STRATEGIES FOR MEETING SYDNEY'S AVIATION INFRASTRUCTURE NEEDS



The Summary of Key Points in Part Ten highlights the complexity of addressing the Sydney region's aviation infrastructure requirements to meet the forecast demand.

The Committee considers that there are three key parts of the strategy which needs to be put in place by Australian and NSW governments, the aviation industry and the community to meet Sydney's long term aviation infrastructure requirements and maximise community economic and environmental outcomes. These are:

- Optimise the use of Sydney (Kingsford-Smith) Airport for RPT international, domestic and regional passengers by ensuring that it operates efficiently and safely and can grow to its practical maximum operational capacity;
- · Protect and optimise the use of the other existing airports in the Sydney region; and
- Select and confirm the site for a new supplementary airport for the Sydney region. The new site should be capable of eventually accommodating a full service airport serving all market segments.

The Committee makes the following recommendations in relation to this strategy.

Optimising Use of Sydney (Kingsford-Smith) Airport

Ensuring that Sydney (Kingsford-Smith) Airport operates efficiently and safely, and can continue to grow to its maximum practical statutory capacity is critical to Sydney's and Australia's economic development.

SACL's Master Plan and program of investment in airport infrastructure

Investment is required urgently in airport infrastructure to address current pressures and the additional demands of continuing growth. In the Master Plan, SACL identified a range of works to upgrade taxiways, gates and terminals. These works were to be undertaken on a staged basis, with some identified for completion by 2019 and the balance by 2029. These works need to be brought forward.

More recently, SACL announced that it is developing a revised concept for use of the terminals. SACL's objectives for the proposal are to improve passenger experience through faster connection times and more efficient airline and airport operations. SACL is working with its stakeholders to progress the proposal. However, a number of key issues remain to be resolved, with details and funding arrangements to be negotiated, before any formal decisions can be made to proceed.

The Steering Committee welcomes the intentions to improve the passenger experience and efficiency of operations on the site but notes the need to finalise issues quickly so that essential investment is not delayed.

Recommendation 1

A plan of investment for Sydney (Kingsford-Smith) Airport needs to be settled as quickly as possible to meet the growth in larger aircraft types and the current and forecast shortfall in gates and parking at the airport. The Minister for Infrastructure and Transport (Commonwealth) should exercise the power under the *Airports Act 1996* to require that a new Master Plan process

be initiated immediately by SACL. There is a need, highlighted in this review, to bring forward investments in terminals, aprons and parking for aircraft to ensure that Sydney (Kingsford-Smith) Airport is able to meet the forecast growth in aircraft movements and passenger throughput.

This Master Plan process should include the development of a definite program of works, with clear performance timeframes for each project, to support the expansion of the capacity of the terminals, gates and taxiways. The program should take account of the plans and scope for continued upgauging of aircraft, in particular the requirements to accommodate Code E and F aircraft.

Under normal arrangements, the next Master Plan is due for endorsement in 2014. While acknowledging that the Master Plan process is complex and time-consuming, the Committee is concerned that a firm program for upgrade works be resolved without unnecessary delay. The program should address the clear need to provide for the expected shortfall of gates, manage the runway balance utilisation requirements and limit any increase in taxiway congestion in the short term.

Air traffic management enhancements

Recommendation 2

SACL, Airservices Australia and airlines should accelerate plans for the implementation of advanced technologies and air traffic management practices including satellite based systems at Sydney (Kingsford-Smith) Airport. These do not significantly change the capacity of the airport, but help to maintain traffic handling rates and efficiency of operations as capacity pressures build. System performance measures such as target levels of congestion and delays should be identified which guide the implementation of efficiency measures. A 20 year investment plan should be developed to address both current proposals and long-term enhancements.

Surface transport links to Sydney (Kingsford-Smith) Airport

Sydney (Kingsford-Smith) Airport sits within the key economic precinct for Sydney and NSW, alongside Port Botany. Road congestion in the areas around the airport will increasingly impact on operations at the airport and affect the activity within the economic precinct. Increased activity at the airport will itself contribute to the problem. A key element of the strategy for making Sydney (Kingsford-Smith) Airport work into the future will be to increase the take-up of public transport by passengers, airport workers and others travelling to the airport precinct.

The Australian and NSW Governments need to urgently undertake joint planning to develop a long-term surface transport investment and operations management strategy for the Sydney (Kingsford-Smith) Airport/Port Botany economic precinct.

Recommendation 3

The Steering Committee recommends that the NSW Government, in consultation with the Australian Government and SACL, develop and implement a strategy for increasing the patronage of the airport rail system which includes removing the existing access fee to the two airport rail stations. This would mean that fares for services to and from the airport stations would be comparable to normal CityRail fares.

- Consideration should be given to the appropriate long term funding arrangements for this
 measure, with costs of removing the station access fee to be met by the airport operator.
- The strategy should set annual targets for airport rail patronage growth and system performance measures which are transparent and reported.

