BATHURST
REGIONAL COUNCIL

AERODROME
ASSET MANAGEMENT PLAN

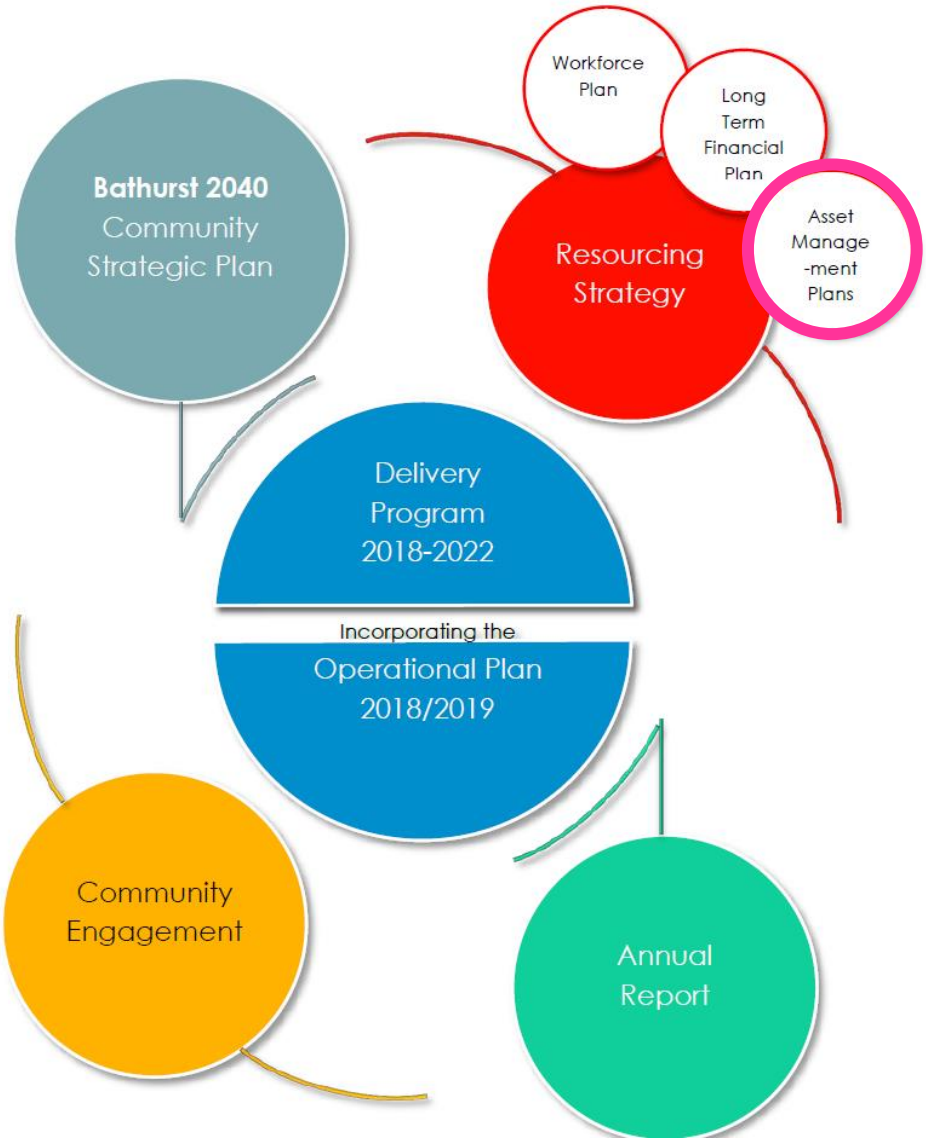
Version 3.0
November 2018

Document Control	Bathurst Regional Council

Document ID: november 2018_aerodrome_amp_ver 3.0.doc

Version No.	Date	Version Details	Author	Reviewer	Approver
0.1	October 2010	First draft	BDO	PB	DP
0.2	November 2010	Second draft	BDO	PB	DP
0.3	November 2010	Third draft	BDO	DS	DP
0.4	December 2010	DS changes to third draft	BDO	PB/DS	DP
0.5	January 2011	DS changes to fourth draft	BDO	PB/DS	DP
1.0	July 2011	Adopted by Council	BDO	DS	DP
2.0	October 2018	Draft Version	BH	PB/BDO/BD	DS
3.0	November 2018	Amendments to Draft	BH	PB/RD	DS
3.1	February 2021	Adoption by Council (17/02/2021)	BH	PB/RD	DS

Intergrated Planning and Reporting Framework



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ABBREVIATIONS

AAAC	Average annual asset consumption
AMP	Asset management plan
ARI	Average recurrence interval
BOD	Biochemical (biological) oxygen demand
CRC	Current replacement cost
CWMS	Community wastewater management systems
DA	Depreciable amount
DoH	Department of Health
EF	Earthworks/formation
IRMP	Infrastructure risk management plan
LCC	Life Cycle cost
LCE	Life cycle expenditure
MMS	Maintenance management system
PCI	Pavement condition index
RV	Residual value
SS	Suspended solids
vph	Vehicles per hour
BAM	Bathurst Aerodrome Manual
CASA	Civil Aviation Safety Authority
CASR	Civil Aviation Safety Regulation

GLOSSARY

Annual service cost (ASC)
An estimate of the cost that would be tendered, per annum, if tenders were called for the supply of a service to a performance specification for a fixed term. The Annual Service Cost includes operating, maintenance, depreciation, finance/ opportunity and disposal costs, less revenue.

Asset class
Grouping of assets of a similar nature and use in an entity's operations (AASB 166.37).

Asset condition assessment
The process of continuous or periodic inspection, assessment, measurement and interpretation of the resultant data to indicate the condition of a specific asset so as to determine the need for some preventative or remedial action.

Asset management
The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost effective manner.

Assets
Future economic benefits controlled by the entity as a result of past transactions or other past events (AAS27.12).

Property, plant and equipment including infrastructure and other assets (such as furniture and fittings) with benefits expected to last more than 12 month.

Average annual asset consumption (AAAC)*
The amount of a local government's asset base consumed during a year. This may be calculated by dividing the Depreciable Amount (DA) by the Useful Life and totalled for each and every asset OR by dividing the Fair Value (Depreciated Replacement Cost) by the Remaining Life and totalled for each and every asset in an asset category or class.

Brownfield asset values**
Asset (re)valuation values based on the cost to replace the asset including demolition and restoration costs.

Capital expansion expenditure
Expenditure that extends an existing asset, at the same standard as is currently enjoyed by residents, to a new group of users. It is discretional expenditure, which increases future operating, and maintenance costs, because it increases council's asset base, but may be associated with additional revenue from the new user group, e.g. extending a drainage or road network, the provision of an oval or park in a new suburb for new residents.

Capital expenditure
Relatively large (material) expenditure, which has benefits, expected to last for more than 12 months. Capital expenditure includes renewal, expansion and upgrade. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital funding
Funding to pay for capital expenditure.

Capital grants
Monies received generally tied to the specific projects for which they are granted, which are often upgrade and/or expansion or new investment proposals.

Capital investment expenditure
See capital expenditure definition

Capital new expenditure
Expenditure which creates a new asset providing a new service to the community that did not exist beforehand. As it increases service potential it may impact revenue and will increase future operating and maintenance expenditure.

Capital renewal expenditure
Expenditure on an existing asset, which returns the service potential or the life of the asset up to that which it had originally. It is periodically required expenditure, relatively large (material) in value compared with the value of the components or sub-components of the asset being renewed. As it reinstates existing service potential, it has no impact on revenue, but may reduce future operating and maintenance expenditure if completed at the optimum time, e.g. resurfacing or resheeting a material part of a road network, replacing a material section of a drainage network with pipes of the same capacity, resurfacing an oval. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital upgrade expenditure
Expenditure, which enhances an existing asset to provide a higher level of service or expenditure that will increase the life of the asset beyond that which it had originally. Upgrade expenditure is discretional and often does not result in additional revenue unless direct user charges apply. It will increase operating and maintenance expenditure in the future because of the increase in the council's asset base, e.g. widening the sealed area of an existing road, replacing drainage pipes with pipes of a greater capacity, enlarging a grandstand at a sporting facility. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Carrying amount
The amount at which an asset is recognised after deducting any accumulated depreciation / amortisation and accumulated impairment losses thereon.

Class of assets
See asset class definition

Component
An individual part of an asset which contributes to the composition of the whole and can be separated from or attached to an asset or a system.

Cost of an asset
The amount of cash or cash equivalents paid or the fair value of the consideration given to acquire an asset at the time of its acquisition or construction, plus any costs necessary to place the asset into service. This includes one-off design and project management costs.

Current replacement cost (CRC)
The cost the entity would incur to acquire the asset on the reporting date. The cost is measured by reference to the lowest cost at which the gross future economic benefits could be obtained in the normal course of business or the minimum it would cost, to replace the existing asset with a technologically modern equivalent new asset (not a second hand one) with the same economic benefits (gross service potential) allowing for any differences in the quantity and quality of output and in operating costs.

Current replacement cost "As New" (CRC)
The current cost of replacing the original service potential of an existing asset, with a similar modern equivalent asset, i.e. the total cost of replacing an existing asset with an as NEW or similar asset expressed in current dollar values.

Cyclic Maintenance**
Replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, building roof replacement, cycle, replacement of air conditioning equipment, etc. This work generally falls below the capital/ maintenance threshold and needs to be identified in a specific maintenance budget allocation.

Depreciable amount
The cost of an asset, or other amount substituted for its cost, less its residual value (AASB 116.6)

Depreciated replacement cost (DRC)
The current replacement cost (CRC) of an asset less, where applicable, accumulated depreciation calculated on the basis of such cost to reflect the already consumed or expired future economic benefits of the asset

Depreciation / amortisation
The systematic allocation of the depreciable amount (service potential) of an asset over its useful life.

Economic life
See useful life definition.

Expenditure
The spending of money on goods and services. Expenditure includes recurrent and capital.

Fair value
The amount for which an asset could be exchanged or a liability settled, between knowledgeable, willing parties, in an arms length transaction.

Greenfield asset values **
Asset (re)valuation values based on the cost to initially acquire the asset.

Heritage asset
An asset with historic, artistic, scientific, technological, geographical or environmental qualities that is held and maintained principally for its contribution to knowledge and culture and this purpose is central to the objectives of the entity holding it.

Impairment Loss
The amount by which the carrying amount of an asset exceeds its recoverable amount.

Infrastructure assets
Physical assets of the entity or of another entity that contribute to meeting the public's need for access to major economic and social facilities and services, e.g. roads, drainage, footpaths and cycle ways. These are typically large, interconnected networks or portfolios of composite assets. The components of these assets may be separately maintained, renewed or replaced individually so that the required level and standard of service from the network of assets is continuously sustained. Generally the components and hence the assets have long lives. They are fixed in place and are often have no market value.

Investment property
Property held to earn rentals or for capital appreciation or both, rather than for:
(a) use in the production or supply of goods or services or for administrative purposes; or
(b) sale in the ordinary course of business (AASB 140.5)

Level of service
The defined service quality for a particular service against which service performance may be measured. Service levels usually relate to quality, quantity, reliability, responsiveness, environmental, acceptability and cost).

Life Cycle Cost **
The life cycle cost (LCC) is average cost to provide the service over the longest asset life cycle. It comprises annual maintenance and asset consumption expense, represented by depreciation expense. The Life Cycle Cost does not indicate the funds required to provide the service in a particular year.

Life Cycle Expenditure **
The Life Cycle Expenditure (LCE) is the actual or planned annual maintenance and capital renewal expenditure incurred in providing the service in a particular year. Life Cycle Expenditure may be compared to Life Cycle Expenditure to give an initial indicator of life cycle sustainability.

Loans / borrowings
Loans result in funds being received which are then repaid over a period of time with interest (an additional cost). Their primary benefit is in 'spreading the burden' of capital expenditure over time. Although loans enable works to be completed sooner, they are only ultimately cost effective where the capital works funded (generally renewals) result in operating and maintenance cost savings, which are greater than the cost of the loan (interest and charges).

Maintenance and renewal gap
Difference between estimated budgets and projected expenditures for maintenance and renewal of assets, totalled over a defined time (e.g. 5, 10 and 15 years).

Maintenance and renewal sustainability index
Ratio of estimated budget to projected expenditure for maintenance and renewal of assets over a defined time (e.g. 5, 10 and 15 years).

Maintenance expenditure
Recurrent expenditure, which is periodically or regularly required as part of the anticipated schedule of works required to ensure that the asset achieves its useful life and provides the required level of service. It is expenditure, which was anticipated in determining the asset's useful life.

Materiality
An item is material is its omission or misstatement could influence the economic decisions of users taken on the basis of the financial report. Materiality depends on the size and nature of the omission or misstatement judged in the surrounding circumstances.

Modern equivalent asset.
A structure similar to an existing structure and having the equivalent productive capacity, which could be built using modern materials, techniques and design. Replacement cost is the basis used to estimate the cost of constructing a modern equivalent asset.

Non-revenue generating investments
Investments for the provision of goods and services to sustain or improve services to the community that are not expected to generate any savings or revenue to the Council, e.g. parks and playgrounds, footpaths, roads and bridges, libraries, etc.

Operating expenditure
Recurrent expenditure, which is continuously required excluding maintenance and depreciation, e.g. power, fuel, staff, plant equipment, on-costs and overheads.

Pavement management system
A systematic process for measuring and predicting the condition of road pavements and wearing surfaces over time and recommending corrective actions.

Planned Maintenance**
Repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown criteria/experience, prioritising scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

PMS Score
A measure of condition of a road segment determined from a Pavement Management System.

Rate of annual asset consumption*
A measure of average annual consumption of assets (AAAC) expressed as a percentage of the depreciable amount (AAAC/DA). Depreciation may be used for AAAC.

Rate of annual asset renewal*
A measure of the rate at which assets are being renewed per annum expressed as a percentage of depreciable amount (capital renewal expenditure/DA).

Rate of annual asset upgrade*
A measure of the rate at which assets are being upgraded and expanded per annum expressed as a percentage of depreciable amount (capital upgrade/expansion expenditure/DA).

Reactive maintenance
Unplanned repair work that carried out in response to service requests and management/supervisory directions.

Recoverable amount
The higher of an asset's fair value, less costs to sell and its value in use.

Recurrent expenditure
Relatively small (immaterial) expenditure or that which has benefits expected to last less than 12 months. Recurrent expenditure includes operating and maintenance expenditure.

Recurrent funding
Funding to pay for recurrent expenditure.

Rehabilitation
See capital renewal expenditure definition above.

Remaining life
The time remaining until an asset ceases to provide the required service level or economic usefulness. Age plus remaining life is economic life.

Renewal
See capital renewal expenditure definition above.

Residual value
The net amount which an entity expects to obtain for an asset at the end of its useful life after deducting the expected costs of disposal.

Revenue generating investments
Investments for the provision of goods and services to sustain or improve services to the community that are expected to generate some savings or revenue to offset operating costs, e.g. public halls and theatres, childcare centres, sporting and recreation facilities, tourist information centres, etc.

Risk management
The application of a formal process to the range of possible values relating to key factors associated with a risk in order to determine the resultant ranges of outcomes and their probability of occurrence.

Section or segment
A self-contained part or piece of an infrastructure asset.

Service potential
The capacity to provide goods and services in accordance with the entity's objectives, whether those objectives are the generation of net cash inflows or the provision of goods and services of a particular volume and quantity to the beneficiaries thereof.

Service potential remaining*
A measure of the remaining life of assets expressed as a percentage of economic life. It is also a measure of the percentage of the asset's potential to provide services that is still available for use in providing services (DRC/DA).

