

Armidale Regional Airport

Master Plan

June 2016



The objective of the Armidale Regional Council Regional Master Plan is to identify the key initiatives that will inform our strategic plans and direct the energy and resources of Council to build a modern, connected city and region; that caters for the needs of our community, drives sustainable growth and meets the aspirations contained within our Community Strategic Plan.

*An inclusive process of research, workshops,
community engagement & collaboration*

Table of Contents

Table of Contents.....	3
Introduction.....	1
The Opportunity	2
Stakeholder and Community Consultation.....	4
Positioning as a Regional Hub	5
Commercial (Land) Development.....	9
Airport Site Development	10
Existing General Aviation Land	11
Rural Fire Service	12
Residential (Airpark) Development.....	13
FBO Facilities, Fuel Services	14
Airport East Development	14
Zoning of Land.....	15
Project Management and Marketing.....	16
Land Purchase and Financing.....	16
Financing	16
Future Growth.....	17
Land Acquisition.....	18
Tourism, Recreational and Support Facilities	18
Highway Service Centre	18
Airport Hotel	20
Car Museum.....	20
Air Museum.....	21
Parks and Gardens	21

Terminal Upgrade	22
Terminal Requirements	22
Upgraded Terminal Concept (Terminal 2)	23
Food and Beverage	25
Exhibition and Retail Areas	25
Facility Services (Cleaning)	25
Further Terminal Expansion (Terminal 3)	26
Apron, Taxiways and Runway works	27
Apron.....	27
New 45M wide 05/23 Runway.....	27
Precision Approach	28
Ground Transport, Parking and Airport Access	28
Access Roads, Parking, Security and Signage.....	28
Security	29
Road Naming/Signage.....	29
Ground Transportation	29
Economic Development and The Visitor Economy	30
Economic Development.....	30
Industrial Land Development.....	30
Residential (Airpark) Land.....	31
Tourism Opportunities.....	31
Air Charter.....	31
Joy Flights, Sightseeing	32
Air and Transport Museums	32
Saumarez Homestead	34
Implementation Timetable (Stage 1).....	35
Financial Performance	36
APPENDIX	37



Artists Impression of the Upgraded Airport Precinct

Introduction

The Armidale Regional Airport is a curfew free, domestic airport located mid-way between Sydney and Brisbane serving the City of Armidale and the towns, villages and rural communities of the New England Region.

Located 6kms south west of the Armidale CBD, alongside the New England Highway, the airport occupies a 262 hectare site owned by Armidale Regional Council. The airport is at an elevation of 3,556 feet (1,084 metres) AMSL and has two non-intersecting runways in a 'V' configuration. The passenger terminal, car park and general aviation zones are currently sited in a wedge-shaped area located between the main (05/23) runway and the New England Highway.

With excellent highway access, close proximity to the services of the City of Armidale and offering excellent infrastructure, Armidale Regional Airport is ideally positioned as part of the State's air transportation network, with the aim of further positioning the airport as a growing hub for air travel within NSW and the eastern states. Available land within the airport precinct presents an excellent opportunity to grow general aviation, the visitor economy and to drive economic development, addressing needs identified within the Economic and Tourism Development Strategy (AECgroup, May 2011)

This Airport Master Plan is the product of consultation with a broad range of stakeholders, desktop research and a review of prior reports, to identify future needs and to ensure longer term flexibility of the airport precinct. The key aims of this master plan are to:

- ✓ Position Armidale Regional Airport as a growing hub for RPT services
- ✓ Support and grow existing general aviation and aviation related business activity
- ✓ Diversify current airport income through expansion of the airport's property portfolio and
- ✓ Upgrade and expand current airport infrastructure, capabilities and services.



Figure 1 – Location of Armidale Regional Airport

The Opportunity

Armidale Regional Airport is a *significant* asset serving the region through the provision of aviation related services for passenger flights, air freight, aircraft maintenance, emergency services, general and private aviation.

The airport also supports established and growing sectors within the regional economy; including education, the visitor economy, agriculture, business development, sporting and leisure activities and has significant potential for further diversification of its property portfolio to attract new income generating activities.

- Education represents the largest sector within the Armidale economy (22% (AECgroup, May 2011)) and includes many non-local, interstate and overseas students. The availability of scheduled passenger flights is key to interstate and overseas students being able to access both the University and local boarding schools. Air services from Armidale to Sydney and onward on international flights, serve students, visiting academics, occupational trainees, technicians and support staff providing travel both to and from interstate and overseas destinations.
- Armidale Regional Airport provides air services essential for support of the visitor economy, sporting and leisure events and for visits to friends and relatives. Additionally, the airport enables a range of sightseeing tours and adventures from scenic flights in fixed wing aircraft or helicopters, day trips to out-of-the-way pubs and wineries, heli-fishing and wilderness adventures - in the heart of the New England gorge country.

The visitor economy represents a significant and growing component of the regional economy (5% (AECgroup, May 2011)) and it's planned that airport based tourism will be further enhanced with a major upgrade to the terminal building which will include display facilities and a combined visitor information centre and retail outlet. Two new museums are proposed, featuring vintage automobiles and historic aircraft and a highway service centre will further increase airport visitation while serving both air travellers and motorists travelling on the New England Highway.

- To date the airport precinct has focussed on aviation related activities, however available land 'outside' the airspace protection zone, offers major development potential for tourism, civil buildings, residential and commercial development – including an airport hotel and highway service centre. Approximately 14 hectares of land zoned IN2, is available in Stage 1, for aviation related activities and commercial development and a further 5.5 hectares of land zoned B6 will allow development that includes an airport hotel, museums, highway service centre, visitor information centre and civil buildings.

A further 8.5 hectares is proposed for development of a residential air-park, offering combined residential housing and aircraft storage. These development options are shown on the Airport Master Plan, page 8.

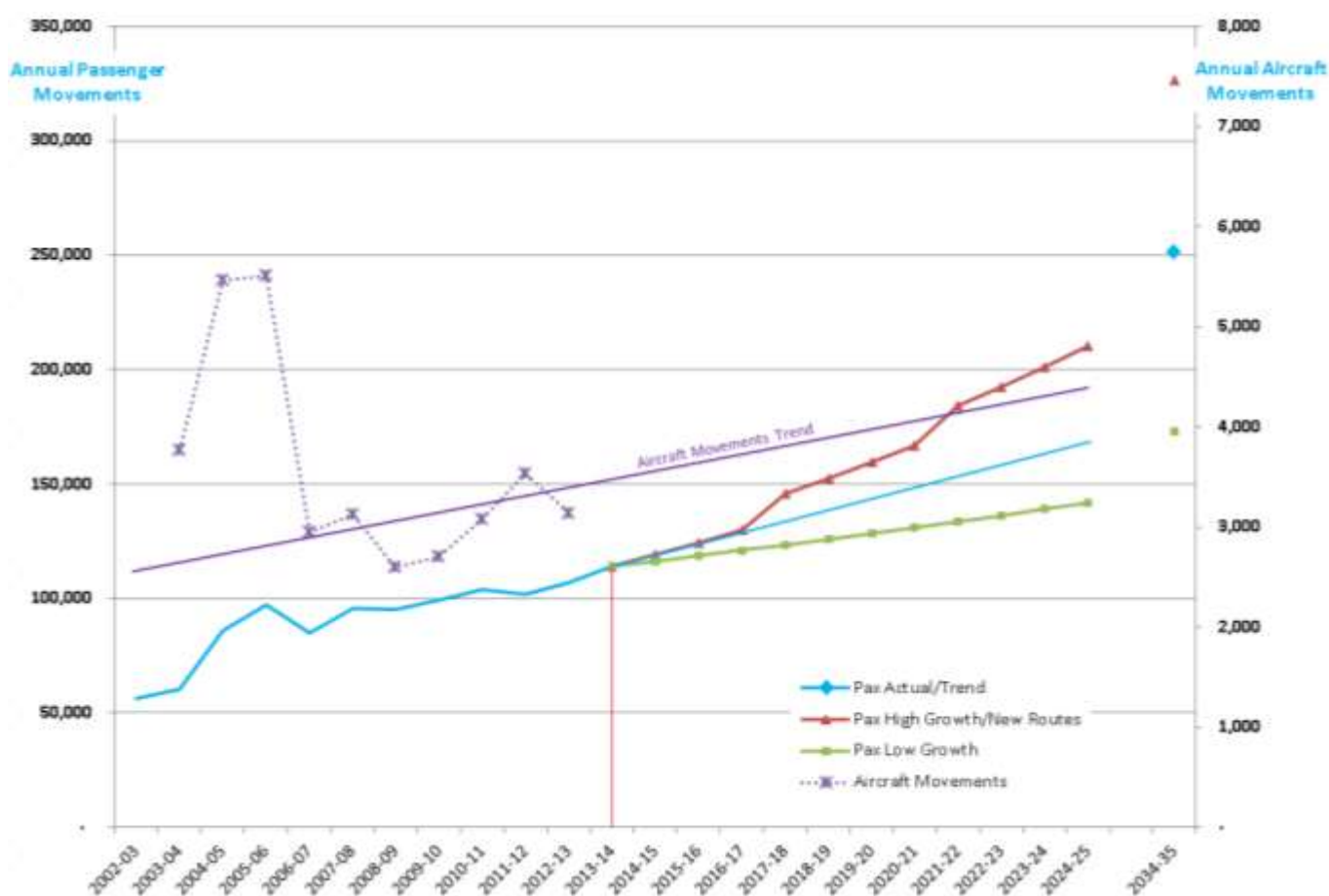
- Armidale and the broader New England North West region, represent highly productive agricultural enterprises, built upon wool, beef cattle and fat lambs, with increasing horticultural activity offering export potential. The airport supports these activities and enables Armidale City to be a major agricultural service centre through the support of the University, CSIRO and other providers, meeting the growing global demand for food and food technology.

- The availability of the NBN and direct and inexpensive air travel to Sydney and other capital cities supports the continuing growth in professional services and information technology. These capabilities enable the potential re-location to Armidale of Sydney and nationally based government departments and other non-government service providers – taking advantage of the quality of life, health services, accessibility and communications of this region.
- With the recent addition of a second carrier, Regional Express, and their planned introduction of scheduled services between Armidale and Brisbane, growth in passenger numbers is forecast to increase from the current level of ~120,000pa to ~175,000pa in ten years.

The development and promotion of Armidale Regional Airport as a 'regional hub' for flights feeding the east coast cities of Sydney, Newcastle, Brisbane and Melbourne, will drive further growth in passenger numbers and enhance the visitor economy and business activity. Much of the new and upgraded infrastructure set-out in this plan is to support the positioning the Armidale Regional Airport as such a 'hub', offering competitive services and excellent facilities.

Overall, the airport precinct offers significant opportunity for growth and diversification of income through commercial development while providing a modern airport that supports education, the expansion of tourism and professional services and a push to establish an air-transportation hub.

These activities will combine to make Armidale Regional Airport a strategic and growing component of the regional economy and a driver of further business and tourism growth.



Source: (Airplan, May 2014)

Figure 2 – Annual Passenger Movement Growth Scenarios to 2035

Stakeholder and Community Consultation

During the preparation of this plan, Council has undertaken consultation with government agencies, airlines, general aviation operators, airport businesses, private aviators, the general public, community groups and land owners to identify key issues and propose viable solutions.

Throughout the master planning process, for both *this* Airport Master Plan and for other planned projects, stakeholder awareness, project information and community feedback have been facilitated through the availability of the Master Plan website (armidaleregional.nsw.gov.au), popular social media channels and where appropriate through newsletters, flyers, surveys and the media. In addition, interested stakeholders can subscribe to receive regular e-mail updates.

