# **Sydney Airport**



# Presentation SYDNEY AIRPORT COMMUNITY FORUM

Preliminary Draft
Master Plan 2009

26 September 2008



#### 1. Current status

- Technical Studies complete.
- Initial stakeholder consultation complete 84 separate briefings to various stakeholders.
- 19 September 2008 public announcement and release of Preliminary Draft Master Plan 2009 (PDMP).
- Week commencing 22 September 2008 commencement of community consultation process. Regular Community Updates will be provided in local newspapers and a series of Community Open Days will be held (further details on Sydney Airport website).



#### 1. Current status (cont'd)

- 16 December 2008 conclusion of public exhibition period.
- December 2008 to February 2009 consideration of public comments and revisions of PDMP to produce Draft Master Plan.
- by 22 March 2009 submission of Draft Master Plan to Minister for Infrastructure, Transport, Regional Development and Local Government.



#### 2. Outline of the Preliminary Draft Master Plan

- The Preliminary Draft Master Plan 2009 is an update of Sydney Airport's existing approved Master Plan 03/04. Its chapters provide information on:
  - the proposed stakeholder and community consultation process.
  - the statutory and policy framework.
  - the economic and regional significance of Sydney Airport.
  - aviation activity forecasts in 2029 passengers, aircraft movements and freight volumes.
  - Sydney Airport's land use zoning plan.
  - Airspace protection measures.



#### 2. Outline of the Preliminary Draft Master Plan (cont'd)

- Master Plan Concepts for:
  - > the layout of the airfield in 2029.
  - terminal and passenger systems.
  - freight handling.
  - > aviation support facilities and utilities.
  - > landside access.
  - > commercial development.
- measures to address sustainability, climate change and environmental management issues.
- implementation issues.



#### 3. Statutory context

Sydney Airport's Preliminary Draft Master Plan is based on:

- No change to the curfew
- No change to flight paths
- No change to the aircraft movement cap
- No new or extended runways
- No change to access arrangements for regional airlines



#### 4. Aviation Activity Forecasts

- Prepared by Tourism Futures International and peer reviewed by Booz Allen Hamilton.
- Air freight forecasts by T&L Consulting.
- Forecast growth is:

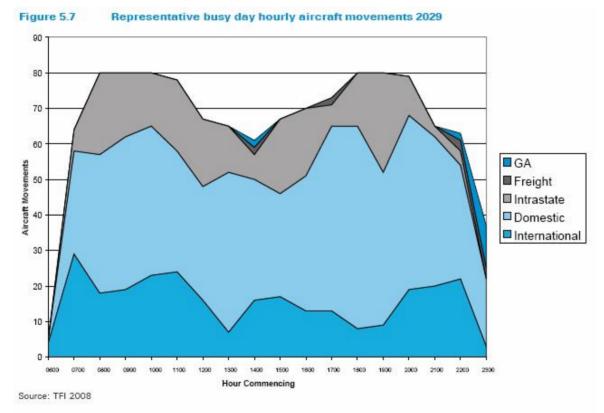
	2007	Forecast for 2024 (existing approved Master Plan 03/04)	Forecast for 2029 ( <i>Master Plan 2009</i> )
Domestic and international passengers (millions)	31.9	68.3	78.9
Total aircraft movements* (thousands)	286.1	412.0	427.8
Air freight (million tonnes)	0.47	1.297	1.077

<sup>\*</sup> includes passenger aircraft, dedicated freighter aircraft and General Aviation



#### 4. Aviation Activity Forecasts (cont'd)

- Continued introduction of larger aircraft, higher loading factors and spreading of peak period.
- 2029 Representative busy day forecast (around 4% busier than the 'average' day):



#### 5. Airfield Capacity Modelling

- A capacity modelling study was carried out using Boeing's Total Airport and Airspace Modeller. It used a representative busy day schedule and was based on:
  - No change to curfew,
  - No change to 80 aircraft movement cap,
  - Maximising noise sharing.
- The study confirmed that the Master Plan concept for the airfield layout in 2029 is capable of handling the forecast traffic volumes, with:
  - no new or extended runways,
  - one new and other extended taxiways to be provided,
  - proposed number of additional gates confirmed as appropriate.



### 5. Airfield Capacity Modelling (cont'd)

- Sydney Airport can sustainably accommodate forecast growth in airline travel because:
  - airport facilities including terminals, freight facilities, taxiways, hangars, aircraft parking, airport roads and car parking – will be progressively upgraded over the next 20 years.
  - aviation technology is improving all the time: new generation aircraft are quieter, cleaner, more efficient and they consume less fuel.
  - Governments are also considering upgrades to the M4 and M5 motorways, new bus services and more frequent trains to and from the airport. New infrastructure and public transport services will make it easier for people to travel to and from Sydney Airport.