The Steering Committee recommends that the Australian and NSW governments, in consultation with SACL, immediately commence work on the detailed planning required for a program of surface transport works to improve the connections to the airport and the surrounding precinct. This should include:

- a program to upgrade roads and intersections in the locality of the airport, including key connections such as the M4 and M5 motorways. This should include road widening and traffic flow measures to reduce congestion around the domestic terminal precinct and to provide additional bus lanes and capacity for improved bus services;
- a commitment by the governments to the investment in suitable rolling stock and train
 paths to enable the airport rail link to provide at least 20 peak hour trains per hour by
 2020, with a long term investment plan for increase of an additional ten trains per hour by
 2035;
- expansion of the Sydney bus network to the airport, in particular to link the airport directly to the CBD, Parramatta, St George/Sutherland area and the Lower North Shore. This will need to be undertaken in parallel with the strategy on the removal of the station access fee; and
- development and implementation of a plan to facilitate bus and mini-bus access to a centralised transit point or points at the airport terminal precincts.

The Committee notes that Transport for NSW has already put a submission to Infrastructure Australia for funding for a major transport study for the Sydney (Kingsford-Smith) Airport/Port Botany precinct.

Changes to regulatory measures

The Steering Committee has considered a range of proposals for change to the regulatory arrangements which apply to operations at Sydney (Kingsford-Smith) Airport. These proposals include change to the level of protection of access to the airport by intrastate NSW services from regional areas, removal or relaxation of the movement cap and the approval for extra movements in curfew shoulder periods. These changes would not provide long term solutions, but could defer the impacts of capacity pressures for a few years. They could help Sydney (Kingsford-Smith) Airport to meet the need to lift its peak hour handling capacity and also maximise passenger throughput.

The existing regulatory arrangements have been implemented to strike a balance between the use of the airport and the protection of other community interests and amenity. The Committee is aware that governments may not support change to these arrangements, particularly if alternatives are available. However, since regulatory measures including the movement cap were put in place there has been a significant investment by the aviation industry in new, quieter aircraft types which have reduced the noise impacts of operations and air navigation procedures and technologies to better distribute aircraft operations. These need to be recognised as part of achieving the balance in managing the airport's environmental impacts.

Recommendation 5

The Steering Committee recommends that the Australian Government initiate legislative amendments to the *Sydney Airport Demand Management Act* 1997 to lift the statutory movement cap from 80 to the 85 movements per hour in the peak hours of 6.00 to 10.00am and 3.00 to 8.00pm each weekday to enable greater rates of handling of peak hour traffic.

Consideration was given to whether the movement cap should be lifted to 85 movements per hour for the whole day, not just for the peak periods. The Steering Committee considers that the proposal to lift the cap only for the peak periods means that the additional capacity is targeted to the periods of greatest demand. It is unrealistic to expect the airport to operate effectively at its maximum rate for the full day. In practice, there will inevitably be some level of disruption of the schedule, due to external factors such as weather or to operational issues affecting aircraft, the airfield or terminals. The proposal as recommended allows a small but important margin to help cope with these inevitable events and allow recovery.

Recommendation 6

The arrangements for implementing and monitoring the Sydney Airport Slot Management process and movement cap should be reviewed to ensure they are effective in preventing movements beyond the levels set, but are workable and consistent with safe and efficient operation of the airport and the surrounding airspace and do not lead to perverse environmental outcomes.

Recommendation 7

The Steering Committee recognises the continued importance of access by regional communities to Sydney (Kingsford-Smith) Airport both for access to the CBD and for transfers to flights to other destinations. The Committee does not recommend any reduction to the existing level of protection of slots for intrastate services; nor does the Committee support the forced relocation of any regional services to other airports.

The Steering Committee notes that a staged reduction in the level of use of small aircraft over time would assist in maximising the passenger throughput at the airport.

The Committee recommends that the Australian Government take action including amendments to the Slot Management Scheme to further limit access to new runway slots for smaller aircraft types, to maximise passenger throughput at the airport.

- The Committee supports preventing the allocation of slots for new services operated by aircraft of less than 50 seats from 2015, increasing to 70 seats from 2020.
- Recognising that the main use of aircraft up to 70 seats is for regional air services, slots allocated for services that are already operating should be grandfathered.

Aircraft Noise and the Long Term Operating Plan

Managing the balance between the needs of the airport and the impacts of aircraft noise on the surrounding communities is a key element in the planning for growth at Sydney (Kingsford-Smith) Airport. The Steering Committee does not support changes to the legislated curfew.

The use of alternate runway operating modes under the LTOP to enable the sharing of aircraft noise in the areas around the flight paths to Sydney (Kingsford-Smith) Airport has been a key measure in providing some respite to the communities most affected.

With the level of traffic growth expected, the scope to operate the noise sharing modes will be very limited by 2020. In the absence of new initiatives, the periods of respite offered for some communities will progressively become more and more limited, particularly for communities to the north of the airport. The impacts of this increased activity will be reduced somewhat by the fact that newer aircraft types have a smaller noise footprint.