Figure 3, below, shows a ‘three-step’ community consultation process, by which initial input - ideas, options and issues, can be canvassed and used to frame a ‘concept plan’ which can be discussed with stakeholders and the community through formal meetings and via the online channels described above. With appropriate revision, the initial concept plan will be endorsed during a Council workshop for further Community engagement prior to adoption by Council for Public Exhibition. Prior to formal adoption by Council, feedback will be considered and included in the final Master Plan as appropriate. Implementation of the adopted Master Plan will be planned and included in Council’s LTFP, Delivery and Operational plans (see separate Implementation Report).

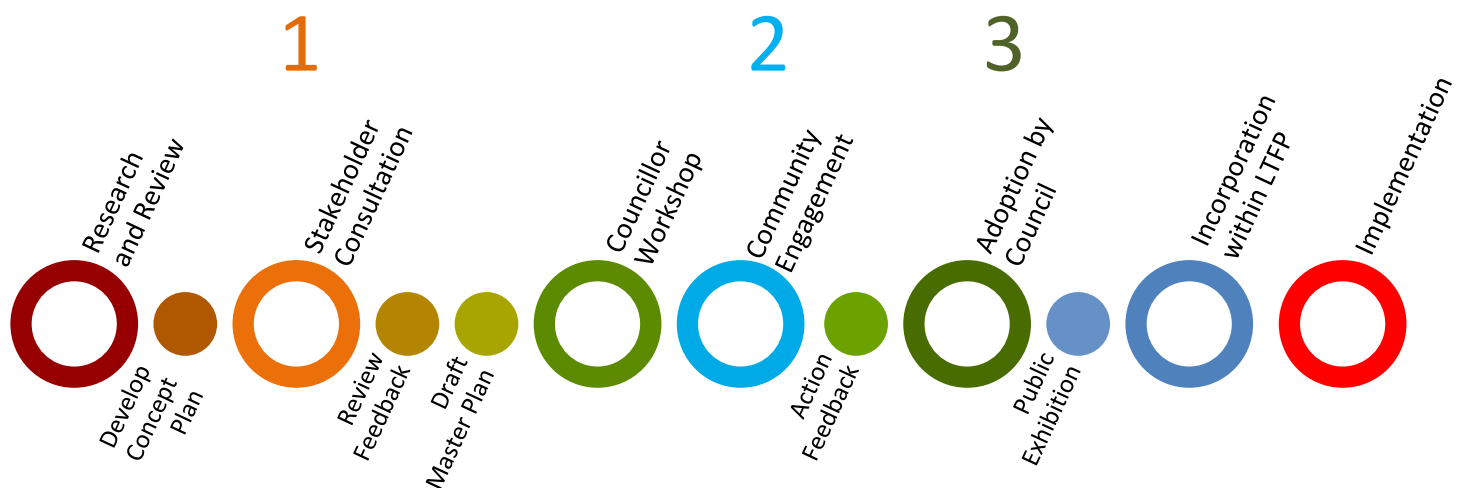


Figure 3 - Stakeholder and Community Consultation Process

Stakeholders consulted in the development of the concept plan included:

- Avis Car Rental
- Edwards Aviation
- Fleet Helicopters, Fleet Adventures
- QANTAS Link
- Regional Express Airlines
- Saumarez Homestead
- Council’s Planning, Engineering, Economic Development, Tourism and Finance staff

Positioning as a Regional Hub

Common practice in Australian air travel is 'point-to-point' flight routing. The diagram below, Figure 4, shows traditional point-to-point flights that take passengers *directly* from their starting point to their final destination. This is commonly seen with direct flights to and between Australian capital cities where it is unusual for passengers to make flight connections (other than via regional feeder airlines at capital cities).

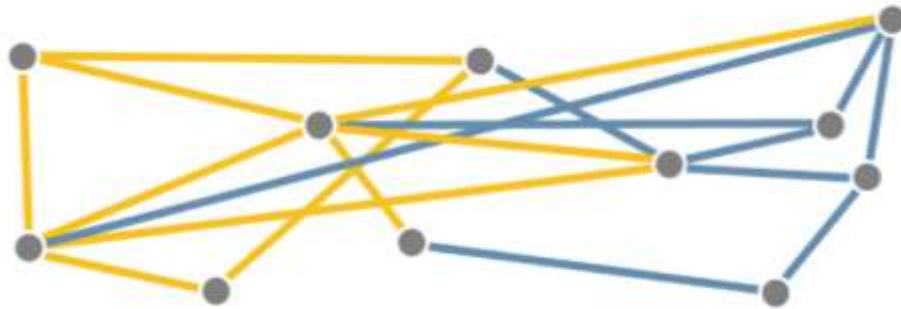


Figure 4 - Point to Point Flight Routing

Within regional Australia, every city or larger town cannot offer direct flights to, say, Sydney, Newcastle, Brisbane or Melbourne, because of relatively low passenger numbers and higher operating costs. If affordable air travel is to be available from these smaller centres, an alternative approach is required.

The diagram below shows a typical 'hub and spoke' model, where travellers change planes/flights en route to reach a destination not served by direct flights. This routing structure offers airlines reduced operating costs, higher passenger numbers and provides smaller centres with an air travel option that was previously unavailable.

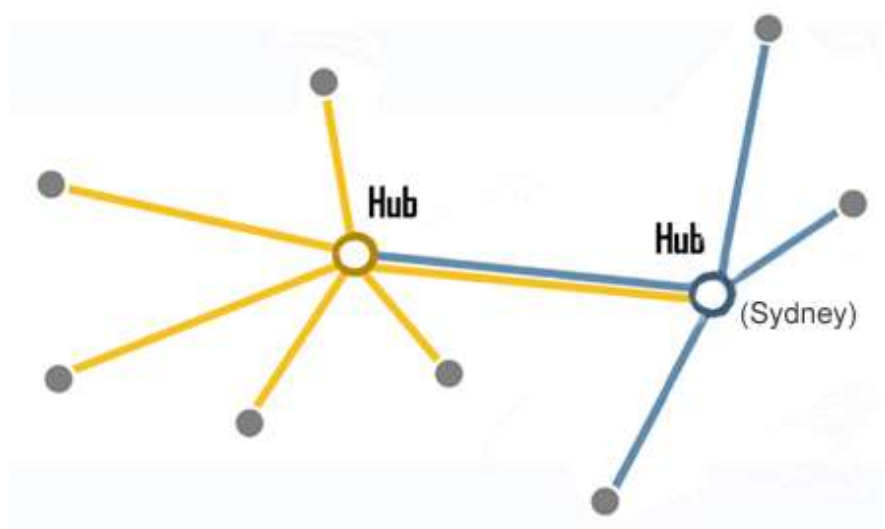


Figure 5 - Hub and Spoke Flight Routing



Figure 6 - Map showing Passenger Catchment for Armidale Regional Airport

During the period of this plan, it is proposed that Armidale Regional Airport be positioned as a 'regional hub', serving the cities and larger centres located in north western NSW. Many of the infrastructure proposals and upgraded facilities set-out in this plan are to support the positioning of Armidale airport as such a regional hub.

New infrastructure proposed for the Airport includes a new and upgraded runway, apron expansion and new taxiways, security screening, a precision [navigation] approach for all weather operation, upgraded terminal facilities and support services - including an airport hotel, highway [fuel] service centre, short, long term and secure parking.

Figure 6 shows the Catchment Area for passengers travelling through Armidale Regional Airport. Over the plan period, the Airport can be developed to become a *regional hub*; serving such centres as Glen Innes, Inverell, Orange and Narrabri with direct flights to Sydney, Brisbane and Newcastle and connecting flights through either Sydney or Wagga Wagga to Melbourne and Adelaide.

Figure 7 depicts a possible route structure operating through Armidale Airport.

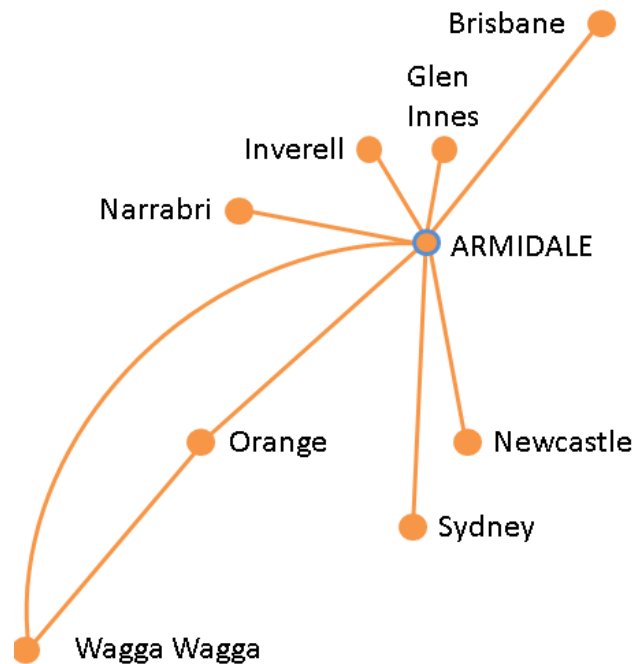


Figure 7 - Potential routes from Armidale Regional Airport- serving as a rural-hub

Corporate Air and Regional Express (Rex) have expressed interest in introducing return flights to Brisbane as a new destination. In the case of Rex, the introduction of flights to Brisbane and from Wagga Wagga via Orange would serve mining related passenger traffic destined for Brisbane. The Brisbane route would initially grow passenger numbers by ~10,000-15,000pa [8-12%].

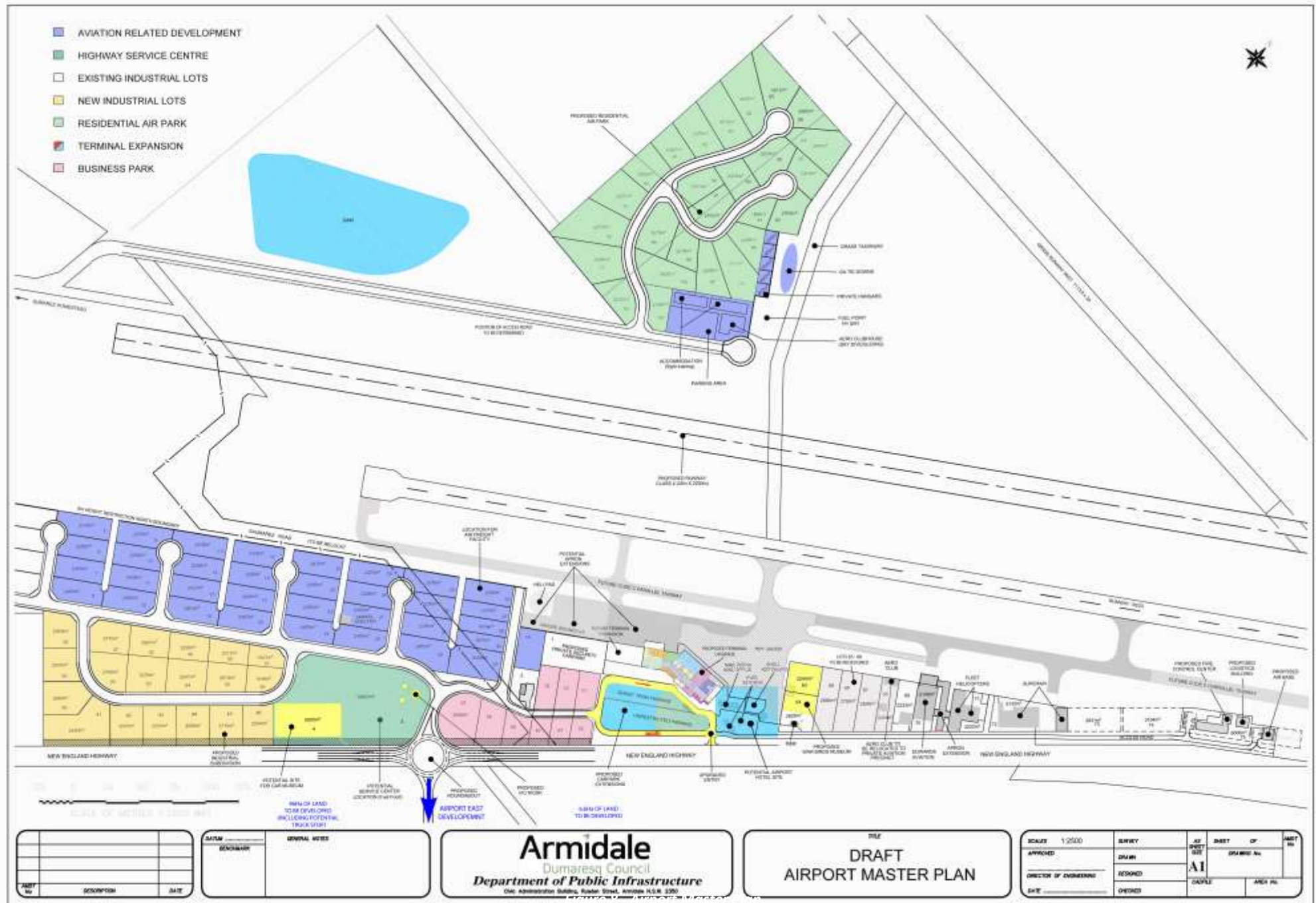
While the introduction of the hub and spoke system has enabled rapid growth and marketing flexibility within the global airline industry, especially within the United States; in a *rural context*, the establishment of Armidale as a hub airport will allow for air travel to and from destinations not currently served by RPT carriers.

