PARKES REGIONAL AIRPORT MASTER PLAN REVIEW 2024 - 2044 PARKES SHIRE COUNCIL







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Glossary of Terms and Abbreviations

ACN (Aircraft Classification

Number)

A number expressing the relative effect of an aircraft on a pavement for a specified standard subgrade category.

Aerodrome A defined area on land or water (including any buildings,

installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of

aircraft.

AFRU(Aerodrome Frequency

Response Unit)

The AFRU is an electronic, ground based, aviation safety enhancement device, intended for use on the CTAF or MBZ

frequency at non-controlled aerodromes.

AIP ERSA Airservices Australia Aeronautical Information Package En-Route

Supplement Australia

ANEF Australian Noise Exposure Forecast

ARP Aerodrome Reference Point

ATC Air Traffic Control

AWIS Automatic Weather Information Service

CASA (Civil Aviation Safety

Authority)

The Australian federal government department responsible for setting and maintaining safety standards for civil aviation. CASA is responsible for the codification of international standards and recommended practices into Australian legislation and for the issue of licences for aviation personnel including pilots, amongst other responsibilities.

CASR(Civil Aviation Safety

Regulation)

CASRs establish the regulatory framework (Regulations) within

which all service providers must operate.

CTAF Common Traffic Advisory Frequency

General Aviation (GA) The sector of the aviation industry that does not include

regular public transport (RPT) airlines and military aviation.

IATA International Air Transport Association

ICAO International Civil Aviation Organisation

INM Integrated Noise Model

IWI Illuminated Wind Indicator



LIRL Low Intensity Runway Lighting

MTOW Maximum Take-off Weight

NDB (Non-Directional Beacon) A simple and common type of radio navigational aid which allows

pilots to track to or from its location.

OLS Obstacle Limitation Surfaces

Pavement Classification Number

(PCN)

A number expressing the bearing strength of a pavement for unrestricted operations by aircraft with ACN value less than or

equal to PCN.

Payload The total weight of passengers and cargo that an aircraft can carry.

PCR Pavement Classification Rating

PSI Unit of pressure or stress (pounds per square inch)

RESA (Runway End Safety Area) Area provided at the end of a runway strip, to protect the

aeroplane in the event of undershooting or overrunning the

runway.

RFDS Royal Flying Doctor Service

RPT (Regular Public Transport) Air services operated by airlines that are scheduled to occur on a

regular basis at fixed times or frequencies and on fixed routes.

Runway StripA defined area including the runway and stop way, intended to reduce risk of damage to aircraft running off a runway and to

protect aircraft flying over it during take-off or landing operations.

Refers to rules under which flight involving navigation solely by

DME Radio navigation system: Distance-based measuring equipment

VFR/VMC (Visual Flight Rules/

Visual Meteorological Conditions)

reference to visual cues (rather than requiring reference to radio navigational aids or instruments) is carried out. VFR flight is permissible only when meteorological conditions (cloud base and visibility) are above defined limits. Such conditions are referred to as visual meteorological conditions (VMC). VFR flight does not require pilots to be qualified in the use of instrument navigation, nor does it require expensive radio navigational aids to be

provided at airports.

1.Introduction

Australian airports play a critical role in our economy. They connect people and businesses, support around 56,000 air transport jobs, and boost the retail, hospitality, medical and well-being sectors around them. With more than 156 million passengers passing through Australian Airports each year, airports are essential infrastructure, facilitating domestic and international travel, trade, health, business and tourism. Military airfields support national security whilst regional airports are the backbone for connecting communities to essential services often under crisis conditions.

Collectively, regional airports contribute more than \$213 million annually to Australia's economy, underscoring their importance to the economic and social fabric of regional communities.

Parkes Regional Airport recognises the vital role its local community and stakeholders play in the operation of the airport. This Master Plan review provides stakeholders with a detailed vision and a level of certainty that any future development is compatible with surrounding land uses. This document addresses all facets of airport planning and operations, including aeronautical growth forecasts, ground transport, airport safeguarding, land use compatibility, environmental strategies, aircraft noise management, commercial development, and community and stakeholder engagement.

While the Parkes Regional Airport Master Plan serves as a comprehensive blueprint for development, it is also an integral part of the broader strategic, economic, and community planning framework outlined by Parkes Shire Council.

1.1 Parkes Regional Airport

The airport serves as a vital hub for the Central West Region of New South Wales, providing essential air transport services to the local community, businesses, and visitors. Located 6 kms from the Parkes CBD, the airport facilitates both passenger, parcel freight, medical, emergency and charter services, connecting the region to larger cities like Sydney and beyond. These connections support tourism, business growth and economic opportunities, linking to the Parkes region to both domestic and international markets.

Owned and operated by Parkes Shire Council since 1975 the airport has a rich history. Formerly managed by the Federal Government as a Royal Australian Air Force Base, it was repurposed in 1949 as a migrant camp that housed approximately 2,000 migrants between 1948 and 1952. Remnants of this era, such as the footings of Nissen huts, are still visible on the site today.

The airport is a Certified Aerodrome in accordance with Civil Aviation Safety Regulation Part 139 and is a tier three Security Controlled Airport.

Parkes Regional Airport connects an estimated 35,000 passengers annually. Over 40,000 people across the catchment areas of Parkes, Lachlan, Forbes, Bland and Weddin depend on having the ability to conduct business, have access essential social and medical services, and maintain connections with friends and family via the airport. Services like the Royal Flying Doctor Service, Air Ambulance, Angel Flight, Polair, Little Wings and the NSW Rural Fire Service regularly bridge the gap for the community's access to healthcare and emergency services.

The Airport also has significant general aviation activity with a total of 7,867 movements during 2023. These general aviation movements comprise of aircraft operating charter, flight training, small air freight, private, recreation, emergency services and military flights.

Over the past four years, Parkes Shire Council invested \$5 million in the redevelopment of the Parkes Regional Airport precinct, including installation of new runway lighting, a refurbished and expanded airport terminal with security regime readiness and pre-approved business park with airside access. Established in 2018 the Business Park was initiated to leverage investment opportunities aligned to the Special Activation Precincts (SAP). The first of its kind in NSW, Parkes SAP is the only place along the new Inland Rail where it all comes together with major logistics, manufacturing, warehousing, agricultural value-adding, and distribution opportunities being offered. The Parkes Airport Business Park is set to grow, leveraging off the investment of the SAP.

In recent times the airport has faced significant challenges surviving one of the most severe droughts on record, sustaining massively reduced operations during the 2020 global pandemic (Covid 19) and in mid-2024 suffering further with the collapse of its sole Regular Passenger Transport (RPT) operator - Regional Express Airlines. RPT operations and passenger services have resumed under administration, yet flight reliability remains inconsistent due to delays, cancellations, and last-minute schedule changes, affecting community confidence in air travel.

As one of 200 council-owned and operated airports across Australia, Parkes Regional Airport remains a key driver of economic growth, accessibility, and community well-being across the Central West region.

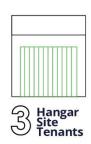
Parkes Community STRATEGIC PLAN 2035+, Avdata December 2023, Special Activation Precincts | NSW Government

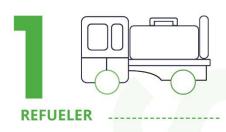




SNAP SHOT PARKES REGIONAL AIRPORT 2023









Land area



Shire population:





(AEC Group 2023)

Aerodrome User Categories:

GA, Recreation, Flight Training







TERMINAL NO CURFEW

Community perceptions: 74% satisfied





RPT Purpose:

39% **BUSINESS** 26% **TOURISM**

VFR visiting friends & relatives 19%

TRANSPORT MODE TO GET TO AIRPORT

60%

31%

Parked Car

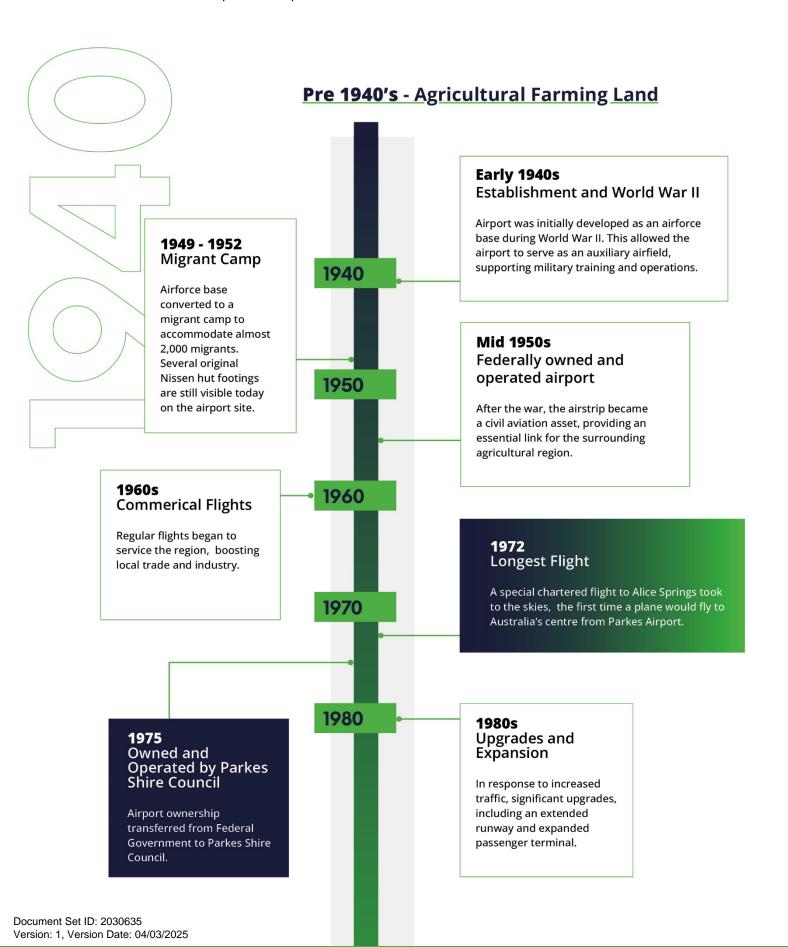
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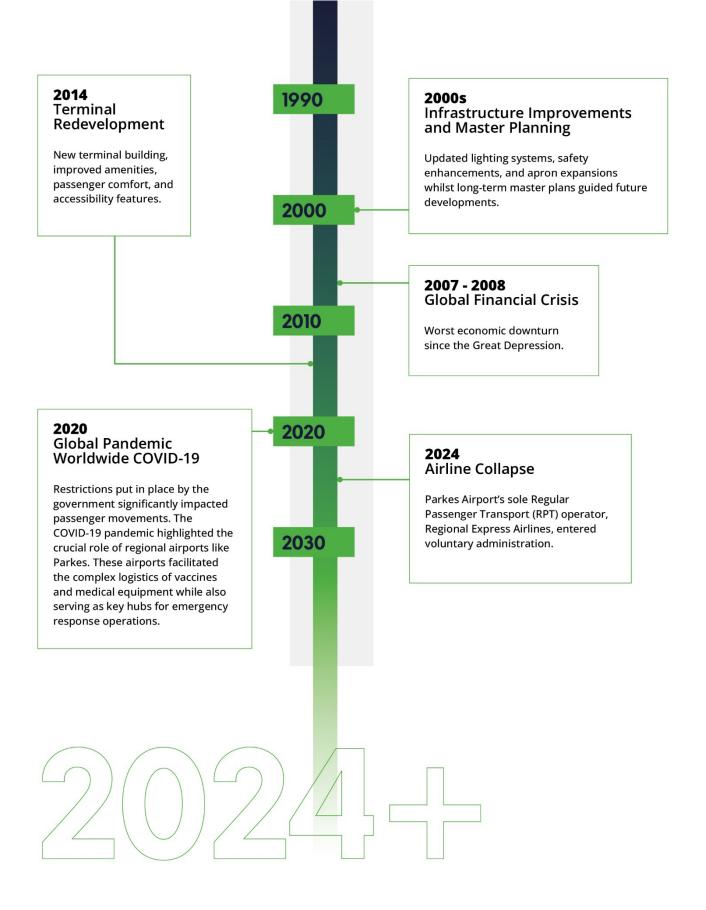
Taxi

8%

1.2 History of Parkes Regional Airport

Over the years, Parkes Regional Airport has evolved to accommodate changes in aviation demand, infrastructure needs, and regional development. Key historical milestones that have impacted or influenced Parkes Airport developments include:





1.3 Scope of Report

Parkes Shire Council engaged CJC to review and update the 2013 Parkes Airport Masterplan.

Using the 2013 Masterplan, prepared, and produced by Rehbein Ptd Ltd, as the base document, this review includes:

- updating and analysis of current vs projected passenger forecasts,
- updating of the relevant works programs and associated planning documentation that have progressed or been completed from 2013 to 2024,
- the development of plans (drawings) to show potential future developments, expansions, and projects
- preparation of estimated timelines and costings linked to Capex programming

Capital Expenditure (CAPEX) Planning

CJC have also prepared a forecast CAPEX planning summary which is included as part of this report to be utilised as part of the Master Plan documentation.

Supporting Documentation/Exclusions

Items not reviewed in this scope are detailed below. They are included as either an attachment or within the document or referenced, and available at the discretion of Parkes Shire Council.

- Airspace assessments and land use planning documentation
- Australian Noise Exposure Forecast 2023 JJ Ryan
- 2013 Parkes Regional Airport Master Plan Rehbein Consulting

1.4 Acknowledgement

This master plan review draws on a range of previous reports to outline the future direction for Parkes Regional Airport. CJC Management specifically acknowledges the foundational work undertaken in the 2013 Master Plan by Rehbein Consulting. Many elements of this earlier documentation remain highly relevant and have been incorporated into this review, providing a strong basis for planning the airport's development over the next 10 to 15 years.



1.5 Purpose and Objectives

Parkes Regional Airport Master Plan serves as the principal blueprint document to set the course for future development over the next 20 years for Parkes airport. This plan has been developed to determine the future aviation requirements and sets out to establish an orderly development concept to guide the airport's short, medium, and long-term measures and assist airport management and stakeholders in making informed decisions. It also aims to safeguard future growth and expansion opportunities so that development potential can be achieved.

This review has been conducted to ensure future facilities are designed to meet projected air traffic demand and capitalise on economic growth opportunities. The plan also ensures compatibility with regulatory obligations, including safety and security standards. In 2018, the aerodrome infrastructure (runways/taxiways, lighting etc) was fully compliant with the Manual of Standards Part 139 – Aerodromes V1.15. Several facilities have been grandfathered to continue to comply with the new Part 139 (Aerodromes) Manual of Standards 2019, however any upgrades may trigger a requirement to upgrade grandfathered facilities.

2013 plan objectives are defined below:

- Establish a strategic direction for the efficient, sustainable, and economic development of the airport over the planning period;
- Provide for the development of additional uses for the airport site;
- Indicate to the public the intended future uses of the airport site;
- Minimise potential conflicts between the various uses of the airport site, ensuring compatibility with surrounding areas.

In continued support of the 2013 objectives, this review includes:

- Updating of data and forecasting to reflect current figures to ensure master plan review meets both current and future requirements.
- Engagement with stakeholders to provide qualitative insights for consideration into the future.
- Updating and analysis of current vs projected passenger forecasts for Regular Public Transport (RPT) operations.
- Updating of the relevant works programs and associated planning documentation that have progressed or have been completed from 2013 to 2024.
- Evaluating the existing runway, taxiway, and apron layout with recommendations for future improvements to accommodate growth.
- Development of plans (drawings) to show potential future developments, expansions, and projects.
- Preparation of estimated timelines and costings linked to Capex programming.

Estimated timelines and related costings for Capital Expenditure (CAPEX) programming are presented based on 2024 financial estimates and technical condition reports. Prior to works programs being initiated a business case should confirm operational need, viability and costing estimates are current.

This plan should be reviewed on a regular basis, particularly in response to significant regulatory changes or unexpected developments, investments, or changes affecting the operations of Parkes Regional Airport.





1.6 Methodology

The approach adopted in the preparation of this Master Plan has included:



The principal steps in the preparation of this Master Plan review were as follows:

- Visits to Parkes were made by CJC Management on 16 and 17 March 2024 as well as 15 and
 28 October and 5 and 7 November 2024;
- Agreed stakeholder participant lists, approach and survey content objectives were confirmed 15 October 2024.
- Stakeholder consultation was undertaken from 15 October 8 November to understand the views, issues and concerns of key stakeholders, airport users and community. Council representatives, airlines, airport tenants, locals, businesses, and tourism and regional development organisations were interviewed. Discussion was focussed on the future infrastructure requirements; stakeholder needs and included feedback on current strengths, weaknesses, opportunities, and threats (SWOT) analysis of Parkes Regional Airport.
- Based on consultation with key stakeholders and consideration of relevant market trends, future aviation activity forecasts for both aircraft movements and passengers were developed.
- Aeronautical infrastructure development proposals were reviewed and updated to provide further guidance on the stages, triggers and implementation of the proposals.
- Indicative capital cost estimates and a prioritised five-year CAPEX plan has been developed to assist in future planning for future airport infrastructure considerations.



2. Planning Context

2.1 Master Planning Context

2.1.1 Location

Parkes Shire Council is in the Central West region of New South Wales, approximately 365 km west of Sydney. It is positioned 900 km northeast of Melbourne, 950 km south of Brisbane, 1,200 km east of Adelaide, and about 290 km northwest of Canberra. The Parkes Regional Airport is situated 6 km east of Parkes Central Business District (CBD). Within a 200 km radius of Parkes, major regional cities include Dubbo (120 km to the north), Orange (100 km southeast), and Bathurst (170 km southeast).

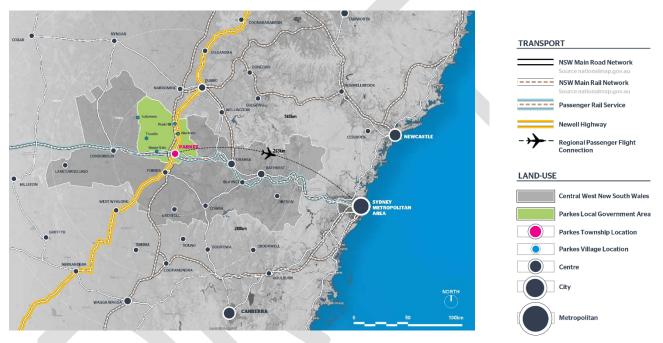


Figure 1 Parkes to Sydney route map

Just over 14,256* people call Parkes Shire home, with more than two thirds of the population living in the town of Parkes. Small towns and villages are located at Peak Hill, Trundle, Tullamore, Alectown, Bogan Gate and Cookamidgera. Parkes Shire is located on the lands of the Wiradjuri nation.