The Steering Committee recommends that the LTOP for Sydney (Kingsford-Smith) Airport be reviewed with the aim of determining new, more effective measures of aircraft noise impacts and respite than the current runway end movement numbers.

 International experience regarding alternative approaches such as determining "noise budgets" and setting operating parameters for aircraft operations based on noise intensity and frequency of operation in noise sensitive hours should be examined, with a view to setting achievable noise reduction targets for the airport based on the use of new generation quieter aircraft types.

Protecting airspace around Sydney (Kingsford-Smith) Airport

It is important that the future operations of aircraft to and from Sydney (Kingsford-Smith) Airport are not restricted as a result of developments which intrude into protected airspace, create hazards to safe aircraft and airport operations or interfere with the operation of radar and other air navigation facilities.

Recommendation 9

The Steering Committee recommends that the Australian and NSW government agencies undertake an audit of existing and potential intrusions into the protected airspace for Sydney (Kingsford-Smith) Airport (addressing both the Procedures for Air Navigation Services – Aircraft Operations (PANS-Ops) and obstacle limitation surfaces (OLS)).

An agreement should be developed on statutory provisions in Australian and NSW government legislation to protect operations to and from the airport and on the administrative arrangements to support the implementation of those provisions and ensure their effective implementation.

- The arrangements should be extended to protect the operation of radar and other air navigation systems from interference arising from inappropriate location or design of structures in the airport vicinity.
- The Committee notes the pressure for continuing urban renewal in Australian cities, including in areas around airports. The Committee advocates appropriate strategic planning to support renewal opportunities without prejudicing the operation and development of airports as a result of airspace penetrations or inappropriate exposure to aircraft noise.

Optimising Use of Other Existing Airports in the Sydney Region

Airport sites are scarce and are difficult to replace or supplement. It is important that planning for each of the other existing airports, and the areas around them, should allow aviation activities to develop to the full practical potential of the sites, having regard to the physical capacity of each site and to the impacts on nearby communities.

The Australian and NSW governments need to urgently develop and agree policy and planning approaches, including airport noise amenity criteria, to guide development around airports particularly for Greenfield sites. It is critical to prevent inappropriate development within flight corridors which restrict the opportunities for future airport development.

Canberra Airport

Canberra Airport is an important airport with infrastructure capable of handling the full range of services, but is not located close enough to the Sydney market to take the role of Sydney's second RPT airport. It will serve a growing RPT market in southern NSW and will provide an additional option for a small proportion of Sydney passengers who are prepared to travel the extra distance.

Canberra Airport is the only curfew-free airport within reach of Sydney and provides the potential for night-time services which cannot be accommodated in Sydney, in particular international LCC services and overnight freight services. It is important that Canberra's 24 hour unrestricted curfew-free status be protected.

Recommendation 10

The Steering Committee recommends that the Australian, ACT and NSW governments work together to ensure that Canberra Airport is protected from encroaching noise-sensitive urban development which would be incompatible with 24-hour jet aircraft operations and could restrict the expansion of the airport over time into a significant domestic and international aviation centre for both passenger and freight services for south-eastern Australia.

- In particular, the current undeveloped approach and departure corridors to the north and south of the airport should be protected (as appropriate) from residential or other noisesensitive development.
- The Australian, ACT and NSW governments should undertake a joint strategic planning study of these and other areas potentially affected by aircraft noise to ensure that appropriate zoning and infrastructure planning is put in place to avoid creating problems for the future.
- Measures to protect the future growth at Canberra Airport should be put in place quickly, recognising that there is already pressure for approval of greenfield residential developments in the southern corridor.
- The Committee considers that greenfield residential development in currently undeveloped approach and departure corridors, are not appropriate, having regard to the expected growth of operations at the airport and its role as an overnight hub for jet freight, noting the particular sensitivity of night-time noise.

RAAF Base Williamtown (Newcastle Airport)

Newcastle Airport is also too far from the Sydney market to serve as Sydney's second RPT airport, but will serve an important and growing market for the Hunter and Central Coast regions.

Given the aerodrome's role as the primary operational RAAF fighter base and the focus of future Joint Strike Fighter operations, its capacity to accommodate continued growth of civil operations is unclear.

Recommendation 11

The Steering Committee recommends that the Australian and NSW governments develop a joint strategy for accommodating growth in aviation demand for the Hunter and Central Coast regions, addressing short and long-term needs. Any opportunity for expansion of civil services has to be based on the aerodrome being able to meet its primary role as a RAAF fighter base.

- As an initial step, RAAF, Newcastle Airport and the aviation safety agencies should conduct a study to examine strategies to assist in meeting demand in the short-term, such as lifting the arrival rate permitted from six to eight per hour in defined peak periods.
- For the long term, the Australian and NSW governments, in consultation with RAAF and Newcastle Airport, should initiate a study to reach a clear assessment of whether the Williamtown site can meet the future needs of civil operations for the region north of Sydney, with regard to the forecast growth in the Hunter Valley and Central Coast. If the assessment is that Williamtown is not adequate to provide the necessary capacity, a strategy should be initiated for securing an alternative site for a civilian airport to service the region.

