Mount Gambier Airport

Master Plan

Mount Gambier Airport 2016-2026

Adopted 7th September 2015

District Council of Grant

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1. EXECUTIVE SUMMARY

The Mount Gambier Airport Master Plan is a document created for the purpose of ensuring continual improvement, sustainability, accountability and growth of the airport.

In addition to the specific projects and programs, the Master Plan will also outline in broader details some of the longer term goals for the Mount Gambier Airport, its tenants and its management team. Examples of this include: reserving land for future use (both aviation and non-aviation related) and long term financial planning to ensure sustainability.

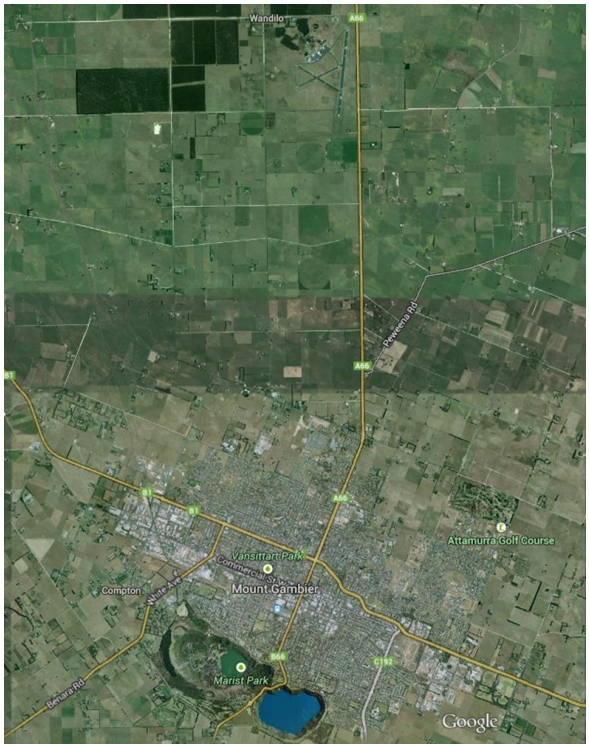
The Mount Gambier Airport Master Plan replaces the Mount Gambier Airport 15 Year Strategic Plan.

2. INTRODUCTION

2.1 Airport Overview

The Mount Gambier Airport is located 8 kilometres north of Mount Gambier adjacent the Riddoch Highway. 154.7 hectares is used for airport operations however the District Council of Grant own 247.4 hectares on the site as well as a neighbouring property, both of which are currently under lease. The airport has three maintained sealed runways and good apron space. It is built on predominately sandy ground with excellent drainage.

Figure 1: Airport location in relation to city of Mount Gambier



2.2 Purpose and Objectives of the Master Plan

The purpose of this master plan is to facilitate airport growth, sustainability, and accountability whilst promoting its role to the community.

It is important that this is achieved without compromising the safe operation of the facility.

3. MASTER PLAN CONTEXT

3.1 Historical Background

Mount Gambier Airport has been located at its current location since 1 July 1936. It was constructed by local aviation pioneers Messers HS May and SC Davis and operated as a civil airfield with regular flights to Adelaide and Melbourne until 1939 when the Royal Australian Air Force assumed control of the facility to establish No.2 Air Observers School, RAAF Mount Gambier.

The airport grew considerably under the control of the RAAF. At its peak the base was home to more than 160 buildings and 1000 personnel. As such a great number of buildings were constructed at the base, some of which still remain in place today.

The existing runway configuration was established during this period with all three runways sealed in 1946. Mount Gambier Airport's main runway was extended in 1956.

Since the Second World War, the airport has been an active facility with regular public transport flights returning to Mount Gambier in October 1944.

The airport was handed over to the District Council of Mount Gambier (DCG) on 18 June 1989.

3.2 Regional Context

Mount Gambier is the largest regional centre in South Australia. The city is situated close to the state border with Victoria and is approximately equidistant between Melbourne and the South Australian state capital Adelaide.

It is estimated that the Mount Gambier Airport serves a population of approximately 60,000 people. The majority of these are from the City of Mount Gambier with a population of 25804. This population increased at an annual average rate of just under 2% per year between 2007 and 2011.

The principal industries of the region are forestry, fishing and agriculture. These industries employ a regional average of approximately 18% of the workforce. The forestry industry is a significant size and as such a number of manufacturing and processing facilities exist in the region which are significant local employers at a regional average of approximately 14.4%. The other major industry in the region is retail with a regional average of approximately 11.6% of the workforce.

In recent years there has been uncertainty in the forestry industry which can be contributed to the downturn in the timber market and the forward sale of the government owned plantations. In turn this and, other factors, have led to a downturn in the consumer confidence in the region. House prices have fallen, the housing market has been stagnant and new development was near zero.

The forestry industry is now showing signs of recovery and the new owners of the timber plantations appear to be keen to work with existing local infrastructure. Additionally, small improvements in the regions housing market have been detected and confidence is slowly building.

The airport is the only facility in the Limestone Coast that has regular public transport (RPT). Other general aviation airfields are located at Millicent (50km away), Coonawarra (62km away), Naracoorte (100km away) and Kingston (153km away).

The nearest airport that has RPT is Portland Airport in Victoria which is approximately 94km away.

A 2012 study into the contribution of regional airports stated that the Mount Gambier Airport supports 126 jobs (FTE's) in the Mount Gambier region and generates Gross Regional Product (value added) of $15.4 million annually.

3.3 Regulatory and Policy Context

The Mount Gambier Airport master plan has been created with adherence to all regulatory and government policy requirements.

3.4 Previous Master Plan

Previous to this plan, the Mount Gambier Airport master plan was created in 2006 by consultants Rehbein AOS and was known as the 15 Year Strategic Plan.

This plan provided details on the potential development of the Mount Gambier Airport.

Unfortunately its assumptions on passenger growth, whilst flawed in the first instance, were made further inaccurate by the collapse of the second airline at Mount Gambier in 2007 causing a passenger decline.

As such, the new plan is designed to realign expectation and plans in relation to current trends and markets.

3.5 Key Stakeholders

There are several key stakeholders that have been involved in the consultation process including:

- Airlines
- Local airline agents
- Regulatory bodies
- Local and state Councils
- General aviation users
- Aeromedical organisations
- Airport businesses

Consultation began in November 2011 with a request for input to the next Mount Gambier Airport master plan. Ongoing communication with these stakeholders continued throughout the process ensuring vested parties were working together to achieve common goals.

3.6 Associated Documentation

This master plan is to be read with the following associated documents:

- Strategic Management Plan
- Long Term Financial Plan
- Annual Business Plan
- Asset Accounting Policy
- Risk Management Policy
- Leases and Licences Policy
- Disability Access Facilitation Plan
- Mount Gambier Airport Manual
- Asset Management Policy
- Asset Management Strategy

4. CURRENT SITUATION

4.1 Ownership and Management

The Mount Gambier Airport is wholly owned and managed by the District Council of Grant. The airport employs two full-time staff; an Airport Manager and an Airport Compliance Officer. The airport also employs one casual staff member primarily to assist with grounds maintenance at peak periods.

The airport is operated by the Council as a separate business unit. That is, Council does not provide any funding for the airport and the airport does not provide any funding to Council's general revenue. The Mount Gambier Airport's primary revenue is from the passenger levy charged to the airlines passengers in and out of Mount Gambier. Other revenue is derived from hangar leases, general aviation, concessions, airport consulting and leased land.

4.2 Site Description

The airport is located approximately eight kilometres north of the City of Mount Gambier. It straddles the Riddoch Highway and Sunnybrae Road and is 247.4 hectares in size. The airport is predominately flat with small sandy rises located at the extremities of the field. The remainder of the airport is also composed of primarily sandy soil with pockets of clay.

4.3 Surrounding Land

The land surrounding the Mount Gambier Airport is predominately farmland with a small parcel of Radiata pine trees to the north-west. The land to the immediate north is owned by the Council to safeguard it for future expansion and is currently leased for grazing. The remainder of neighbouring property is used for grazing.

There are some small hills to the south of the airport which limit any significant extension to the main runway and whilst the Council own the land to the north, any runway extension in that direction would be limited by the convergence of Riddoch Highway.

4.4 Existing Activities

The Mount Gambier Airport is host to a number of aviation and non-aviation activities that are quite diverse.

The airport has RPT flights to and from Adelaide and Melbourne with Regional Express utilising SAAB 340 aircraft. The airline provide a total frequency of approximately 7 flights daily during the week with approximately 4 flights daily on the weekend. From Sunday to Thursday (inclusive) two aircraft overnight at Mount Gambier with one overnighting on Friday.

Debruin Aviation calls Mount Gambier Airport home. They provide charter and aerial survey services and operate a mixture of aircraft.

There are 20 general aviation aircraft based at Mount Gambier Airport ranging in size from single seat recreational aircraft through to a 9 seat twin engine executive commuter aircraft. There is also an aero club at the airport with approximately 30 members.

In addition to the local general aviation traffic, Mount Gambier Airport is the destination for a large number of visiting small aircraft. From 2008/09 to 20112/13 there were an average of 2166 landings per annum by general aviation aircraft. This provided an average annual income of $32500 pa over the same period.

The Royal Flying Doctor Service (Central Operations) are quite active at Mount Gambier Airport. Whilst based in Adelaide they land at Mount Gambier more than 500 times a year making it their number two destination behind Whyalla.

During the summer months the South Australian Country Fire Service operate two Air Tractor firebombing aircraft at the airport. Based at the northern end of the general aviation aprons, the aircraft utilise airside hydrant infrastructure and landside gravity feed water tanks to refill the aircraft.

There are several non-aviation activities at Mount Gambier Airport. The airport is the home to Aero Espresso, the terminal café. This is a licensed venue with a commercial kitchen and store room. There are four rental car companies based at the airport with three of them having site offices as well as booths within the terminal. The Australian Air Force Cadets (612SQN) are located at the airport with buildings and parade ground on the airport exit road.

Stark Aviation operate the fuel facility at the Mount Gambier Airport. The compound is located on the northern apron where there is a self-serve AVGAS bowser and a mobile JET-A1 tanker.

4.5 Existing Facilities

4.5.1 Runways, Taxiways and Aprons

Mount Gambier Airport has three runways. The main runway (18/36), located in a north/south direction, is 1524 metres long and 30 metres wide. The runway had asphalt overlay applied in early 2012 to correct its width, transverse shape and strength. It is contained within a grassed runway strip approximately 1648 metres long and 150 metres wide. Runway 18/36 currently fulfills the requirements for a Code 3C non-precision instrument runway stipulated in the Civil Aviation Safety Authority (CASA) Manual of Standards (MOS) Part 139.

There are two secondary runways at the airport. Runway 11/29 is 922 metres long and 30 metres wide; within a grassed runway strip approximately 1045 metres long and 90 metres wide. Runway 06/24 is 842 metres long and 30 metres wide; within a grassed runway strip approximately 1113 metres long and 90 metres wide. Both runways are bitumen sealed. Runways 11/29 and 06/24 currently fulfill the requirements for Code 2C non- instrument runways stipulated in CASA MOS Part 139.

Runway 18/36 has a Pavement Classification Number (PCN) of 12 and the other runways have a PCN of 6.

There are two main apron areas at the airport. The main apron which serves the terminal is marked to accommodate regular public transport (RPT) and charter aircraft serving Mount Gambier. Several private hangars are located to the southwest of the RPT apron.

The general aviation (GA) aprons are used for the parking of commuter and general aviation aircraft including the Royal Flying Doctor Service and fire-fighting aircraft. The GA apron also provides access to:

- the Debruin Air hangars;
- a Council-owned Bellman hangar with space rented to private GA aircraft owners;
- a private hangar; and
- the fuel facility

Access from both the RPT and GA aprons to the Runway 18 threshold is via Taxiway B. Taxiways A1 and A2 link the aprons with the thresholds of Runways 11 and 06. Taxiway C connects the GA apron with the Runway 24 threshold but is only available to aircraft of less than 5700kg maximum take-off weight. Runway 11/29 is frequently used for the taxying of aircraft from Runway 18/36 to the RPT apron. All aprons and taxiways are bitumen sealed.

All airside areas adjoining runways and taxiways are grassed natural surfaces.

4.5.2 Airport Lighting

Runways 18/36 is equipped with pilot actuated medium intensity runway lighting (MIRL) and 06/24 is equipped with pilot actuated low intensity runway lighting (LIRL). Both runways have elevated runway edge, runway end and threshold lights with inset threshold lighting for runway 24.

Runways 18 and 36 are equipped with pilot activated Precision Approach Path Indicator (PAPI) systems.

Taxiways A1, A2 are provided with blue elevated omnidirectional taxiway edge lights and taxiway B is fitted with green inset centerline lights. Elevated yellow lights are provided on taxiways A1 and A2 at the runway 06 and runway 11 holding points. Inset yellow lights are provided at the runway 18 holding point on taxiway B.

The primary wind indicator is illuminated.

Apron floodlighting is provided by 4 floodlighting towers on the RPT apron and 1 floodlight tower on the GA apron.

4.5.3 Navigation Aids (Navaids)

There is a very high frequency (VHF) omni-directional range (VOR) and a nondirectional beacon (NDB) on the airport provided by Airservices Australia.

4.5.4 Other Facilities

An aircraft refuelling facility is located at the northern end of the GA Apron. The facility includes airside storage for the mobile tanker which serves RPT aircraft as well as a self-serve swipe card AVGAS bowser.

4.5.5 Terminal Facilities

The terminal building with a gross internal floor area of 585 m^2 is provided to cater for RPT & charter passenger traffic.

The terminal facilities consist of:

- A kerbside drop-off area, with shelter for vehicles and persons provided by a large, open-side corrugated metal structure;
- Check in area with three check-in desks, which are currently used by RPT and charter airlines. A small office space is provided to the rear of each check-in counter, through which checked passenger baggage is carried to the baggage make-up area.
- Fully licensed café with tables and seating for 20 people.
- Male, female and mobility-impaired toilet facilities.
- An 'executive lounge' room with sofa seating for 14 people.
- A departure lounge area with seating for approximately 82 people.
- Flight information display system.
- Four rental car company service counters.
- A 'business centre' with eight powered alcoves.
- Double access door provides access to and from the RPT apron for passengers.
- A outbound baggage make-up area; and
- An inbound baggage collection area.
- Public telephone.

The terminal meets the requirements for current passenger movements however any major growth in passenger numbers or a change in the security environment may require significant terminal expansion and/or modification.

The terminal is approaching 25 years of age and is beginning to require maintenance investment to revitalize the building. Additionally the single arriving/departing passenger door makes it susceptible to security breach along with the baggage collection area when the baggage is delivered.

4.5.6 Roads and Car Parks

An access road loop is provided from the road to the north. A one-way circulation system operates. The one-way loop provides access to the Mount Gambier Aero Club building, fuel facility, Debruin Aviation hangars, the RPT terminal and car parking.

There is a car parking area opposite the terminal with 135 time limited public car spaces, 52 paid secure/long term public car spaces, 35 rental vehicle bays and 3 permit only parks for terminal staff. 9 Taxi spaces are provided immediately adjacent to the baggage collection area.

4.5.7 Other Facilities

A number of other ancillary facilities are located landside, including:

- car rental office and workshop facilities;
- a small clubhouse housing the Mount Gambier Aero Club;
- a generator building providing standby power to the airport;
- a compound for the Australian Air Force Cadets No. 612 Squadron.

Furthermore, several areas of land are leased to non-aviation interests. The Mount Gambier and District Pony Club currently occupy a large plot of land to the north of the main terminal complex, east of the main airport access road.

A small plot on the western boundary of the airport is leased to the Australian Government Bureau of Meteorology with the remainder being leased to a local grazier.

4.6 Ground Transport Access

The terminal precinct of the airport is accessed via the loop road that comes off of Airport road. It is predominately a one way road that services all active sites on the airfield. The road was built along with the RAAF training base in the early 1940's and was designed to allow better control over access to the base. It became a one way loop in the late 1980's due to an increase in usage.

The car park provides ample parking for current and forecast requirements although an increase in local rental car stock requires some alterations to existing parking arrangements for these vehicles. This may require some tree removal to facilitate space.

The majority of roads are in good condition with some minor access roads (not generally used by the public) needing some further work in the medium term.

4.7 Utility Services

The airport receives mains electrical power from the grid via overhead lines to the powerhouse. From the powerhouse the electrical power is distributed via underground ducted cable.

Water is supplied via an equipped bore. This water is pumped into a 100,000 litre holding tank after being treated with chlorine for potable use. Additionally, two 80,000 litre water tanks are located adjacent the bore and are for the sole purpose of storing water for firefighting purposes.

Wastewater is stored in seven septic systems located throughout the airport. These systems are drained as required.

Storm water is accommodated by the extensive storm water drainage system located around the terminal precinct. The majority of this infrastructure was built during the Second World War but is still in serviceable condition. The outlet for the storm water system is located in the middle of the paddock located to the south of the airport.

4.8 Historic Values

The Mount Gambier Airport became the facility it is today, due to the construction conducted in 1941. As such there are a number of war time buildings still in use today along with a number of foundations and remnants of other buildings. These are historically valid with an interest to the general public. It is important parts of these areas are retained for historic record.

5. SWOT ANALYSIS

To better understand the potential for improvement and growth, the management team of the Mount Gambier Airport have conducted an analysis on the facilities strength and weaknesses.

5.1 Strengths and Advantages

5.1.1 Three maintained sealed runways

The Mount Gambier Airport is the only regional airport in Australia that still maintains all three sealed runways. This makes it an ideal base for a flight training facility.

5.1.2 Strong local centre

The city of Mount Gambier can support anyone that moves to Mount Gambier to conduct business at the airport. The city has developed health and educational facilities along with numerous social and retail outlets.