In addition to facilitating business connectivity, the airport provides key social cohesion, and intangible welfare gains for all users and adds significant social capital to the region. A 45-minute flight between Parkes and Sydney (compared to a five-hour drive) makes it feasible for people to travel to and from the Parkes region on a regular basis and solidifies the area as a connected and great place to live.

* Australian Bureau of Statistics, 2021 Census Results, National Institute of Economic, and Industry Research, 2023



2.1.2 Economy

Tourism

Leveraging from the passing visitors along the Newell Highway, the tourism industry generates more than \$40 million to the Parkes economy annually. Primary attractions include the CSIRO's Australia Telescope National Facility at the Parkes Observatory, home of the 64-metre Parkes radio telescope 'the Dish' attracts over 130,000 visitors each year, the Peak Hill Open Cut Experience, the Henry Parkes Centre, and the Historical Aircraft Restoration Society (HARS) museum. Complementing the Observatory, is a region with a growing range of unique built attractions, including the Sculptures Down the Lachlan, Utes in the Paddock and Gum Bend Lake; a man-made ski lake located at Condobolin.

Headlined by the Parkes Elvis Festival, emerging events like the Trundle ABBA Festival, continue to grow year on year. The Elvis Festival in particular draws people from all over Australia with the RPT provider scheduling additional services to cater for the growing demand on air travel. Parkes Cup Race Day, Tullamore Irish Festival, Trundles Bush Tucker Day, Astrofest, Grazing Down the Lachlan, Taste on Templar, and Condo SkyFest 'Miima-gu Ngaanha' as well as large sporting fixtures, car rallies and conventions all add to the list of annual celebrations that attract significant visitation.

Mining

Mining remains a cornerstone of the Parkes economy, with the Northparkes mine situated 27 kilometres northwest of Parkes. This operation utilises open-pit and innovative block-caving techniques to access significant copper and gold reserves. The mine currently employs 300 full-time equivalent staff and approximately 400 full-time equivalent contractors.

New exploratory projects and initiatives are currently underway at Northparkes mine. These include potential developments in rare earth minerals, driven by global demand for critical materials used in green technologies and renewable energy infrastructure. The region is also seeing interest in lithium and cobalt exploration, further enhancing its mining potential.

The mine's life expectancy extends beyond 2030, ensuring its continued importance to the local economy throughout the duration of this Master Plan. Alkane Resources Ltd has a considerable influence on mining in the region. The gold exploration and production company owns and operates Tomingley Gold Operations, an open pit and underground gold mining development, located 67km from Parkes and 50km southwest of Dubbo. With a workforce of more than 250 employees and contractors, 2024 has seen Alkane has seen a ramp up production at Tomingley whilst continuing mine exploration in the region. With the possibility of new mining activities emerging, the broader mining sector is likely to bolster economic growth and job creation in the Parkes region in the coming decades.

Logistics and Connectivity

Parkes' strategic location, where Australia's key east-west and north-south rail corridors intersect, establishes it as a central logistics and distribution hub. With direct rail links to seaports and cities, as well as robust road infrastructure, Parkes minimises freight distances, lowering transportation costs for businesses. The Parkes National Logistics Hub, developed on 516 hectares of rezoned agricultural and industrial land on the western edge of town, continues to attract interest from major transport and logistics companies. With an additional 100 hectares in reserve, the hub operates 24 hours a day, seven days a week, and offers a purpose-built, multi-modal transport facility.





The \$14.5 billion Inland Rail project, connecting Melbourne to Brisbane, enhances the logistics hub's capacity, reinforcing Parkes as a critical node in Australia's freight network. Strategically aligned to connectivity and logistics, the Parkes Special Activation Precinct (SAP) has drawn new businesses and industries to the area. The SAP's focus is on advanced manufacturing, agribusiness, and logistics, provides infrastructure and incentives to attract investment. Developments to date include an \$82 million pet food manufacturing facility. Whilst not confirmed, there is also significant interest from a plastic recycling plant and energy from waste facility with both operations poised to invest 1 billion, during the construction phase. The SAP's proximity to Parkes Regional Airport, and its evolving Business Park further enhances the town's connectivity and business potential.

Government

Government agencies and services continue to play a significant role in the Parkes economy, with Roads and Maritime Services, the Department of Community Services, and Centrelink being major employers. The Parkes Shire Council, employing approximately 170 full- and part-time staff, also contributes substantially. Key sectors such as Health Care and Social Assistance, along with Education and Training, remain vital government employers. One in three residents of Parkes is employed in a government-related role, with these jobs contributing over \$100 million annually to the local economy. The growth experienced because of the Inland Rail and SAP investment will undoubtedly influence employment sector statistics in the future.

Agriculture

The agriculture sector in Parkes remains a cornerstone of the local economy, dominated by sheep grazing and the production of grain crops like wheat and barley. Recent advances in sustainable farming practices have positioned Parkes as a leader in agricultural innovation. Beyond direct farming outputs, the sector is intricately linked to manufacturing supply chains, providing raw materials for food processing, animal feeds, and bioenergy production. These downstream industries add significant value to the region's output, contributing to the economy in ways not always directly attributed to agriculture. This integration enhances productivity, creates local jobs, and boosts export potential, making agriculture a key driver of regional development.



2.2 Strategies and Planning Integration

Incorporating regional, state, and federal plans into the Parkes Regional Airport Master Plan review ensures that airport development aligns with broader economic, logistical, and tourism goals while addressing emerging trends in sustainability and regional connectivity.

2.2.1 Parkes Shire Community Strategic Plan 2035+

The Parkes Shire Community Strategic Plan 2035+ (Reviewed 2021) (CSP) sets out the vision for the Parkes Shire in 2035, "Connected, Vibrant and Sustainable – It all adds up." Four themes guide the shires vision:

- 1. COMMUNITY We live in a safe, inclusive and growing community that provides a great quality of life for people of all ages and abilities
- 2. ECONOMY We have a diverse, thriving economy which supports traditional and new industries, accommodates continued population growth, and provides quality employment, education and training opportunities
- 3. ENVIRONMENT We value our natural and built environments and effectively plan for a growing community.
- 4. LEADERSHIP We enjoy open, accountable, and responsible local government that involves our community in decision making and responsibly manages our public resources

The Community Strategic Plan focuses on building an attractive destination to work, live and invest. It promotes the importance of industry expansion and diversification and lists the airport business park as an opportunity to leverage and connect businesses through aviation. Maintaining passenger services through RPT operations with Regional Express airlines is also equally important for community access and continuity.

The plan calls for continued efforts to drive economic growth and diversification, with the airport playing a pivotal role in attracting business investment and expanding tourism. The Airport Business Park is highlighted as an important initiative to diversify revenue streams and support the broader business community.

Beyond economic benefits, the airport is vital for community well-being, enabling emergency services, medical evacuations, and air ambulance support. The CSP promotes expanded medical and allied health services, positioning the airport as a critical resource in emergencies and a key enabler of essential health support.

Aligned with the Community Strategic Plan (CSP), there is a strong commitment to safety, sustainability, and innovation. The airport supports these goals by adopting environmentally sustainable practices, reducing carbon emissions, and incorporating green technologies, furthering the council's environmental priorities.

2.2.2 The Local Strategic Planning Statement 2020

This plan establishes a 20-year vision (2041) for land-use planning in the Parkes Shire in relation to economic, social and environmental matters. The statement identifies Parkes as an attractive location for investment due to its location on the Newell Highway, the North Southeast West rail lines and the Parkes Regional Airport. Planning controls are established to encourage airport related businesses at





the Parkes Regional Airport in accordance with the Airport Master Plan and restrict any incompatible development within the surrounding area, including the obstacle limitation surface (OLS).

2.2.3 The Mid-Lachlan Regional Economic Development Strategy 2023 Update

In 2018, the NSW Government developed Regional Economic Development Strategies (REDS) for 38 Functional Economic Regions (FERs) across regional NSW. Since publication, regional NSW has endured bushfires, floods, COVID-19 and a mouse plague. The Mid-Lachlan Regional Economic Development Strategy articulates the economic opportunities relating to mid-Lachlan region, encompassing Parkes, Forbes and Lachlan Councils and developed a framework for identifying actions crucial to achieving a progressive and prosperous regional community. Despite experiencing a decline in overall population growth, it is expected with a range of major projects and transformative investments underway in the region, there are strong prospects for sustained positive population growth in coming years.

2.2.4 DNCW Destination Management Plan 2022-2030

DNCW Destination Management Plan 2022-2030 guides the work that Destination Central West will champion to stimulate the economic prosperity, create new jobs, and enhance the lifestyles of the people within the central west region of NSW. The Destination Management Plan (DMP) aligns with the NSW Visitor Economy Strategy 2030. Parkes Shire is identified as a subregion of this plan alongside Lachlan, Parkes, Forbes, Weddin and Cowra Local Government areas. Celebrating the assets of the immediate region, the airport plays a key role in providing connectivity for stakeholders including investors, visitors, and locals.

2.2.5 Parkes Special Activation Precinct Master Plan 2020

The Parkes Special Activation Precinct (SAP) Master Plan was developed in 2020 and brings together the state government's vision of building dedicated areas to bring together planning and investment to drive jobs and economic activity. The Parkes SAP vision builds an inland port, transferring export ready goods to every major city and freight centre in Australia. It has already provided opportunities for new industries in agriculture, freight and logistics, manufacturing, energy and resource recovery and transport to co-locate. The Parkes Special Activation Precinct is setting new benchmarks for efficient management and environmental performance standards in energy, waste, water, climate resilience and emissions.

2.2.6 2024 Premier's Priorities (NSW Government):

The NSW Government's Premier's Priorities focus on improving infrastructure, creating jobs, and enhancing services across the state. For Parkes Regional Airport, these priorities highlight:

- Job creation: Supporting regional economies through infrastructure projects that lead to direct and indirect employment.
- Boosting freight and logistics capabilities: Aligning airport development with the state's freight strategy, particularly as Parkes is a key hub in NSW's transport network.
- Environmental sustainability: Ensuring that the airport aligns with sustainable infrastructure goals, such as lowering carbon emissions and embracing green technologies.





2.2.7 Regional Development Central West Plan:

The Regional Development Central West Regional Plan 2036, developed by the NSW Department of Planning, highlights the importance of enhancing transport infrastructure to support regional economic growth. Key considerations for Parkes Regional Airport include:

- Improving connectivity: Leveraging the airport's strategic location to enhance regional, national, and international connectivity.
- Supporting regional industries: Expanding airport operations to facilitate the growth of industries like mining, agriculture, and tourism.
- Logistics hub development: Reinforcing Parkes' role as a major logistics hub, with the airport being central to this strategy.

2.2.8 NSW Freight and Ports Plan 2018-2023

This state-wide plan underscores the need to improve regional freight infrastructure. For Parkes Regional Airport, this plan stresses:

- Freight capacity expansion: Ensuring the airport can handle increasing freight volumes, especially for perishable goods and regional exports.
- Integrating with rail and road: Aligning the airport's development with broader intermodal transport networks, including the Inland Rail project.

2.2.9 Parkes Air Freight Hub 2019

This 2019 report was developed in response to Transport for New South Wales' (TfNSW) investigation into potential locations for an air freight and agribusiness hub to support the export of perishable and high-value agricultural products to international markets. The Parkes Special Activation Precinct (SAP) was a location under consideration for this initiative.

The report includes:

- 1. Review and analysis of publications on aviation and agribusiness relevant to Parkes and NSW to identify alignment with regional and state priorities.
- 2. Transport-related investments already underway in Parkes and their potential alignment to an agribusiness precinct.
- 3. How Parkes Airport could strategically complement services from Western Sydney Airport and its agribusiness hub, enhancing the region's connectivity and driving economic outcomes.
- 4. Case Study Insights including Toowoomba Wellcamp Airport and Auckland Airport.

2.2.10 Historical Airport Proposed International Freight Facility

Whilst not specifically the focus of this review, a study undertaken in 1997, and included in the 2013 Masterplan is referenced as historical information for background and to inform future studies if airfreight develops, during the term of this masterplan. This document is available from Parkes Shire Council.





2.3 Parkes Local Environmental Plan

The Parkes Local Environmental Plan (LEP) 2012 serves as the foundational planning document governing land use and development in the Parkes Shire, including Parkes Regional Airport. In 2024, the LEP (refer to Figure 2) continues to support the strategic growth of Parkes Regional Airport, adapting zoning, land use, and sustainability policies to accommodate expansions in infrastructure and operations. These updates align with broader regional and state-level plans to enhance Parkes' role as a logistics and aviation hub.

Key Features:

- Zoning: The airport land is zoned as SP2 Infrastructure, which is specifically designated for transport infrastructure, allowing for the continued operation and expansion of the airport. The surrounding land is zoned RU1 Primary Production preserving agricultural use around the airport and limiting incompatible developments.
- 2. Development Control: The LEP contained provisions that control the type and scale of development around the airport, ensuring land uses surrounding the airport are compatible with aviation operation

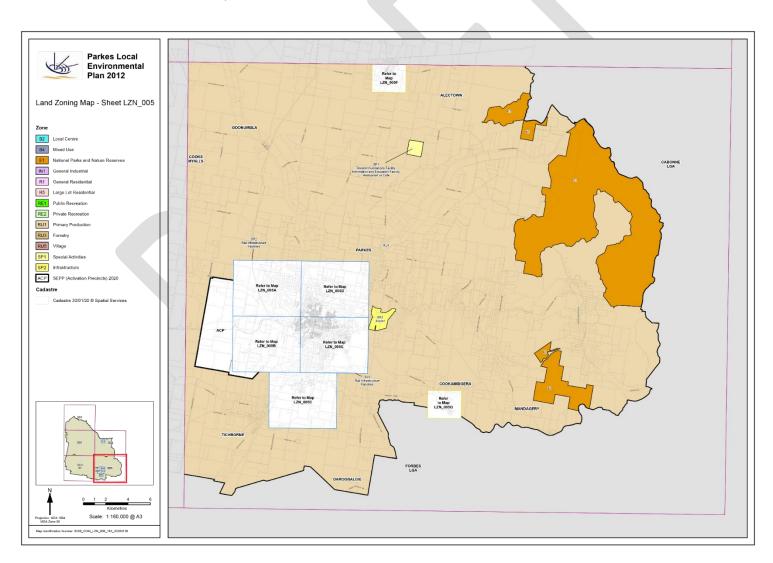


Figure 2 Parkes Local Environmental Plan 2012 – see full image at www.parkes.nsw.gov.au/Development/Building-and-development/Planning-Controls





2.4 Parkes Shire Council Development Control Plan 2021

The Parkes Shire Development Control Plan 2021 (DCP), in conjunction with the Parkes Local Environmental Plan 2012, provides a framework for guiding land-use planning and development within the Parkes Shire. The DCP aims to:

- Promote growth and development.
- Ensure orderly, consistent, and environmentally sustainable development.
- Establish public consultation procedures for certain development proposals.
- Maximise positive planning outcomes for the broader community.

To achieve these aims it is equally important that the Council uses the National Aviation Safeguarding Framework (NASF) in addition to the DCP in their assessments to safeguard airport operations. (refer section 6.1)

Part G - Parkes Regional Airport Developments

The DCP outlines specific requirements for developments at the Parkes Regional Airport to support its operations while maintaining environmental sustainability, safety, and compatibility with surrounding land uses.

Key considerations include:

- Earthworks and Drainage: Minimise impacts on airport operations, public roads, and adjoining properties.
- Lot Design: Ensure subdivisions support ongoing airport operations.
- Airside Design: Require aerodrome aprons and taxiways to meet Council-approved standards for operational safety.
- Landside Design: Enhance streetscape aesthetics through complementary developments.
- Setbacks and Building Design: Align developments with master plans and the Building Code of Australia to integrate airside and landside functions.
- Signage Design: Ensure signage is structurally sound, functional, and aesthetically compatible with airport operations.
- Driveways, Access, and Parking: Provide well-designed and functional access to public roads and parking facilities.
- Stormwater Management: Prevent adverse drainage impacts on airport operations, infrastructure, and nearby properties.
- Utilities: Ensure adequate utilities and services for all developments.

This framework ensures that development at Parkes Regional Airport supports its operational needs while fostering sustainable growth and integration with the broader community.





2.5 Community and Stakeholder Engagement

Consultation for this Master Plan, was conducted to gather input from stakeholders associated with or impacted by Parkes Regional Airport. The purpose was to understand what airport developments would help meet the business and the community goals in the short, medium and long term.

Stakeholder consultations were divided into two main categories:

1. Local Community Community stakeholders were invited to provide feedback through an online survey distributed on the Council's social media platforms.

2. Airport Stakeholders

Airport Stakeholders were grouped as on-airport tenants, council, tourism organisations, regional development bodies, the business chamber, airlines, ground handlers, and refuelling. Airport Stakeholders shared their insights in either face-to-face meetings or online meetings with an independent aviation consultation specialist. (refer to Appendix B:)

Approach undertaken for Airport Stakeholders and Local Community engagement included:





Discussions focused on how the airport supports the current and future needs of the community it serves and organisations who rely on the airport for their prosperity. Topics included:

- Understanding airport use
- Identifying priorities and how the airport can support these
- Key infrastructure needs
- Future airport growth opportunities

Key findings included:

- There is a crucial link between the ability to do day trips via air travel and the retention and growth of residents, business and investment.
- Safety is viewed as a baseline expectation with the standard of the airport high and expressed a desire to maintain the airport's current state, avoiding overcapitalisation.
- For many representative organisations, the airport is regarded more as a functional "bus stop" rather than a strategic asset, using it as an enabler for other business activities.
- The focus for on airport participants and some business groups was the viability of the region, ensuring residents are retained and more attracted including a skilled workforce to support growth in businesses.
- Risks/concerns for the viability of the region when airline schedules are limited, not reliable or cost prohibitive
- The airport represents an untapped opportunity, as not all industry stakeholder groups currently include Parkes or the airport in their strategic planning priorities.

