60%. Even if the cost estimates had been advanced to a level consistent with the 'Feasibility' stage of a full business case, the recommended range under the guidelines is -15% to +25%.

However, the range presented in the business case cost estimates was around 20%, or around -10% to +10%. This is much narrower than any relevant recommended range for a business case and corresponds more closely to the guidelines for a tender estimate.

Ultimately, while the business case implicitly communicated high levels of uncertainty into its statements of limitations, it neglected to quantify these in its cost estimates. This resulted in a cost estimate range consistent with a significantly more advanced stage of development.

Furthermore, the language of "best case" and "worst case" potentially gave greater confidence than was due, given the omission of the financial impacts of some elements of uncertainty (and risks).

## Sensitivity analysis

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### DTF guidelines

Sensitivity analysis is generally used to provide further information on the potential impacts of changes to modelling assumptions. The DTF guidelines provide the following guidance in relation to the use of sensitivity analysis to manage uncertainty around financial impacts:

*'Conduct sensitivity and scenario analysis to test changes in the outcome if assumptions or other variables change.'* (p.43)

*'Sensitivity analysis is a form of quantitative analysis that tests the validity of assumptions under various conditions. It is useful for uncertain investments but may not be required for routine low-risk projects. Sensitivity analysis examines how NPVs, benefits, costs or other outcomes vary as individual assumptions or variables are changed, such as testing the likelihood of an uncertain impact occurring by changing probabilities or testing the discount rate.'*

*Sensitivity analysis can address two key questions:*

- *Would the preferred project option still be worthwhile pursuing if some of the key assumptions are incorrect?*
- *What actions can be taken to reduce the risks before accepting a particular project option?*

### Sensitivity analysis in the business case

The business case provides a sensitivity analysis (section 4.4), but this is simply a calculation of the cost-benefit ratio for the upper bounds and lower bounds of the cost and benefit estimates. There is no sensitivity analysis for costs beyond the cost estimate range.

The sensitivity analysis misses the opportunity, as identified under the DTF guidelines, to communicate the impact of uncertainty around the methodologies or assumptions. For example, it could have considered:

- the cost impact of different escalation rate assumptions

Review of business case cost estimates

- the cost impact of different assumptions relating to the additional costs of staging a Commonwealth Games in 4 regional locations, by comparison to the centralised 2018 Gold Coast Commonwealth Games
- alternative outcomes to the private sector “absorbing” most of the cost of the athletes’ village through a delivery agreement
- at what point, under the above changes in assumptions, the delivery model for the 2026 Commonwealth Games was no longer a recommended option.

# Risk assessment

## In this section

In this section we consider:

- DTF guidelines on the consideration and assessment of risk in business cases, focusing on cost-related risks
- how the 2026 Commonwealth Games business case's consideration of risk aligned with these guidelines.

## Summary

Risks relate to events that would materially affect the cost of the project that are not factored into the model – for example, that there is not enough accommodation in the regional locations.

The business case outlined a risk assessment methodology, identified a range of risks, assigned each risk a rating and recommended risk mitigation approaches. This was generally consistent with DTF guidelines.

However, some of the key risks identified were risks associated with the truncated timeline and preparation, rather than true project risks as defined by the DTF guidelines.

Furthermore, DTF guidelines also require that full business cases include a quantification of risk and integrate these into the cost estimates. While the business case outlined 15 cost-related risks, there is no indication these were integrated into the cost estimates.

