APPENDIX B

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C6. Checklist for Stages 3 & 4: Business Case Development and Business Case Assessment

The following provides a checklist for proponents when preparing a project business case submission to Infrastructure Australia.

This submission does not seek to duplicate work which has been prepared for state/territory approval processes. Infrastructure Australia encourages proponents to submit the business case and supporting material in their entirety, where they have already been prepared. Where proponents do not have existing documentation, the Stage 4 Business Case Assessment template can be used.

The development of business case occurs over the life of the project development from Stage 1 (Problem Identification and Prioritisation) onwards. The Stage 4 submission should reflect and build upon work completed and submitted to Infrastructure Australia and earlier submissions will form part of the Stage 4 evaluation. This checklist should therefore be read alongside the checklists for Stages 1 and 2.

Proponents are encouraged to contact Infrastructure Australia for clarification on any part of this checklist, or for additional guidance in preparing a submission.

Infrastructure Australia can be contacted via email on mail@infrastructureaustralia.gov.au, or telephone on (02) 8114 1900.

C6.1 Step 1: Define the base case

Table 13 Describe the 'do minimum' base case

Key questions	Complete?
What service levels are delivered?	☑
What is the infrastructure network which provides this service?	☑
What are the costs of the current infrastructure network faced by infrastructure owners over the evaluation period, not just in the present in the absence of the project? This includes, but is not limited to: ▪ 'do minimum' capex and operating costs ▪ government (taxes and subsidies).	☑

C6.2 Step 2: Describe the project case options

This should be consistent with information provided to Infrastructure Australia during Stage 3.

Table 14 Describe each option being considered in the business case

Key questions	Complete?
What are the options and their characteristics? This description must include: ▪ a description of each option ▪ cost information (including capital expenditure and operating expenditure, where relevant), at a high level ▪ a description of the options expected impact in terms of efficiency, equity and productivity, imposed on or gained by stakeholders by the possible initiatives ▪ where appropriate, a description of each future scenario considered.	☑

C6.3 Step 3: Strategic alignment of the project case options

Table 15 Describe the strategic alignment of each project case option

Key questions	Complete?
How does each project case align with relevant jurisdictional transport plans? ▪ Proponents should provide supporting information such as Transport Master Plans or similar.	☐ Not Applicable
How does each project case align with relevant land use plans? ▪ Proponents should provide supporting information such as Regional Land Use Plans or similar.	☐ Not Applicable
How does each project case align with jurisdictional strategic initiatives/economic objectives? ▪ Proponents should provide supporting information such as policy documents or similar.	☑
How does each project case align with potential complements or substitutes? ▪ For example, projects which are being planned, constructed or recently completed.	☑

C6.4 Step 4: Economic modelling key assumptions

Demand modelling

Table 16 Describe and provide supporting material that demonstrates how demand is modelled

Key questions	Complete?
What are the characteristics of the underlying demand model? ▪ For example, in the case of a transport project this should include: – the name of the model – the types of behaviour it models (i.e. induced demand, land use change, mode switching etc.) (see section on induced demand in Section D3.3) – model inputs – how the model performs against existing and historical observed traffic – the years for which demand was measured – the time periods modelled (e.g. AM and PM peaks). ▪ Proponents should provide demand model(s) in excel attached to the submission.	☑
What timeframe has demand been modelled over (month, quarter, year etc.)? ▪ Where demand has been modelled for only part of the year, or part of the day, expansion factors will be needed to estimate annual demand.	☑
Has the underlying demand model been independently reviewed? ▪ Where a review has been conducted, information of the reviews findings must be provided.	☑
Where applicable, what expansion factor has been used to estimate annual demand and what sources informed this expansion factor?	☑

** There should be at least two short-listed options.*

Land use, population and employment forecasts

Table 17 Describe and provide supporting material that demonstrates how land use, population and employment projections are modelled

Key questions	Complete?
What land use projections have been included in the demand modelling? ▪ This should be supported by planning documents or other evidence. ▪ Where these documents are not publicly available, they must be provided to Infrastructure Australia.	Not Applicable ☐
What is the source of population and employment projections used in the demand modelling? ▪ The proponent must provide Infrastructure Australia with a copy of these projections, or a detailed summary, where these forecasts are not publicly available.	☑
What are the specific land use forecast characteristics used? ▪ If applicable, what approaches and tools have been used in order to quantify the land use change? ▪ What is the difference in terms of number of jobs and residents compared to the base case land use in the last year the forecasts are produced for? ▪ What level of segmentation has been used (e.g. sociodemographics/ industry sector)? ▪ Has there been any redistribution of jobs and residents and if so, what are the assumptions underpinning this redistribution?	Not Applicable ☐

Costs

Table 18 Describe and provide supporting material that demonstrates how forecast costs are derived