There is significant potential to reposition the airport as a key regional asset. Opportunities include continuing to diversify the airport offer, leveraging partnerships and promoting regional experiences. The airport is often the first point of contact for passengers, it is a platform for the region to showcase lifestyle and drive increased visitation, affordable housing, business opportunities and a growing economy.

Opportunities through partnerships or investment for consideration within the airport precinct to support this potential include:

- Pilots rest facility
- Aeromedical Transfer Hangar
- Concrete Run-up Pad
- Helipad/Heli parking/Heliport
- HARS Museum Tourism Attraction
- Pilot training school (Fixed Wing and Rotator)
- Parachute training, Sky Diving, Flying and Airshow Event development
- Secure Undercover Solar Car Parking
- EV Charging Station
- Undercover Solar Rental Carpark
- Quiet space business/Business booths in departure lounge
- Terminal IT Charging stations
- Directional signage review and update e.g. baggage claim
- Passenger terminal entrance signage, linking to Airport Entrance Statement
- Terminal Advertising through terminal internal /external wall imagery
- Digital What's on Board





3. Existing Facilities

Parkes Regional Airport is a Certified Aerodrome in accordance with Civil Aviation Safety Regulation Part 139. The aerodrome is a tier three Security Controlled Airport. The facilities were fully compliant with the Manual of Standards Part 139 — Aerodromes V1.15. A number of facilities have been grandfathered to continue to comply with standards, however any upgrades may trigger a requirement to comply with the new Part 139 (Aerodromes) Manual of Standards 2019.

A plan showing existing facilities at Parkes Regional Airport is provided as Figure A at Appendix A:

3.1 Airfield Facilities

3.1.1 Runways

Parkes Regional Airport has two operational runways: Runway 04/22 and Runway 11/29.

Runway 04/22

Runway 04/22 is the primary runway. It is 1,684 metres long and 30 metres wide with a sealed surface and a 150-metre-wide runway strip. It is suitable for SAAB 340 aircraft operations at maximum take-off weight (MTOW) of 13,358kg. The runway has a Pavement Classification Number (PCN) of 8/F/C/850 (123 PSI)/T. The central 30m section of the runway was reconstructed in 2010.

The runway is equipped with low intensity runway edge lights (LIRL) at 60 metre spacing and runway end lights at both thresholds. The precision approach path indicator (PAPI) system was installed in early 2014.

Runway 11/29

The secondary runway 11/29 is 1,623 metres long and 30 metres wide. The runway sits within a 90-metre-wide runway strip. The central 18 metres of pavement was last sealed in 2015. The remainder of the 30-meter-wide runway seal is significantly older, and in reasonable condition.

Runway 11/29 has a published PCN of 6/F/C/580 (84PSI)/T. This enables it to take most aircraft if required, including occasional use by SAAB 340 operations when Runway 04/22 is unavailable.

Runway 11/29 is not currently lit. The runway is suitable for non-instrument approaches by aeroplanes up to Code 3C.

3.1.2 Taxiways

There are a series of taxiways connecting various parts of the site. In 2022, the taxiway names were redesignated as per the below table:

Table 1 Taxiway name redesignation

Taxiway	А	В	С	D
Surface	Sealed	Sealed	Sealed	Unsealed
Width	7.5 meters	15 meters	15 meters	10.5 meters
Limitation	Code A	Code C (SAAB)	Code C (SAAB)	Code B, 5700kg
Formerly	D	Α	В	С



For the purposes of identification these have been designated as indicated on Figure A at Appendix A.

Taxiway 'A' (Formerly TWY D- 2013 Rehbein Master Plan)

This taxiway links the Runway 04 threshold with the touchdown zone of Runway 11. The taxiway surface was 15 metres wide and sealed on top of either a gravel or natural surface pavement to temporarily accommodate SAAB 340 aircraft during the reconstruction of Runway 04/22. It is in a poor condition and has been reduced to 7.5 meters in width. It is suitable for Code A aeroplanes only. The taxiway is weight limited to 5,700kg.

Taxiway 'B' (Formerly TWY A - 2013 Rehbein Master Plan)

Taxiway B is a sealed taxiway that links the main apron with the Runway 04 threshold. This taxiway is a minimum of 15 metres wide at its narrowest point and suitable for use by Code C aeroplanes.

Taxiway 'C' (Formerly TWY B - 2013 Rehbein Master Plan)

This taxiway was constructed in 2020 and links the main apron area to the Runway 04 touchdown zone. It has a sealed surface 15 metres wide and suitable for use by Code C aeroplanes

Taxiway 'D' (Formerly TWY C - 2013 Rehbein Master Plan)

This unsealed gravel taxiway links the apron area to Runway 29 Threshold. It is approximately 10.5m wide and suitable for use by Code B aeroplanes.

3.1.3 Aprons

RPT Apron

A single aircraft parking position is marked on the RPT apron adjacent to the passenger terminal. LED floodlights were installed in 2024 on the RPT parking position. The position is marked for SAAB SF-340 aeroplanes to park facing the Runway 04 threshold. This parking arrangement places the forward passenger access door adjacent to the terminal for ease of loading and unloading.

Additional General Aviation (GA) apron areas are available to the eastern end of the main apron but are unlit.

North of the main apron and east of Taxiway C, a large grass parking area is available for GA aircraft. The first row of GA Grass Parking offers cable tie down facilities, accommodating up to six aircraft.

3.1.4 Hangars Facilities

There are three hangars historical Bellman hangars approximately 35m long and 30m wide (1,000 square meters) located near the passenger terminal.

- Parkes Aviation Maintenance leases a hangar located to the east of the terminal to conduct aircraft maintenance
- The Parkes Aero Club leases the hangar adjacent to Parkes Aviation for storage of members' aircraft;
- A hangar to the west of the terminal is currently occupied by the Historical Aircraft Restoration Society (HARS) which stores rare aircraft and parts.





3.1.5 Airport Business Park

Established in 2018, the Airport Business Park subdivision was established as a business precinct, capitalising off economic opportunities linked to connectivity offered through air transportation. The business park is a three-stage development

Stage One has three leases already established (Parkes Aviation, Aeroclub and Refuelling) the remaining five sites have airside locations and access to both runways, 04/22 and 11/29. Long term leases are available ranging from 1,700m² to 3,029m². They are appropriately zoned and serviced, with no noise restrictions and approved for 24-hour operations.

3.1.6 Air Traffic Control

Parkes Regional Airport is a non-towered aerodrome. A CTAF operates on frequency 126.7.

3.1.7 Navigational and Landing Aids

VOR/DME

The aerodrome is equipped with a VOR/DME located on the western side of the intersection of the two runways, close to the Aerodrome Reference Point (ARP).

Non-Directional Beacon (NDB)

The Parkes NDB is located to the south-east of the airport site, atop a hill on the southern side of Orange Road approximately 2km (1.1nm) from the ARP.

Wind Direction Indicators

The primary wind direction indicator (IWI) is illuminated and located 200 m upwind of Runway 04 threshold on the left-hand side. The signal area is located adjacent to the primary IWI.

A secondary illuminated wind direction indicator is located approximately 100m upwind of the Runway 22 threshold, on the left-hand side.

Automated Weather Information Service (AWIS)

The aerodrome is provided with an AWIS service which can be accessed by telephone or via a radio call.

3.1.8 Fuel Facilities

Previously located adjacent to the Maintenance hangar, refuelling facilities were relocated in 2023. AVGAS and Jet A1 bowsers are provided at the eastern end of the Apron area. The facility is leased by Aero Refuellers, who also provide a JET A1 tanker service to refuel larger aircraft in situ.

3.1.9 Aerodrome Ground Maintenance Shed

Parkes Regional Airport Aerodrome Ground Maintenance shed is located southeast of the airport passenger terminal. The depot that stores tools and equipment for airfield and facility maintenance. The emergency generator and Airfield Lighting Equipment Room (ALER) is located within the same site.



3.2 Passenger Terminal Facilities

The Parkes passenger terminal is located to the east of the Runway 04 threshold. The building was originally constructed in the mid-1960s, has an internal area of approximately 750 m2. The terminal is named in honour of Robert Wilson, a long-serving mayor of Parkes Shire Council who was instrumental in overseeing major airport infrastructure projects that lead to the modernisation of Parkes Regional Airport.

The terminal incorporates:

- A single check-in desk, operated by Regional Express;
- A small office for airline and ground handling staff;
- Seating for approximately 75 people;
- 3 car rental desks;
- Male and female restroom amenities;
- A coffee and drinks vending machine and water cooler.

3.3 Landside Facilities

3.3.1 Car Parking

Approximately 113 car parking spaces are provided, split between parking areas on either side of the terminal. Access between the two car parking areas is via the terminal drop-off/pick-up area.

3.3.2 Road Access

The main access to the terminal and surrounding facilities is off Orange Road via a two-way road which runs approximately 500m north to the terminal precinct. A left-turn taper is provided on Orange Road at the airport entrance for vehicles arriving from Parkes. Heavy vehicles, primarily those serving the fuel facilities, access from Gate 3, which is located further east along Orange Road, adjacent the eastern property boundary, then alongside Taxiway D.

3.3.3 Parkes Aero Club

Established in 1948, the Parkes aeroclub is located immediately to the south of the terminal. An aviation school operates at the clubhouse on weekends and selected weekdays. The Club also has two aircraft, available for flight training or private hire. The clubhouse has an extensive undercover outdoor area, with restroom amenities and fenced lawn area.

3.3.4 Utilities

Water

Water is currently supplied via a combination of raw (untreated) water from a main which runs past the airport entrance, and potable town water. The town water supplies the terminal, all businesses, and the new business park. The raw water provides a firefighting supply for the terminal, businesses, and the business park.





Sewerage

There is an airport reticulated sewerage system which services the terminal, all businesses and the business park. The system is connected to an upgraded septic treatment system and absorption area.

Power

Electricity is supplied overhead along the main access road to a pole west of the terminal. It then runs underground to the terminal. Power supply is accessible to each of the lots in the Airport Business Park Stage One subdivision.

Communications

The site is serviced by standard copper telephone cable. Council has plans to provide conduit for future upgrading of the communications infrastructure. NBN Pits and pipes have been incorporated into the lots for Stage One of the Airport Business Park.

4. Aviation Activity Forecasts

4.1 Passenger Traffic

4.1.1 Historical Passenger Traffic

Regional Express (Rex) has operated Regular Passenger Transport (RPT) flights between Parkes and Sydney since 2002. Prior to this, services were operated by Hazelton Airlines. In 2023, annual passengers totalled 28, 668, below the peak of 35,640 achieved in 2019.

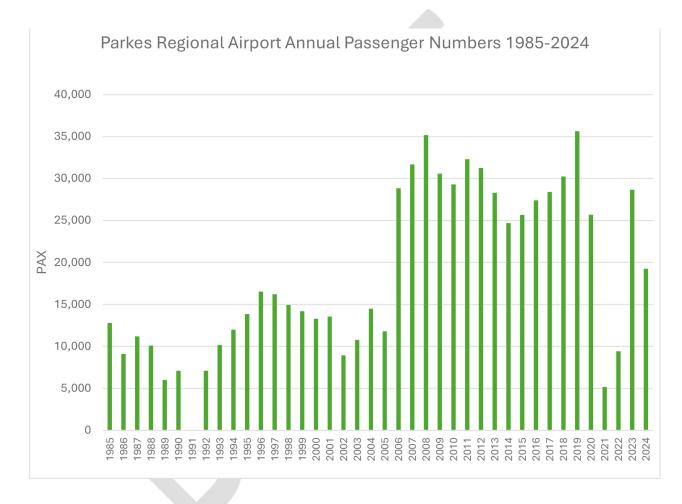


Figure 3 Annual Passenger Numbers 1985 - 2024. (Financial Year)

Regional Express services were originally operated with a 19-seat Metro as a triangulated service with Bathurst. The services are now operated as a direct service to Sydney by 34-seat SAAB SF-340 aircraft at an average load factor of approximately 50%.

The pandemic in 2020 dealt a significant blow to global aviation. Travel restrictions heavily impacted passenger numbers and consumer confidence, yet the pandemic also underscored the value of regional airports. Communities relied on these connections for essential services, highlighting their critical role.

4.1.2 Passenger Insights

Inbound and outbound passenger traffic at Parkes Regional Airport is balanced at approximately 50/50. To better understand current airport users and their purposes for travel, customer research was conducted between 24 October and 4 November 2024.

Respondents identified the airport's greatest benefit as providing critical connections to other areas, supporting family, events, tourism, medical services, and business.

- 52% of respondents emphasised the value of access to metropolitan areas for connections to services, rather than opting for a 5-hour drive time
- Over 25% noted the importance of air services in supporting health-related travel, both for locals seeking care in metropolitan areas and for specialists travelling to the region.

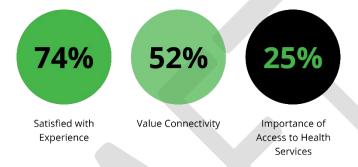
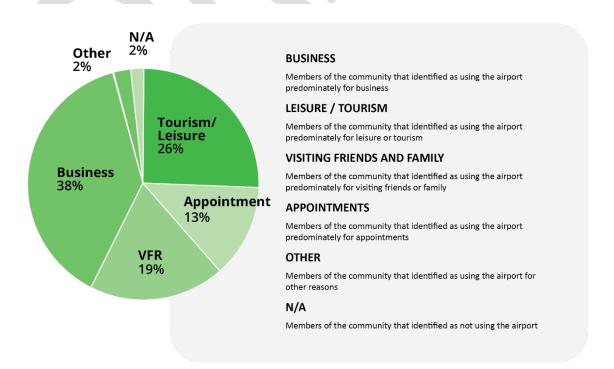


Figure 4 Data summary from customer research conducted between 24 October 2024 to 4 November 2024

Key findings included:

- 39% of respondents used the airport for business travel.
- 26% travelled for tourism or leisure purposes.
- 19% travelled to visit friends and family.

Figure 5 Purpose of travel breakdown



At the time of research, Regional Express Airlines had only recently reintroduced its full flight schedule, meaning passenger awareness of services was still recovering which impacted overall sentiment. Feedback highlighted the need for reliability and regularity in services, underscoring the importance of air travel for connectivity and access.

While there is uncertainty about the long-term viability of regular passenger transport (RPT) operator Regional Express, maintaining infrastructure capacity and capability to accommodate aircraft that may be used by alternate RPT operators is crucial. Historically if the RPT landscape changed, data supports the continuation of services through an alternate RPT operator. This occurred when Hazelton Airlines withdrew services and Regional Express commenced operation.

The research confirms the airport's significant contribution to the region's economic and social well-being. The community values the airport not only as a hub for travel but also as vital infrastructure supporting health, business, and lifestyle connections.

4.1.3 Passenger Traffic Projections

Airport infrastructure, particularly the passenger terminal and landside access facilities, need to be planned with sufficient capacity to accommodate future anticipated passenger levels. Passenger traffic has therefore been forecast to provide a basis for these future facility requirements. It should be recognised, however, that the development of accurate forecasts of passenger traffic is extremely difficult, due to the large variety of internal and external factors which drive demand as well as actual throughput. Unforeseen environmental conditions in regional communities, such as droughts, floods, fires, and plagues, can significantly influence passenger numbers. Additionally, regional developments, including mineral booms or downturns, further contribute to fluctuations in passenger forecasts.

Historically, industry predictions for passenger numbers beyond a five-year period have often proven inaccurate, regardless of an airport's size or location. As such, the passenger traffic projections outlined below should be approached with caution.

While efforts have been made to present a realistic upper-end scenario—representing the maximum infrastructure requirements over the next 20 years, there is no assurance that this or any other forecast will materialise as anticipated.

Future passenger numbers and growth rates depend on numerous factors, including travel demand, aircraft types and seating capacity, load factors, slot availability at destination airports, airline route economics, and traffic growth at current and potential destinations. These projections are influenced by external economic variables relevant to Parkes and its surrounding region and monitoring these factors is critical to planning for the airport's long-term development.





Based on feedback from the stakeholder consultation process and reference to available information referenced in Section 2.0 the key drivers considered to affect passenger numbers and growth rates at Parkes Regional Airport over the 10-year planning horizon are as follows:

- The growth and development in local business activities; and
- Possible fly-in, fly-out (FIFO) activity serving the mining and/or mining support sectors
- Possible RPT or fly-in, fly-out (FIFO) activity serving the Inland Rail developments
- Possible RPT or fly-in, fly-out (FIFO) activity serving the Special Activation Precinct (SAP)
- Growth and development of the tourism market
- Airline scheduling commitment to prioritise Parkes RPT Services

Consistency is airline scheduling and commitment to ensure Parkes Regional Airport stakeholders can rely on services is a key determinant of overall airport activity. This was evident in 2024, with a 33% decline in passenger numbers resulting from REX's reduction in services, attributed to a pilot shortage. FIFO activity holds the greatest potential to impact overall passenger traffic growth with local business growth another key factor driving air travel demand.

Parkes Shire is currently experiencing a significant employment boom, not witnessed since the construction of the Northparkes mines at Goonumbla in the early 1990s. This new construction era has largely been brought about as a result of road, rail, mining and general construction or expansion projects in and around the Parkes region. Recent data from the Australian Bureau of Statistics, 2021 Census reports a declining population growth rate yet continued investment in the Parkes National Logistics Hub and Special Activation Precinct could see short-term employment gains resulting in longer-term changes to the demographic profile in and around the Parkes Shire. In particular, increased migration of full-time workers and their families into Parkes and surrounding towns and reduced out-migration of shire residents.

In recognising the inherent uncertainty in forecasting air passenger traffic, influenced by multiple factors within the Parkes Region, four scenarios were considered to represent a spectrum of potential growth trajectories over the next 10 years.

- 1. **Historical 2015 2019 Growth Data**: Based on a continuation of less consistent growth over the preceding period from 2015 2019 (pre pandemic). This scenario results in an 8.11% annual growth rate, mirroring the 2015 2019 trend, reaching an estimated 42,000 passengers by 2034.
- 2. **Historical 2014 to 2018 Growth Data**: Based on continuation of the steady, consistent growth rate over the preceding -year period from 2014 2018. This scenario results in a 5.65% annual growth rate, mirroring the 2014-2018 trend, reaching an estimated 33,000 annual passengers by 2034.
- 3. **Bureau of Infrastructure and Transport Research Economics (BITRE) Growth Data**: Based on BITRE's forecast of a 2.2% average annual growth rate, it was anticipated that passenger traffic would increase at a similar pace, reaching an estimated 24,000 annual passengers by 2034.
- 4. **Population Growth Rate (PGR) Growth Data**: Based on the SA2 population growth rate forecast from 2022 NSW planning for Parkes (NSW) and Parkes surrounds, reaching an estimated 20,000 annual passengers by 2034. Averaging annual growth rate of 0.54%



Scenario 2: 5.65% percent annual growth rate was the option chosen to model future passenger and RPT movement given the current economic climate, and market uncertainty.