The hub and spoke system with its reduced number of routes connecting ‘spoke’ destinations offers reduced costs, increased passenger loads and earlier introduction of airline services to smaller destinations.

Worldwide adoption of the hub and spoke model is being universally adopted and will no-doubt see implementation outside of Australian capital cities in coming years.

To pursue development of Armidale Regional Airport as an airport hub, it is planned to:

- *Provide the infrastructure and facilities that will enable and encourage such an approach and*
- *Undertake discussions with appropriate carriers, including Regional Express, QANTAS Link and private carriers, to determine their interest in the introduction of new [feeder] routes originating from or transiting through Armidale airport.*

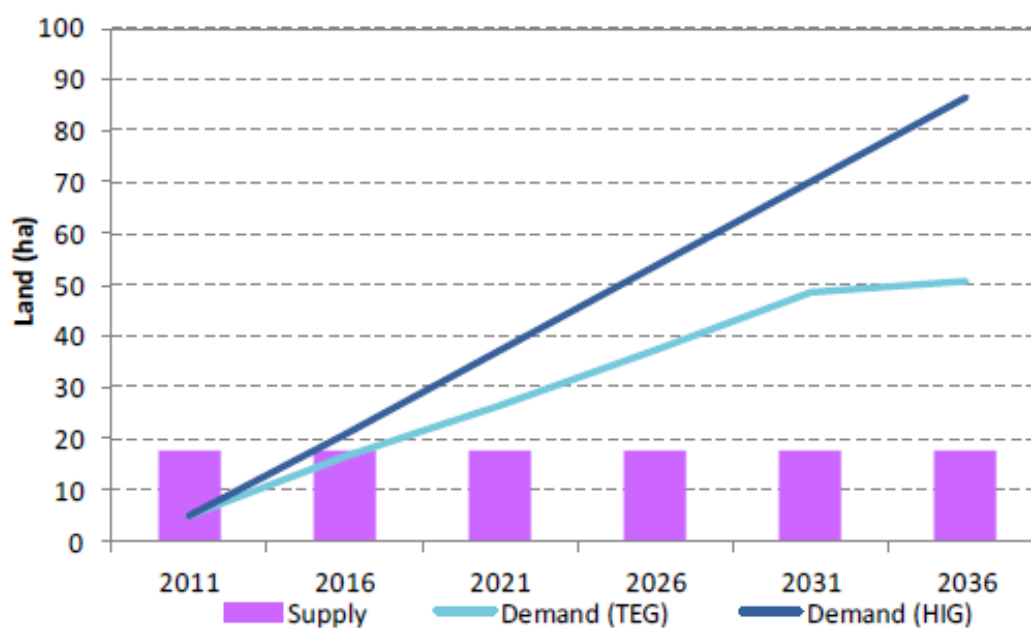


Commercial (Land) Development

An analysis of the industrial land market in Armidale indicates there is strong demand for industrial land, based on community aspirations/economic growth targets, pent-up demand and a lack of current supply (AECgroup, May 2013). Armidale currently has 146.9ha of land zoned for industrial use of which 130ha is occupied. It is estimated that of the 17.5ha of vacant land potentially suitable for development, the majority of which is located within the Acacia Park precinct, much of this stock does not meet customer (pricing) requirements.

The Airport Site is the only area currently zoned for future industrial development, comprising 70ha in total. There is a further 55ha of industrial land potentially available if the Airport East Site is rezoned. To date, these land parcels have not been available for development because of a lack of the necessary infrastructure (water, sewerage and NBN); which is *currently* being made available.

The following chart shows the forecast demand for industrial land over the next 25 years, where the existing under supply of industrial land is projected to further increase to between 33ha to 69ha by 2036:



Note: TEG – Targeted Economic Growth Scenario, HIG - High Industrial Growth Scenario

Source: (AECgroup, May 2013)

Figure 9 – Demand for Industrial Land

This Airport Site represents a major land asset of Armidale Regional Council, from which Council derives minimal non-RPT revenue. Outside the area identified as the ‘airspace protection zone’, 70ha of land is zoned and available for development following the provision of services - increasing the supply of land available in the development pipeline and fostering business growth.

This plan proposes that the Airport (West) Site be developed to include a mix of industrial lots ranging in size from small to medium (1,500 to 5,000sqm), with larger lots (5,000 to 15,000sqm) potentially available through a combination of smaller lot sizes.

The shortage of competitively priced industrial land in Armidale is constraining economic growth and new, appropriately zoned land is required to drive investment by either new or established businesses (AECgroup, May 2013).

Site	Size (ha)	Useable ¹ (ha)	Zoning
Airport Site	66.5ha	35.3ha	IN2
Airport East Site	53.6ha	53.6ha	IN2
West Armidale Expansion - West	19.3ha	3.4ha	IN2 ²
Existing West Armidale Precinct	Existing	Existing	IN2 ²
Acacia Park North Extension	TBD	TBD	IN1
Total	139.4ha	92.3ha	

Figure 10 - Potential Land for Industrial Development

The potential land identified in the above chart, will meet the projected demand for up to 90ha of industrial land over the next 25 years. It should be noted that the Airport precinct itself offers some very considerable advantages to prospective purchasers and lessees, including location alongside the New England Highway, proximity to a regional airport with multiple daily flights to Sydney, full services including water, sewerage and NBN fibre to the premises and flexible development and financing options managed by ADC.

Airport Site Development

By reference to the Airport Master Plan, page 8, it can be seen that aviation, business and industrial land development is proposed on land located south west of the terminal and car park.

Approximately 14ha of useable land zoned IN2, is available for aviation related, business and industrial development and a further 5.5ha of land zoned B6 will allow development of an airport hotel, proposed museum, highway service centre, visitor information kiosk and civil building precinct.

The present public car park is to be expanded to approximately 2¾ times its current size (from 81 spaces to 219 spaces) and is proposed to offer both timed and untimed parking in a ratio of ¼ timed to ¾ untimed. It is *not* envisaged that there will be a charge for timed parking and that timed parking will be 2P for up to 2 hours duration. Timed parking will ensure the availability of parking in close proximity to the terminal for airport visitors picking-up or dropping-off passengers or visiting the airport shop or café. In keeping with the positioning of the airport as a regional facility, untimed parking will be available for passengers travelling for the day, a week or longer; who may have originated their journeys in centres such as Glen Innes, Guyra, Walcha or Uralla.

For those travellers wishing to secure and protect their vehicles from break-in, theft or weather related damage, an undercover short and long term secure parking facility is planned and will be privately constructed and operated. This park will have a capacity for ~100 standard vehicles.

North of the relocated and upgraded Saumarez Road, 40 'aviation-related' industrial lots are to be developed. Each of these lots will have *both* road and airside/taxiway access. These lots have been designed to accommodate aviation businesses who need access to the taxiways and to the main runway. In addition to aircraft operators, these businesses may include aircraft and engine maintenance, avionics, ramp services, fuel sales, aircraft sales/acquisition and painting and upholstery. Lots 33 to 37 have been identified as suitable for *airfreight operations* requiring both road and apron access. The growth in regional horticulture may see the export of such products as mushrooms, tomatoes and chillies directly into Asia. It is recognised that all lots in this 'specialist' area may not be initially leased or sold to aviation related companies; however, flexibility and long term priority must be focussed upon general aviation.

South of the relocated Saumarez Road will be a further 20 industrial lots ranging in size from 1,540sqm to 5,420sqm with larger lots achievable by the merger of smaller lot sizes. Six of these lots will 'front' the New England Highway; however, access will be via the proposed roundabout. These lots will suit any commercial or light industrial business. The approximate total land value of all lots in the Airport Site development is \$21M with a potential rateable income of \$150,000pa, if all lots were to be sold (at current rates).

Lots 1B, 1C, 1D and 57 to 62, cover land identified as a specialist 'business park'; providing office accommodation and civil buildings, offering a more visually attractive entry to the Airport Terminal area. It is planned that the Business Park design includes energy efficient and sustainable design principles as a demonstration precinct located at the airborne entrance to the New England.

Proposed road access to all sites and to Saumarez Homestead will be suitable for articulated vehicles, B-doubles and coaches and the relocated Saumarez road will provide improved access to Saumarez Homestead from the New England Highway roundabout.

Existing General Aviation Land

Future development of the existing general aviation land is constrained by the physical boundaries of the runway/taxiways to the north and the New England Highway to the south.

Armidale Regional Airport is fortunate to have a number of established and successful general aviation operators, offering jet and helicopter charter, fixed wing and helicopter maintenance, flight training, aerial spraying, fire fighting and a range of sightseeing tours and adventures. It's proposed that future development of this General Aviation area is limited to business/professional operators and that the 'private aviation' facilities currently in this zone be re-located to a new, private aviation precinct to be established on the western boundary of the airport.

While there is little scope for the creation of additional leasehold or freehold lots, two (2) new lots have been identified between Super Air and the new RFS facility - to be constructed to the North East of the GA area. The re-location of private aviation away from this area will also allow for the 'cleaning-up' of a number of randomly positioned smaller hangers, which will enable four (4) further general aviation lots to be identified. The creation of the private aviation area will include re-location of the existing aero club.

Fleet Warbirds (part of Fleet Helicopters) owns and operates a number of historic military aircraft ranging from a Boeing Stearman, T6 Texan to a L39 advanced jet trainer. It is planned that an 'Air Museum' be established to hangar these aircraft and to enable viewing by the public.



Figure 11 – Two of Fleet Adventure’s War birds

The identified site characteristics required for the air museum include visibility from the New England Highway and direct access to taxiways and the active runway. For this reason a potential museum site has been identified immediately North East of the current Shell fuel facility and the future site of the proposed airport hotel.