Strategic Management Plan (SA)**
Documents Council objectives for a specified period (3-5 yrs), the principle activities to achieve the objectives, the means by which that will be carried out, estimated income and expenditure, measures to assess performance and how rating policy relates to the Council's objectives and activities.

Sub-component
Smaller individual parts that make up a component part.

Useful life
Either:
(a) the period over which an asset is expected to be available for use by an entity, or
(b) the number of production or similar units expected to be obtained from the asset by the entity.
It is estimated or expected time between placing the asset into service and removing it from service, or the estimated period of time over which the future economic benefits embodied in a depreciable asset, are expected to be consumed by the council. It is the same as the economic life.

Value in Use
The present value of estimated future cash flows expected to arise from the continuing use of an asset and from its disposal at the end of its useful life. It is deemed to be depreciated replacement cost (DRC) for those assets whose future economic benefits are not primarily dependent on the asset's ability to generate new cash flows, where if deprived of the asset its future economic benefits would be replaced.

Source: DVC 2006, Glossary
Note: Items shown * modified to use DA instead of CRC
Additional glossary items shown **

Bathurst Aerodrome Manual
Provides information about the aerodrome, (e.g. contact information) but does not address asset replacement etc.

CASA MOS139
Civil Aviation Safety Authority Manual of Standards 139, the "rule book"

CASR
Civil Aviation Safety Regulation refers to MOS139 as a mandatory standard

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1. EXECUTIVE SUMMARY

What Council Provides
Council provides the aerodrome facilities to allow for commercial, recreation aviation activities and meeting Objectives; 1.5, 2.1, 2.2, 3.3, 4.1, 4.3, 4.5, 5.5, 6.1, 6.4 and 6.6 within Council's adopted 2040 Community Strategic Plan.

The main aerodrome assets include:

- A sealed runway (17/35) 1705m long
- An unsealed runway (08/26) 1435m long
- A glider airstrip
- A modern terminal building with parking for RPT (Regular Passenger Transport) aircraft, car park and access roads.
- Taxiways and associated infrastructure to cater for local commercial and recreational aviation support industry.
- Drainage and other aviation-specific items (e.g. runway lights, windsocks, airstrip markers)

What does it Cost?
There are two key indicators of cost to provide the recreation assets network.

- The life cycle cost being the average cost over the life cycle of the asset, and
- The total maintenance and capital renewal expenditure required to deliver existing service levels in the next 10 years covered by Council's long term financial plan.

The life cycle cost to provide the aerodrome assets is estimated at **$611,047** on average per annum. Council's planned life cycle expenditure for year 1 of the asset management plan is **$506,668** which gives a life cycle sustainability index of **0.83.**

The total maintenance and capital renewal expenditure required to provide the aerodrome assets over the next 10 years are estimated at **$28.84 million**. This is an average of **$2.88 million** per annum.

Council's maintenance and capital renewal expenditure for year 1 of the asset management plan of **$1.93 million** giving a 10 year sustainability index of **0.67**.

Plans for the Future
Council plans to operate and maintain the aerodrome assets to achieve the following strategic objectives.

1. Ensure the aerodrome is functioning and available for users.
2. Ensure the aerodrome is maintained at a safe and functional standard as set out in this infrastructure asset management plan, *CASR* and *CASA MOS139.*
3. Ensure that future expansion or capital improvement of the aerodrome asset portfolio is planned appropriately to cater for growth.
4. Maximise an assets useful life whilst minimising lifecycle expenditure.
5. Maintain a high level of community satisfaction in the provision of aerodrome assets.

Measuring our Performance

Quality
Aerodrome assets will be maintained in a reasonably usable condition and in line with CASA regulations. Defects found or reported that are outside the stated standard will be repaired.

Function
It is intended aerodrome assets will be maintained in partnership with other levels of government and stakeholders to ensure community satisfaction is maintained and safety is not compromised.

The following key functional objectives are met:

- Safe and efficient operation of the aerodrome.
- Maintenance and renewal of the aerodrome is within budget.
- Support of commercial and recreational aviation activities in the Bathurst community.

Safety
Council will react to complaints and requests regarding aerodrome assets according to response times. These are prioritised according to the perceived risk each complaint presents weighed against the available budget in the Bathurst Regional Council Management Plan.

The Next Steps
This actions resulting from this asset management plan are:

- Implementation of the Plan
- Review of the Plan
- Improve financial data collection;
- Improve valuation and depreciation projections

2. INTRODUCTION

2.1 Background

This asset management plan is to demonstrate responsive management of assets (and the services provided from assets), compliance with regulatory requirements, and to highlight the funding that is required to provide the required levels of service in accordance with Objectives; 1.5, 2.1, 2.2, 3.3, 4.1, 4.3, 4.5, 5.5, 6.1, 6.4 and 6.6 within Council's adopted 2040 Community Strategic Plan.

Assets owned and maintained by Council at the Aerodrome provide and allow for aviation activities to be undertaken by members of the Bathurst and wider Community. This currently (July 2018) ranges from Regular Passenger Transport provided by Regional Express (REX) airline for some 23,000 passengers per year to flying training, aviation service and repair businesses, other aviation ancillary businesses, recreational flying (including Bathurst Aero Club), RAAF Air Cadets and medical transport (Angel Flight and NSW Air Ambulance) with total annual landings of around 8,000.

Table 2.1 Aerodrome assets covered by this plan[1]

Category	Dimension	Replacement Value ($)
Land	**194ha**	**$1,277,200**
Buildings	**6 buildings**	**$1,272,597**
Car park and entry road	**4464m^2**	**$192,418**
Airstrip (Glider Strip Earthwork)	**81ha**	**$177,914**
Runways (17/35 & 08/26)	**76,385m^2**	**$5,363,698**
Taxiways (Alpha, Bravo, Charlie, Delta & Echo)	**22,607m^2**	**$512,273**
Hard-stand areas (Apron)	**6,320m^2**	**$260,596**
Drainage	**95 Pipes, 82 Pits & 21 Culvert Headwalls**	**$2,193,227**
Other Structures (Lights, Wind socks, Markers, Cones/Gables & Fences)		**$1,060,234**
TOTAL		**$12,310,157**

Taxiway, Gable Markers, Primary (illuminated) Windsock

[1] Summary of Confirm Asset Valuation Detail Report as at 30/06/2018 + Land value based on VG information in Authority Rates system

Key stakeholders in the preparation and implementation of this asset management plan are:

The Councillors	**Formulate policy for the allocation of resources to maximise benefit to the community whilst minimising the Council's exposure to risk.**
The Council	**To manage the implementation of policy in a timely and cost effective manner. To ensure resources are effectively utilised.**
General Public	**Users of aerodrome facilities as passengers/visitors.**
Commercial aviation operators	**Users of aerodrome facilities on a commercial basis; either directly or in an aviation support industry role.**
Recreational aviation operators/groups	**Users of aerodrome facilities on a recreational basis, either individually or part of a group such as Bathurst Aero Club.**

2.2 Goals and Objectives of Asset Management

Council's core business activities include the provision of services to the community. Some of these services are provided by infrastructure assets. Council has acquired infrastructure assets by 'purchase', by contract, construction by council staff and by donation of assets constructed by developers and others to meet increased levels of service in accordance with Objectives; 1.5, 2.1, 2.2, 3.3, 4.1, 4.3, 4.5, 5.5, 6.1, 6.4 and 6.6 within Council's adopted 2040 Community Strategic Plan.

Council's goal in managing infrastructure assets is to meet the required level of service in the most cost effective manner for present and future consumers. The key elements of infrastructure asset management are:

- Taking a life cycle approach,
- Developing cost-effective management strategies for the long term,
- Providing a defined level of service and monitoring performance,
- Understanding and meeting the demands of growth through demand management and infrastructure investment,
- Managing risks associated with asset failures,
- Sustainable use of physical resources,
- Continuous improvement in asset management practices.[2]

This asset management plan is prepared under the direction of Council's vision, mission, goals and objectives.

Council's vision:

"Bathurst: A vibrant and innovative region that values our heritage, culture, diversity and strong economy."

Kings Parade in Bathurst's CBD

[2] IIMM 2006 Sec 1.1.3, p 1.3

Relevant Council goals and Objectives; 1.5, 2.1, 2.2, 3.3, 4.1, 4.3, 4.5, 5.5, 6.1, 6.4 and 6.6 within Council's adopted 2040 Community Strategic Plan and how these are addressed in this asset management plan are detailed in Table 2.2.

Table 2.2. Council Goals and how these are addressed in this Plan

Community Strategic Plan Objective	How Goal and Objectives are addressed in the AMP
1.5 Promote good design in the built environment. 2.1 Support local business and industry.	• Ensure the provision of facilities at the aerodrome in line with regulatory requirements and user requests within appropriate financial constraints.
2.2 Grow local employment, investment and attract new business by nurturing and supporting entrepreneurs, partnerships and local skills development.	• Ensure the provision of facilities at the aerodrome in line with regulatory requirements and user requests within appropriate financial constraints. • Ensure internal road network and hangers are at the acceptable level of service for projected transport volumes.
3.3 Minimise the city's environmental footprint, live more sustainably and use resources more wisely.	• Adapting to changing usage trends. • Targeted expenditure for proactive maintenance activities to minimise larger replacement costs and resources in the future.
4.1 Facilitate development in the region that considers the current and future needs of the community.	• Planned expenditure for future taxi-ways and subdivisions to cater for growth.
4.3 Ensure services, facilities and infrastructure to meet the changing needs of the region.	• Relevance of provided facilities. • Ensure the facilities at the aerodrome in line with regulatory requirements and user requests within appropriate financial constraints.
4.5 Work with partners to improve public transport, passenger and freight connections to and from the region.	• Ensure internal road network and hangers are at the acceptable level of service for projected transport volumes.
5.5 Plan and respond to demographic changes in the community.	• Adapting to changing usage trends. • Planned expenditure for future taxi-ways and subdivisions to cater for growth.
6.1 Communicate and engage with the community, government and business groups on important matters affecting the Bathurst Region.	• Community Surveys • Feedback from passengers or the community regarding Council's Aerodrome Assets to reaffirm acceptable levels of service.
6.4 Meet legislative and compliance requirements.	Bathurst Aerodrome is a certified registered aerodrome and is subject to the requirements of CASR and MOS139 As a result: ✓ Regular audits are conducted by CASA to ensure compliance. ✓ Technical inspections are carried out annually for lighting, pavements and all other airside infrastructure. ✓ Daily runway and security inspections are carried out prior to RPT operations.
6.6 Manage our money and our assets to be sustainable now and into the future.	• Adapting to changing usage trends. • Targeted expenditure for proactive maintenance activities to minimise larger replacement costs and resources in the future. • Ensure the facilities at the aerodrome in line with regulatory requirements and user requests within appropriate financial constraints.

2.3 Plan Framework

The key elements contained within the Aerodrome Asset Management plan are:

- Levels of service – specifies the services and levels of service to be provided by council.
- Future demand – how this will impact on future service delivery and how this is to be met.
- Life cycle management – how Council will manage its existing and future assets to provide the required services
- Financial summary – what funds are required to provide the required services.
- Asset management practices
- Monitoring – how the plan will be monitored to ensure it is meeting Council's objectives.
- Asset management improvement plan

A road map for preparing an asset management plan is shown on the next page.

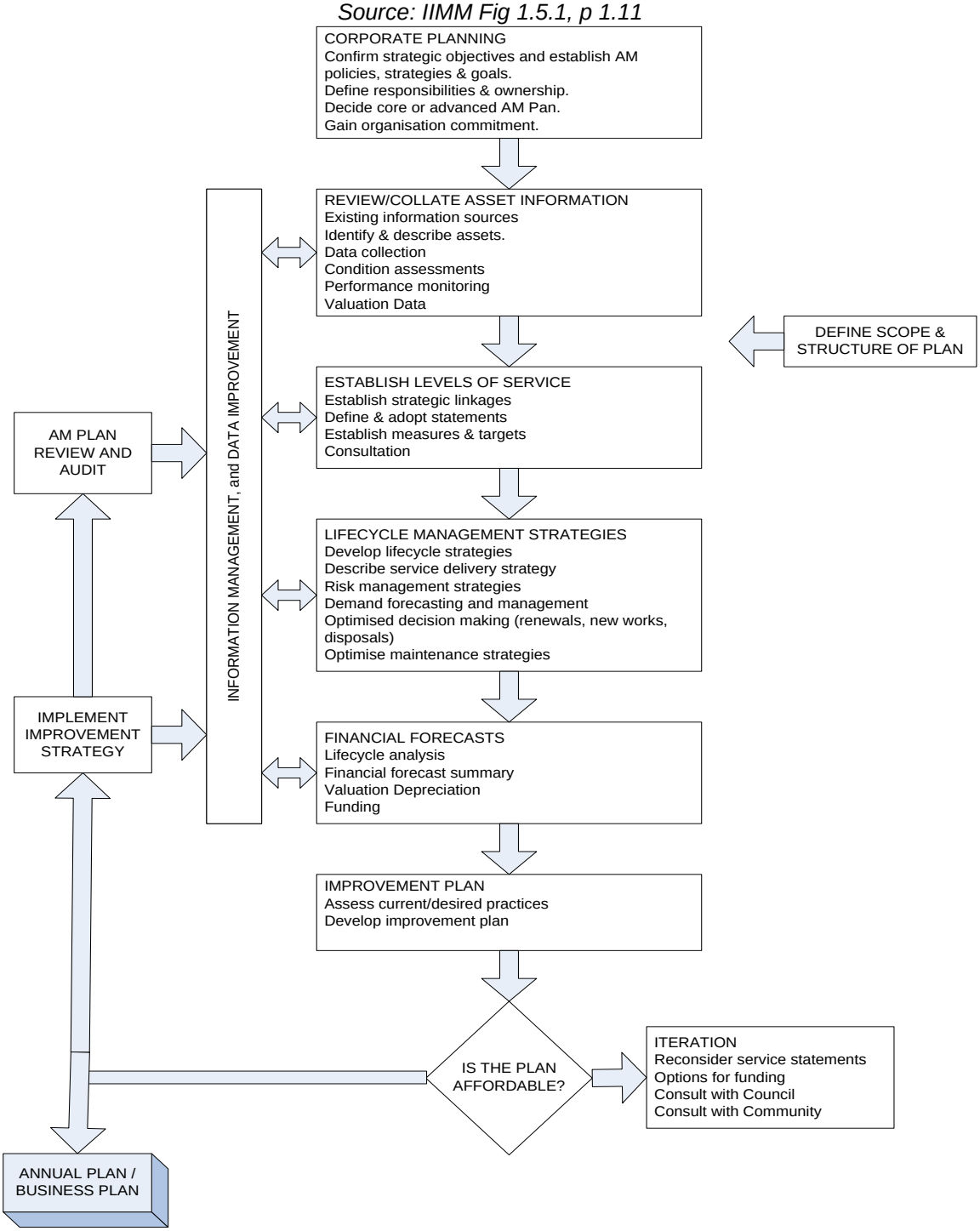
2.4 Core and Advanced Asset Management

This asset management plan is prepared as a 'core' asset management plan in accordance with the International Infrastructure Management Manual. It is prepared to meet minimum legislative and organisational requirements for sustainable service delivery and long term financial planning and reporting. Core asset management is a 'top down' approach where analysis is applied at the 'system' or 'network' level.

Future revisions of this asset management plan will move towards 'advanced' asset management using a 'bottom up' approach for gathering asset information for individual assets to support the optimisation of activities and programs in order to meet agreed service levels.