5.1.3 Ample airport land

The airport has many acres of landside land available for development. There is great flexibility to the development type.

5.1.4 Positive approach

Council, the management team of the airport along with the members of the Mount Gambier Airport Advisory Committee embrace the positive attitude of continuous improvement which assists in growing and developing the airport.

5.1.5 Financial sustainability

The Mount Gambier Airport is fortunate enough to retain a financial surplus each year allowing ongoing investment in improving airport infrastructure and services.

5.2 Weaknesses and Constraints

5.2.1 Lack of suitable navigation aids (navaids)

While the airport has appropriate navaids to assist in the arrival and departure of day-to-day traffic, an important part of the training program for a flying school, particularly an airline academy, is experience on an instrument landing system (ILS). The nearest ILS is at Avalon Airport which is approximately 330km to the east.

5.2.2 Distance from nearest capital city

Mount Gambier is well designed to provide for people moving to this region, but in a city-centric industry such as aviation, attracting aviation businesses and staff to Mount Gambier is challenging.

5.2.3 Limited revenue sources

Even though the Mount Gambier Airport remains sustainable with an annual operating surplus, it is not able to generate revenue to the same extent as capital city airports who gain the majority of their funds from ancillary sectors such as car parking and bulky goods warehousing.

5.2.4 Eight kilometres out of town

A large number of regional airports are located quite a distance from the towns they serve. This has significant benefits relating to curfew and noise planning but it creates challenges when encouraging businesses to set up at the airport with very little 'walk-by' traffic to entice business owners.

5.3 Opportunities and Prospects

5.3.1 Flight training

The demand for flight training facilities from Asia is still very strong. Australia currently trains thousands of Asian pilots for a number of Asian and sub-continental airlines. As such, despite previously mentioned limitations, there is an opportunity to base one of these facilities in Mount Gambier.

5.3.2 RPT market development

The RPT market has been in decline since late 2007. The passenger numbers are now at a point where real improvements can be made by working with the interested airlines in reviving the local airline market.

5.3.3 Tourism charter development

Currently, tourist charter aircraft visit Mount Gambier as a stopover on the way to another destination. There is a great opportunity to turn Mount Gambier and the Limestone Coast into the final destination with development of weekend getaways which bring people via air for a weekend experiencing all the region has to offer.

5.3.4 On site business development

The Mount Gambier Airport is situated on approximately 250 hectares of land which provides the potential for aviation and non-aviation business development.

The airport has identified a number of sites on the landside areas of the airport that can be developed for commercial or light industrial tenants. The airport now has the possibility of access to the AARNET high speed fibre optic system which passes through the airport lands, which opens up the possibility of attracting more high tech business development. Coupled with its own water supply system and ample space for development, this makes the airport an attractive site for this type of business investment.

The airport continues to market itself as a business friendly location with utility services available along with a potential ultra-high speed internet communication link and is vigilant for further opportunities.

5.4 Threats and Risks

5.4.1 Declining passenger numbers

The primary income source for the Mount Gambier Airport is from the charge levied on all RPT passengers. Therefore a declining passenger market delivers less income which makes it more challenging to continuously improve and maintain the airport and its features.

5.4.2 Loss of commercial air services

As mentioned in the previous paragraph, a complete loss of commercial air services would prevent the airport from funding ongoing maintenance and continuous improvements.

5.4.3 Incohesive regional tourism policy

The Limestone Coast has a lot to offer visitors of all types. In fact the attractions are so diverse; the region has continually struggled to deliver a tourism campaign that brings the region together as a place people would want to spend the weekend.

5.5 Summary of SWOT Analysis

An analysis of the airport SWOT indicates that to succeed in growing and developing, it is important for the Mount Gambier Airport to go forward and make contact with industry stakeholders to encourage them to think about locating at Mount Gambier. The airport needs to establish comprehensive working relationships with these operators. It is not enough to create the space and wait for investment. In the current economic and aviation environment it is critical to put yourself at the front of the queue.

6. STRATEGIC VISION AND OBJECTIVES

The following vision statement and objectives provide broad guidance and direction for the development of the airport. The development of the vision and objectives was guided by the master plan context and the SWOT analysis as well as discussions with key stakeholders.

6.1 Strategic Vision

To maintain and develop a safe and efficient airport that is a gateway to the Limestone Coast enhanced by appropriate aviation expansion and land use that will contribute to and support airport operations and add to the economy of Mount Gambier and the Region.

6.2 Objectives

To achieve the vision the Mount Gambier Airport have set the following objectives;

- To maintain the excellent safety and service record of the airport.
- To take advantage of opportunities in the aviation industry that create activity at the airport.
- To encourage land use and development which enhances the core aviation function of the airport and integrates with airport operations and the local region.
- To strengthen the range of exiting uses and compatibility of these and new land uses.
- To aggressively seek new industry and participants to establish operations at the Mount Gambier Airport.

7. CRITICAL AIRPORT PLANNING PARAMETERS

7.1 Forecast of Future Operations

Forecasting future operations at an airport is always a challenge. Aviation is nothing if not full of variables that, to a certain extent, are out of the control of the airport and its management. As such, the forecast of future operations is based on relevant historical data, the current situation at the airport and potential industry developments in conjunction with our objectives for the future.

The master plan also uses the benchmarks of Port Lincoln and Mildura airports in forecasting the future operations. While it is not anticipated that the airport will grow to these levels during the life of this plan, their path to their current operation is one the Mount Gambier Airport can also follow.

Whilst passenger trends have been declining since the collapse of local market competitor O'Connor Airlines in late 2007, the decline has slowed in 2013/14 providing a great base on which to rebuild the market.

In line with the airports determined approach to growth, the master plan forecasts passenger growth of 2% from 2016 for the period of the plan. This growth is anticipated to come from improved aviation services to Mount Gambier with airline cooperation. There is also evidence that the local economy is generally improving which will see partial flow on effect to the airlines market.

There is no anticipated change on destinations with lack of demand for direct flights to other areas (eg. Sydney).

The size of aircraft operating to Mount Gambier will begin to change towards the end of the life of this plan. The 34 SAAB340 that is utilised by Regional Express has not been in production since 1999 and it is feasible that these aircraft will be nearing the end of their useful life by 2025. As there are no 34 seat aircraft currently in production any replacement aircraft is likely to be larger and more than likely 50+seats.

Increasing aircraft size will have an impact on terminal operations with the potential of more people using the terminal at peak times.

An increase in the primary aircraft size may also have implications under the Aviation Transport Security Act (2004). Any aircraft with a maximum takeoff weight of 20,000kg or greater operating in a RPT or open charter capacity is subject to full passenger and baggage security screening. This will necessitate infrastructure development to accommodate this.

The area where development is forecast to be needed most is in general aviation (GA). In recent years there have been numerous enquiries regarding hangar space for GA aircraft. Additionally, there is a strong desire by the airport to base an airline flying school in the Limestone Coast. The master plan is produced with these important areas in mind.

There have been attempts to secure a rescue helicopter service for the region. It's anticipated that there will be further attempts to secure this service with the base being constructed at Mount Gambier Airport.

7.2 Aerodrome Reference Code System

The Aerodrome Reference Code System is the International Civil Aviation Organisation (ICAO) methodology to specify the standards for individual aerodrome facilities which are suitable for use by aircraft within a range of performances and sizes. The Civil Aviation Safety Authority (CASA) have adopted this system.

The Code is composed of two elements: element 1 is a number related to the aircraft reference field length; and element 2 is a letter related to the aircraft wingspan and outer main gear wheel span. A particular specification is related to the more appropriate of the two elements of the Code or to an appropriate combination of the two Code elements. The Code letter or number within an element selected for design purposes is related to the critical aircraft characteristics for which the facility is provided. There could be more than one critical aircraft, as the critical aircraft for a particular facility, such as a runway, may not be the critical aircraft for another facility, such as the taxiway.

The current Aerodrome Reference Code is 3C.

7.3 Selected Design Aircraft

Based on current information on future aircraft production, the Mount Gambier Airport has selected the Bombardier Dash 8-Q300 as the design aircraft for the development of the facility.

Notwithstanding that the Bombardier Dash 8-Q300 was selected for the design of the runway 18/36 overlay, restricted/limited use by the Bombardier Dash 8-Q400 is permitted within the design, as it is currently one of most popular regional airliners currently in use. Additionally it is the largest regional airliner that is likely to be seen in the Australian market in medium term. Other regional aircraft such as the ATR 72-500, ATR 42-600 and De Havilland DHC-8-300 do not require the infrastructure that the Q400 requires and as such will be accommodated by working with the selected design aircraft.

The design aircraft has an Aerodrome Reference Code of 3D.

7.4 Navigation Systems

Mount Gambier Airport has a number of navigational systems operational.

The airport has RNAV approaches for both runway 18 and runway 36 as well as a runway 18 VOR and MDB approach.

There is no planned upgrade to these systems in the near future. The NDB received a significant upgrade in 2007.

With the introduction of Ground Based Augmentation Systems (GBAS) in Australia, there may be an opportunity to upgrade the airports navigation systems in the latter years of the master plan.

7.5 Aircraft Movement Areas

The existing movement areas of the Mount Gambier Airport are almost suitable for the design aircraft with an Aerodrome Reference Code of 3D. Minor modifications to the turning node on runway 36 are required for the wider wheel track of the design aircraft. Existing large aircraft taxiway and apron facilities are already compliant for the design aircraft.

To accommodate an expansion in GA operations, existing GA aprons need to be expanded and a new GA hangar/aviation business precinct will need to be created with associated taxiways to continue airport development.

Increased traffic will see the need to improve the flow of aircraft to and from the primary runway, particularly at night. This may require the installation of additional taxiways accessing the runway or by creating a night taxiway on runway 11/29.

7.6 Pavement Strength

The current pavement strength on runways 11/29 and 06/24 is sufficient for the operations that are conducted on there with no forecast change. The runways are too short for larger aircraft operations and as such do not need any strengthening work during the term of the master plan.

The Pavement Classification Number (PCN) for runway 18/36. The design aircraft along with, the Bombardier Dash 8-Q400 which has a maximum take-off weight Aircraft Classification Number (ACN) of 16.5 on a subgrade of B. Consideration needs to be given to reclassifying the runway based on wear reports and regular inspections with a plan to conduct an overlay in approximately 8 years. Regular assessment of existing taxiway B and RPT apron will be necessary during the life of the master plan.

7.7 Aviation Support and Landside Facilities

To enable the growth and development that the Mount Gambier Airport is working towards, there is significant infrastructure works to be completed.

The existing GA parking areas will need to be expanded to allow for easy parking particularly during the summer months when the firebombers establish their operations at the field. This expansion to the north of the existing GA apron will avoid crowding the parking areas enhancing safety.

The establishment of a new GA/Commercial Aviation precinct to the southwest of the terminal will provide increased capacity for future aviation based businesses. This precinct will be designed so that it can be constructed in stages as demand requires.

The Mount Gambier Airport car park has capacity to accommodate an increase in use from increased passenger numbers.

Should the existing car park reach capacity limits, a further 20 parks can be obtained by relocating the hire car positions currently within the existing customer car park. Any additional expansion can be achieved with vacant adjacent land.

The airport's navigation aids and meteorological facilities are located in positions that provide no constraints to expansion and development.

7.8 Passenger Terminal

The current terminal was constructed in 1990 and currently serves passengers adequately. The terminal design limits the opportunity to expand or rearrange the facility in line with demand and growth. The logical direction for terminal expansion is to the northeast. This area would be designated a sterile area if security screened flights commenced at Mount Gambier Airport with the screening point setup at the commencement of the new departure lounge.

Depending on market development and growth, consideration should be given to significant changes to the terminal as opposed to expansions and extensions.

7.9 Security Requirements

The Mount Gambier Airport will be required to provide significant security upgrades if RPT aircraft with a MTOW of 20,000kg or greater begin to operate to the facility. This will require passenger security screening along with carry-on and checked baggage screening. Due to the current layout of the terminal, serious consideration must be given to significantly alterations to the terminal to accommodate sizeable equipment and sterile areas.

7.10 Airspace Protection Surfaces

The OLS at Mount Gambier Airport are defined under CASA Manual of Standards (MOS) Part 139 – Aerodromes, Section 7.3 and Regulation 4 of the Airports (Protection of Airspace) Regulations.

The OLS are comprised of a series of imaginary planes surrounding an airport, which must be kept free and clear of obstructions that could be hazardous to aircraft taking off or landing at the facility. The surfaces are intended to prevent development of airspace obstructions that could adversely impact air navigation or the usability of the facility. The height restrictions imposed by the OLS are determined based on the following factors:

- the intended use of the runway, i.e. for take-off, landing or both;
- the runway code as determined by the runway length and type of aircraft using the runway; and
- type of approach, i.e. non-instrument, nonprecision or precision instrument.

Extending off the end of each runway, the OLS standards define both a "take-off climb" surface and an "approach surface" for landing. Where take-offs and landings may occur in either direction along a runway, the more restrictive approach surfaces for landings should be used in determining obstacle height restrictions. At Mount Gambier Airport, it is assumed that take-offs and landings may occur in either direction of the runways and therefore the landing approach surfaces are used in this analysis.

Surrounding the runway pavement is the Runway Strip. The Runway Strip is defined as an area including the runway and stopway, if any, intended to reduce the risk of damage to aircraft running off the runway surface, and to protect aircraft flying over it during take-off or landing. The dimensions of the Runway Strip determine where the OLS surfaces begin and are defined based on the width of the runway pavement, type of aircraft using the runway, and level of precision approach capability available.

There is no change to the current OLS as a result of the Aviation and Non-Aviation development concepts. The OLS for Mount Gambier are depicted in Appendix A Diagrams.

At airports with instrument approach capability, radio navigation aids enable aircraft to operate safely in poor weather conditions. PANS-OPS surfaces are established to protect those stages of take-off, landing or manoeuvring, when aircraft are operating in nonvisual (instrument) conditions.

Pilots must be assured of obstacle clearance in these circumstances, although transition from or to visual conditions will still occur at some point in the flight. The International Civil Aviation Organisation standards for PANS-OPS surfaces require surfaces to be defined for each published procedure, for aircraft operating in accordance with that procedure. The PANS-OPS surfaces should not be infringed in any circumstance. The PANS-OPS surfaces at Mount Gambier Airport are not complex due to the limited number and kind of procedures. There is no change to the current PANS-OPS as a result of the Aviation and Non-Aviation development concepts.

7.11 Environmental and Historical Sites

The Mount Gambier Airport was once home to the RAAF 2 AOS (Air Observer School). The airport retains a number of the buildings from this period and there are the foundations and historical markers of many more. While it is not possible to retain all evidence of the airport's history, it is important to preserve enough to help tell the story of how the facility became what it is today.

A mixed eucalyptus species and blue gum plantation are situated to the west of the airport. These plantations are unique in that they formed part of a forestry study and have a number of rare species located within it. Some species are so rare that they dare only found in this plantation and one other location in Australia. Preservation of this natural section of the airport will have benefits in years to come when environmental requirements of airports become more structured.

8. FACILITIES DEVELOPMENT PLAN

8.1 Asset Upgrades/New Assets (Airside Facilities)

8.1.1 Airport Lighting Control System

The current lighting control system is similar in age to the dated lights of Runway 18/36. The hardware and the peripheral equipment that works with it is aged. The result of this has been an increase in equipment failure directly attributable to the control equipment. The contactors and related components were originally installed in the 1960's and as such parts are no longer available to replace failed items. Technology advances are such that the equipment required to replace this ageing infrastructure is no longer available.

Planned project date: **FY15/16 (subject to funding assistance from state/federal government)**
Estimated cost: **$150,000**

8.1.2 Runway 11/29 Night Taxiway

The smooth flow of arriving and departing air traffic is important to minimise delays and to maintain aviation safety. At Mount Gambier Airport, the prevailing wind for the majority of the year is from the South. This requires aircraft to use runway 18 for landing and takeoff operations. During daylight hours aircraft generally vacate runway 18 and taxi to the apron using runway 11/29. However during night operations on runway 18 aircraft are required to back track the full length of runway 18 to exit by taxiway bravo which is the only taxiway with lighting.

With current scheduled aircraft arriving at similar times and charter and possible future additional scheduled services potentially adding to the congestion, the flow can be improved by installing taxiway lighting on runway 11/29.

During daylight operations, the runway would continue to function in its capacity as a light aircraft runway and taxiway for aircraft vacating runway 18 and destined for the apron and at night it would become a dedicated taxiway allowing for the smooth flow of arriving and departing aircraft at the peak times of operation.

Planned project date: **No planned date (subject to funding assistance from state/federal government)**
Estimated cost: **$220,000**

8.1.3 General Aviation Parking Extension

General Aviation (GA) plays a significant role at Mount Gambier Airport with over 2000[1] movements recorded every year for the past three financial years.

To accommodate growth in the GA segment, the airport has planned to remove the sandy hill next to the existing GA Park and adjacent the Mount Gambier Aero Club Inc.

Levelling and resurfacing this ground will create additional parking for aircraft and alleviate the congestion surrounding the refueling facility. This would also provide additional room to relocate the firebombing aircraft and associated equipment closer to the fence which will enhance safety through obstacle removal.

In addition to providing additional space for aircraft parking and firebombing operations, this project would stop the formation of minor irregularities in TWY Bravo immediately adjacent this hill.[2]

Planned project date: **Stage 1: FY18/19 Stage 2: FY20/21**
Estimated cost: **$130,000 (stage 1: hill removal - $50,000 | stage 2: resurfacing - $80,000)**

8.1.4 Runway 18/36 Upgrade

As mentioned previously in this master plan, this runway was upgraded in 2012 with a minimum 50mm hotmix overlay.