To provide improved access and to allow both Edwards Aviation and Fleet Helicopters to better serve their tourism related customers, it is proposed that a new taxiway and apron be constructed from the access road to the new Code C taxiway. This taxiway will greatly enhance the customer experience when passengers are boarding and alighting or undertaking an extended pre-flight briefing.

Rural Fire Service

The Rural Fire Service’s aerial firefighting base has been established with a new, purpose built facility recently constructed. This facility is located at the North Eastern end of the General Aviation area (page 8). The new base will support the firefighting operations of the RFS in the New England Zone, where crews are regularly stationed during summer months. This new facility will provide for equipment storage and support facilities for staff and off-duty pilots.

As part of a broader plan for the New England Zone, the proposed airport site will enable other RFS services to be re-located; including RFS Aerial Firefighting Training and, importantly, the Zone Control Centre which will command all firefighting operations - whether undertaken by land or from the air.



Residential (Airpark) Development

Residential airparks allow people to both live in close proximity to an airfield and keep an aircraft in a hangar at their home; either as a separate building or integrated within the house design. Aircraft have either direct taxiway access to the runway or, as it is proposed for the Armidale Airpark; access will be through a security gate to the airside/secured area.

Airparks have operated successfully in the United States for over 30 years, with well over 150 airparks now established; some accommodating upward of 1500 homes. A growing number of airparks are emerging on the east coast of Australia. To date many have typically developed in rural or peripheral locations on private or remote airstrips with few facilities or amenities. In contrast, Armidale Airpark is to be located in close proximity to a major rural city, adjoining a substantial regional airport offering excellent aviation facilities, runway lighting, navigation, maintenance and support services.

It is planned that the airpark be a 'gated' and secure community with combined road and taxiway access constructed on private land and offering excellent community facilities including an active aero-club, F&B and FBO services (fuel and maintenance).

In addition to residential homes, accommodation may also be provided for visiting aviation specialists, flight training students and for transiting or emergency service pilots.



Figure 12 – A typical Residential Airpark development

It is planned that following the establishment of the Private Aviation precinct, a number of additional facilities could also be established:

These will include the Aero Club and clubhouse. The clubhouse will be the focal point of the private aviation community, with the potential to support private aviation, gliding and sky-diving. With growth in the number of residential blocks within the air-park, the clubhouse will be increasingly popular as a social gathering venue with increased use of catering, BBQ, lounge and bar facilities. Other facilities to be established may include 'budget' accommodation for flight training students and for transiting pilots overnighing at the airport. This accommodation can be simple and inexpensive.

FBO Facilities, Fuel Services

There also exists the opportunity for the Aero Club to become a Fixed Base Operator (FBO), offering a range of services to private aviation - including fuel purchase, aircraft hire/rental, food and beverage, transportation, tie-downs, hangers and a pilot lounge.

These services could provide the Club with a growing income stream following growth in private aviation. It is suggested that aviation fuel (Av-gas) be made available at this location, recognising that this class of fuel is sold predominantly to smaller fixed wing and rotor aircraft.

The availability of a quality, service-orientated FBO facility will be a key driver of interest in private aviation and visitation to the airport.

Airport East Development

In addition to the Airport [West] Site, it is proposed that the owner of private land held on the eastern side of the New England Highway be encouraged to develop this 56½ha site to provide an additional 50ha of useable industrial land. Like the Airport Site, the availability of infrastructure services currently being installed will further support such a development.

Potential interest in this land includes a freight distribution operator, a small and a large animal abattoir and cold store. It is proposed that a truck [fuel] stop, diner and associated facilities also be considered, to compliment the Highway Service Centre on the western side of the Highway.

Together with water and sewerage, the availability of NBN with fibre to the premises will be an attractive service for attracting businesses using modern technology and communications.

Design of the 'new' roundabout, required for access to the Airport precinct, will also provide safe entry to and exit from this proposed industrial development. Other roads which access the New England Highway (including Kia Ora and Mills roads) will be closed following construction of the roundabout, providing a single point for highway access - required by the RMS.

It is envisaged that this development will offer larger lot sizes than those available within the Airport Site, accommodating larger scale developments with competitively priced land (AECgroup, May 2011).



Zoning of Land

Figure 13, below, shows the location of the proposed development lots associated with Stage 1 (P16) of the Industrial Land development. These lots have been identified to maximise access while minimising infrastructure costs through the adoption of a 'staged' development approach.



Figure 13 - Location of Proposed Development Lots to allow for Staged Development

In order to achieve a *visually attractive* entry to the Airport precinct, it is planned that lots 1B to 1D and 57 to 62, be zoned as a 'Business Park', comprising office accommodation and civic buildings.

The proposed Airport Master Plan will require certain lots to be re-zoned. A separate (confidential) report has been prepared detailing the issues and recommendations associated with the re-zoning of airport-related land.

Project Management and Marketing

Given the specialised nature of *any* airport-based industrial land development, it is envisaged that a multi-staged development will be undertaken over a 10 to 20 year period. This approach, however, will not provide the more immediate investment returns normally associated with a residential or commercial development and will, therefore, be less attractive to property developers.

While there are several options available to Council for development and marketing of airport land, each with financial and risk advantages and disadvantages, it is proposed that Council manage both the development and marketing of the Airport Site. Council may choose to sub-contract the design and development works and outsource the marketing and sale of land; the approach that offers Council the greatest control and flexibility is for Council to assume the role of Developer. This approach enables Council to target preferred tenants and to offer financial and other incentives to attract key businesses. Competition to attract investment, particularly aviation-related businesses, is significant and the attracting of keystone tenants will be important to the overall success of the airport project. Success in attracting key tenants will drive further investment in the industrial park and the residential housing precinct.

Land Purchase and Financing

At present, airport land is only made available on a *leased* basis, upon which tenants construct their own facilities in the form of hangars, workshops, aprons, car parks and/or offices. These improvements can often represent a substantial investment on the part of the tenant - totalling millions of dollars. Accordingly, there can be a natural desire to own the land on which such significant investments are being made. Land ownership also assists the owner with financing both the business and any associated improvements. Land ownership allows the businesses to establish bricks and mortar equity. The ability to purchase land can be a major attraction in the promotion of industrial land for sale. It is proposed that currently leased land be available for purchase by the tenant.

Financing

The 262ha airport precinct represents a major land asset of Council which, importantly, provides Council with the ability to offer 'vendor financing' for the purchase of industrial land or residential lots. While not the major consideration, vendor financing will enable Council to derive additional [interest] income from the airport asset, adding to RPT revenues, fees and traditional lease income. More importantly, the ability to offer vendor financing will provide greater flexibility when marketing development land and, following the sale of land, will enable council to generate rates income. This additional rates income will grow and further diversify council's overall revenues. As the mortgagor, council would hold security over the property, protecting against any default in payment. The interest rate offered could be targeted to attract and drive land sales.

Consideration should also be given to *not selling* aviation-related lots, located to the North West of the relocated Saumarez Road, to *non-aviation businesses*; in order to maintain this section of the development as a true 'aviation precinct'.

Future Growth

The current proposal details only the initial stage (Stage 1) of the proposed aviation and commercial land development at the Airport Site. As can be seen from the following diagram, Figure 14, there exists further opportunity for the development of the land to the south west of The Croft. This is shown diagrammatically as Stages 2 and 3.

It should be noted that there is a section of land located between the Stage 1 and Stage 3 sites that is undulating and generally not suited to traditional industrial land development. It is suggest that this land only be considered for a 'specialist' purpose(s) not requiring more level land or construction using common cut and fill techniques.

The timing of future development of the Airport Site is dependent upon the take-up of the 25 commercial lots in Stage 1. Commencement of Stage 2 would not be anticipated before about year 10 (2025).

It is not anticipated that aviation related land development would be extended beyond The Croft due to accessibility to the main runway. Because of its specialist nature, this land may be developed more slowly than the commercial land located on the eastern side of the relocated Saumarez Road. Upon lease or sale of the majority of the 25 'commercial' lots, it would be envisaged that development of Stage 2, would be commenced and the same approach would be similarly be applied to the development of Stage 3.

By adopting this 'staged' approach, the infrastructure costs to develop this industrial land would be kept to a minimum. Within the 3 major stages of development, road construction and other infrastructure would only be undertaken as and when required. This would particularly apply to the aviation related lots where parcels of 8 lots at a time could be developed (minimising the infrastructure costs for both roads and taxiways).

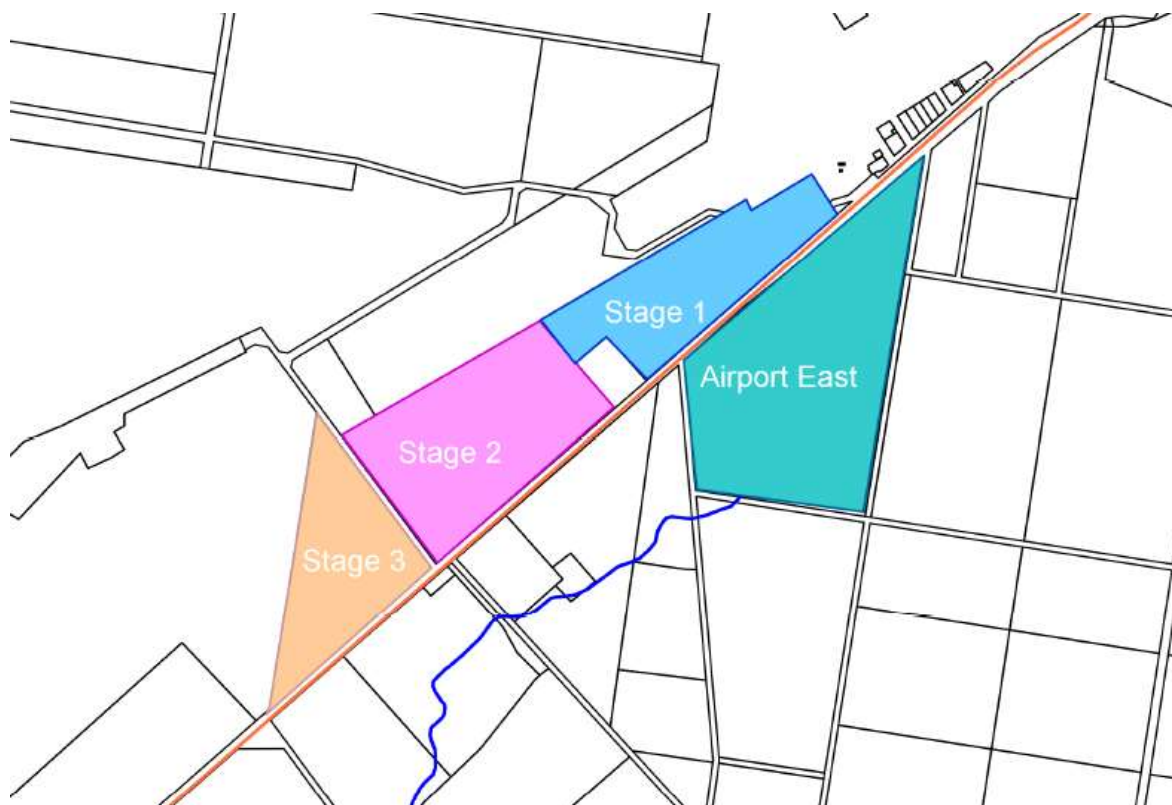


Figure 14 - Staged Development of the Airport Site

In a similar way to that of the industrial park, development of the proposed *residential air park* would be staged to avoid significant up-front investment in infrastructure. As with the industrial land, funds from the sale of initial lots would finance further development of the air-park.