Road Map for preparing an Asset Management Plan

Source: IIMM Fig 1.5.1, p 1.11

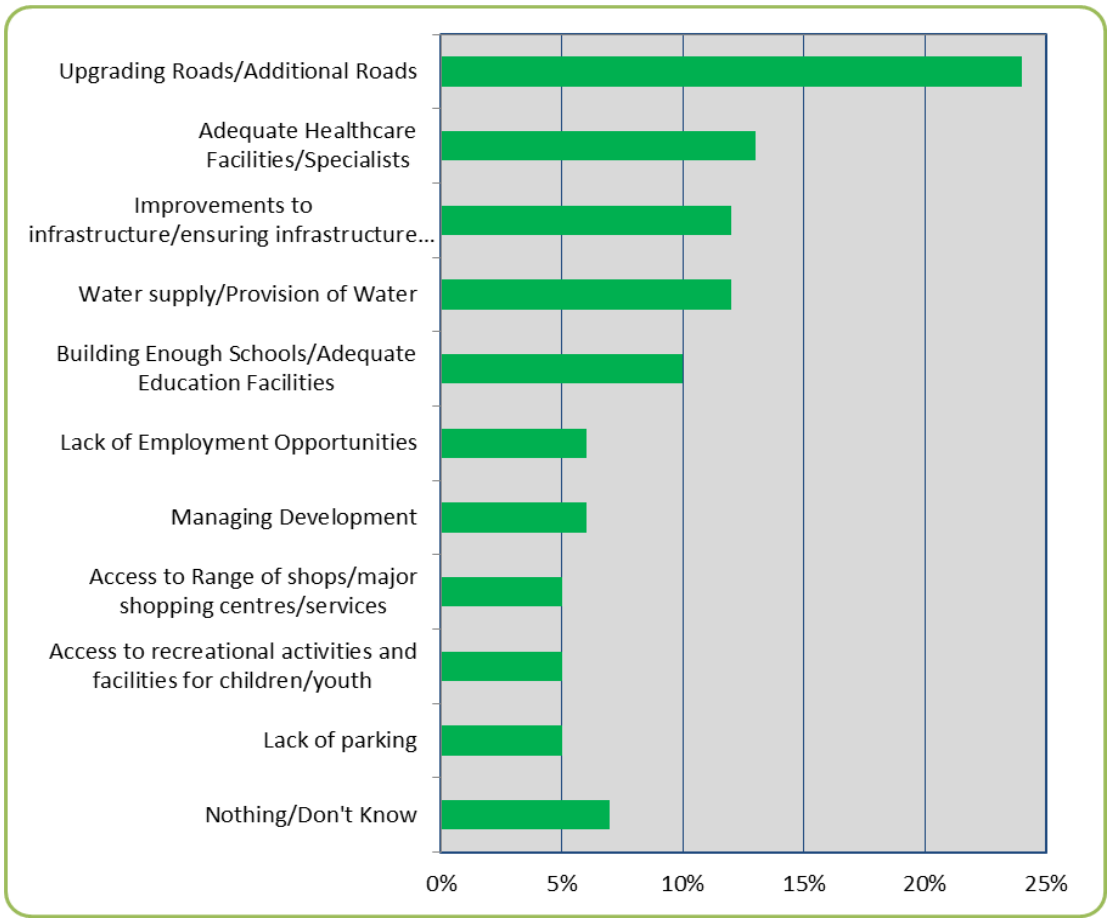


3. LEVELS OF SERVICE

3.1 Customer Research and Expectations

The Council undertakes community surveys on an annual basis to gauge community expectations and satisfaction with the service Council provides. A series of questions are put to a broad cross section of the community including residents from rural and urban areas each year. The survey for 2009 has changed the method of data collection from telephone survey to a mailed written survey. Using the data from the Community Survey helps council meet Objectives; 1.5, 2.1, 2.2, 2.6, 3.3, 4.1, 4.3, 4.5, 5.5, 6.1, 6.4 and 6.6 within Council's adopted 2040 Community Strategic Plan.

Respondents were asked to select and rank 3 priorities for Bathurst Regional Council in 2016. The results in order of priority for 2016 are:



The function or operation of the aerodrome has not specifically been covered in 9 of the last 10 Community surveys (questions relating to the aerodrome were only included in the 2004 survey). CASA Office of Airspace Regulation has interviewed users of the Aerodrome but this was in relation to the airspace above the Aerodrome rather than the Council Assets and facilities.

As a result Council relies heavily on direct feedback to the Airport Manager and Senior Airport Groundsman from the community to gauge the level of satisfaction with the aerodrome. This feedback is used to refine regular operational maintenance schedules and planning for future capital works.

Terminal Building – land side

Waiting area and RPT desk inside terminal building

Looking over apron and taxiway Alpha

3.2 Legislative Requirements

Council has to meet many legislative requirements including Australian and State legislation and State regulations and Objectives; 1.5, 2.1, 2.2, 3.3, 4.1, 4.3, 4.5, 5.5, 6.1, 6.4 and 6.6 within Council's adopted 2040 Community Strategic Plan. The primary acts and regulations relating to the aerodrome assets are:

Table 3.2. Legislative Requirements

Legislation	Requirement
Local Government Act	**Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by asset management plans for sustainable service delivery.**
Environmental Planning and Assessment Act 1979	**The principal planning instrument in NSW – specifies environmental considerations required for all development activities.**
Civil Liabilities Act 2002	**Sets out the provisions that give protection from civil liability and the responsibilities of Council and public alike.**
Protection of the Environment Act 1997	**To protect, restore and enhance the quality of the environment having regard to the need to maintain ecologically sustainable development.**
Rural Fires Act 1997	**Aims for the prevention, mitigation and suppression of bush and other fires in local government areas Ensures co-ordination of bush fire fighting and bush fire prevention throughout the State**
Noxious Weeds Act 1993	**Defines the roles of government, councils, private landholders and public authorities in the management of noxious weeds. The Act sets up categorisation and control actions for the various noxious weeds, according to their potential to cause harm to our local environment.**
Native Vegetation Conservation Act 1997	**Provides overriding control of tree and other vegetation destruction in NSW.**
Heritage Act 1977	**An Act to conserve the environmental heritage of the State.**
Occupational Health and Safety Act 2000 and Occupational Health and Safety Regulation 2001	**Provides for the health, safety and welfare of persons at work; and for other purposes.**
Civil Aviation Act 1988	**An Act to establish a Civil Aviation Safety Authority with functions relating to civil aviation, in particular the safety of civil aviation, and for related purposes**
CASA Regulations, MOS Part 139	**Manual of Standards Part 139 - Aerodromes**
CASA Rules and Practices for Aerodromes	**Contain rules, mandatory standards, procedures and guidance information relating to the planning, design and operation of aerodromes.**
Civil Aviation Safety Regulations 1998 (CASR)	**Includes Advisory Circulars and Manual of Standards and are the detailed legislation of the Commonwealth regarding aviation safety**
Aviation Transport Security Regulation 2005	**These Regulations provide the detail necessary for the regulatory framework established by the Aviation Transport Security Act 2004 to operate as intended.**

3.3 Current Levels of Service

Service levels can be defined by two terms.

Community Levels of Service relate to how the community receives the service in terms of safety, quality, quantity, reliability, responsiveness, cost/efficiency and legislative compliance.

Supporting the community service levels are operational or technical measures of performance developed to ensure that the minimum community levels of service are met. These technical measures relate to service criteria such as:

Service Criteria	Technical measures may relate to
Quality	Provision of well-maintained aerodrome assets
Function	Do aerodrome assets meet functional standards
Availability	Meeting future demand
Safety	The management of safety risks associated with the aerodrome

Table 3.3. Current Service Levels

Community Levels of Service

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
Quality	Facilities at the aerodrome provide a quality experience for all users.	Public comment and requests for improved or changed aerodrome facilities.	Not currently measured	**Not currently measured**
		Organisation Measure of % of Aerodrome Assets in; Excellent/Good (1,2) and Poor/Bad (4,5) Condition.	**50% Excellent/Good <5% Poor/Bad**	**38% Excellent/Good 8% Poor/Bad**
Function	Ensure the aerodrome facilities meet user requirements.	Usage of facilities.	Aircraft/Runway movements recorded daily	**Not currently measured**
Accessibility and Quantity	Aerodrome facilities are sufficient to cater for number of passenger and aircraft movements.	Public/RPT provider feedback on facilities to cater for passengers (waiting areas, check-in, baggage handling).	REX provide feedback	**Not currently measured**
		Complaints regarding airside facilities from Commercial or recreational users.	Not currently measured	**Not currently measured**
Maintenance	Airside facilities are well maintained.	Complaints relating to airside facilities.	Maintain within Budget	**Compliance with MOS139/RPAs**
	Landside facilities are well maintained.	Complaints relating to landside facilities.	Maintain within Budget	**Not currently measured**
	Budget Expenditure is sufficient to cover maintenance works on Aerodrome Assets.	Organisation Measure of Maintenance Budget Expenditure	Desired for Optimum $139,842 p.a.*	**2018/19 Budget Avg. $133,530 p.a.**
Safety	**Aerodrome facilities meet the requirements of MOS139/Rules and Practices for Aerodromes**	**Results of Audits/Inspections requiring correction.**	**Compliance with MOS139/RPAs**	**Compliance with MOS139/RPAs**

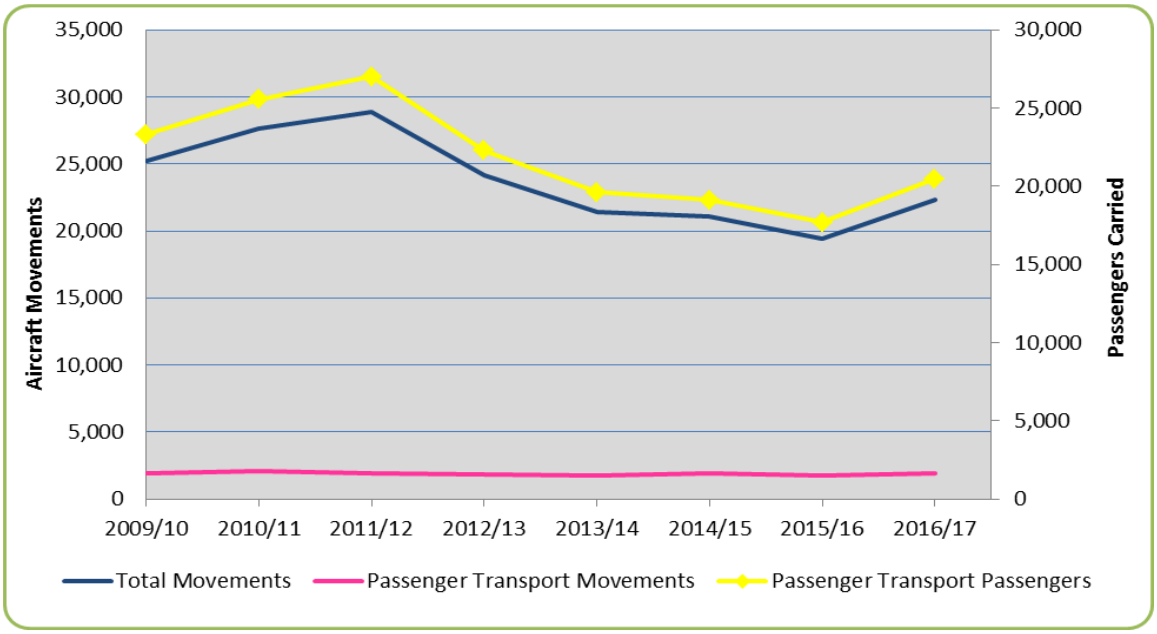
*Desired for optimum maintenance figure determined from last 8 Management Plans, Maintenance expenditures averaged out p.a.

Technical Level of Service

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
Quality	Passenger facilities are sufficient for demand	Complaints relating to passenger terminal facilities	0 p.a.	**Not currently measured**
	Aerodrome is available 365 days per year (apart from scheduled maintenance operations)	Available days >= 360 per year	360 available days	**Closures of runway recorded in inspection record**
	Organisation Measure of % of Aerodrome Assets in; Excellent/Good (1,2) and Poor/Bad (4,5) Condition.		50% Excellent/Good <5% Poor/Bad	**38% Excellent/Good 8% Poor/Bad**
Expenditure	Aerodrome expenditure is within budget	Annual maintenance expenditure is within the budget allocated	Annual expenditure is within ± 10% of annual budget	**Period from Jul 2010-Nov 2010 39% under budget.**
		Organisation Measure of Maintenance Budget Expenditure	Desired for Optimum $139,842 p.a.*	**2018/19 Budget Avg. $133,530 p.a.**
Safety	Aerodrome facilities are safe	Insurance claims received on aerodrome assets	0 p.a.	**Not currently measured**
	CASA required inspection of airside facilities	Airstrips, lights and markings are inspected daily	Daily inspection	**Daily inspection**
	CASA Pavement and Electrical technical inspections	**Required inspections are carried out**	**Required inspection passed**	**Required inspection passed**

*Desired for optimum maintenance figure determined from last 8 Management Plans, Maintenance expenditures averaged out p.a.

Currently there are only very broad performance targets for the operation of the aerodrome. A more detailed review of the aerodrome operations may provide a clearer perspective of the views of the commercial and recreational users.



Change in Annual Movements at Bathurst Regional Aerodrome 2009-2016
(Bureau of Infrastructure, Transport and Regional Economics via CASA Airspace Review of Bathurst Aerodrome, June 2009) [Note: no data for Total movements prior to 2003; also the increase in passengers carried with fewer movements – this is the result of using larger capacity, heavier aircraft]

4. FUTURE DEMAND

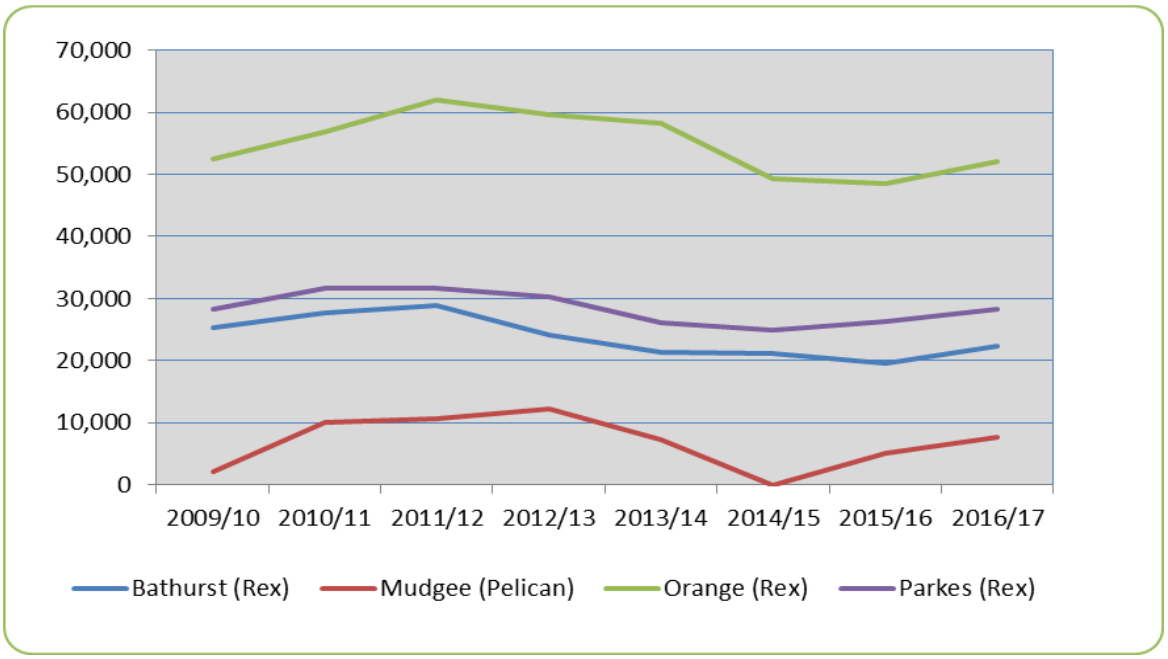
4.1 Demand Forecast

The major factor affecting demand is expectation from users of the aerodrome, both commercial and recreational. As in accordance with Objectives; 1.5, 2.1, 2.2, 3.3, 4.1, 4.3, 4.5, 5.5, 6.1, 6.4 and 6.6 within Council's adopted 2040 Community Strategic Plan.