Action is also needed to ensure that Newcastle Airport is protected from encroaching urban development which would be incompatible with the airport's expansion and its operations as the primary RAAF Base in south-eastern Australia and a significant RPT airport.

Recommendation 12

The Steering Committee recommends that the NSW and Australian governments should develop a land use strategy, in consultation with Newcastle Airport, RAAF and the local councils, for land use and statutory protections in the areas around RAAF Base Williamtown and its flight-paths.

Bankstown Airport

The capacity of Bankstown Airport to accommodate services beyond the current General Aviation (GA) operations is affected by factors such as the short length of the three runways and potential airspace conflicts arising from the airport's proximity to Sydney (Kingsford-Smith) Airport flight-paths. The airport's location in a highly developed part of Sydney and the potential community impacts are also factors.

Subject to approval through the Master Plan process, Bankstown Airport could support up to about ten Instrument Flight Rules movements per hour by turboprop RPT aircraft. The airport is not suitable to accommodate jet RPT operations.

The Steering Committee supports further development of proposals for Bankstown Airport to be made available as a site for a level of turboprop RPT operations. The Committee does not support any forced relocation of RPT operations, but considers that Bankstown could provide an option for growth of operations by smaller RPT aircraft, including in particular regional services, as slots for additional services become unavailable at Sydney (Kingsford Smith) Airport.

A new Bankstown Airport Master Plan process is due to be conducted in 2012, with full public consultation, and a revised plan to be lodged early in 2013.

Recommendation 13

The Steering Committee recommends that Bankstown Airport and the Australian Government use the Master Plan process to resolve a strategy to allow Bankstown Airport to accommodate RPT operations by turbo-prop aircraft, with the following issues to be explored:

- the extent to which RPT operations might be permitted at Bankstown and any conditions which might be imposed on the operation of RPT services;
- the extent to which the main runway and associated infrastructure might be extended or upgraded to accommodate RPT aircraft, freight aircraft and business jets;
- any implications arising from the operation of RPT aircraft, freight aircraft or business jets for airspace and air traffic management in the region;
- the adequacy of existing surface transport links to allow RPT passengers to travel between Bankstown Airport and Sydney (Kingsford-Smith) Airport or the Sydney CBD;
- any implications for congestion affecting roads and intersections around the airport from the commencement of RPT services;
- · an investment plan to support the changes required to accommodate RPT operations; and
- a surface transport investment plan for the upgrade of airport road links and key intersections to improve access between Sydney (Kingsford-Smith) Airport and Bankstown Airport.

NSW Government transport and planning agencies and Australian Government aviation agencies will need to work with Bankstown Airport in preparation of relevant analysis for the Master Plan process. This process also involves extensive public consultation.

The NSW Government should also initiate a strategic planning review to address the potential implications of the use of Bankstown for a level of RPT operations. This should be linked to any surface transport investment plan.

The proposal to open Bankstown to operations by turbo-prop RPT aircraft complements the proposal to prevent growth of additional small aircraft operations at Sydney (Kingsford-Smith) Airport. If new turboprop services, which typically serve regional routes, cannot be accommodated at Sydney (Kingsford-Smith) Airport, it is important that an alternative airport is available for those services.

In the initial years at least, the level of RPT operations at Bankstown Airport is likely to be at a level compatible with Bankstown's role as the major general aviation airport for the Sydney region.

RAAF Base Richmond

RAAF Base Richmond is an important economic driver for the North West subregion of Sydney. The RAAF's operational use of the site has decreased over time, and it is questionable whether the costs of maintaining the site as a base can be sustained if limited to the current range of uses. RAAF would support shared use of the site with some civil operations as a way to defray the operational costs and meet the investment needed to maintain the facility.

Given the loss of aviation facilities for the Sydney region over the past 20 years, it is critical to meeting Sydney's aviation growth and Australia's military response capability that Richmond be retained as an aerodrome to help serve Sydney's aviation needs. The Australian Government

needs to ensure that the RAAF is able to continue to operate at the site and that other aviation users can utilise the aerodrome consistent with RAAF operational requirements.

For a relatively modest investment, civil services could be supported on the existing runway, providing RPT services up to something like five million passengers per year.

The location of Richmond in the northwest subregion of Sydney would provide an immediate market, improving access to services for residents of West and North West Sydney, rather than divert demand from Sydney (Kingsford-Smith) Airport. Initially, Richmond is likely to attract low cost carrier services to a small number of major domestic destinations. The market is likely to grow over time in line with projected population growth in the region.

The Steering Committee is conscious of the likely sensitivities in the local communities about the introduction of RPT services, particularly in relation to the additional exposure to aircraft noise. The Committee notes that an environmental assessment under Commonwealth law would be required for the change, which would include an extensive process of public consultation.

The Committee's expectation is that a curfew would be required for RPT services at Richmond.

Recommendation 14

The Committee recommends that the Australian Government initiate action to progressively open RAAF Base Richmond to a level of civil traffic using the existing east-west runway alignment. The civil traffic would be operated in parallel with continued Defence operations and under conditions agreed with the RAAF.

