

Fact Sheet

Essential Public Assets – establishing estimated reconstruction costs

December 2025

This fact sheet provides guidance for local councils and NSW state agency asset owners on establishing estimated reconstruction costs for essential public assets under the NSW Essential Public Assets Restoration Natural Disaster Grant Program Guidelines (the guidelines).

Key definitions

- Asset owner refers to a local government entity (councils) or other state government agency (such as Transport for NSW in relation to State Roads)
- An essential public asset refers to an eligible transport or public infrastructure asset which is owned and maintained, or operated and maintained, by an eligible undertaking in accordance with the National Disaster Recovery Funding Arrangements 2018 (DRFA).

When is an ERC required?

An Estimated Reconstruction Cost (ERC) is required for all Essential Public Asset Reconstruction (EPAR) works. EPAR works involve reconstruction of essential public assets damaged by an eligible disaster that do not meet the intent or timeframes of Immediate Reconstruction Works (IRW). The ERC forms the basis for the Total Upper Limit Grant (TULG) offered to the asset owner once funding is approved.

How to develop an ERC

Asset owners must prepare an ERC submission for EPAR works using a suitably qualified professional, cost estimation or market response (such as an open tender process), using the NSW Reconstruction Authority (RA) Treatment Guide and Cost Estimation tool or relevant local government estimation/procurement processes.

The ERC must be supported by evidence and reflect the most accurate estimate possible within the timeframe. The estimate must be based on the most economically efficient approach to reconstructing the asset and incorporate value-for-money supply rates for labour, materials, plant and equipment hire and other cost elements.

The ERC must align with the asset's pre-disaster function, while considering cases where original treatments cannot be duplicated due to obsolete methods or materials.

The ERC must be calculated in accordance with the DRFA and include:

- construction direct costs
- design and project management costs

- contingency allowance
- cost escalation allowance.

Day Labour Co-Funding Arrangements and ERC

Local councils that opt-in to the co-funding arrangements may claim funding for the following additional items:

- Use of normal-hours staff (day labour) for Emergency Works (EW), IRW and EPAR works.
- Use of council-owned plant and equipment for EW, IRW and EPAR works.
- Extended period for EW on essential public assets, including clean-up, for up to 3 months from the time the asset becomes accessible.

Opt-in councils

Councils that have opted-in to the co-funding arrangements and are eligible to claim day labour and their own plant and equipment costs should incorporate these resources into the ERC, where they are available and represent the most value-for-money option.

Opt-out councils

Councils that have not opted-in to the new co-funding arrangements must still include the use of their own resources in the ERC, based on the principle that councils must reasonably exhaust their internal resources before claiming assistance for any additional resources.

However, these costs cannot be claimed for reimbursement. Instead, they will be treated as the council's contribution to EPAR works, alongside the mandatory \$29,000 maximum contribution per eligible disaster.

EPAR packaging, ERC and TULG relationship

When defining a project for an EPAR application and estimating reconstruction costs, a project may be:

- a single essential public asset, or
- a group of essential public assets w delivered or contracted jointly

The EPAR application and associated ERC (cost estimate or market response value) should represent the entire project including:

- multiple assets
- treatment types
- cost items
- project management
- contingency
- escalation costs.

Each cost item should be listed individually in the EPAR application.

The ERC must be submitted to RA with supporting evidence and include cost estimates and details of the nature and extent of the treatment types for each asset, in addition to the other evidence requirements. Once approved, the total ERC forms the basis for the TULG.

The TULG amount for each EPAR is cumulative and not tied to individual line items. Asset owners may manage overspends and underspends between line items, provided the approved scope is delivered and the TULG is not exceeded.

ERC Cost Elements

Construction Direct Costs

Construction direct costs are those expenses directly tied to the physical restoration or reconstruction of assets. These costs include:

- Labour
 - on-site workers: plant operators, labourers, traffic controllers, supervisors
 - includes wages, allowances, and site-specific overheads (such as travel and accommodation if remote)
- Materials
 - road base, gravel, asphalt, concrete, bitumen
 - drainage materials: pipes, culverts, headwalls
 - geotextiles, erosion control products, and stabilisation agents
- Plant and equipment
 - excavators, graders, rollers, water carts, trucks
 - specialised equipment for slope stabilisation or bridge repair
- Subcontractor services
 - civil contractors for specific scopes (sealing works or bridge works)
 - traffic management providers
 - environmental or heritage specialists (if directly involved in construction)
- Site preparation and restoration
 - establishment of site amenities and offices
 - erosion and sedimentation control measures
 - temporary access tracks or detours
 - reinstatement of road shoulders, verges, and signage
- Temporary works
 - traffic control devices, barriers, detour signage
 - temporary drainage or water diversion structures
- Testing and quality assurance (if required on-site)
 - compaction testing, material sampling, or concrete testing directly tied to construction.