While this overlay will be suitable for existing airport operations for many years, it is important that continual upgrades occur to further strengthen the runway to allow for larger aircraft and more aviation opportunities. With a current PCN of 12, the runway still isn't as strong as other facilities' of comparative size.

Another overlay would increase the PCN to a level that allows for a wide range of aircraft to utilise Mount Gambier Airport.

Planned project date: **No planned date (subject market demand and funding assistance from state/federal government)**
Estimated cost: **$2,500,000**

8.1.5 Taxiway and Hangar Project

Mount Gambier Airport has reached capacity for hangars on existing sites and taxiways. There are seven hangars on the airport with 5 privately owned on leased land and two owned by the airport.

The airport has identified land that can be developed for additional hangars and/or aviation related businesses whilst not reducing land available for potential large scale development.

This project would level the land that runs from northern side of Taxiway B to the north adjacent the public exit road and would allow the construction of up to seven hangars in a staged development.

Artist's rendition of the plan is located in Appendix A Diagrams.

Planned project date: **No planned date (subject market demand and funding assistance from state/federal government)**
Estimated cost: **$1,500,000**

8.2 Asset Upgrades/New Assets (Landside Facilities)

8.2.1 Baggage Collection Area

The current baggage collection area is essentially a tin shed from which arriving passengers collect their bag from the trolley. It is an undesirable look that greets visitors to our region and this is made worse by the difficulty in keeping it clean.

Plans have been established that will see the collection area lengthened to the south, additional access points installed airside to allow for ground crews to drive in and out without reversing and a baggage carousel with division wall installed for the benefit of passengers. The public side of the area will be carpeted and lined the same as the rest of the terminal and limited seating will also be provided. A freight collection and drop off area will also be installed to remove freight congestion from the terminal and passenger baggage areas.

The plan can be found in Appendix A Diagrams.

Planned project date: **FY16/17**
Estimated cost: **$80,000**

8.2.2 Taxi Rank Relocation

With the redevelopment and expansion of the baggage collection area, there is a requirement to relocate the airport taxi rank.

The new rank will be a 'line astern' rank with the first taxi in being the first taxi out. The ranks relocation will also make it look more appealing to the travelling public and avoid the 'taxi driver bottleneck' currently witnessed at the exit of the baggage collection area.

While its final location is yet to be confirmed, the cost to construct this new facility will be similar regardless of location.

Planned project date: **FY16/17**
Estimated cost: **$15,000**

8.2.3 Landside Accommodation/RV Park

Mount Gambier Airport has a number of landside areas that are surrounded by lush natural scrub that are undeveloped. A small RV park will take advantage of these vistas as well as providing a cost effective and secure place to park for the night.

Basic facilities could include power and fresh water along with the privacy of the local bush.

Planned project date: **FY22/23**
Estimated cost: **$10,000**

8.2.4 Airport History Display and Trail

The Mount Gambier Airport is steeped in history. The current site was first utilised as an airstrip in 1927 before becoming a RAAF training base in 1940. As such the airport has a great story to tell.

The airport currently displays some of its airport history in a small glass case in the business desks alcove along with a restored Avro Anson engine.

With the memorabilia held by the airport along with some items members of the public have offered for display, there is the potential to expand the airport's history display to a small museum.

Additionally, working with a community group, the airport will create a trail with information pillars that took visitors on a tour of the old RAAF base highlighting the existing original WWII buildings as well as the ruined foundations of many others.

Planned project date: **FY23/24**
Estimated cost: **$20,000 (working with local community groups)**

8.2.5 Carpark Equipment Expansion

Since the successful implementation of the secure/long term car park and the introduction of timed car parking in the existing general car park, the next logical step is to expand the car park control equipment to the general car park.

This will allow easy monitoring of car park use and will help educate those that abuse the systems in place.

Planned project date: **FY17/18**
Estimated cost: **$70,000**

8.2.6 Security Fence and Gate Upgrade

In 2002 the Federal Government provided funds to erect a security fence around the airport. This was in response to the events in the United States on September 11 the previous year. The Airport Manager at that time erected the fence around approximately three quarters of the airport and handed back approximately $100,000 to the Federal Government.

To ensure the ongoing security of our airport, the last quarter of boundary needs to be fenced with security fencing. This will also reduce the wildlife hazard at the airport.

Further to that, with the support of the South Australian Ambulance Service, the airport will install a powered proximity card activated gate at Gate 2 to allow easier access to their ambulance crews and maintain airside security.

It is anticipated that this project will be completed over four stages.

Planned project date: **FY17/18 – FY20/21**
Estimated cost: **$99,000**

8.2.7 Rental Vehicle Parking Consolidation

Currently three rental vehicle companies utilise a large portion of the area located to the immediate south west of the car park and terminal. Over time, the companies have outgrown the parking provided there.

The airport is to expand the parking for rental cars and trucks in the triangle of land in this location (see Appendix A Diagrams). This will allow all companies to park their vehicles in a suitable park and remove those vehicles from their unsightly positions adjacent the car park and exit road.

Planned project date: **FY15/16**
Estimated cost: **$50,000**

8.2.8 Sterile Area/Terminal Expansion

Due to changes in the Aviation Transport Security Act (2004), larger aircraft operating regular public transport flights are required to be screened at the departure airport. As such Mount Gambier Airport has completed planning for such operations with an addition to the North-East of the building which encompasses a screening point along with a sterile departure lounge and toilet facilities

This construction would encompass the grassed area on the northern side and require the relocation of some water services. The extent to which the building can be expanded is limited to a certain extent by the proximity of the RPT apron and the Bellman hangar. Some alleviation may be gained by adjusting the angle of the additional sections. Should the requirement for screening not present itself, this design would also be suitable for planned terminal expansion to accommodate increasing passengers.

Planned project date: **FY21/22**
Estimated cost: **$700,000**

8.2.9 Security Surveillance Equipment Upgrade

As a part of the airport's Transport Security Plan (TSP) the facility has a number of surveillance cameras operating throughout the airport. These are currently standard definition (SD) and are being recorded through analogue systems. As technology develops, the airport needs to engage in a replacement program to install high definition (HD) cameras and digital recording hardware.

This changeover should occur over a period of time.

Planned project date: **No planned date (subject market demand and funding assistance from state/federal government)**
Estimated cost: **$40,000**

8.3 Asset Renewals (Airside Facilities)

8.3.1 Bellman Hangar Roof Replacement

The airport owned Bellman hangar houses nine privately owned single engine aircraft. The owners of these aircraft pay an annual lease on their parking position to the airport. The hangar itself was built in 1941 as a part of the construction of the RAAF training base at Mount Gambier Airport. While it is generally in good condition the roof is beginning to show signs of age with small scale leak repairs becoming a regular requirement. To eliminate further leaks and to protect the integrity of the interior support structure, it is important that the roof be completely replaced with new sheeting.

Planned project date: **FY17/18**
Estimated cost: **$70,000**

8.3.2 Ancillary Runways and Taxiway Resurfacing

Whilst runway 18/36 receives the bulk of air traffic at Mount Gambier Airport, runways 06/24 and 11/29 are still vital components providing increased landing options for smaller general aviation aircraft allowing them to use the airport in greater variations of weather.

The runways are connected to the apron area via taxiways A1, A2 and C. All surfaces are a spray seal. The resurfacing using a spray seal is the most cost effective method of rejuvenation for these lower traffic pavements.

The infrastructure has previously been improved at various times throughout the past 25 years and current technical reports indicate that they will be suitable for use through to the planned improvement date.

Planned project date: **FY20/21 – FY22/23**
Estimated cost: **RWY 06/24: $126,900 RWY 11/29: $138,300 TWY A1, A2 & C: $60,000**

8.3.3 General Aviation Apron Levelling and Surfacing

The general aviation (GA) area of the airport is 18275m^2 of spray seal and is the parking area for the majority of aircraft operating at Mount Gambier (except RPT and some charter aircraft).

The tarmac is slowly losing shape during its life and will require the developing depressions to be filled and the entire apron to be resurfaced.

Planned project date: **FY23/24**
Estimated cost: **$185,000**

8.4 Asset Renewals (Landside Facilities)

8.4.1 Terminal Toilets Renovation

The toilets in the terminal at Mount Gambier Airport are nearly 25 years old and have had no significant work done to them in that time.

The renovation of these facilities with give them a fresh modern look that functions better for the more than 60,000 that use them every year.

New lighter tiles along with new toilets, cubicles and basins will eliminate the eyesore of the ageing ablutions area.

Planned project date: **FY15/16**
Estimated cost: **$25,000**

8.4.2 AVGAS Fuel Equipment Renewal

The Mount Gambier Airport provides a 24 hour AVGAS refuelling facility with the fuel supplied by Stark Aviation. The credit card swipe machine was installed in 2011 with the bowser and pump installed in the late 1980's. This equipment will need additional servicing as its ages with parts becoming harder and harder to source.

It is anticipated that the ageing infrastructure will require replacement during the life of this plan.

Planned project date: **FY19/20**
Estimated cost: **$60,000**

9. ASSET MANAGEMENT

9.1 Introduction

9.1.1 Background

The airport assets considered in this plan are described as including all assets directly associated with the provision of airport services and located within the airport land parcel, for which the District Council of Grant is the responsible authority. Please refer to Council's Asset Register for all airport and associated airport infrastructure assets for which Council is accepting responsibility.

The assets covered by this plan are shown in Table 9.1.1.

Table 9.1.1: Assets covered by this Plan

Asset category	Quantity	Dimension	Replacement Value As at 30th June 2014
Land	1	2,470,000m²	$2,040,000
Runways	3	105,000m²	$6,525,835
Taxiways	4	28,200m²	$1,658,239
Aprons	3	38,200m²	$2,054,394
Carparks and Other Sealed Area	6	16,646m²	$721,380
Administration Buildings	1		$242,000
Terminals	3		$1,263,229
Hangars	2		$1,032,000
Sheds and Other Buildings	12		$534,000
Plant and Equipment	32		$308,950
Roads, Kerbs, Footpaths and Landscaping	4	8,446m² 313m	$367,935
IT & Furniture	27		$80,954
Water Licence	1		$11,864
Lighting	2		$795,411
Security Fencing	2		$212,053
Water Supply System	1		$335,199
TOTAL			**$18,183,443**

This purpose of the asset management section of this plan is to demonstrate responsive management of assets (and services provided from assets), compliance with regulatory requirements and to communicate funding needed to provide the required levels of service.

9.1.2 Goals and Objectives of Asset Management

The airport exists to provide services to its 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.

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.[1]

The goal of this asset management section is to:

- Document the services/service levels to be provided and the costs of providing the service,
- Communicate the consequences for service levels and risk, where desired funding is not available, and
- Provide information to assist decision makers in trading off service levels, costs and risks to provide services in a financially sustainable manner.

9.1.3 Framework

Key elements 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 the organisation 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 the organisation's objectives.
- Asset management improvement plan

9.1.4 Core and Advanced Asset Management

This asset management section is prepared as a first cut 'core' asset management plan in accordance with the International Infrastructure Management Manual[2]. 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.

9.2 Levels of Service

Levels of Service relate to outcomes the customer receives in terms of quality, quantity, responsiveness and performance as provided by the asset.

To achieve and sustain acceptable standards of service for Council's airport requires an annual commitment of funds. These funds provide for regular and responsive maintenance and for timely renewal or replacement of assets.

[1] IPWEA, 2006, *IIMM* Sec 1.1.3, p 1.3.
[2] IPWEA, 2006.

The provision of adequate financial resources ensures that the airport is appropriately managed and preserved. Financial provisions below requirements impacts directly on the airport service provision and if prolonged, results in increased and escalating reactive maintenance as aged assets deteriorate at increasing rates, with the necessary expenditure being borne by Council.

In developing the levels of service, Council has given due regard to the strategic goals and objectives outlined in this Master Plan as well as giving due regard to Legislative requirements and Australian Standards and stakeholder expectations.

The levels of service documented therefore reflect the current levels of service provided by the airport, for the benefit of the community, in the context of Council's financial and human resources.

9.2.1 Customer Research and Expectations

A survey of all departing passengers from Mount Gambier was conducted by Department of Planning, Transport and Infrastructure in September 2013. The results and Department analysis identified clear trends in passenger behaviour which assisted in developing strategies to achieve our common goals.

9.2.2 Legislative and Statutory Requirements

Council has to meet many legislative and statutory requirements including Australian and State legislation and State regulations. Relevant legislation is shown in Table 9.2.2A and statutory requirements in Table 9.2.2B.

Table 9.2.2A: 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.
Local Government (Financial Management and Rating) Amendment Act 2005	Impetus for the development of a Strategic Management Plan, comprising an (Infrastructure) Asset Management Plan and Long-term Financial Plan.
Work Health and Safety Act 2012	An Act to provide for the health, safety and welfare of persons at work.
Disability Discrimination Act 1992	The objectives of this act are to eliminate, as far as possible, discrimination against persons on the grounds of disability. It sets the standard for accessibility.
National Asset Management Framework Legislation 2010	Focuses on long term financial sustainability and provides a mandate to have long term strategy, financial statements and annual reporting mechanisms. AM plans are likely to be audited.
Aviation Transport Security Act 2004 and Aviation Transport Security Regulations 2005	Establishes the regulatory framework to safeguard against unlawful interference with aviation by establishing minimum security requirements for civil aviation in Australia by imposing obligations on persons engaged with civil aviation related activities. In particular it obliges certain aviation industry participants to develop, and comply with, aviation security programmes.

Table 9.2.2B: Statutory Requirements

Legislation	Requirement
Civil Aviation Safety Authority (CASA) Regulations	Part 139 prescribes the requirements for aerodromes used in air transport operations and manuals of standards. Subpart 139H specifies the requirements for the provision of aerodrome and fire fighting services.
Building Code of Australia	To enable the achievement and maintenance of acceptable standards of structural sufficiency, safety (including safety from fire), health and amenity for the benefit of the community now and in the future.
Australian Accounting Standards	Sets out the financial reporting standards relating to infrastructure assets. Standards of particular relevance to Infrastructure Assets include: • AASB 13 Fair Value Measurement – defines fair value, sets out in a single standard the framework to measure fair value and requires disclosures about fair value measurement • AASB 116 Property, Plant & Equipment – prescribes requirements for recognition and depreciation of property, plant and equipment assets • AASB 136 Impairment of Assets – aims to ensure that assets are carried at amounts that are not in excess of their recoverable amounts • AASB 1021 Depreciation of Non-Current Assets – specifies how depreciation is to be calculated • AAS 1001 Accounting Policies – specifies the policies that Council is to have for recognition of assets and depreciation • AASB 1041 Accounting for the reduction of Non-Current Assets – specifies the frequency and basis of calculating depreciation and revaluation basis used for assets • AAS 1015 Accounting for acquisition of assets – method of allocating the value to new assets on acquisition

9.2.3 Current Levels of Service

The Mount Gambier Airports Core Service Statement is: *'Engaging with the community to deliver superior facilities and service to all users of the airport whilst maintaining the highest levels of safety'*.

To achieve the above core service statement, the Mount Gambier Airport provides services as follows:

- Provision of infrastructure to airlines for commercial and freight travel to and from the region;
- Provision of infrastructure to facilitate safe effective aeromedical, firefighting and other emergency air operations.
- Provision of infrastructure to accommodate the private and general aviation sector.
- Provision of infrastructure and space to tenants to deliver services to the community.

9.2.4 Defining Levels and Service

Council has defined three tiers of levels of service:

The first being '**Strategic Levels of Service**' – what we expect to provide in terms of key customer outcomes such as:

- Smooth passenger experiences.
- Proactive community engagement.
- Continuous improvement.

The second being '**Tactical Levels of Service**'.

What we will do in real terms, i.e. reliability, functionality and adequacy of the services provided. Typically, this plan has documented our standards – i.e. at what point will we repair, renew or upgrade to meet the customer outcomes listed in the strategic levels.

Tactical levels of service are also referred within Council as Technical Levels of Service and have been defined for each of the following:

- New Asset – If we provide for example new runways, then what design and maintainability standards shall apply to make them meet our strategic outcomes?
- Upgraded or Reconstructed Asset to original standard - If we upgrade or reconstruct our airports assets, then what design and maintainability standards shall apply to make them meet our strategic outcomes?

The third being '**Operational Levels of Service**'.

Operational levels of service are also referred within Council as Maintenance Levels of Service and have been defined for the following:

- Maintenance – When will we intervene with a maintenance repair and what will be our responsiveness in terms of requests for maintenance faults.

Strategic Levels of Service

Strategic Levels of Service, communicate the philosophies of Council in relation to the management of the airport including the rehabilitation and renewal of these assets as they deteriorate due to structural failure, use, obsolescence, capacity and/or age.

The airport Strategic Levels of Service that have been adopted are shown in the table below as:

Table 9.2.4- Strategic Levels of Service

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
Reliability	The airport is available and accessible 24 hours a day	Airport is accessible to travellers and aircraft.	Nil closures. Natural disasters and emergency incidents excepted.	100% compliance
Function	The airport is located and provided with essential services to facilitate safe, efficient and environmentally friendly operation.	Consistent delivery of utilities. Roadways and carparks.	Suitable operational system No closures during times of normal operations	100% compliance 100% compliance
Condition	Provision of runway, terminal and hangar assets that enables effective delivery of service.	Provision of operational and structurally sound assets.	0 times per year that the assets are unavailable for use due to structural failure.	0 reported defected assets in 2013

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
Safety	To operate and manage an airport in a manner conducive to a hazard free environment.	Effective implementation of Council's Work Health and Safety (WH&S) policies.	0 injuries per annum.	0 injuries in 2013
Condition	Provide appropriate airport facilities that are maintained to meet CASA regulations and user requirements.	Service & maintenance request responses. Emergency Requests	Less than 5 reactive service requests per month. Provide full assistance to emergency service authorities.	100% compliance 100% compliance
Quality	Efficient Capital Works Program	Capital projects completed on time and within budget each financial year.	> 90% programme completed and allocated funds spent.	100% (2010/11)

Technical and Management Levels and Service

It is proposed that design standards will be considered on a case-by-case basis. Airport associated infrastructure assets will generally be designed in accordance with relevant industry standards and guidelines such as those published by CASA and the Building Code of Australia.