- As a first step, the Australian Government should undertake an environmental impact assessment process for the opening up of civil operations based on the investment and traffic scenarios set out in this Report for operations on the existing runway configuration. The assessment should include consideration of a curfew and any other appropriate conditions to protect amenity.
- Following the assessment, the Australian Government should move to formalise the arrangements for joint civil and RAAF use of the site, drawing on the example of the other federal leased airports, which accommodate both civil and military activity.
- The civil facility could be leased and operated under the Commonwealth Airports Act 1996
 with arrangements similar to the lease for Canberra Airport with RAAF's long term access
 to the airfield and the facilities it requires on the base and the civil airport lessee taking
 responsibility for the balance of the site.
- The arrangements should include development obligations to ensure provision of facilities for GA operations and RPT capacity without undue delay.
- The Australian and NSW governments, working closely with local government in the region, should initiate a strategic planning review to address the potential implications of the use of RAAF Base Richmond for a level of RPT operations.

Consideration was also given to an option of adding a new north-south runway at Richmond. This would allow a longer runway to be built, up to a length that would accommodate a full range of international and domestic services. A north-south alignment would also result in better outcomes for aircraft noise exposure, with flights avoiding the Richmond and Windsor townships.

For a north-south runway, acquisition of additional land and major relocations to existing road and rail systems would be required. As a result, this would be a high cost option for something that would not meet all of the projected long term aviation needs of the Sydney region.

Should RAAF Base Richmond be no longer required for RAAF use at some stage in the future, the aviation infrastructure must be retained and made available for civil use, including for GA.

A Greenfield Airport Site in the Sydney Region

None of the above changes would meet the projected long term demand for aviation in the Sydney region. The initiatives to make the most of Sydney (Kingsford-Smith) Airport and other existing airports will delay the impacts of a shortfall in airport capacity for some years, but by about 2030 or soon thereafter, a new airport will be required to supplement capacity.

The need for a new airport would not be overcome with the construction of a HSR network. HSR and additional aviation capacity should not be considered mutually exclusive, as shown in the number of countries constructing both HSR networks and new airports. These countries, and this Steering Committee, recognise both offer important economic and social benefits.

HSR is not a substitute for all air travel, especially international travel. A range of factors including frequency, travel time, cost, station location, and the likely competitive airline response, mean HSR will not remove the need for a supplementary airport.

Although previous studies have assessed a wide range of sites for a possible second RPT airport for the Sydney region, a fresh assessment was conducted *ab initio*. The search addressed the broader Sydney region, from the Hunter region in the north to Canberra in the south and the Blue Mountains to the west.

Localities were assessed to find a site suitable for either a:

- Type 1 airport a full service airport with a runway length up to 4,000 metres, capable of serving all market segments and accommodating a future parallel runway layout; or
- Type 3 airport a limited service airport with a runway length of up to 2,600 metres, capable of serving all market segments but with a single runway layout only.

Key issues in the shortlisting and site assessment included, but were not limited to:

- site suitability, in particular suitability of the terrain for airport construction;
- air navigation issues, including airspace conflicts with existing airports;
- environment and amenity impacts and protected ecosystems;
- proximity to demand;
- · proximity to planned growth centres; and
- · aviation development capacity.

A total of 18 locations were identified in the initial round of assessment, from which five were taken forward for further assessment. These comprised large areas of broadly suitable land identified in the Nepean and Hawkesbury localities, with smaller areas identified in the Cordeaux-Cataract, Burragorang and Central Coast.

The best sites in each locality were then assessed in more detail.

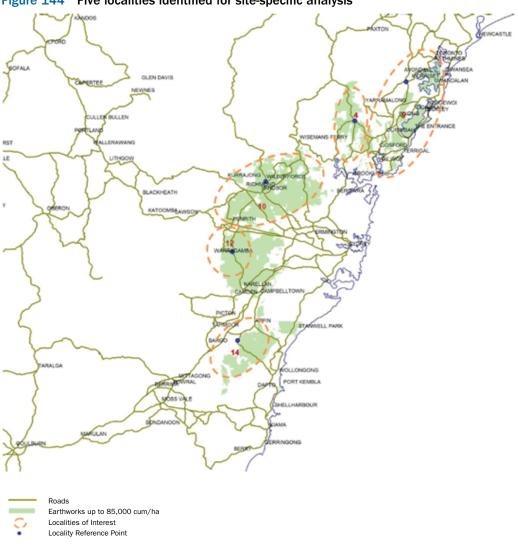


Figure 144 Five localities identified for site-specific analysis

Source: WorleyParsons/AMPC

Type 1 airport options

Site analysis was undertaken, including a technical analysis of the sites and an economic appraisal (rapid Cost Benefit Analysis) to compare suitable sites. The results showed that for a Type 1 airport, potential sites in the Nepean locality (including Badgerys Creek and Luddenham sites) were ranked the best in terms of proximity to Sydney's growth areas and had the highest Relative Benefit Cost Ratios (RBCRs). The RBCRs for the Nepean locality sites ranged from 2.7 for Luddenham to 2.4 for Greendale.