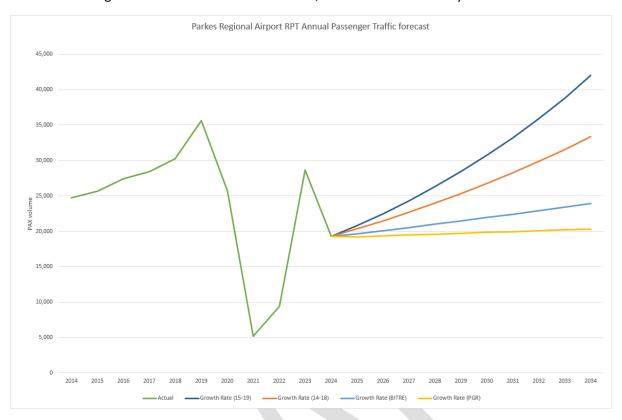


Figure 6 Projected annual passenger traffic for each Scenario from 2014 - 2034

4.2 Aircraft Movements

4.2.1 Historical Movement Breakdown

Figure 3 shows the total number of aircraft movements at Parkes Regional Airport over the last 10 years. 2023, marked the busiest year on record with 7,876 total movements. Substantial growth was recorded in multiple movement categories from 2022 FY to 2023 FY, particularly RPT and Charter. This could be attributed to post pandemic confidence for aviation in general, and a willingness to travel.

In 2024, aircraft and passenger movements experienced a substantial 27% decline compared to the previous year, marking the second-lowest volume in the past decade. Consistent RPT flight cancellations and reduced schedules has eroded passenger confidence. In this context, the subsequent voluntary administration of Rex has negatively impacted both passenger and aircraft movements.

In 2024, the distribution of aircraft movements across different categories shifted compared to the average of the past 10 years.

- Flight Training and Freight movements increased to 28% and 9%, respectively.
- Business, Charter, GA Private/Recreation, and RPT movements decreased to 14%, 5%, 20% and 19%, respectively.

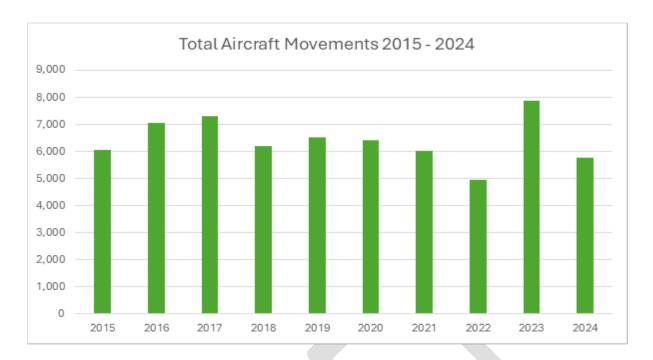
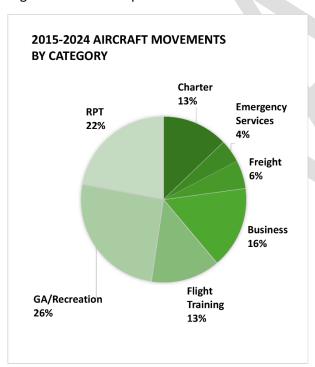


Figure 7 Total Annual Aircraft Movements

Figure 8 illustrates the average distribution of movements by category over the past 10 years, while Figure 9 shows the specific distribution for 2024.



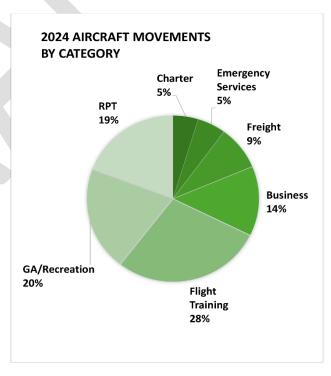


Figure 8 2015-2024 aircraft movements by category

Figure 9 2024 Aircraft movements by category



4.2.2 Regular Passenger Transport (RPT)

In July 2024 Regional Express Holdings Limited and a number of its subsidiaries entered voluntary administration. A decision by the Federal Court extended the convening period for the Rex (Airlines) voluntary administration to 30 June 2025.

Inconsistency in reliability and scheduling has greatly impacted community confidence in choosing RPT services. Stakeholder engagement has revealed that some passengers are choosing to drive rather than relying on the services offered by Regional Express. The key theme from all stakeholder feedback was how crucial the link is between the ability to do day trips via air travel and the retention and growth of residents, business and investment. The return of daily return services in October 2024 has built confidence.

Parkes Regional Airport is currently providing 18 direct return services ex-Sydney, undertaken by 34-seat SAAB SF-340 aircraft operated by Regional Express (Rex).

Based on historical data from 2015-2018 and current trends in 2023-2024, the average load factor for these flights is around 50%.

Using historical data and the assumption that the average load factor of 50% will remain steady throughout the forecast horizon, RPT movements are anticipated to grow by an average of 5.65% per annum to accommodate scenario 2 "2014 to 2018" passenger forecasts.

Approximately 2,000 annual RPT movements are anticipated in 2034 utilising a 34-seat SAAB SF-340 aircraft or similar.

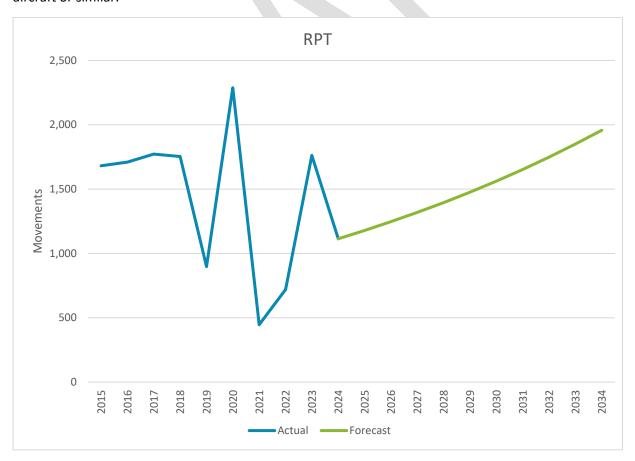


Figure 10 RPT Movements Forecast Growth 2024 - 2034

Realistically, the current climate dictates the need to reestablish airline confidence and consistency rather than introduce new destinations. The community survey revealed that over 68% of respondents identified Sydney as their primary destination. Additionally, 44% and 42% of respondents expressed interest in having direct flights to Melbourne and Brisbane, respectively, as potential new destinations. The primary reasons cited for these preferences were to facilitate business travel (31%) and to visit family, friends, or for leisure purposes (32% each).

If the airline administrators are unable to secure RPT services through the current operator, stakeholder feedback has indicated that there is interest from other operators to provide direct RPT services to Sydney from Parkes Regional Airport. It is presumed that the future RPT operator will predominately move the same number of people - either using smaller aircraft more frequently, or the same or similar aircraft under a comparable schedule.

For planning purposes, this masterplan has assumed the aircraft will remain the same or similar for the next 5-10 years. A second scenario using larger aircraft less often has been provided should there be a significant change in the regional landscape, population or business growth.

- Stage 1 (0-10 years): continuation of 34-seat (SAAB SF-340, BAe Jetstream 41, Bombardier Dash 8-100 or similar) operations together with possible 50-seat (Dash 8-300,) or, 70-seat services; and
- Stage 2 (10+ years): continuation of 50-70 seat operations from Stage 1 with possible introduction of operations by Airbus A220 100, Fokker 100, 100 130 seat operation, depending on actual passenger traffic growth.

4.2.3 Charter Movements

As an alternative to an increase in the number of RPT aircraft movements or the size of aircraft operating these, a proportion of passenger traffic growth may be accommodated through closed charter operations. In this situation, the destinations, aircraft types and service frequencies are likely to vary from what would be expected if these passengers were carried on RPT services.

Stakeholder consultation has suggested that the potential for Fly-In, Fly-Out (FIFO) demand for services into Parkes is projected to grow.

There is some reported demand for FIFO services for personnel originating in Parkes and travelling to mine sites in Western Australia. Currently this traffic, is served through Orange and Parkes Airports and its unlikely that dedicated charter services to Parkes would be justified by the aircraft types of a size needed to achieve the required range.

The Special Activation Precinct development for FIFO workers is expected to boost charter movements, which are projected to grow by 3.5% annually based on the past 10-year trend. Approximately 400 annual Charter movements are anticipated in 2034.





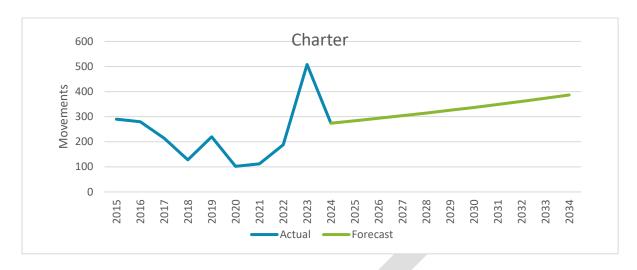


Figure 11 Charter Movements Forecast Growth 2024 - 2034

Charter service schedules are dictated entirely by the contracting company's requirements and are difficult to predict or influence. These services may therefore occur simultaneously with RPT operations.

4.2.4 Emergency Services

Emergency services movements are challenging to forecast due to their substantial year-to-year variability, which is influenced by environmental factors. Bushfires, medical retrievals and transfers, floods, plagues, natural or manmade disaster often trigger the requirement for police, RFS, Ambulance, and recovery specialists to attend. In 2023, a significant spike in helicopter movements was recorded provided essential and emergency car to those effected by the major flooding event at Eugowra, Parkes and Forbes. Data is only one part of the story yet for the purposes of planning an average growth rate of 3.5% per year is assumed. Approximately 450 annual emergency service movements are anticipated in 2034. This master plan proposes the allocation of an essential services precinct, specifically positioned to provide and enable efficient and effective care provided to community through aviation emergency services providers.

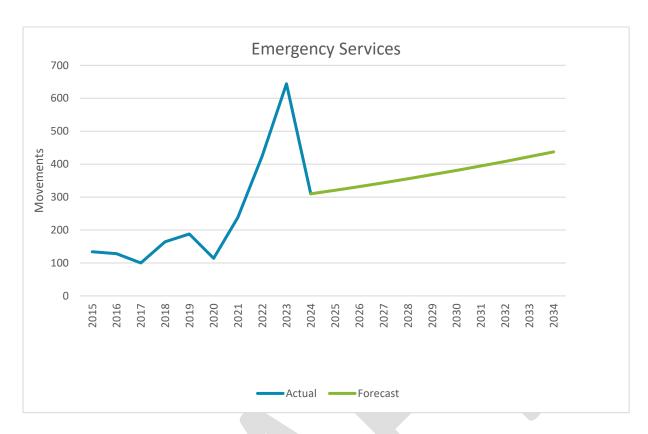


Figure 12 Emergency Services Movements Forecast Growth 2024 - 2034

4.2.5 Freight Movements

Domestic freight movements have maintained a steady state since 2022. Freight through Parkes Regional Airport is believed to be small freight moved daily via contractor GAM using a Cessna. Most air freight is collected via local freight companies and includes small parcel/postal freight, aircraft parts and urgent maintenance supplies. It is anticipated that freight movements will exhibit minimal growth and remain at 2024 levels. Approximately 500 annual freight movements are anticipated in 2034.

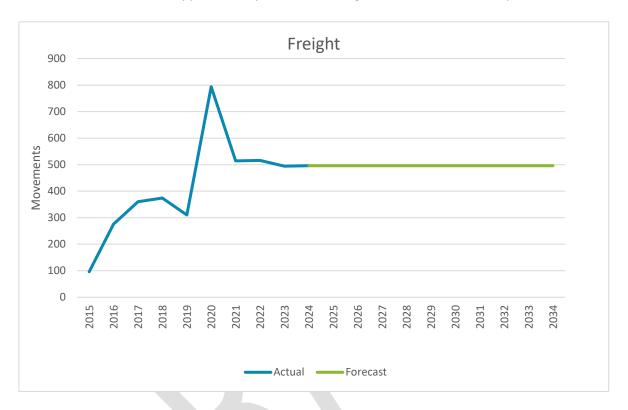


Figure 13 Freight Movement Forecast Growth 2024- 2034

4.2.6 Other General Aviation Movements

Training

Flight training activities and other related operations are anticipated to continue as a major contributor to aircraft movements at Parkes Airport. Over the 10-year period, flight training makes up 13% of the aircraft movements purpose. Around 3,500 annual flight training movements are projected for 2034 with annual growth rate of 8%.

Business

Business movements are expected to grow as the regional economy continues the developments after COVID-19. 16% of the aircraft that use Parkes Airport are flying in for business purposes. An annual average growth rate of 4% is assumed. Approximately 1,200 annual business movements are anticipated in 2034.



GA Private / Recreation

Where unable to be categorised, aircraft under 1500kg and recreation aircraft under 600kg, classified as GA Private /Recreation. These aircraft movements have experienced a decreasing trend over the past 10 years. The rate of decline has moderated since 2022. A projected annual decrease of 2% indicates that approximately 1,000 annual movements will occur in 2034.



4.3 Aircraft Movement Forecast Summary

An overall increase of 54% is anticipated of the next 10-year period, leading to an estimated 8,900 annual movements by 2034. This corresponds to a compound annual growth rate of approximately 4.43% overall airport movements. The projection indicates that Flight Training and RPT categories will constitute the predominant contributors to aircraft movements in 2034, collectively representing over 50% of the total, as illustrated in Figure 13.

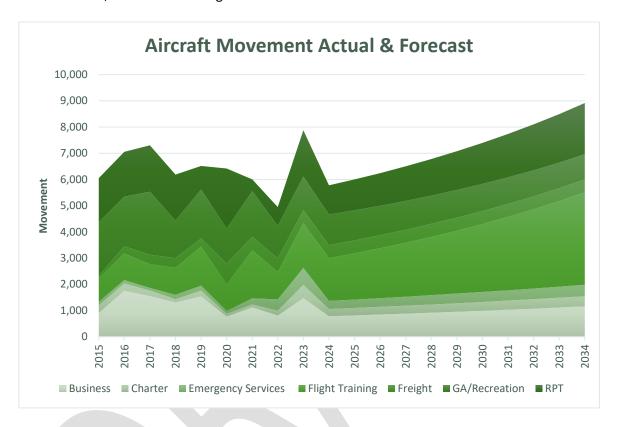


Figure 14 Actual & forecast Aircraft Movements 2015-2034

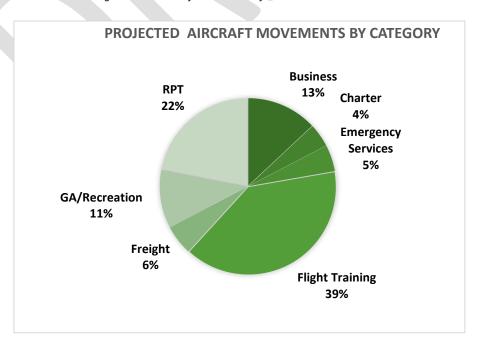


Figure 15 Aircraft Movements by Category (2034 forecast)





4.4 Rotator Wing (Helicopter) Movement Summary

Helicopter movements are incorporated into the overall aircraft movement forecast. Figure 16 shows that Business operations comprised 57% of helicopter movements in 2024. While 2023 saw an unusually high volume of helicopter activity due to flooding, an average annual growth rate of 4.9% is projected, resulting in an estimated 460 annual helicopter movements by 2034. The growth in rotator wing movements could warrant the staged development of a designated helicopter parking area, and potential future construction of a helipad in the Essential Services Precinct.

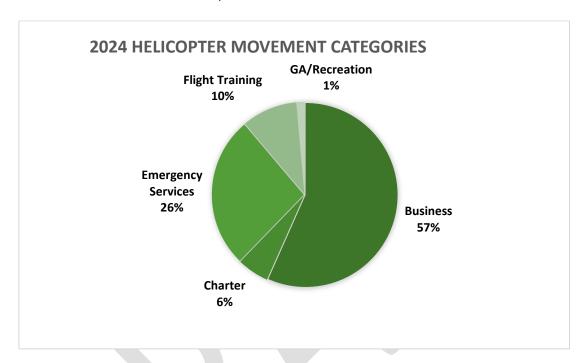


Figure 16 Helicopter Movements by Category 2024

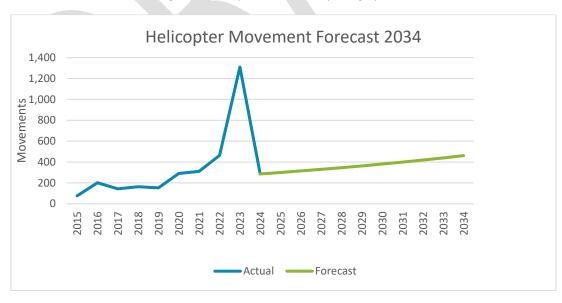


Figure 175 Helicopter Total Movement (2034 forecast)



5. Aeronautical Development Concept

5.1 Overview

The proposed aeronautical development concept, covering airfield and terminal infrastructure requirements and development staging, has been prepared on the basis of satisfying a set of key planning parameters. These parameters are set out in Section 5.2.

The proposed development concept for the runways, taxiways, aircraft parking areas, hangar development and passenger terminal are described in Section 5.3 through Section 5.6. Figures B through F at Appendix A: illustrate the development concepts described herein.

Proposed development is broadly separated into two stages:

- Stage 1: Covering approximately the next 10 years to around 2034; and
- **Stage 2**: Future development expected not to be required until the second half of the Master Plan period, or beyond.

The actual scope and timing for implementation of specific proposals should be reviewed on a case-by-case basis.

