

Lowest priced tender should not automatically be preferred. Tender and quotation evaluation should be conducted against a set of agreed criteria between all project stakeholders and each proposal measured consistently against each other.

When requesting quotations or tenders from contractors for any sized project, always prepare a project brief clearly articulating the project objectives in addition to any specific design requirements or performance outcomes. This allows contractors to base their price on a consistent Scope of Works and enables comparison of prices and proposals that are offering the best value whilst meeting the project's identified needs.



Local councils are experienced in procurement processes. They are a potential resource that could provide assistance, or even lead the project procurement process. Local councils are governed by strict tendering protocols, so be sure that clear evaluation criteria is established with input from those that have specific tennis infrastructure knowledge and expertise.

### 2.5 FINANCIAL MANAGEMENT

Project costs are one of the most significant influences over any project. These costs can change regularly and at any stage of a project. It is critical to implement strong financial management practices and controls over projects, regardless of scale.

This section should be read in conjunction with Section 2.4 Project management and procurement and examines the following considerations on project outcomes:

- 1. Project budgeting
- 2. Life cycles

#### **Primary audience**

This section has primarily been designed for:

- Community tennis clubs, associations, venue operators and educational institutions
- Local Government
- Architects, planners, developers, designers and builders.

#### **Definitions**

**Budget** - Total amount of financial resources allocated for particular purpose. Budgets should be documented and agreed between project stakeholders to ensure the necessary funds for implementation are confirmed and available.

Cash flow - Cash flow determines how and when money will be obtained and expenses will be paid. Cash inflows usually arise from financing, grants, existing bank balances and operational revenues, while cash outflows relate to the expenses that will be paid out.

**Contingency cost** – Allowance for costs that will or are likely to occur based on past experience and any known site conditions, but with some uncertainty regarding the amount.

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**Cost escalation** - Changes in the cost or price of specific materials over a period of time. Prices for building materials can change or escalate over short periods of time, so where possible, ensure prices and costs are fixed for project lifecycles.

**Life cycle cost** - Combination of both initial capital costs for specific facility elements and ongoing usage, maintenance and replacement.

Sinking fund - Money set aside for the future repayment of a debt or replacement of a wasting asset.

#### **Standards**

AS/NZS 4536 - 1999: Life cycle costing -An application guide - details the process, definitions and various components and models of life cycle costing. As it covers a wide range of industries and products, the Standard needs to be read and interpreted by a representative with a deep understanding of life cycle concepts to maximise its value.

The Life Cycle Cost Guidelines for Sport and Recreation Facilities developed by the Western Australian Department of Sport and Recreation provides a contemporary view on life cycle cost planning, evaluation and delivery relevant to sporting infrastructure. It also provides resources to assist in the development of life cycle models specific to the project.

#### **KEY HIGHLIGHTS**

#### What you need to know

- Project budget determines affordability of the project brief
- Known costs and likely costs are essential in preparing budgets at the start of the project.
- Project budgets should be reviewed at every stage before progressing to ensure capacity to deliver on agreed objectives
- Costs increases over time is an important consideration when applying for funding to avoid potential shortfalls.
- Contingencies of between 10% and 20% of the project budget should be factored in to allow for unforeseen issues or costs over the life of the project.
- Evaluation of different products must consider the full product life cycle, not just the initial capital costs. Maintenance and renewal costs are just as important over time.

## 2.5.1 PROJECT BUDGETING

Costing projects can be very difficult with so much uncertainty, however a realistic budget must be set prior to the decision to proceed with the project and be achievable to fund.

From commencement of the project to starting construction it is also likely that the cost of materials or labour may increase, the project scope may vary or site conditions may alter, particularly if project planning spans across a number of years. These are referred to as cost escalation and can be minimised through the use of contingencies.

Contingencies of between 10% and 20% are often added to project budgets in order to cover these unforeseen costs and should be factored into all projects at the early stages of project identification and design.

Managing project cash flow is important to achieving successful project outcomes. Contractors will expect to be paid as they complete various stages of work, so ensure that funding is available to pay out upon satisfactory completion of work.

The project budget will ultimately guide project outcomes and what can be delivered, so it is important not to underestimate all costs involved. Last minute surprises will always cost more to resolve than if they were initially considered at the start of a project.

Replacement costs associated with the project or related infrastructure should be reflected in the project budget (refer to **Section 2.5.2 Lifecycles**).

Budgeting must account for ongoing management, maintenance, renewal and replacement costs to ensure maximum benefits of the improved facility into the future. Sinking funds or facility replacement funds are essential, allowing clubs, venue operators and local councils to regularly deposit funds into an account specifically for ongoing improvements. This will ensure that funds are available for maintenance works as well as renewal at the end of asset life.



Once the budget is completed and the project starts, actual spend should be regularly checked against budget estimates. This will inform whether the project is progressing as planned or if corrective action is needed.



Project budgets need to include 'contingencies' to account for any unexpected costs that may arise through the life of the project. Contingencies are particularly relevant during the project construction phases where unforeseen issues with drainage or ground works may be experienced, or significant rises in material costs or availability may only be known after project commencement.

Depending on the size and scale of the project, allow between 10% and 20% of the total anticipated project costs for contingencies. It is better to plan for these upfront than have to secure additional funding during the project construction phase.



Appropriate allowances for GST should be made and incorporated into project budgets. Many prices are often quoted exclusive of GST, creating the potential for an unbudgeted 10% on top of existing identified project costs. Regardless of whether the club or centre is registered for GST (i.e. registered to claim back GST paid), GST will need to be paid for products and services.

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#### **Example project budget**

**Table 2.5.1 Indicative project budget** is a guide to project budgeting to assist in identifying the range of costs associated with key project phases. The Indicative Project Budget Table below reflects a generic range of budget cost allocations as a percentage of total project costs, against each project component likely to be associated with a tennis infrastructure project.

All budgets should be tested with contractors, local councils and industry advisors to ensure their accuracy. The example below is provided as a sample budget summary only and includes project components and percentage estimates of total estimated project costs.

**Table 2.5.1 Indicative project budget** 

Project stage / phase	% of estimated budget
Project scoping	4%
Site planning	2%
Facility design	5%
Construction	68%
Project handover	1%
Project management / design / consultancy	8%
Cost contingencies	12%
Total estimated budget	100%

Due to the vast differences in project and site related costs associated with individual projects, specific development costs or even cost ranges cannot be provided with certainty. It is highly recommended that all projects follows the seven stages of planning outlined in the Facility Planning Process section in order to accurately calculate the project budget.

Information presented in the Site Assessment and Site Planning sections will also assist in preparing project budgets. They will help to guide you through a range of considerations that will influence the budget, including:

- Site location challenges (e.g. access, proximity from suppliers).
- Site conditions (e.g. ground conditions, soil types, topography).
- Local environment (e.g. flood impacts, climatic conditions).
- Statutory requirements (e.g. meeting Council planning and permit requirements).

## 2.5.2 LIFE CYCLE COSTS

Life cycle cost analysis compares not only the initial costs of development and installation, but also the ongoing costs to maintain the serviceability of a facility or facility element over a fixed period of time. The process is used to determine the sum of all expenses associated with a product or project, including acquisition, installation, operation, maintenance, and refurbishment and disposal costs.

In the tennis facility context, life cycle costs are typically used for court surfaces, court furniture, lighting, fencing and other associated infrastructure that has a clear fixed life span.

Life cycle cost analysis is an important element of the decision making process and in making informed value judgements when considering a range of facility options. It is not however the only factor in facility planning and decision making. Desired playing characteristics, overall venue amenity features and user preferences are all important elements for consideration.

#### Life cycle cost principles

The Life Cycle Cost Guidelines for Sport and Recreation Facilities developed by the Western Australian Department of Sport and Recreation provides four primary principles to consider when assessing life cycle costs and which are supported within the tennis context.

- Recognise that a facility development project begins at the concept and preplanning stage and is complete when the asset is sold or the site returned to its original condition.
- Examine the full cost of each project component across the life of a project rather than choose the cheapest option. This may mean a higher initial outlay but lead to reduced ongoing operational, maintenance and disposal costs and a net lower total ownership cost.

- Consider all of the economic and financial costs associated with constructing, procuring and operating a facility at a level for which it was originally planned.
- Developing a life cycle cost analysis is an intrinsic part of your overall asset (facility) management strategy.

# Tennis infrastructure life expectancy

**Table 2.5.2** provides an estimated life expectancy range (in years) for generic tennis facility infrastructure. These can be used to guide your product life cycle analysis. Information below assumes ideal site and construction conditions and that appropriate levels of maintenance have been delivered to manufacturer specifications, commensurate with the level and intensity of infrastructure use they are intended.

### **Budgeting for tennis** infrastructure renewal

Planning for infrastructure renewal is an ongoing challenge for tennis venue owners and operators. Often Australian tennis venues experience financial constraints which inhibits substantial contributions to long-term infrastructure renewal.

As the owners of the majority of Australian tennis infrastructure, support from local government is required to ensure tennis facilities meet the needs of users. Timeframes for renewal and depreciation of tennis infrastructure is often determined by council policy and budget allocation. It is therefore important for local government authorities to include all facets of tennis infrastructure within their asset management plans, life-cycle renewal processes and capital budget planning.

Opportunities exist for council's to include ongoing maintenance requirements, asset renewal costs and capital development plans into venue operational and occupancy agreements, specifying the

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level or range of contribution required from venue users and key stakeholders. This will ensure that expectations are clear and costed. Regular court, clubhouse and site audit and assessment processes enable

continuous monitoring of the condition and life-cycle of tennis infrastructure and guide the level of investment required to maintain them to a safe, playable standard that promotes a quality user experience

**Table 2.5.2** Estimated life expectancy of tennis infrastructure

Infrastructure elements	Expected life	
Court pavements / bases		
Asphalt pavement / base	20+ years	
Concrete pavement / base	20+ years	
Court surfaces		
Acrylic surface	8 - 12 years	
Natural Clay / Red Porous (including En-Tout-Cas, Italian, Conipur, Har-Tru)	25+ years	
Natural grass	30+ years	
Synthetic filled surfaces (Sand Filled Acrylic Grass and Synthetic Clay)	8 - 12 years	
Other court / site infrastructure		
Net posts and winders	20+ years	
Court fencing	20+ years	
Court lighting (including poles and fittings)	20+ years	
Clubhouse (structural)	20+ years	
Clubhouse (internal)	20+ years	
Hit up wall	20+ years	



The expected life of tennis infrastructure is dependent on a number of factors such as the quality of the original construction, levels of usage, maintenance practices and geographic location.

Table 2.5.2 Estimated life expectancy of tennis infrastructure is provided as a guide only.