The next best site based on the quantitative economic analysis was located in Hawkesbury (Wilberforce). However, a Type 1 airport located at Wilberforce is likely to require closure of RAAF Base Richmond

The next best sites were Somersby on the Central Coast and the Wilton site in the Cordeaux Cataract locality. However, a Type 1 airport at Somersby would be constrained due to airspace interaction with Sydney (Kingsford-Smith) Airport;

The Wilton site in the Cordeaux-Cataract locality was best placed with regards to noise impacts and is also one of the least constrained sites in terms of airspace interactions, making it a strong overall site. It currently ranks lower on proximity to market, including the Sydney area

growth centres, but would be well located if the south-west corridor becomes the key focus for long-term development beyond the life of existing planning instruments.

In light of the capacity forecasts and the economic cost if demand is not met, it is important that the process be initiated without delay, notwithstanding the cost and likely opposition from some in the areas around the preferred site.

The range of potential sites for consideration has continued to shrink as development has proceeded in the Sydney basin.

Figure 145 Potential new Sydney aviation sites previously identified

	Benefit/Cost Study of alternative Airport Proposals for Sydney (1971–74)			Major Airport needs of Sydney Study (1977–79)				Second Sydney Airport Site Selection Programme (1983–85)	
	Medium list	Select list	Short list		Zones	Sites/layouts	Short list	Nominated locations	Short list
North and west of city centre	Wyong* Somersby Richmond** St Marys Blue Gum Ck+ Marsden Pk Rouse Hill Galston Prospect Duffys Fst Towra Pt Wattamolla	Blue Gum Ck Marsden Pk Galston Prospect	Blue Gum Ck Marsden Pk Towra Pt	NW- Londonden Richmond Scheyville N - Galston		Londonderry Scheyville	Scheyville Sites foregone	Warnervale Somersby Londonderry Scheyville	
South and west of city centre	Long Point++ Bringelly Badgerys Ck Canberra - Goulburn	Long Point Bringelly	Long Point Bringelly	S	Holsworthy Bringelly Badgerys Ck	Bringelly Badgerys Ck	Badgerys Ck	Holsworthy Bringelly Badgerys Ck Darkes Forest Wilton Goulburn	Badgerys Ck Wilton

- * Later called Warnervale.
- ** East of the Londonderry site.
- + Later called Scheyville.
- ++ Later called Holsworthy.

Source: Department of Aviation, Sydney Second Airport Site Selection Programme Draft Environmental Impact Statement, prepared by Kinhill Stearns, 1985

Recommendation 15

The Steering Committee recommends that the Australian and NSW governments commit to establishing a supplementary airport for the Sydney region.

- The site selected for a supplementary airport should be one which is capable of
 accommodating a full service airport serving all market segments and with a parallel
 runway layout (a "Type 1" airport in the terms of the assessment conducted for this
 Study). This would allow staged development as aviation activity develops, with a single
 runway operation initially and parallel runways in the long term.
- The Badgerys Creek site (in the Nepean region), which was acquired for a future airport clearly remains the best location to provide significant additional capacity. It is located close to growing markets in the western regions of Sydney and close to road and rail transport links. In turn, it would provide much needed employment and economic opportunities for the growing residential population of Western Sydney. The site has been

protected from encroaching development and given that the Commonwealth owns the land it would be less costly and disruptive to the community as a development site than other options. In particular an airport at this site and its associated employment opportunities will provide a significant catalyst to increase much needed housing supply in the region.

- The Committee is conscious of policy statements indicating that both Australian and NSW
 governments no longer see the site as suitable for airport development. The decision is
 one for governments, but a definitive decision is required now to confirm whether or not an
 airport can be built at Badgerys Creek.
- If the Badgerys Creek site is not ruled out by governments, the Environmental Impact
 Statement should be updated immediately. Subject to the outcomes of that process,
 planning and other work should commence to development infrastructure so RPT
 operations can commence as soon as possible, thereby maximising the opportunities for
 increased access to aviation services and employment in Western Sydney.

Recommendation 16

If Badgerys Creek is ruled out, Wilton is the next best site. The airspace interactions with Sydney (Kingsford-Smith) Airport are less constrained than other sites, and a smaller number of people impacted by both land acquisition and aircraft noise. Sydney's growth is expected to spread further to the southwest in the long term.

If Badgerys Creek is ruled out, the Steering Committee recommends that the Australian and NSW governments proceed without delay to secure and protect the Wilton site for the development of a supplementary airport in the future.

The following initial steps should be taken in the next 12 months with regards to Wilton:

- An Environmental Impact Statement assessment, and preliminary land acquisition
 planning, should be initiated in order to identify potential environmental issues and
 strategies for managing them.
 - Processes should be put in place for identifying the properties that would need to be acquired and to make preparations for the acquisition program.
 - A review of strategic planning instruments should occur to take account of the
 preferred airport site, looking beyond the life of existing instruments and recognising
 the potential for an economic driver like an airport to contribute to planning outcomes.
 Planning should commence for controls on land use and development in the areas
 surrounding the preferred site.
 - An early comprehensive community consultation and engagement program including local government should immediately commence.
- As a minimum a supporting infrastructure plan should be developed between the Australian and NSW governments. This should include planning on surface transport links and connections to utilities, including identification of the service corridors to be protected.

