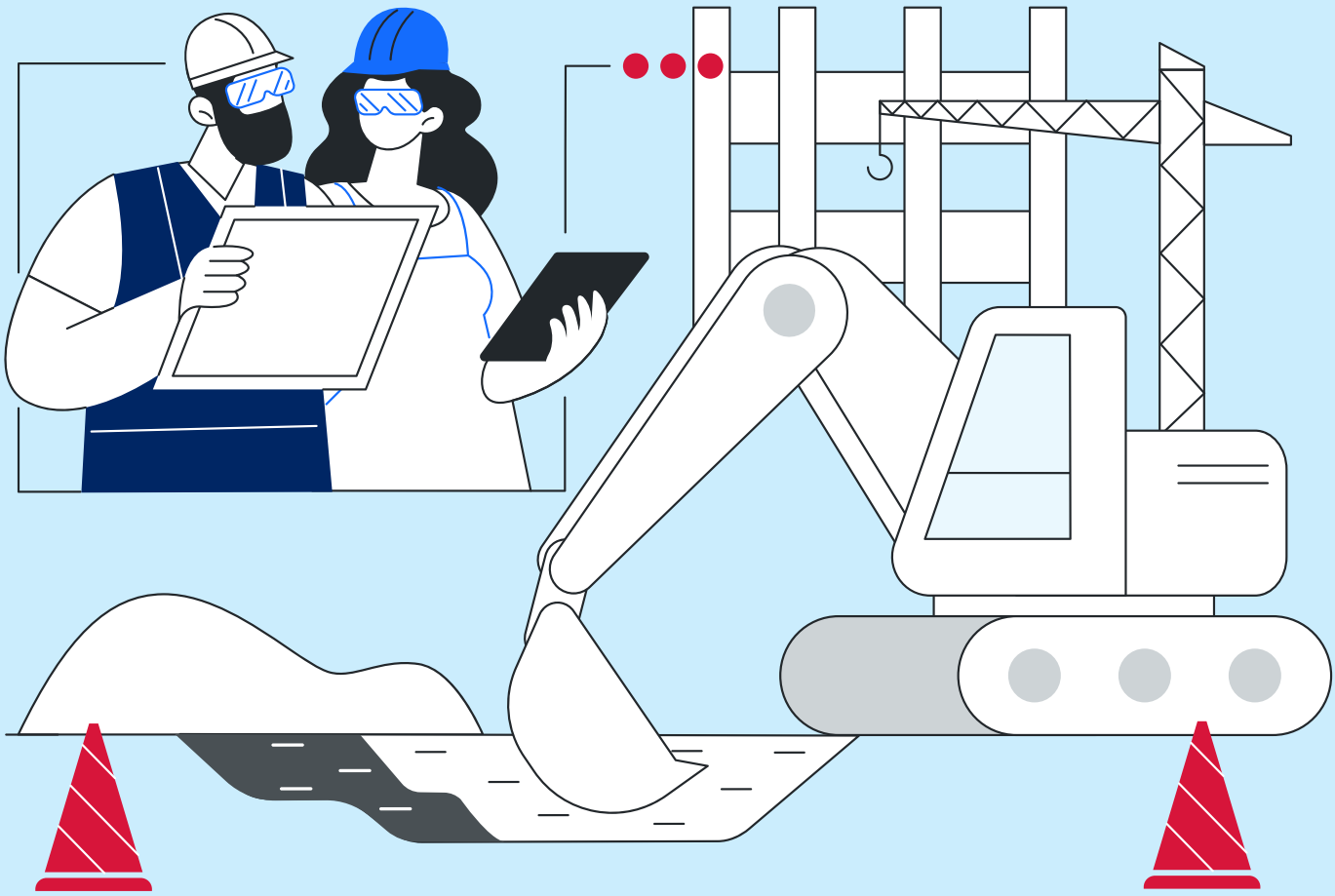
Cost Control Framework for the Infrastructure Program

March 2025

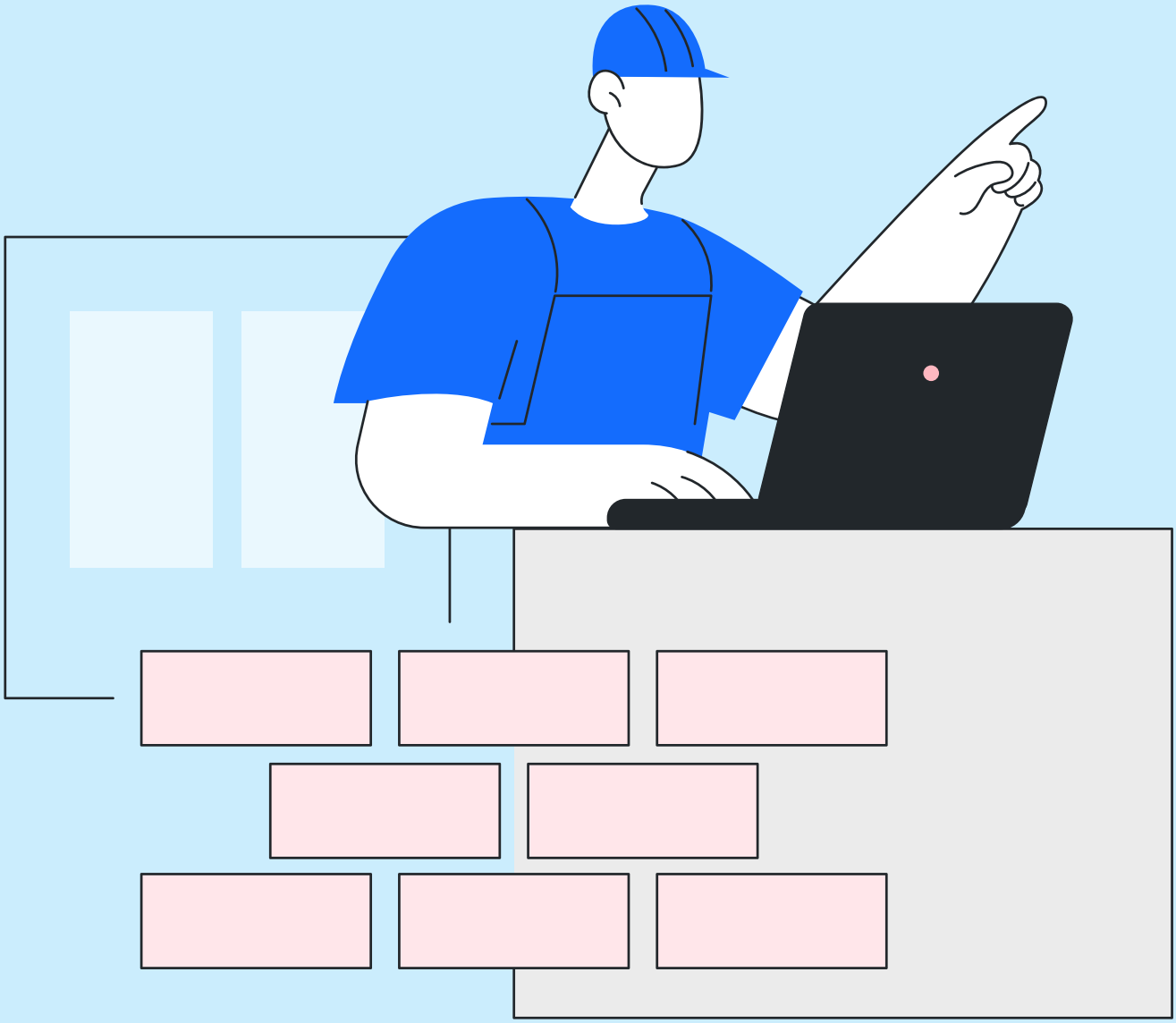


Acknowledgement of Country

Infrastructure NSW acknowledges the Traditional Custodians of the lands where we walk, work and live, and pays respect to their Elders past and present.

We acknowledge and respect their continuing connection to land, seas and waterways of NSW, and the continuation of their cultural, spiritual and educational practices.

In preparing the report, we acknowledge the importance of Aboriginal and Torres Strait Islander people's unique history of land and water management, and of art, culture and society that began over 65,000 years ago.



Contents

Background

Rigorous and defensible cost estimates are integral to driving greater transparency and accountability in infrastructure decision-making. Ministers and Cabinet must have confidence that the Infrastructure NSW Assurance Framework has been applied, that business cases demonstrate a clear benefit for the project, and that cost estimates included in business cases have been rigorously determined and benchmarked. Following investment decision, effective cost control processes are integral to the delivery of an agency's capital investment program within the parameters approved by government.

This Cost Control Framework (the Framework) applies to all projects[1] and programs registered under the Infrastructure Investor Assurance Framework (IIAF)[2], excluding State Owned Corporation (SOC) projects subject to the IIAF, unsolicited proposals and grants programs. The Framework sets the requirements for:

- transparency of cost and risk at both the project and portfolio level to ensure that Cabinet has a clear picture of fiscal risks
- preparing cost plans to inform investment decisions to ensure that decision makers are provided with consistent, transparent information on the potential cost and risks
- calculating and managing risk exposure and contingency to ensure consistency and a level of robustness appropriate to the risk level of each project
- managing agency level contingency (if applicable) to balance central control with agencies' ability to manage risk across their portfolios.
- The Framework has been updated and now requires:
- increased transparency of contingency provisions within project costs
- stricter controls on the application and use of contingency throughout the project lifecycle, with focus on High-Risk High-Profile projects to facilitate on-time, on-budget project delivery
- biannual reports to Cabinet on the health of their capital portfolio and budget risks for nominated agencies
- additional reporting on risk exposure, particularly for Tier 1 projects.

Agencies must ensure that their internal policies are aligned to the Framework, with consideration to the particular risk profile of the agency's capital works portfolio and the existing governance arrangements.