Table 4.1 Demand Factors, Projections and Impact on Services

Demand factor	Present position	Projection	Impact on services
Population	42,389 (2016 census)	52,500 (2031)	**Increased population will lead to increasing expectations of greater availability for transport options and recreational aviation facilities**
Demographic (see Fig.3)	22.2% of population >60 yrs in 2016 26.9% of population <20 yrs in 2016	26.1% of population >60 yrs in 2031 25.6% of population <20 yrs in 2031	**Reduction in demand on facilities directed at younger people.** **Increased demand on facilities directed at retirees (travellers and users of recreational aviation)**
Quality/quantity of aerodrome facilities	Increased number of plane movements requires additional infrastructure to handle them; e.g. air strip exit points, taxiways, aprons, hangar space		**Initial capital cost of construction is high, more may need to be set aside in future budgets to allow for this expansion**
Changing work practices	As the option of 'telecommuting'/working from home becomes increasingly viable/popular, ready and quick access to the main office will be required Improved availability to Mascot Airport (more suitable time-slots)		**Higher demand for RPT services to Sydney, or even other major centres will require additional facilities at the aerodrome.**
Overflow from nearby aerodromes	Existing nearby aerodrome with RPT at Spring Hill (Orange) may reach capacity and alternative for overflow traffic could be Bathurst aerodrome		**Demand for increased use of runway and terminal facilities will require planned capital upgrades to be brought forward.**
Decrease in recreational users at Bathurst	Other nearby private aerodromes (e.g. Pipers Airfield) may cater for increase in demand for recreational users		**Decrease in fees from recreational user activity, decrease in demand for leased hangar facilities.**
Increase in commercial users at Bathurst	Changes at Metropolitan aerodromes (closure of Hoxton Park, increasing costs at Bankstown) may cause Commercial operators to seek other locations close to the Sydney area. This may also be enhanced by the 'EvoCities" marketing push		**Demand for increased availability of Commercial sites will require planned capital upgrades to be brought forward**
Improvement in competing transport modes	**Planned or future upgrades of other transport modes (especially to/from Sydney) such as the Bells Line Expressway, Great Western Highway and passenger train services**		**Due to the proximity of Bathurst Aerodrome to Sydney (particularly the western areas) a 45 min flight to the southern suburbs (Mascot) will struggle to compete with shorter complete journey times from other transport options (road, rail). This may lead to a reduction, or even removal, of RPT services to Bathurst.**

Figure 2. Passenger comparision with other Regional Airports



4.2 Changes in Technology

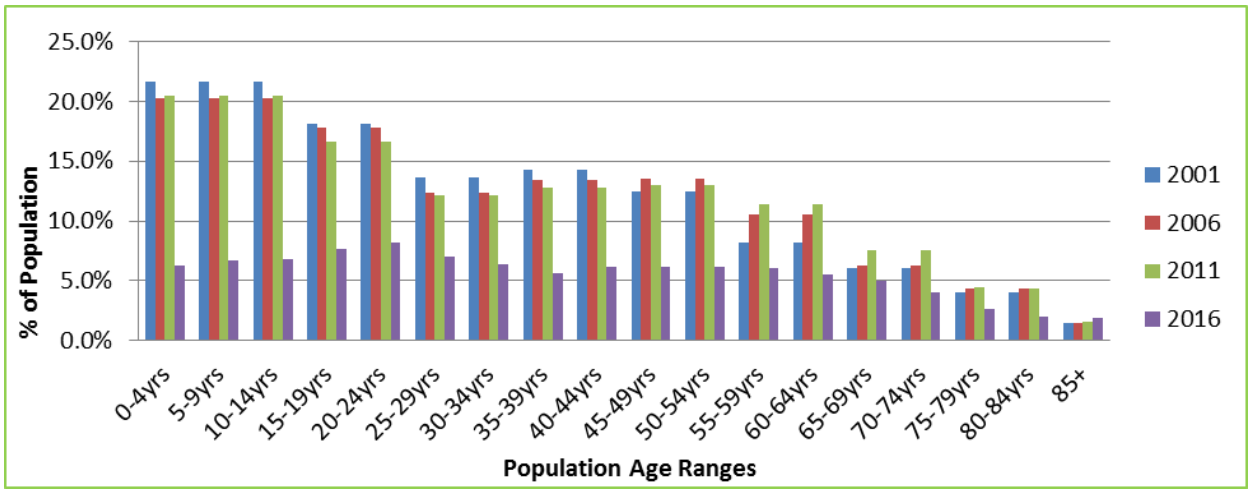
Technology changes may have an effect on passenger demand (tele-commute), recreational usage (increasing availability of affordable recreational aviation), and fuel sources (cheaper fossil fuel technology making flying more cost-effective).

Technology Change	Impact on services
Population	**Increased population will lead to increasing expectations of greater availability for transport options and recreational aviation facilities**
Heavier, higher tyre-pressure aircraft	**Increased loading on runways, taxiways and apron; leading to shorter life spans for seal and pavements in these areas**

Control Tower at Aerodrome

Leased hangers along Windsock Way

Fig. 3 Population Demographics of Bathurst.



Notes on Fig. 3
The most notable demographic changes for the period of 2011 to 2016, has been the significant decrease in the proportion of population for age ranges from 2011 to 2016 by an average of 6.6%.The only exception to this is with the 85+ age range being the only portion to increase in this time by 0.2%.

4.3 Demand Management Plan

Opportunities identified to date for demand management are shown in Table 4.3. Further opportunities will be developed in future revisions of this asset management plan.

Table 4.3. Demand Management Plan Summary

Service Activity	Demand Management Plan
Planning for future aerodrome activity	Undertake a community consultation to assess the demand for various types of infrastructure at the aerodrome.
Passenger	Forecasting growth and monitoring passenger numbers and being able to cater for growth.

BP Re-fuelling station off Taxi-way Bravo – Pending Capital Works Project

4.4 New Assets from Growth

New assets may result from increased usage of the aerodrome (and a consequential increase in landing fees) and/or demand from existing/future users and funding from council's existing revenue base as in accordance with Objectives; 1.5, 2.1, 2.2, , 3.3, 4.1, 4.3, 4.5, 5.5, 6.1, 6.4 and 6.6 within Council's adopted 2040 Community Strategic Plan.

Acquiring these new assets will commit Council to fund ongoing operations and maintenance costs for the period that the service provided from the assets is required. These future costs are identified and considered in developing forecasts of future operating and maintenance costs.

Year	Works
2016/17	**Boundary Fencing Improvements**
2017/18	**Construction of Parallel Taxiway Foxtrot**
"	**Extension of Aircraft Parking Apron (Taxiway Bravo)**
2018/19	**Aerodrome New Security**
"	**Aircraft CCTV Monitoring – New Cameras**
"	**Additional Leasable Hangar Site Improvements**
"	**Redirection of Taxiway Charlie and Construction of Taxiway Hotel**
2019/20	**Aircraft Tie Downs**
"	**Redirection of Taxiway Charlie and Construction of Taxiway Hotel**
2021/22	**Aerodrome Terminal Building Upgrade**

Note: Although not outlined with Council's Adopted 2018/22 Management plan or the above table, new subdivision developments and infrastructure works are planned for future growth at the aerodrome. Please refer to Future Development Map Appendices.

Ground view of approach to Runway 17

5. LIFECYCLE MANAGEMENT PLAN

The lifecycle management plan details how Council plans to manage and operate the assets at the agreed levels of service (defined in section 3) while optimising life cycle costs as in accordance with Objectives; 1.5, 2.1, 2.2, 3.3, 4.1, 4.3, 4.5, 5.5, 6.1, 6.4 and 6.6 within Council's adopted 2040 Community Strategic Plan.

5.1 Background Data

5.1.1 Physical parameters

Table 5.1a Aerodrome Assets

Asset type
Land
Buildings
Airstrip /Runways
Taxiways
Apron/Parking Area
Drainage
Other

Aerdrome Site – Aerial View

Table 5.1b Aerodrome assets

Asset Type	Useful Life (years)	Approximate Quantity
Land	N/A	**194 ha**
Buildings	100	**6**
Airstrips (Glider Strip)	80	**81 ha**
Runway Pavements (17/35 & 08/26)	25	**76,385 m^2**
Runway Seal (Currently only 17/35)	10	**54,288 m^2**
Taxiway Pavements	25	**22,607 m^2**
Taxiway Seal	15	**22,607 m^2**
Apron Pavements	25	**6,320 m^2**
Apron Seal	10	**6,320 m^2**
Drainage Pits	100	**82**
Drainage Pipes	100	**5340 m**
Drainage Headwalls	100	**21**
Drainage open channels	100	**3**
Lights and control system	50	**5**
Markers (cones/gables)	20	**157**
Windsocks	50	**2**
Line marking	1	**White 3150m^2** **Yellow 150m^2**
Fences/Gates	**60**	**Powder-Coat security 79m** **Chain mesh man proof 1164m** **Rural type 9,800 m**

5.1.1 Age of aerodrome assets

The wide variety of ages within the different asset classes makes summarising these difficult. However the following lists ages of some of the assets:

Table 5.1.1 Major aerodrome asset ages

Asset	Year of Construction
Terminal Apron	1965
Runway 17/35 Pavement	1966
Groundsman cottage	1974
Control tower	1987
RPT apron	1994
Runway 17/35 Seal	1995
Terminal Building	2002

5.1.2 Asset capacity and performance

Council's services are generally provided to meet design standards where these are available. Locations where deficiencies in service performance are known are detailed in Table 5.1.2.

Table 5.1.2. Known Service Performance Deficiencies

Location	Service Deficiency
Runway 17/35 pavement/seal	**Pavement concessions are currently required for aircraft with ACN12 and tyre pressure 84psi; improvements to the pavement/seal may allow increased loadings up to ACN20.**

5.1.3 Asset condition

Runways, taxiways and the general airside area are inspected daily, while other assets are inspected on a varying basis.

5.1.3a Runways and taxiways

Due to the high risk nature of aircraft operation on the runways/taxiways, they are subject to tight regulatory conditions as part of the operation of the aerodrome and are inspected daily to ensure they are free from defects that may pose risks to aircraft.

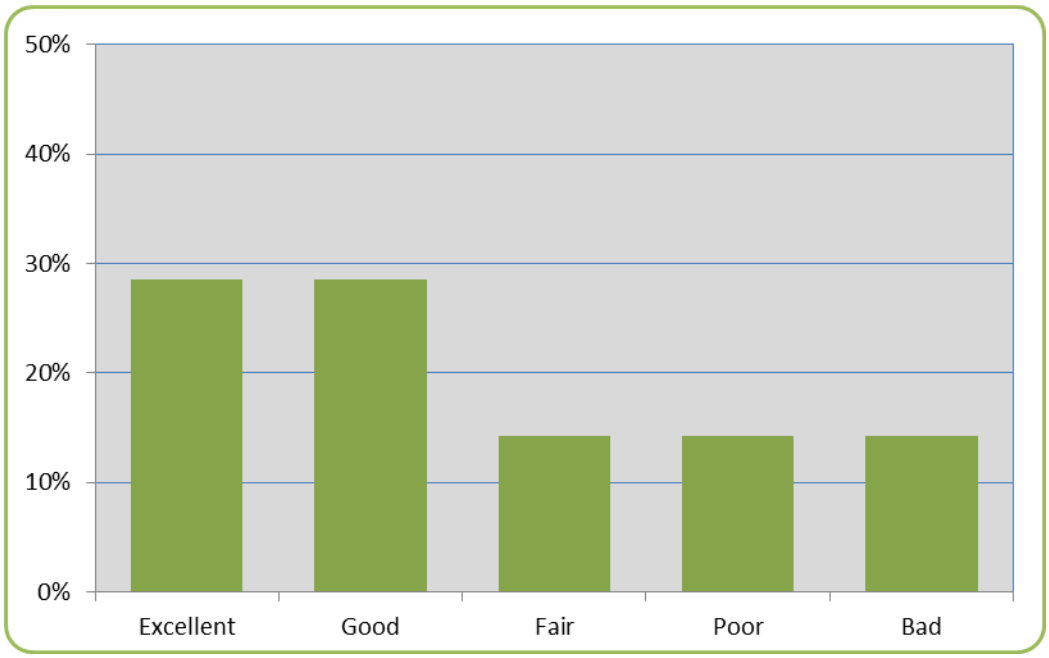
In addition, annual inspections are carried out by external agencies on some of the aerodrome assets (e.g. lighting, Obstacle Limitation Surface, pavement)

Terminal Building – air side

5.1.3b Buildings

Council does not have an active building inspection program for any classes of building. There is no specific data gathered on the overall condition of the buildings in the Council's asset register. The information displayed in Fig 7 has been gathered through a brief visual inspection of each building. There has been no structural testing of any sort. Therefore, the resulting condition ratings are more of an indication of the buildings aesthetic qualities rather than a statement on structural soundness.

Fig 4. Buildings



Rating	Description of Condition
1.	Excellent condition: Only planned maintenance required.
2.	Good: Minor maintenance required & planned maintenance.
3.	Average: Significant maintenance required.
4.	Poor: Significant renewal/upgrade required.
5.	Bad: Building should be demolished

5.1.4 Asset inspections

A number of inspections are carried out at the aerodrome for the purposes of the daily operation. These inspections also highlight any issues with the assets managed at the aerodrome.

Aerodrome Lighting Inspection
In accordance with Bathurst Regional Aerodrome Manual Part 2 Section 3,

A night-time lighting performance inspections is conducted at least weekly…
A full lighting technical inspection and maintenance is conducted annually …

Inspection/Assessment of Movement Area, Pavements and Drainage.
In accordance with Bathurst Regional Aerodrome Manual Part 2 Section 6, *"aerodrome serviceability inspections are conducted by the aerodrome reporting officer to detect immediate hazards"* inspections include movement areas, pavements and drainage.

Inspections are generally carried out before the first RPT service, every day of the week. Additional inspections are carried out after unusual weather such as heavy rainfall or severe wind storms, or following requests from NOF or the District Aerodrome Inspector.

An inspection and assessment of the movement area pavements and drainage is undertaken and reported as follows:

Runway:	08/26	17/35	Glider
• Daily check of movement areas -staff competency -inspection content -inspection system -inspection frequency -recording inspection results of noted defects)	✓	✓	✓
• **Surface** -texture, roughness -cleanliness -drainage -other faults (cracks,holes,rutting)	✓	✓	✓
• **Shoulders** -surface material -width, strength, slope -drainage	✓	✓	✓
• **Strip** -width, graded and ungraded -surface condition (subsidence, depressions, loose stones, grass) -drainage (drains, ponding)	✓	✓	✓
• **RESA, Clearways, Stop ways** -surface, strength, slope, obstruct	✓	✓	✓

Other Movement Areas:	Main Taxiway - Alpha	GA Taxiways – Bravo, Charlie, Delta, Echo	Apron
• **Surfaces** -texture, roughness -cleanliness (stone, debris) -drainage -other faults (cracks, holes, rutting)	✓	✓	✓
• **Shoulders** -surface material -width, strength, slope/shape -drainage	✓	✓	✓
• **Aircraft Tie-Down Areas** -location, cables, pegs, rings	✓	✓	✓

An Inspection of Signs, Markers and Marking On the Movement Area;
In accordance with Bathurst Regional Aerodrome Manual Part 2 Section 6, "*aerodrome serviceability inspections are conducted by the aerodrome reporting officer to detect immediate hazards*" inspections include signs, markers and marking on the movement area.