Generally, it has been assumed that all assets have been built to the required standard at the time of construction.

Operational Levels of Service

For the Levels of Service delivered on a day to day nature (i.e. responding to maintenance faults and responding to breakdowns), refer to Council's Airports Maintenance Levels of Service in the appendices.

This document identifies:

- The task or work expected to be undertaken, e.g. repair damaged lighting or fencing.
- The quantity of work expected to be undertaken.
- The schedule of inspections to be undertaken of specified matters at specified intervals;
- The circumstances under which intervention action is to be taken with respect to repair or maintenance needs for defects reported or found on inspection;
- The priority to be given to intervention level;
- The type of priority intervention action that will be carried out;
- Provision, as far as practicable, for the unpredictable, i.e. emergencies, natural disasters; and
- Assessment of resources required delivering the specified maintenance services.

Responsibility for immediate dangerous situations with respect to airports and associated airport infrastructure is initially assessed or undertaken by Councils Airport staff.

Given the outcomes of the internal and external review with respect to Council's airport and associated infrastructure asset maintenance services, the standards of maintenance detailed in this plan are considered reasonable and meeting community expectations in the context of responsible and reasonable airport infrastructure management.

9.2.5 Desired Levels of Service

Council has yet to quantify desired levels of service. This will be done in future revisions of this asset management plan.

9.3 Future Demand

9.3.1 Demand Forecast

Factors affecting demand include population change, changes in demographics, seasonal factors, vehicle ownership, consumer preferences and expectations, economic factors, agricultural practices, environmental awareness, etc.

Demand factor trends and impacts on service delivery are summarised in Table 4.1.

Table 9.3.1: Demand Factors, Projections and Impact on Services

Demand factor	Present position	Projection	Impact on services
Population *Based on Lower South East Region which includes:* • *District Council of Grant* • *Wattle Range Council* • *City of Mount Gambier*	45,665 (2012 data) *Reference: Australian Bureau of Statistics*	50,798 (2025) *Reference: Social Health Atlas of South Australia Local Government Areas, 2010*	Change in passenger numbers may be proportional to the change in population, however the more significant effect on passenger numbers would be due to use by the government (state and federal) and "fly in fly out" sectors. If there is a drop off in use by either of these sector, the ability to maintain the assets would be affected.

9.3.2 Changes in Technology

Council is continuously monitoring new asset treatments or changes within the industry that may be available to adopt or implement to increase the life of its assets. Technology changes that could affect the delivery of services covered by this plan are documented in the following table.

It should be acknowledged that Council has embraced these technological changes and implemented programs to put into practice these changes.

Table 9.3.2: Changes in Technology and Forecast effect on Service Delivery

Technology Change	Effect on Service Delivery
Lighting Improvements	Updated runway lighting has improved pilot visibility during times of fog.

9.3.3 Demand Management Plan

Clearly there is a demand for Council to continue providing this service at present and therefore the financial forecasting will assume a 10 year period. However, with each iteration of this plan, demand will be continually assessed.

The terminal meets the requirements for current passenger movements however any major growth in passenger numbers or a change in the security environment may require significant terminal expansion and/or modification.

The terminal is approaching 25 years of age and is beginning to require maintenance investment to revitalise the building. Additionally the single arriving/departing passenger door makes it susceptible to security breach along with the baggage collection area when the baggage is delivered.

9.3.4 New Assets for Growth

New and upgraded assets for growth are detailed in Section 8 of this plan.

Constructing any 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 operations and maintenance costs.

9.4 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 9.2) while optimising life cycle costs.

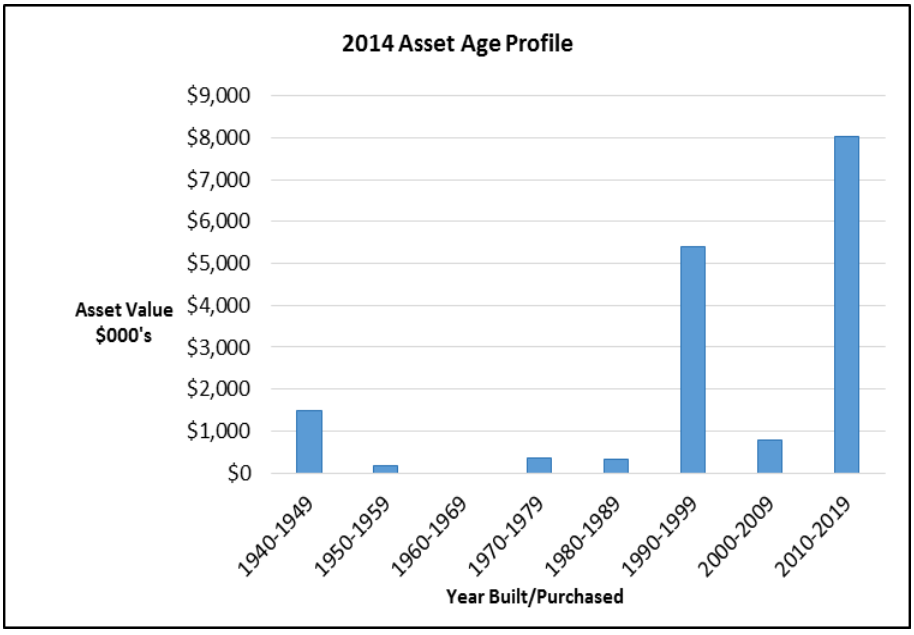
9.4.1 Background Data

Physical Parameters

The assets covered by this plan are shown in Table 9.1.1.

The age profile of the assets include in this plan is shown in Figure 1.

Figure 1: Asset Age Profile



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 9.4.1.

Table 9.4.1A: Known Service Performance Deficiencies

Location	Service Deficiency
Airport Lighting Control System	Increase in equipment failure directly attributable to aged control equipment.
Runway 11/29	Improved lighting required for night use.
Bellman Hangar	Small scale roof leak repairs becoming a regular requirement.
General Aviation (GA) Parking	Congestion around fuel facility.

Asset condition

Council has a documented assessment manual (refer to the 'District of Grant Business Process Manual' for further details) with regards to condition rating the airport assets.

Condition assessments of the airport assets are conducted to:

- Monitor the condition and deterioration of airport assets to facilitate projections of asset life in this plan;
- Enable long-term planning and funding provision for the optimum renewal of airport assets as they deteriorate;
- Allow for the inclusion in annual works programs of repairs to non-hazardous defects that degrade the quality of service provided to users of the airport network that Council is responsible for; and
- Enable fair value depreciation calculations as required by Accounting Standard AASB 113.

Due to the complexity of the airport infrastructure assets, condition assessments are undertaken on the principle asset components.

The following table below provides a high level overview of Council's adopted condition rating scale for the various airport infrastructure assets.

It is important to note that as some of these assets are complex in nature, the following table has been utilised to align a condition score at a higher level for the purposes of determining the current assessment of health of the airport asset stock.

For the purposes of selecting asset candidates for capital works, the detailed engineering data (where available) has been utilised to identify these suitable candidates.

Typically condition is measured using a 0 to 5 rating system as described below:

Table 9.4.1B: Description of Condition

Condition Grading	Description of Condition
0	**Brand New**
1	**Excellent**: only planned maintenance required
2	**Very Good**: minor maintenance required plus planned maintenance
3	**Good**: significant maintenance required
4	**Fair**: significant renewal/rehabilitation required
5	**Poor**: unserviceable

Condition assessments are not undertaken on the plant and equipment assets associated with the airport and instead, Council utilises age and maintenance failure data to facilitate projections of asset life.

The following graphs illustrate the DCG's airport network condition based on Council's condition data and taking into account the above condition rating scales. The graphs show the percentage of Council's asset portfolio in each category of condition scales.

Figure 2: 2014 Snapshot of Runways, Taxiways, Roads and Carparks Condition

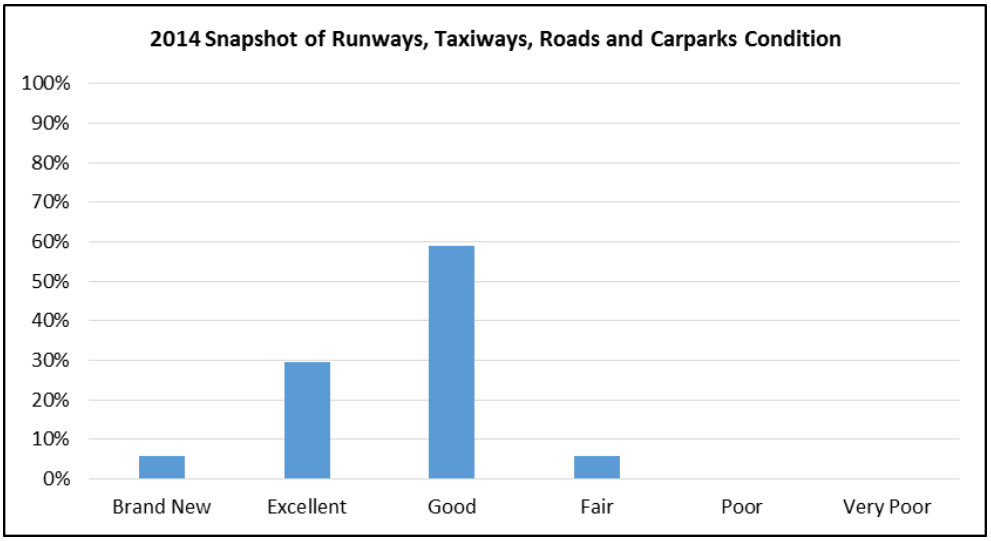
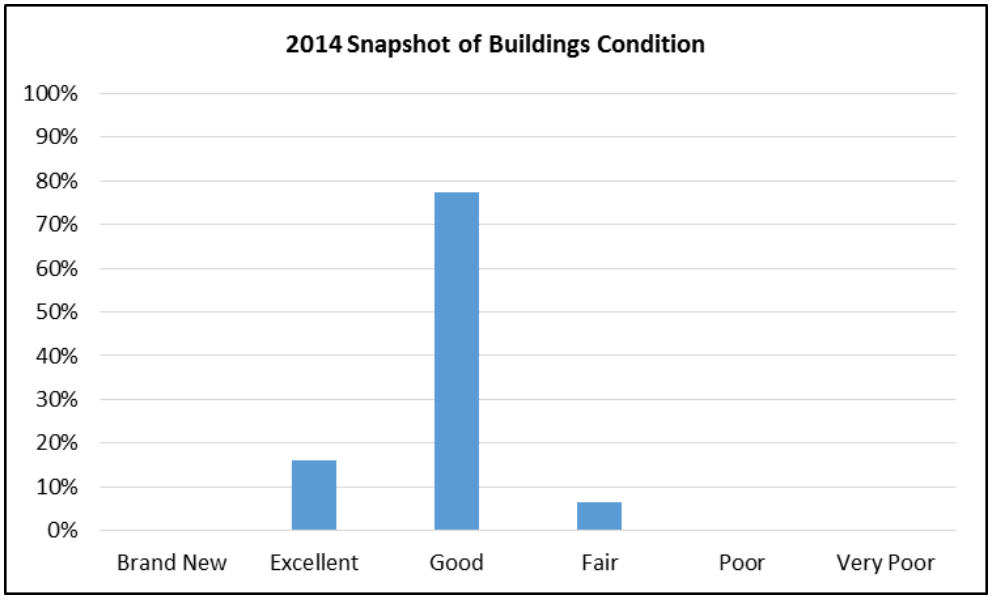


Figure 3: 2014 Snapshot of Buildings Condition



Overall, the majority of assets at the airport are in good condition with an acceptable proportion of these assets in fair condition. The runway, airport terminal and lighting assets are in very good condition as a result of the recent upgrade works, whilst it is also interesting to note that the fleet and light plant have all exceeded their useful lives.

9.4.2 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.

Maintenance Plan

Maintenance includes reactive, planned and specific maintenance work activities.

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

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.

Specific maintenance is replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, building roof replacement, etc. This work generally falls below the capital/maintenance threshold but may require a specific budget allocation.

Actual past maintenance expenditure is shown in Table 9.4.2.

Table 9.4.2: Maintenance Expenditure Trends

Year	Maintenance Expenditure
2014	$880,031
2013	$904,127
2012	$679,173

Current maintenance expenditure levels are considered to be adequate to meet required service levels. Future revision of this asset management plan will include linking required maintenance expenditures with required service levels.

Assessment and prioritisation of reactive maintenance is undertaken by operational staff using experience and judgement.

Standards and Specifications

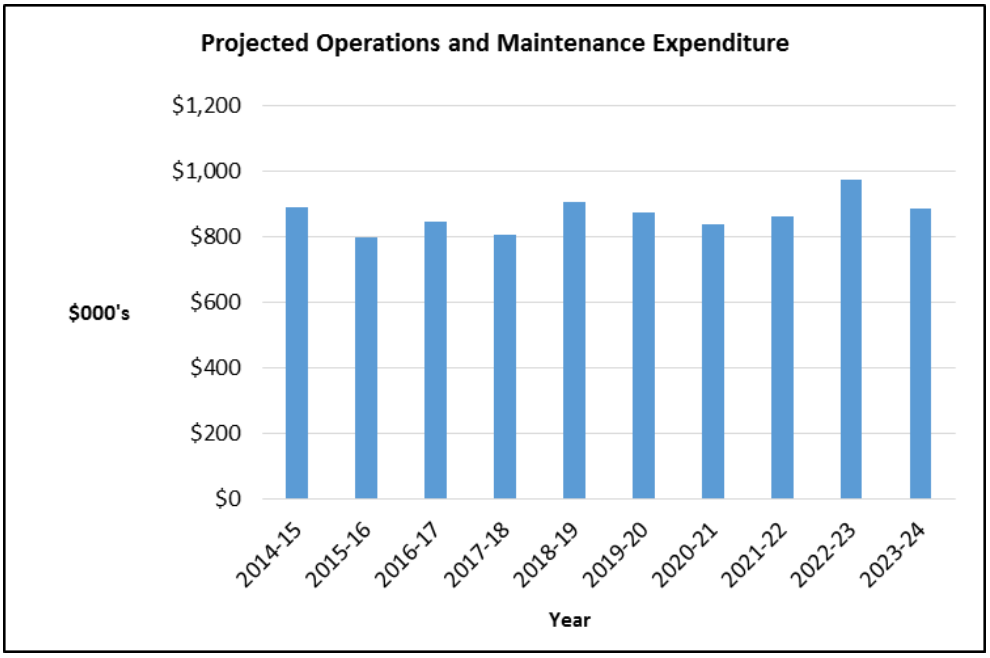
Council has not formally endorsed design standards and specifications at present with regards to constructing / renewing infrastructure at the airport. However in light of best practices Council utilises State and National standards and codes of practices where applicable to ensure that it complies with the Legislation and Regulations as documented in Section 9.2.

The Mount Gambier Airport has also a fully qualified auditor who provides independent audits such as Safety Management Systems and Airport Emergency Plan reviews and revisions.

Summary of future operations and maintenance expenditures

Future operations and maintenance expenditure is forecast to trend in line with the value of the asset stock as shown in Figure 4. Note that all costs are shown in 2015 dollar values.

Figure 4: Projected Operations and Maintenance Expenditure



Deferred maintenance, ie 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 the operating budget and grants where available.

9.4.3 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.

Renewal plan

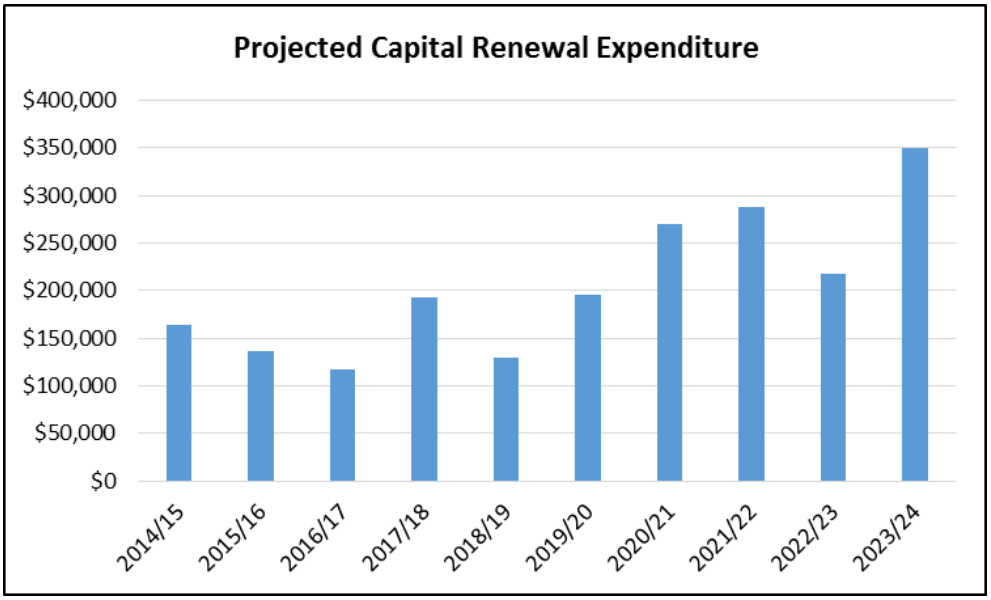
Renewal will be undertaken using 'low-cost' renewal methods where practical. The aim of 'low-cost' renewals is to restore the service potential or future economic benefits of the asset by renewing the assets at a cost less than replacement cost.