While the number of lots within the air-park development may be limited, additional 'residential' or 'rural residential' lots may continue to be developed in this area to the North West, taking advantage of the available infrastructure services and road access.

Land Acquisition

Development of the Airport Precinct may require acquisition of *some* adjoining portions of land. Once the location of the upgraded 05/23 runway has been identified, a separate (confidential) report will be prepared providing details of proposed land acquisition and zoning.

Tourism, Recreational and Support Facilities

Highway Service Centre

It is proposed that a Highway Service Centre be developed on Lot 3 of the Airport Master Plan shown on Page 8. Lot 3 is a large 2.2ha site which includes land identified for the construction of a 5,000sqm veteran and vintage car museum. As the new roundabout will impact the current level of fuel sales at the existing service station site, it is proposed that the option be given to the current service station operator to develop and/or manage the fuel component of the proposed Service Centre.

Shown below, is an artist's impression of a typical Service Centre, which features a service station (fuel), an express market, fast food outlets (2), toilet facilities and parking for cars, buses, RV vehicles and caravans.



Figure 15 - Artist Impression of Kempsey Service Centre (Pacific Highway)

It is also proposed that a Visitor Information Kiosk (VIC), be located at the northern corner of this lot to take advantage of the large number of visitors to the service centre and to the proposed car museum. There are currently in excess of 3 million vehicles annually travelling the New England Highway and it would be expected that 300,000+ travellers would take advantage of the planned service centre facilities. In addition, it is estimated that 250,000+ passengers and friends visit or travel via the airport terminal each year.

Within the service centre precinct, space has been made available for the construction of a car museum which will be able to take advantage of the added security offered by the 24 hour operation of the service centre. The museum will also be able to take advantage of the restaurant, fuel, parking and toilet facilities provided within the service centre.

The diagram below, Figure 16, shows the layout of the above Kempsey Service Centre, which is typical for such a facility on a major highway. This layout caters predominantly for motor vehicles; however, a truck refuelling facility and diner are planned for construction within the Airport East development.

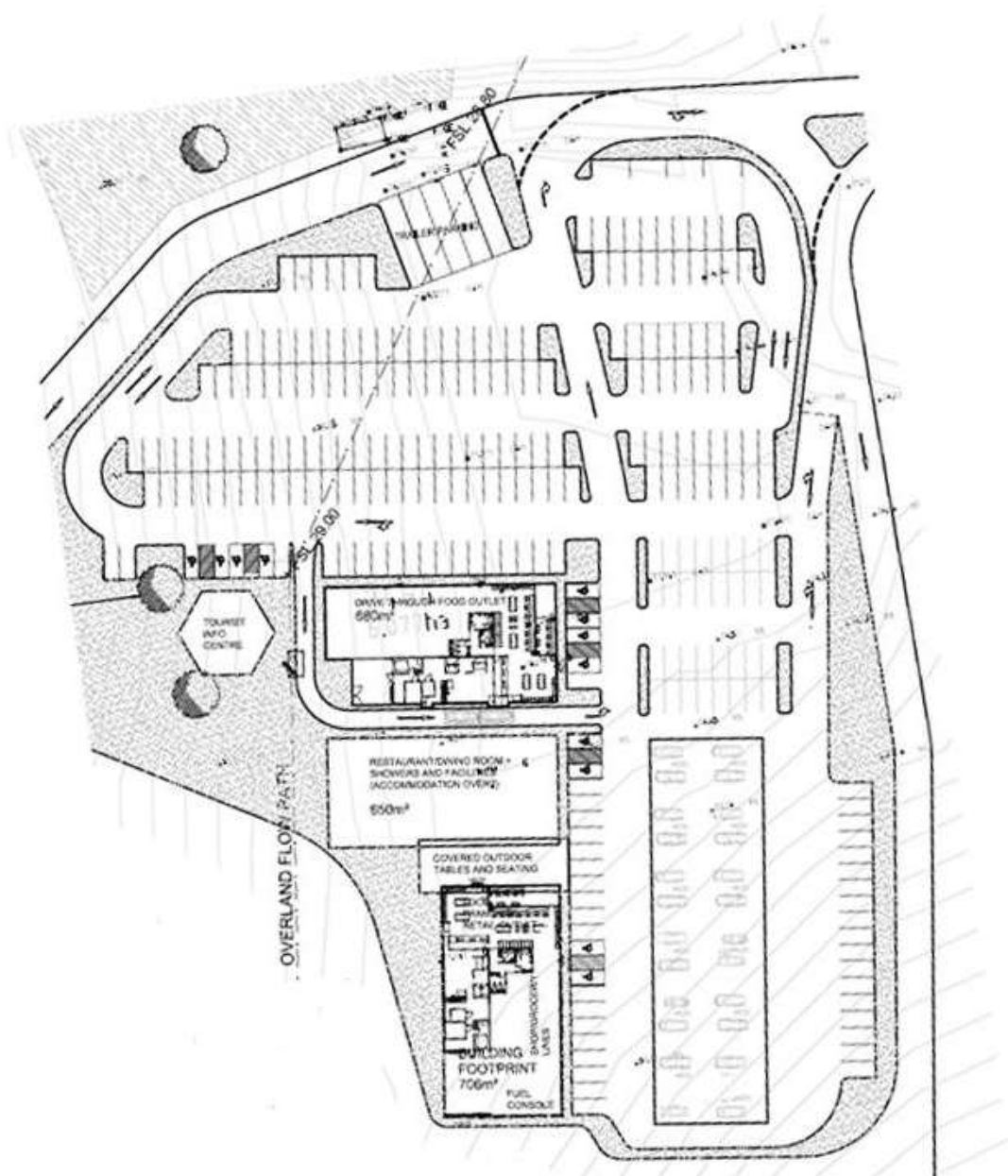


Figure 16 - Typical layout of a Highway Service Centre (South Kempsey)

Airport Hotel

At the appropriate time, it is proposed that an Expression of Interest be called covering the construction of an Airport Hotel; to be developed on the site identified to the north east of the current car park.

Following development of the Airport Site, including the planned Highway Service Centre, air-freight operations and removal of the now defunct water storage tank, this site would be potentially available for clearing and construction of a hotel complex. The complex would likely include accommodation, restaurant and bar, pool, business and conference facilities and on-site parking.

The image below, Figure 17, shows a typical regional airport hotel.



Figure 17 - Typical Regional Airport Hotel (55+ rooms)

Car Museum

Armidale is fortunate to have a number of owners of vintage motor vehicles; collectively these total ~400 exhibits. For more than 15 years, discussions have been advanced and plans formulated for the construction of a Transport Museum.

An area of land has been set-aside for such a museum building of up to 5,000sqm in size which would accommodate a substantial part of the total collection. The design and location of the museum would be integrated within the Highway Service Centre precinct and would offer a number of distinct advantages:

- Of greatest significance would be visibility and access from the New England Highway
- Large numbers of 'passing visitors' via the Service Centre
- Available facilities including fast-food restaurants, fuel, toilets
- 24 hour operation/lighting providing added security
- Ample shared parking.

Air Museum

Fleet Adventures owns and operates a number of 'war birds' and historic aircraft which include a L39 jet trainer and light attack fighter, a Boeing Stearman, T6 "Texan", de Havilland Canada DHC-2 Beaver and a Bell Helicopter "Huey" UH-1A. It is proposed to locate these in an air museum where exhibits can be viewed by the general public.

These aircraft are used daily to provide sightseeing and aerobatic adventure tours of the gorges and waterfalls of the Oxley Wild Rivers National Park. Regular use of these aircraft creates some specific requirements when considering their location within a historic aircraft museum. In addition to visibility from the New England Highway, ease of access and parking; access to the main airport runway is critical. For these reasons, it is planned that the proposed museum be located at the entrance/south western end of the current General Aviation area. A potential site has been identified at this location meeting the required criteria and with sufficient space to build an appropriately sized hangar. Parking facilities will be provided around the hangar.

Together with the proposed airport hotel and park area (see below), the air museum will complete an attractive visitor destination.

Parks and Gardens

To provide a public space, where members of the public can walk, relax, picnic, exercise dogs and view airport activities/aircraft, it is proposed that a small park and garden be established as part of the airport hotel/air museum and car park layout.

The proposed park would be adjacent to the airside boundary fence, offering clear visibility to the apron and runway and adjoining the north east end of the current terminal and the proposed airport hotel.



Figure 18 - Typical Airport Garden

Terminal Upgrade

The current terminal, constructed in the mid 1990s, was designed to initially handle 35,000 passenger movements with capacity to grow to 50,000 movements. In the past 10 years, passenger numbers have increased to ~120,000, with Regional Express joining QANTAS Link on the Sydney route, further increasing check-in and baggage handling demands on the terminal.

In addition to this doubling of passenger numbers, potential upgrades of aircraft type serving Armidale and the likely future requirement for passenger and baggage screening is driving the need for an upgrade to the current terminal facilities.

Terminal Requirements

Below is a summarised list of facilities proposed for consideration in the planned Terminal 2 and possible future Terminal 3 upgrade as follows:

Departures –

- Check-in facilities for 3 airlines, each with counters, baggage scales/conveyors and customer service capability
- Baggage make-up facilities/conveyor, with undercover storage and loading
- Provision for unattended check-in kiosks and baggage tag printers
- Security screening for passengers, their carry-on baggage, checked-baggage and air-freight
- Departure lounge for screened passengers
- Toilet facilities within (screened) departure lounge
- Modest café facilities within departure lounge
- Airline/Club members lounge(s) with business facilities
- 3 Departure gates, each with computer/card-reader stand or counter with data and power

Arrivals –

- Hire car counters – serving Avis, Hertz, Budget, Thrifty, a local operator and charter groups/ground handling services etc.
- Baggage break-down carousel with undercover unloading and storage of baggage
- Baggage cart storage for use by passengers
- Display/exhibition space (car size), for product promotion and events, with appropriate access.

Common Service Area -

- Arrival/Departure flight displays/screens
- Toilet facilities, disability access.
- Licensed café with both indoor and outdoor seating
- Seating area(s)
- Combined Retail/News/VIC/Local Produce outlet
- Shared office space for 5 (non-airline) personnel
- Meeting/Conference/Training room
- Public pay-phone, taxi phone, Wi-Fi access, USB charging facilities etc.
- Media and Advertising displays

Airport Operator Facilities –

- Separate airline offices for 3 carriers (can be located behind check-in counters) – each to accommodate 3 staff members
- Staff lunchroom/kitchen facilities (with some overnight /flight catering - hot water/fridge/freezer)
- Staff change-room/locker facilities (10 users - shared)
- GSE equipment storage/charging/maintenance/supplies (de-icing fluid).
- Storage for Airline stationery – destination labels, baggage tags, boarding passes etc.
- Shared Communications ('Comms') room for servers, switches, UPS etc.

Apron

- Apron upgrade to provide for Q400 Dash 8 sized aircraft (74Y), B717, A320, B737-800.
- Passenger airside/terminal access that does not conflict with baggage handling, refuelling etc.
- Provision for use of a 'QANTAS Ramp' for passenger boarding, disembarkation.

Safety, Emergency –

- CCTV
- Standby Power
- PA/Emergency Communications, IT infrastructure
- Fire fighting, review of emergency exits to meet current requirements

Upgraded Terminal Concept (Terminal 2)

Rehbein Airport Consulting has been engaged to develop a Terminal Concept that addresses the future requirements for an upgraded Terminal serving Armidale Region Airport. A detailed report, technical strategy and plans have been provided by Rehbein Consulting.

Figure 19, page 23 shows a concept plan for the proposed terminal upgrade. This plan addresses the identified requirements and accommodates significant growth in passenger numbers (to 200,000+), as well as providing for the introduction of passenger and baggage screening. The plan as shown assumes passenger screening is in place. Until this time, while the terminal design would remain the same, the screening facilities would not be installed and the terminal would operate as an unscreened facility.