An inspection and assessment of the signs, markers and markings on the movement area is undertaken and reported as follows:

Runway:	08/26	17/35	Glider
• **Markers and markings** -in accordance with standards	✓	✓	✓

Other Movement Areas:	Main Taxiway - Alpha	GA Taxiways – Bravo, Charlie, Delta, Echo	Apron
• **Markers and markings** -in accordance with standards	✓	✓	✓
• **Wind direction indicators**	✓	✓	✓
• **Aircraft Tie-Down Areas** -marked/sign posted	✓	✓	✓

In the future Council may develop a program of condition inspections for Council building assets. As part of any future inspection program the aerodrome building assets should be included.

Terminal and hangars on leased sites

Hangars on leased sites

5.1.5 Asset valuations

The valuation data assembled below has been based on estimation gathered from various sources. See Section 6.4 for details on valuation assumptions.

Current Replacement Cost	**$9,862 million**
Depreciable Amount	**$3,372 million** (CRC less land and earthworks)
Depreciated Replacement cost	**$6,489 million**
Annual depreciation expense	**$290,366 thousand**

Sustainability reporting reports the rate of annual asset consumption and compares this to asset renewal and asset upgrade and expansion.

Asset consumption	**1.40%**
Asset renewal	**7.60%**
Annual upgrade/expansion	**22.4%**

5.2 Risk Management Plan

An assessment of risks associated with service delivery from infrastructure assets has identified critical risks to Council. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for non-acceptable risks.

Critical risks, being those assessed as 'Very High' - requiring immediate corrective action and 'High' – requiring prioritised corrective action identified in the infrastructure risk management plan are summarised in Table 5.2.

Table 5.2. Critical Risks and Treatment Plans

Risk	What can Happen	Risk Rating	Risk Treatment Plan
Runway	Tyre blow out due to debris on runway	**H**	**Monitor current sweeping program, increase if required**
Runway	Tyre blow out due to pavement failure	**H**	**Increase frequency of resealing. Engineers Assessment and report**
Taxiway/Apron	Damage from refuelling activities	**H**	**Refuelling to occur only at designated locations with treated seal to protect against fuel spill damage**
Drainage	Water on sealed areas due to blocked drains	**H**	**Monitor through inspections regime**
Terminal Building	Security/Vandalism	**H**	**Security review and design review and change. Continue current program and implement renewal program.**
Terminal Building	Electrical Fault	**H**	**Regular inspections and preventative treatments. Increase Visual inspections**
Terminal Building	Public liability	**H**	**Regular and documented inspections. Upgrade Safety Inspections to include action report**
Terminal Building	Fire (internal generated within building)	**H**	**Maintain fire equipment in high use and building rules and auditing. Implement Annual Inspections**

Risk	What can Happen	Risk Rating	Risk Treatment Plan
Aircraft	Damage due to animal activity	**H**	**Regular monitoring and upgrade of existing perimeter fencing g. Occasional eradication and bird dispersal.**
Security	Breach of Secure Airside area of aerodrome	**H**	**Transport Security Plan (TSP)**
Emergency on field	Emergency situation within aerodrome boundary	**H**	**Bathurst Aerodrome Emergency Plan (AEP) (Separate exercises are held every two years to test TSP and AEP)**

Ground approach to Runway 26 (unsealed)

Approach end markers for Runway 08 (unsealed) and Secondary Wind Sock

5.3 Routine Maintenance Plan

Routine maintenance is the regular on-going work that is necessary to keep assets operating, including instances where portions of the asset fail and need immediate repair to make the asset operational again as in accordance with Objectives; 1.5, 2.1, 2.2, , 3.3, 4.1, 4.3, 4.5, 5.5, 6.1, 6.4 and 6.6 within Council's adopted 2040 Community Strategic Plan.

5.3.1 Maintenance plan

Maintenance includes reactive, planned and cyclic maintenance work activities.

Reactive maintenance is unplanned repair work carried out in response to service requests and management/supervisory directions. Reactive maintenance to the aerodrome assets includes:

- Grass Mowing (Airside and Landside areas)
- Maintenance of vegetation near terminal building
- Repair of buildings
- Repairs to lighting system components
- Repairs to seal on Apron/Taxiway/Runway
- Repairs to Security gates and fences

Planned maintenance is repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown experience, prioritising, scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance. Planned maintenance includes:

- Grass Mowing (Airside and Landside areas)
- Building Painting – terminal
- Recarpeting – terminal

Cyclic maintenance is work carried out on a periodic basis, not prompted by inspection or complaints. This can include:

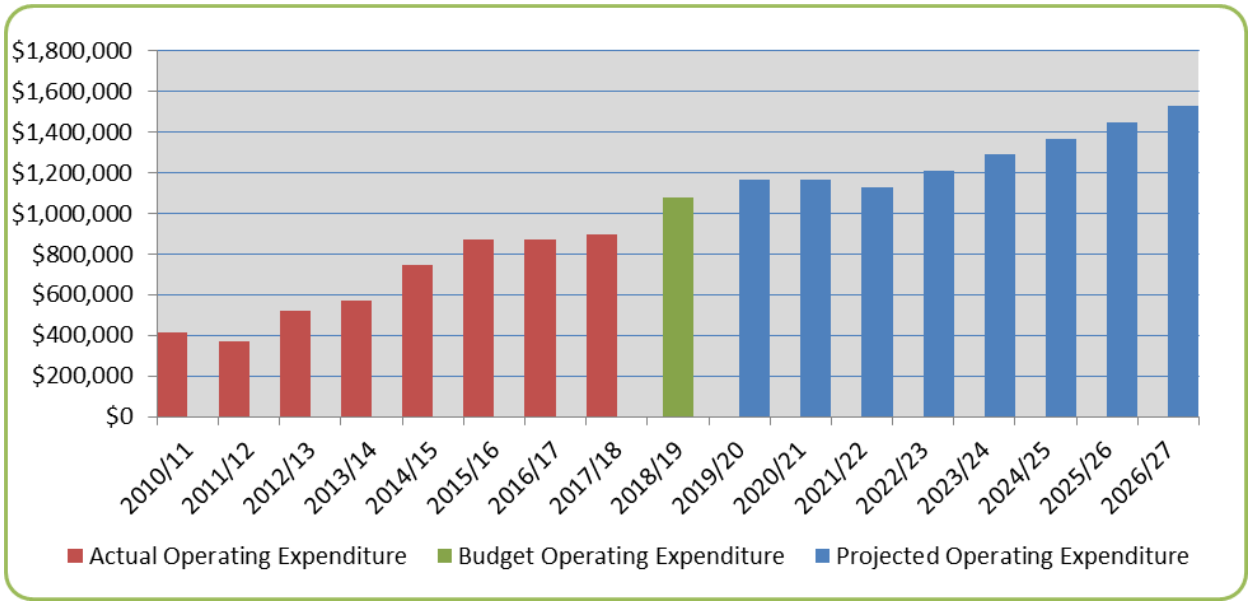
- Grass Mowing (Airside and Landside areas)
- Painting of structures (e.g. gable markers)
- Replanting of garden beds
- Renewal of line marking on runways (3150m^2) and Taxiways (150m^2) annually
- Maintenance of vegetation on approach/departure to runways

Maintenance expenditure trends are shown in Table 5.3.1

Table 5.3.1. Maintenance Expenditure Trends

Year	Operations & Maintenance Expenditure
2010/11	**$414,557**
2011/12	**$374,735**
2012/13	**$517,537**
2013/14	**$636,995**
2014/15	**$743,517**
2015/16	**$871,886**
2016/17	**$881,315**
2017/18	**$894,779**
2018/19 (Current Budget)	**$969,286**

Fig 5. Summary of maintenance and operations Budget since 2010/11



Assessment and prioritisation of reactive maintenance is undertaken by Council staff using experience, training and judgement.

Mowing Glider Airstrip

5.3.3 Standards and specifications

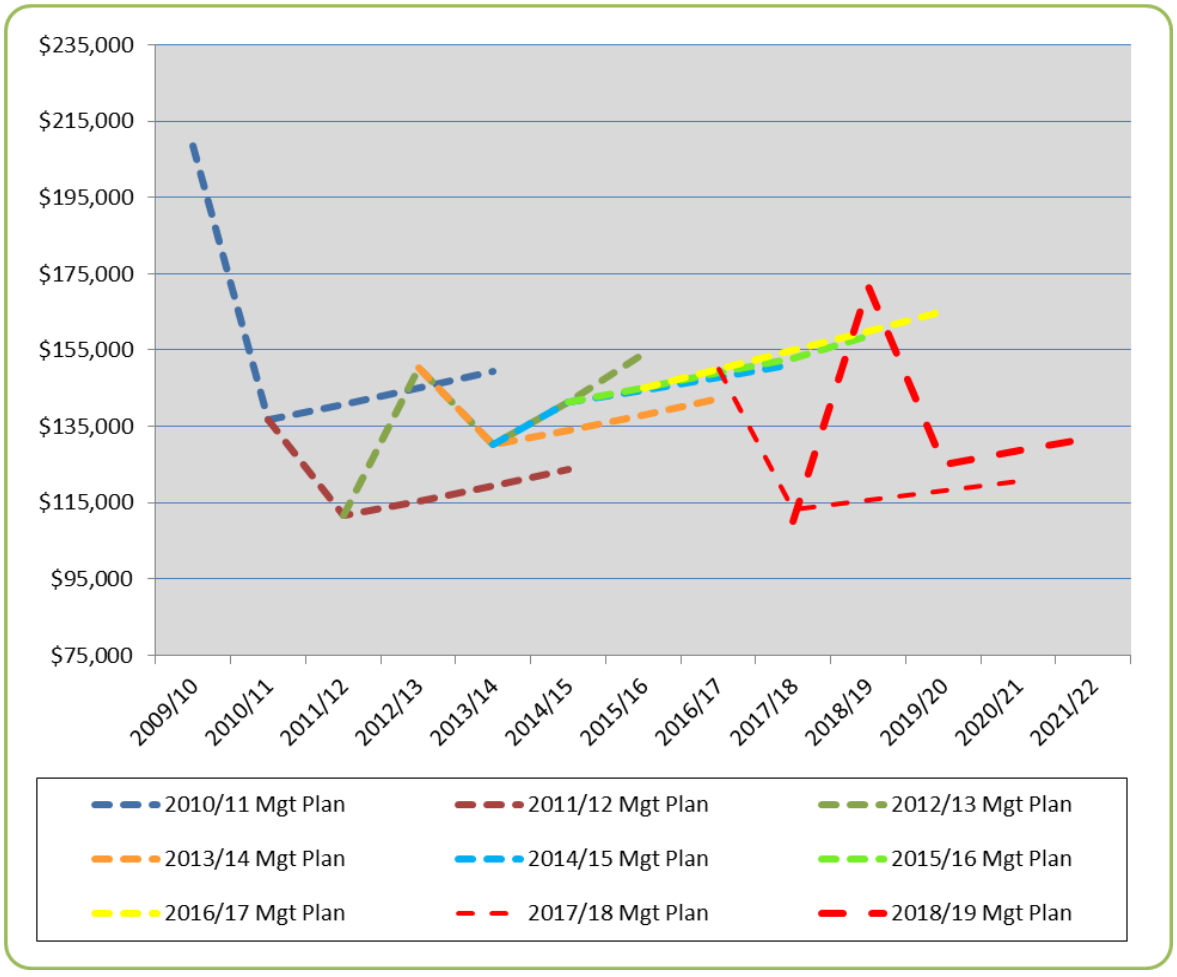
Maintenance work is carried out in accordance with the following Standards and Specifications and appropriate Australian Standards.

Building Code of Australia
CASA Manual Standards Part 139 Aerodromes
OH&S Legislative Requirements
NSW Local Government Act 1993
Other Council Specifications and Guidelines

5.3.4 Summary of future maintenance expenditures

Future maintenance expenditure is forecast to trend in line with the value of the asset stock. The minimum expenditure on maintenance will be current expenditure plus inflation variations.

Fig 6. Planned Maintenance Expenditure

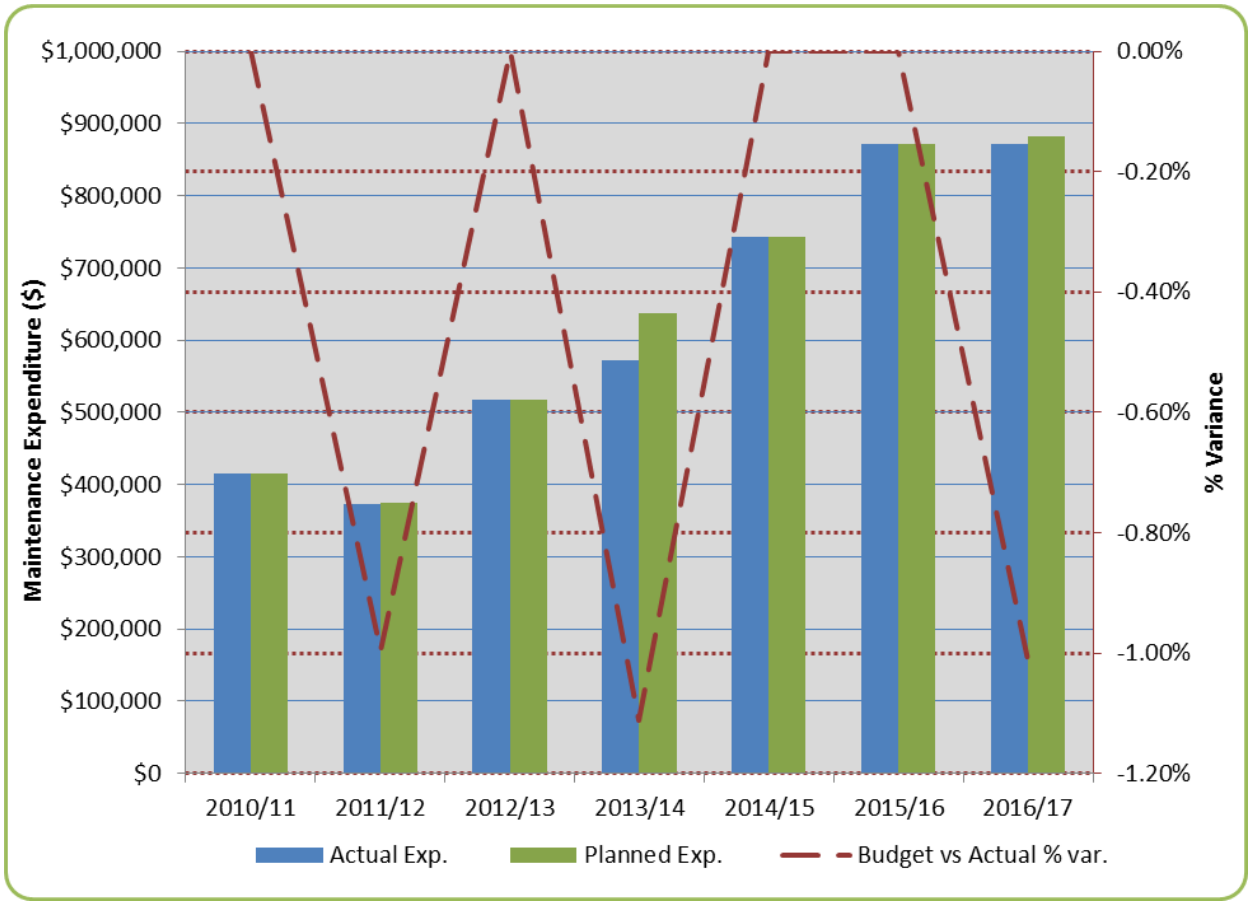


NOTES on Fig 6.