Summary of projected renewal expenditure

Projected future renewal expenditures are forecast to increase over time as the asset stock ages. The costs are summarised in Figure 5. Note that all costs are shown in 2015 dollar values.

The projected capital renewal program is shown in the appendices.

Figure 5: Projected Capital Renewal Expenditure



Deferred renewal, ie those assets identified for renewal and not scheduled for renewal in capital works programs are to be included in the risk assessment process in the risk management plan.

Renewals are to be funded from capital works programs and grants where available.

9.4.4 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.

Selection criteria

As new projects are brought forward for consideration with the annual budget, they will have an assessment of these ongoing operational (recurrent) costs presented to Council as part of the overall project cost projections, as typically these projects will need to be funded from loan borrowings, often due to their extensive construction costs, which are not easily absorbed by the Airports annual budget.

It is not reasonable to expect costs for new or upgraded assets to be absorbed into existing budgets without an increase in the commitment of annual funding allocation. Not providing annual commitment of funding allocation will effectively reduce the current levels of service to part or all of the asset stock.

The Airport annual budget can be increased as a result in increases in income via additional passenger numbers, however, taking into account recent passenger number trends as illustrated in Section 3, Council does not envisage that income will increase, but remain static over the following 5 years.

The second option is to increase airport fees, however, recent surveys and discussions with key stakeholders suggest strong opposition to such an approach. However, Council has carefully considered all future works required at the Airports and also the annual costs required funding the operations, maintenance and loan repayments and as a result have had to apply an increase to its fee structure.

Council also utilises the following framework for capital upgrade works selection of airport infrastructure assets which typically depends on 2 main factors, the first being cost of maintaining the existing asset in its current condition and the second, the requirement to deliver the level of service it was designed or intended for.

E.g. The decision to upgrade the main runway was due to lack of any upgrade in the past to keep up with larger aircraft types resulting in a runway below the CASA standard as well as low strength which was a barrier to most business jets from operating into and out of Mount Gambier Airport therefore turning away potential investment in the region.

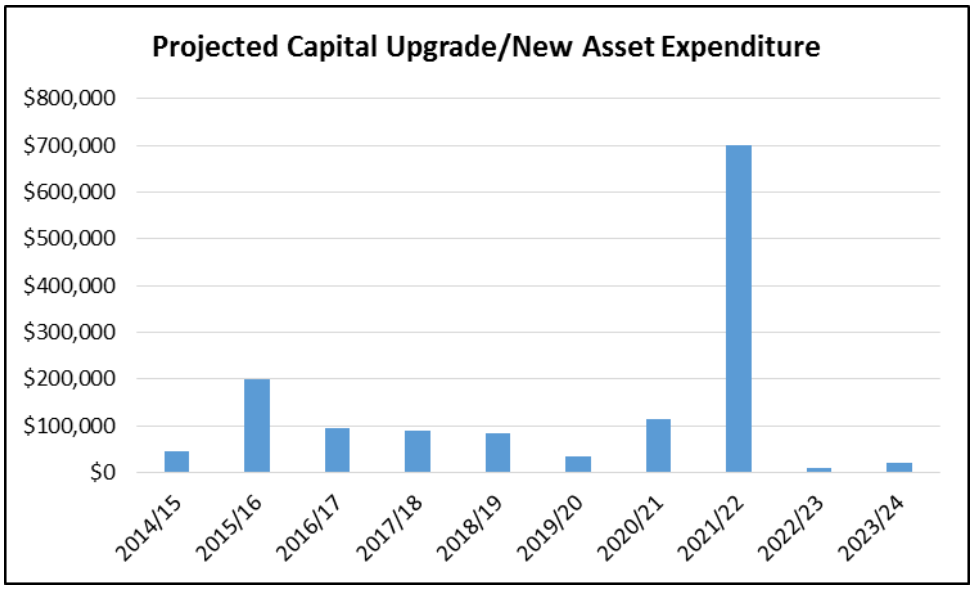
The decision to upgrade the runway lighting system was based on the age of the old installation and the rising costs to keep the system compliant along with the high cost of any rectification work.

Other works are carried out to fill a need either driven by the existing capacity or functionality requirements to meet current or future needs e.g. the terminal expansion and addition of the café was required to cater for an increase in user demands and considered that the existing infrastructure was not providing the appropriate capacity and functionality requirements.

Summary of projected upgrade/new assets expenditure

Projected upgrade/new asset expenditures are summarised in Figure 6. The projected upgrade/new capital works program is shown in the appendices. All costs are shown in current 2015 dollar values.

Figure 6: Projected Capital Upgrade/New Asset Expenditure



9.4.5 Disposal Plan

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. Assets identified for possible decommissioning and disposal are shown in Table 5.6, together with estimated annual savings from not having to fund operations and maintenance of the assets. These assets will be further reinvestigated to determine the required levels of service and see what options are available for alternate service delivery, if any.

Where cashflow projections from asset disposals are not available, these will be developed in future revisions of this asset management plan.

Table 9.4.5: Assets identified for Disposal

Asset	Reason for Disposal	Timing	Net Disposal Expenditure (Expend +ve, Revenue –ve)	Operations & Maintenance Annual Savings
			+/- $0	+/- $0

9.5 Asset Management Practices

9.5.1 Accounting/Financial Systems

Accounting and financial systems

Council's finance system is Synergy Soft. This system has been utilised as Council's primary finance system for a number of years. It currently manages all financial transactions and holds the General Ledger.

Accountabilities for financial systems

The Senior Accountant is responsible for operating the finance system.

Accounting standards and regulations

The South Australian Local Government (Financial Management) Regulations 1999 requires that Council prepare and maintain all accounting records, accounts and financial statements in accordance with all relevant Australian Accounting Standards. The DCG comply with the following accounting standards and guidelines as required:

- AASB 116 Property, Plant & Equipment – prescribes requirements for recognition and depreciation of property, plant and equipment assets
- AASB 136 Impairment of Assets – aims to ensure that assets are carried at amounts that are not in excess of their recoverable amounts
- AASB 1021 Depreciation of Non-Current Assets – specifies how depreciation is to be calculated
- AAS 1001 Accounting Policies – specifies the policies that Council is to have for recognition of assets and depreciation
- AASB 1041 Accounting for the reduction of Non-Current Assets – specifies the frequency and basis of calculating depreciation and revaluation basis used for assets
- AAS 1015 Accounting for acquisition of assets – method of allocating the value to new assets on acquisition
- AAS 1010 Recoverable Amounts of Non-Current Assets – specifies requirement to test the reasonableness of valuations

Capital/maintenance threshold

Council has prepared and endorsed a capitalisation and depreciation policy with schedules for capitalisation and valuation thresholds. These financial thresholds and activities have been developed to assist in determining when expenditure is capital or maintenance.

It includes a Capital Value Register (CVR) for storing asset valuation details and computing depreciation expenses.

9.5.2 Asset Management Systems

Asset management system

Assetic's myData – asset register holding inventory data, condition data, valuation data and related documents such as photos.

Asset registers

Assetic's myData – asset register holding inventory data, condition data, valuation data and related documents such as photos.

Linkage from asset management to financial system

Asset valuation and depreciation is calculated in myData and then exported to Synergy Soft to be entered at the asset class level.

Accountabilities for asset management system and data

The Asset Management Coordinator is responsible for maintenance of the asset management system.

Required changes to asset management system arising from this AM Plan

To be considered in future revisions of this plan.

9.5.3 Information Flow Requirements and Processes

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

- Council strategic and operational plans,
- Service requests from the community,
- Network assets information,
- The unit rates for categories of work/materials,
- Current levels of service, expenditures, service deficiencies and service risks,
- Projections of various factors affecting future demand for services and new assets acquired by Council,
- Future capital works programs,
- Financial asset values.

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

- The projected Works Program and trends,
- The resulting budget and long term financial plan expenditure projections,
- Financial sustainability indicators.

These will impact the Long Term Financial Plan, Strategic Longer-Term Plan, annual budget and departmental business plans and budgets.

10. Risk Management Plan

The District Council of Grant as the operator of the Mount Gambier Airport is required to have an Airport Manual in accordance with Civil Aviation Safety Regulations 139. Council is required to operate and maintain the airport in accordance with the procedures set out in the manual.

The manual is divided into 3 parts:

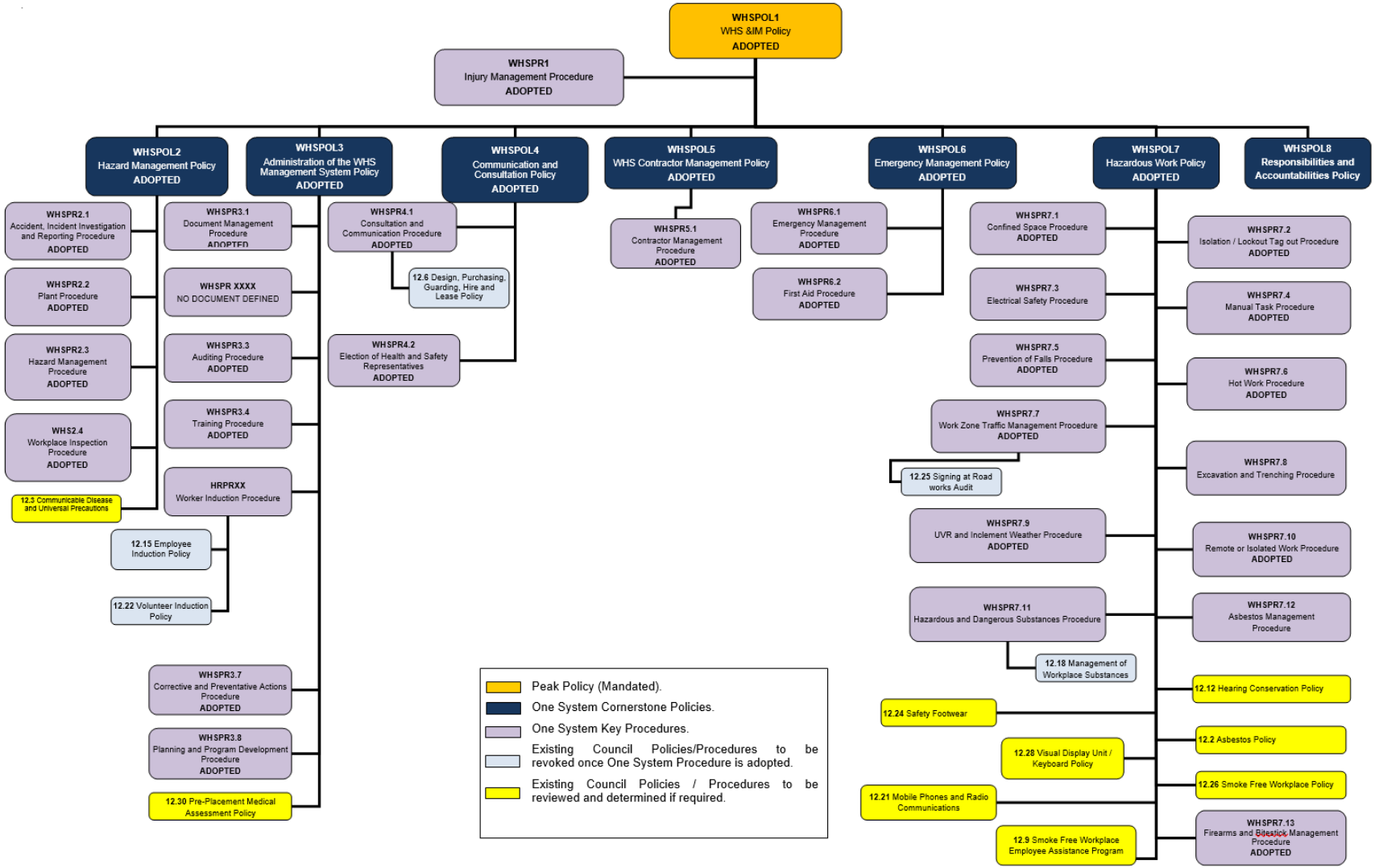
- Particulars of the Airport Site
- Airport Operating Procedures; and
- Particulars to be notified in AIP ERSA

A copy of the manual is available from the Airport Manager or the District Council of Grant Offices.

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

As a result, Council has implemented the 'District Council of Grant – Work Health and Safety and Injury Management' system (last updated and reviewed in November 2013) to mitigate its risk in relation to managing its airport.

Figure 7: Adopted Risk Management System



11. 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.

11.1 Financial Statements and Projections

11.1.1 Expenditure projections for long term financial plan

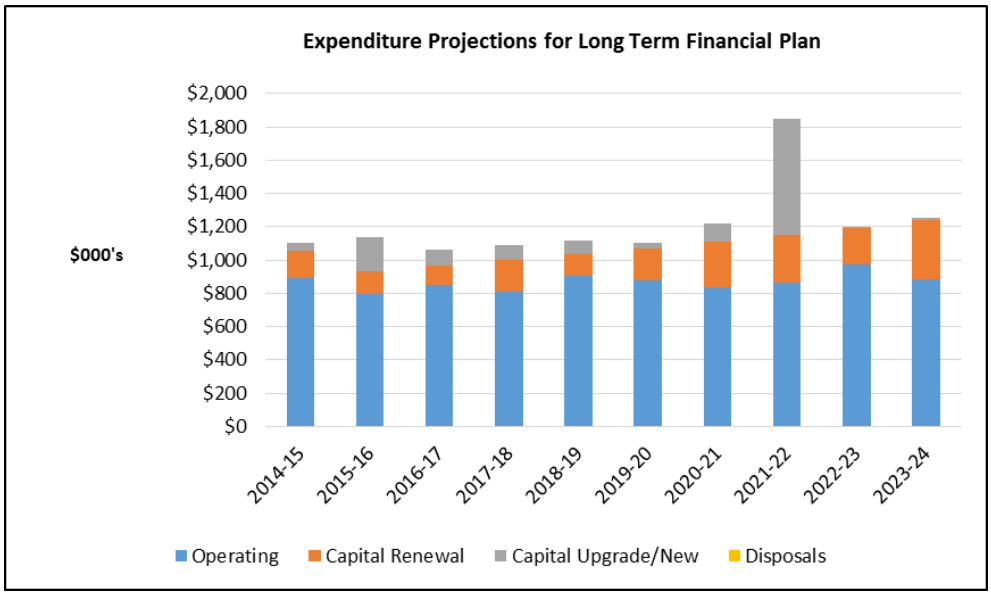
Table 11.1.1 shows the projected expenditures for the 10 year long term financial plan.

Expenditure projections are in current (non-inflated) values. Disposals are shown as net expenditures (revenues are negative).

Table 11.1.1: Expenditure Projections for Long Term Financial Plan ($000)

Year	Operations ($000)	Projected Capital Renewal ($000)	Capital Upgrade/ New ($000)	Disposals ($000)	Total ($000)
2015	$891	$164	$45	$0	**$1,100**
2016	$797	$137	$200	$0	**$1,134**
2017	$848	$117	$95	$0	**$1,060**
2018	$806	$193	$90	$0	**$1,089**
2019	$905	$129	$83	$0	**$1,117**
2020	$875	$196	$33	$0	**$1,104**
2021	$840	$269	$113	$0	**$1,222**
2022	$862	$288	$700	$0	**$1,850**
2023	$975	$217	$10	$0	**$1,202**
2024	$887	$350	$20	$0	**$1,257**

Figure 9: Expenditure Projections for Long Term Financial Plan



11.1.2 Revenue projections for long term financial plan

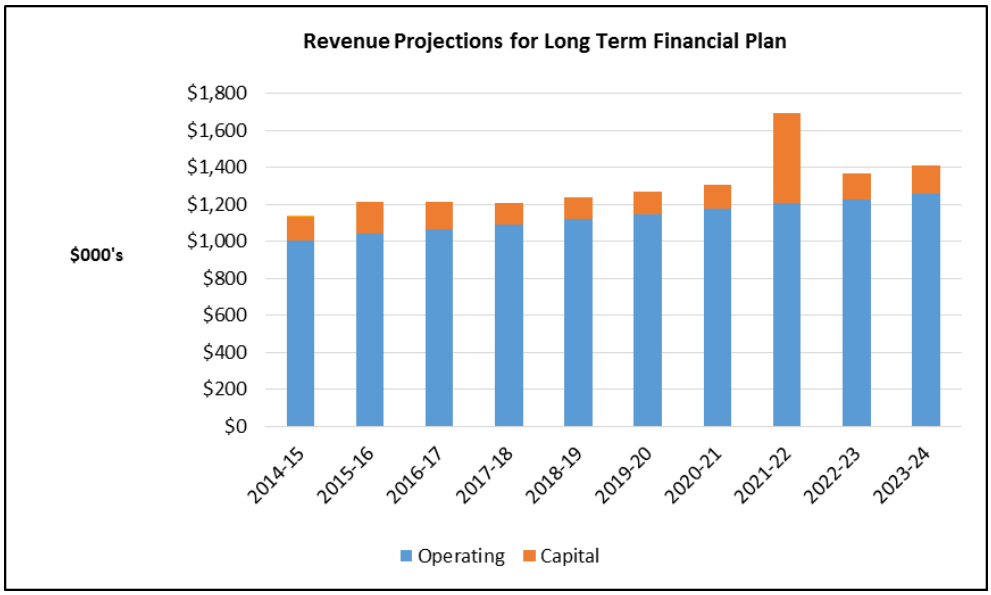
Table 11.1.2 shows the projected revenue for the 10 year long term financial plan.