5.2 Key Planning Parameters

Whilst the forecasts of overall passenger traffic and aircraft movements described in Section 4.0 are useful for gaining an understanding of likely future activity levels, they are of only limited value as inputs to the planning of individual aeronautical facilities. Therefore, more specific key planning parameters have been developed consistent with these overall forecasts.

To determine the key planning parameters, which include terminal sizing requirements and aircraft parking capacity, a scenario-based approach was adopted which considered the potential impacts of varying combinations of passenger traffic and operating aircraft size/frequency to plan for the worst-case scenario in terms of infrastructure development.

5.2.1 Planning Scenario Analysis

Aircraft types, operating frequencies and schedules were determined through discussion with the incumbent RPT airline, Regional Express, together with reference to other industry knowledge and the application of a general understanding of airline operations to develop a range of different scenarios for provision of passenger services. Regardless of the incumbent airline being under administration, through stakeholder consultation, if operations were to change, another airline operator would be extremely interested in undertaking the Parkes Regional Airport RPT service.

The key airline operational scenarios encapsulated in the scenario analysis are:

 High-Frequency operations utilising generally the smallest aircraft types appropriate to the level of traffic, to the greatest number of destinations considered viable and offering the highest frequency of service considered viable to each destination;





- Low-Frequency operations utilising generally the largest aircraft types appropriate to the level
 of traffic, serving only the existing destinations and offering the lowest frequency of service
 to those destinations; and
- Medium-Frequency operations utilising aircraft types of intermediate size to serve traffic to
 existing destinations, and in some cases the most likely additional destinations, on a moderate
 frequency to each destination.

For each scenario a base schedule detailing the typical weekly airline operations including airline, origin/destination, scheduled arrival/departure time and operating aircraft type was developed. These nominal schedules with peak aircraft load factors were used to determine the maximum number of passengers in the terminal at one time and maximum concurrent aircraft parking requirements.

Under this review, it is unlikely there will be any significant change to the current base scheduling. If a new operator is using what they are currently using now, the new operators are not going to gauge up the type of aircraft. There would need to be a significant change in the regional landscape and regional landscape that triggers a spike in flight demand. The current airspace and runway should be maintained on the expectations that operations are going to be similar into the foreseeable future.

5.2.2 Design Aircraft Characteristics

ICAO Reference Code

The dimensions, shape and layout of basic aerodrome facilities such as runways, taxiways and aprons are essentially determined by the performance capability and size of the aircraft that are intended to use them. The planning and design of these facilities therefore begins by identifying the most demanding or critical aircraft that will use them.

In Australia, like most countries, this is achieved by using an ICAO reference code system. The reference code has two elements, a number and a letter, which are derived by grouping aircraft with similar performance capability and key physical dimensions. Thirteen aircraft groupings, each with a unique code number and letter combination such as 1A, 2B, 3C and 4D have been identified.

The objective is to plan individual facilities for the critical aircraft likely to use them. Different facilities at the airport, such as those intended for RPT services and those intended solely for GA aircraft, are normally planned for their specific critical aircraft. On the other hand, common use facilities such as the primary runway and taxiway system will be planned for the most demanding aircraft envisaged to use the airport.

Pavement Strength

Pavements at Parkes are currently only rated for the runways. The current runway ratings, which are published in ERSA, identify RWY 04/22 as having a PCN of 8/F/C/850 (123PSI)/T whilst RWY 11/29 has a PCN of 6/F/C/580 (84PSI)/U. Currently, ICAO and CASA require airports across the globe to transition from the ACN/PCN rating system to the ACR/PCR system by 27 November 2025.

The ACN is calculated by the aircraft manufacturer for each aircraft, based on the damaging effect of the aircraft on different types of pavements. The ACN is dependent on both the maximum weight of the aircraft and the number, type and configuration of the landing gear. The ACN also includes a component related to the tyre pressure of the main gear, which can often become the critical parameter in relation to pavement strength. The ACN will be replaced with an ACR.





The responsibility for transition from ACN to ACR falls to the aircraft manufacturer and the operator. The aircraft manufacturer provides the official computation of an ACR value. Computation of the ACR requires detailed information on the operational characteristics of the aircraft, such as maximum aft centre of gravity, maximum ramp weight, wheel spacing, and tyre pressure. The main differences between ACN and ACR relate to the basis on which the equivalent wheel load is determined, and include:

- standard tyre pressure,
- standard pavement structures,
- subgrade categories, and
- calculated indicator of relative damage.

Principal Aircraft Parameters

Table 2 summarises the principal relevant planning parameters that relate to aeronautical facilities for each of the key aircraft types that currently and may potentially use Parkes Regional Airport in the future.

Table 2 Principal Design Aircraft Key Parameters

Aircraft Type	Wingspan (m)	Tail Height (m)	MTOW (kg)	ICAO Aerodrome Reference Code	ACN, Flexible pavement on a low (cat. C) sub- grade	Typical Capacity (Pax/Tonne s)
Cessna 172	10.9	2.7	1,160	1A	< 5,700 kg	N/A
Cessna 310	11.3	3.3	2,495	1A	< 5,700 kg	N/A
GippsAero GA-8	12.4	3.9	1,905	1A	< 5,700 kg	N/A
Pilatus PC-12	16.2	4.3	4,740	2B	< 5,700 kg	N/A
Beech Super King Air 350	17.7	4.4	6,804	1B	4	N/A
BAe Jetstream 41	18.4	5.7	10,866	3B	6	30
Embraer EMB-120 Brasilia	19.8	6.4	11,990	3C	7	30
Bombardier Dash 8-100	25.9	7.5	15,650	2C	8	37
SAAB SF-340B	28.7	7.6	44,500	3C	8	34
Bombardier Dash 8 - 300	27.4	7.5	18,643	2C	11	50
ATR 72	27.0	7.7	22,000	3C	14	68
Bombardier Q400	28.4	8.3	29,257	3C	18	72
Fokker 70	28.1	8.5	36,740	3C	27	79
Fokker 100	28.1	8.5	45,810	3C	31	107
Airbus A220-100	35.1	11.5	63,050	3C	37 *to be verified	135
Airbus A220-300	35.1	11.5	70,900	3C	43 *to be verified	160
Embraer E-190	28.7	10.5	46,990	4C	33	106
Boeing B717-200	28.4	8.9	51,710	4C	38	106
Airbus A320-200	33.9	11.8	73,500	4C	44	150



Boeing B737-800	35.8	12.6	70,535	4C	51	175
Boeing B767-300F	47.6	16.0	186,880	4D	59	54T
Airbus A330-200F	60.3	17.2	230,000	4E	72	70T
Boeing 777F	64.8	18.5	347,814	4E	87	103T
Boeing B747-400F	64.5	19.5	396,893	4E	82	122T

Pavement Classification

Pavement classifications are determined and published by the aerodrome operator. The pavement classification systems are pavement management tools that allow aircraft operators to determine when they can operate on a pavement without restriction or must seek prior permission (from a pavement strength perspective, noting prior permission may still be required for other reasons).

The new PCR will be set by the aerodrome operator and published in AIP-ERSA to enable aircraft operators to make the same pavement restriction assessment.

Aerodrome operators will notice that the new PCR numeric values are obviously much larger than the existing PCN values for the same pavement. This will be of assistance in differentiating between the old and new classification systems. The PCR values will be identified through the application of technical or usage information to enable calculation of a value.

Currently, a PCN is reported within the AIP-ERSA in a five-part format:

PCN 108/F/D/W/T

Following the transition, the PCR will be reported in the same way with a minor but essential difference – note the much larger numeric value under the new system.

PCR 1096/F/D/W/T

(NOTE 1: Subgrade categories may also change if the PCR value assessment is completed using a technical evaluation by a pavement specialist.)



Passenger Aircraft Parking Requirements

The planning scenario analysis was used to determine the combinations of aircraft types likely to occur in relation to the RPT apron and passenger terminal at Parkes over the Master Plan horizon. The planning scenario analysis suggests:

- During Stage 1, the following combinations of aircraft represent those which are considered sufficiently likely that facilities ought to be planned to ensure they can be accommodated:
 - o 2 x 30-seat: or
 - o 1 x 30-seat plus 1 x 50-to- 100-seat.
- During Stage 2, the combinations considered for Stage 1, plus in addition:
 - o 1 x 30-seat plus 2 x 50- to 100-seat; or
 - o 1 x 30-seat plus 1 x 50- to 100-seat plus 1 x 100- to 150-seat.

Potential 30-seat aircraft types include the SAAB SF-340, BAe Jetstream 41, which are Code 3C, and Bombardier Dash 8-100 (Code 2C) types.

Potential 50 to 100 seat aeroplanes include the Bombardier Dash 8-300 (2C), Bombardier Q400, ATR72-600, Airbus A220 100 - 300, Fokker-70 and Fokker-100 (all Code 3C).

Potential 100 to 150 seat aeroplanes would include Embraer E-190 regional jets, Boeing B717.

5.2.3 Passenger Terminal

Functional Space

Functional space requirements for the terminal, referencing the International Air Transport Association (IATA) Airport Development Reference Manual (9th Edition). These space requirements were calculated based on expected aircraft design loadings for each operational area. Level of Service C, which strikes a balance between passenger comfort and space efficiency, was selected as the standard for planning.

Design parameters for passenger and checked baggage security screening have been determined in line with current Commonwealth guidelines and practices observed at regional Australian airports.

The terminal was expanded in 2015 to address increasing passenger numbers and heightened air traffic. Whilst there is no immediate need for further terminal expansion, land southeast of the current terminal has been reserved for potential future growth. Triggers for this would be driven by increased passengers, air traffic, automation of baggage handling, and enhancements in passenger, freight, and baggage screening.

Commercial Space

An allowance for outdoor or indoor advertising, retail, food and beverage space and other concession space such as car rental desks has been included as appropriate to an airport terminal of the current and anticipated size at Parkes. This allowance was based on benchmarking of commercial areas at some typical Australian and overseas regional airports and based on industry best practice.



5.3 Runways

5.3.1 Runway 04/22

Runway 04/22 has been reduced from 45m wide to 30m wide to address a non-compliance in OLS standards. The reduced 30m width has removed the requirement to relocate the hangar, southwest of the passenger terminal (currently leased by HARS.)

Runway 04/22 at 30 meters wide is sufficient to accommodate Code 3C aeroplanes such as the ATR-72, Bombardier 400, Fokker 70 and Fokker 100 however the runway pavement would need to be strengthened, and the runway length would need to be extended to accommodate the Code 3C aircraft if they were to use the airport on a regular basis. E.g. RPT

The required standards for a 45m wide runway and the runway length is marginal in terms of the range of destinations that could be served. Regular operations by aircraft types requiring a 45m wide runway is not envisaged by this Master Plan, the possibility that B737 or A320 type aircraft might serve Parkes in the future is recognised in the development of terminal and apron concept plans and if there becomes a need to cater for larger aircraft, the runway width would need to be reinstated, and the hangar (W4) located in the OLS, south-west of the passenger terminal being relocated.

The Master Plan also acknowledges previous proposals to develop a significant international freight hub at Parkes. Whilst it does not propose the wholesale realignment of runways and surrounding highways put forward previously, on the basis that there is yet to be demonstrated any conclusive economic potential for such a facility, some limited international operations would be possible with logical extension of the existing Runway 04/22. Realisation of these aspirations in any form will necessitate a runway of the current 45m width. It is therefore recommended that runway infrastructure be provided, as far as practical, to enable a 45m wide runway to be reinstated in the future with minimal changes to infrastructure.

The runway width extension stages have been altered from the 2013 plan, (Appendix A) to show:

- 1. Current OLS (04/22 Runway Width 35m) Figure G
- 2. New RESA requirements of 240 m long x 90m wide (formerly 90 x 90 m) Figures B and C
- 3. Stage 1 Runway 04/22 extension reduced by 154 meters to keep the RESA within the current aerodrome boundary. Figure B
- 4. When 04/22 Runway width reverts to 45m for larger aircraft, and the future OLS is applicable, (Figure H) Hangar W4 will need to be relocated or removed.

Stage 1: Extension to the north-east by approximately 316m, to a total length of 2,000m. This is the maximum extension feasible within the existing airport property boundary. The provision of minimum 240m long by 90m wide Runway End Safety Areas (RESAs), consistent with a 45m wide runway, would be triggered by this extension. The Stage 1 runway would be suitable for F100 and B737-800 operations to all domestic destinations but would not permit international services.





- Stage 2A: Extension by a further 564m to the north-east, to a total length of 2,464m. The additional 150 meters for the new RESA length will likely impact the Shire Road 17 to the north-east, therefore further investigations may be required. (2013 Stage 2 plans indicated that this would be the maximum extension possible without implications that would limit approach and take-off gradients, due to the to the rising ground.) The Stage 2A runway would enable wide-body operations to south-east Asian destinations such as Singapore, Jakarta and Kuala Lumpur by aircraft such as B737-800, B767-300F, A330-200 and B747-400ER F at approximately 50-90% of maximum payload; and
- Stage 2B: Extension by a further approx. 450m to the south-west would be possible, subject
 to acquisition of the adjacent property. This therefore represents the maximum practical
 length of runway available on the current site. A runway of this length is likely to permit
 maximum payload by the above aircraft types to destinations throughout Asia and as far as
 Tokyo. An extension in this direction will likely trigger the removal of existing precinct
 buildings, there for despite its challenges, an extension of 860 metres to the northeastern
 area may be the preferred option.

Extension of the runway beyond Stage 1 would be contingent on land acquisition and is therefore not proposed unless a compelling economic case develops for operations requiring the additional length. These extensions are included in the Master Plan merely to ensure that they are safeguarded in case they are ultimately required in the long term.

5.3.2 Runway 11/29

No changes are proposed to Runway 11/29. This runway and its present Obstacle Limitation Surfaces (OLS) Figure G is suitable to accommodate Code 3C non-instrument approaches, or Code 2C instrument approaches.

5.4 Taxiways

A series of progressive upgrades to existing taxiways and provision of new taxiways is proposed, subject to operational requirements.

Existing Taxiway A

No upgrade to existing Taxiway A is proposed. The 2024 technical inspection highlights that in its current condition existing Taxiway A is unserviceable.

A decision needs to be made regarding either:

- 1. Reverting Taxiway A to an unsealed/gravel surface or
- 2. Permanently remove Taxiway A from airport operations.

Based on current and forecast usage of existing Taxiway A, this Master Plan proposes the permanent closure of the Taxiway. Capital should be redirected towards the construction of a new Code B or C Taxiway located parallel to Runway 04/22 with direct access to Runway 11/29

Taxiway A (Currently Taxiway B)

Taxiway A is a sealed taxiway that links the main apron with the Runway 04 threshold. This taxiway is a minimum of 15 metres wide at its narrowest point and suitable for use by Code C aircraft.





Taxiway B (New Taxiway Construction)

It is proposed that the new Taxiway Bay B be constructed to be suitable for Code C aircraft, with the possible addition of shoulders to accommodate jet aircraft operations. Progressive extension of Taxiway B is then proposed, to from a full-length parallel taxiway connecting to the Runway 29 threshold and the extended Runway 22 threshold. In Stage 1 this taxiway should only need to meet Code C jet aircraft standards. In Stage 2, Taxiway B may be upgraded to meet Code E standards, depending on the establishment of wide-body jet operations, and the centreline should be established at a minimum of 182.5m from the Runway 04/22 centreline to permit Code 4E precision instrument operations.

Taxiway C

Upgrade and formalisation of Taxiway C was completed in 2020 and now links the RPT apron to the Runway 04 touchdown zone. This provides an additional access/egress route for RPT aircraft for Runway 04/22.

Taxiway C would then extend along the approximate alignment of the existing apron edge to connect to the Future Hangar Development Zone. This taxiway should be established to meet Code C jet aircraft standards and will facilitate operations in and around the RPT apron by F100 and, possibly in Stage 2, B737 aircraft.

In Stage 2, the section of Taxiway B connecting Taxiway A to the runway may be upgraded to Code E standard to accommodate aircraft accessing or existing Runway 04/22 south of Runway 11/29.

Taxiway D

Realignment of Taxiway D is proposed, through the establishment of a new taxiway linking the RPT apron and Airport Business Park Precinct to Runway 29 threshold. Taxiway D construction is not proposed until Stage 2 (Figure C). Code B provision will be sufficient for Taxiway D; however, it may prove beneficial to upgrade this taxiway to Code C standard.

If GA growth is significant, the construction of Taxiway D could be expedited to Stage 1. The former unsealed/ gravel Taxiway D should then become disused, or repurposed.

Taxiways E and F

These short taxiways provide links between the runway and other taxiways or between taxiways and may be developed according to operational need in Stage 2.

Taxiways G

It is proposed that the new Taxiway G be constructed during Stage 1 (Appendix A, Figure B) of the plan, suitable for Code C aircraft, providing access the essential services precinct. Taxiway G construction could be a staged development based on the progression of the proposed HARS museum site located to the west of the airport entrance road.





5.5 Aircraft Parking Areas

5.5.1 RPT Apron

To accommodate the combinations of aircraft identified in Section 5.2.3, an aircraft parking concept for the RPT apron has been developed. The concept is illustrated in Figure E at Appendix A:. The parking arrangement retains the current principle of parking aircraft parallel to the terminal, as this is advantageous with respect to the future Obstacle Limitation Surfaces (OLS) discussed in Section 6.1.

The existing SAAB SF-340 position is retained and formalised for reversible parking to enable aircraft to park facing into the wind to assist with engine start-up. Regional Express currently adopts this practice but uses the same stop-bar in each direction. The proposed concept provides separate primary and secondary positions (Bay 1/1A) in accordance with current CASA preferences and clear of the OLS.

An additional position suitable for aircraft up to F100 size, including the SAAB SF-340, and all current Dash 8 models up to and including the Q400, is proposed to the east of the existing position. This position will also be reversible for turboprop aircraft. When parked on the primary position, aircraft will be positioned conveniently in relation to the proposed Stage 1 terminal arrangements.

Finally, a third position (Bay 3) is proposed immediately to the north of the E2 Hangar site in the business park. This position will accommodate all aircraft up to Boeing 737-800. It is not anticipated that this position will be required until Stage 2.

Possible refinements to the concept which may be investigated during detailed implementation, according to need, might include the accommodation of A220, B717, B737 or other 100- to 180-seat aircraft on Bay 2. This would require careful consideration of aircraft manoeuvring, wingtip clearances and jet blast impacts on the terminal and adjacent areas. This may defer or negate the need for Bay 3 or allow that area to be used for parking other aircraft as discussed further below.