- Budget forecasting is reviewed annually and adjusted for CPI variations.
- See 5.3.1 for comments

Deferred maintenance, i.e. works that are identified for maintenance and unable to be funded are to be included in the risk assessment process in the infrastructure risk management plan.
Maintenance is funded from Council's operating budget and grants where available. This is further discussed in Section 6.2.

Fig 7. Historical: Planned Maintenance Expenditure & Actual Maintenance Expenditure



Aerodrome maintenance budget has been within ±1% for the period 2010 – 2018 except for the 2013/14 Financial Year where it was underspent by 1.11%.

Ground approach to Runway 35

5.4 Renewal/Replacement Plan

Renewal expenditure is major work which does not increase the asset's design capacity but restores, rehabilitates, replaces or renews an existing asset to its original service potential. Work over and above restoring an asset to original service potential is upgrade/expansion or new works expenditure. There is often a poorly defined line between renewal and upgrade.

5.4.1 Renewal plan

Larger assets that are made up of many individual components may be renewed at the component level over a period of time. The implication of this method of maintenance is that records don't show a renewed asset, which over a period of time has been renewed.

Assets such as buildings, Runway/Taxiway/Apron seal, and lighting will be renewed or replaced as necessary at the end of their useful life and as the budget allows and subject to the conditions outlined in table 5.4.1.

There is no specific long term plan or budgetary allocation for periodic renewal or replacement of assets. Rather, assets requiring renewal or replacement are identified during the compilation of Council's annual management plan.

An asset register recording asset ages and conditions would assist in forward programming of asset renewal and replacement and the associated budget implication.

Table 5.4.1 outlines a basic scoring system that may be used to prioritise renewal candidate proposals.

Table 5.4.1 Renewal Priority Ranking Criteria

Criteria	Weighting
Condition of asset	40%
Aesthetic value of asset	20%
Population serviced by asset	20%
Projected capital cost	10%
Proximity to similar asset/s	10%
Total	**100%**

5.4.2 Renewal standards

Renewal work is carried out in accordance with the Bathurst Regional Council's engineering guidelines and appropriate Australian Standards.

5.4.3 Summary of future renewal expenditure

Some major expenses that may occur in the next three years identified are summarised in Table 5.4.3

Table 5.4.3 Capital Renewal Summary

Asset	Year	Cost
Boundary Fencing Improvements	2016/17	$550,000
	Total	**$550,000**

5.5 Creation/Acquisition/Upgrade Plan

New works are those works that create a new asset that did not previously exist, or works which upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs. Assets may also be acquired at no cost to the Council from land development. These assets from growth are considered in Section 4.4.

5.5.1 Upgrade selection criteria

Table 5.5.1 outlines a basic scoring system that may be used to prioritise upgrade candidate proposals.

Table 5.5.1 Upgrade Priority Ranking Criteria

Criteria	Weighting
Safety	30%
Access	30%
Economic Development & Commercial Potential	10%
Aircraft / Passenger Volume	30%
Total	**100%**

5.5.2 Standards and specifications

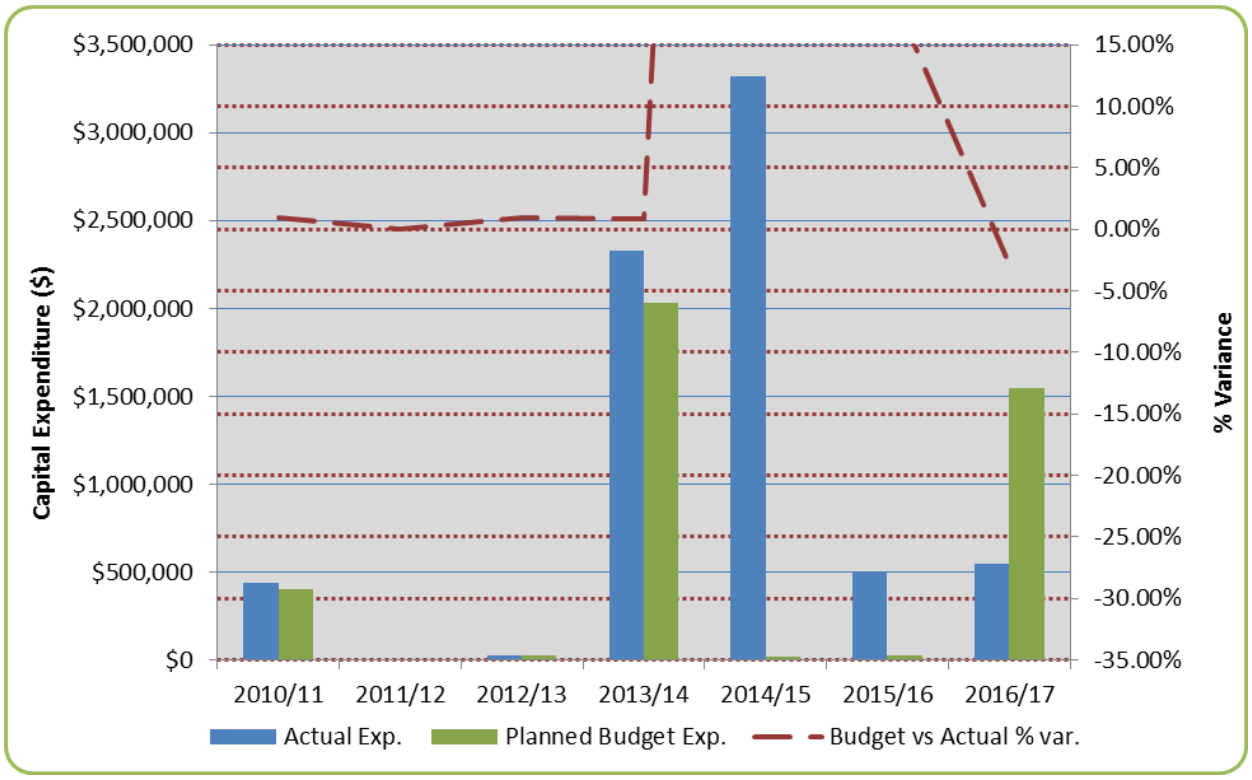
New work is carried out in accordance with the Bathurst Regional Council's engineering guidelines and appropriate Australian Standards.

5.5.3 Summary of future upgrade/new assets expenditure

Expenditure currently identified is:

Asset	Year	Cost
Construction of Parallel Taxiway Foxtrot	**2017/18**	**$450,000**
Extension of Aircraft parking Apron (Taxiway Bravo)	**2017/18**	**$550,000**
Additional Leasable Hanger Site Improvements	**2018/19**	**$850,000**
Redirect Taxiway Charlie and Construction of Taxiway Hotel	**2018/19**	**$450,000**
Aerodrome New Security Gates	**2018/19**	**$10,000**
Aircraft CCTV Monitoring – New Cameras	**2018/19**	**$100,000**
Aircraft Tie-downs	**2019/20**	**$100,000**
Redirect Taxiway Charlie and Construction of Taxiway Hotel	**2019/20**	**$500,000**
Aerodrome Terminal Upgrade	**2021/22**	**$3,000,000**
	Total	**$6,010,000**

Fig 8. Historical: Planned Capital Expenditure & Actual Capital Expenditure



NOTE on Fig 8;
Financial Years 2010/11, 2012/13 2013/14 and 2016/17 have been within ± 3% with the exceptions of 2011/12 where no expenditure was budgeted for, or occurred. And financial years 2014/15 and 2015/16 where major expenditure works have occurred, that were not originally budgeted for. In the case of 2014/15 the funding was transferred for runway upgrade works and construction of an additional cul-de-sac to service an additional hanger. For 2015/16 the expenditure also went towards the construction of the cul-de-sac as well as modifications to Taxiway Echo.

5.6 Disposal Plan

There are no current plans for asset disposal from the aerodrome asset register.

The land at the Aerodrome was transferred from the Commonwealth to the Council as part of the Aerodrome Local Ownership Plan (ALOP) in December 1959 with a proviso that revenue from sale of any land would be passed directly on to the Commonwealth. As a result, there is no benefit to the Community for Council to sell any land at the Aerodrome and can best realise any economic benefit by leasing land.

Controlled access gate to Airside

Control tower, Aero Club hangar and clubhouse, Terminal

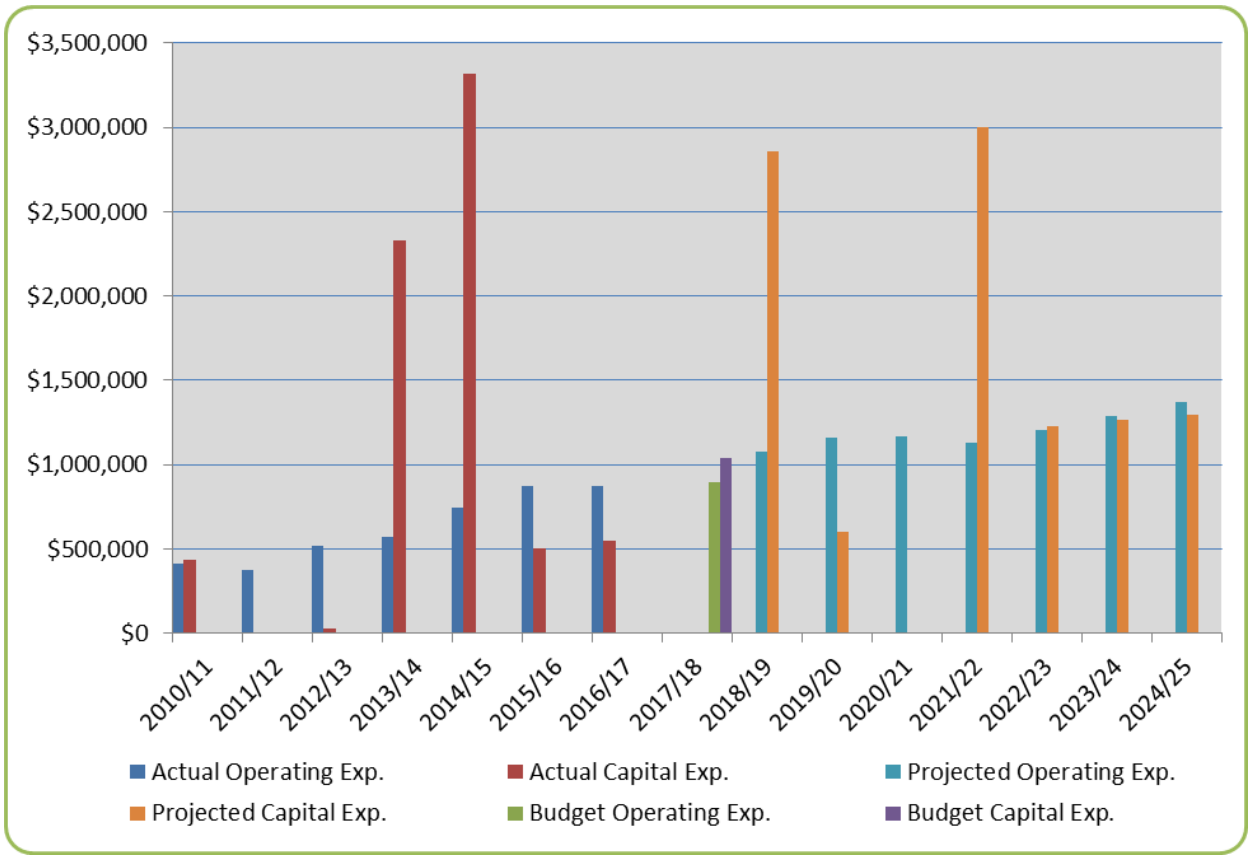
6. FINANCIAL SUMMARY

This section contains the financial requirements resulting from all the information presented in the previous sections of this asset management plan. The financial projections will be improved as further information becomes available on desired levels of service and current and projected future asset performance.

6.1 Financial Statements and Projections

The financial projections are shown in Fig 9 for planned operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets).

Fig 9. Planned Operating and Capital Expenditure



NOTE

- It is unlikely that growth will continue at the projected rate for 10 years
- Budget forecasting is reviewed annually and adjusted for CPI/PPI variations.
- Note that all costs are shown in 2017 dollar values.
- Planned maintenance costs are forecast to increase proportionally with planned capital expenditure.
- The projection is for 10 years only as the available data is not sufficient to provide a useful long term prediction.

6.1.1 Sustainability of service delivery

There are two key indicators for financial sustainability that have been considered in the analysis of the services provided by this asset category, these being long term life cycle costs and medium term costs over the 10 year financial planning period.

Long term - Life Cycle Cost

Life cycle costs (or whole of life costs) are the average costs that are required to sustain the service levels over the longest asset life. Life cycle costs include maintenance and asset consumption (depreciation expense). The annual average life cycle cost for the services covered in this asset management plan is **$611,047**.

Life cycle costs can be compared to life cycle expenditure to give an indicator of sustainability in service provision. Life cycle expenditure includes maintenance plus capital renewal expenditure. Life cycle expenditure will vary depending on the timing of asset renewals. The life cycle expenditure at the start of the plan is **$506,668**.

A gap between life cycle costs and life cycle expenditure gives an indication as to whether present consumers are paying their share of the assets they are consuming each year. The purpose of this asset management plan is to identify levels of service that the community needs and can afford and develop the necessary long term financial plans to provide the service in a sustainable manner.

The life cycle gap for services covered by this asset management plan is **$104,379** per annum.
The life cycle sustainability index is **0.83.**

Medium term – 10 year financial planning period

This asset management plan identifies the estimated maintenance and capital expenditures required to provide an agreed level of service to the community over a 20 year period for input into a 10 year financial plan and funding plan to provide the service in a sustainable manner. This may be compared to existing or planned expenditures in the 20 year period to identify any gap. In a core asset management plan, a gap is generally due to increasing asset renewals.

The current budget compilation method of short term programming of asset renewal does not allow for long term future predictions.

Using the valuation and remaining useful life estimations of Section 6.4 and the 2017/18 Management Plans the following have been budgeted for;

Asset	Year	Cost
Boundary Fencing Improvements	**2016/17**	**$550,000**
Construction of Parallel Taxiway Foxtrot	**2017/18**	**$450,000**
Extension of Aircraft parking Apron	**2017/18**	**$550,000**
Aircraft CCTV monitoring New Cameras	**2018/19**	**$100,000**
Aerodrome New Security Gates	**2018/19**	**$10,000**
Aircraft Tie Downs	**2018/19**	**$100,000**
Additional Leasable Hangar Site Improvements	**2018/19**	**$850,000**
Construction of Taxiway Golf	**2018/19**	**$450,000**
Redirect Taxiway C and Construction of Taxiway Hotel	**2018/19**	**$450,000**
“ “	**2019/20**	**$500,000**
Aerodrome Terminal Upgrade	**2021/22**	**$3,000,000**
	Total	**$7,010,000**

Using the valuation estimations and remaining useful life the estimated capital works and maintenance expenditure required over the next 10 years is $**10.570 million**.

This is an average expenditure of **$1.057 million pa.** Estimated maintenance and capital renewal expenditure in year 1 is **$414,500.** The 10 year sustainability index is **0.66**. In the medium term the funding of aerodrome assets is very low.

It should be noted that the majority of the aerodrome maintenance budget as defined by the management plan could be termed operational expenditure as it is mainly for airstrip maintenance and as such is not a good indication of the level of maintenance on large capital value assets such as buildings, sealed runways and taxiways.

6.2 Funding Strategy

The entire aerodrome budget for 2018/19 financial year is approximately **$506,668**. Income for the same period is estimated at **$581,400** as per the projected figures from the Council management plan.

Much of the funding for large capital projects within the aerodrome section of Council is reliant on funding from loans raised to carry out the specific projects. For the 2021/22 financial year an amount of **$3,000,000** has been identified as being required to fund upgrade of the Airport Terminal Building.