Revenue projections are in current (non-inflated) values. Disposals are shown as net expenditures (revenues are negative).

Table 11.1.2: Revenue Projections for Long Term Financial Plan ($000)

Year	Operations ($000)	Projected Capital Revenue ($000)	Total ($000)
2015	$1,006	$128	**$1,134**
2016	$1,040	$177	**$1,217**
2017	$1,065	$147	**$1,212**
2018	$1,093	$113	**$1,206**
2019	$1,120	$119	**$1,239**
2020	$1,148	$124	**$1,272**
2021	$1,178	$131	**$1,309**
2022	$1,206	$487	**$1,693**
2023	$1,227	$144	**$1,371**
2024	$1,259	$151	**$1,410**

Figure 10: Revenue Projections for Long Term Financial Plan



11.2 Financial Sustainability

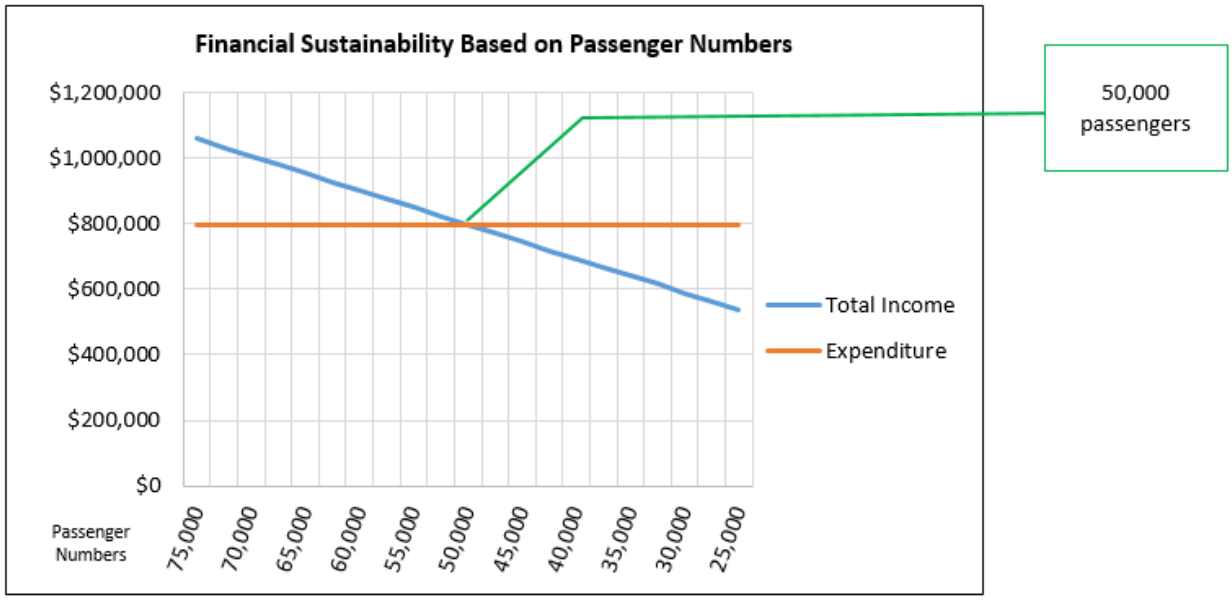
11.2.1 Passenger Numbers

As identified in clause 5.4.1, the primary income source for the Mount Gambier Airport is from the charge levied on all RPT passengers. Therefore a declining passenger market delivers less income which makes it more challenging to continuously improve and maintain the airport and its features.

Passenger levies in the 2015/16 budget are $765,510, which is based on approximately 73,250 passengers (current levy is $10.45 per passenger).

The following graph shows the point at which declining passenger numbers would result in the airport no longer being financially sustainable.

Figure 11: Financial Sustainability Based on Passenger Numbers



The above graph assumes an operating expenditure of $797,000 and operating revenue (not including passenger levies) of $275,000 per annum.

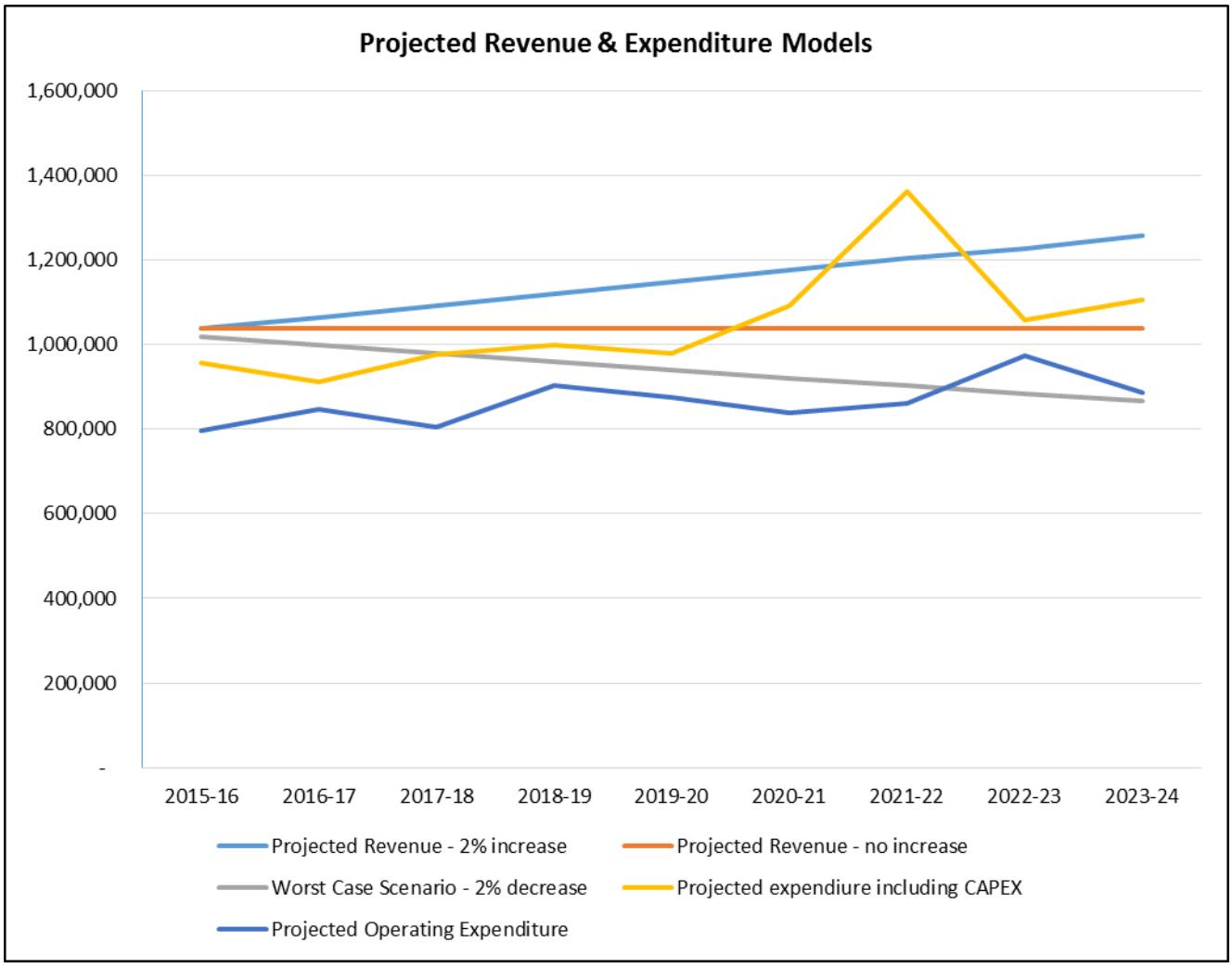
11.2.2 Projected Revenue and Expenditure Models

Using the following scenarios, a projected increase of 2% in revenue would ensure that there is enough funds for all projected operating and capital expenditure. No increase in revenue would ensure enough funds for ongoing operations, however there would be no funds to meet the capital upgrades and renewals which are required for the future. Worst case scenario, a 2% reduction in revenue would not generate sufficient funds for capital upgrades and renewals and would eventually result in inadequate funding to operate the business.

Table 11.2.2: Projected Revenue and Expenditure Models

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Projected Revenue - 2% increase	1,040,291	1,065,429	1,093,150	1,120,353	1,148,255	1,178,136	1,206,123	1,227,414	1,259,082
Projected Revenue - no increase	1,040,291	1,040,291	1,040,291	1,040,291	1,040,291	1,040,291	1,040,291	1,040,291	1,040,291
Worst Case Scenario - 2% decrease	1,019,485	999,095	979,113	959,531	940,340	921,534	903,103	885,041	867,340
Projected expenditure including CAPEX	956,555	913,132	976,039	998,341	979,108	1,091,414	1,362,334	1,057,951	1,105,348
Projected Operating Expenditure	797,255	848,367	805,786	904,575	874,804	839,644	861,571	974,865	886,608

Figure 12: Projected Revenue and Expenditure Models



11.3 Funding Strategy

Projected expenditure identified in Section 11.2.1 is to be funded from future operating and capital budgets. The funding strategy is detailed in the organisation's 10 year long term financial plan.

11.4 Asset Valuations

11.4.1 Current Valuations

The value of airport assets as at the 30 June 2014 is summarised below.

Table 11.4.1 - Assets Valuations as at 30 June 2014

Asset	Replacement Value	Written Down Value	Accumulated Depreciation	Annual Depreciation
Airports	$18,183,443	$10,067,044	$1,202,595	$241,634
Totals	**$18,183,443**	**$10,067,044**	**$1,202,595**	**$241,634**

As at 30 June 2014, the Annual Depreciation (annual asset consumption) for the Mount Gambier Airport was calculated at $241,634.

The following asset consumption ratios have been calculated as follows:

- Airport Infrastructure Assets – Annual Asset Consumption = 1.3%
- Airport Infrastructure Assets – Asset Consumption = 55.4%

The annual asset consumption ratio is the approximation of the asset's value to be consumed during the financial period expressed as the annual depreciation divided by the replacement value. Industry accepted ranges are between 1% and 2% for infrastructure assets and 5% to 10% for Plant and IT assets.

The asset consumption ratio is the average proportion of 'as new' value remaining in the infrastructure assets. This ratio is expressed as the written down current value divided by the replacement value. This ratio seeks to highlight the assets lifecycle location taking into account either age or condition or in many cases both. Industry accepted ranges are between 60% and 80%.

11.4.2 Valuation Forecasts

Asset values are forecast to increase minimally due to renewal and upgrade of current assets.

11.5 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:

- This is the current position of Airport asset management in DC Grant and represents the starting point of the Airport asset management journey
- Financial data obtained is accurate
- Forecasted on "today's dollars", CPI is added in the financial budgeting cycle
- Staffing needs are resourced adequately
- No significant changes in Legislation
- Growth as forecast
- Current levels of service remain unchanged
- Surveys and discussions with key stakeholders indicates that the passenger numbers are likely to remain static in both the short term (next five years) and long term (beyond five years).

- Economic factors have not been taken into account in the financial forecasting, as these are difficult to predict. The economy can have a great impact on the Airport's revenue with a run of prosperous economic periods seeing passenger numbers stable or increase in numbers, while times of poor economic periods can see a reduction in passenger numbers.

Accuracy of future financial forecasts may be improved in future revisions of this plan.

12. PLAN IMPROVEMENT AND MONITORING

12.1 Improvement Plan

Table 12.1: Improvement Plan

Task No	Task	Responsibility	Resources Required	Timeline
1.	Obtain Council approval of this Plan.	AM	In-house	Completed
2.	Review activities and response levels of service for proactive and reactive maintenance defects.	AM	In-house Resources & Budget Allocation	Nov 2015
3.	Spatially entering all Airport assets into the GIS so that all assets can be located easily with accuracy.	AMC	In-house	Nov 2015
4.	Implement a process for assets which are renewed or upgraded during the financial year to be updated in Council's current Asset Register and report on annual financial movements to inform Council's Finance System.	DCEO/AMC	In-house Resources & Budget Allocation	On-going
5.	Undertake renewed Customer Surveys and key stakeholder interviews to ascertain the likely passenger numbers inputs for the following 5 to 10 years. This will inform future iterations of this plan.	AM	In-house Resources & Budget Allocation	Nov 2015
6.	Undertake renewed Customer Surveys and key stakeholder interviews to ascertain satisfaction with the level of service provided by the Airports.	AM	In-house Resources & Budget Allocation	Nov 2015
7.	Test the current levels of service, to measure if these are achievable within the context of Council's current human and financial resources.	DCEO	In-house Resources & Budget Allocation	Nov 2015
8.	Review how maintenance requests and response time data is captured and recorded.	AM/DCEO	In-house Resources & Budget Allocation	Nov 2015
9.	Develop and implement a recording method, so that all identified defects are entered into Council's database with the identification date.	AM/DCEO	In-house Resources & Budget Allocation	Nov 2015
10.	Develop and implement a work-completion process so that all work orders are closed out with the appropriate finish dates. This is critical to ensure that Council can demonstrate their compliance with the nominated performance standards	DCEO/AM	In-house Resources & Budget Allocation	Nov 2015
13.	Undertake strategic condition inspections of all airport infrastructure assets.	DCEO/AM	In-house Resources & Budget Allocation	Nov 2015

12.2 Monitoring and Review Procedures

This plan will be updated annually to ensure it represents the current service level, asset values, projected operations, maintenance, capital renewal and replacement, capital upgrade/new and asset disposal expenditures and projected expenditure values incorporated into our long term financial plan.

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District Council of Grant Long Term Financial Plan.

