

# Building Management

Building management is the process required to achieve and sustain defined levels of building performance throughout the life of a building.

The concepts contained in this guideline are consistent with the requirements in the following policy documents:

- [Building Asset Performance Framework](#) (Department of Housing and Public Works)
- [Capital Works Management Framework](#) (Department of Housing and Public Works)
- [Maintenance Management Framework](#) (Department of Housing and Public Works)
- [Non-Current Asset Policies for the Queensland Public Sector](#) (Queensland Treasury)
- [Project Assessment Framework](#) (Queensland Treasury)

In this guideline, the term 'agencies' is equivalent to 'departments' (as defined in s8 of the [Financial Accountability Act 2009](#)).

The main objectives of building management are to:

- achieve specified performance levels in terms of meeting service delivery needs
- manage risk
- provide support to building users and occupants to maintain and improve efficiency of building systems
- ensure that future upgrades/alterations/additions are consistent with service delivery objectives, statutory compliance and the ensure optimum value for money for the community.

## Benefits

The benefits of efficient building management are:

- effective risk management
- extended asset life
- reduced operating costs
- compliance with statutory obligations
- provision of a healthy work environment
- improved performance of building systems
- performance and investment predictability through a life-cycle approach
- alignment of building performance with users' expectation, relevant to productivity and service delivery
- improved user/occupant satisfaction
- enhanced community perceptions
- environmental compatibility.

## Risks

Risks associated with poor building management and which may ultimately affect service delivery capacity and quality, include:

- degradation of the Queensland Government's asset base
- premature asset failure
- shorter asset useful life
- higher repair and replacement costs
- missed opportunities to identify and implement improvements to reduce environmental impacts
- unnecessary exposure to legal, social and other risks associated with:
  - deteriorated buildings
  - statutory non-compliance
  - workplace health and safety
  - hazardous materials.

### 1.0 Building management considerations

#### 1.1 Elements of building management

The size, type, complexity and role which individual government buildings or building complexes play in supporting the delivery of services vary significantly. Therefore, the activities associated with building management must be tailored accordingly to achieve effective building asset performance management and efficient and effective resource allocation.

According to the *Building Asset Performance Framework (BAPF)*, building assets should be classified in terms of their operational roles and criticality to service delivery.

The four aspects of building management – building occupancy, building operation, building maintenance and building upgrades are explained in detail below.

### 1.1.1 Building occupancy

Building occupancy relates to the activities required to enable the spaces in a building to be occupied. It encompasses occupancy management and lease management.

Occupancy management involves the management of available space to optimise utilisation, and generally, to maximise its economic performance. It includes consideration of the occupancy mix to ensure harmonious use by occupants, monitoring occupancy levels to facilitate the prediction of occupancy and the formalisation of occupancy agreements. Agreements in an owner-occupier situation may take the form of memoranda of understanding; in other circumstances, a lease contract will be required.

Lease management provides the legal and contractual framework for building occupancy and defines the requirements to be met by the lessor and the lessee. Competent lease management is essential to the successful occupancy and use of any building or complex.

As the sole provider of government office accommodation, the Department of Housing and Public Works administers the [Office Accommodation Management Framework](#) which:

- defines best practice methodologies for the acquisition, fitout and occupancy of government office accommodation
- provides practical guidance for government agencies in all aspects of office accommodation.

### 1.1.2 Building operation

Building operation covers activities necessary to operate the building and its services efficiently. These activities should effectively support the needs of the building occupants in their efforts to deliver government services and support the Government's environmental and social commitments. Consideration should be given to the following building operation activities:

**The control and monitoring of building services and plant operation** are critical to the provision of a habitable, comfortable and functional environment. In particular, workplace health and safety requirements for building occupants and users must be met.

Commissioning of building services and plant is important to ensure that the building maintains optimum energy efficiency and that all systems, including the water based fire safety systems (i.e. fire hydrants and sprinkler systems), work to the intent of the design.

**The facilitation of building operational activities** will significantly reduce the likelihood of conflict in the use of common areas, storage, materials handling facilities and access, and ensure that occupants and users are not disrupted in their delivery of services. Effective planning and communication are required to achieve these outcomes.

**The coordination and direction of contractors and employees of supply authorities** will ensure that their access and activities are safe and that security is maintained.