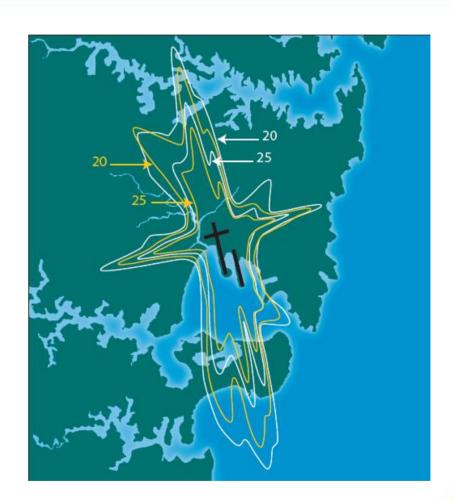
#### 6. Environmental management

- Sydney Airport has completed or is undertaking numerous environmental initiatives.
   These are outlined in the Airport Environment Strategy 2005, which is to be updated in 2009/2010.
- Substantial environmental benefits associated with the forecast increase in the use of new generation aircraft (A380 and B787): quieter, cleaner and more fuel efficient.
- Aircraft noise:
  - the International Civil Aviation Organization has said that the aircraft coming off the production line today are about 75% quieter than they were 40 years ago, and that aircraft manufacturers are working to reduce this further.
  - Airservices Australia has released a report showing that the A380 is between 2.3 and 6.7 decibels quieter than the B747-400 when departing Sydney Airport (a 3 decibel reduction is regarded as halving an aircraft's noise energy).
  - noise sharing and respite opportunities are maintained in the area immediately to the north of the Airport, respite is slightly increased (when compared to 2024 forecast in existing approved Master Plan 03/04) although reduced (when compared to today) – little or no change in other areas.



#### 6. Environmental management (cont'd)

- Comparing the Australian Noise
   Exposure Forecast (ANEF) for 2029
   (yellow contours) with the approved
   ANEF in the existing Master Plan 03/04
   (white contours), the forecast noise
   footprint in 2029 relative to that for 2024
   has been generally reduced.
- This is because of the impact of aircraft which are now quieter, a trend that will accelerate over the next 20 years with the introduction of new generation aircraft. These even quieter aircraft have not been included in the modelling for the ANEF 2029.
- The PDMP includes an Australian Noise Exposure Concept (ANEC), which models the impact of the quieter aircraft. This shows the noise footprint shrinking even further.





#### 6. Environmental management (cont'd)

- Aviation and climate change:
  - The Intergovernmental Panel on Climate Change (IPCC) estimates that aviation accounts for around 2% of global CO<sub>2</sub> emissions, and is expected to reach 3% by 2050.
  - Despite growth in aviation over recent decades, the IPCC estimates that the fuel efficiency of today's modern jets is 70% better than it was with the early jets. The IPCC projects a 20% improvement in fuel efficiency by 2015 and a 40-50% improvement by 2050 relative to aircraft produced today.
- Reducing Sydney Airport's carbon footprint:
  - Emissions inventory for the Airport complete (excluding emissions from airlines or other third parties) – the Airport produces around 100,000 tonnes of CO<sub>2</sub> equivalent emissions, with the largest contributor being the energy used to run the airconditioning systems in the terminals.
  - Energy Saving Action Plan being implemented initiatives to be pursued include increasing use of alternative energy such as solar and cogeneration.
  - Increased use of Fixed Electrical Ground Power Units will reduce the need for aircraft to run Auxiliary Power Units on the ground, thus reducing fuel burn and emissions.
  - Construction has commenced on Sydney Airport's water recycling plant which will save about 350 million litres of fresh water a year.

## 7. Master Plan Concept

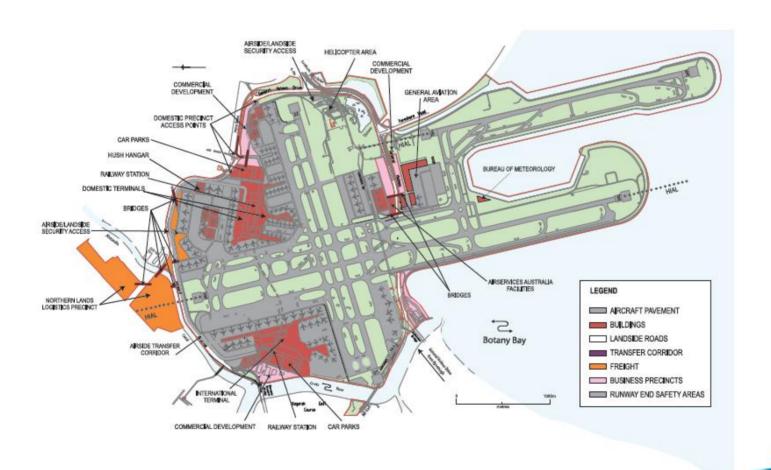
Sydney Airport layout in 2023/24 (approved Master Plan 03/04)





## 7. Master Plan Concept (cont'd)

Sydney Airport layout in 2029 (Preliminary Draft Master Plan 2009)





#### 8. Passenger terminals

- International Terminal will remain in current location.
- Domestic Terminal will remain in current location.
- Additional layover aircraft parking in SW and SE sectors.
- International Terminal (T1):
  - to be expanded,
  - new Pier A to north of existing terminal building,
  - parallel taxiways serving straightened terminal front,
  - additional gates to be provided that are capable of handling increasing numbers of larger aircraft (such as the A380),
  - aviation fuel facility (JUHI) to be relocated post-2024.



#### 8. Passenger terminals (cont'd)

- Domestic Terminals (T2 and T3):
  - to be expanded,
  - T2 and T3 will join (after expiry of Qantas T3 Lease),
  - New Pier C for T2.
- Passenger transfer between International and Domestic Terminal precincts forecast to increase to 7.1 Million by 2029 – dedicated airside transfer corridor to be provided.



#### 9. Landside access

- The NSW Government's Metropolitan Strategy identifies a Global Economic Corridor stretching from Macquarie Park, through the CBD to Sydney Airport and Port Botany. Growth in aviation activity at Sydney Airport needs to be seen in the context of:
  - Port Botany expansion,
  - draft targets for 2031 proposing an additional 26,050 dwellings and 36,100 jobs in the Botany Bay, Randwick, Marrickville and Rockdale LGAs,
  - major development approvals for Green Square and Cooks Cove.
- Productive consultations with key NSW Government infrastructure and transport agencies including Office of the Coordinator General, Ministry of Transport, RTA, CityRail and State Transit Authority.
- Public transport improvements are proposed (additional bus routes and rail capacity).
- Motorway extensions being considered by Governments (M5 East, M4 Extension).
- International Precinct little change to layout shown in existing approved Master Plan.



#### 9. Landside access (cont'd)

- To improve traffic flow and reduce congestion in the Domestic Terminal Precinct, Sydney Airport is proposing a new access concept:
  - three entry/exit points to replace the existing single point.
  - separating different types of traffic taxis, staff, rental cars, car parkers, limousines, buses and coaches and people meeting passengers.
  - prioritised access to Arrivals and later at Departures kerb to taxis, hire cars, buses and coaches.
  - Develop "kiss and ride" facility within car park structures: will enhance front of terminal security.
  - Increase car parking capacity in response to consumer demand.



#### **10. Commercial Developments**

- International (NW) Sector similar to existing approved Master Plan.
- Domestic (NE) Sector similar to existing approved Master Plan.
- Southern Sectors increased aviation use.
- Northern Precinct reserved for freight/aviation logistics similar to existing approved Master Plan.
- Interim commercial uses of sites are permissible until needed for aviation purposes.



#### 11. Next steps: stakeholder consultation

- Initial briefings and preliminary consultations have already taken place during initial phase, including with:
  - Australian Government agencies
  - NSW Government agencies
  - Local Government
  - Sydney Airport Community Forum
  - Airlines and other aviation industry stakeholders
  - Business and tourism industry groups
  - Ground access organisations
  - Freight companies



#### 11. Next steps: stakeholder consultation (cont'd)

- Public exhibition phase (22 September to 16 December 2008):
  - The PDMP can be downloaded from <a href="www.sydneyairport.com">www.sydneyairport.com</a>, is available for viewing at various public locations and for viewing and purchase from SACL Corporate Office.
  - PDMP Summary, FAQ and Fact Sheets are available on website.
  - Regular Community Information Updates to be provided in local newspapers (English speaking and community languages).
  - Briefings and discussions with key stakeholders.
  - Community displays and open days to be held in areas around Sydney Airport.
  - 1300 73 65 93 Community Information Line and dedicated master plan email set up.



#### 12. Summary

- Maintaining Sydney Airport as our international gateway and Australia's premier airport.
- Sydney Airport can accommodate forecast growth in airline travel.
- PDMP is based on no change to curfew, no change to the aircraft movement cap, no new flight paths, no new or extended runways and no change to access arrangements for regional airlines.
- The new generation of quieter, more fuel efficient aircraft will result in environmental benefits. The ANEF contours in 2029 relative to those for 2024 in the existing approved Master Plan 03/04 have been generally reduced.
- New access concept proposed to improve traffic flow and reduce congestion in the Domestic Terminal Precinct.
- Governments are considering upgrades to the M4 and M5 motorways, new bus services and more frequent trains to and from the airport. New infrastructure and public transport services will make it easier for people to travel to and from Sydney Airport.