Internal reserve accounts of **$120,000** ($70,000 for Aerodrome Improvement and $50,000 for Aerodrome Sealing), following amounts transferred to and from the previous year's budgets.

The income components from the 2018/19 Management Plan are Landing Fees income: **$479,900** and Leases of Land income: **$167,763** (see appendices for breakup).

Future development of additional hangar lease areas will allow a greater income base that will help cover the cost of operations at the aerodrome.

The breakup of the aerodrome budget will continue to be made up of the same components. Shortfalls in budgets have been filled in the past through funds secured through loans. This may be reduced in the future with appropriate levels of transfer to reserves each year effectively creating an 'internal loan'.

Council's current management practices are resulting in a level of service that appears to be meeting expectations of the Aerodrome users, based on the limited feedback available.

6.3 Valuation Forecasts

Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by Council and from assets constructed by land developers and others and donated to Council.

As there is no firm long term capital works plan it is not possible to provide a meaningful valuation forecast.

6.4 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this asset management plan and in preparing forecasts of required operating and capital expenditure and asset values, depreciation expense and carrying amount estimates. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

Key assumptions made in this asset management plan are:

- Assets group ages and remaining lives have been classified as follows:

Asset Group	Replacement Value	Useful life	Remaining life (Avg.)	Depreciated replacement cost
Land	**$1,277,200**			**$1,277,200**
Buildings	**$1,272,597**	**100 yrs**	**77 yrs**	**$978,686**
Earthworks	**$878,983**	**100 yrs**	**100 yrs**	**$878,983**
Pavement	**$4,585,680**	**25 yrs**	**16 yrs**	**$2,879,556**
Seal	**$1,042,236**	**10 yrs**	**6 yrs**	**$590,317**
Drainage	**$2,193,227**	**100 yrs**	**60 yrs**	**$1,309,330**
Fences #	**$454,610**	**50 yrs**	**46 yrs**	**$417,136**
Lighting system	**$574,286**	**50 yrs**	**42 yrs**	**$478,045**
Markers (Cones/Gables)	**$26,836**	**20 yrs**	**0 yrs**	**$0.00**
Wind Socks	**$4,503**	**50 yrs**	**27 yrs**	**$2,406**
TOTAL	**$12,310,157**		**TOTAL**	**$8,811,659**

- Values as at 30 June 2018
- Remaining life is the average of all assets in this group
- # Only the man-proof fences have been valued, the rural style fencing surrounding most of the aerodrome has not been valued as it has generally reached the end of its economic life.
- Useful lives have been estimated through experience and by using published lives from the *Local Government Asset Accounting Manual* published by the NSW DLG.
- Annualised CPI have been calculated using the figures published by the Australian Bureau of Statistics *http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6401.0Sep%202009?OpenDocument*
- Depreciation is calculated using the straight line method.

Accuracy of future financial forecasts may be improved in future revisions of this asset management plan by the following actions.

- Development of condition based depreciation method that satisfies accounting standards.
- Collection of condition data through an asset network survey.
- Development of a firm future capital works timeline and budget

7. ASSET MANAGEMENT PRACTICES

Council has implemented Civica Authority in 2010 as the financial management system.
Administrator: IT manager

Relevant accounting standards are:

- AASB 136 *Impairment of Assets*
- AASB 1021 *Depreciation of Non-Current Assets*
- AASB 1041 *Accounting for the reduction of Non-Current Assets*
- AAS 1015 *Accounting for acquisition of assets*
- AAS 27 *Financial reporting by Local Government*

7.2 Asset Management Systems

Council uses CONFIRM asset management software. The current version is 9.50d.AM
CONFIRM team:

Team leader:	Administration Engineer
Administrator:	Asset Engineer
Data entry:	3 x Asset Technicians
Mobile inspections:	Asset Inspector

Confirm consists of:

- A comprehensive recreation asset inventory;
- Data Management, with functional reporting procedure to present inventory and assessment information;
- Asset Accounting, AAS27 reporting capability and life cycle costing; and

Council uses MapInfo GIS system linked to CONFIRM.

A number of handheld devices using Trimble GPS units are used to collect data.

As a result of this plan it is intended to improve the Asset management system by:

- Ascertaining more accurate unit rates for work performed in the aerodrome assets;
- Linking of Confirm to Financial Software to gain more accurate costs of works.

7.3 Information Flow Requirements and Processes

The key information flows *into* this asset management plan are:

- The asset register data on size, age, value, remaining life of the network;
- The unit rates for categories of work/material;
- The adopted service levels;
- Projections of various factors affecting future demand for services;
- Correlations between maintenance and renewal, including decay models;
- Data on new assets acquired by council.

The key information flows *from* this asset management plan are:

- The assumed Works Program and trends;
- The resulting budget, valuation and depreciation projections;
- The useful life analysis.

These will impact the Long Term Financial Plan, Strategic Business Plan, annual budget and departmental business plans and budgets.
The current communication between financial and asset systems is limited to manually entering the relevant data. It is expected that CONFIRM will provide asset valuations and capitalisations from 2011 onwards. These figures will be supplied to the finance system for reporting purposes.

8. CONCLUSIONS

8.1 Current position statement

The provision of aerodrome assets as part of operating the Bathurst Regional Airport is one of Council's Business Units.

The Aerodrome is one of the physically larger single assets maintained by Council being some 194ha in overall size. The rising costs of maintenance coupled with increased expectations from users leading to demand for improved asset function is faced off by a relatively finite revenue stream that will have an impact on the ability to deliver the costly improvements into the future. Even sourcing funding via loans may not be a viable long-term option as the repayments may divert funds from maintenance of existing assets at an expected level.
Increases in or improvements in facilities may allow for an increase in 'business' at the airport. This is most likely to come from Commercial or Recreational users rather than suppliers of RPT Services due to competition of other transport modes to and from Sydney.

The Aerodrome has been a part of the Bathurst transport and recreation landscape for some 70 years and continues to provide an adjunct segment of industry to the overall economy for the region. As pressure increases on the remaining smaller metropolitan aerodromes from nearby urban growth an opportunity exists to attract further aero-based businesses to Bathurst in the near-term. This increase could allow for better future support of improved infrastructure at the aerodrome; although a more detailed risk/return analysis should be undertaken before Council heads down that path.

The current replacement cost of the aerodrome asset portfolio is estimated at **$9.863 million**. The annual depreciation expense is estimated at **$290,366.** A detailed asset valuation has not been performed on the aerodrome assets. The outcomes of this plan will be improved as detailed valuations are performed and a more accurate picture of the current status of the assets is formed. The estimations that have been performed are at Greenfield rates and are based on rates published by Rawlinsons Australian Construction Handbook (2009) and actual financial information collected from the financial records of Council.

The current operations and maintenance budget for the first year of the asset portfolio is **$1,078,068**

Customer requests regarding aerodrome assets are very minimal since the implementation of the Council's current customer request management system in September 2005. This may suggest that the level of service provided by the Council through the aerodrome assets is being maintained and current maintenance expenditure is adequate or that a more formalised system of feedback from users of the aerodrome is required. Please refer to Section 3 Level of Service.
In technical terms the re-current maintenance budget appears to be satisfactory for the aerodrome assets, with the exception of providing sufficient reserves for large capital renewal projects. The asset

deterioration rate appears to be inline with or slower than the useful life used to calculate remaining asset life. A more thorough maintenance management system, including a program of inspection will better allow the Council to ascertain the effectiveness of the budget allocation.

Currently, funding of major capital renewal projects is applied for when preparing the management plan and there is no guarantee that the application will be successful. Tasks in this category include the major renewals to the runways, additional taxiways and other support infrastructure. These projects are required to ensure the assets remain in good condition and meet or exceed the expected useful life of the asset and the expectations of users.

The budget for maintenance and repair is currently forecast by adding an additional amount due to CPI on the previous year's budget. As the aerodrome assets age and the portfolio expands to meet the expectations of users and meet growth in areas of use at the aerodrome, the expenditure required to meet maintenance needs will increase at a rate higher than the CPI - for example as more taxiways are constructed an increase in the maintenance budget will be required to maintain them to an acceptable level of service. If the current level of maintenance is not increased inline with the increasing maintenance requirements of the aerodrome assets, a reduction in safety, amenity and aesthetics could reasonably be expected.

The aerodrome assets have varied useful lives. The useful life will vary from asset to asset depending on the level of maintenance performed. From the estimations of useful life (Section 6.4) most asset groups have greater than 60% useful life remaining with the exception of Windsocks, having 53% useful life remaining. Given the possible requirement to 'shut down' parts of or, all of the aerodrome to carry out major works (e.g. reconstruction drainage works and windsock replacement), there is an impact on the timing of capital works and may cause a 'bunching up' of funding requirements that would normally not be acceptable. The process of using loan funding to 'spread out' these costs may be helpful; but consideration must be given to the ongoing cost of not only meeting the loan repayments but also the continued maintenance requirements in planning the future funding of these works.

Although the final assessment on capital renewal of aerodrome assets will be based on the criteria in 5.4.1, asset age in conjunction with condition inspection is the best indicator available to predict the future expenditure required to replace aerodrome assets before they have deteriorated to a point where they are no longer serviceable or safe.

The information contained within the asset management plan sets a benchmark for the aerodrome asset portfolio at the close of the 2022 calendar year. By continuing to collect information on the condition of the aerodrome asset portfolio and monitoring the expenditure on maintenance and renewal of aerodrome assets the performance of the Council's strategies can be measured, reported on and improved in the future.

8.2 Recommendations

Council aims to ensure all assets are sustainable and appropriate. The key outcomes of this asset management plan are to keep the aerodrome assets in good condition, and ensure that current and future development of these assets are relevant to the needs of the community while appropriate funding is planned for maintenance and capital upgrades.

To ensure that Council can achieve this, the following actions have been identified:

8.2.1 Asset management recommendations

- Include specific questions relating to the aerodrome in the next Community Survey.
- Conduct targeted interviews for the survey with users of the aerodrome
- Asset inspection results and condition information should be recorded on the Council's asset management system
- Maintenance and renewal costs should be closely monitored using the asset management system's maintenance management capabilities. This will provide more accurate unit rates and better valuation figures.

8.2.2 Maintenance recommendations

- Current levels of maintenance must be maintained
- When considering maintenance of Council's assets, the whole of life costs are to be considered in addition to capital costs, maintenance/operations, depreciation and any disposal costs. Maintenance and operations budgets **will** be altered to reflect increased or decreased budgetary requirements OR the community will be consulted on the reduced level of service that may be experienced if budgets are not increased with increased maintenance demands.

8.2.3 Renewal recommendations

- The pavement on runway 17/35 should be renewed within 15 years (before 2033)
- The seals on runway 17/35, and Taxiways Alpha, Bravo Charlie should be renewed within 6 years (before 2025). With future Taxiways Foxtrot, Golf and Hotel being renewed within 10 years, after the year of construction.

8.2.4 Upgrade and new asset recommendations

- When considering new or upgraded assets the whole of life costs are to be considered in addition to capital expenditure, including maintenance, operations, depreciation and any disposal costs. Maintenance and operations budgets **will** be altered to reflect increased or decreased budgetary requirements OR the community will be consulted on the reduced level of service that may be experienced if budgets are not increased with increased maintenance loads;

- To cater for future increases in use of the aerodrome runway 08/26 should have it's pavement reconstructed and upgraded from an unrated pavement to PCN12 and a new seal applied within 15 years (before 2033)

8.2.5 Budgetary recommendations

- Appropriate levels of funding are to be set aside each year to reserves to cover large capital costs as they become necessary;
- An increase in the maintenance budget in real terms to maintain the current asset stock plus additional new and upgraded assets.

9. PLAN IMPROVEMENT AND MONITORING

9.1 Performance Measures

The effectiveness of the asset management plan can be measured in the following ways:

- The degree to which the required cash flows identified in this asset management plan are incorporated into council's long term financial plan and Strategic Management Plan;
- The degree to which 1-5 year detailed works programs, budgets, business plans and organisational structures take into account the 'global' works program trends provided by the asset management plan;

9.2 Improvement Plan

The asset management improvement plan generated from this asset management plan is shown in Table 9.2

Table 9.2 Improvement Plan

Task	Responsibility	Resources Required	Timeline
Inclusion of Aerodrome Specific questions for future Community Surveys. Quality/Function/Accessibility and Condition.	Corporate/Asset Sections	Identify key areas to address and communicate for inclusion into future surveys	4 years
Categorisation of Budget items into Upgrade/Renewal/Maintenance/Operations	Finance/Asset Sections	Capital Works information and clear criteria or each category.	

9.3 Monitoring and Review Procedures

This asset management plan will be reviewed during annual budget preparation and amended to recognise any changes in service levels and/or resources available to provide those services as a result of the budget decision process.

The Plan has a life of 4 years and is due for revision and updating within 2 years of each Council election.

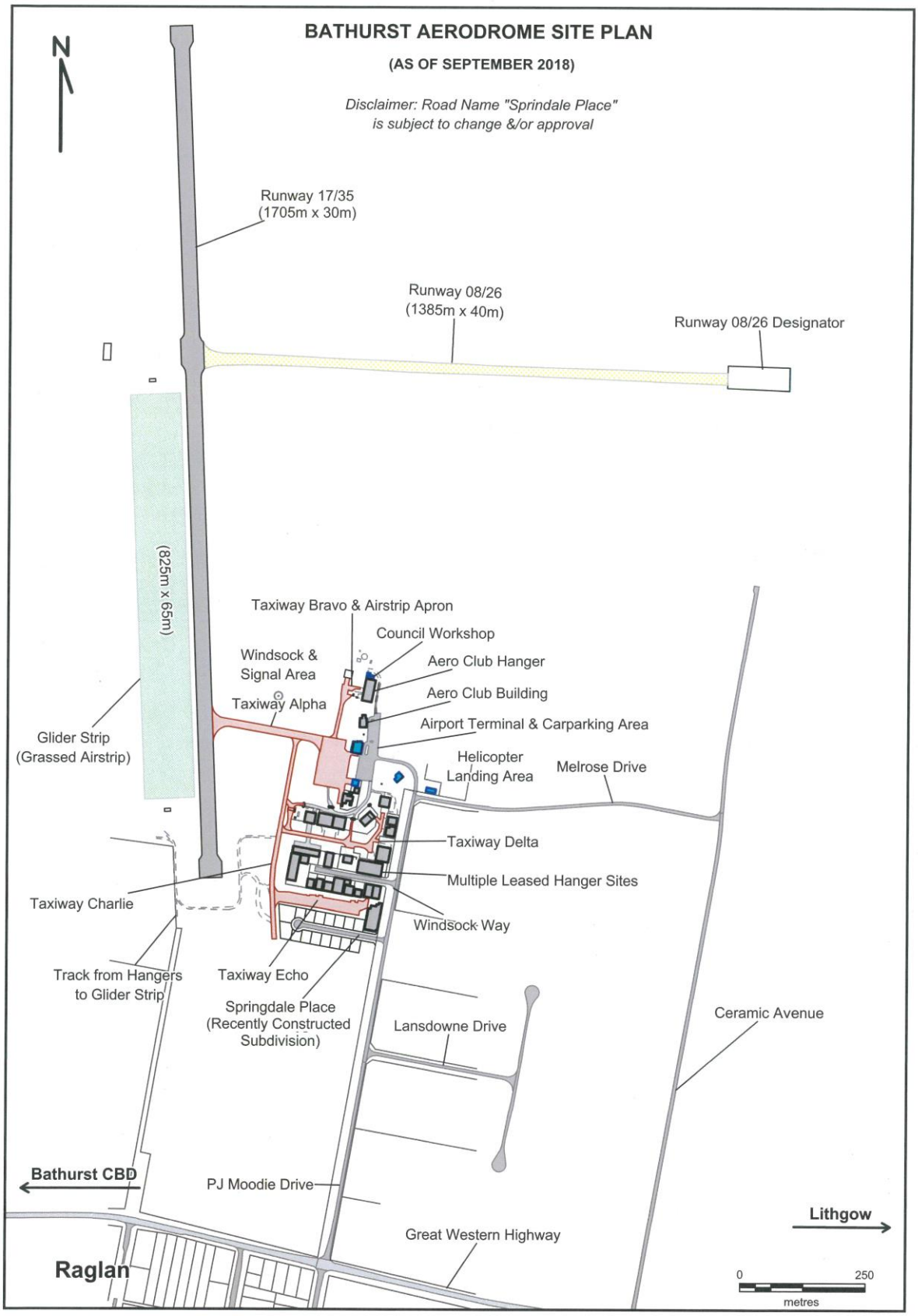
REFERENCES

- Bathurst Regional Council, 'Management Plan 2018-2022',
- Bathurst Regional Council, 'Detailed Financial Budget and Revenue Policy 2018-2019'
- IPWEA, 2006 'International Infrastructure Management Manual', Institute of Public Works Engineering Australia, Sydney
- IPWEA, 2009 First Ed 'Australian Infrastructure Financial Management Guidelines' , Institute of Public Works Engineering Australia, Sydney
- Rawlinsons, 2009 'Australian Construction Handbook', Rawlinsons Publishing, Perth.
- NSW Department of Local Government, 1999 *Local Government Asset Accounting Manual - update 4* NSW DLG, Nowra
- Bathurst Regional Aerodrome Manual and appendix
- Airport Traffic & Passenger Data 1985 - 2016 https://bitre.gov.au/publications/ongoing/airport_traffic_data.aspx
- Mudgee Airline Passenger Statistics https://www.transport.nsw.gov.au/data-and-research/passenger-travel/aviation/nsw-intrastate-aviation-quarterly-passenger-statistics
- Kangaroo Island Council – Kingscote Airport Infrastructure and Asset Management Plan
- Various publications from Civil Aviation Authority website accessed during November 2010 (http://www.casa.gov.au/scripts/nc.dll?WCMS:HOMEPAGE::pc=HOME)
- Bathurst Regional Council adopted 2040 Community Strategic Plan