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**Effective communication with building occupants and users** provides a means for complaint management, building promotion, crisis management and continuous improvement in building operations in support of the occupants' requirements.

**The identification and management of hazardous material** protects the safety of building users and occupants and ensures compliance with statutory obligations. Hazardous materials include liquid and gaseous fuels, asbestos, halon/inert gas, fertilisers and cleaning agents. The condition of asbestos containing material in building elements must be assessed and documented in accordance with the requirements in the Queensland Government [Asbestos Management Policy for its Assets](#).

**Access control and security measures** protect the building, its physical contents and its users. Security management can range from the control of keys to sophisticated electronic systems and specialist patrols. Further information on security management is outlined in the *Strategic Asset Management Framework* guideline: [Security Management of Government Buildings](#).

**Emergency/disaster management for each building** will ensure adequate protection of building occupants and users in the event of emergencies or natural disasters. This process involves the training of both building management personnel and users. Liaison is also required with police and other emergency services authorities for rescues and disaster recovery. Routine testing of all procedures should be carried out on a regular basis.

In particular, in relation to fire safety measures, building owners and users are required to ensure that testing of building fire systems and equipment and assessing the safety level of their buildings is undertaken by service providers with appropriate knowledge and experience. For this, building owners need to have:

- appropriate skills to manage the risk areas affecting building protection systems and equipment and to ensure the occupants' safety is adequate, in accordance with the Building Fire Safety Regulation 2008
- information about specific design considerations of the smoke control systems, fire protection systems and equipment, to facilitate the accuracy of these testing and assessments. Where this information is not available, having access to historical data may identify the necessary rectifications in order to ensure that such systems remain reliable when required.

**External and internal cleaning (day to day hygiene-type cleaning)** is necessary to ensure that the building is both habitable and well presented. Structured and systematic procedures carried out by specialist contractors may be necessary to meet occupants' expectations and maintain the image of the building. Well-designed cleaning arrangements can contribute to lower life-cycle costs as well as managing the risks associated with workplace health and safety. Cleaning methods should be chosen for their environmental compatibility and minimised wastage of resources, such as water and energy.

**Waste management and recycling services** must be managed effectively if buildings are to comply with hygiene and environmental requirements. Specialist and/or licensed service providers may be required.

**Pest control** activities associated with the treatment and eradication of cockroaches, spiders and other pests should be conducted on a regular basis.

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**Landscaping activities** (such as mowing grass, pruning and trimming trees/shrubs, tending to gardens, and removing horticultural waste) should be undertaken as necessary to maintain the property to the required standard.

**Other building operation services** which include energy and water supply and management, telecommunications (voice and data services), laundry and catering services, and artworks and special features management services.

Departments are required to focus on effective building management practices with regard to:

**Energy management** - strategies to increase energy efficiency and lower operating costs in Queensland Government buildings should be assessed and integrated with relevant aspects of asset planning and management. Further information on energy management is outlined in the guidelines related to [strategic energy efficiency in Queensland government buildings](#) (Department of Housing and Public Works)

**Water management** - strategies to increase water efficiency, such as the requirement to prepare Water Efficiency Management Plans (for owners of non-residential buildings with substantial water consumption or premises with cooling towers for air-conditioning).

### 1.1.3 Building maintenance

Effective management of maintenance directly impacts on the cost and effectiveness of maintenance works, the building's physical condition and reliability to meet service delivery needs.

The [Maintenance Management Framework](#) (MMF) is the whole-of-Government policy for managing building maintenance. It applies to all departments (as defined in s8 of the [Financial Accountability Act 2009](#)) that control or administer buildings and have responsibility for maintenance as part of the overall asset management of their portfolio.

Maintenance is defined in the MMF as work on existing buildings undertaken with the intention of:

- reinstating physical condition to a specified standard
- preventing further deterioration or failure
- restoring correct operation within specified parameters
- replacing components at the end of their useful/economic life with modern engineering equivalents
- making temporary repairs for immediate health, safety and security reasons (e.g. after a major building failure)
- mitigation of the consequences of a natural disaster
- assessing buildings for maintenance requirements (e.g. to obtain accurate and objective knowledge of physical and operating condition, including risk and financial impact for the purpose of maintenance).

Maintenance procedures and maintenance plans should be documented in accordance with the policy requirements in the MMF. Coordination of maintenance activities with building operations is essential to ensure minimal disruption to building occupants. Further

information on maintenance management is also outlined in the *Strategic Asset Management Framework* guideline: [Maintenance Management](#).

Departments, as building owners and managers, need to be aware of their statutory obligations to maintain building water based fire safety systems in accordance with the [Fire hydrant and sprinkler system commissioning and periodic test \(Queensland Development Code Mandatory Part QDC MP 6.1\)](#).

#### 1.1.4 Building upgrades

Building upgrades (e.g. renovations, refurbishments, alterations, extensions or improvements) are defined as ‘government building projects’ and are governed by the [Capital Works Management Framework](#) (CWMF). They aim to optimise the utility, amenity and functionality of a building and increase its useful life to meet future service delivery requirements.

For complex building upgrades, agencies should engage appropriately skilled persons in design, project and contract management to manage the projects associated with building upgrades, in particular for the preparation of design briefs, review of design and documentation, invitation of tenders and the awarding of contracts.

When the project is completed, it is essential that all certificates, warranties, and operation and maintenance manuals are provided at handover to ensure proper management of the facility. Departments should ensure that systems and processes are in place for the acceptance and retention of building information in accordance with the requirements of the CWMF. Further information is available in the CWMF guidelines: [Handover: Guidance for commissioning and handover associated with Government building projects](#) and [Building Regulatory Requirements](#).

In relation to commissioning tests of fire hydrants and sprinklers, the tester (i.e. fire protection plumbers licensed through the Plumbing Industry Council) is required to give a copy of the [Fire hydrant and sprinkler system commissioning and periodic test form — Form 70](#) to the building owner within 10 business days. Departments must ensure that this information is handed over to the appropriate officer for recording on a departmental register, and kept available for access by the officers responsible for operating and maintaining these assets.

In relation to commissioning tests of fire hydrants and sprinklers, departments must ensure that information provided by the tester (i.e. fire protection plumbers licensed through the Plumbing Industry Council) is handed over to the appropriate officer for recording on a departmental register, and kept available for access by the officers responsible for operating and maintaining these assets.

## 2.0 Building management systems

In order to adequately coordinate and control the various activities associated with building management, systems covering the key aspects of monitoring and control need to be used.

Building management systems should be capable of providing comprehensive reports to adequately facilitate:

- building occupancy management

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- building performance management to meet service delivery needs
- project progress for building upgrades.

**Information management systems** - data for monitoring, planning and verifying the multitude of building management activities and operational outcomes must be collected, stored, retrieved and reported on to support effective management of the building's operation.

The following are examples of information management systems:

**Maintenance management systems** record technical and asset information pertaining to the maintenance of buildings and services to facilitate maintenance planning, implementation and reporting.

**Financial management systems** store and monitor financial transactions and handle basic revenue and expenditure data to provide consolidated financial reports to support management decisions.

**Lease management systems** track space utilisation and vacancies and can initiate rental and services billing to tenants. By having access to effective lease management systems that generate appropriate reports, building managers can use this information for decision-making processes and to analyse financial performance and consolidate data for benchmarking purposes.

### 3.0 Performance management

The measurement, analysis and reporting of building performance is critical to effective building management.

Accurate data about the performance of a building is vital to:

- anticipate issues related to the management and operation of a building, and being able to address these issues before they become of concern or impact on service delivery
- facilitate decision-making and planning for maintenance and capital works programs
- informing future disposal and rationalisation decisions
- benchmarking and continuous improvement.

The BAPF outlines the broad scope and application of building performance management and the key principles and elements necessary for achieving effective management of buildings. It provides guidance on classifying buildings, establishing performance areas, indicators and measures and undertaking a performance assessment of a building by giving consideration to the social and environmental aspects as additional dimensions to the traditional functional and financial performance assessment approach.

The suite of guidelines which comprise the *Strategic Asset Management Framework* (available online at [www.hpw.qld.gov.au](http://www.hpw.qld.gov.au)) is organised under the following categories:

1. **Overview** - explains the principles and concepts of strategic asset management as they apply to buildings.
2. **Guidelines** - expand on key aspects of strategic asset management to inform decisions over the entire life-cycle of the asset.
3. **Decision-making methodologies and guidelines** - support agencies to implement best practice strategic management of buildings.

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