## Project risks and 'poor project planning risks'

### DTF guidelines

The DTF guidelines provide guidance on identifying project risks in preparing financial analysis and cost estimates. They state that:

*'Agencies should choose a methodology for identifying project risks, mitigation treatments as well as a method of evaluating the risks as part of the project option assessment... A business case describes the process through which risks of project options have been assessed and addressed. This can provide assurance that project risks are well understood and reflected in cost estimates.'* (p.4)

The previous guidelines *Preparing Project Budgets for Business Cases* emphasise the need to draw a distinction between 'project risks' and 'poor project planning risks':

*'Project risks are the risks associated with implementing the project, for example, a contaminated site, regulatory planning failure to grant a right of way or materials defect. These are the residual risks that projects are exposed to and that need to be managed.'*

*'Poor project planning risks most often crystallise on projects when the DTF Investment Lifecycle Guidelines have not been applied properly. These risks are most often associated with flawed and truncated project planning, and typically see significant scope changes and other surprises during the tender process and/or post-contract award. Poor project planning risks can be catastrophic, resulting in extensive delays and significant cost overruns.'* (p.25)

## 'Poor project planning risks' in the business case

The business case outlined in Section 6.1.3 and Appendix H:

- a risk assessment methodology
- a detailed risk register identifying 22 risks, including 15 cost-related risks
- risk mitigation strategies.

It assigned each risk a rating and recommended risk mitigation approaches. This was generally consistent with DTF guidelines.

The Executive summary (section 1.9, p.18) of the business case highlights 5 key risks:

- *'a lack of time to undertake due diligence prior to the heads of agreement being signed could create a commercial or delivery risk'*
- *'a lack of time to prepare for the games could impact cost, quality and benefits realisation'*
- *'a lack of stakeholder engagement could lead to delayed delivery or heightened criticism'*
- *'poor execution of the novel delivery model could result in benefits not being realised'*
- *'supply chain constraints could delay infrastructure delivery'*

The first 4 of these risks are 'poor project planning risks', and based on the Victorian Government's revised June 2023 costing, it appears the first 2 of these project planning risks eventuated. However, the *Preparing Project Budgets for Business Cases* technical guidelines suggest that poor planning risks should be avoided, rather than accommodated in cost estimates:

*'It is expected that business cases will involve a sufficient level of planning to produce defensible and robust estimates that avoid poor project planning risks. Financial impacts arising from the risk of 'poor project planning and analysis' represent an avoidable risk.'* (p.10)

Ultimately, the business case correctly identified that there were substantial risks associated with taking a decision based on preliminary 'desktop analysis'. However, it did not integrate these risks into the cost estimates, or a sensitivity analysis.

## Risk allocation

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### DTF guidelines

DTF guidelines require that full business cases include a quantification of risk and integrate these into the cost estimates. Risk allocations (or project risk estimates) aim to quantify costs resulting from a level of risks that can reasonably be expected to eventuate under a central case.

The *Risk, time, cost and contingency* technical guidelines provide specific guidance on quantifying risk:

- *'project risk estimate is the State's provision for inherent and contingent risk and includes:*
  - *base risk estimate: the amount estimated for project risk, uncertainty, and escalation with a 50 per cent confidence level. Combined with the base cost estimate, this equals the P50, denoting a 50 per cent probability that the cost estimate will not be exceeded. It is not the sum of all identified project risks and may be higher than the most likely project outcome.*

- escalation is included as a component of project estimates to fund future cost increases resulting from inflationary factors over the life of the project. An escalation allowance is applied to the project cash flow (the base cost estimate in the financial years in which the expenditure will occur).'
- excess risk estimate is an additional risk allocation above the most likely value for all costed project risks. It is a provision for the State to manage in the event that a project exceeds its project cost estimate. This was referred to as contingency in the superseded Victorian Government guidance – *Preparing project budgets for business cases.* (pp.24-25)

Figure 6 – Project budget breakdown



Source: Office of Projects Victoria.

### Risk estimates in the business case

Despite identifying 15 cost-related risks, all of which were upside risks, there is no indication the business case includes a quantification of risk or reflects this in the cost estimates. This is inconsistent with the DTF guidelines.

There appears to be some discrepancy between the DTF guidelines and the *Risk, time, cost and contingency* technical guidelines. The DTF guidelines require a separate 'risk allocation' for identified risks. The *Risk, time, cost and contingency* technical guidelines incorporate risk within the contingency. However, the business case does not outline any form of quantification of the identified cost risks, and it states that the 'operational contingency' relates to the 'early stages of operational planning and the limited coordination undertaken to date', i.e. the limitations or 'poor project planning risks'.

One important example of the identified risks is the: "Risk there is limited regional labour and resource capacity for construction, with competition from large infrastructure programs (e.g. Victoria's Big Build)". This was identified as 'high risk,' though after accounting for the mitigation strategy ("Early engagement by the Government with the business case, along with Government buy-in for early capital planning and decision making"), was downgraded to a 'medium risk'. Based on the Victorian Government's revised June 2023 cost estimates, this risk appears to have eventuated. As this risk (along with other cost-related risks) was not factored into a risk allocation, it was therefore not reflected in the cost estimates.

As discussed in the previous section ('Uncertainties'), the language of "best case" and "worst case" potentially gave greater confidence than was due, given the omission of the financial impacts of risks in the business case.

# Attachment A – Reconciliation against the request

Requested submission	Addressed in submission
Advice on whether the methodology, assumptions and scope of the business case was sound.	
<ul style="list-style-type: none"> <li>▪ Scope</li> </ul>	‘Scope’ section (pp. 12-14)
<ul style="list-style-type: none"> <li>▪ Methodology</li> </ul>	‘Methodology’ section (pp. 15-17)
<ul style="list-style-type: none"> <li>▪ Assumptions</li> </ul>	‘Assumptions’ section (pp. 18-21)

# Attachment B – Reconciliation against the inquiry terms of reference

Inquiry terms of reference	Addressed in submission
The potential failures in governance, probity and procurement processes in the Victorian Government's bid, contract, and termination of the 2026 Commonwealth Games	Out of scope.
The impacts of the contract termination of the Commonwealth Games on Victoria's reputation, business community, tourism, and major events	Out of scope.
The Victorian Government advice received from government departments, councils, agencies, consultants, and contractors	Basis of 2026 Commonwealth Games cost estimates considered across submission.
The potential of undue influence by the executive on the independence of the public service	Out of scope.
The timeline, progress and budget of the Victorian Government's regional infrastructure and housing build	Out of scope.
The impact on community, social, amateur, and professional sport in Victoria	Out of scope.
Any other relevant matter	Out of scope.

## Attachment C – Data sources

- Department of Jobs, Precincts and Regions. 2021. *Regional Victoria – Commonwealth Games 2026 Business Case*. [ONLINE] Available at: <https://www.vic.gov.au/commonwealth-games-2026> [Accessed 14 March 2024]
- Department of Treasury and Finance. 2012. *Preparing Project Budgets for Business Cases Technical Guide*. [ONLINE] Available at: <https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.dtf.vic.gov.au%2Fsites%2Fdefault%2Ffiles%2F2018-03%2FPreparing%2520project%2520budgets%2520for%2520business%2520cases%2520-%2520Technical%2520guide.doc&wdOrigin=BROWSELINK> [Accessed 14 March 2024]
- Department of Premier and Cabinet. 2023. *2026 Commonwealth Games Budget July 2023*. [ONLINE] Available at: <https://www.vic.gov.au/commonwealth-games-2026> [Accessed 14 March 2024]
- Department of Treasury and Finance. 2023. *Investment Lifecycle and High Value High Risk Guidelines; Business Case*. [ONLINE] Available at: <https://www.dtf.vic.gov.au/investment-lifecycle-and-high-value-high-risk-guidelines/stage-1-business-case> [Accessed 14 March 2024]
- Office of Projects Victoria. 2021. *Risk, time, cost and contingency; Identifying, quantifying and managing risk, time, cost and contingency*. [ONLINE] Available at: [Business case | Department of Treasury and Finance Victoria \(dtf.vic.gov.au\)](https://www.dtf.vic.gov.au/business-case) [Accessed 14 March 2024]
- Parliament of Victoria. 2024. *Inquiry into the 2026 Commonwealth Games Bid*. [ONLINE] Available at: <https://www.parliament.vic.gov.au/get-involved/inquiries/inquiry-into-the-2026-commonwealth-games-bid/hearings> [Accessed 14 March 2024]