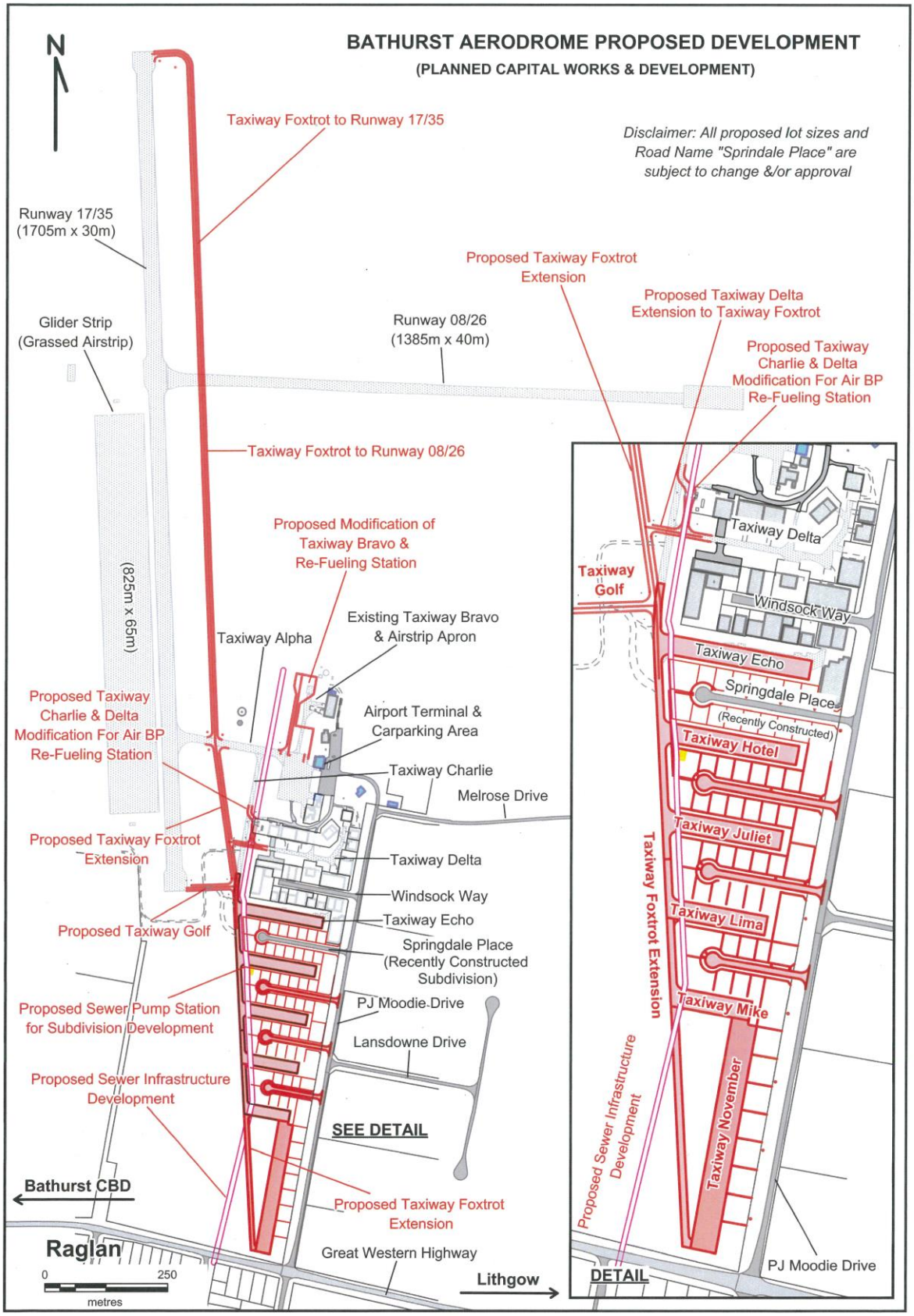
APPENDICES

Rental income breakup at aerodrome as of June 2018:

Lot	DP	Area m^2	Rent
4	847356	1194	$10,746.00
5	847356	1708	$13,151.60
8	873722	842.2	$3,768.41
9	873722	900	$1,695.26
12	1024590	393.9	$4,771.66
12	1041715	1099	$2,957.48
1	1085658	421	
11	1024590	600	$4,388,64
13	1024590	1012	
14	1089964	216	$951,87
16	1096829	1763	$5,183.25
21	1104105	1739	$6,454.60
22	1108205	400	$1,428.56
23	1108205	600	$3,960.00
24	1108205	600	$3,960.00
25	1111454	1115	$100.00
29	1151799	559.3	$1,693.08
30	1151799	515.1	$4,635.00
31	1151799	602	$2,279.96
32	1151799	2015	$20,150.00
303	1187714	765	$3,243.78
270	1162107	1336	$5,079.00
271	1162107	476	$,3243.48
35	1159302	2669	$15,223.44
36	1159302	4421	$15,940.00
Rural	Land	10.47ha	$2,100.84
Terminal		N/A	$4,087.04
	Total	**27961.5 (Rural Land Omitted)**	**$167,762.95**


BATHURST AERODROME SITE PLAN
(AS OF SEPTEMBER 2018)
Disclaimer: Road Name "Sprindale Place" is subject to change &/or approval
N
Runway 17/35 (1705m x 30m)
Runway 08/26 (1385m x 40m)
Runway 08/26 Designator
(825m x 65m)
Glider Strip (Grassed Airstrip)
Taxiway Bravo & Airstrip Apron
Council Workshop
Windsock & Signal Area
Aero Club Hanger
Taxiway Alpha
Aero Club Building
Airport Terminal & Carparking Area
Helicopter Landing Area
Melrose Drive
Taxiway Delta
Multiple Leased Hanger Sites
Taxiway Charlie
Windsock Way
Track from Hangers to Glider Strip
Taxiway Echo
Springdale Place (Recently Constructed Subdivision)
Lansdowne Drive
Ceramic Avenue
Bathurst CBD
PJ Moodie Drive
Lithgow
Great Western Highway
Raglan
0
250
metres


BATHURST AERODROME
KEY FEATURES AROUND TERMINAL
& HANGER AREA
(AS OF SEPTEMBER 2018)
N
Disclaimer: Road Name "Sprindale Place" is subject to change &/or approval
Council Workshop
Aero Club Hanger
Windsock
Mobil Re-Fueling Station
Signal Area
Taxiway Bravo
Aero Club Building
Carparking Area
Taxiway Alpha
Airport Terminal
Helicopter Landing Area
Airstrip Apron
Taxiway Charlie
Aerodrome Entry
Air BP Re-Fueling Station
Track from Hanger to Glider Strip
Melrose Drive
Taxiway Delta
Windsock Way
Taxiway Echo
PJ Moodie Drive
Great Western Highway
Springdale Place
Leased Hangers/Buildings
Council-Owned Buildings
Leased Areas
0
50
metres


BATHURST AERODROME PROPOSED DEVELOPMENT
(PLANNED CAPITAL WORKS & DEVELOPMENT)
N
Disclaimer: All proposed lot sizes and Road Name "Sprindale Place" are subject to change &/or approval
Taxiway Foxtrot to Runway 17/35
Runway 17/35 (1705m x 30m)
Glider Strip (Grassed Airstrip)
(825m x 65m)
Runway 08/26 (1385m x 40m)
Proposed Taxiway Foxtrot Extension
Proposed Taxiway Delta Extension to Taxiway Foxtrot
Proposed Taxiway Charlie & Delta Modification For Air BP Re-Fueling Station
Taxiway Foxtrot to Runway 08/26
Proposed Modification of Taxiway Bravo & Re-Fueling Station
Existing Taxiway Bravo & Airstrip Apron
Taxiway Alpha
Airport Terminal & Carparking Area
Taxiway Charlie
Melrose Drive
Taxiway Delta
Windsock Way
Taxiway Echo
Springdale Place (Recently Constructed Subdivision)
PJ Moodie Drive
Lansdowne Drive
SEE DETAIL
Proposed Taxiway Golf
Proposed Sewer Pump Station for Subdivision Development
Proposed Sewer Infrastructure Development
Bathurst CBD
Raglan
Great Western Highway
Lithgow
0
250
metres
DETAIL
Taxiway Golf
Taxiway Delta
Windsock Way
Taxiway Echo
Springdale Place
(Recently Constructed)
Taxiway Hotel
Taxiway Juliet
Taxiway Foxtrot Extension
Taxiway Lima
Taxiway Mike
Taxiway November
Proposed Sewer Infrastructure Development
PJ Moodie Drive

Key Features

Bathurst Regional Airport is a Licensed Security Airport in accordance with Civil Aviation Regulations and the Civil Aviation Safety Authority (CASA). As a result, a high degree of safety requirements and regulatory controls are in place.

Security Measures

- Independent annual safety audits by CASA
- Secure Baggage, Security Fencing, Close Circuit TV Cameras internal and external to the Terminal
- Formal Maintenance, Safety and Security Plans
- Regular security conducted by the RRDT (Regional Rapid Deployment Team)
- Daily safety inspections by Senior Groundsman who is on call 24 hours

Airport Runways

- The main runway is 1705m in length with a bitumen sealed surface
- The secondary runway is 1435m in length with a gravel surface, for use by small aircraft only
- Pilot activated Runway Edge Lighting

Navigational Aids

- Automatic Weather Station
- Non Directional Beacon Radio Transmitter (NDB)
- Aerodrome Frequency Response Unit "Beep Back" (frequency identifying Bathurst Airport)
- Private Aircraft Hangars
- Air conditioned Passenger Terminal
- Unrestricted Car Park (security video surveillance)
- Public Transport – Taxi Stand

A History of the Bathurst Airport

- **1937-1939:** Council investigated various sites for the proposed aerodrome, including Eglinton, Kelso and Brewongle. At the time, an aerodrome was considered to have become a necessity for commercial purposes, for the benefit of the municipality, and from a Defence point of view, planes wishing to cross the mountains were frequently compelled to turn back under difficult circumstances due to fog and other weather conditions.
- **1945**: First Groundsman appointed.

  JB Chifley MP Treasurer made personal representations on behalf of Council regarding its desire that the aerodrome near Bathurst should be utilised as an airport for civil air services.
- **1946:** No shelter of any description at the air strip, nor rooms for the convenience of passengers.
- **1948:** Representations made to Minister for Air for land alongside Raglan Aerodrome to be made available for aero club training purposes, provision of a shelter shed, and other necessary buildings required at the aerodrome.
- **1952:** New buildings erected at aerodrome; Council agrees to connect water supply.
- **1953:** Modifications made to shelter shed; installation of blinds on windows and a glass screen in front of the door; establishment of a hedge as a windbreak.

  Radio navigational aids installed.
- **1954:** Royal Visit - Her Royal Majesty The Queen arrives by plane at Bathurst Aerodrome.

  Road works for access to aerodrome – strengthening and bitumen surfacing.
- **1954/1955:** Local Air Safety Committee formed to act as observers and to arrange assistance for pilots in difficulty.
- **1956:** Representations made to Minister Civil Aviation seeking lighting of Raglan Aerodrome, and lengthening of it to take "Viscounts".
- **1956/1957:** Representations made to "Post Master's General Department" for provision of a Public Telephone at the aerodrome (application was rejected).
- **1957:** Official opening of ATC Hut at Raglan Aerodrome; leaflets dropped from aircraft over the city, advertising joy flights by Bathurst Aero Club.
- **1959:** Bathurst Aerodrome was transferred to the City of Bathurst from the Commonwealth in December 1959. The runway at that time was an unsealed pavement, and situated in the Turon Shire.

  Consulting Engineers and Department of Civil Aviation carried out design & investigation works in order that the runway could be reconstructed. Approval was gained to allow calling of tenders for the project towards the end of 1966.
- **1963:** First Landing Charges proposed.
- **1963:** Fokker Friendship aeroplanes introduced to Bathurst timetable by Airlines of NSW Limited.

- **1964:** Construction completed of Terminal Building ready for occupancy. Kerb and gutter, paving and gardens yet to be done. "Airlines of New South Wales" first tenant of Terminal Building. Airport lighting facilities now installed at aerodrome.
- **1965:** Submissions made to Department of Civil Aviation for location of a taxi-way for access to the hanger area, and a defined area to serve as an apron for use by light aircraft.

  Airlines of NSW concludes its service to Bathurst and East West Airlines commences operations.
- **1967:** Aerodrome closes for 11 months for reconstruction of runway.
- **1969:** Naming of PJ Moodie Memorial Drive.

  BP Australia Air Race for home-built aircraft conducted by Bathurst Aero Club.
- **1972:** Air Ambulance Service commenced operations.
- **1973:** East West Airlines reports passenger numbers for this year at 16,348 one-way passengers used the air service.
- **1974:** Groundsman's Cottage constructed.
- **1977:** East West Airlines introduce a bus service from the aerodrome to town to transport passengers and freight.
- **1979:** Main Runway resealed.
- **1981:** Southern Cross Air Race to Melbourne commenced from Bathurst Aerodrome.
- **1987:** Basic structure for a Control Tower was erected at the aerodrome by Council and others, for the 1987 October Car Races.
- **1993:** Main Runway resealed.
- **1994:** Extension of aircraft apron constructed.
- **2002:** Passenger terminal reconstructed
- **2005:** Security fencing/CCTV installed
- **2008:** Taxiway echo built
- **2011:** Runway lighting upgrade
- **2015:** Runway 17/35 pavemtn and seal reconstruction

Note: This summary was compiled solely from original Council Files in 2009.