Check-in Counters – for 3 airlines are to be provided with conveyor belts, incorporating scales, taking passenger bags through the checked-bag screening unit. Oversized baggage would be passed to the screening unit or manually scanned via the doors to the left of the check-in counters.

Check-in Kiosks – have been provided in the event that QANTAS Link or another carrier wishes to implement unattended check-in, boarding pass printing and tagging of baggage. This capability would be equivalent to the QANTAS Q-check in. Once tagged, checked baggage would be passed onto the baggage conveyor for screening before being consolidated for loading on aircraft..

Passenger Screening – would then be undertaken before entering the 'screened' lounge. This is a sterile area where passengers await boarding of their aircraft through one of the three boarding gates. Toilet facilities, a child's play area and a snack and beverage bar are proposed for inclusion in the screened lounge area.

Baggage Hall – Upon arrival, passengers would enter the baggage claim area via a glazed entry air-lock where they can be identified by family and friends. Baggage would be unloaded from the aircraft and placed on the baggage carousel entering the baggage hall. Checked bags would be claimed by passengers and pay-for-use baggage carts will be available to transport baggage to the transportation zone/parking area.

Hire Car Counters – will be provided for booking or collecting of rental cars from one of the half dozen providers. Rental cars would be parked in an area located in close proximity to the terminal – see Figure 20.

Other facilities – would include male, female and disabled access toilets, storage, lockers, lunchroom and offices for airline staff, a conference/training room and private offices for council staff.

Food and Beverage

Food and beverage is an important component of the Terminal design. Being a Regional airport, many passengers will be either seen-off or greeted by family, friends or business colleagues. There are also a growing number of GA operators located within the airport precinct who may wish to use the terminal facilities for business meetings and/or meals and the airport is a destination in itself where people simply choose to go for a coffee!

To accommodate these visitors to the airport, a mid-range restaurant and licensed bar are proposed to be centrally located in the terminal. Visitors can have a coffee and watch in comfort while awaiting the arrival of passengers, or have a meal or snack before a flight.

Critical to the success of the F&B offering will be the level of service and *opening hours*, which need to match the airlines' flight schedules as an absolute minimum.

Exhibition and Retail Areas

It is important that Armidale Region Airport, as the gateway to Armidale city and to the towns, villages and communities of the North West, has an *exhibition area* and *retail sales* space that is able to promote the region, its produce and events.

The exhibition space can promote upcoming events, local businesses and regional sights and experiences such as vineyards, adventure tours and National Parks. The retail space [shop] can be used to promote local produce, crafts and wares and also offer books, magazines and 'double' as a Visitor Information Centre (VIC).

Facility Services (Cleaning)

There are currently a number of airline agents and support organisations operating at the airport and within the Terminal building in particular. In addition, Council regularly attends the terminal to undertake cleaning activities, security checks, emptying of waste and a host of other smaller caretaking activities.

It is suggested that an Expression of Interest be called for covering the provision of these services by one of the private operators already at the airport with the intention that Council could obtain these services at a reduced cost; while enabling an operator to 'smooth-out' the peaks and troughs of their daily schedule and better recover costs.

Further Terminal Expansion (Terminal 3)

Anticipated passenger growth (see Figure 2, page 3), suggests that by the year 2024-2025, annual passenger movements through the upgraded terminal will exceed 200,000.

At this time, planning will need to be commenced for a further upgrade and expansion of the Terminal Building (Terminal 3 upgrade).

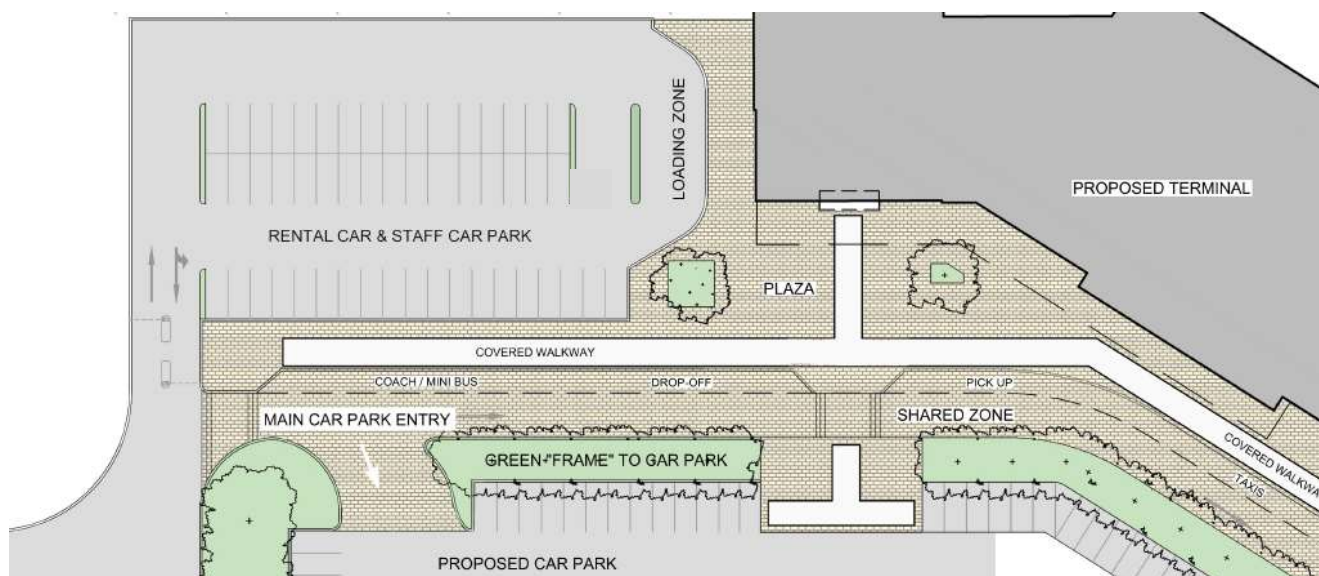


Figure 20 - Car Park area preserving land for potential Terminal Expansion

To 'quarantine' adjacent land for this further terminal upgrade, a staff car park and parking for rental cars is proposed to the south west of the planned terminal building.

A covered walkway will provide access for both the collection of rental vehicles, staff parking and for access to and from the proposed secure car park (located further to the South West).

Rental Car and Staff parking will need to be relocated to the expanded general parking area (219 available spaces), following this further extension to the terminal building (Terminal 3).

Apron, Taxiways and Runway works

With a planning horizon of 20 years, consideration has been given to future requirements of the airport in terms of runways, aprons and taxiways. These future needs will be driven primarily by increases in passenger numbers, changes in the size and type of aircraft being operated and potential introduction of air-freight services shipping nationally and internationally.

Apron

The most immediate need is for an upgrade to the existing apron being used by the RPT carriers (Rex, Fly Corporate and QANTAS Link); to enable greater flexibility, ease of movement and importantly the use of larger sized aircraft (including the Q400 Dash 8 sized aircraft [74Y]).

Following construction of the new entry roundabout and initial road infrastructure, it is proposed that a new heliport be constructed to meet the needs of emergency services and, in particular, Westpac Helicopters. The new helipad will have excellent and quick access to ambulances travelling on the New England Highway. Future planning also includes a new apron for use by air ambulances; also taking advantage of the improved highway access.

An upgraded apron/taxiway is proposed to be constructed between the hangers of Edwards Aviation and Fleet Helicopters. This apron will offer improved comfort for customers of these two tourism operators and provide greater ease of movement. This upgraded taxiway will connect from the access road gateway to the new Code C parallel taxiway (taxiway 'B').

Rehbein Airport Consulting has undertaken the design for the initial apron upgrade. The proposed design is included on page 39.

New 45M wide 05/23 Runway

It was initially planned to upgrade the current 05/23 runway (1,738m in length), with a 362m extension to the runway length and installation of Runway End Safety Areas (RESAs) at each end; together with other minor improvements. A review of works required, cost to complete and, most importantly, the period of time that the runway would be out-of-action were undertaken. In addition, any significant runway works would require the existing runway to be brought up to current standards, requiring the 'uneven' sections of the runway to be addressed.

These factors combined to make the runway upgrade both costly and impractical, due to the runway being out-of-action for an extended period of months. The proposal, therefore, is to plan and construct a new runway to be located northwest of the existing 05/23 strip and at the minimum separation distance required for construction. The new runway will be a minimum of 2,120m in length, 45m in width and accommodate aircraft including the Dash 8-400 (Q400) and current B737-800, A320 and B717-200 jet aircraft.

While the new runway is being constructed, the existing runway can remain in use and subsequently be used as both a taxiway and back-up runway when future maintenance is required. Construction of the new runway is not planned for several years and design and final location is yet to be determined.

It is possible that the position of the new runway will intersect the current 1,139m [09/27] grass runway. This may require the 'repositioning' of this runway and for additional land to be acquired to enable their construction.

Precision Approach

It is proposed that a 'precision approach' be installed at or *before* the time of construction of the new runway. A precision approach is an instrument approach and landing system that uses precise lateral and vertical guidance with a minimal clearance distance above the ground. A CAT-IIIa approach allows a pilot to fly 'blind' to within 30m of the ground before requiring visual sight of the runway and 200m visibility along the runway.

Such an approach would greatly assist current RPT carriers and GA operators and avoid the expensive and disruptive diversions to an alternate airport at times of poor weather/visibility. The type of aircraft that would use the proposed new runway would expect such navigation aids and the availability of a precision approach would greatly enhance Armidale Airport's attractiveness as a training airfield. Such facilities are limited throughout this region and training operations at Glen Innes and Tamworth would regularly use such an approach for training.

Ground Transport, Parking and Airport Access

The new roundabout proposed for the New England Highway will redefine access to the Airport and make accessible industrial and commercial land to the east and west of the highway for development.

With construction of the new roundabout, it is anticipated that the current access opposite the terminal will be limited to left-hand-in and left-hand-out for traffic travelling north [only] on the New England Highway. Southbound traffic travelling on the New England Highway will not be able to *turn across* the highway to enter or to exit the airport. Instead, southbound traffic will need to enter and to leave the airport via the newly constructed roundabout. This may adversely impact the sales of the current service station, to be offset by the opportunity to relocate to the proposed service centre.

The main entry to the airport will be via the new roundabout, with the initial entry road branching northeast and serving the Airport, carpark and GA operators and southeast to the Aviation and Industrial Parks and on to Saumarez Homestead. To accommodate the aviation related businesses located to the north west of the relocated Saumarez road, both road and airside/taxiway access will be provided at the front and to the rear of their premises.

Access Roads, Parking, Security and Signage

A car park extension is planned to coincide with the terminal upgrade. The existing car park will be enlarged with expansion to the southwest. The car parks capacity will be increased to $2\frac{3}{4}$ times its current size (from 81 to 219 spaces) and it is proposed that both timed and untimed parking be made available. While timed parking is to be provided, it is not planned that this will be on a *paid basis*. Parking will continue to be free-of-charge but for a limited time period (2P - for up to 2 hours duration). The ratio of $\frac{1}{4}$ timed to $\frac{3}{4}$ untimed parking is proposed to ensure that there is always drive-up, short term parking in close proximity to the terminal and longer term (unlimited) parking for local and regional visitors to the airport.

The current access road surrounding the car park will be lengthened to incorporate the expanded car parking area. It is proposed that this road be one-way (clockwise) as it passes the terminal to minimise traffic congestion and to simplify directional signage. Traffic attending the GA operators will pass to the south-east of the expanded car park via a two-way road. It is anticipated, however, that the majority of these drivers will continue to enter the airport via the current entrance.