To assist agencies with compliance with the Framework, checklists have been prepared to be used by agencies to assist in preparing submissions to Cabinet at key milestones in the project lifecycle and when preparing the biannual Capital Portfolio Report Back. These checklists are included in **Appendix A**.

1 The definitions of terms such as project, program and portfolio are consistent with the definitions in the IIAF

2 https://www.infrastructure.nsw.gov.au/media/3011/infrastructure-investor-assurance-framework-iiaf-_march-2021.pdf

Key Principles

Framework Application

The Framework applies to all capital infrastructure projects registered in the Infrastructure Investor Assurance Framework with an enhanced focus on High-Profile High-Risk (HPHR) and Tier 2 projects. It does not apply to:

- State Owned Corporations due to the existing regulatory and governance frameworks
- unsolicited proposals due to the existing governance framework for considering project costs and the potential for conflict with proponent requirements
- capital infrastructure projects funded through grant programs as both the risk profile and structure of risk provisions are different to traditionally delivered infrastructure projects.

Project teams delivering projects with Commonwealth funding should have regard to Infrastructure Australia's guidance on cost estimation (https://investment.infrastructure.gov.au/about/funding_and_finance/cost_estimation_guidance.aspx). The Cost Control Framework is consistent with this guidance.

Framework Objectives

The Framework establishes:

- Increased transparency. Clear reporting requirements for both cost and risk. This includes information requirements to support decisions at key milestones as well as ongoing requirements for reporting during development and delivery. The objective is to ensure that Cabinet has a clear picture of fiscal risks to inform decision making.
- Reliable cost development. Minimum requirements for the preparation of cost plans to inform investment decisions. The scope includes scope development and consideration of options, risk estimation and organisational factors. The objective is to ensure that decision makers are provided with consistent, transparent information on the potential cost and risks for each project.
- Management of risk provisions. A framework for responding to risk events through the project lifecycle, including estimation of ongoing risk, reallocation of funds where appropriate and reporting on risks to the budget.
- Portfolio requirements. Specific requirements for management and reporting of risk at the capital portfolio level to balance central control with agencies' ability to manage risk across their portfolios.

The Framework provides high level minimum requirements to meet these objectives as well as guidance on the detailed implementation at the agency level. Agencies must develop a detailed implementation framework suited to the risk profile and existing oversight processes, and decision-making (collectively referred to as governance) arrangements of their infrastructure portfolio. This approach recognises the differences in the risk profile of each agency, as well as existing delivery and governance frameworks whilst also creating consistency and a baseline capability requirement across agencies.

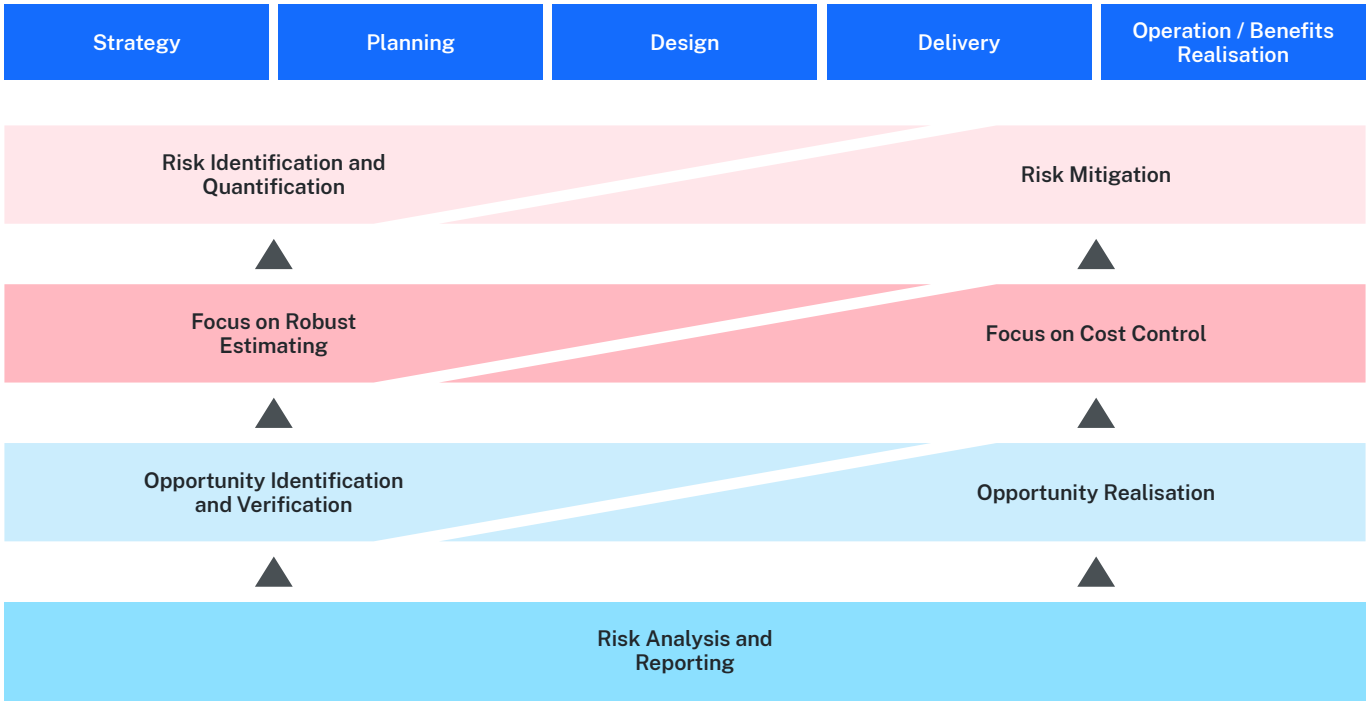
Framework Review

Infrastructure NSW and NSW Treasury will conduct a review of the implementation of the Cost Control Framework every 2 years.

Major changes to the Cost Control Framework must be approved by Cabinet. Minor changes to clarify requirements or respond to lessons learnt may be approved by Chief Executive Infrastructure NSW.

Driving efficient delivery of projects

An effective system for cost control will incorporate measures to minimise the cost of delivery and ensure effective management of risks through every stage of the project lifecycle. As shown in the diagram below, the focus of these measures changes depending on the stage of the infrastructure project.



Effective cost control requires the following measures and actions to be applied during the development phase of an infrastructure project:

- Early engagement with stakeholders to define requirements.
- Clear definition of the service need and alignment with government priorities.
- Identification and analysis of options to deliver the service need, including staging delivery of proposed infrastructure solutions and detailed examination of non-infrastructure solutions to address the service need.
- Planning and design activities to define the scope and delivery methodology for the project.
- Avoiding early anchoring of estimates, particularly through public announcements (refer to the Principles for the Provision of Information on Infrastructure Projects policy).
- Value management, opportunity identification and validation to ensure the scope is the most efficient way to deliver on the service need.
- Identification, quantification and mitigation of risks, including targeted investigations to quantify key risks.
- Testing of cost plans or components of cost plans by benchmarking.
- Ensuring assumptions have been tested by sensitivity analysis and can be supported by both quantitative and qualitative analysis.

The outcome of the above activities will be a robust cost estimate which should provide the project team with a challenging but achievable target cost for delivering the service need.

Following an investment decision, effective cost control requires:

- Identification and implementation of lessons learnt from similar projects, ideally by including project team members from similar projects.
- Effective oversight by the agency executive with a strong focus on delivering for the minimum possible cost, not just within budget.
- Strict change control in accordance with the agency's oversight measures.
- Restricting the access of project teams to the full contingency (i.e. holding some portion of contingency to a higher delegation).
- Compliance with any requirements for control of contingency by central agencies.
- Ongoing systematic identification, assessment, and implementation of opportunities to realise savings, reduce risk or increase benefits.
- Regular reviews of the risk register and re-quantification of risks, including cost and schedule risk analysis.
- Proactive issue management.
- At the agency level, the focus throughout the project lifecycle is on maintaining a clear, transparent picture of project and portfolio health, and diffusing the potential impact of strategic risks.

Agency culture

Cost estimation and risk analysis are challenging and complex to verify. Different analysts can quantify the assumptions which underpin cost estimates and risk exposure in different (and equally correct) ways. Decisions may be less clear-cut than desirable. This enables changes to cost estimates and risk provisions late in the process without understanding full impacts, to achieve competing objectives, leading to either overstated or understated estimates.

Agency culture is critical to overcoming these factors. It is incumbent on the agency to foster a culture of robust cost estimation, managing projects to budget, continuously seeking opportunities to reduce costs, encouraging active risk and value management and countering late changes to achieve competing objectives.

Agencies should consider the following measures to drive a positive cost control culture:

- Assessing the performance of executives based on effective management of risk exposure, contingencies and any strategic reserve at the agency level.
- Assessing the performance of project leaders based on accurate cost estimation, effective value management and risk mitigation, particularly in the early phases of projects, and delivering to a minimum cost in the delivery phase.
- Designing oversight frameworks to ensure accountability for poor cost estimation or control.

- Reporting risk exposure in delivery as a range, with incentives and performance assessment for project leadership tied to the lower end of the range (for example P50-P70 for Tier 2 projects and P50-P90 for HPHR projects).
- Actively encouraging accuracy and openness in estimating – this can be enhanced by arbitrating between stakeholders with opposing agendas (i.e. where one party seeks a higher estimate and one lower, designing the process so that they must reach agreement).
- Creating a process which encourages project team knowledge, and active management, of risks – requiring quantitative risk analysis during early phases of the project to drive this behaviour.
- Actively and systematically managing opportunities to mitigate known risks and to reduce the project costs.
- Implement a structured change management process that outlines clear steps for assessing, approving, and implementing changes. This includes defining roles and responsibilities for stakeholders involved in the change process, as well as streamlining approval procedures to minimise delays.
- Incorporate impact assessments for all proposed changes, evaluating their potential effects on costs, timelines, quality, and stakeholder expectations. This practice ensures that every change is carefully considered before implementation, aligning with cost control objectives.
- Continuous improvement in risk management and estimating (including development of data sets to support baselining of projects).
- Stringent definition of scope as early as possible (requiring to appropriately define project scope at each stage).
- Collaboration between project team members on cost, scope and risk (for example, open communication between designers and cost estimators).