These costs exclude items covered by project management, design, contingency and escalation allowances.

Design costs

Design costs vary widely depending on the complexity of works—ranging from simple road damage repairs to complex geotechnical projects involving slips. The estimated reconstruction cost must include design costs for both concept and detailed design phases of the repair.

Project management

Project management costs include all costs associated with managing the reconstruction works, such as staff, consultants and council personnel directly involved with managing the reconstruction works. This costs also includes services related to investigations, design, procurement, contract administration, construction and project planning. Councils must comply with Local Government Procurement policies when engaging external services.

To be eligible, project management costs must be supported by time records and documentation that clearly demonstrate a link between the expenses incurred and EPAR works.

Costs are not eligible for reimbursement if they relate to personnel performing work removed from the direct delivery of reconstruction projects or roles not required for specific project delivery. Examples of non-eligible roles include DRFA program-level management, oversight and direction, DRFA audit/assurance, and program administration roles, such as works managers, directors and executive managers, chief financial officers, human resource officers, accountants and administrative officers who are not directly engaged in asset restoration.

Project management costs can vary based on the complexity of the work, procurement/delivery method, and the scale of the work packaged for delivery. The RA Treatment Guide provides anticipated typical percentages for project management costs across standard treatment groupings, other treatment types based on project stages including Strategic, Concept and Details Design. Applicants are expected to adopt values no greater than those identified in the guide unless sufficient evidence and justification are provided.

Contingency

When developing the ERC, asset owners must include a contingency allowance for residual risks. This allowance must be calculated in accordance with DRFA requirements and be sufficient to cover the complexity and risk profile of the project.

The calculation should reflect factors such as project scope, risk identification, constructability, key dates, site-specific conditions, and project interfaces. Contingency estimates must also consider the investment lifecycle, benchmarks, and past performance for similar projects.

For some reconstruction projects, asset owners may consider a streamlined approach to the application of a contingency allowance based on the treatment type and unique regional characteristics. However, for more complex/high dollar value reconstruction projects, a more sophisticated approach may be required.

As a general rule, projects under \$25 million, require a deterministic P90 estimate, while is required based on the project phase the cost estimation is based on. For projects over \$25 million, require a probabilistic P90 estimate, and an Independent Technical Review.

These approaches ensure that the ERC provides a 90% confidence level that costs will not be exceeded.

The contingency percentage depends on the assessment against six factors:

1. Project Scope
2. Risk Identification
3. Constructability
4. Key Dates
5. Site Specific Information
6. Project interfaces

Contingency percentages are outlined in the RA Treatment Guide, which includes P90 and P50 values for standard treatment groupings such as:

- Unsealed road treatments

- Sealed pavement repairs
- Clearing and earthworks
- Concrete works
- Culverts and drainage structures
- Protection works
- Road furniture and delineation
- Other treatment types are included in the Treatment Guide to cover any treatments not outlined above.

The contingency amounts pre-determined by RA for the standard treatments are reviewed annually to maintain accuracy. Contingency allowances must be applied as a percentage of the total direct costs, including design, construction, and project management costs. They cannot include risks related to DRFA eligibility or insufficient cost escalation.

For guidance, asset owners should refer to the [Australian Government Department of Infrastructure, Transport, Regional Development, Communications, Sports and the Arts \(DITRDCSA\) under Resources for funding recipients>Cost Estimation Guidance](#).

Deterministic contingency estimation – Projects under \$25 million

For projects under \$25 million, a deterministic contingency estimation approach is suitable for most reconstruction projects. This factor-based method is suitable for most reconstruction projects and should reflect the unique characteristics of the project or location.

All EPAR submissions must include a project-specific deterministic approach that effectively captures the risk profile at a P90 level. Asset owners are encouraged to use the contingency factors outlined in the RA Treatment Guide wherever possible. If project-specific contingency factors are developed, additional evidence may be required to support their inclusion during the EPAR assessment process.

Requests for contingency amounts greater than those published in the RA Treatment Guide without sufficient justification and evidence may indicate that the estimate maturity or project scope is not ready for funding submission.

Detailed procedures for calculating appropriate deterministic contingency estimates are provided in [Guidance Note 3B](#) published by the DITRDCSA.

Probabilistic contingency estimation – Projects over \$25 million

For projects over \$25 million, probabilistic contingency estimation approach is required. This method is more sophisticated and is typically used for complex or high-value reconstruction projects. Probabilistic estimation ensures that risks are modeled accurately and provides a P90 confidence level that costs will not be exceeded. Detailed procedures for calculating probabilistic contingency estimates are outlined in [Guidance Note 3A](#) published by the DITRDCSA.

To apply this approach, the project scope and design must be sufficiently advanced, and a detailed risk register must be prepared. Additionally, this method generally requires the involvement of a suitably qualified and experienced engineer or quantity surveyor who can model risks in accordance with [Guidance Note 3A](#).

Table 1: Contingency Estimation Approach Summary

Project Estimated Value	Contingency Estimation Approach	ITR Required	DITRDCSA Guidance
Under \$25 million	Deterministic P90 estimate (factor-based approach)	No	Guidance Note 3B
Over \$25 million	Probabilistic P90 estimate	Yes	Guidance Note 3A

Cost escalation

Cost escalation allowances must be applied to estimated reconstruction costs to ensure adequate capital funding is available to cover expected cost increases in the life of a project. These allowances can be applied for a maximum period of 3 years from the end of the financial year in which the eligible disaster occurred, regardless of when the project commences or is completed.

Cost increases may result from factors such as fluctuations in labour, plant and material, and global and local market pressures.

When preparing the ERC, asset owners are required to establish a realistic cost escalation allowance that reflects anticipated cost changes during the project lifecycle.

States must use the escalation calculation methodology outlined in [Guidance Note 4](#) published by the DITRDSCA and the Road Construction Cost Escalation Forecasts prepared annually by the Commonwealth. Current escalation rates will be published by RA as part of the Standard Treatment Guide and incorporated into the Cost Estimation Tool, which asset owners must use when calculating cost escalation for ERCs.

Approaches for Establishing the ERC

Market response method

The market response method should be used when an external contractor is hired and can confirm the agreed cost of reconstruction within the timeframe for EPAR submissions.

If the procurement or tender process cannot provide an agreed cost within the required timeframe, the asset owner must prepare the ERC using the cost estimation method and submit it by the deadline.

Submission and approval process - Market response

When using the market response method (such as an open tender or quotation) to determine direct costs, you must follow the correct procurement processes. Evidence of these processes will be required as part of your EPAR submission and approval.

For complex projects or where eligibility is unclear, the market response process may require staged approval before going to tender. This ensures eligibility and scope are confirmed before seeking market pricing. The steps are:

Stage 1: Scope approval (pre-tender)

- Submit the EPAR claim, including all components and an estimate of cost, at least 2 months before seeking a market response
- Obtain RA approval for all components (except cost) before seeking a market response or going to tender
- RA will provide a decision within 2 months.

Stage 2: Final cost lodgement

- After accepting the market response/tender price, submit the full EPAR application, including the final market cost, within 4 weeks of awarding the contract
- If the preferred price triggers an Independent Technical Review (ITR), RA will arrange the review and aim to complete it within 6 weeks.

Cost estimation method

Use the cost estimation approach when you do not plan to hire an external contractor for EPAR works or when a market response cannot be obtained within the required timeframe.

Direct costs under this method must be based on agreed unit/benchmark rates for the proposed treatments. These rates must be agreed upon by the asset owner and RA before submitting the claim.

ERCs prepared using cost estimation should be based on concept-level design information at a minimum. Strategic estimates and associated contingencies are not acceptable for ERC submissions.

Tools and methodology

RA provides resources to help councils prepare accurate and consistent ERCs, including the RA Treatment Guide and RA Cost Estimation Tool, available on our website. These tools include standard allowances for project management, design, contingency, and cost escalation to ensure ERCs meet DRFA requirements.

The tools cover common treatments but also allow flexibility for complex or unique works using other treatment types and council-provided contract or historic rates. If no standard treatment or benchmark rate applies, estimates can be developed using first principles. For day labour delivery, first-principles estimates should be based on plant, labour, and material unit rates.

Verification

If cost estimation method is used, RA will verify the ERC through an internal or independent engineer or quantity surveyor with the appropriate expertise.

Additional Information

- NSW Reconstruction Authority Administration of Essential Public Assets Restoration website <https://www.nsw.gov.au/departments-and-agencies/nsw-reconstruction-authority/disaster-recovery-funding-arrangements>
- [NSW Essential Public Assets Restoration Disaster Grant Program Guidelines \(2025\)](#)
- The Australian Government's Disaster Assist website; Disaster Recovery Funding Arrangements (2018) disasterassist.gov.au/disaster-arrangements/disaster-recovery-funding-arrangements

Contacts

For additional information or support, email Reconstructioncoordination@reconstruction.nsw.gov.au.