5.5.2 Itinerant Aircraft

An area has been allocated parallel to the airport entrance road, Muzyczuk Drive, for the parking of itinerant light and ultra-light aircraft at Appendix A. Approximately 25 light and ultra-light aircraft could be accommodated in this area.

North of the main apron and east of the current Taxiway D, a large grass parking area is available for GA aircraft. The first row of GA Grass Parking offers cable tie down facilities, accommodating up to six aircraft.

GA Parking in this area would have no significant limitations. Major fly in events, would trigger the need for a coordinated approach between airside operations and aircraft users to ensure pilots and passengers to not walk across the RPT apron to access landside. Clear directional signage would help guide passengers and pilots, reducing potential issues.

Larger itinerant aircraft would park on or adjacent to the RPT apron, possibly utilising Bay 3 or secondary positions in this area.





5.6 Passenger Terminal

The terminal facilities have been designed with significant flexibility to allow for adaptable internal configurations.

Two stages of expansion were previously proposed to address future needs:

- Stage 1: Expansion to accommodate simultaneous operations by up to 1 x 30-seat aircraft and
 1 x 70-seat aircraft, through an improved and expanded check-in area, a new departures hall,
 capacity to incorporate passenger screening for some services if required, upgraded
 amenities, improved baggage reclaim operations with an extended kerb and pedestrian area
 and the inclusion of retail/food and beverage opportunity.
- Stage 2: Further expansion, if required, to accommodate multiple simultaneous 30- to 150-seat services or a single 180-seat service.

The Stage 1 expansion was completed in 2015. Stage 2 remains an option for future implementation, depending on changes in passenger numbers, aircraft schedules, or aircraft types to support growth. The terminal design is also able to respond to changes in the regulatory requirements that will inevitably occur over the life of the Master Plan.

5.7 Aviation Precincts and Hangarage Developments

Parkes Regional Airport Hangar development precincts have been created to group businesses or services into functional zones, that meet the needs of operators in consideration of the type of services they provide to airport stakeholders. Parkes Council owns and leases three hangars. The remaining Hangar sites are available under long term lease arrangements with the requirement for the lessee to construct the Hangars.

5.7.1 Essential Services Precinct

In the area to the west of the passenger terminal, and extended south from the existing hangar, three (3) hangar sites suitable to accommodate hangars up to approximately 35m x 35m are proposed (Sites W1, W2 and W3). Each of these sites have access to an apron area immediately in front of the Hangar. As the only sites which have the potential to incorporate leased apron area, together with their Code B aeroplane access, proximity to the terminal, main access road and the Runway 04 threshold, these sites should represent prime locations.

The existing hangar site W4 (currently occupied by HARS) could be repurposed to an aeromedical hangar, or undercover paid parking when HARS relocate their operations to the Heritage Precinct, located on the left-hand site of the airport entrance road.

W4 hangar site, in its current location infringes the future OLS (Figure H) when the 04/22 runway width was 45 meters. To immediately address the OLS infringement and potential hazard to aircraft safety, the Runway width was reduced to 30 meters. (Current OLS Figure G). This reduction has no impact on current operations.





If aircraft larger than Code 3C commence operations (See Table 2 – Principal Design Aircraft Key Parameters) at Parkes Regional Airport, the 04/22 runway width will need to be reverted to 45 meters. This will trigger the need for relocation or removal of Hangar W 4. The heritage nature of the hangar structure may restrict the number of available sites to which it may be relocated. If the hangar is relocated, the vacated site (W4) may be utilised for other purposes provided these do not infringe the OLS.

Aviation business or services likely to utilise this area could include Aeromedical Transfers, (NSW Ambulance, RFDS, Toll, Airmed, Angel Flight, Care Flight), Small Freight (GAM), Polair and RFS. A designated area for helicopter landing/parking would be well suited in this zone. The requirement for emergency services to be able to land and load in the most efficient and effective manner, is imperative and this zone certainly enables efficient access.

5.7.2 Heritage Precinct

Immediately south of the essential services precinct and located on either side of the Airport entrance road, Muzycuk Drive, is the Heritage Precinct. The area will be split into two zones yet both sides of the road will reflect historic moments in aviation that helped shaped the airport and the Parkes region. On the western side – HARS (Historic Aircraft Restoration Society) have plans to develop a new museum site that will complement the Shellharbour HARS Museum, with additional space to display restored aircraft and displays. Parkes has a long history in aviation with a Sopwith Camel piloted by aviation pioneer Sydney Pickles in 1919.

On the eastern side a historic walking timeline concept plan has been developed to help convey stories and moments from the past, using a circular walking path that proposed to incorporate, signage, seating and interactive pathways. The site proposed to incorporate tales of Wiradjuri history, RAAF airbase, fallen pilots, and insights of migrant camp life whilst celebrating nature and fauna of the region. The seating shelters, paths and picnic areas will incorporate spaces for learning and reflection of the history of the airport and the people who called it home.



Figure 18 Illustration of Hars Parkes Aviation Museum

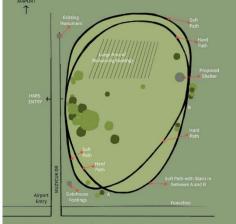


Figure 19 Heritage precinct locality map

5.7.3 Airport Business Park

To the east of the passenger terminal, the Airport Business Park precinct was established to capitalise on the economic opportunities linked to connectivity offered through air transportation. The business park is a three-stage development.





Stage One has three established leases Site E1 to Parkes Aviation — an onsite aircraft maintenance business, Site E2 to the Parkes Aero Club and Site E5 to Aero Refuellers. A fourth site (E4) is occupied by the Aerodrome Reporting Officers for the Airport Maintenance facilities.

The remaining seven sites have airside locations and access to both runways, 04/22 and 11/29. Long term leases are available ranging from 1,700m² to 3,029m². They are appropriately zoned and serviced, with no noise restrictions and approved for 24-hour operations.

5.7.4 Future Hangar Development

Provision for further hangar development in the future is made to the east/north-east of the Airport Business Park. This area could accommodate approximately Code A or B aircraft with direct airside and landside access. These sites could be made available singly or in combination to private and small business users.

This area is illustrated in Figure C at Appendix A:.

5.8 International Air Freight Facilities

Consistent with previous proposals for the development of an international air freight hub at Parkes Regional Airport, the Master Plan retains the option to implement an amended version of the previous concepts by safeguarding an area in the south-east of the airport site for this purpose, as shown in Figure C at Appendix A:.

The location has been selected in recognition of the speculative nature of this opportunity and utilises land that is unlikely to be required for other more immediate development. The location is considered suitable as it would be well-located with respect to the runway complex, independently accessible off Orange Road, and with connectivity to proposed non-aviation industrial land uses along the southern airport boundary.

Conceptual provision is made for:

- A freight processing facility of approximately 20,000m2 internal area and around 5 hectares of external land, accessible via Gate 3;
- Contact gates for up to 3 B747-400F aircraft, or a large number of smaller types;
- Stand-off parking for 2-4 additional aircraft; and
- Provision for air traffic control (ATC) tower and aerodrome rescue and firefighting (ARFF) facilities.

The shape of the site may pose some constraints on optimisation of the development, if the existing airport property boundary is retained, however as land acquisition would be required to accommodate the runway extensions necessary for this opportunity the option exists to acquire some adjacent land to improve the external arrangements.

The establishment of the Parkes Special Activation Precinct located on the western side of town, could potentially present an alternate future option for the location of airfreight infrastructure, should air freight demand become a possibility. With the Inland Rail on the doorstep of Parkers Shire Council, the likelihood of general airfreight is very low, however if a perishable commodity is high in demand — a domestic air freight facility may be considered within or as part of the SAP location.





5.9 Road Access

It is intended that the main access road to the airport remain and that the area around the intersection with Orange Road be upgraded with a more definitive entrance statement. Stakeholder Engagement has uncovered a concern regarding the turning lane into the airport traveling in a westbound direction (from Orange) It is suggested that a turning lane be planned and installed due to an identified traffic hazards and safety risk.

The main access between precincts will eventually be upgraded in line with traffic volumes and should offer an appropriate boulevard feel.

A one-way central loop system serving the terminal drop-off, pick-up and car parking areas is proposed, triggered by passenger number growth.

5.10 Car Parking

Staged development of car parking is proposed, subject to demand. To best serve the terminal and associated precincts, development of car parking is proposed within the central road loop, with an overflow option south of the drainage culvert.

The 2013 Masterplan proposed relocating the Parkes Aero Club for more parking, but this review finds relocation unnecessary due to available land south of the drainage culvert.

The aero club is an important contributor to the vibrancy of activity at Parkes Regional Airport and in its existing location several integrated business opportunities could be considered to cost effectively strengthen the services and Parks Regional airport precinct. For example, the club house could integrate a GA pilots rest lounge, flight training and waiting area for aeromedical transfers. Parkes Shire Council should engage with the Parkes Aero Club to collaborate on potential expansion opportunities that strengthen the reputation of the airport and its ability to accommodate the needs of its customers using an existing facility. Income for the aeroclub could be derived from such activities.

Further expansion is proposed to the south of the existing open drainage channel which would be retained and appropriately landscaped. It is estimated that approximately 220 spaces can be accommodated in this area, to give a total of around 313 public car parking spaces. As this area is developed, opportunities exist to enhance Parkes Airport's parking infrastructure by incorporating solar and EV charging capabilities. Additional revenue could be generated by developing the western car park (39 spaces) as a rental car park and the eastern car park (29 spaces) as the secure car park. Conducting a business case analysis would provide insight into the demand, cost benefits, and investment requirements, enabling informed decision-making about these potential developments in the future. This will provide a further 67 dedicated spaces.

Parking for on-site businesses should be incorporated into the development of the associated precincts to avoid these users having to occupy spaces in the terminal car park, with appropriate controls and enforcement to prevent unauthorised use.





6. Land Use Planning

Land use planning is key to achieving the goals set out in the airport's Master Plan, to ensure the infrastructure and airspace is protected to enable growth and secure the role of Parkes Regional Airport.

To ensure Parkes Regional Airport can continue to operate safely, efficiently, and grow in line with its potential, it's essential to protect the airport's ability to meet safety and regulatory standards.

Safeguarding covers several areas that come into play at different stages of airport planning and development. As new activities and flight operations arise, various measures will need to be implemented to support these changes and keep operations safe.

6.1 National Airports Safeguarding Framework

The National Airports Safeguarding Framework (NASF) is a national land use planning framework, agreed to by Commonwealth, State and Territory Ministers in 2012. Whilst the responsibility for land use planning rests with State and local governments, a national approach can assist in improving planning outcomes on and near airports and flight paths.

The guidelines aim to support smart land-use planning on or near airports by:

- 1. Enhancing community understanding of aviation safety and noise impacts on planning.
- 2. Offering clear and consistent guidance for developers and property owners.
- 3. Streamlining planning regulations for greater efficiency.
- 4. Promoting best practices to maintain safety and effectiveness in aviation areas.

Many proposals comply with land use requirements; it is equally important for Council to adopt the NASF in their planning assessments to safeguard airport operations.

Table 3 NASF Guidelines and Purpose Summary

Guideline	Purpose
A: Measures for Managing Impacts of Aircraft Noise;	Ensures land-use planning minimizes the impact of aircraft noise on communities, focusing on residential and sensitive areas.
B: Managing the Risk of Building Generated Windshear and Turbulence at Airports;	Prevents structures near airports from causing wind or turbulence hazards affecting aircraft operations.
C: Managing the Risk of Wildlife Strikes in the Vicinity of Airports;	Mitigates risks posed by birds and other wildlife around airports to reduce the chance of wildlife strikes with aircraft.
D: Managing the Risk of Wind Turbine Farms as Physical Obstacles to Air Navigation;	Addresses the impact of wind turbines on aviation safety, particularly radar interference and obstacle limitations.
E: Managing the Risk of Distractions to Pilots from Lighting in the Vicinity of Airports;	Minimises risks from external lighting that could distract pilots, such as bright or flashing lights near airports.





F: Managing the Risk of Intrusions into	Preserves operational airspace by preventing		
the Protected Airspace of Airports.	inappropriate developments that could penetrate the		
	prescribed airspace surfaces.		
G: Protecting Aviation Facilities—	Encourages safe land use in areas where the risk to the		
Communications, Navigation and	public from aircraft accidents is highest (e.g., runway		
Surveillance	approach and departure zones).		
H: Protecting Strategically Important	Mitigates impacts from ground-level activities (like		
Helicopter Landing Sites	mining) that could disrupt airport operations or		
	compromise safety.		
I: Managing the risk in public safety	Safeguards essential airport infrastructure, such as radar		
areas at the ends of runways	and navigation systems, from disruptions caused by		
	nearby developments.		

GUIDELINE A Measures for Managing Impacts of Aircraft Noise

In 2023 JJRyan prepared an Australian Noise Exposure Forecast (ANEF) model for the existing and proposed runway configuration for Parkes Regional Airport. This report should be used by Council in the assessment of new development applications for noise sensitive use. While the Australian Noise Exposure Forecast (ANEF) system is recognised by several jurisdictions in land use planning decisions, the 20 and 25 ANEF zones do not capture all high noise affected areas around an airport.

Australian Standard AS2021-2015 recognises that the ANEF contours are not necessarily an indicator of the full spread of noise impacts, particularly for residents newly exposed to aircraft noise. Guideline A is the Government's recognition of the need to consider a complementary suite of noise measures in conjunction with the ANEF system to better inform strategic planning and to provide more comprehensive and understandable information on aircraft noise for communities. Council should consider, taking into consideration the existing and potential future land uses in the vicinity of the Airport. Any future runway extensions will trigger a review of the current ANEF Model. If a runway upgrade is undertaken, the ANEF model should be updated to reflect any changes in forecast aircraft operations resulting from the ANEF plan outlined in the 2023 report.

GUIDELINE B Managing the Risk of Building Generated Windshear and Turbulence at Airports

The purpose of this guideline is to assist land use planners and airport operators in their planning and development processes to reduce the risk of building generated windshear and turbulence at airports near runways. Applicability of this Guideline is initially determined by the location of the building within an 'assessment trigger area' around the runway ends, that is: 1200 metres or closer perpendicular from the runway centreline (or extended runway centreline); 900 metres or closer in front of runway threshold (towards the landside of the airport); and 500 metres or closer from the runway threshold along the runway.

The guideline recommends that all developments within the assessment trigger areas which will infringe a 1:35 sloping surface from the runway centreline should be subject to further assessment. Positioning of all developments on airport will need to be evaluated on a case-by-case basis. Subject to confirmation through such evaluation that no adverse impact on aircraft operations is predicted, then buildings may be located closer to the runways and within the 1:35 surface.





GUIDELINE C Managing the Risk of Wildlife Strikes in the Vicinity of Airports

Birds (and other wildlife) on or around airfields should be regarded as a potential hazard to aircraft safety. The majority of aircraft collisions with birds occur near the airfield during take-off, landing and associated phases. Birds may be ingested into aircraft jet engines or otherwise cause damage that may impact on the pilot's ability to manoeuvre the aircraft.

The prevention of bird strike requires careful consideration during master planning phase to identify potential land uses that may attract birds. Master planning considerations include the land use inside the boundaries of the airport and the surrounding land uses that should be avoided to reduce the risk of bird strike.

While consideration of land uses within and adjoining the airport is essential for decreasing bird strike risk, operational procedures and control measures are applied to reduce the existing threat of birds. Targeted maintenance and management activities are necessary to reduce habitat or food sources that attract birds.

Land use and the environment surrounding aerodromes can attract birds and bats. Waterways, agriculture, landfills and even golf courses often provide attractants that contribute to transit issues where birds and bats traverse the airfield while moving between nesting areas and feeding or foraging sites. Development near airfields that provides refuge, feeding or breeding opportunities for large numbers of birds or bats contributes to an increased risk of bird strike.

GUIDELINE D: Managing the Risk of Wind Turbine Farms as Physical Obstacles to Air Navigation.

This guideline provides general information and advice in relation to wind farms and turbines and their hazards to aviation. Proponents of such installations should take account of Guideline D in undertaking assessments of the impacts of the proposals, including on aviation. Council should be aware of the guideline, and it may assist Council in evaluating and commenting on any wind farm proposals.

GUIDELINE E Managing the Risk of Distraction to Pilots from Lighting in the Vicinity of Airports

The Part 139 (Aerodromes) Manual of Standards 2019 Section 9.143: Other lighting on the aerodrome, sets out the restrictions and provides advice to lighting suppliers on the general requirements, information and correspondence avenues. CASA has the power, through Regulation 94 of the Civil Aviation Regulations 1988 (CAR 1988), to require lights which may cause confusion, distraction or glare to pilots in the air, to be extinguished or modified. Ground lights may cause confusion or distraction as a result of their colour, position, pattern or intensity of light emission above the horizontal plane. The advice provided by CASA is applicable to lighting installations within a 6-kilometre radius of the airport. The lights within this radius fall into a category most likely to be subjected to the provisions of Regulation 94 of CAR 1988.

Part 139 (Aerodromes) Manual of Standards 2019 Section 9.144 Lights: requirements for zones, sets out these zones within the 6km radius, a primary area exists which is divided into four light control zones designated A, B, C and D. These zones reflect the degree of interference ground lights can cause as a pilot approach to land. Figure I at Appendix A shows the primary area and zones in relation to Parkes Regional Airport within which limits on intensity of light emissions (at 3 degrees above the horizontal plane) should be maintained.





The emission intensity limits are also shown on the plan, expressed in candela (the common candle emits light at an intensity of roughly one candela) and are as follows:

- Zone A: 0 candela (cd);
- Zone B: 50 cd;
- Zone C: 150 cd; and
- Zone D: 450 cd.

Lighting restriction zones in relation to both runways are shown, even though currently only Runway 04/22 is lit, in case Runway 11/29 is upgraded for night operations in future.

GUIDELINE F Managing the Risk of Intrusions into the Protected Airspace of Airports

Guideline F is designed to address the issue of intrusions into the operational airspace of airports by tall structures, such as buildings and cranes in the vicinity of airports. The safety, efficiency and regularity of aircraft operations require airspace to be largely free of obstacles which may make it unsuitable for the conduct of visual and instrument flights.