Infrastructure NSW is available to provide support to agencies through guidance and examples of best practice procedures.

Transparency and accountability

Transparency is essential to provide government with the confidence that the cost of delivering the infrastructure program is being diligently controlled. It minimises potential adverse impacts on the NSW Government's fiscal position when external shocks occur and ensures accountability for the outcomes delivered. The provisions of this Framework, in particular those which relate to reporting to Cabinet in Section 4, are designed to increase transparency and accountability of the delivery agency for all aspects of infrastructure investment.

Agency executives must ensure that any reporting to Cabinet is accurate, backed by robust analysis and includes identification of key risks and the maximum exposure for the project.

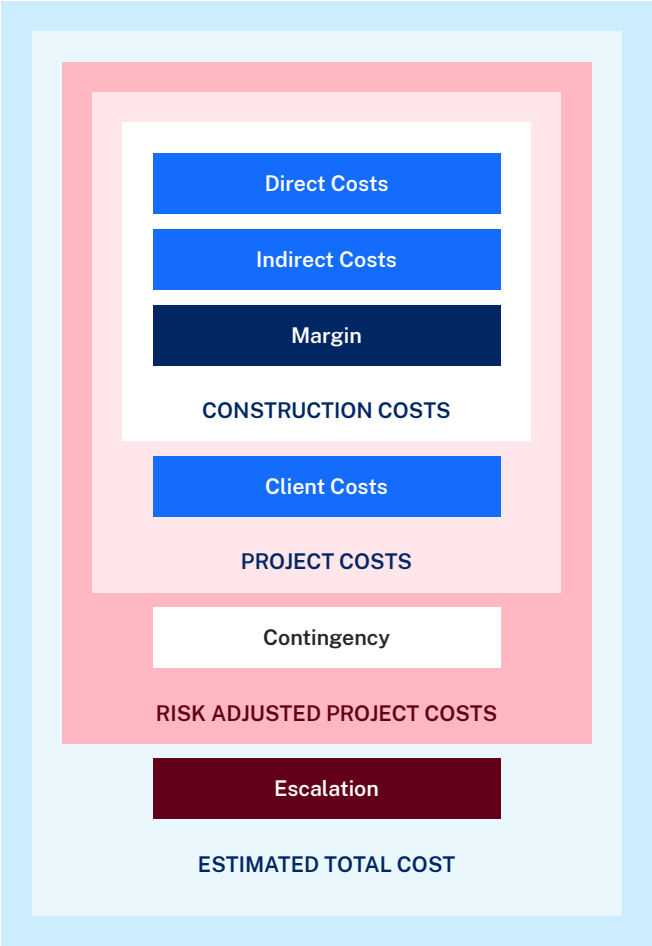
Infrastructure NSW will assure compliance to the Cost Control Framework at the portfolio level through Portfolio Reviews under the IIAF and at the project level through project reviews under the IIAF. The workbooks for portfolio reviews and gateway reviews have been updated to reflect the measures in this Framework.

Approach to Cost Control

Structure of Cost Estimates

Cost estimates are to be structured to reflect the various forecast costs and risks to the project in a consistent and reliable manner. The general structure of cost estimates is shown to the right noting that, as the project progresses from Gate 1 to Gate 4, cost estimates will be refined according to the development of project specifications and as project procurement proceeds.

This structure is consistent with Commonwealth requirements in order to avoid the need for multiple cost plans to be produced for Commonwealth or jointly funded projects. Agencies will be required to define and provide further detail on the structure in accordance with agency-specific issues (for example, what is included in direct costs, indirect costs and client costs).



Project costs incorporate the following:

- **Construction costs** – The estimated cost of construction to deliver the project without consideration of escalation and risk. This element includes the following:
  - **Direct costs** – All contractor's costs directly attributable to a project element including plant, equipment, materials and labour.
  - **Indirect costs** – All contractor's costs not directly attributable to a project element, for example, preliminaries, overheads, cost of bank guarantees, insurances etc.
  - **Contractor's margin** – Which usually includes some level of risk margin which the contractor assesses as being necessary to return a profit from the project.
- **Client costs** – Costs for delivery of the project that are expected to be borne by the agency, including project development, planning and approval costs, the cost of the project team, consultants, travel costs, biodiversity offsets, client-supplied equipment, land acquisition, licences etc.

The risk adjusted project costs further include contingency. Contingencies are designed to protect the portfolio and project budget against known risks that have been identified, or should have been identified, in the project risk register. The total contingency for a project should not fully cover the cost of all of the risks should they occur but should be a weighted assessment of the total risk exposure including the probability of the risks occurring and the significance of their impact.

Agencies must ensure that contingency is provisioned at P90 for Tier 1 HPHR projects and P50 for Tier 2 projects, consistent with the budget process. Where a project is re-tiered to Tier 1 prior to contract award (Gate 4), the agency, in consultation with NSW Treasury and Infrastructure NSW, will recommend to Cabinet in the next gateway submission whether the project should be funded to P50 or P90.

Where a project is re-tiered to Tier 1 during delivery, the project will retain, and will be reported at, its original funding level.

The Estimated Total Cost also includes escalation. Escalation is in effect a provision intended to protect the project budget against the risk of changes in prices or costs during the planning and delivery of the project. That is, between when the cost estimate is completed and the date on which the cost is incurred.

Preparing Robust Cost Estimates

Preparation of robust estimates is fundamental to successful cost control for infrastructure projects. Noting the significant differences between agencies in terms of the specific cost areas, risk profile and preferred delivery strategies for their projects, agencies must develop detailed guidance on the preparation of cost plans which is appropriate to the particulars of their capital portfolio. Delivery agencies must clearly set out requirements for preparing cost estimates in their internal policies. The following measures represent minimum requirements which must be addressed in agency cost estimation policies.

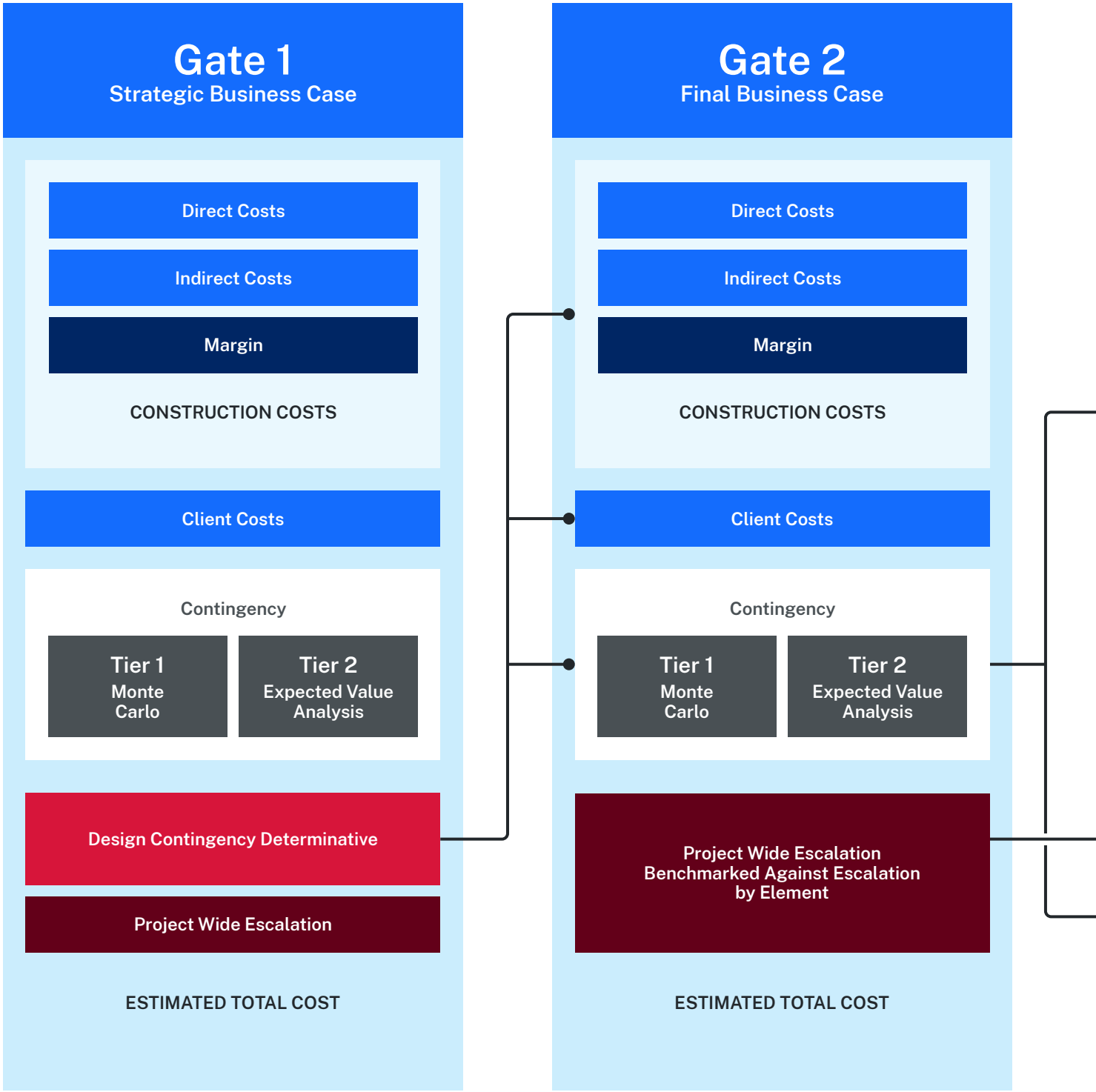
- **Governance:**
  - there must be clear responsibility for reviewing and approving cost estimates, including risk provisions
  - design, risk and cost estimation teams must work together to prepare cost and risk estimates to ensure completeness and to combat double-counting.
- **Staff capability:**
  - capability frameworks should be developed for staff involved in cost estimating
  - a professional development plan for cost estimating staff must be developed
  - a 'community of practice' or similar forum should be provided for cost estimating staff and cost management staff to allow feedback and sharing of lessons learnt.
- **Information:**
  - cost databases must be developed and maintained by the agency to inform cost estimates for the types of projects the agency ordinarily delivers
  - the agency must attain reliable predictions for key labour and material markets to inform the cost estimates for the projects that the agency ordinarily delivers
  - lessons learnt from similar projects must be identified and incorporated into the design, risk register and cost plan.
- **Validation:**
  - there must be set milestones where site investigations and other studies are identified to quantify or resolve identified risks and assumptions
  - where appropriate, contractors should be engaged sufficiently early to assist with scope development and value management, as well as risk identification, quantification and mitigation
  - cost estimates must be peer reviewed.
- **Time based:**
  - cost estimates must be integrated with the delivery program
  - the risk analysis for project cost plans must include a schedule quantitative risk analysis.