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APPENDICES

Appendix A Diagrams

Appendix B Maintenance Response Levels of Service

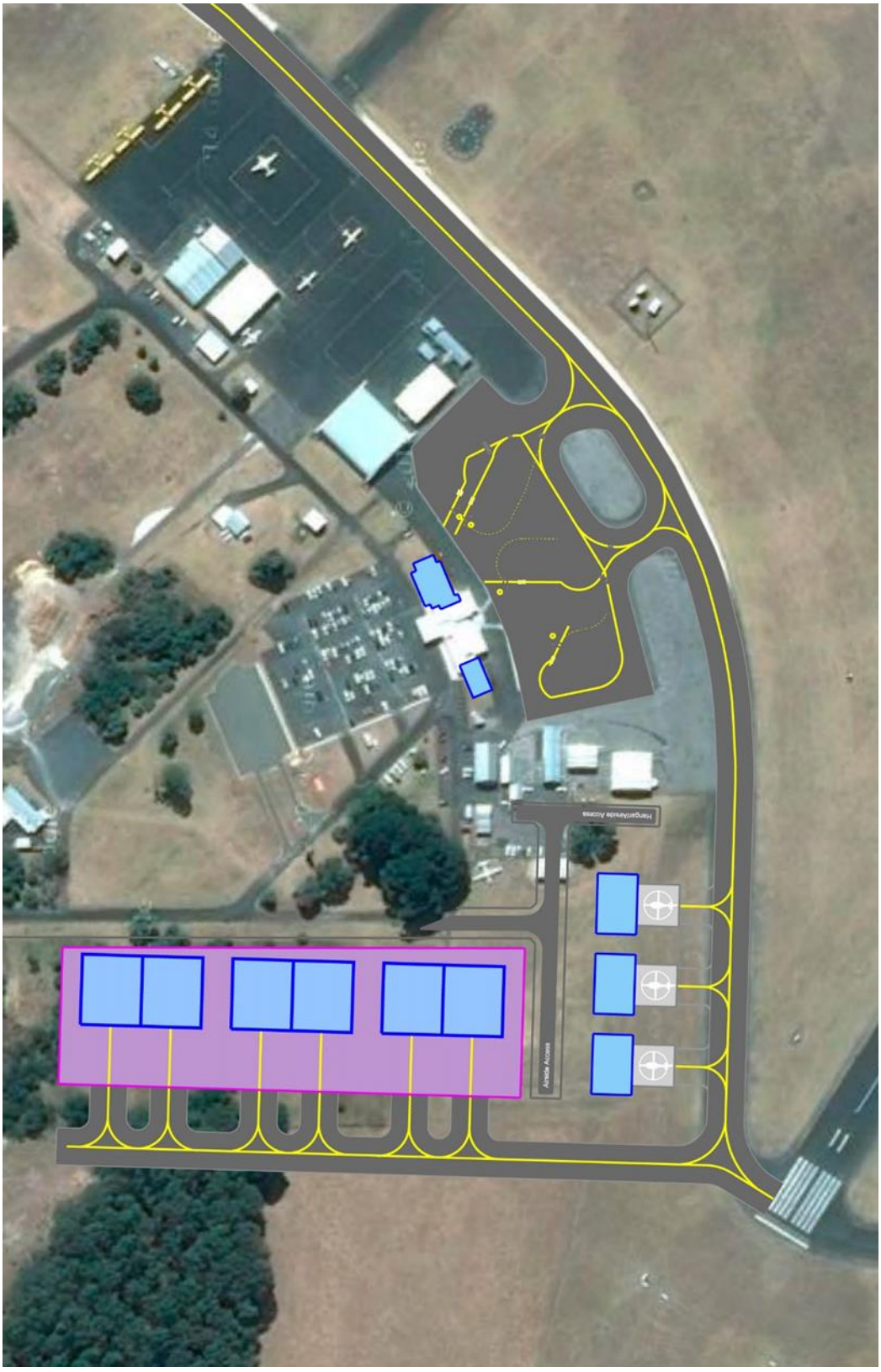
Appendix C Ten Year Forecast

Appendix D Projected Ten Year Capital Works Program

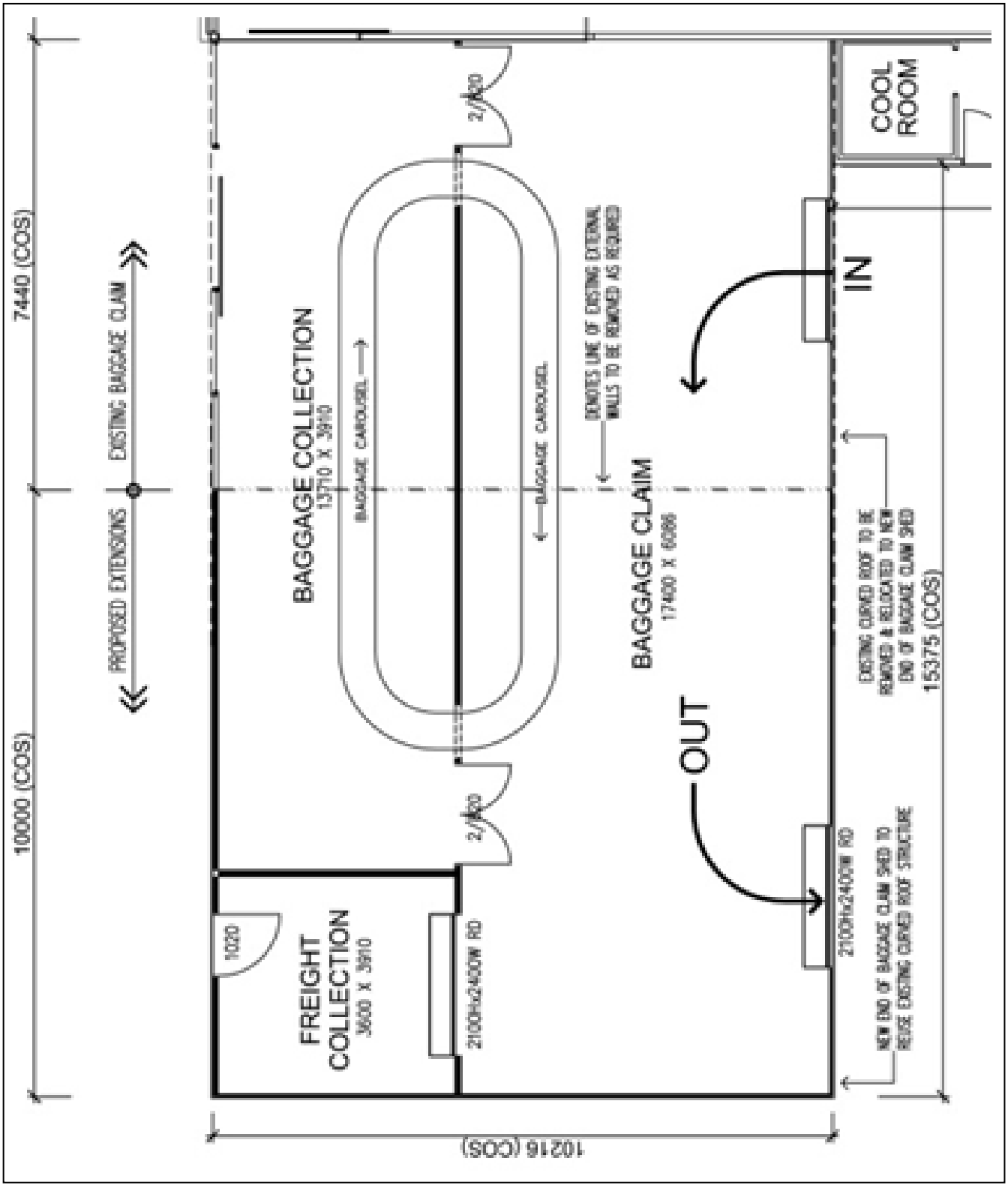
Appendix F Glossary

Appendix A Diagrams

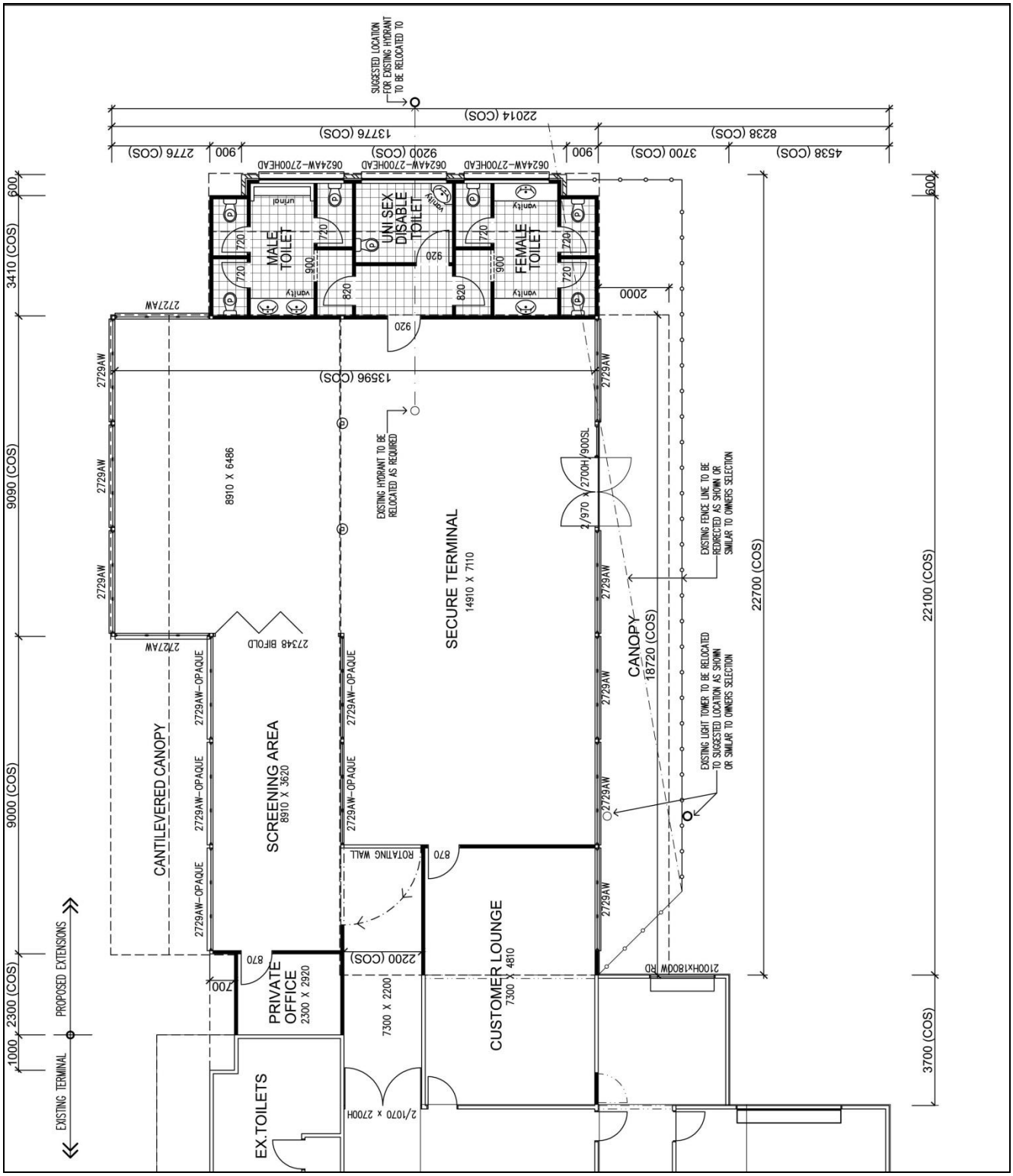
Taxiway and Hangar Precinct



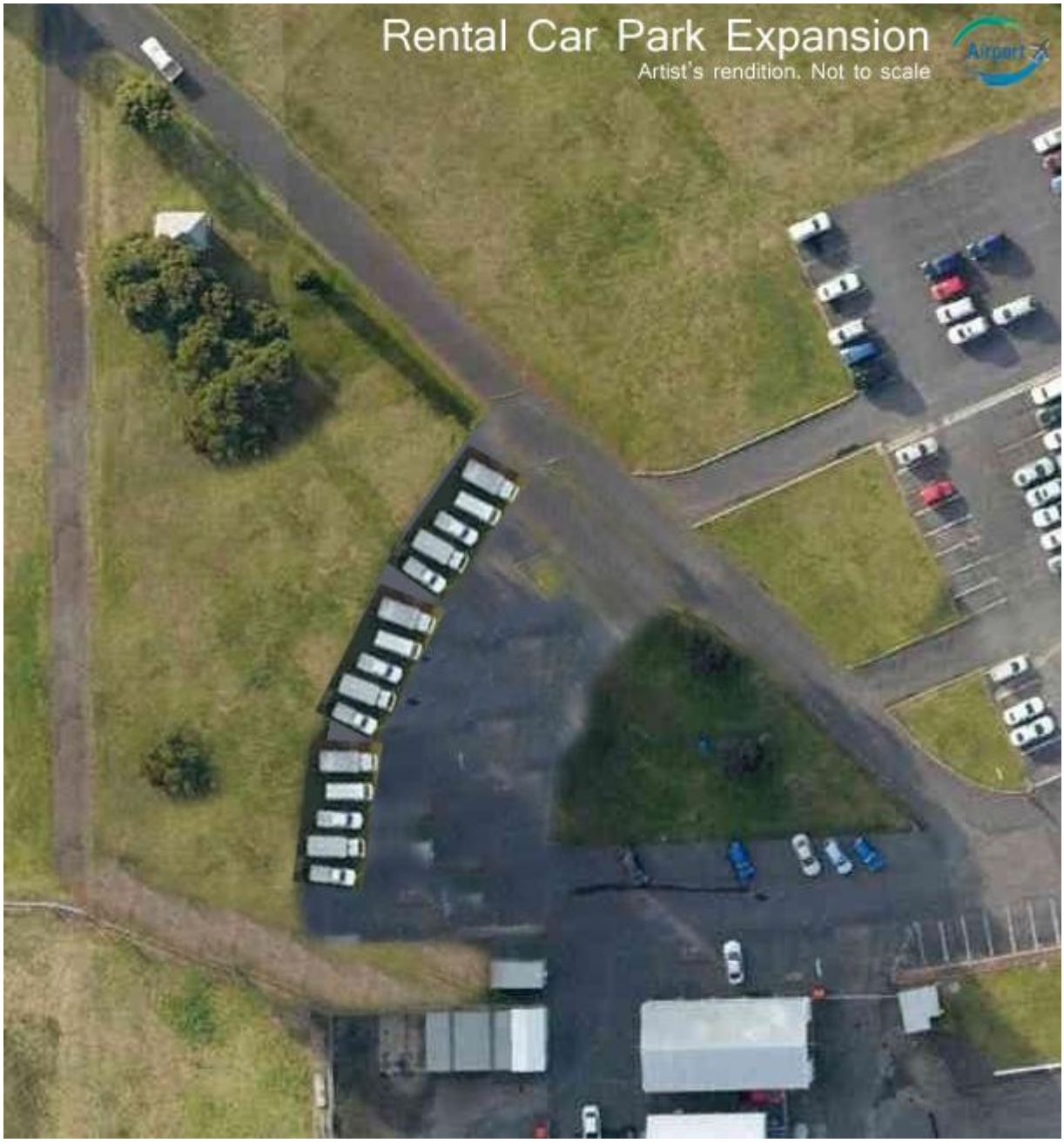
Baggage Collection Upgrade



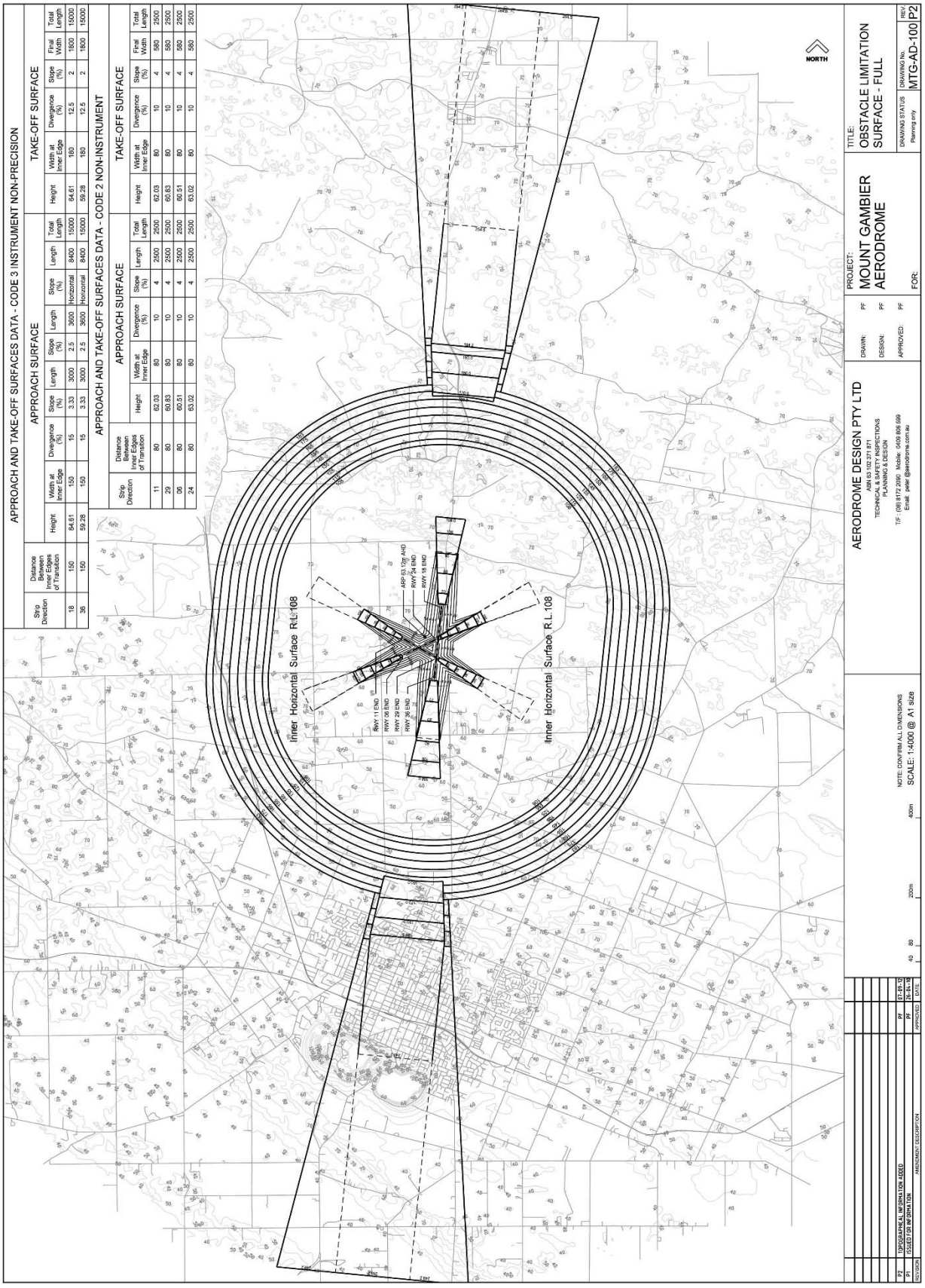
Sterile Area Expansion



Rental Car Park Expansion Area



OLS and PANSOPS



Appendix B Maintenance Response Levels of Service

Routine Maintenance Items	Intervention Level	Response Times		
		Urgent	Non-Urgent	Performance Standards
1.0 Airport Services				
1.1 Electrical Outages	Power outages that affect the efficient operations of the Airport	1 Hr	1 day	99%
1.2 Electrical and Gas Outages	Power outages that affect the efficient operations of the Airport	1 Hr	1 day	99%
1.3 Cleaning – Main Admin Office & Café	Cyclic	1 Hr	10 Days	99%
2.0 Runways, Taxiway, Aprons and Carparks				
2.1 Pothole Maintenance	Pothole with depth between 20mm - 100mm and area < 10m^2	5 Hrs	20 days	99%
	Pothole > 100mm depth	5 Hrs	5 days	99%
2.2Pavement Texture Maintenance	Crocodile cracking < 10m2	1 day	30 days	99%
	Longitudinal cracking < 20m	Monitor	NA	99%
	Flushing < 5m2	1 day	30 days	99%
	Stripping (applicable to carparks only) < 5m2	1 day	30 days	99%
2.3 Pavement Defects	Pavement failures, with height displacement > 15mm and affecting less than 100m^2 of area.	5 Hrs	30 days	99%
2.4 Heavy Patching	Pavement failures, with height displacement > 15mm and affecting an area between 100m^2 and 500m^2.	5 Hrs	30 days	99%
2.5 Shoving / Delamination Maintenance	Any shoving with a height displacement of 15mm as measured under a 1.2m straight edge, or delamination defect with a diameter > 200mm	5 Hrs	30 days	99%
3.0 Kerb Maintenance				
3.1 Kerb Repairs	Between 6m and 50m of kerb and watertable which holds water extending > 1m into roadway or carpark	30 days	120 days	80%
3.2 Kerb Repairs	More than 50m of kerb and watertable where rotation, vertical or horizontal displacement > 100mm	30 days	120 days	80%