Key questions	Complete?
Who were the capital cost estimates prepared by? ▪ Proponents should provide a detailed quantity surveyor's report outlining the capital costs of the project. These include: – the confidence level of capital cost estimates (i.e. are estimates expected values, P50 or P90 estimates?) – the timing of construction, the timing of costs over the evaluation period – the project's outturn costs ($m, nominal, undiscounted) – the assumed escalation rate – the project's real costs in each year during construction ($m, real, undiscounted).	✓
What are the ongoing costs associated with the project, including maintenance and operating costs? This information should include: ▪ maintenance costs – describe the basis for estimating all maintenance costs, including growth rates over time (for both base and project cases). Are the maintenance costs P50, P90, P95? What is the basis for this estimate and who were the maintenance cost estimates prepared by? ▪ replacement – is there a need to replace or refurbish major components of the infrastructure/ rolling stock during the appraisal period? If so, how are these replacement or refurbishment costs captured? ▪ operating costs – describe the basis for estimating all operating costs, including growth rates over time (for both base and project cases). Who were the operating cost estimates prepared by? Have they been independently verified? ▪ Where appropriate, how do these vary under different future scenarios?	✓
Have the costs been independently verified? ▪ If they have been reviewed, a copy of the report must be provided to Infrastructure Australia.	X
How was the project contingency estimated?	✓
If applicable, what external costs (for both the bases and project cases) have been estimated? Proponents should: ▪ describe the basis for estimating all costs imposed/costs avoided by external parties (e.g. environmental harm). ▪ describe and provide the source of parameters/proxies used to generate these estimates ▪ explain how these align with current industry practice.	✓
Are any resource cost corrections appropriate and if so what are they?	Not Applicable

Please note that for transport infrastructure submissions for which Australian Government funding may subsequently be sought, Infrastructure Australia recommends that proponents follow the capital cost breakdown and escalation approach outlined in the Department of Infrastructure and Regional Development's Guidance *Note 2: Base Cost Estimation*.[12] Doing so can potentially avoid any unnecessary subsequent re-categorisation of costs.

12 Australian Government Department of Infrastructure and Regional Development (2017), *Guidance Note 2: Base Cost Estimation*, Department of Infrastructure and Regional Development, Canberra, http://investment.infrastructure.gov.au/publications/administration/pdf/Guidance_Note_2_Base_Cost_Estimation.pdf

Benefits

Table 19 Describe and provide supporting material that demonstrates how forecast benefits are derived

Key questions	Complete?
What are the forecast benefits?	✓
For each benefit component, how were the benefits estimated?	✓
For non-modelled years, how were benefits interpolated and/or extrapolated? Where appropriate, how do forecast benefits vary across different future scenarios?	Not Applicable.

Cost-benefit analysis

Table 20 Describe and provide supporting material that demonstrates how the CBA was undertaken

Key questions	Complete?
What are the underlying characteristics of the CBA conducted for each project case? This includes, but is not limited to: ▪ What discount rates have been used? ▪ What is the base year? ▪ What is the length of the evaluation period and why was this chosen? ▪ What is the length of the principal asset's economic life? ▪ What is the net present value and benefit–cost ratio of each project case? Proponents should: ▪ provide the cost-benefit excel model ▪ attach an appendix showing the time stream for each benefit and cost component ($m, real, undiscounted).	✓
What sensitivity analysis has been undertaken? This includes but is not limited to: ▪ a description of the assumptions that have been tested and reasons for testing these parameters ▪ how are the net present value and benefit–cost ratio results affected if different estimates and assumptions are used? ▪ what happens when discount rates are varied?	✓
What is the ranking of projects based on the results?	✓
Where appropriate, how robust are the costs and benefits of each project case across different future scenarios?	✓
What is the ranking of projects based on sensitivity tests?	✓
Related initiatives or projects – Are the benefits and costs closely related to, dependent upon or potentially influenced by other initiatives or projects?	✓
If so, how has this been accounted for in the benefit cost ratio?	✓
Has the economic appraisal been independently verified through a peer review? ▪ If a peer review has been completed, provide a copy of the peer review report.	✗

Non-monetised costs and benefits

Some benefits may not be able to be quantified. Where this is the case, proponents should provide a qualitative description of the potential project benefits.

C6.5 Step 5: Deliverability

Table 21 ***Describe and provide supporting material that demonstrates how the project will be delivered, financed and risks managed***

Key questions	Complete?
What is the Delivery Strategy and Operations Strategy? Proponents should: ▪ describe whether the feasibility of recovery of full or partial costs from users through mechanisms such as tolling or those who benefit from the project through mechanisms such as value capture has been considered ▪ provide a delivery options analysis and high level delivery schedule ▪ explain who will own operate and maintain the infrastructure.	☑
How will the project be funded and financed? This includes, but is not limited to: ▪ Does the project include user funding? – If not, provide a justification for user funding not being included in the funding mix of the project. ▪ If a mix of private and public funding or full public funding is proposed, what are the market failures that require this? What is the viability gap for the project? – Outline how the market failures could be remedied through reforms or regulation ▪ Describe expected funding sources: private sector, federal, state and local government, and the proposed split of funding. Describe why this funding split has been proposed.	☑
What are the unmitigated project risks? This includes, but is not limited to: ▪ Describe the risk evaluation approach used to identify and manage risks ▪ Provide a risk matrix that outlines the relevant risks identified for the project, the severity of the risk and how risks will be managed ▪ Outline the governance structures, accountabilities and responsibilities for the risk management for the project.	☑

C6.6 Step 6: Post Completion Review strategy

Table 22 ***Describe and provide supporting material that demonstrates how the Post Completion Review will be undertaken***

Key questions	Complete?
What is the Post Completion Review strategy/approach? This includes, but is not limited to: ▪ Describe the base line against which key performance indicators will be measured and governance structure as per Stage 5 guidance ▪ Proponents are encouraged to provide Infrastructure Australia with the Post Completion Review strategy when the business case submission is lodged.	X

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