Figure G at Appendix A provides the current Obstacle Limitation Surface (OLS) plan based on existing operations with a main runway width of 30m.

Figure H at Appendix A provides an Obstacle Limitation Surface (OLS) plan that indicates limits on building and other object heights surrounding the airport. This has been developed based on the ultimate runway development incorporating Stage 1, 2A and 2B extensions and protecting for Code 4E precision approach operations to Runway 04/22, to ensure that all future potential operations can be safeguarded.

The future OLS plan is based on the minimum requirements for these potential operations as set out in CASA Part 139 (Aerodromes) Manual of Standards 2019. Due to the prevalence of existing obstacles, further protection of take-off gradients below 2% slope is considered impractical.

This plan should be reviewed to understand if any existing buildings and/or objects impinge on the future OLS. Whilst undertaking the review, a pans ops surface drawing should also be developed. Both documents, should be incorporated into future Local Environmental Plans to ensure that any future developments do not impact further on the OLS and therefore restrict the operational potential for airport expansion in the future.

GUIDELINE G Protecting Aviation Facilities—Communications, Navigation and Surveillance

CASA is Australia's safety regulator for civil air operations and the operation of Australian aircraft overseas and is responsible for enforcing safety requirements. As Australia's civil air navigation services provider, Airservices has responsibility under the Air Services Act 1995 to ensure safe and efficient air navigation. Airservices are tasked with the Airservices can provide advice to Commonwealth, State, Territory and Local Government land use planning decision makers on development which has the potential to impact on the effectiveness of Communications, Navigation and Surveillance (CNS) facilities. This advice includes siting, design, construction and operational constraints associated with development activities

GUIDELINE H Protecting Strategically Important Helicopter Landing Sites (HLS)



Guideline H provides guidance on the ongoing operations, protection of flight paths and areas for offairport HLS. As such it is not applicable to on-airport facilities. However, on-airport helicopter facilities should be planned and designed in accordance with the guidance set out in CAAP 92-2(2) Guidelines for the establishment of onshore helicopter landing sites. 9.2.9

GUIDELINE I Managing the Risk in Public Safety Areas at the Ends of Runways

Guideline I provides guidance on approaches for the application of a Public Safety Area (PSA) planning framework in Australian jurisdictions. This guideline is intended to ensure there is no increase in risk from new development and to assist land-use planners to better consider public safety when assessing development proposals, rezoning requests and when developing strategic land use plans. A PSA is a designated area of land at the end of an airport runway within which development may be restricted to control the number of people on the ground around runway ends. The size and shape of a PSA typically depend on the statistical chance of an accident occurring at a particular location. The risk is related to the number and type of aircraft movements and the distance from the critical take-off and landing points.



7. Implementation Plan

7.1 Development Staging

For this Master Plan, developments have been divided into three stages triggered as follows:

- Short-term: Expected to be required within the next five years (i.e. before 2030). Planning and budgeting for these developments should occur now.
- Medium-term: Expected to be required sometime between 5 and 15 years (i.e. between 2030 and 2040). The timing of these developments is subject to a number of factors which make it difficult to predict the exact timeframe. The need and expected timing of these should be reviewed further during the next 5-yearly Master Plan review process, when it is anticipated that some of these developments will move into the 'short-term' category; and
- Long-term (or ultimate): developments which are to comply with sound planning practices should nevertheless continue to be safeguarded for implementation subject to demand, or for which there are existing constraints with unknown removal timeframes. These developments are not expected to occur before 2040 and may not occur within the 20- year timeframe of this Master Plan if at all.

Indicative Development Staging for Parkes Regional Airport. The following table provides an indicative sequence for development. The development sequence within each Stage 1-3 and where relevant specific triggers are identified. Triggers are rated as low – non urgent, medium and high (urgent.) No attempt has been made to anticipate the order of Stage 3 developments due to the distant timeframe within which these are envisaged.

Indicative costs have been developed for the key elements envisaged in the short-term development have been prepared. Given there is considerable uncertainty over the need for, and required timing of, any of the other developments within the development concept, costs for medium and long-term developments are not appropriate at this stage. The indicative costs for short-term development items are summarised in the below table.

7.2 Stage One – Short Term – Immediate - 5 years

The table in this section is a work in progress and will be updated with final details prior to final submission.

Year	Item	Description	Trigger	Cost Estimate
2025	Line marking (Staged) excluding 11/29 reseal	Line marking (maintenance)	Operational Need - High	\$60,000
2025	Pavement Strength Testing (boreholes and non- destructive testing)	Geotech testing to determine current pavement condition. Anecdotally, varying strengths in pavement condition RPT Apron, taxiway and OMGW Taxiway/Runway. Centre 30 meters of 04/22. Assessment to determine the actual pavement condition and capacity.	Operational Need – Medium	\$60,000 04/22 Runway, associated Taxiways and RPT Apron
2025	Taxiway Alpha Unserviceable	US Cones and Unserviceable Crosses installed	Operational Need - High Unserviceable	In house US Cones, US Crosses
2025/26	7.5 m outer edge of 11/29 crack sealing and reseal	7.5 m outer edge of 11/29 crack sealing and 2 coat reseal, (note potential to bring forward - do seal before line marking) Option 1 coat seal if required	Operational Need - High	\$550K - \$600K
2025/26	Line marking 11/29 reseal	Line marking (maintenance) Remainder of 11/29 post reseal works	Operational Need - High	\$10,000
2025	Entrance off highway	Realignment of Entrance turn off roads – from Orange -to include turning lane	Operational Need – High	To be funded by TFNSW
2026/27	Aeromedical Transfer Hangar – Option 1	Upgrade/Repurpose Existing Hangar W 4		Existing
2026/27	Aeromedical Transfer Hangar - Option 2	Construction of Undercover Patient Transfer Hangar (W3)	Operational Need - High	TBC
2026/27	Aeromedical Transfer Apron	Reseal and or redesign /rebuild apron at Hangar W4 or Hangar W3 sites	Funding, HARS Relocation,	\$200K - \$300 based on 1400 sq meters, (Could be reduced based on option)
2028	Subsoil Rubble Drainage	Stormwater drainage (maintenance) restore rubble filled subsoil drainage, uphill side of both runways	Operational Need - Medium	\$450K (replacement of gravel and ag pipe inc labour /materials)
2030	Essential Services Precinct Taxiway G construction	Design and Construct. TWY G – rough estimate 360m long 21m wide (3m+15m+3m) about \$1.67M + \$0.5m drainage works x 1.3 factor (variability) = \$2.81M + 150K for Design	Operational Need Medium	\$2.95M
2030	Run up Pad Option 1	25 mm Asphalt Run Up Pad 8m x 8m top of existing pavement (in current pavement area east of refuelling depot)	Operational Need – Low	\$20K
2030	Run up Pad Option 2	Option 2 Concrete 8 x 8 approximate (in current pavement area, – east of refuelling depot)	Operational Need – Low	\$80K

7.3 Stage Two – Medium Term – 5 to 10 years

The table in this section is a work in progress and will be updated with final details prior to final submission.

Item	Description	Trigger	Cost Estimate
Line marking	Line marking,	Operational Need, estimate every 5 years or less based on Daily Inspection reports	\$80,000
Taxiway Alpha (New)	Design and Construct	South of 11/29	\$5.93M
Taxiway Alpha (New)	Design and Construct	North of 11/29	\$5.79M
Staged Undercover walkway	From existing car park through to landscaping area and or Car parking expansion zone	Subject to growth/operational need and funding	To be determined
Helipad	Dual purpose helicopter – parking or pad, suitable for use by helicopters, powered lift aircraft	Subject to helicopter parking/landing/vertiport growth and funding	To be determined
Runway Lighting Upgrades to LED	Upgrade Lighting Systems to LED	Operational Need - Medium	To be determined

7.4 Stage Three – Long Term

The table in this section is a work in progress and will be updated with final details prior to final submission.

Item	Description	Trigger	Cost Estimate	
Stage 2 Airport Business Park	Stage 2 Business Park expansion	Demand for additional hangar sites	To be determined	
Stage 3 Airport Business Park	Stage 3 Business Park expansion	Demand for additional hangar sites	To be determined	
Stage 1 Runway 04/22 Extension	Extension/strengthening to carry larger aircraft. (310 meters + RESA at 04 and 22 – previously grandfathered)	Subject to growth/operational need and funding	\$7.9M (2013 Estimate) - to be confirmed post Geotech investigations	
Stage 1 Taxiway Charlie Strengthening	Strengthening to carry larger aircraft aligned to Runway 04/22 Extension/strengthening	Subject to growth/operational need and funding	To be determined post Geotech investigations	
Stage 1 RPT Apron Strengthening	Strengthening to carry larger aircraft aligned to Runway 04/22 Extension/strengthening and Taxiway Charlie CAPEX	Subject to growth/operational need and funding	To be determined post Geotech investigations	
Taxiway D Construction	New taxiway linking the RPT apron and Airport Business Park Precinct to Runway 29 threshold.	Subject to growth/Operational need and funding	To be determined	



Stage 2 Terminal Expansion and access roads	Passenger Terminal Expansion cater for growth in passenger numbers and larger aircraft	Passenger Number Growth and larger aircraft	To be determined
Landscaping stormwater drainage	Between existing car park and stage 2 car park	Subject to growth/Operational need and funding	To be determined
Stage 2 Carparking	South of the stormwater culvert	Subject to growth/Operational need and funding	To be determined

7.5 Assumptions and Exclusions

A range of assumptions and exclusions were made to produce the indicative development costs, these are as follows:

- Costs are based on assumptions made in the absence of detailed feature and level survey and/or geotechnical investigation;
- Airfield development costs include allowances for earthworks, pavement, stormwater drainage and airfield lighting;
- Costs included for the development of the precincts do not include ground improvements or servicing within the construction of hangars, it is anticipated that this will be carried out by the lessee/owners. Costs for engineering services (power, water, telecommunications, sewer and stormwater drainage) to the lot boundary, taxiway access (where relevant) and landside access to the subdivided sites have been considered only;
- Engineering services for the new subdivided sites will be connected to the existing services at the airport site;
- Upgrades to the power, water and sewer connections to the airport site have not been considered;
- GST has not been included;
- An allowance of 15% for preliminaries and 30% for design contingency has been made; and
- No allowance for construction contingency has been made.

7.6 Potential Operational Works, Comments, Recommendations

For this review, an additional table has been developed to highlight actions that should or could be undertaken to further strengthen or improve current processes and operations. It also details potential future developments that are currently proposed yet unfunded.

In no specific order suggestions are listed below.

Item	Description	Comment
Directional Signage for Drop	Signage installation for	Line Marking on pavement or directional street signage
Off Zone	terminal drop off/pickup zones	
Heli parking	Designated area	Line Marking /Blue Cones – Eventually in Essential Services
		Precinct, but could be interim parking area at the western end of
		GA Apron
EV Charging	Could incorporate EV Charging	Business Case to investigate timing, demand/Need
	areas in Car Parks based on	
	Partnership Opportunity or	
	funding	
Rental Car Bays and Rental Car	Designated areas	Signage
Signage		
Paid Advertising Program	Partnership Opportunity	Additional Income potential whilst marketing the regional assets and lifestyle benefits
		and mestyle benefits

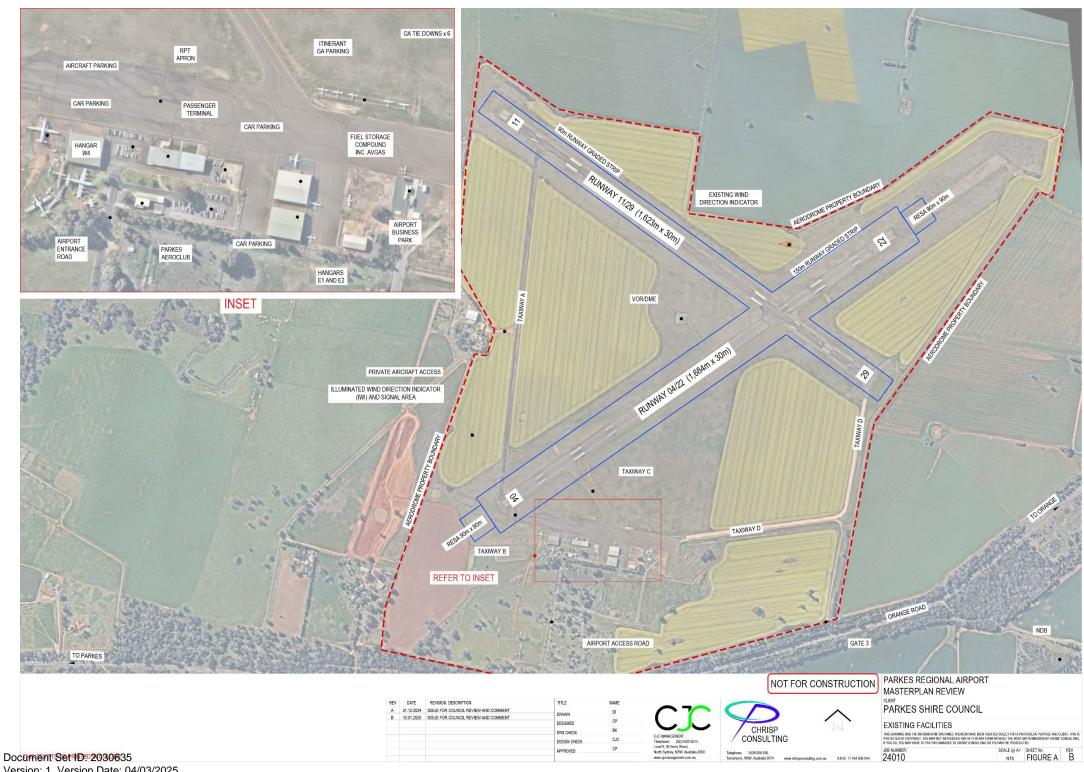


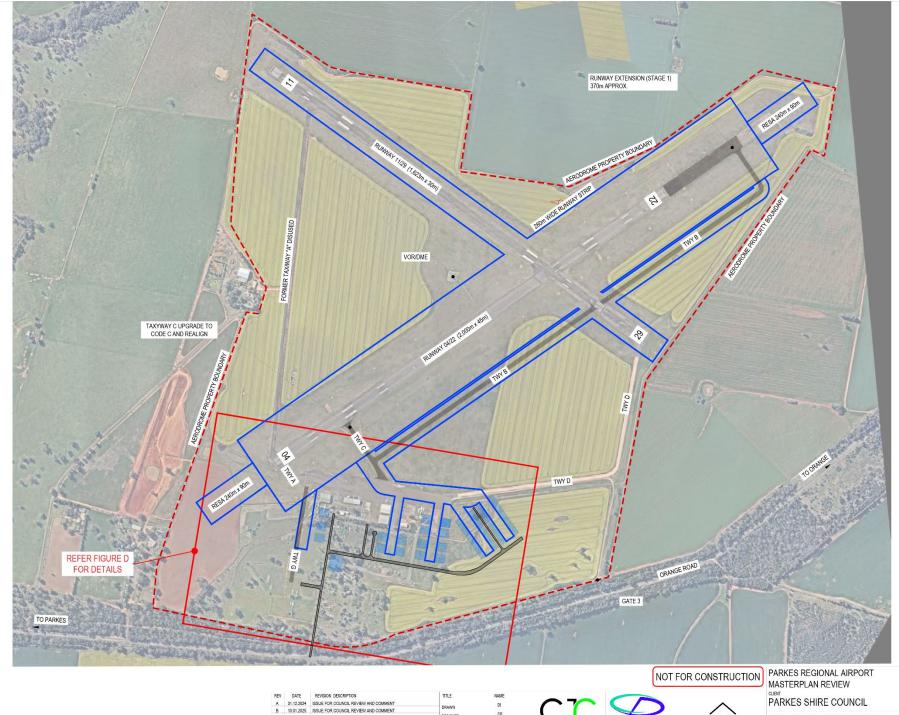


Digital What's on in Parkes TV /Board	Partnership Opportunity	Additional Income potential whilst marketing the regional assets and lifestyle benefits
Aeroclub Partnerships	Partnership Opportunity	Approach Aeroclub with potential Partnership collaborative approach. Create Value add Proposition, become known for exceptional pilot/passengers' services Additional Income potential for Aeroclub. Potential Aeromedical Patient/Pilot/Emergency Services Transfer /waiting areas/restroom/tea/coffee /couches/tv/Flying School /Instruction Rest Area, Restroom when terminal closed
Develop Future pans ops surface drawing PRA	Operational Need – High	Need to develop and adopt future pans ops as part of planning processes, to ensure uninhibited operations. Include as part of the DCP and LEP assessments.
Develop Future OLS drawing PRA	Operational Need – High	Develop and adopt future OLS (not current) as part of planning processes, to ensure uninhibited operations. Include as part of the DCP and LEP assessments.
Adopt NASF Guidelines	Operational Need – High	Adopt NASF as part of Council planning assessment processes and include in DCP
Solar undercover car parking	Staged solar undercover Car Parking (Rental and Secure Car Parks)	Subject to demand, need, and funding
Future Secure Car Parking	Business case to determine demand v need	Subject to business case findings and potential funding
Rental Car Bays/Solar /Undercover	Could incorporate Solar/undercover parking into existing car parks	Check Demand/Need/Funding
Airport Entrance Statement		Heritage Statement (consider HARS/Airport Heritage Walking th HARS and Walking Trail developments)
HARS Museum	Historic Aircraft Restoration Society – proposed Tourism Development.	Proposed museum site that will complement the Shell Harbour HARS Museum, with additional space to display restored aircraft and displays Subject to funding, approvals, and investments
Heritage Walking Trail	Circular walking path at Airport Entrance Road,	Proposed Tourism Walking track /attraction to incorporate tales of Wiradjuri history, RAAF airbase, fallen pilots, and insights of migrant camp life and site natural assets Subject to funding, approvals, and Investment

Appendix A: Parkes Regional Airport Masterplan Review







DESIGNED

DRG CHECK DESIGN CHECK APPROVED

Document Set ID: 2030635 Version: 1, Version Date: 04/03/2025

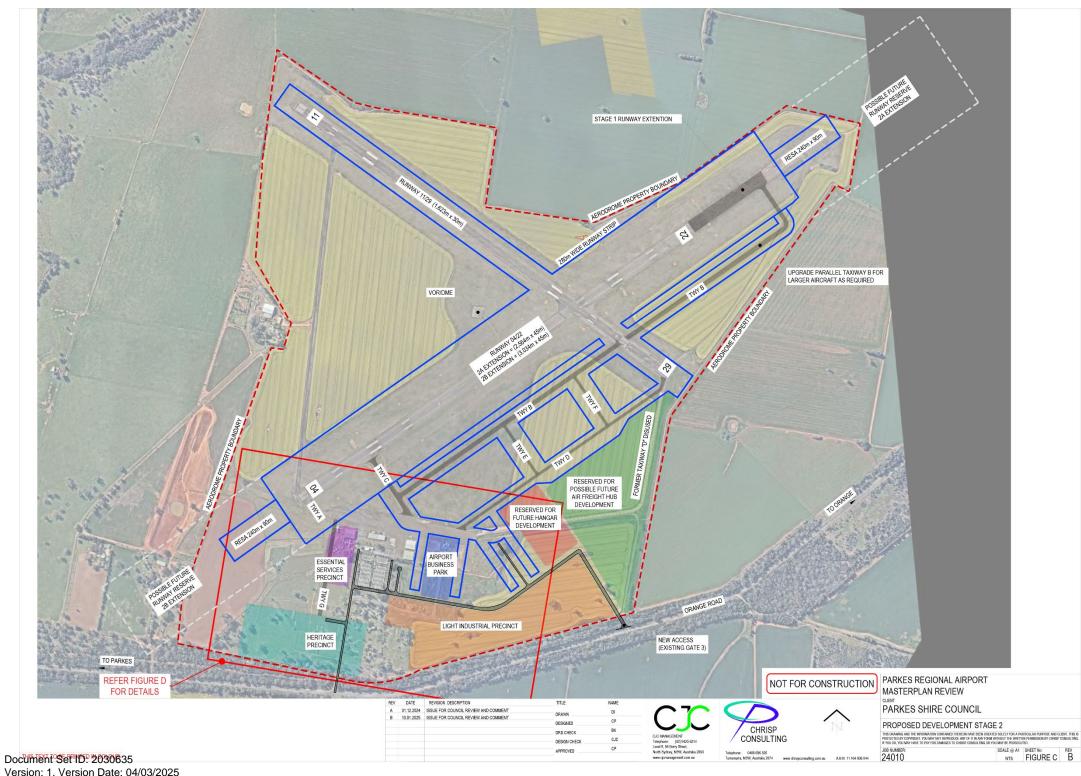
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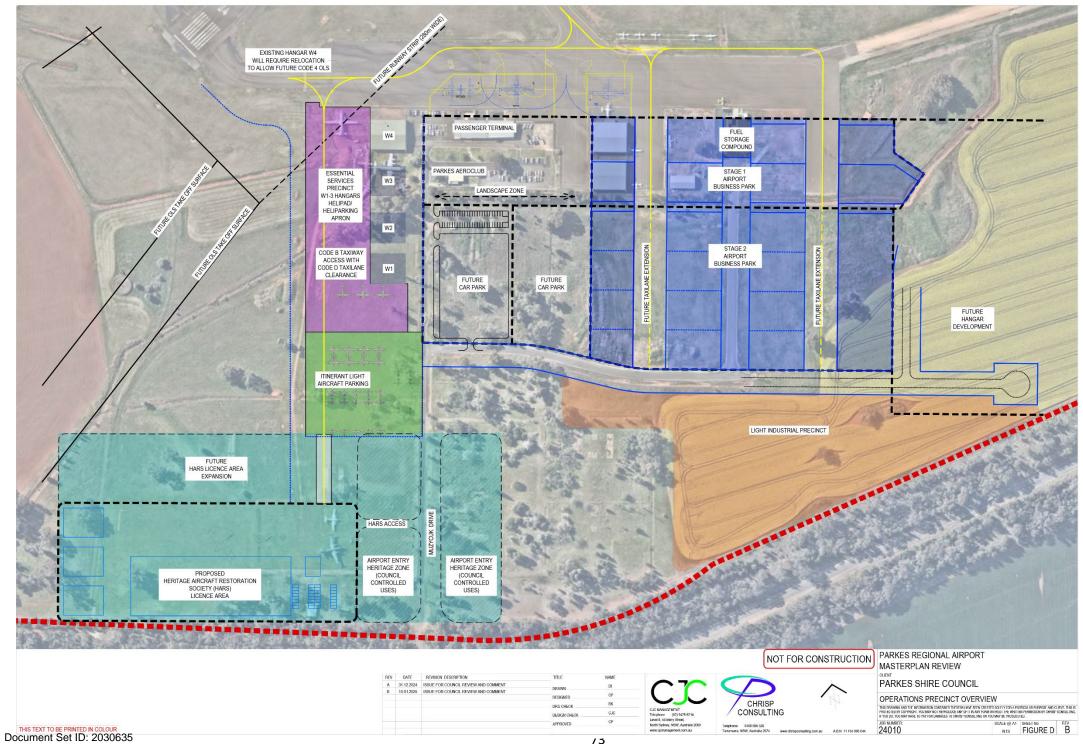
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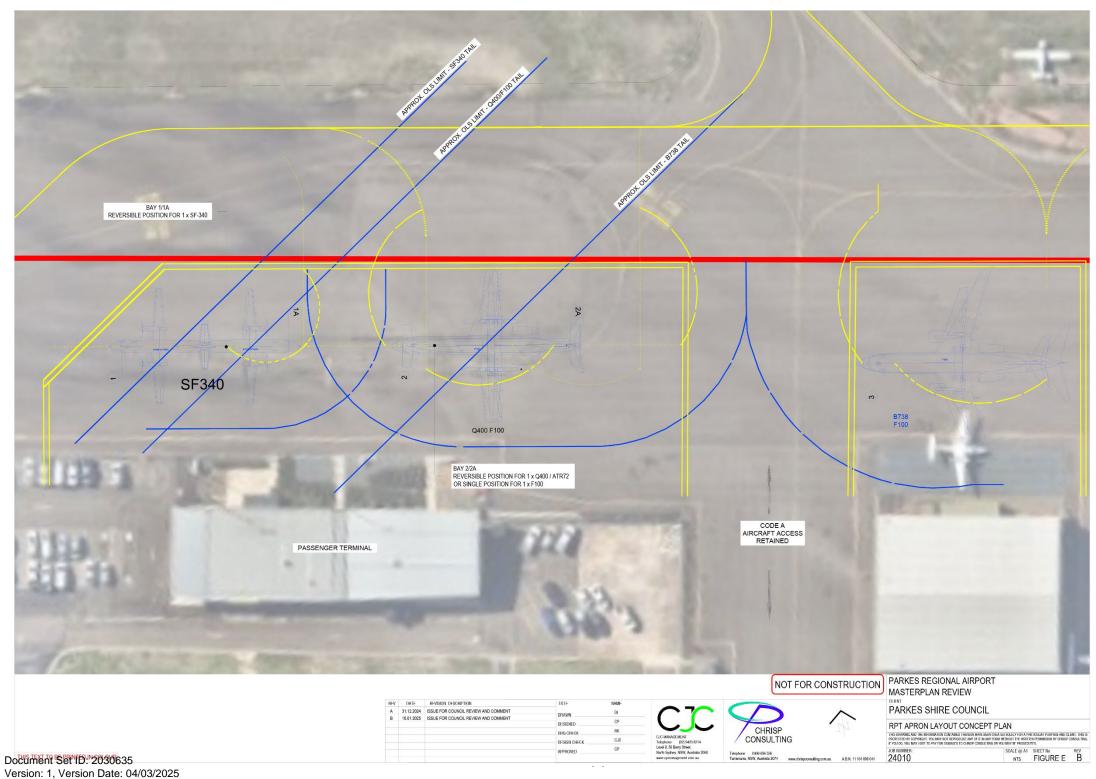
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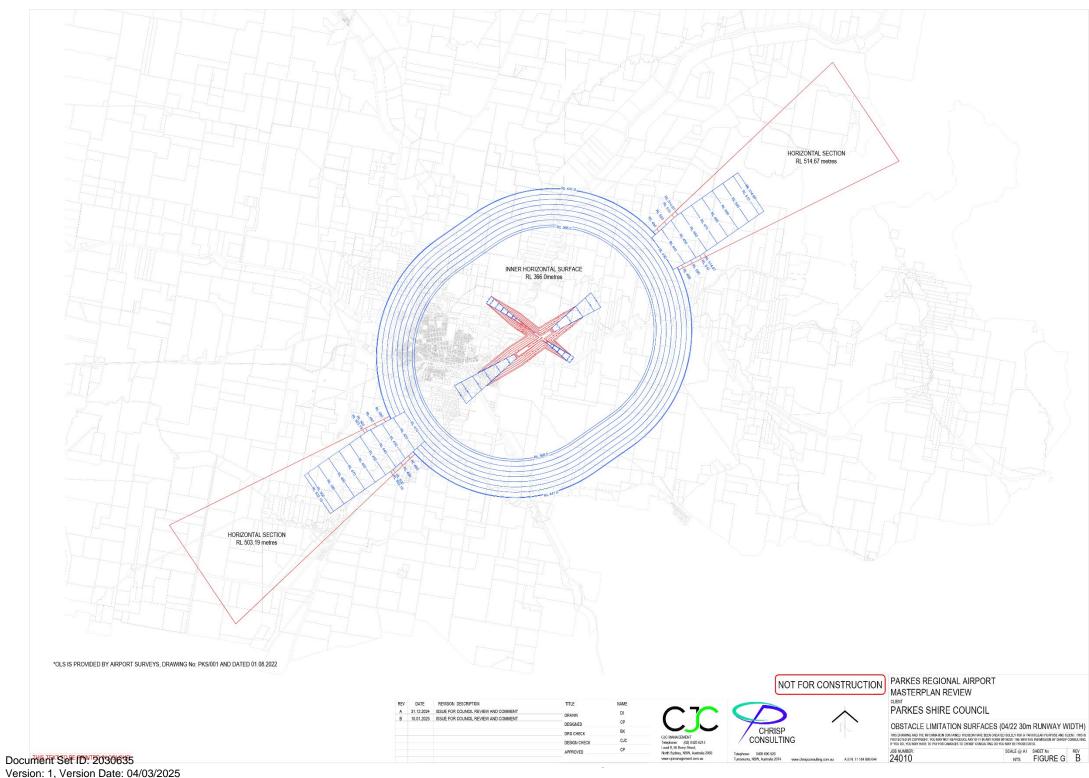
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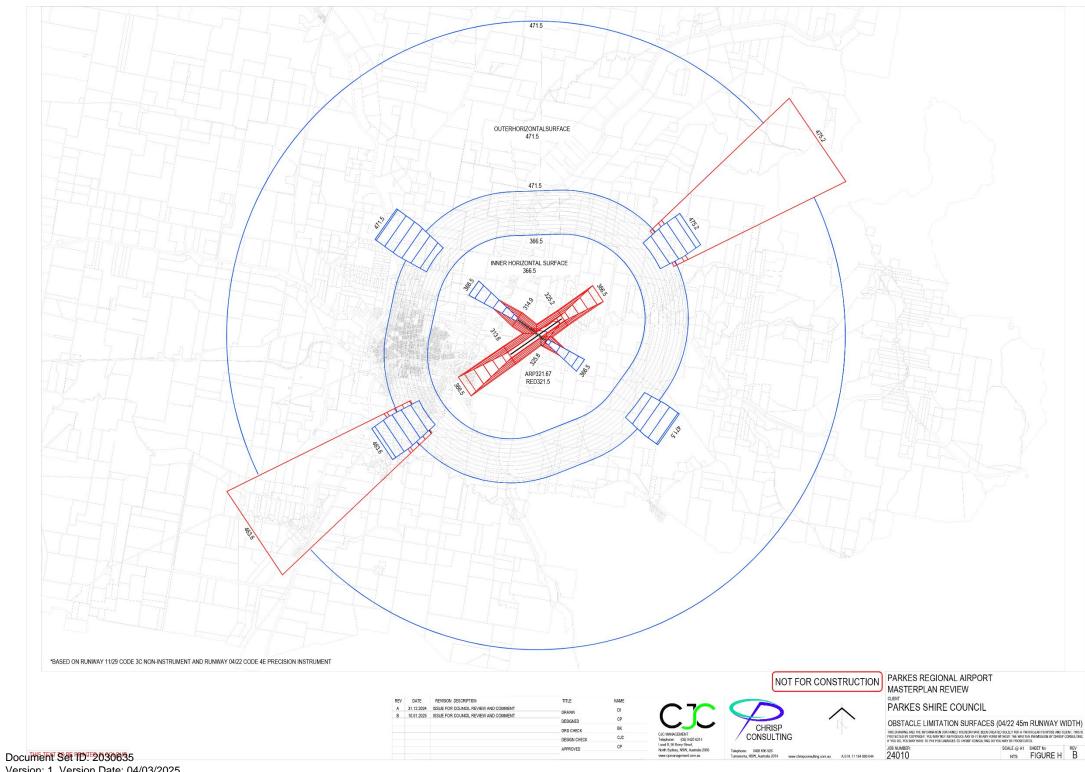


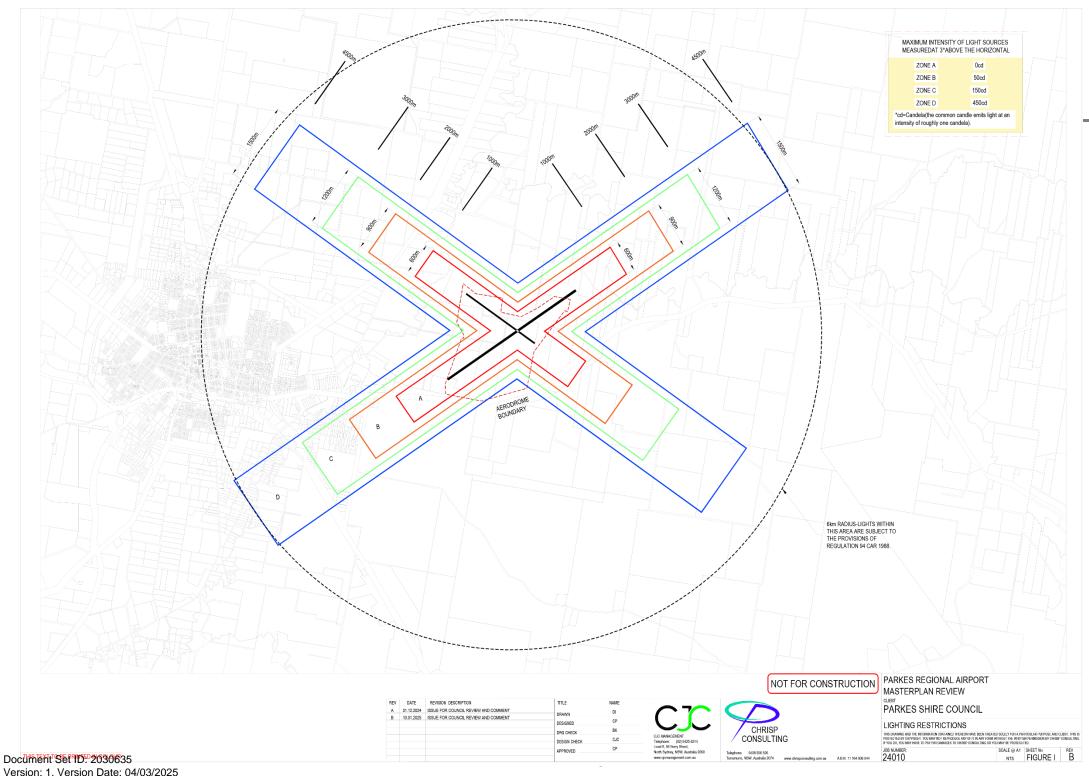












Appendix B: Airport Stakeholder Consultation

The stakeholders consulted are indicated in Table below.

Organisation	Representative	Category	Objective Area	Date
Parkes Shire Council	Mayor Councillor Neil Westacott; General Manager Kent Boyd; Chief Financial Officer Jaco Barnard; Executive Manager of Planning Scott Brakenridge; Economic Development Officer Katie Nash.	Client	Development & Economic opportunities	4.11.2024
Chamber of Commerce	Geoff Rice (President) Tracie Robertson, Belinda McCorkell	Corporate	Development & Economic opportunities	31.10.2024
Destination network / tourism	General Manager: Sean Haylan	Gov	Development & Economic opportunities	30.10.2024
Regional development team	Director: Josh Gordon	Gov	Development & Economic opportunities	5.11.2024
Regional Express	Operations Manager David Brooksby	Service	Economic opportunities Services /plans	1.11.2024
Qantas	Regional Manager Victoria, Tasmania and NSW: Adam Mee	Service	Economic opportunities Services /plans	Unconfirmed
Link	Manager of Network Strategy: Jeff Boyd	Service	Economic opportunities Services / plans	29.10.2024
Fly Pelican	Managing Director: Marty Hawley	Service	Economic opportunities Services /plans	7.11.2924
Air Link	Director: Matthew Kline, General Manager: Ron O'Brien	Service	Economic opportunities Services /plans	4.11.2024
Ground Handling (Rex)	Manager: Allison Hattenfels	Supplier	Suitability, standard of airport facilities Services to meet demand	28.10.2024
ARCAV Air Pty Ltd (Aero Refuellers)	Manager Operations: Don Kemble	Supplier	Development opportunities Suitability, standard of airport facilities Services to meet demand	7.11.2024
Parkes Aero Club	President: Wade McConnell Secretary: Brett Preisig Hangarage: Greg Rout	Tenant	Development opportunities Suitability, standard of airport facilities Services to meet demand	28.10.2024
HARS Further Engagement	Mike De La Hunty Bob De La Hunty It with CJC Management	Tenant	Development & Economic opportunities Suitability, standard of airport facilities Services to meet demand	6.11.2024



Freight	Olivia Thompson – GAM Group Dwayne Jude, Interim GM Team Global	Service	Determine Freight growth/content	18.12.2024
	Express (Formerly TOLL)			
NSW Air	Senior Flight Director, Christopher	Service	Aeromedical Services	17.12.2024
Ambulance	Wildey			
Parkes Aviation	Tim Hall Matthews, Owner/Operator	Tenant	On site Aircraft	6.11.2024
	Parkes Aviation		Maintenance	
			business	