Wilton is further than Badgerys Creek from Sydney and the current planned growth centres. While Sydney's growth is expected to spread to the southwest in the long term, the level of business for a new airport at Wilton is likely to be lower than for an airport at Badgerys Creek in the initial years and the commencement of operations might not be viable by 2030 for Wilton. Opening RAAF Base Richmond to RPT services would provide improved access to aviation services for the growing population of western Sydney in the interim.

The Steering Committee recommends that, if Wilton is selected as the site for a supplementary airport, it is important that action proceed in the interim to open RAAF Base Richmond to a level of RPT operations.

The development of an additional airport will require a strong ongoing commitment from both the Australian and NSW governments.

Recommendation 18

The Steering Committee recommends that when a firm decision is reached to proceed with development of a supplementary airport and the preferred site, the decision should be locked in as an ongoing commitment of both governments through legislative actions in both the Australian and NSW Parliaments. This will provide planning certainty to support the development of Sydney, both by allowing the effective development of housing, employment and transport in the areas around the selected site, and by removing conjecture over the future of other possible sites that have been suggested for an airport.

Recommendation 19

The Steering Committee recommends that, if governments confirm that the Badgerys Creek site is not to be used as an airport, an agreed approach be developed for future use of the site, recognising its potential contribution to the supply of employment lands, affordable housing and community amenity facilities.

- The Australian and NSW governments should immediately agree to a detailed planning and zoning strategy for the site which effectively preserves the site for future employment lands for the South West Growth Centre and Western Sydney.
- The Australian Government should, in consultation with the NSW Government, undertake
 a scoping study of the future land disposal and sale options, to determine the optimal
 timetable for the land to be brought to the market.
- The Australian and NSW governments should consider a suitable public-private partnership land development joint venture for the site to provide an optimal strategy for infrastructure provision, land release and financing for urban development of the site.
- The Australian and NSW governments should jointly plan infrastructure investment and programming for the site, including possible extension of the South West Rail Line from Leppington to the site.
- The current state and local government restrictions on land surrounding the site, which
 were put in place to protect the site for a future airport development, could be removed.

Governance, Monitoring and Reporting

It is important that the Australian and NSW governments continue to work together in taking forward the strategy for ensuring adequate aviation capacity for Sydney. A wide range of actions by both governments, airport operators and others will need to be monitored and coordinated over a long period.

The Steering Committee recommends that the Australian and NSW governments establish a joint body and an agreed process for managing and monitoring implementation of the strategy, with access to a broad-based reference group.

- Regular reports should be provided to both governments, advising on trends in aviation
 activity and their impact on timeframes identified in this Report; identifying progress on all
 elements of the strategy; and highlighting significant issues encountered.
- What is expected of airport operators should be made clear and, where practicable, formalised in instruments such as airport master plans or lease agreements.
- The monitoring should include coverage of the adequacy of airport capacity for general aviation operations as well as RPT and freight services.

Conclusions

The Steering Committee has undertaken a comprehensive integrated planning review of one of the most critical planning and investment decisions facing Sydney, New South Wales and Australia – the future aviation infrastructure needs of the Sydney region.

The work of this Joint Study seeks to ensure that sufficient future aviation capacity is in place so that Sydney and Australia can and will benefit from the growth in population, air travel and business and personal mobility. Importantly, this Study has set out to integrate for the first time aviation planning with planning for Sydney's spatial growth and its surface transport investment.

Aviation is an economic driver and a social enabler for Australia. It creates jobs and underpins the future industries and communities which Australia needs. For Sydney, NSW and Australia to be positioned as global centres of finance, trade, high value technology and manufacturing, and to support the communities we want in the region, Sydney's aviation needs must be met now and into the future.

The Steering Committee well understands why solving the issues raised in this review have been contentious. However, the option of doing nothing is no longer available and the costs of deferring action are unacceptable.

The need for both short and long-term actions is clear.

The economic costs of inaction outweigh the costs and controversy of expanding airport capacity.

The spread of urban development in the Sydney basin means it is already very difficult to find a suitable site for a second RPT airport. The Joint Study has found that there is no optimal site that satisfies everyone. However, the options have now become very limited.

The opportunity to secure a suitable site is likely to disappear altogether if action is not put in train now.

The following presents the impact of the capacity constraints identified over the short, medium and long term and the subsequent actions recommended to address them. The Committee considers that these measures recommended can be implemented in parallel.

	Shortfall in Sydney (Kingsford-Smith) Airport aircraft stands		Increasing congestion and delays with some activity constrained by lack of stands		1.	Initiate a new Master Plan process to develop a definite program of works at Sydney (Kingsford-Smith) Airport, bringing forward investments in terminals, aprons and parking for aircraft, providing for management of runway balance utilisation requirements and limiting taxiway congestion
Short Term (0–10 years)	Weekday peak slots to access Sydney (Kingsford- Smith) Airport fully		New entrants excluded from peak, only some will accept other times		2.	Accelerate implementation of technologies and air traffic management practices to maintain traffic handling rates / efficiency
	allocated				5.	Lift Sydney (Kingsford-Smith) Airport statutory movement cap from 80 to 85 in peak hours to enable greater rates of handling of peak hour traffic
					6.	Review the slot management process and movement cap to ensure they are effective in preventing movements beyond set levels, ensuring efficient airport operations
	Roads and intersections at		Increasing travel time and cost between Sydney (Kingsford- Smith) Airport and the CBD / other key locations		4.	Develop agreed program of surface transport works, including:
	entrance to Sydney (Kingsford-Smith)				•	Upgrade of roads and intersections in airport locality
	Airport domestic terminal near				•	Investment in suitable rolling stock/train paths to provide at least 20 peak airport trains per hour by 2020 and a further 10 per hour by 2035
	constant traffic jam in peak periods					Expansion of public bus network to the airport
						Facilitation of centralised bus/mini-bus transit point a the airport
	CBD-bound train services from Sydney (Kingsford- Smith) Airport at capacity in the morning peak		Train travel undesirable due to crowded carriages, greater road use increasing congestion		3.	Develop strategy to increase rail patronage to access Sydney (Kingsford-Smith) Airport. This should include removal of the station access fee.
	Activity at Sydney (Kingsford-Smith) Airport consistently above level required for LTOP		Capacity to share noise and provide respite only available for few hours of the day		8.	Review LTOP to determine more effective measures of aircraft noise impacts and noise respite, such as noise budgets and aircraft operating parameters
	Development occurring around few remaining		Options for development of current and future sites compromised		14.	Undertake environmental and other assessments for opening of RAAF Base Richmond east-west runway for civil traffic
	options for future airport sites				15.	and 16. Undertake environmental and other assessments; and land acquisition planning to secure site for future additional airport
	Development near Sydney (Kingsford-Smith)		Constraints on operations at existing airports due to inappropriate development		18.	Decision to proceed with supplementary airport and preferred site locked in as an ongoing commitment of the Australian and NSW governments
	Airport, Canberra Airport and RAAF Williamtown /				9.	Develop and implement Australian and NSW statutory provisions to protect operations to and from Sydney (Kingsford-Smith) Airport
	Newcastle Airport				10.	Protect current undeveloped approach and departure corridors to Canberra Airport, to enable 24-hour aircraft operations and future expansion
					12.	Develop strategy for land use and statutory
	Protected regional slots full at Sydney (Kingsford-Smith) Airport		Constraints on new regional services accessing Sydney region		13.	protections in areas around RAAF Base Williamtown Use Master Plan process to resolve a strategy to allow Bankstown Airport to accommodate RPT operations b turbo-prop aircraft
	Fragmented planning		Uncertainty for the community and businesses		20.	Australian and NSW governments establish a joint body and agreed process

Timeframe Issue Impact Action Recommended

Civilian operations at RAAF Williamtown/ Newcastle Airport reach capacity in the peak No new civilian services possible in peak times at Newcastle Airport

- 11. Develop strategy to meet aviation demand in the Hunter and Central Coast regions, on the basis of the current aerodrome's primary role as a RAAF base:
- Examine short term strategies such as lifting arrival rate to 8 per hour in defined peak periods
- Assess the site's ability to meet future civil demand, and if capacity deemed inadequate, initiate strategy to secure alternative site for a civilian airport

Around 2027, all slots to access Sydney (Kingsford-Smith) Airport fully allocated

Around 2033 aircraft movements at Sydney (Kingsford-Smith) Airport estimated to reach legislated cap of 80 movements per hour New entrants excluded from flying to Sydney, with no opportunities for new carriers

No new flights able to operate, growth only possible through fuller or larger aircraft

\$2.3 billion in foregone GDP for Australia (\$6.0 billion foregone in NSW GSP) Further limit access to new Sydney (Kingsford-Smith) Airport runway slots for smaller aircraft:

- Prevent allocation of slots for new services operated by aircraft less than 50 seats (from 2015), increasing to 70 seats (from 2020)
- Grandfather slots already allocated to regional air services operating aircraft up to 70 seats
- 15. Commence operations at supplementary airport at Badgerys Creek **or**
- 14. and 17. Progressively open RAAF Base Richmond to a level of civil traffic using the existing east-west runway alignment and
- 16. Progress development of Wilton as supplementary airport and
- 19. Agree approach for future use of Badgerys Creek site

Demand cannot be met at Sydney (Kingsford-Smith) Airport if additional capacity is not operational by 2035 Unmet demand of approximately 665 million passenger movements and 9 million tonnes of air freight

\$34.0 billion foregone GDP for Australia (\$17.5 billion foregone NSW GSP)

17,300 foregone jobs per annum in Australia (12,700 pa in NSW)