



The Hon Andrew Constance MP

Minister for Transport and Infrastructure

Rob Stokes

Minister for Planning

Hon. Warren Truss MP
Deputy Prime Minister
Department of Infrastructure and Regional Development
Western Sydney Airport Submission
Western Sydney Unit
GPO Box 594
Canberra ACT 2601

Dear Mr Truss

**New South Wales Government Submission in response to the
Western Sydney Airport draft Environmental Impact Statement and draft Airport Plan**

The New South Wales Government welcomes the opportunity to provide a submission on the Western Sydney Airport draft Environmental Impact Statement and draft Airport Plan. This submission represents a whole of NSW Government response.

The NSW Government supports the proposal of the Australian Government to develop a Western Sydney Airport (WSA) at Badgerys Creek. The new airport will be a major catalyst for economic and employment growth in Western Sydney, the Sydney Metropolitan Region and wider NSW.

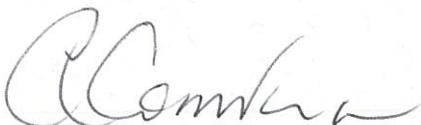
Whilst the development of the airport is subject to a Commonwealth environmental assessment and approvals process, a number of key environmental issues have been identified by the NSW Government. Recommendations for further assessment and additional mitigation measures have been identified to strengthen the existing commitments in the draft EIS and draft Airport Plan. A Western Sydney Airport, as a new gateway to Australia and to NSW, should represent international best practice in terms of innovation and sustainability.

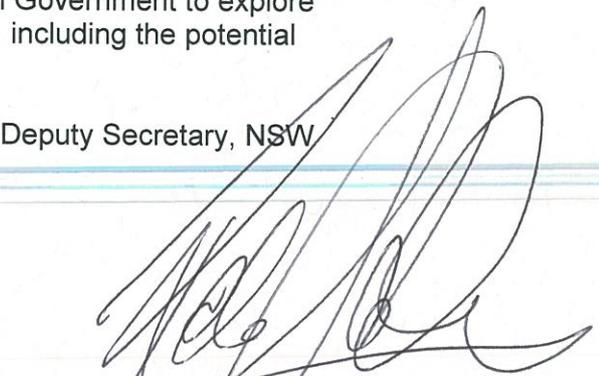
Please see attached the *NSW Government submission on the Western Sydney Airport Draft Environmental Impact Statement and draft Airport Plan*.

The newly formed Greater Sydney Commission has been charged with the job of establishing a vision for the Western Sydney Priority Growth Area surrounding the new airport. The NSW Government is keen to work in collaboration with the Australian Government to explore mechanisms and frameworks that will best implement the plan, including the potential establishment of a state owned Development Corporation.

Should you have any enquiries, please contact Dr Liz Develin, Deputy Secretary, NSW Department of Planning and Environment on (02) 9228 6245.

Yours sincerely


17/12/15
The Hon Andrew Constance MP
Minister for Transport and Infrastructure


Rob Stokes
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New South Wales Government
submission on the
Western Sydney Airport
draft Environmental Impact Statement and draft Airport Plan

December 2015

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Executive Summary

The NSW Government supports the Australian Government's proposal to develop Western Sydney Airport (WSA) at Badgerys Creek. The airport development will be a major catalyst for economic and employment growth in Western Sydney, the Sydney Metropolitan Region and wider NSW. It will also alleviate pressure on the existing Kingsford Smith Airport (KSA) at Mascot, and help to meet Sydney's future demand for domestic and international air services.

The newly formed Greater Sydney Commission has been charged with the job of establishing a vision for the Western Sydney Priority Growth Area surrounding the new airport. The NSW Government is keen to work in collaboration with the Australian Government to explore mechanisms and frameworks that will best implement the plan, including the potential establishment of a state owned Development Corporation.

The noise impacts of the airport and flight paths will continue to shape urban development in Western Sydney, in terms of the location, type and intensity of development. The Western Sydney Priority Growth Area will be carefully coordinated to integrate with the plans for the airport. The NSW Government is committed to using the best possible information on noise impacts to plan and manage growth and development in Western Sydney in a way that protects the long-term operating capacity of the airport and limits the impact of noise on communities.

Transport planning will be integral to the effective planning for the airport. The \$3.6 billion Western Sydney Infrastructure Plan is an excellent kick start for growth in Western Sydney.

Given the ambitious commercial and retail floor space estimates of the draft Airport Plan it is clear that the traffic generated at the site is underestimated and will require further investment in infrastructure, particularly transport. It is important that all levels of Government work together to augment the Western Sydney Infrastructure Plan.

Concerns are raised about road infrastructure which include: issues with proposed road realignment of the Northern Road; increased heavy vehicle movements on Elizabeth Drive; costs to NSW of relocating Elizabeth Drive; and funding of required local road upgrades.

The NSW Government is collaborating with the Australian Government on the integration of future rail options with the WSA. This includes undertaking a rapid assessment of whether rail infrastructure is best developed during development of the airport or at a future date when demand is greater. Draft plans for the WSA retain options for both an east-west and a north-south rail connection through the airport site.

The review of environmental impacts includes a number of observations for consideration in the final Environmental Impact Statement (EIS). These would strengthen the existing commitments in the draft EIS and ensure that WSA, as the new gateway to Australia and to Sydney, represents international best practice in environmental outcomes, innovation, design and sustainability. Further considerations are:

- The **assessment time-frame** is limited to a five-year operating scenario. A more typical assessment would be for at least 10 years, allowing for a robust assessment of key operational impacts including ground borne noise, air quality, traffic and hazards/risks.
- The **operating mode** to be subject to further analysis and assessment. Proposed operating modes 05 and 23 have similarities and differences in their environmental impacts. Indirect impacts such as noise, air quality and health require further assessment, including community consultation, once the operating mode is finalised.
- Further consideration to be given to the location of the **flight path merge point** to reduce noise impacts on local communities in the Blue Mountains.

- Additional work on the current **biodiversity** offsets strategy to meet NSW requirements. Innovative solutions to achieving, for example, 'future requirement offsetting' will be required, as conventional methods are unlikely to achieve cumulative offsetting needs.
- Further assessment for the **hazards and risks** associated with storing and managing jet fuel and supplying fuel to the site via road tanker (rather than a pipeline). Road tanker movements will also have environmental impacts on surrounding communities, as would a future jet fuel pipeline.
- Further strengthening of the identification of and commitment to specific **sustainability** targets in the Airport Plan, including underlying environmental principles and/or outcomes to inform future development on the site.
- Further consideration to be given to the impact of pollutants arising from airport operations on **human health**.
- Further assessment of plans to manage pollutants generated by the airport against recognised performance standards in order to achieve established **water quality** objectives.
- Further investigation into the assessment and mitigation of **social impacts** for existing communities (Luddenham, Twin Creeks, Bringelly) and areas where new acquisitions due to noise impacts may be required.

1. 24-hour operations and flight curfews

The NSW Government supports the need for a 24-hour airport in Sydney with no flight curfew, to ensure economic competitiveness of the airport and Western Sydney. This would also allow for emergency overflow from KSA, which would otherwise be diverted interstate.

Flight path 23 is preferred on the basis of the reduced population affected, and flight paths should be reviewed with the aim to minimise the exposed population. This would necessitate a joint process for the optimisation of flight path plans to reduce the impact on existing residential areas and population.

The land surrounding the airport has been protected from the development of dwellings and other noise-sensitive uses for almost 15 years, in accordance with the existing s117 Ministerial Direction; hence, the number of existing dwellings directly impacted is very low. However, the consideration of stricter night-time noise and sleep disturbance criteria (N60 contours) reveals substantial additional populations potentially affected under different flight path operating modes in 2063. Proposed strategic planning for WSA's surrounding growth areas will include controls to minimise noise disturbance.

Recommendation

- The NSW Government is supportive of an airport in Western Sydney that operates 24 hours a day, without a curfew for flights, if the demand and need can be demonstrated and the resulting economic benefits justify the operational impacts and the impacts to surrounding communities are considered and mitigated.

2. Noise impacts on surrounding land uses and population

The land surrounding the airport has been protected from development for a number of years, meaning that the number of dwellings directly impacted is very low. The proposed Australian Noise Exposure Concept (ANEC) contours in the draft EIS (working on a longer term scenario), appear to be consistent with the earlier EIS contours used for land use planning decisions in the area. It appears the main differences are reduced noise-affected areas in the Warragamba / Silverdale area and the Twin Creeks and Kemps Creek areas.

A site-specific section 117 Ministerial Direction (Direction 5.8) protects the future airspace of the WSA by limiting residential zonings to those areas outside of the 20 ANEF (based on the contours from the 1985 EIS). This approach would need to be re-evaluated and confirmed as part of the next steps in airport development.

The draft EIS provides information on noise across metrics but does not include criteria for assessing what is an acceptable level, or at what levels actions will be implemented to mitigate impacts to residential and non-residential places (such as schools).

As the flight paths prepared by Airservices Australia are conceptual, these do not appear to have fully considered potential noise abatement opportunities. Areas that could be further clarified include:

- What changes will be made at the final design stage and whether this will result in significant differences to the predictions in the draft EIS.
- Whether the assumed flight mix (types and number of aircraft) and the distribution of flights over the 24-hour operating period presented in the draft EIS are representative of a reasonable worst-case scenario.
- The potential implications for flight path noise from changes to Bankstown and Sydney Airport flight paths in the longer term.
- Whether engine start, taxiing and take-off form part of the ground-based noise flight operations assessment. The NSW Government suggests that further consideration be given to the impact of ground-based transport impacts outside the airport site.
- General aviation requirements and demand. The draft EIS states that an “airport for such activity is not specifically excluded and investment in associated support facilities will be a commercial decision for the airport lessee company”. The implications, in terms of flight path planning, numbers and impacts are unclear.

The draft EIS indicates that the conceptual airspace design may not have been developed to a level of detail necessary for implementation. Furthermore, it is based primarily on air space requirements rather than on the basis of safety, efficiency, noise and environmental considerations, as well as minimising changes to existing regional airspace arrangements.

The NSW Government would recommend that consideration be given to commitments to other initiatives to manage noise impacts: for example, consideration of landing charges and restrictions to the operating hours of noisy aircraft. These approaches can be used to achieve the most appropriate noise outcome at the least overall cost.

A Noise Abatement Program (NAP) could be developed to provide the community with clarity and certainty regarding the mitigation measures that will be taken for affected receivers and under what circumstances. A NAP would identify the need to either acquire and/or provide noise insulation to adversely affected noise-sensitive receivers, based on the predicted ANEF zone for different building types or land-use categories.

For houses, home units, flats and caravan parks within the 'unacceptable' AS 2021 building site acceptability category, the NSW Government would support the Australian Government making an offer of acquisition. Where this is not accepted, an offer of, or assistance with, noise insulation sufficient to achieve the 'acceptable' AS 2021 could be provided.

For hotels, motels, hostels, schools, universities, hospitals, nursing homes, public buildings, commercial buildings and light industrial buildings within the 'unacceptable' AS 2021 building site acceptability category, the NSW Government would support an offer for noise insulation sufficient to achieve the 'acceptable' AS 2021 .

A Noise Management Plan could be developed during the final detailed design and future airspace review to provide key stakeholders with the opportunity to influence the final design and ensure the community is fully informed of the likely impact of the airport prior to commencement. The installation of permanent noise monitors with real-time results from the monitoring available online could also inform any future planning of the airport.

An operational aircraft noise mitigation policy would provide transparency and certainty for the community regarding noise mitigation in response to operational noise monitoring as the airport grows. Ideally, this would identify the appropriate operational noise criteria and metric, and what mitigation measures would be implemented if these are exceeded, linking to the Noise Abatement Program as needed.

An online noise tracking system showing 'real time' and historic aircraft noise data could be maintained during airport operation and appropriate measures put in place to respond to public inquiries and complaints on aircraft and ground-based noise issues. Data from the noise tracking system should be utilised for future planning of the airport.

Any developments to increase capacity for additional aircraft greater than those identified in the Airport Plan (2030) would require an Major Development Plan (MDP) to be prepared by the airport lessee company, to be provided for public consultation and including detailed consideration of any additional noise impacts, including results of noise monitoring.

A Community Aviation Consultation Group (CACGs) would provide for effective and open discussion of airport operations and its impact on nearby communities.

A final airspace design should ensure that noise impacts are minimised as far as practicable and be subject to community and industry consultation and, where appropriate, undergo further environmental assessment processes and the preparation of noise contours.

Recommendations

- The NSW Government supports the development of an Australian Government policy defining the aircraft noise levels at which noise mitigation measures will be implemented and providing commitments to introduce an adaptive noise abatement program to mitigate potential impacts through possible acquisition, insulation or possible relocation support.

3. Building height restrictions in surrounding areas

The addition of another major airport adds to the complexity of air navigation in the Sydney Basin. The draft EIS identifies a need for new, Australian Government-enforced, building height restriction. With five airports in operation, these restrictions could be wide ranging for the Sydney Metropolitan Area.

Currently, the control of building height through the Australian Government's assessment process can cause delays in the development assessment of tall buildings. This is an issue for tall buildings within many of Sydney's major centres and can inhibit local strategic planning.

A statutory planning requirement to Councils (s117 Direction 3.5 Development near licenced aerodromes) requires consultation with the Commonwealth for any planning proposal that impacts on Obstacle Limitation Surface (OLS) or other airport navigation limitation. There is a model clause for local environmental plans that requires the approval of the Australian Government to any development that may impact on the OLS of an airport.

If the Department of Infrastructure and Regional Development (DIRD) is able to clarify the process for resolving building and air navigation conflicts associated with WSA /other Sydney airport operations, this could lead to amendments to the statutory direction to Western Sydney Councils near the airport (s117 Direction 5.8 Second Sydney Airport Badgerys Creek) and the interpretation of Direction 3.5 (Development near licensed aerodromes).

Recommendations

- The NSW Government requests that a strategic building height approval for the entire Sydney Basin be made a priority of the Federal Department of Infrastructure and Regional Development. There is an opportunity for the Australian Government to contribute to the preparation of a 3D model to aid strategic planning of building height across the Sydney Basin. A strategic approval will give planning and investment certainty for major centres such as Blacktown, Parramatta and Bankstown, enabling these centres to grow in the long term.

4. Air quality

The EIS as it stands does not fully explore the cumulative air quality impact of the airport in relation to urban development in Western Sydney. Western Sydney's geography poses unique problems for air quality because the South Creek Valley traps pollution under certain meteorological conditions. The NSW Government is committed to economic development in Western Sydney though mitigation of potential risks to human health and the environment must be understood and planned for.

Further modelling to forecast potential health and environment impacts would be required in order for the new airport to set operational air quality targets. State and federal governments would need to work together to set reasonable air quality targets for the whole region and to implement a joint plan that will ensure these targets are met.

Assessment of both local and regional impacts on the air environment has broadly followed EPA guidance. Scenarios assessed are not based on detailed design and may not be representative of actual operations.

There is a contribution to regional ozone greater than the EPA's maximum allowable increment, and a number of residences may be exposed to one-hour concentrations of nitrogen dioxide (NO₂) greater than the criterion. There does not appear to be a clear mitigation strategy to address these exceedances.

The air quality assessment does not consider cumulative projected emissions for sources other than the proposed airport (industrial, incineration of wastes, roads etc), so potential impacts associated with incineration of wastes for international operations would require assessment.

The NSW Government proposes an air-quality management plan which would set out measures to minimise air quality impacts. Best-practice environmental management systems during both construction and operational phases which meet or exceed the Sydney Airport Environmental Strategy 2013-2018 and its actions for managing air quality would include, for example:

- Provision of electricity (APU) for planes at gates;
- Vapour recovery on fuel storage tanks and for re-fuelling; and
- Electric ground support vehicles.

The emissions standards of diesel equipment would need to meet or exceed the emissions standards specified in the NSW Government Resource Efficiency Policy.

A comprehensive air-quality monitoring network, designed to assist with the assessment and management of construction and operation air quality impacts, would benefit from early establishment.

Control of dust at construction sites should be undertaken in accordance with the NSW EPA Local Government Air Quality Toolkit.

Recommendations

- The NSW Government supports a revised assessment based on:
 - The detailed / final design of the airport; and
 - incorporation of contemporary data, methods, and standards as available at the time of the assessment.

5. Transport, Traffic and Access

The Draft Environmental Impact Statement advises that by 2030 the Western Sydney Airport is expected to generate approximately 42,000 trips by passengers and staff. By around 2063, the Airport is expected to generate more than 190,000 trips per day by passengers and staff. These traffic generation figures are not the whole picture as they are exclusive of the planned commercial development within and around the airport. It also excludes the airport terminal consumables task for example food, retail item deliveries and garbage collection.

The NSW Government acknowledges that the \$3.6 billion Western Sydney Infrastructure Plan is an excellent kick start for growth. However greater investment in infrastructure, particularly for regional road upgrades, is required. This is especially warranted given the ambitious commercial and retail floor space estimates contained in the draft Airport Plan. It is important that all levels of Government continue to work together to resolve transport related issues prior to the finalisation of the EIS.

The location of the airport in 'green field' means that supporting infrastructure of the right scale can be planned and implemented cost effectively without needing to make as many compromises for pre-existing buildings. However this planning needs to occur now before development activity forms around Western Sydney Airport.

Transport modelling generally identified sufficient capacity on the existing surrounding network based on trip generation estimates for passengers and staff only. However, there is identified congestion on the broader strategic network, including the M4 Motorway, M5 Motorway, M7 Motorway and M31 Hume Highway, which have not been quantified and which needs to be further investigated and mitigation measures proposed.

Western Sydney Airport will provide parking for between 11,500 and 12,500 vehicles. There would be benefits in looking at the way parking is provided and managed on-site to ensure that off-site traffic demand can be managed effectively, including any taxes or user charges that might be applied on airport land, and the contribution that they might make to funding the provision of high quality public transport serving the airport.

The access routes for construction vehicles outlined at Figure 4.1 illustrates Elizabeth Drive as being the key route for heavy vehicles during construction. This may require further consideration and discussion given that Bringelly Road and The Northern Road are being upgraded and may provide safer and more efficient access to and from the airport site for construction purposes.

The Surface Transport and Access Strategy advises that Elizabeth Drive would need to be deviated to the northeast and upgraded to accommodate exclusion zones for the northern runway. Upgrade of Elizabeth Drive is not one of the announced Western Sydney Infrastructure Plan projects and additional funding will be required.

The main public access to Western Sydney Airport is the new M12 Motorway proposed to connect the M7 near Cecil Park through to the Northern Road near Luddenham. There will be a grade separated interchange for the Airport access road. Roads and Maritime is investigating and planning for two lane on-load and off-load ramps for the M12 and Airport interchange. The airport access road should also include a dedicated bus corridor given the importance of bus services to connect to the airport from a range of centres in Sydney prior to and after rail options are in place.

The Draft Environmental Impact Statement advises that realignment of The Northern Road including an alignment through the WSA site will be necessary. Roads and Maritime Services current preference following public consultation is for the Eastern Option around the proposed Airport site and then passing through Luddenham along Campbell Street, connecting back to The Northern Road existing alignment just north of Luddenham.

It is important that the proposed Northern Road corridor is not included as part of the proposed environmental conservation lands offsetting development activity elsewhere on the airport site.

The Draft Environmental Impact Statements advises that Adams road (between Elizabeth Drive to Anton Road), Anton Road (from Adams Road) would be upgraded to meet the need for construction traffic and support traffic for the proposed airport, including B-doubles. The upgrade of these local roads is not one of the announced Western Sydney Infrastructure Plan local road projects and additional funding will be required. It can also be advised that Roads and Maritime Services has not made any funding available to Council to upgrade these local roads.

An airport perimeter road is proposed to provide access to support infrastructure and navigational aids. The two-lane roadway will also be used to monitor the airport security and perform any maintenance of the security fencing, perimeter lighting and CCTV systems. Funding will be required for this road.

The Draft Environmental Impact Statement clarifies that the fuel deliveries to WSA will be made by fuel tanker. It is considered that a pipeline would be a safer option from a road safety perspective.

It is proposed to locate utilities in 'transport corridor reservations'. This needs to be carefully planned as relocation of utilities for Western Sydney Airport in transport corridors may impact on the cost of providing future road and rail projects initiated after the utilities are located.

The NSW Government notes the commitment to pedestrian, cycle or road networks for movements around the airport site and will provide further comment when the ground transport plan is developed. The 2016 Environmental Impact Statement could be improved by a commitment to end of trip facilities for cyclists and pedestrians.

Details on the expected volume of passengers transferring between Kingsford Smith Airport and Western Sydney Airport could be improved. This information will be important to inform the joint NSW and Commonwealth rail scoping study.

It is important that bus service planning in the 2016 EIS reflects an underlying premise that Western Sydney Airport will be used by people from across the Sydney Metropolitan Area and beyond. Therefore planning for the bus network needs to take a whole of Sydney Region perspective.

The NSW and Australian Governments have announced a joint Rail Options Study (\$2M over one year) to determine the need and role of a rail link with the airport. This includes undertaking a rapid assessment of whether this rail infrastructure is best developed during development of the Airport or at a future date when demand is greater.

The forthcoming joint investigation on rail will help determine the type of rail, when it will be required and how much it will cost based on an investigation of economic, population and commercial drivers. The scoping study will also consider funding and financing issues, including whether value capture techniques could assist meeting the funding requirement. The study will need to take into account existing reports as well as plans for the future rail needs of Sydney.

It will also provide an opportunity for the public to have their say as part of an informed discussion on Western Sydney's future transport needs.

The way the Draft Environmental Impact Statement describes the use of modelling inputs from the Sydney Strategic Transport Model could be improved. The Bureau of Statistics and Analytics within TfNSW are the custodians of the Sydney Strategic Travel Model. The Bureau of Statistics and Analytics did not produce the forecasts presented in the draft Environmental Impact Statement. It would be correct to say Strategic Travel Model outputs were provided to the Western Sydney Airport proponent to provide inputs to their own subsequent modelling process for the development of the forecasts as presented.

Recommendations

- **Trip Generation:** A 10 year after opening i.e. 2036 Western Sydney Airport scenario should be assessed in keeping with normal practice of opening year plus ten years. This should also be updated to include traffic estimates for the terminal consumables task and the airport commercial development. Prior to the finalisation of the 2016 Environmental Impact Statement it is recommended that an independent peer review be undertaken of the traffic and transport methodology adopted for the Draft Environmental Impact Statement. In particular, the peer review should analyse the traffic and transport assumptions including traffic generation, trip assignments, background traffic growth and road network assumptions.
- **Management of On Site Parking:** The NSW and Commonwealth Governments should consider jointly investigating options for taxes or user charges that might apply to airport land, and the contribution that these charges or taxes might make to funding the provision of high quality public transport serving the airport.
- **Construction Impacts:** Re-consideration should be given to making airport construction access via The Northern Road and/or Bringelly Road as these roads are being upgraded to four lane divided carriageways (by late 2019). These roads will be a safer and more efficient option for construction traffic. If construction access via Elizabeth Drive were to continue to be recommended then a comprehensive independent road safety audit by a qualified auditor should be undertaken. The audit would identify any necessary remedial measures with associated costs apportioned to the airport project. At a minimum this would include a comprehensive pre-condition survey and a need to maintain the asset to equivalent quality post construction.
- **Elizabeth Drive re-alignment:** The deviation of Elizabeth Drive is required as a direct result of the construction of Western Sydney Airport and accordingly should be funded as part of the Western Sydney Airport Project.
- **Main Access Roadway:** The 100 metre wide transport reservation within the Airport site to accommodate future transport capacity is supported. It should be noted that the interchange up to the Airport site boundary that Roads and Maritime Services is currently designing will initially be four traffic lanes.
- **The Northern Road:** Should the proposed Northern Road alignment through Environment Conservation land as part of The Northern Road upgrade be pursued, the road corridor should not be included as biodiversity lands. The preferred design for the upgrade of The Northern Road at this location is expected to be available in early 2016.
- **Local Roads and Airport Perimeter Road:** It is noted that Adams and Anton Roads which are predicted to carry heavy vehicle loads are not part of the \$200 million Local Roads Package and will require funding as part of the WSA project. The airport perimeter road should be funded as part of the WSA project.
- **Airport Road Access:** The 2016 EIS should detail the distribution of total airport traffic onto each of the surrounding roads and provide further detail on the road treatments that will be constructed to accommodate this traffic. Key passenger and freight routes should be identified, together with any practical measures to separate different vehicle types. The aim should be to avoid unnecessary interactions between light and heavy vehicles for safety and traffic efficiency.

- **Fuel Pipeline:** An economic assessment should compare ongoing delivery by road and longer term supply of fuel supply to the airport by pipeline. A pipeline alignment should be identified and protected in statutory instruments prior to commencement of operations, as encroachment will limit future options and may result in construction of a pipeline being unviable.
- **Utilities:** The NSW Government will continue to work in collaboration to coordinate the relocation of utilities to ensure future road and rail transport projects have suitable easement provisions for new utility locations.
- **Outer Sydney Orbital:** The NSW Government will continue to collaborate with the Commonwealth on integration of the South West Rail Link Extension and the Outer Sydney Orbital with the Western Sydney Airport.
- **Pedestrians and Cyclists:** Further detail on the provisions made for pedestrians and cyclists is anticipated as part of the ground transport plan. It is suggested the transport plan also makes provision for end of trip facilities for pedestrians and cyclists.
- **Inter Airport Transfers:** The 2016 Environmental Impact Statement is recommended to consider the issue of transfers between Kingsford Smith Airport and WSA in more detail. It is expected that the issue will also be addressed as part of the joint Australian Government rail scoping study.
- **Bus Services:** The 2016 Environmental Impact Statement should outline the following issues for a more comprehensive response in the forthcoming ground transport access plan:
 - The WSA internal road network would ideally be designed to ensure bus services could directly access bus stops at the domestic and international terminals from all approach roads with minimal delay from general vehicles. Bus stand capacity would need to support the bus network, including bus layover for terminating bus services; and
 - In addition, bus network, planning for buses would also need to factor in private coaches, tour buses, airport/hotel transfer buses, and regional bus/coaches for airline travellers direct from Sydney CBD, Wollongong, Canberra and Newcastle/Central Coast. Bus stops and layover facilities for all these would need to be included in overall bus arrangements at WSA.
- **Rail Connections:** The NSW Government looks forward to partnering with the Commonwealth Government on a cost benefit analysis of suburban, metro and high speed rail links to the airport. The cooperation from the Commonwealth to include an allowance for agreed rail corridors in airport earthworks contracts is noted and appreciated. A decision on the preferred corridor options for the South West Rail Link Extension and the Outer Sydney Orbital is expected in 2016.
- **Description of Traffic Modelling:** Any update of the DEIS and the forthcoming 2016 EIS could say Strategic Travel Model outputs were provided to allow inputs to their own subsequent modelling process for the development of the forecasts as presented.

6. Airport Plan and surrounding land use

The Airport Plan proposes 315ha of non-airport commercial land for Stage 1. The proposed commercial land development is the same size as present day Liverpool City Centre and would be Sydney's largest bulky goods retail destination. This suggests a need to rethink the retail hierarchy for this part of Sydney.

The clusters of commercial development in WSA have the potential to attract enterprises that might otherwise locate in centres within the Western Sydney Priority Growth Area (especially at North Luddenham and North Bringelly). The commercial development may also compete with or complement commercial activity in other strategic centres in Western Sydney, including Leppington, Liverpool and Penrith. The land use demand for these uses may develop more slowly (and at a smaller local scale) as a result of competition in attracting investment.

The WSA site includes around 167 ha (2036) to 190 ha (2063) of business, commercial and retail uses as part of a business park within an available area of 315 ha (2036) – 344 ha (2063). The airport has the potential to have a level of economic activity and employment equal to a major strategic centre by 2036, particularly if the land for the second runway is used for interim business uses. These interim uses could be in existence for 20 to 30 years, depending on the rate of passenger growth.

The draft WSA EIS reports that there could be up to 550,000 m² of commercial land at the airport business park by 2031 and up to 1.8 million m² of commercial land at the airport business park by 2063, outlined in the following categories (from EIS Appendix P3 Table 8: Proposed land use at the on-site business park (all units in m²):

	2031	2063
Industrial	350,000	845,000
Office	10,000	100,000
Hotels	20,000	50,000
Petrol Station and Food Outlets	15,000	40,000
Regional shopping centre	-	200,000
Bulky goods	153,000	561,000
Total	548,000	1,796,000

Source: L&B / EY Real Estate Advisory

In 2063, the WSA office floor space would be comparable to the current amount of office floor space in the regional cities of Liverpool and Penrith (which both currently contain around 100,000 m²). The WSA retail floor space by 2063 would be greater than that currently contained within the strategic centres of Penrith (157,000 m²), Campbelltown-Macarthur (164,000 m²) and Liverpool (160,000 m²). Overall, the proposed business park offerings located on the WSA are significant. By 2063, the combined offering of retail and floor space would put the WSA on par with the larger strategic centres in Western Sydney (at their current size). This is in addition to any retail or office floor space developed as a part of the airport terminal.

Ultimately, WSA could be at the core of a new strategic centre and transport gateway, serving a potential surrounding population of 600,000 beyond 2050.

The total on-site employment at the airport is expected to be approximately 13,000 in 2031 and approximately 90,000 in 2063 (refer below).

	2031	2063
Direct employees	8,730	62,860
On-site business park employees	4,439	27,148
TOTAL	13,169	90,008

Source: EY

The draft EIS modelling assumes that these are not 'net new' jobs but a distribution of jobs from elsewhere in the system (NSW, in this case). It is likely that some of these jobs would be redistributed from around the KSA area but also from other centres in Sydney. Increases in job numbers above the base case scenario are expected to occur in the Western Sydney LGAs of Penrith, Blue Mountains and Wollondilly.

The Liverpool LGA, which 'hosts' most of the airport site, including the proposed terminals (and onsite business park mentioned in the above table), as well as a string of existing and planned centres outside the airport along the existing, and a possible extension of the South West Rail Link, has no increase in jobs above the base case scenario.

The draft WSA EIS predicts significantly more employment associated with the airport environs than anticipated in earlier studies. This is partially explained by the inclusion of non-airport specific jobs within a substantial business park. This has significant implications for the development of centres and industrial uses in the region.

Implementation of District Plans for the South West and West will address the relationship between the WSA land uses and the potential impacts on the strategic centres of Leppington, Liverpool, Penrith and Campbelltown.

Revised structure plans for the Western Sydney Priority Growth Area and South West Priority Growth Area will take account of the supply and function of business zones proposed within the WSA in providing for additional land for business enterprise within this corridor.

The extent (area and impact) of acquisition of easement interests on adjacent non-Commonwealth-owned land for the purposes of safe air navigation is unclear.

There are some strategic considerations relating to the provision of infrastructure. For example, the draft EIS does not assess the removal or relocation of the TransGrid 330kV transmission line from the airport site; the airport development cannot occur until the relocation has been completed. We propose that the final EIS, as a minimum, considers the impacts of the transmission line removal.

Recommendations

- The Australian Government and future airport lessee company will need to work closely with the NSW government to ensure that the Airport Plan and the provision of non-airport related commercial land is integrated holistically into the surrounding area. This would enable a more integrated and sustainable urban design, by ensuring that employment and non-employment land-use opportunities are appropriately located.
- Before the site is formally leased, further discussion about legal rights of access is suggested – including discussion of an allowance for infrastructure corridors in which the NSW Government has ready access and control, specifically those that traverse the airport site (such as a rail corridor and station box).

7. Regional air services to Western Sydney Airport and Kingsford Smith Airport

Sydney Airport currently operates a system of allocating aircraft slots to airlines arriving and departing from regional destinations, known as the 'regional ring fence'. The Australian Government plans are silent on this issue but the contractual offer (Notice of Intention) for a private airport operator could soon give some insight into future provision for regional air services.

The NSW Government supports a minimum quota of slots for regional flights in and out of KSA.

Recommendations

- That the Australian Government provide further details on the provision of regional services to WSA, to be incorporated into the Airport Plan and considered in terms of air-space design.
- The NSW Government supports the maintenance of a minimum quota of slots for regional flights in and out of KSA.

8. Heritage

Aboriginal cultural heritage

The Aboriginal cultural heritage assessment is considered adequate. The cumulative impact of the development on the archaeological and cultural values will be very substantial.

European heritage

The heritage assessment is thorough and adequately references and builds upon earlier relevant studies.

Recommendations

- Mitigation strategies should generally include in-situ conservation of at least two sites and if possible, a representative sample of an archaeological landscape. The Aboriginal Sites Decision Support Tool (ASDST) can be used to evaluate and quantify the potential heritage gain of different biodiversity offset packages. Ongoing consultation with the Aboriginal community is recommended.

9. Biodiversity

The draft EIS advises that 280 hectares of native vegetation will be removed from the site. This includes 148 hectares of Cumberland Plain Woodland. The project requires significant environmental offsets to compensate for the loss of native vegetation.

It is recommended that the Australian and NSW Government work together on a strategic biodiversity framework for Western Sydney. Innovative solutions to achieve biodiversity offsets will be required as conventional methods are unlikely to meet demand. This is an opportunity for investment in Western Sydney Parklands and Western Sydney's green network.

The draft EIS could more effectively apply the NSW Biodiversity Offsets Policy for Major Projects (2014) and the Framework for Biodiversity Assessment (FBA) that underpins it. If applied correctly, the required offsets could be in the order of 1.5 to three times more than currently reported.

As offsets are scarce, and may be difficult to secure in the future, possible solutions could include payments into a future NSW Offsets Fund and innovative solutions such as investment in regeneration/revegetation of degraded land now for future offsets. Offsets could be considered as part of a comprehensive package to account for associated infrastructure such as relocation of the TransGrid high voltage line.

It is unclear how the identified conservation areas will be protected. It is noted that the relocated The Northern Road would traverse an identified conservation area and this linked impact will need to be assessed in the final EIS.

Recommendations

- Innovative solutions such as payments into the NSW Offsets Fund for Major Projects are recommended for consideration.
- For Cumberland Plain Woodland, parties seeking to offset impacts could enter into commercial arrangements (including opportunity cost payments) with local landowners to invest in regeneration and revegetation projects so that areas of land meet 'offset standards' when they are required in the future.

10. Inter-Government cooperation and implementation

Greater integration between WSA and the Western Sydney Priority Growth Area will be productive for all of Western Sydney.

The WSA proposal is consistent with the broad economic development, land use and transport goals and directions of Sydney's metropolitan strategy: *A Plan for Growing Sydney*.

The delivery and timing of public transport is a key factor for the distribution of the economic and employment effects of the airport to the residents and businesses across outer western / south western Sydney.

The Greater Sydney Commission (on behalf of NSW Government) will collaborate with the Australian Government to review economic region relationships to optimise the synergies between WSA and Western Sydney Priority Growth Area.

The key 'District Priorities' of *A Plan for Growing Sydney* that are influenced by the WSA are:

- Investigating an enterprise corridor between Leppington and Bringelly - linked to the potential extension of the South West Rail Link;
- Identifying and protecting land to serve Sydney's future transport needs, including intermodal sites and associated corridors and for strategically important industrial uses;
- Planning for Leppington Strategic Centre as a mixed-use centre focused on the new Leppington train station with capacity for long-term employment growth including offices, retail, services and housing;
- Working with councils to provide capacity for additional mixed use development – while retaining a commercial core – in the strategic centres, including Penrith, Leppington, Liverpool and Campbelltown-Macarthur; and
- Improving transport connections to eastern Sydney to capitalise on the subregion's increasing role in Sydney's manufacturing, construction and wholesale/logistics industries in the WSEA.

The main risk to the achievement of these priorities would be the failure to integrate the proposal with the future surrounding land uses and identify and preserve future infrastructure corridors and facilities within WSA and Western Sydney Priority Growth Area.

The soon to be formed Greater Sydney Commission will be prioritised to establish a vision for the Western Sydney Priority Growth Area surrounding the new airport. The NSW Government would work collaboratively with the Australian Government to explore mechanisms and frameworks that would best implement the plan.

Recommendations

- The NSW Government is keen to work with the Australian Government to support the delivery and growth of the WSA as a future strategic centre and transport gateway for the Western Sydney region.

11. Assessment timeframe

The assessment is generally focussed on Stage 1 – five-year operating scenario (2030), on the basis of the requirements of the draft Airport Plan. The maximum capacity for Stage 1 will not be reached until 2050 – by which time passenger and flight numbers are expected to increase four and three fold respectively, compared to that assessed in the draft EIS for Stage 1. This maximum capacity for Stage 1 has not been assessed, with the exception of noise.

Other key off-site community impacts would include air quality, health, traffic and hazards/risks. It is as yet unclear to what extent the Master Plan/Major Development Plan (MDP) process will take into account off-site issues and how this would interface with community consultation and provisions of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). By comparison, the Brisbane second runway EIS, the assessment (prepared in 2007) looked at two key assessment dates:

- 2015 – expected runway operation begins; and
- 2035 – impact of second runway in 20 years.

The 2035 project was used for assessment in the EIS where impacts would change with increased passenger/flight numbers – for instance, noise, traffic, air quality, hazards and risks.

Recommendation

- That the assessment timeframe be revised to consider a 10 year post opening planning horizon in the final EIS to match community expectations about the assessment of a project of this scale.

12. Hazards and risk

The hazard and risk assessment of the fuel farm has been undertaken on the proposed Stage 1 capacity and there is no assessment of the ultimate capacity. The number and size of on-site fuel tanks is likely to increase significantly as airport operations increase after 2030. The assessment of potential off-site risks due to a fuel storage fire has been assessed with the conclusion that the proposed 80 metre buffer zone is adequate to mitigate against significant impacts. The hazard assessment does not assess potential larger events which may extend outside the WSA boundary.

The hazard assessment recommends restrictions to land uses outside the airport boundary near the fuel farm, which would have an impact on current private land owners. As it stands, there is no assessment of the risks posed by the transport of fuel to the site. Initial estimates of 43 B-Double fuel tankers a day (which would increase substantially after 2030) to service Stage 1 of WSA present a potential risk to road users, especially given that fuel tankers would use local roads to access the site and at this stage there is no plan to upgrade local roads.

Recommendations

- A risk assessment of storing and managing jet fuel for the ultimate development be provided.
- An assessment of transport risk associated with supplying fuel to the site via tanker beyond 2030 be provided.
- Consideration of the relocation of the fuel farm away from the site boundary or acquisition of land near the proposed fuel farm location.

13. Water quality

The NSW Government suggests that the draft EIS more clearly articulate the environmental values (human environmental uses of receiving waters), the relevant indicators and associated trigger points for those environmental values, and how the environmental values may be impacted during construction and operation of the project.

Elevated nutrient loads are a significant issue for the Hawkesbury-Nepean River and in particular for South Creek. The draft EIS indicates that while the concentrations of nutrients will generally decrease in response to Stage 1 of the development, there will be a substantial increase in the annual load of nutrients to receiving waters. For example, total particulate loads at the basin outlets are estimated to increase by 108% to 624% compared to existing loads. Similarly, total nutrient loads are estimated to increase by 42% to 308%. It is suggested that the draft EIS demonstrate more clearly that all measures have been put in place to ensure that the proposal does not exacerbate the current condition of South Creek or the main stem of the Hawkesbury Nepean or prevent improvement in the future through other catchment actions.

A number of other potential pollutants generated by the airport site were not assessed in the draft EIS, including hydrocarbons and heavy metals. The potential impacts of the operation of an onsite wastewater treatment plant have not been assessed, including any wet weather discharges of treated wastewater when irrigation cannot be undertaken. The draft EIS impact assessment of the construction and operation of WSA on groundwater was limited and it is suggested that further monitoring and assessment be undertaken.

Recommendations

- That the final EIS include a clear statement of the NSW Water Quality Objectives (WQOs) and environmental values for the receiving waters relevant to the project, including the indicators and associated trigger values or criteria for the identified environmental values.
- Identification and estimation of the quality and quantity of all pollutants that may be introduced into the water cycle is needed, by source and discharge point for both the construction and operation phase. This would need to describe the nature and degree of impact that any discharge(s) may have on the receiving environment, including consideration of all pollutants that pose a risk of non-trivial harm to human health and the environment.
- Assessment of the significance of any identified impacts, including consideration of the relevant ambient water quality outcomes. Demonstration of how construction and operation of the project will ensure that:
 - where the NSW WQOs for receiving waters are currently being met, that they will continue to be protected; and
 - where the NSW WQOs are not currently being met, activities will not prevent their achievement over time but rather contribute to their achievement.