This Master Plan makes allowance for either the new roundabout not being constructed promptly or for the existing entrance not being maintained in the future (by decree of the RMS). In either case, the airport will continue to function with adequate access available to all areas.

Security

Security at the airport has been an issue. The provision of CCTV cameras at the terminal and covering the car park will assist in improving security. The proposed secure car park to be privately constructed will also provide airport users with an alternative should they wish to secure their vehicles.

The 24 hour operation of the Highway Service Centre will also provide lighting and increase visibility in the car park areas. While acknowledging the lighting restrictions imposed at any airport, it is important that car parks and streets are well lit for safety and security. The need for improved street lighting also applies to the current GA area and it is proposed that lighting be reviewed and lighting upgraded/ installed as required.

Road Naming/Signage

There are currently a number of roads and access ways within the airport precinct that are unnamed and the proposed industrial land, Business Park and residential air-park development will add further to these naming requirements.

It is therefore suggested that all unnamed roads, access ways, taxiways and lanes be identified and appropriate names selected, simplifying reference and documentation going forward.

In selecting suitable names for this purpose, it is proposed that individuals with a close connection to aviation and the Armidale Airport be selected. For example, the airport once part of Saumarez Station and its owner, FJ White, was a founding shareholder of QANTAS, was very involved in the early days of aviation in Armidale. Similarly, Donald (Don) Munroe Shad was the founding Chairman of East West Airlines and John Henry Ford, of Armidale, was the first pilot based in Armidale to continue the Airline Service of East-West Airlines Pty Ltd.

Ground Transportation

Ground transportation is to be covered as part of a separate Master Plan project, under the Transportation theme. This will include the role of taxis, buses and private vehicle usage.

Facilities for the pick-up, drop-off and parking of ground transport has been included as part of the consultancy work for the Terminal and Apron design and a concept plan is included in the Appendix, Page 41.

Economic Development and the Visitor Economy

Implementation of this airport master plan will offer significant benefits to both economic development and growth of the visitor economy, through increased business employment and tourism travel, increased visitor activity and, most importantly, the creation of industrial and residential development land.

Economic Development

Acknowledging the significance of airport infrastructure and the proposed terminal upgrade to both support and grow visitor and business travel, the greater economic benefit resulting from implementation of this Master Plan will be the creation of *employment land*. The availability of competitively priced commercial and industrial land will drive employment growth with associated benefits to housing, education and the economy as a whole.

While a niche opportunity, the release of residential land within the proposed air park will similarly offer economic benefits, albeit of a lesser magnitude.

Industrial Land Development

There exists a strong demand for competitively priced industrial land to meet community needs, drive economic growth and to satisfy pent-up demand. The current lack of development land is forecast to grow to 90ha over the coming 25 years (to 2035) and the 35ha available within the Airport Site and 54ha within the Airport East Development will address this need (AECgroup, May 2013).

It is critical that industrial land be competitively priced if prospective business owners are to consider Armidale as a viable business location. In this regard, competition locations include Tamworth, Toowoomba, Orange, Bathurst and other larger rural centres.

Reference to the Airport Master Plan, page 8, shows the potential development of 75 commercial lots in the initial stage of this development. Stages 2 and 3 of the industrial land development would contain a further 70 to 75 lots (design to be finalised). The total land value created under Stage, 1 is in excess of \$36M with an annual potential rate income of \$240,000 (if all lots were to be sold). Stages 2 and 3 would increase land value to \$57M and rate income would increase to \$388,000pa. While the sale of all lots is *unlikely* in the foreseeable future, this does provide an 'order of magnitude' for ongoing capital sales, lease revenues and rate income to be generated over the 20 year Master Plan period.

Included within the industrial land to be developed and benefiting from the investment in the new highway roundabout, is a Highway Service Centre. Such a centre will be a major economic driver providing both employment opportunities and injecting income into the local economy.

An assessment of the economic benefit to be derived from implementation of the Airport Master Plan, upgrades to airport infrastructure and development of industrial land and service centre, has been prepared by AEC Group and is available upon request.

Residential (Airpark) Land

The proposed 'air park' development offers residents the ability to both live in close proximity to an airfield and to keep an aircraft in a hangar at or near their home. In addition, private hangars can be provided for those owners not wishing to reside at the airport. Aircraft will have direct taxiway access to the runway(s) at a major regional airport will be provided with support facilities including flight training, aircraft maintenance, recreational facilities and, in time, a FBO serving private aviation needs.

Development of a 'niche' air park will occur over time and forms part of an overall strategy to create a private aviation 'precinct' adjacent to but separate from commercial aviation activities. Facilities will be developed for aircraft, their maintenance, provision of fuel and flight training and residential accommodation, a clubhouse, bar and other recreational facilities will be developed. Air parks are well established in the United States and rapidly growing in number in Australia. Considerable community spirit is developed amongst air park residents – with the benefit of added security for aircraft and for their owners while living within a gated community.

It is proposed that the air park be initially designed for ~30 residential/air-park lots, with a land value of \$10M and an annual rate income of ~\$57,000.

Tourism Opportunities

Air Charter

Edwards Aviation is a private charter organisation offering both jet and premium air charter services. Recognising the need for more efficient private jet hire and travel services, Edwards Aviation provides an alternative to the challenges and limitations associated with traditional, commercial air travel when serving clients ranging from dignitaries, government officials, high profile executives, professional athletes, entertainers and mining companies to medical and human repatriation agencies.

With all aircraft based at Armidale airport, the proposed upgrades to the runway, apron and taxiways will greatly enhance the services being offered by Edwards; both in terms of passenger comfort and the efficiency and quality of their charter operation. Armidale has proved a strategic location for charter operations because its convenient access to all major and most regional centres in Australia; as well as the opportunity to operate with lower overheads from a curfew free airport. Flight operations will benefit from implementation of a precision approach, enabling virtually all weather access to the airfield. Should passenger screening be required for access to or connection at major airports, check-in and screening facilities will be available within the public terminal.



Figure 21 – Two Cessna Citation Aircraft, as used in Edwards Air Charter fleet

Joy Flights, Sightseeing

Fleet Adventures offer both mild or wild joy flights and sightseeing adventures to the New England gorge country and National Parks. Offering scenic flights to day trips to out of the way pubs and wineries or wilderness adventures for heli-fishing, Fleet is a true tourism focussed aviation business.

Proposed upgrades to the runway, apron and taxiways will greatly enhance the tourism experiences offered by Fleet Adventures; in terms of both passenger comfort and operational efficiency.

Flight operations will benefit from implementation of a precision approach enabling virtually all weather access to the airfield.



Figure 22 - Fleet Adventures, Heli-tour of the 7 Georges

Air and Transport Museums

Fleet Adventures, a GA operator based at Armidale Airport, has a growing collection of War birds, historic aircraft and a range of Bell and Robertson helicopters.



Figure 23 - Czechoslovakian L39 attack fighter, part of Fleet War birds Historic Collection

These historic aircraft are used daily to provide sightseeing and aerobatic adventure tours in the gorges and waterfalls of the Oxley Wild Rivers National Park. Fleet Warbirds offer a world renowned tourism experience that takes visitors back to a bygone era in aircraft including a Boeing Stearman and the fast and powerful T6 Texan, for a fast and furious or nostalgic cruise adventure.

It is planned that an interpretative Air Museum be constructed to house these aircraft enabling a hands-on experience for visitors to Armidale. Already an established and growing tourism operator, the business of Fleet Adventures will benefit greatly from such a museum, the planned infrastructure upgrades, the terminal upgrade and the proposed airport hotel.



Figure 24 - Typical Car Museum Exhibits

A 'transport museum' is also proposed as a new *tourism venture*, to be construction at Armidale airport and located to take advantage of the proposed highway service centre – its food and beverage facilities, toilets, parking and security.

A collection of approximately 400 cars are available for exhibition at the museum on a rotational basis featuring particular eras in motoring, makes, models, manufacturers and other themes to provide a sustained visitor experience. Potential visitor numbers passing through the museum are yet unknown, however, similar museums in Australia, Europe and the United States have all attracted considerable interest and substantial visitor numbers.

The planned museum complex, when fully constructed, is planned to be 5,000sq metres and positioning within the overall design of the highway service centre so as to optimise access, available parking, facilities and pedestrian access.

Funding for the construction and operation of the museum is currently under review.

Saumarez Homestead

This 10 hectare grazing property, named after the Dumaresq Estate in the Channel Islands, was first inhabited by Henry Dumaresq in the 1830's. With its well supplied store, tools, clothing and basic foods, Saumarez in its early years was the last stopping point for settlers before they moved north. A Now Saumarez is a historic country homestead with gardens, farm buildings and a café; providing an interesting insight into rural life in the late 1800's.



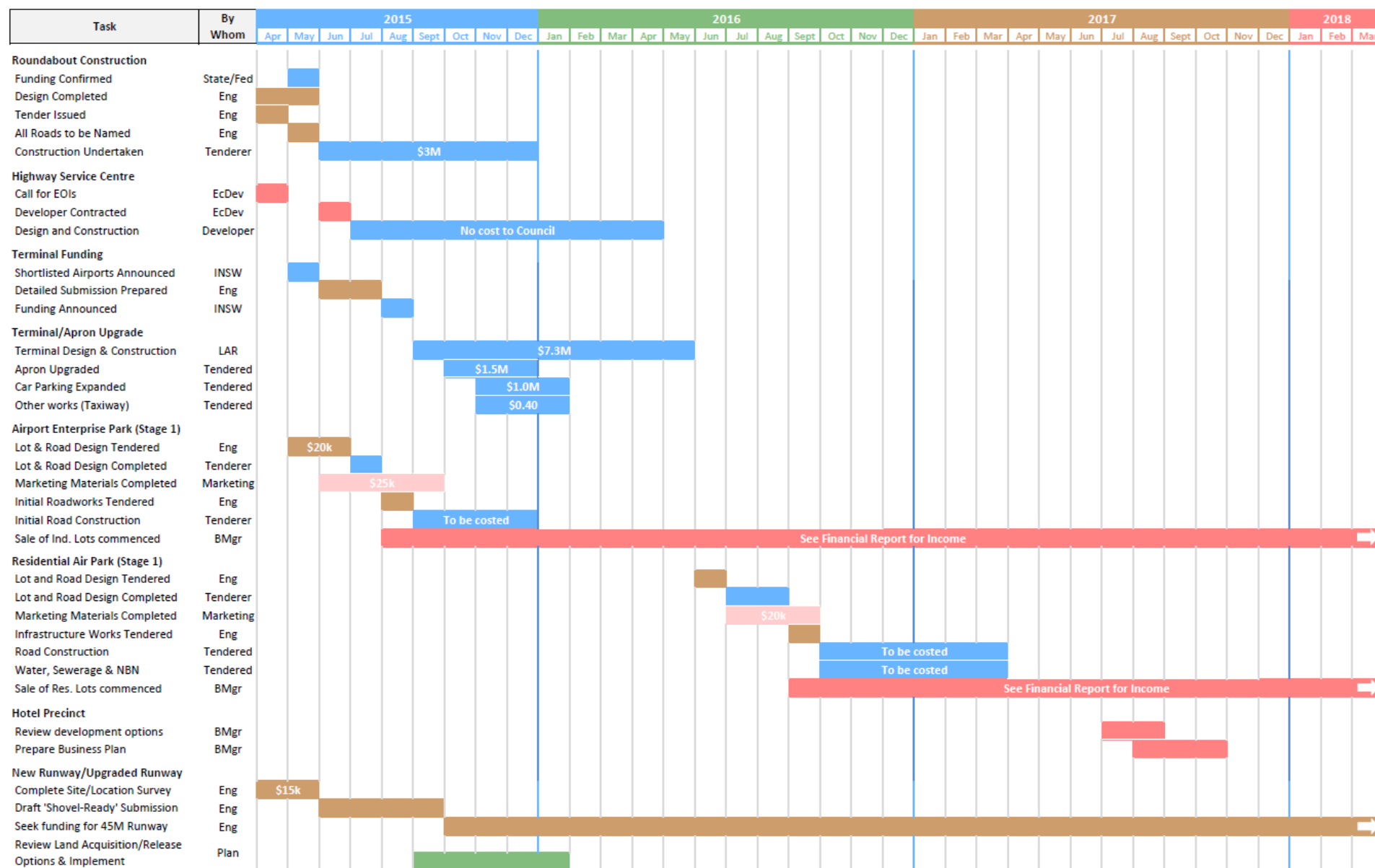
Figure 25 - Saumarez Homestead, South West of Armidale Regional Airport

Saumarez Homestead is an elegant, 30 room, fully furnished Edwardian homestead that was further extended between 1888 and 1910. Available for both guided tours for casual visitors, coach tours, weddings, celebrations and conferences; lunch and other refreshments are available from the café and the homestead includes a National Trust gift shop and ample parking.