Where agencies cannot implement any of these measures, or where they are inappropriate to the cost or risk profile of their portfolio, agencies should seek assistance and guidance from NSW Treasury or Infrastructure NSW.

Key points to note on cost estimates through the project lifecycle include:

- **Gate 0** – Gate 0 should be undertaken before any significant project development has occurred. Consequently, it should be based on benchmarking of similar projects, and should be expressed as a range. There is no requirement for a breakdown of the Estimated Total Cost.
- **Gate 1** – The Estimated Total Cost of the project includes construction costs and client costs (see Section 6 – Estimation of Project Costs), a probabilistic (ideally) or determinative delivery contingency, a determinative design contingency (see Section 7 – Contingencies) and a project wide escalation (see Section 8 – Escalation).
- **Gate 2** – The determinative design contingency should be retired by Gate 2, placing the onus on the project teams to define the scope and identify and quantify the risks to be included in the contingency. It would be expected that both the construction costs and probabilistic contingency would increase through this process. The project wide escalation should also be benchmarked by calculating escalation by element where possible.
- **Gate 3** – The draft contract should provide a risk allocation agreed to by all parties and which is reflected in the contingency. The contingency should be split by reference to whether the draft contract transfers the risk, or it is retained by the agency, such that the risk adjusted construction costs include the risks to be transferred to the contractor. This figure is the agency's best assessment of the likely contract sum. Escalation should be calculated by element. Note that escalation should be applied to the risk adjusted construction costs, the client costs and contingency. For some collaborative contracts, escalation risk for the direct costs may be retained by the agency, in which case it should be addressed in the retained contingency.
- **Gate 4** – The overall construction costs are locked in and the retained risk should be updated based on the outcomes of negotiations. The approved contract budget should reflect the contract price at contract award and the contingency should include provision for any retained risks.

Delivery. The structure of the cost plan will remain the same as at Gate 4 through delivery. Reporting must delineate spent funds from expected future expenditure. The Forecast Estimated total cost must be updated to reflect the outcomes of quantitative risk analysis.


Gate 1
Strategic Business Case
Direct Costs
Indirect Costs
Margin
CONSTRUCTION COSTS
Client Costs
Contingency
Tier 1
Monte
Carlo
Tier 2
Expected Value
Analysis
Design Contingency Determinative
Project Wide Escalation
ESTIMATED TOTAL COST
Gate 2
Final Business Case
Direct Costs
Indirect Costs
Margin
CONSTRUCTION COSTS
Client Costs
Contingency
Tier 1
Monte
Carlo
Tier 2
Expected Value
Analysis
Project Wide Escalation
Benchmarked Against Escalation
by Element
ESTIMATED TOTAL COST


Gate 3
Pre-Tender Estimate
Direct Costs
Indirect Costs
Margin
Likely Transferred Risk
Escalation Applied to All Elements Based on Assumed Rates / Schedule
RISK ADJUSTED CONSTRUCTION COSTS
Client Costs
Contingency (Likely Retained Risk)
ESTIMATED TOTAL COST
Gate 4
Contract Award
Direct Costs
Indirect Costs
Margin
As Agreed Risk Provision***
As Agreed Escalation
Provisional Sums
APPROVED CONTRACT BUDGET
Client Costs
Contingency (Retained Risk)
ESTIMATED TOTAL COST

Risk Provisions

The Framework makes provision for managing risk events through 3 risk provisions:

1. **Contingency**, which captures the expected value of risks identified in the risk register ("known risks", also referred to as "known unknown risks") and is regularly updated throughout the project lifecycle.
2. **Escalation**, which captures the expected increase in the cost of delivery, from the date of the cost estimate to the point when the cost is realised, due to inflationary pressures in the economy.
3. **Strategic Reserve**, which is designed to protect against unforeseen cost overruns across a capital portfolio, but may only be maintained with the approval of the Expenditure Review Committee.

Contingency

Contingency is a core element of total project cost and is essential to manage identified project risks. Provisions in this Framework prevent its utilisation for costs which are, or should be, funded separately. The contingency is not to be used for scope changes or additional scope (unless consistent with the approved Business Case or where scope changes are required to respond to or otherwise avoid a risk event), operating costs or funding of other projects.

Estimation of contingency

Probabilistic risk assessment is deemed 'best practice' for the estimation of the contingency as it directly aligns the quantum of the contingency to the identified risks in the risk register and it provides a strong incentive for project teams to identify and analyse risks early in the project lifecycle. This in turns drives appropriate investigations and risk mitigation focused on the highest impact risks.

The minimum requirement for determining contingencies at each stage of the project lifecycle should have regard to the level of information available to project teams given the state of scope and design development, investigations and engagement with stakeholders and industry. This should be balanced with the principle of encouraging project teams to develop a detailed understanding of the risk profile of the project.

The scope of the risk assessment should be tailored to the complexity, cost and risk profile of the project.

Agencies are not required to provision for force majeure events and options to fund potential impacts will be considered in the unlikely realisation of these risks. The cost plan report must explicitly state that these risks are not allowed for.

Some probabilistic risk assessment methodologies are resource, and time, intensive and may not be justified for Tier 3 projects and below. Agencies may determine the appropriate method determining the contingency for Tier 3 and below projects. The use of generic risk percentages is to be avoided wherever practicable. Risk percentages must be determined by appropriate benchmarking against similar projects or projects in other infrastructure sectors with similar risk profiles.

The preferred approach for the estimation of the contingencies for any projects within the scope of the Framework is probabilistic risk impact assessment. It can be undertaken through either or both of the following 2 processes:

1. **Monte Carlo analysis**. This is the minimum requirement for all HPHR projects and is encouraged to be conducted, as best practice, for Tier 2 and below projects, particularly where the project has a unique risk profile or features major risks that do not have a deterministic (single point) outcome.
2. **Expected value analysis**. This approach may be utilised for Tier 2 projects or below, particularly where there are many recent and similar projects to benchmark against.

Agencies may employ both approaches as a further check on the robustness of the contingency.

Within each process, a deterministic design allowance may be required early in the design process to account for the fact that many risks will not have been identified or quantified. Agencies should use benchmarks to determine the quantum of the design allowance. This allowance must be retired by the Investment Decision, placing the onus on the project teams to proactively identify and quantify risks to the project by this stage.

Benchmarking the outcome of the cost estimate and probabilistic assessment against other similar projects in the portfolio, or projects with similar risks, is also required for HPHR and Tier 2 projects at both Preliminary Business Case (PBC) and Full Business Case (FBC) stages.

Cost reports are to detail the basis of the probabilistic modelling and the benchmarking that was used to produce and confirm the cost estimates.

Underlying challenges for risk management and procurement are magnified for HPHR projects, in particular, market capability and capacity in large, complex infrastructure projects. Infrastructure NSW's reviews demonstrate that megaprojects are approximately 1.5 times more likely to be at risk when compared with projects with an Estimated Total Cost less than $1 billion. The magnified risks of HPHR projects necessitate a more conservative approach to apportioning of the contingency. HPHR projects are to be funded at a higher confidence level (to P90 level) unless directed otherwise by Cabinet.

Deterministic risk impact assessment is available for Tier 3 or below projects, at early stages of the project development where many risks are unknown or as an additional level of surety where probabilistic risk impact assessment was conducted. It should include benchmarking against projects with similar characteristics and/or risk profile.

Oversight of the contingency

The provisions for oversight of the contingency are designed to allow projects to respond quickly to risk events, whilst holding additional contingency at the senior executive level. The Framework ensures visibility of risk management at the senior executive level and the ability to redeploy some contingency across the portfolio as required and with Cabinet approval.

Agencies are to establish formal guidelines in their cost control processes for the use of the contingencies that satisfy the requirements of the Framework and are tailored to the agency's governance framework. These guidelines ensure contingencies are only used for permitted purposes and require the use of contingency funds to be documented in formal project records and periodically reported to Cabinet through IIAF processes.

To enable projects to respond quickly to realised risks, the Project Director will have the delegation to approve drawdowns of up to the P50 Contingency subject to constraints on the size of each drawdown, the rate of drawdown over time, and a total overall drawdown. The agency cost control policies must detail the policy for these delegations.

For HPHR infrastructure projects, the delta P90-P50 contingency is to be managed externally to the project at an agency senior executive level, with the responsible position or committee to be specified in the agency's cost control processes. This provision facilitates the management of the greater risk profile of these projects across the portfolio. Additional funding will be sought through Cabinet for known risks with actual impacts above provisions at the time of the impact, and on a project-by-project basis.

Agencies may specify further measures, such as the apportionment of delegated control of contingency between the client and the delivery agency, in the agency's cost control processes.

Central oversight of the contingency and cash flows

Treasury has developed the Contingency Management – Special Access Protocols (CMSAP) policy measure to improve central government's cost control oversight of designated HPHR projects. Additionally, NSW Treasury is establishing requirements for project-specific cashflow forecasting for these projects including with respect to contingency. At the time of the approval of this Framework, this policy was in pilot phase. The Framework will be adapted consistent with the policies on completion of the pilot phase.

Management of the contingency

The contingency is to be applied towards the cost impact of any known risks including the cost of amendments to the project scope required to address the impact of the risk. The quantum of the contingency funds that can be used should address the actual cost impact associated with a risk occurrence and not be limited to the contribution that risk made to the total contingency. Other permitted uses include errors and omissions and, subject to consistency with the approved Business Case, delivery of approved, but unfunded, scope items following delivery of the agreed scope.

The contingency should not be reallocated simply because a risk has been resolved. The adequacy of the contingency is to be confirmed at 6 monthly intervals for HPHR and Tier 2 projects through quantitative reassessment of the risk exposure. Reassessment should also be undertaken at Gate 3 and Gate 4 particularly focused on the risk allocation in the contract and any change in residual

risk held by the agency. Opportunities to reduce the contingency should be systematically managed as part of the project development process.

Opportunities to reduce the risk exposure should be managed with the same systematic approach as the development of the risk register itself. The agency cost control processes must detail how opportunities should be quantified, analysed and incorporated into the modelling of the contingency.[3]

The agency may request Cabinet approval[4] to reallocate funds from a HPHR project where:

- modelling shows that the risk exposure of a project is reduced so that the remaining contingency is greater than that required to complete the project
- there are excess funds remaining on completion of the project
- the agency can demonstrate that the reallocation of funds will better align the agency's portfolio with government priorities.

Funds must not be reallocated from HPHR projects without Cabinet approval.

Escalation

All construction costs should be calculated as being effective at a specific date or month/year, i.e. the estimate base date. Escalation is then calculated from the estimate base date.

Agencies must detail the process for calculating the escalation at each stage of the project lifecycle in the agency's cost control processes, including key source assumptions (e.g. Treasury guidance, ABS indices and/or cost planner modelling).

Agencies must conduct sensitivity analysis on the timeframes and rates used to estimate escalation.

Agencies must also articulate in their cost control processes the fidelity of escalation calculations with regards to the stage of cost estimation that the project is at and the sensitivity testing and benchmarking which is to be conducted on escalation figures.

It is expected that agencies adopt a considered approach to escalation and take into account the location of the project (metropolitan or regional) and the extent to which projects rely on specialist technical staff, scarce materials or specialist plant and equipment to increase provisions for projects at higher risk of escalation.

It should be noted that under some contract types the escalation risk is wholly or partially transferred to the contractor at Contract Award, at which point the contractor will have incorporated its own calculations of escalation risk into its contract price. This is not necessarily the case for some collaborative forms of contract and agencies retain the risk of escalation on Client Costs. In either case, minimising the time between Investment Decision and Contract Award and then delivery, minimises the escalation risk.

Strategic Reserve

A Strategic Reserve is a contingency fund held centrally in an agency which is available to address risk events on any project that are not able to be managed through the project's contingency. It allows agencies with large and complex capital portfolios to spread risk across that portfolio and reduce the risk to the state's budget.

Agencies may request approval from Cabinet to maintain a Strategic Reserve. An IIAF Portfolio Review must be completed by Infrastructure NSW prior to requesting approval to maintain a Strategic Reserve. The request must detail the agency's arrangements for the Strategic Reserve, including:

- governance arrangements
- proposed uses of the Strategic Reserve, including any restrictions on its use
- any proposed splitting of the Strategic Reserve in order to aid in its management
- any additional reporting arrangements to inform Cabinet.

The Strategic Reserve may only be utilised in accordance with the uses specified in the Cabinet approval.

3 In practice, this outcome is difficult to achieve if the project is not utilising a modelling method with multiple risk outcomes

4 The request for Cabinet approval to reallocate funds is expected to be included in the agency's report back, or, where the agency is not required to provide report backs, through the appropriate Cabinet processes

Where agencies are approved to maintain a Strategic Reserve, it must be internally funded through savings in the agency's capital program.

Where they are not already required to under this Framework, any agency approved to maintain a Strategic Reserve will be required to provide Capital Portfolio Reports Back to Cabinet as detailed in Section 4.

All movement of funds into or out of the Strategic Reserve must be requested in the report back and approved by Cabinet prior to reallocation.

Agencies may nominate to split the Strategic Reserve so that programs within the portfolio have their own separately managed Strategic Reserve Fund.

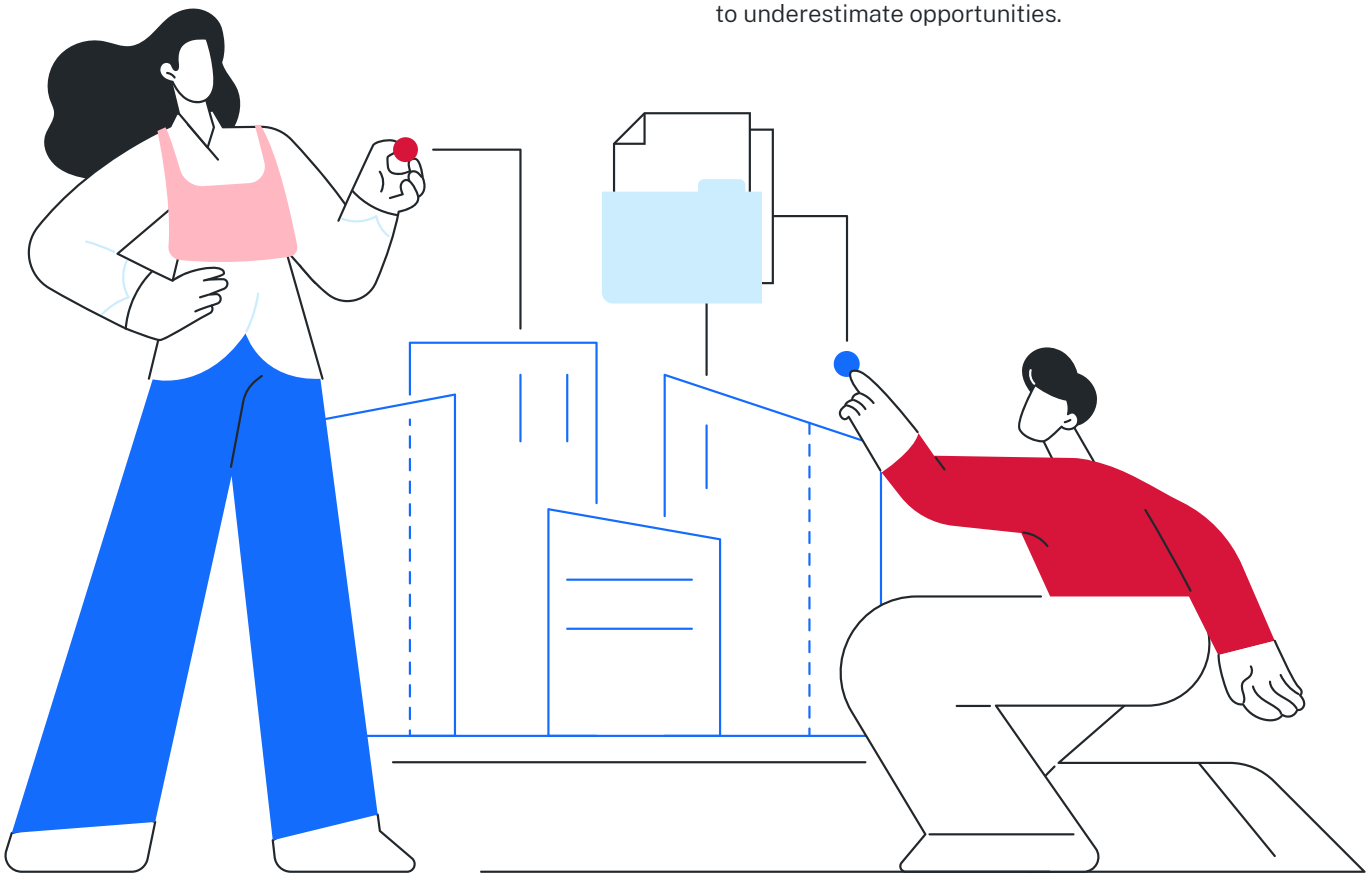
The Strategic Reserve is not included in the ETC for any project and should not be included in Benefit Cost Ratio Analysis. The Strategic Reserve will not be considered by Infrastructure NSW when assessing the performance of projects under the IIAF.

Opportunity Management

The delivery of maximum benefits to the community and diligent control of costs requires a systematic approach to opportunity management, applying the same rigour as that applied to risk management. Opportunity management requires the project team, sponsor, contractor and other stakeholders to work together collaboratively, and often to make concessions in furtherance of the overall outcomes of the project. It is therefore important that the Framework incentivises the enthusiastic participation of all stakeholders.

Opportunities are to be identified through deliberate activities involving a wide range of project stakeholders, particularly during early phases of the project lifecycle, recorded in an opportunity register and quantitatively assessed in terms of probability of success and potential benefit. The status and progress of opportunities are to be reported on as part of the ordinary reporting framework for the project.

Opportunities will not be accounted for in the project cost plan due to the potential to deplete the contingency if not realised and to avoid incentivising project teams to underestimate opportunities.



Transparency of cost to Cabinet

Accurate reporting of project cost to Cabinet facilitates better decision making and allocation of resources to deliver on the government's priorities. It is also fundamental to transparency and accountability.

Project reporting is well established. It takes place at both set milestones such as Gates 1, 2, 3 and 4, as well as at regular intervals (monthly for HPHR projects and quarterly for Tier 2 and 3 projects). The requirements for these reporting frameworks is set out under policies such as:

- Infrastructure Investor Assurance Framework (IIAF)
- TPG 24-35 Budget Control Framework
- CSMAP.

The principles in this Framework should be read in conjunction with these policies.

Portfolio reporting to Cabinet is less well established but is equally important as it helps to inform Cabinet of developing risks which may have a moderate impact at the project level, but a significant cumulative impact on the budget at the portfolio level.

Milestone reporting of costs

At any one of Gates 1, 2, 3 or 4 where Cabinet approval is required, the following project information must be clearly identified in the Cabinet Submission:

- **Estimated total cost:**
  - The nominal (i.e. escalated) Estimated Total Cost, expressed as a range (ordinarily P50 to P90).
  - The accuracy (i.e. P50 or P90) at which the budget is being requested.
  - Any assumptions that may have a substantial impact on the Estimated Total Cost.
- **Project contingency:**
  - Identified as both an absolute number and as a percentage of the Estimated Total Cost.
  - Disaggregated into the components which cover key areas such as:
    - property acquisition risks
    - external risks (e.g. biodiversity offset costs, cost of compliance with planning approvals etc)
    - construction risks
    - commissioning risks.
- **Risks:**
  - A description of the top 5-10 delivery risks (which may include procurement, integration, interface and contractual risks).
  - The expected and reasonable worst-case exposure for each risk.
  - Any identified but unquantified risks.
- **Escalation:**
  - Allowance for escalation.
  - Timeframes for major milestones assumed in calculation of escalation.
  - Rates assumed for escalation.
  - The outcomes of the sensitivity analysis undertaken (i.e. the impact of changes in rates or timeframes).
- **Assumptions:**
  - A description of each material assumption in the cost plan.
  - The circumstances in which the assumption would be wrong.
  - The potential impact if the assumption were to be wrong.
  - The timeframe in which the assumption should be resolved.
  - The outcomes of any sensitivity analysis undertaken, whether quantitative or qualitative.

- **Impact of deferred decision:**
  - For each of a deferral for 6 months, 1 year, 2 years and 5 years.
  - Any increased risks, including risks to ongoing service delivery or existing assets.
  - Any increase to the Estimated Total Cost due to escalation or lost economies from concurrent delivery with other projects.
  - Any impacts on other projects or initiatives.
  - Where the submission relates to a single contract package rather than the project in its entirety, the above

Regular reporting on projects

Regular reporting on the performance of projects is well established. The following are additional requirements to improve the reporting of cost for HPHR and Tier 2 projects under the IIAF:

- ¬ The Estimated Total Cost must be reported at the same probability level as the project is funded. For example, the Estimated Total Cost for a HPHR project must be reported at P90, while a Tier 2 project will ordinarily be reported at P50 (unless it is funded at a higher confidence level, in which case the reported ETC should be consistent with the approved confidence level).
- ¬ Contingency Spent is to include only those funds that have been approved to be drawn down from contingency for the resolution of a risk. For example, those funds that have been approved to be transferred on award of a contract or approved to be applied to cover the cost of a contract variation.

– Contingency Committed is the amount that modelling shows is the risk-adjusted sum that is required to cover the exposure to costs of the remaining identified risks. It is to be reported at the same probability level as the project is funded. For example, P90 for a Tier 1 project.

- During development the commentary should include:
  - any outstanding material assumptions, including:
    - ¬ a description of the assumption
    - ¬ the potential impact of the assumption if it turns out to be incorrect
    - ¬ the timeframe in which the assumption is expected to be resolved.
  - a description of any identified but unquantified risks
  - any major design decisions to be made in the current phase including:
    - ¬ the options being considered
    - ¬ the potential cost impact of each option
    - ¬ the factors that may drive that option to be selected.
- During delivery, the commentary should include:
  - the date of the latest Quantitative Risk Analysis
  - the top 5 risks which have the greatest impact on the Estimated Total Cost, including:
    - ¬ a description of the risk
    - ¬ the most likely and worst case impact of the risk in terms of cost
    - ¬ mitigations in place or planned
    - ¬ when the risk is expected to be resolved (or if it is ongoing throughout delivery).
  - any identified but unquantified risks
  - any viable opportunities being pursued, including:
    - ¬ a description of the opportunity
    - ¬ the potential benefit if it is realised
    - ¬ what actions need to be taken to realise the opportunity
    - ¬ what might prevent the opportunity.

Portfolio level reporting

Portfolio level reporting to Cabinet is essential to identify any cumulative or emerging risks to the state budget position from the infrastructure portfolio. In many cases, these risks may not be evident when reviewing reporting project by project. The provisions below will provide a clear picture of the health of the agency's portfolio and the effectiveness of cost control efforts.

The Treasurer or Secretary of Treasury may direct that an agency provides Capital Portfolio Report Backs in accordance with this framework.

Capital Portfolio Report Backs are to be submitted to Cabinet in April and October of each year, with updates on the financial position of the agency's capital portfolio and the risks to delivering on the government's requirements.

The report backs are to include, as a minimum:

- Overall capital investment portfolio position, including:
  - total forecast value over the forward estimates
  - total forecast value over the next ten years from the report
  - the proportion of the capital investment portfolio which is contractually committed
  - the proportion of the capital investment portfolio which is not contractually committed, but is a public government commitment
  - under or over-spend against forecast capital expenditure over the previous 12 months
  - forecast capital expenditure for the next 12 months.
- Capital funding risks, including:
  - Major risks which may have a significant impact on the agency's portfolio position, including:
    - a description of the risk
    - an assessment of how severe the risk is and how likely it is to be realised
    - any mitigations in place or planned, including any action required by Cabinet or other agencies
    - the expected impact of the risk in terms of cost, including the most likely impact and the worst case impact.
  - The following data on funding risks for Tier 1 and 2 projects:
- Proportion of projects that are reported as RED (where major unmitigated risks have been identified and require further action) and those that are reported AMBER (where major risks have been identified but appropriate mitigating actions are being taken) in IIAF reporting.
- The aggregate Forecast Estimated Total Cost of the projects that are reported as RED and of those that are reported as AMBER.
- Breakdown of IIAF review outcomes (low, stressed, medium or high) over the preceding 12 months.
- Total state funding risk at P90 (i.e. aggregate forecast total costs over and above current contingency provisions).
- Current remaining aggregate contingency as a percentage of total forecast cost to complete.
- Where agencies are utilising a Strategic Reserve:
  - the current balance of the Strategic Reserve
  - the individual and aggregate costs of provisioned uses for known risks
  - the forecast future balance of the Strategic Reserve accounting for aggregate provisioned risks
  - any proposed transfers out of the Strategic Reserve
  - any proposed transfers into the Strategic Reserve
  - the predicted future cashflow of the Strategic Reserve over the forward estimates.
- An appendix with the predicted cashflow over the next 10 years for each of the agency's approved Tier 1 projects.

Notes

1. Agencies may split funding risks between state and federal funding risks where appropriate.
2. Agencies may provide further information as required to provide context, highlight risks, or justify proposed actions.
3. Agencies may provide further breakdowns as appropriate, for example, by Tier, for particular programs or by category of projects.
4. Agencies must ensure that contingency is provisioned at P90 for Tier 1 HPHR projects and P50 for Tier 2 projects, unless Cabinet has approved a different funding level, in which case the contingency must be provisioned at that level.

Appendix A – Cost Control Framework Checklists

The following checklists are designed to be used by agencies to prepare submissions to Cabinet at key milestones in the project lifecycle and when preparing the biannual Capital Portfolio Report Back. There is a stand-alone checklist for each milestone to ensure all requirements are conveniently consolidated in one place.

The checklists consolidate the requirements set out in the Cost Control Framework and are designed to be used in conjunction with an understanding of the framework as a final check. They are not to be used as an alternative to reading the framework. The requirements in the framework take precedence if there is any incongruence.

Requesting Cabinet Approval at Gate 1

When calculating the Estimated Total Cost of the project at Gate 1 (Preliminary/Strategic Business Case), include:	
• construction costs and client costs (see Section 6 – Estimation of Project Costs)	Yes / No
• a probabilistic contingency and a determinative design contingency (see Section 7 – Contingencies)	Yes / No
• a project wide escalation (see Section 8 – Escalation).	Yes / No

In reporting Estimated Total Cost throughout the lifecycle of the project, include:	
• The nominal (i.e. escalated) Estimated Total Cost, expressed as a range (ordinarily P50 to P90).	Yes / No
• The accuracy (i.e. P50 or P90) at which the budget is being requested.	Yes / No
• Any assumptions that may have a substantial impact on the Estimated Total Cost.	Yes / No

Benchmarking the outcome of the cost estimate and probabilistic assessment against other similar projects in the portfolio, or projects with similar risks, is required for HPHR and Tier 2 projects at both Preliminary/Strategic Business Case (PBC/SBC) and Full Business Case (FBC). **When preparing robust cost estimates ensure that the below minimum requirements are met:**	
• **Governance**	
– Clearly state responsibilities for reviewing and approving cost estimates, including risk provisions.	Yes / No
– To ensure completeness of cost and risk estimates and to combat double counting, ensure design, risk and cost estimation teams work together.	Yes / No
• **Staff capability:**	
– Develop capability frameworks for staff involved in cost estimating.	Yes / No
– Develop a professional development plan for cost estimating staff.	Yes / No
– Provide a 'community of practice' or similar forum for cost estimating staff and cost management staff to allow feedback and sharing of lessons learnt.	Yes / No
• **When collating information:**	
– Develop and maintain an agency level cost database to inform cost estimates for the types of projects the agency ordinarily delivers.	Yes / No
– Attain reliable predictions for key labour and material markets to inform the cost estimates for the projects that the agency ordinarily delivers.	Yes / No
– Identify and incorporate lessons learnt from similar projects into the design, risk register and cost plan.	Yes / No

• **When validating cost estimates:**	
– Set milestones where site investigations and other studies are identified to quantify or resolve identified risks and assumptions.	Yes / No
– Where appropriate, engage contractors sufficiently early to assist with scope development and value management, as well as risk identification, quantification and mitigation.	Yes / No
– Ensure that cost estimates are peer reviewed.	Yes / No
• **When considering time-based cost estimates:**	
– Integrate the cost estimates with the delivery program.	Yes / No
– Include a schedule quantitative risk analysis as part of the risk analysis for project cost plans.	Yes / No

Ensure that the project contingency is:	
• Identified as both an absolute number and as a percentage of the Estimated Total Cost	Yes / No
• Disaggregated into the components which cover key areas such as:	
– property acquisition risks	Yes / No
– external risks (e.g. biodiversity offset costs, cost of compliance with planning approvals etc)	Yes / No
– construction risks	Yes / No
– commissioning risks.	Yes / No

Estimate contingency using one of two probabilistic risk impact assessments *(Note: Agencies may employ both approaches as a further check on the robustness of the contingency.)*	
Monte Carlo analysis. *The minimum requirement for all HPHR projects and is encouraged to be conducted, as best practice, for Tier 2 and below projects, particularly where the project has a unique risk profile or features major risks that do not have a deterministic (single point) outcome.*	Yes / No
Expected value analysis. *To be utilised for Tier 2 projects or below, especially when there are recent and similar projects to benchmark against.*	Yes / No
When estimating using one of the 2 assessments above:	
• Use benchmarks to determine the quantum of the design allowance.	Yes / No
– Ensure to retire this design allowance by the Investment Decision, placing the onus on the project teams to proactively identify and quantify risks to the project by this stage.	Yes / No
– Benchmark the outcome of the cost estimate and probabilistic assessment against other similar projects in the portfolio for HPHR and Tier 2 projects at both Preliminary Business Case (PBC) and Full Business Case (FBC) stages.	Yes / No
– Detail the basis of the probabilistic modelling and the benchmarking that was used to produce and confirm the cost estimates in the cost report.	Yes / No

In reporting risks, provide:	
• a description of the top 5-10 delivery risks (which may include procurement, integration, interface and contractual risks)	Yes / No
• the expected and reasonable worst-case exposure for each risk	Yes / No
• any identified but unquantified risks.	Yes / No

In reporting escalation, report the:	
• allowance for escalation	Yes / No
• timeframes for major milestones assumed in calculation of escalation	Yes / No
• rates assumed for escalation	Yes / No
• the outcomes of the sensitivity analysis undertaken (i.e. the impact of changes in rates or timeframes).	Yes / No

In reporting assumptions, provide:	
• a description of each assumption in the cost plan	Yes / No
• the circumstances in which the assumption would be wrong	Yes / No
• the potential impact if the assumption were to be wrong	Yes / No
• the timeframe in which the assumption should be resolved	Yes / No
• the outcomes of any sensitivity analysis undertaken, whether quantitative or qualitative.	Yes / No

In reporting the impact of a deferred decision, provide:	
• the cost impact for each of a deferral for 6 months, 1 year, 2 years and 5 years	Yes / No
• any increased risks, including risks to ongoing service delivery or existing assets	Yes / No
• any increase to the Estimated Total Cost due to escalation or lost economies from concurrent delivery with other projects	Yes / No
• any impacts on other projects or initiatives.	Yes / No

Requesting Cabinet Approval at Gate 2

When calculating cost estimates at Gate 2 (Final Business Case):	
• Retire the determinative design contingency (placing the onus on the project teams to define the scope and identify and quantify the risks to be included in the contingency).	Yes / No
• Once retired, both construction costs and probabilistic contingency should increase as a result.	Yes / No
• Benchmark project wide escalation. Do this by calculating escalation by element where possible. Provision for environmental disasters should be considered based on the location of the project.	Yes / No

In reporting Estimated total cost, include:	
• the nominal (i.e. escalated) Estimated Total Cost, expressed as a range (ordinarily P50 to P90)	Yes / No
• the accuracy (i.e. P50 or P90) at which the budget is being requested	Yes / No
• any assumptions that may have a substantial impact on the Estimated Total Cost.	Yes / No
	Yes / No

Benchmark the outcome of the cost estimate and probabilistic assessment against other similar projects in the portfolio, or projects with similar risks, is required for HPHR and Tier 2 projects at both Preliminary/Strategic Business Case (PBC/SBC) and Full Business Case (FBC). **When preparing robust cost estimates ensure that the below minimum requirements are met:**	
• **Governance:**	
– Clearly state responsibilities for reviewing and approving cost estimates, including risk provisions.	Yes / No
– To ensure completeness of cost and risk estimates and to combat double counting, ensure design, risk and cost estimation teams work together.	Yes / No
• **Staff capability:**	
– Develop capability frameworks for staff involved in cost estimating.	Yes / No
– Develop a professional development plan for cost estimating staff.	Yes / No
– Provide a 'community of practice' or similar forum for cost estimating staff and cost management staff to allow feedback and sharing of lessons learnt.	Yes / No
• **When collating information:**	
– Develop and maintain an agency level cost database to inform cost estimates for the types of projects the agency ordinarily delivers.	Yes / No
– Attain reliable predictions for key labour and material markets to inform the cost estimates for the projects that the agency ordinarily delivers.	Yes / No
– Identify and incorporate lessons learnt from similar projects into the design, risk register and cost plan.	Yes / No

• **When validating cost estimates:**	
– Set milestones where site investigations and other studies are identified to quantify or resolve identified risks and assumptions.	Yes / No
– Where appropriate, engage contractors sufficiently early to assist with scope development and value management, as well as risk identification, quantification and mitigation.	Yes / No
– Ensure that cost estimates are peer reviewed.	Yes / No
• **When considering time-based cost estimates:**	
– Integrate the cost estimates with the delivery program.	Yes / No
– Include a schedule quantitative risk analysis as part of the risk analysis for project cost plans.	Yes / No

Ensure that the project contingency is:	
• Identify the contingency as both an absolute number and as a percentage of the Estimated Total Cost.	Yes / No
• Disaggregate the contingency into the components which cover key areas such as:	
– Property acquisition risks	Yes / No
– External risks (e.g. biodiversity offset costs, cost of compliance with planning approvals etc)	Yes / No
– Construction risks	Yes / No
– Commissioning risks.	Yes / No

Estimate contingency using one of 2 probabilistic risk impact assessments. **(Note: Agencies may employ both approaches as a further check on the robustness of the contingency.)**	
Monte Carlo analysis. *The minimum requirement for all HPHR projects and is encouraged to be conducted, as best practice, for Tier 2 and below projects, particularly where the project has a unique risk profile or features major risks that do not have a deterministic (single point) outcome.*	Yes / No
Expected value analysis. *To be utilised for Tier 2 projects or below, especially when there are recent and similar projects to benchmark against.*	Yes / No
When estimating using one of the 2 assessments above:	
• Use benchmarks to determine the quantum of the design allowance.	Yes / No
• Ensure to retire this design allowance by the Investment Decision, placing the onus on the project teams to proactively identify and quantify risks to the project by this stage.	Yes / No
• Benchmark the outcome of the cost estimate and probabilistic assessment against other similar projects in the portfolio for HPHR and Tier 2 projects at both Preliminary Business Case (PBC) and Full Business Case (FBC) stages.	Yes / No
• Detail the basis of the probabilistic modelling and the benchmarking that was used to produce and confirm the cost estimates in the cost report.	Yes / No

In reporting Risks, provide:	
• a description of the top 5-10 delivery risks (which may include procurement, integration, interface and contractual risks)	Yes / No
• the expected and reasonable worst-case exposure for each risk	Yes / No
• any identified but unquantified risks.	Yes / No

In reporting escalation, report the:	
• allowance for escalation	Yes / No
• timeframes for major milestones assumed in calculation of escalation	Yes / No
• rates assumed for escalation	Yes / No
• the outcomes of the sensitivity analysis undertaken (i.e. the impact of changes in rates or timeframes).	Yes / No

In reporting assumptions, provide:	
• a description of each assumption in the cost plan	Yes / No
• the circumstances in which the assumption would be wrong	Yes / No
• the potential impact if the assumption were to be wrong	Yes / No
• the timeframe in which the assumption should be resolved	Yes / No
• the outcomes of any sensitivity analysis undertaken, whether quantitative or qualitative.	Yes / No

In reporting impact of deferred decision, report:	
• for each of a deferral for 6 months, 1 year, 2 years and 5 years	Yes / No
• any increased risks, including risks to ongoing service delivery or existing assets	Yes / No
• any increase to the Estimated Total Cost due to escalation or lost economies from concurrent delivery with other projects	Yes / No
• any impacts on other projects or initiatives.	Yes / No

Requesting Cabinet Approval at Gate 3

In reporting Estimated total cost, include:	
• The nominal (i.e. escalated) Estimated Total Cost, expressed as a range (ordinarily P50 to P90).	Yes / No
• The accuracy (i.e. P50 or P90) at which the budget is being requested.	Yes / No
• Any assumptions that may have a substantial impact on the Estimated Total Cost.	Yes / No

In reporting contingency:	
• Identify the project contingency as both an absolute number and as a percentage of the ETC.	Yes / No
• Disaggregate the project contingency into the components which cover key areas such as:	Yes / No
– Property acquisition risks	Yes / No
– External risks (e.g. biodiversity offset costs, cost of compliance with planning approvals etc)	Yes / No
– Construction risks	Yes / No
– Commissioning risks.	Yes / No

In reporting Risks, report:	
• A description of the top 5-10 delivery risks (which may include procurement, integration, interface and contractual risks).	Yes / No
• The expected and reasonable worst-case exposure for each risk.	Yes / No
• Any identified but unquantified risks.	Yes / No

In reporting escalation, report the:	
• allowance for escalation	Yes / No
• timeframes for major milestones assumed in calculation of escalation	Yes / No
• rates assumed for escalation	Yes / No
• the outcomes of the sensitivity analysis undertaken (i.e. the impact of changes in rates or timeframes).	Yes / No

In reporting assumptions provide:	
• a description of each assumption in the cost plan	Yes / No
• the circumstances in which the assumption would be wrong	Yes / No
• the potential impact if the assumption were to be wrong	Yes / No
• the timeframe in which the assumption should be resolved	Yes / No
• the outcomes of any sensitivity analysis undertaken, whether quantitative or qualitative.	Yes / No

In reporting the impact of a deferred decision, report:	
• for each of a deferral for 6 months, 1 year, 2 years and 5 years	Yes / No
• any increased risks, including risks to ongoing service delivery or existing assets	Yes / No
• any increase to the Estimated Total Cost due to escalation or lost economies from concurrent delivery with other projects	Yes / No
• any impacts on other projects or initiatives.	Yes / No

Reflect in the draft contract a risk allocation that has agreement of all parties, and is reflected in the contingency.	Yes / No
Split the contingency by reference to whether the draft contract transfers the risk, or it is retained by the agency, such that the risk adjusted construction costs include the risks to be transferred to the contractor. *(NOTE: This figure is the agency's best assessment of the likely contract sum.)*	Yes / No
Calculate escalation by element. *(Note that escalation should be applied to the risk adjusted construction costs, the client costs and contingency. For some collaborative contracts, escalation risk for the direct costs may be retained by the agency, in which case it should be addressed in the retained contingency.)*	Yes / No

Requesting Cabinet Approval at Gate 4	
Lock in the overall construction costs.	Yes / No
Update the retained risk based on the outcomes of negotiations.	Yes / No
Reflect the contract price at award in the approved budget.	Yes / No
Include provision for any retained risks in the contingency.	Yes / No

In reporting Estimated total cost, include:	
• the nominal (i.e. escalated) Estimated Total Cost, expressed as a range (ordinarily P50 to P90)	Yes / No
• the accuracy (i.e. P50 or P90) at which the budget is being requested	Yes / No
• any assumptions that may have a substantial impact on the Estimated Total Cost.	Yes / No

In reporting contingency:	
• Identify the project contingency as both an absolute number and as a percentage of the Estimated Total Cost.	Yes / No
• Disaggregate the project contingency into the components which cover key areas such as:	
– property acquisition risks	Yes / No
– external risks (e.g. biodiversity offset costs, cost of compliance with planning approvals etc)	Yes / No
– construction risks	Yes / No
– commissioning risks.	Yes / No

In reporting Risks, provide:	
• a description of the top 5-10 delivery risks (which may include procurement, integration, interface and contractual risks)	Yes / No
• the expected and reasonable worst-case exposure for each risk	Yes / No
• any identified but unquantified risks.	Yes / No

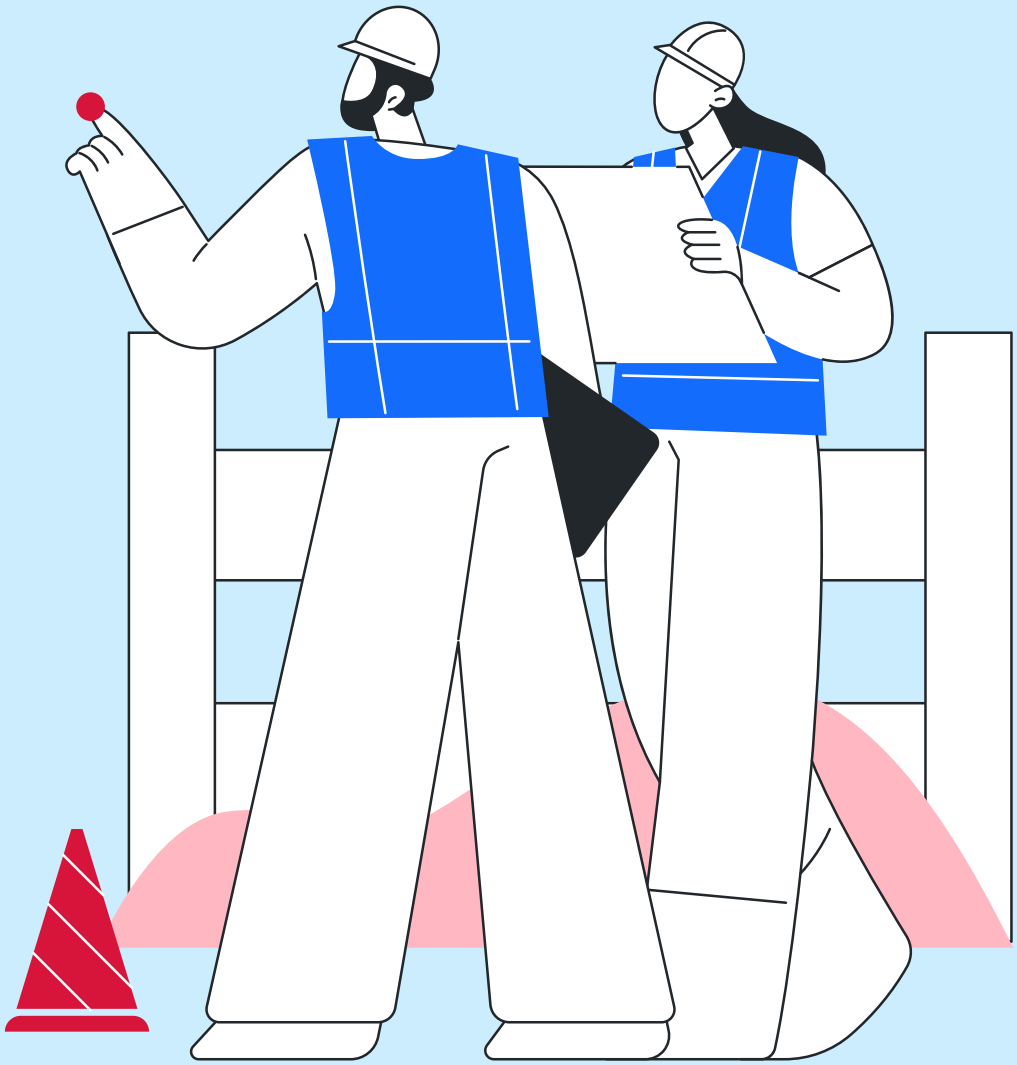
In reporting escalation, report the:	
• allowance for escalation	Yes / No
• timeframes for major milestones assumed in calculation of escalation	Yes / No
• rates assumed for escalation	Yes / No
• the outcomes of the sensitivity analysis undertaken (i.e. the impact of changes in rates or timeframes).	Yes / No

In reporting assumptions, provide:	
• a description of each assumption in the cost plan	Yes / No
• the circumstances in which the assumption would be wrong	Yes / No
• the potential impact if the assumption were to be wrong	Yes / No
• the timeframe in which the assumption should be resolved	Yes / No
• the outcomes of any sensitivity analysis undertaken, whether quantitative or qualitative.	Yes / No

In reporting impact of deferred decision, report:	
• for each of a deferral for 6 months, 1 year, 2 years and 5 years	Yes / No
• any increased risks, including risks to ongoing service delivery or existing assets	Yes / No
• any increase to the Estimated Total Cost due to escalation or lost economies from concurrent delivery with other projects	Yes / No
• any impacts on other projects or initiatives.	Yes / No

Capital Portfolio Report Back	
Submit the report back on time to Cabinet in April and October.	Yes / No
Provide in the report back updates on the financial position of the agency's capital portfolio and the risks to delivering on the government's requirements.	Yes / No
Ensure the report back includes, as a minimum:	
• Overall capital investment portfolio position, including:	Yes / No
– total forecast value over the forward estimates	Yes / No
– total forecast value over the next 10 years from the report	Yes / No
– the proportion of the capital investment portfolio which is contractually committed	Yes / No
– the proportion of the capital investment portfolio which is not contractually committed, but is a public government commitment	Yes / No
– under or over-spend against forecast capital expenditure over the previous 12 months	Yes / No
– forecast capital expenditure for the next 12 months.	Yes / No
• **Capital funding risks, including:**	
– Major risks which may have a significant impact on the agency's portfolio position, including:	
¬ a description of the risk	Yes / No
¬ an assessment of how severe the risk is and how likely it is to be realised	Yes / No
¬ any mitigations in place or planned, including any action required by Cabinet or other agencies	Yes / No
¬ the expected impact of the risk in terms of cost, including the most likely impact and the worst-case impact.	Yes / No
– The following data on funding risks for Tier 1 and 2 projects:	Yes / No
• The proportion of projects that are: – reported as RED (where major unmitigated risks have been identified and require further action) – reported AMBER (where major risks have been identified but appropriate mitigating actions are being taken) in IIAF reporting.	Yes / No
• The aggregate Forecast Estimated Total Cost of the projects that are reported as RED and of those that are reported as AMBER.	Yes / No
• Breakdown of IIAF review outcomes (low, stressed, medium or high) over the preceding 12 months.	Yes / No
• Total state funding risk at P90 (i.e. aggregate forecast total costs over and above current contingency provisions).	Yes / No
• Current remaining aggregate contingency as a percentage of total forecast cost to complete.	Yes / No

• **Where agencies are utilising a Strategic Reserve:**	
– the current balance of the Strategic Reserve	Yes / No
– the individual and aggregate costs of provisioned uses for known risks	Yes / No
– the forecast future balance of the Strategic Reserve accounting for aggregate provisioned risks	Yes / No
– any proposed transfers out of the Strategic Reserve	Yes / No
– any proposed transfers into the Strategic Reserve	Yes / No
– the predicted future cashflow of the Strategic Reserve over the forward estimates.	Yes / No
• Include an appendix with the predicted cashflow over the next 10 years for each of the agency's approved Tier 1 projects.	Yes / No




NSW
GOVERNMENT