4.0 Footpath (Paved Area) Maintenance				
4.1 Grinding	Concrete lip where height displacement is between 15mm and 40mm.	5 days	30 days	80%
4.2 Concrete Replacement	Concrete bay where cracks evident are > 10mm in width or bay is broken / damaged and height displacement is > 20mm.	5 days	30 days	80%
4.3 Footpath Other Repairs	Asphalt or other paved footpath area < 100m2 in area where height displacement under straight edge > 40mm OR Ground level adjacent to paved area is > 20mm in height displacement	5 days	30 days	80%
5.0 Fence Maintenance				
5.1 Railing Repairs	Rotted or rusted or damaged rail for less than 50% of fence perimeter	5 Hrs	5 days	90%
5.2 Post Repairs	Rotted or rusted or damaged single post	5 Hrs	5 days	90%
5.3 Fence Repairs	Rotted or rusted or damaged fencing	5 Hrs	5 days	90%
6.0 Lighting Maintenance				
6.1 Globe Replacement	Light globe not producing intended LUX	2 Hrs	5 days	100%
6.1 Other Light Defects	Lighting and/or fixture damaged	2 Hrs	5 days	100%
7.0 Maintenance Other				
7.1 Hanger Repairs	Rotted or rusted or damaged shelter components and does not compromise the structural adequacy of the hanger and considered to affect less than 30% of sheltered area i.e. loose roofing sheets, rotted timber joists, loose flooring etc	1 day	30 days	80%
7.2 Communications Tower	Rusted or damaged components and does not compromise the structural adequacy and considered to affect less than 30% of structure	1 day	30 days	80%
7.3 Building Maintenance	Failed building component which does not compromise the structural adequacy of the building and considered to affect less than 30% its area i.e. loose roofing sheets, damaged ceiling panels, damaged window, loose flooring etc	5 Hrs	60 days	80%
7.4 Building Security	Damaged and/or failed door locks	5 Hrs	NA	100%
7.5 Site Security	Damaged and/or failed gate and locking mechanisms	5 Hrs	NA	100%
7.6 Vehicle, Plant & Equipment Minor Maintenance	Scheduled maintenance activities in accordance with manufacturers specifications and manuals	NA	As Per Program	90%
7.7 Vehicle, Plant & Equipment Major Maintenance	Vehicle, Plant & Equipment not failed or not working	5 Hrs	5 days	90%
7.8 Sign Maintenance	Sign is illegible, non standard, missing and/or fixtures are missing or damaged and/or post is non plumb or damaged	5 Hrs	30 days	90%

Appendix C Ten Year Forecast

DISTRICT COUNCIL OF GRANT
Mount Gambier Airport
10 Year Forecast

DESCRIPTION	2013-14 Actual	2014-15 Budget	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Operating Income											
Passenger Levies	(761,514)	(750,500)	(765,510)	(780,820)	(796,437)	(812,365)	(828,613)	(845,185)	(862,089)	(879,330)	(896,917)
Landing Fees	(38,018)	(32,000)	(32,960)	(33,949)	(34,967)	(36,016)	(37,097)	(38,210)	(39,356)	(40,537)	(41,753)
Leases & rentals	(109,957)	(122,239)	(125,906)	(129,683)	(133,574)	(137,581)	(141,709)	(145,960)	(150,339)	(154,849)	(159,494)
Consulting Income	(12,830)	(15,000)	(50,000)	(51,500)	(53,045)	(54,636)	(56,275)	(57,964)	(59,703)	(61,494)	(63,339)
Interest received	(6,702)	(60,000)	(30,915)	(33,427)	(37,995)	(41,509)	(45,169)	(50,244)	(52,845)	(48,159)	(53,243)
Other Income	(32,884)	(26,300)	(35,000)	(36,050)	(37,132)	(38,245)	(39,393)	(40,575)	(41,792)	(43,046)	(44,337)
	(961,905)	***(1,006,039)***	***(1,040,291)***	***(1,065,429)***	***(1,093,150)***	***(1,120,353)***	***(1,148,255)***	***(1,178,136)***	***(1,206,123)***	***(1,227,414)***	***(1,259,082)***
Operating Expenditure	-										
Employee Expenses	303,562	275,730	289,517	303,992	319,192	335,152	351,909	369,505	387,980	407,379	427,748
Land & Building Maintenance	189,150	209,774	220,263	231,276	242,840	254,982	267,731	281,117	295,173	309,932	325,428
Plant & Equipment Maintenance	25,843	19,501	20,476	21,500	22,575	23,704	24,889	26,133	27,440	28,812	30,252
Operational Expenses	84,369	75,330	79,097	83,051	87,204	91,564	96,142	100,949	105,997	111,297	116,862
Consulting Expenses	5,859	6,750	20,000	21,000	22,050	23,153	24,310	25,526	26,802	28,142	29,549
Depreciation	267,081	299,854	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000
less Expenditure on Renewals			(136,675)	(117,259)	(193,122)	(129,278)	(195,742)	(269,429)	(287,955)	(217,138)	(349,995)
Other Expenditure	4,166	4,360	4,578	4,807	5,047	5,300	5,565	5,843	6,135	6,442	6,764
	880,031	***891,299***	***797,255***	***848,367***	***805,786***	***904,575***	***874,804***	***839,644***	***861,571***	***974,865***	***886,608***
Capital Expenditure											
Renewals	88,944	163,500	136,675	117,259	193,122	129,278	195,742	269,429	287,955	217,138	349,995
Upgrades	828,704	45,000	200,000	95,000	90,000	83,000	33,000	113,000	700,000	10,000	20,000
	917,648	***208,500***	***336,675***	***212,259***	***283,122***	***212,278***	***228,742***	***382,429***	***987,955***	***227,138***	***369,995***
Capital Income											
Income from Vehicle Trade-ins	(36,818)	(97,500)	(102,375)	(107,494)	(112,868)	(118,512)	(124,437)	(130,659)	(137,192)	(144,052)	(151,255)
Grant Funding	(230,120)	(30,000)	(75,000)	(40,000)	-	-	-	-	(350,000)	-	-
	(266,938)	***(127,500)***	***(177,375)***	***(147,494)***	***(112,868)***	***(118,512)***	***(124,437)***	***(130,659)***	***(487,192)***	***(144,052)***	***(151,255)***
TOTAL (PROFIT)/LOSS Before Reserve Transfers	**568,835**	**(33,740)**	**(83,736)**	**(152,296)**	**(117,111)**	**(122,012)**	**(169,147)**	**(86,723)**	**156,211**	**(169,463)**	**(153,734)**
Transfers to/(from) Reserve	(568,836)	33,740	83,736	152,296	117,111	122,012	169,147	86,723	(156,211)	169,463	153,734
NET	**(1)**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Reserve Account - Book Balance											
Opening Balance	(1,565,579)	(996,743)	(1,030,483)	(1,114,219)	(1,266,516)	(1,383,626)	(1,505,639)	(1,674,786)	(1,761,508)	(1,605,297)	(1,774,760)
(Profit)/Loss	568,835	(33,740)	(83,736)	(152,296)	(117,111)	(122,012)	(169,147)	(86,723)	156,211	(169,463)	(153,734)
Closing Balance	**(996,743)**	**(1,030,483)**	**(1,114,219)**	**(1,266,516)**	**(1,383,626)**	**(1,505,639)**	**(1,674,786)**	**(1,761,508)**	**(1,605,297)**	**(1,774,760)**	**(1,928,494)**

Appendix D Projected Ten Year Capital Works Program

DISTRICT COUNCIL OF GRANT
Mount Gambier Airport
10 Year Capex

DESCRIPTION	Item *	2014-15 Budget	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Capital Expenditure											
Renewals											
Vehicles		103,500	111,675	117,259	123,122	129,278	135,742	142,529	149,655	157,138	164,995
Replacement of Fire Tanks		60,000									
Bellman Hangar Roof Replacement	8.3.1				70,000						
Reseal Runway 06/24	8.3.2							126,900			
Reseal Runway 11/29	8.3.2								138,300		
Reseal Taxiways A1, A2 and C	8.3.2									60,000	
General Aviation Apron Levelling and Resurfacing	8.3.3										185,000
Terminal Toilets Renovation	8.4.1		25,000								
AVGAS Fuel Equipment Renewal	8.4.2						60,000				
		163,500	***136,675***	***117,259***	***193,122***	***129,278***	***195,742***	***269,429***	***287,955***	***217,138***	***349,995***
Upgrades											
Signage		35,000									
Paving and Landscaping		10,000									
Airport Lighting Control System	8.1.1		150,000								
Runway 11/29 Night Taxiway	8.1.2										
General Aviation Parking Extension	8.1.3					50,000		80,000			
Runway 18/36 Upgrade	8.1.4										
Taxiway and Hangar Project	8.1.5										
Baggage Collection Area	8.2.1			80,000							
Taxi Rank Relocation	8.2.2			15,000							
Landside Accommodation/RV Park	8.2.3									10,000	
Airport History Display and Trail	8.2.4										20,000
Carpark Equipment Expansion	8.2.5				70,000						
Gate 2 Upgrade	8.2.6				20,000						
Security Fence Upgrade	8.2.6					33,000	33,000	33,000			
Rental Vehicle Carparking Consolidation	8.2.7		50,000								
Sterile Area/Terminal Expansion	8.2.8								700,000		
Security Surveillance Equipment Upgrade	8.2.9										
		45,000	***200,000***	***95,000***	***90,000***	***83,000***	***33,000***	***113,000***	***700,000***	***10,000***	***20,000***
Capital Income											
Income from Vehicle Trade-ins		(97,500)	(102,375)	(107,494)	(112,868)	(118,512)	(124,437)	(130,659)	(137,192)	(144,052)	(151,255)
Grant Funding		(30,000)	(75,000)	(40,000)					(350,000)		
		(127,500)	***(177,375)***	***(147,494)***	***(112,868)***	***(118,512)***	***(124,437)***	***(130,659)***	***(487,192)***	***(144,052)***	***(151,255)***
NET Capital Expenditure		**81,000**	**159,300**	**64,765**	**170,253**	**93,766**	**104,304**	**251,769**	**500,763**	**83,086**	**218,740**

Appendix E Glossary

Annual service cost (ASC)

1) Reporting actual cost
   The annual (accrual) cost of providing a service including operations, maintenance, depreciation, finance/opportunity and disposal costs less revenue.
2) For investment analysis and budgeting
   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 operations, maintenance, depreciation, finance/ opportunity and disposal costs, less revenue.

Asset

A resource controlled by an entity as a result of past events and from which future economic benefits are expected to flow to the entity. Infrastructure assets are a sub-class of property, plant and equipment which are non-current assets with a life greater than 12 months and enable services to be provided.

Asset class

A group of assets having a similar nature or function in the operations of an entity, and which, for purposes of disclosure, is shown as a single item without supplementary disclosure.

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 (AM)

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.

Average annual asset consumption (AAAC)*

The amount of an organisation's asset base consumed during a reporting period (generally a year). This may be calculated by dividing the depreciable amount by the useful life (or total future economic benefits/service potential) and totalled for each and every asset OR by dividing the carrying amount (depreciated replacement cost) by the remaining useful life (or remaining future economic benefits/service potential) and totalled for each and every asset in an asset category or class.

Borrowings

A borrowing or loan is a contractual obligation of the borrowing entity to deliver cash or another financial asset to the lending entity over a specified period of time or at a specified point in time, to cover both the initial capital provided and the cost of the interest incurred for providing this capital. A borrowing or loan provides the means for the borrowing entity to finance outlays (typically physical assets) when it has insufficient funds of its own to do so, and for the lending entity to make a financial return, normally in the form of interest revenue, on the funding provided.

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 expenditure - expansion

Expenditure that extends the capacity of an existing asset to provide benefits, at the same standard as is currently enjoyed by existing beneficiaries, to a new group of users. It is discretionary expenditure, which increases future operations and maintenance costs, because it increases the organisation's asset base, but may be associated with additional revenue from the new user group, eg. extending a drainage or road network, the provision of an oval or park in a new suburb for new residents.

Capital expenditure - new

Expenditure which creates a new asset providing a new service/output that did not exist beforehand. As it increases service potential it may impact revenue and will increase future operations and maintenance expenditure.

Capital expenditure - renewal

Expenditure on an existing asset or on replacing an existing asset, which returns the service capability 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 generally has no impact on revenue, but may reduce future operations and maintenance expenditure if completed at the optimum time, eg. 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.

Capital expenditure - upgrade
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 discretionary and often does not result in additional revenue unless direct user charges apply. It will increase operations and maintenance expenditure in the future because of the increase in the organisation's asset base, eg. widening the sealed area of an existing road, replacing drainage pipes with pipes of a greater capacity, enlarging a grandstand at a sporting facility.

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

Capitalisation threshold
The value of expenditure on non-current assets above which the expenditure is recognised as capital expenditure and below which the expenditure is charged as an expense in the year of acquisition.

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
Specific parts of an asset having independent physical or functional identity and having specific attributes such as different life expectancy, maintenance regimes, risk or criticality.

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, including 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.

Depreciable amount
The cost of an asset, or other amount substituted for its cost, less its residual value.

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.

Funding gap
A funding gap exists whenever an entity has insufficient capacity to fund asset renewal and other expenditure necessary to be able to appropriately maintain the range and level of services its existing asset stock was originally designed and intended to deliver. The service capability of the existing asset stock should be determined assuming no additional operating revenue, productivity improvements, or net financial liabilities above levels currently planned or projected. A current funding gap means service levels have already or are currently falling. A projected funding gap if not addressed will result in a future diminution of existing service levels.

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 that contribute to meeting the needs of organisations or the need for access to major economic and social facilities and services, eg. roads, drainage, footpaths and cycleways. 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 separate 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.

Key performance indicator
A qualitative or quantitative measure of a service or activity used to compare actual performance against a standard or other target. Performance indicators commonly relate to statutory limits, safety, responsiveness, cost, comfort, asset performance, reliability, efficiency, environmental protection and customer satisfaction.

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

Life Cycle Cost
1. **Total LCC** The total cost of an asset throughout its life including planning, design, construction, acquisition, operation, maintenance, rehabilitation and disposal costs.
2. **Average LCC** The life cycle cost (LCC) is average cost to provide the service over the longest asset life cycle. It comprises annual operations, 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 operations, maintenance and capital renewal expenditure incurred in providing the service in a particular year. Life Cycle Expenditure may be compared to average Life Cycle Cost to give an initial indicator of life cycle sustainability.

Loans / borrowings
See borrowings.

Maintenance
All actions necessary for retaining an asset as near as practicable to its original condition, including regular ongoing day-to-day work necessary to keep assets operating, eg road patching but excluding rehabilitation or renewal. It is operating expenditure required to ensure that the asset reaches its expected useful life.

- **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.
- **Reactive maintenance**
  Unplanned repair work that is carried out in response to service requests and management/supervisory directions.
- **Significant maintenance**
  Maintenance work to repair components or replace sub-components that needs to be identified as a specific maintenance item in the maintenance budget.
- **Unplanned maintenance**
  Corrective work required in the short-term to restore an asset to working condition so it can continue to deliver the required service or to maintain its level of security and integrity.

Maintenance and renewal gap
Difference between estimated budgets and projected required expenditures for maintenance and renewal of assets to achieve/maintain specified service levels, 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 (eg 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
The notion of materiality guides the margin of error acceptable, the degree of precision required and the extent of the disclosure required when preparing general purpose financial reports. Information is material if its omission, misstatement or non-disclosure has the potential, individually or collectively, to influence the economic decisions of users taken on the basis of the financial report or affect the discharge of accountability by the management or governing body of the entity.

Modern equivalent asset
Assets that replicate what is in existence with the most cost-effective asset performing the same level of service. It is the most cost efficient, currently available asset which will provide the same stream of services as the existing asset is capable of producing. It allows for technology changes and, improvements and efficiencies in production and installation techniques

Net present value (NPV)
The value to the organisation of the cash flows associated with an asset, liability, activity or event calculated using a discount rate to reflect the time value of money. It is the net amount of discounted total cash inflows after deducting the value of the discounted total cash outflows arising from eg the continued use and subsequent disposal of the asset after deducting the value of the discounted total cash outflows.

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, eg. parks and playgrounds, footpaths, roads and bridges, libraries, etc.

Operations expenditure
Recurrent expenditure, which is continuously required to provide a service. In common use the term typically includes, eg power, fuel, staff, plant equipment, on-costs and overheads but excludes maintenance and depreciation. Maintenance and depreciation is on the other hand included in operating expenses.

Operating expense
The gross outflow of economic benefits, being cash and non cash items, during the period arising in the course of ordinary activities of an entity when those outflows result in decreases in equity, other than decreases relating to distributions to equity participants.

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

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).

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 operations and maintenance expenditure.

Recurrent funding
Funding to pay for recurrent expenditure.

Rehabilitation
See capital renewal expenditure definition above.

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

Renewal
See capital renewal expenditure definition above.

Residual value
The estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.

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, eg 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 total future service capacity of an asset. It is normally determined by reference to the operating capacity and economic life of an asset. A measure of service potential is used in the not-for-profit sector/public sector to value assets, particularly those not producing a cash flow.

Service potential remaining
A measure of the future economic benefits remaining in assets. It may be expressed in dollar values (Fair Value) or as a percentage of total anticipated future economic benefits. 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 (Depreciated Replacement Cost/Depreciable Amount).

Strategic Longer-Term Plan
A plan covering the term of office of Councillors (4 years minimum) reflecting the needs of the community for the foreseeable future. It brings together the detailed requirements in the Council's longer-term plans such as the asset management plan and the long-term financial plan. The plan is prepared in consultation with the community and details where the Council is at that point in time, where it wants to go, how it is going to get there, mechanisms for monitoring the achievement of the outcomes and how the plan will be resourced.

Specific 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.

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.

Value in Use
The present value of future cash flows expected to be derived from an asset or cash generating unit. 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 net cash inflows, where the entity would, if deprived of the asset, replace its remaining future economic benefits.

Source: IPWEA, 2009, Glossary