To date, access to and from the homestead has been by unsealed road, linking the homestead to the airport entrance. This has been a particular issue for bus and coach tours who have been unwilling and unenthusiastic to expose their vehicles to this road. This airport master plan proposes a well formed and sealed road providing access to Saumarez Homestead from the new roundabout to be constructed on the New England Highway.

The improved access to Saumarez Homestead will further grow visitation to this historic building and expand its use as a tourism and cultural venue.

Implementation Timetable (Stage 1)



Financial Performance

Implementation of the Airport Master Plan will enable diversification away from what are currently aviation related revenues, to a broader range of income producing activities. This diversification will reduce council's exposure to the cyclical nature of the aviation industry, with broader and more stable revenues including rates and lease income.

The chart below, Figure 26, is based on 2015 passenger movements and current charges (fees, rates and leases) and assumes that 60% of land available for development as part of Stage 1 has been purchased. It is readily acknowledged that this scenario *will not occur* in the first few years following development; however, it does show that a more balanced revenue stream can be achieved over the longer Plan period.

In addition, this scenario would generate approximately \$20M in land sales, growing to \$35M (at current pricing), if *all* properties available under Stage 1 were to be sold.

Implementation of Stages 2 and 3 would further diversify income to a point where aviation and non-aviation related revenues would be roughly equal.

A separate (confidential) report has been prepared providing forecasts of financial performance over the timeframe of the airport master plan.

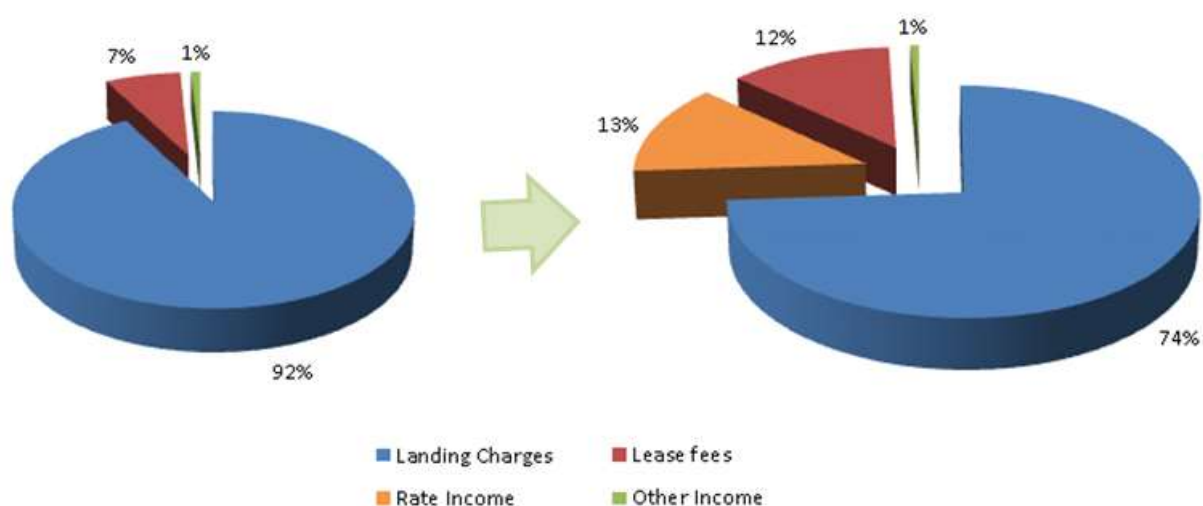


Figure 26 – Potential to Diversify Airport Revenues (at 2015 prices)

APPENDIX

Bibliography

Armidale Airport Infrastructure Business Case [Report] / auth. Group AEC. - Sydney : [s.n.], March 2015.

Armidale Economic Development & Tourism Strategy [Report] / auth. AECgroup. - Sydney : [s.n.], May 2011.

Armidale Industrial Land Study [Report] / auth. AECgroup. - May 2013.

Armidale Regional Airport Industrial Lands Vehicle Access Management Strategy and Traffic Study [Report] / auth. Consultants GTA. - 2014.

Armidale Regional Airport Master Plan [Report] / auth. Airplan. - May 2014.

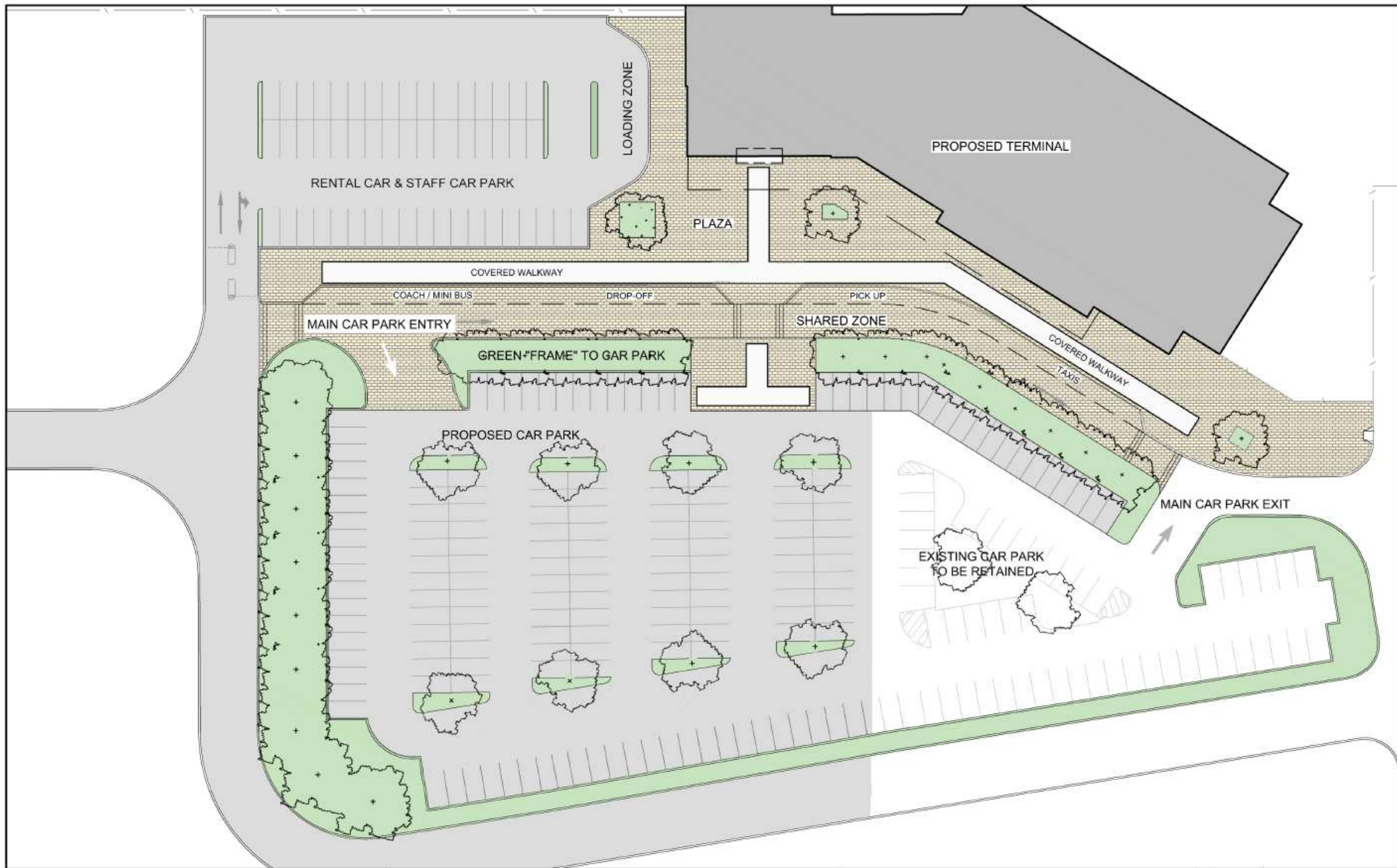
Figures

<i>Figure 1 – Location of Armidale Regional Airport</i>	1
<i>Figure 2 – Annual Passenger Movement Growth Scenarios to 2035</i>	3
<i>Figure 3 - Stakeholder and Community Consultation Process</i>	4
<i>Figure 4 - Point to Point Flight Routing</i>	5
<i>Figure 5 - Hub and Spoke Flight Routing</i>	5
<i>Figure 6 - Map showing Passenger Catchment for Armidale Regional Airport</i>	6
<i>Figure 7 - Potential routes from NE Regional Airport- serving as a rural-hub</i>	7
<i>Figure 8 - Airport Master Plan</i>	8
<i>Figure 9 – Demand for Industrial Land</i>	9
<i>Figure 10 - Potential Land for Industrial Development</i>	10
<i>Figure 11 – Two of Fleet Adventure’s War birds</i>	12
<i>Figure 12 – A typical Residential Airpark development</i>	13
<i>Figure 13 - Location of Proposed Development Lots to allow for Staged Development</i>	15
<i>Figure 14 - Staged Development of the Airport Site</i>	17
<i>Figure 15 - Artist Impression of Kempsey Service Centre (Pacific Highway)</i>	18
<i>Figure 16 - Typical layout of a Highway Service Centre (South Kempsey)</i>	19
<i>Figure 17 - Typical Regional Airport Hotel (55 rooms)</i>	20
<i>Figure 18 - Typical Airport Garden</i>	21
<i>Figure 19 - Concept Plan for Upgraded Terminal Facilities</i>	24
<i>Figure 20 - Car Park area preserving land for potential Terminal Expansion</i>	26
<i>Figure 21 – Two Cessna Citation Aircraft, as used in Edwards Air Charter fleet</i>	31
<i>Figure 22 - Fleet Adventures, Heli-tour of the 7 Georges</i>	32
<i>Figure 23 - Czechoslovakian L39 attack fighter, part of Fleet War birds Historic Collection</i>	32
<i>Figure 24 - Typical Car Museum Exhibits</i>	33
<i>Figure 25 - Saumarez Homestead, South West of Armidale Regional Airport</i>	34
<i>Figure 26 – Potential to Diversify Airport Revenues (at 2015 prices)</i>	36

Attached Plans

- **Airport Master Plan (A3)**
- **Airport Terminal Upgrade (A3)**
- **Proposed Apron Extension (A3)**
- **Proposed [Expanded] Car Park (A3)**





Notes:

Notes: