

Rural & Regional Affairs and Transport Legislation Committee
ANSWERS TO QUESTIONS ON NOTICE
Additional Estimates 2015 - 2016
Infrastructure and Regional Development

Question no.: 01

Program: n/a

Division/Agency: Western Sydney Unit

Topic: Modes 05 and 23

Proof Hansard Page: 7 (8 February 2016)

Senator Cameron, Doug asked:

Senator CAMERON: As I understand it, the 05 mode affects 48,000 people. If you use the 23 mode it would be between 4000 and 6000. Is that your understanding?

Mr Mrdak: I think that they are estimates for certain types of operations at night in certain circumstances. I would have to check those numbers. If I could take that on notice. Those figures sound familiar but I think they pertain to certain types of operations.

Answer:

Detail on operating strategies that may operate at the proposed airport is contained in the draft Environmental Impact Statement (EIS), Volume 2, section 10.3.2 - *Operating strategies*.

The draft EIS includes assessment of the estimated population that would be impacted by noise events exceeding 60 dBA (N60), which has been used to describe the impact of noise at night. Table 10-5, Volume 2 of the draft EIS provides the estimated population within each N60 contour on an average night in 2030 for each modelled operating strategy.

A Prefer 05 operating strategy is predicted to result in an estimated 48,000 people experiencing more than five events above 60 dBA on an average night. A Prefer 23 operating strategy is predicted to result in an estimated 6,000 people experiencing more than five events above 60 dBA on an average night. This is predicted to reduce to approximately 4,000 people if the airport operates with head to head flight paths.

Rural & Regional Affairs and Transport Legislation Committee
ANSWERS TO QUESTIONS ON NOTICE
Additional Estimates 2015 - 2016
Infrastructure and Regional Development

Question no.: 02

Program: n/a

Division/Agency: Western Sydney Unit

Topic: Flight path heights

Proof Hansard Page: 7 (8 February 2016)

Senator Cameron, Doug asked:

Senator CAMERON: It goes up to about 1,000 metres. Blaxland is about 230 to 250 metres. When you are talking about flights coming in at 5000 meters, you have to take that away. Some flights could be in the 4000 metre area.

CHAIR: I recall from my pilot days that Wagga is 720 feet.

Senator CAMERON: That is correct, isn't it, Mr Mrdak? The EIS deals with sea level heights.

Mr Mrdak: Again, I am guided by my team. My understanding is that the heights are above surface area, not above sea level. Let me take that on notice, if I might. I think the heights that are in the EIS are actually calculated above surface area.

Answer:

The indicative flight paths designed by Airservices Australia provide flight altitudes above sea level.

The indicative noise contours takes into account the elevation of underlying areas.

Rural & Regional Affairs and Transport Legislation Committee
ANSWERS TO QUESTIONS ON NOTICE
Additional Estimates 2015 - 2016
Infrastructure and Regional Development

Question no.: 03

Program: n/a

Division/Agency: Western Sydney Unit

Topic: Distance at 5,000 meters

Proof Hansard Page: 9 (8 February 2016)

Senator Heffernan, Bill asked:

Mr Mrdak: They can be coming down. At 20 miles on approach they would be well above 8,000 feet.

CHAIR: At what stage do they get to 5,000 meters from the airport? You might take that on notice.

Mr Mrdak: I will take that on notice and give you an answer.

Answer:

Based on the indicative flight path design assessed in the draft EIS, aircraft approaching 5,000 metres away to the proposed Western Sydney Airport (WSA) could approximately be 1,200 to 1,400 feet above the elevation of the airport depending on the flight path approach. However, this will depend on the final flight path design implemented for WSA and the specific flight path assigned to each particular aircraft.

Rural & Regional Affairs and Transport Legislation Committee
ANSWERS TO QUESTIONS ON NOTICE
Additional Estimates 2015 - 2016
Infrastructure and Regional Development

Question no.: 04

Program: n/a

Division/Agency: Western Sydney Unit

Topic: Social Impact Assessment

Proof Hansard Page: 22 (8 February 2016)

Senator Cameron, Doug asked:

Senator CAMERON: That is fine. What I am doing is that I have placed on the record exactly what P1 says in relation to these issues. I am now asking the question—and I have every respect for Mr Mrdak and I do not question his integrity at all; it is just that we may be at different analytical points on this document. What is a significant rating of 'very high'? What does that mean for the people in Blaxland?

Mr Wilson: Can I take that on notice. I do not have that in front of me.

Answer:

The social impact assessment in the draft Environment Impact Statement takes into account both the actual (quantifiable) and perceived impacts on a community. In the case of the Blue Mountains, the assessment recognises that residents are likely to have high expectations about amenity and lifestyle. This means that when these factors are taken into account, the social significance rating increases, even though the actual (measurable) impact is predicted to be greater for other communities closer to the airport.

Rural & Regional Affairs and Transport Legislation Committee
ANSWERS TO QUESTIONS ON NOTICE
Additional Estimates 2015 - 2016
Infrastructure and Regional Development

Question no.: 05

Program: n/a

Division/Agency: Western Sydney Unit

Topic: Reporting of Greenhouse Gas Emissions

Proof Hansard Page: 129 (8 February 2016)

Senator Rhiannon, Lee asked:

Senator RHIANNON: Going back to Badgerys Creek airport, the Western Sydney airport: the EIS did not count scope 3 emissions—the take-off jet exhausts—in its calculations of total emissions. Why weren't they included?

Mr McRandle: Sorry, I missed the first part of your question.

Senator RHIANNON: It is about the scope 3 emissions—that the airport EIS did not count scope 3 emissions in its calculations of total emissions. I wondered why they were not included.

Mr McRandle: I am not familiar with the term 'scope 3 emissions', or the detail of that. There was an assessment of emissions required by the EPBC Act in the assessment.

Senator RHIANNON: Yes, but not of the take-off jet exhausts, I understand. That is what we are talking about here. This comes from the EIS itself, on page 101:

The Scope 1, scope 2 and scope 3 greenhouse gas emissions estimated for the proposed stage 1 development would represent approximately 0.1 per cent of Australia's projected 2030 transport-related greenhouse gas emission inventory.

What I am trying to work out here is why scope 3 was not included in the calculations. You have said that it was. I thought that somebody would know about this, because it has been written about and reported on.

Mr McRandle: No. Sorry, I understand now the issue you are getting to. There was a typographical error in, I think, the online publication versus the printed one—

Senator RHIANNON: And the hard copy.

Mr McRandle: and that was corrected. I can go to my notes to find—

Senator RHIANNON: The last time I looked at it, and I must admit it was not this week, it had not been corrected online. I can understand that you cannot correct hard copy, but have you corrected the online version and, if so, where?

Mr McRandle: I need to take on notice the details of the correction, but I can inform you that we were alerted to a typographical error in one of the publications which did not invalidate the public consultation process, or that part of it. I would need to get back to you on the detail about how that was detected and how that was—

Senator RHIANNON: The figure of 0.1 per cent really comes across as greenhouse gas emissions are really not significant in terms of this airport. You can understand why it would be interpreted that way, and it has been used extensively throughout the draft EIS and certainly in many discussions about it. Is there nobody here who can give us any dates on when this was corrected?

Mr McRandle: I would need to take that on notice unless I can find that particular reference in my notes. I think that, in the context of greenhouse emissions in this airport, aviation itself is only a small proportion of the greenhouse emitters in the transport sector. This airport is not going to be the busiest airport in Australia and, therefore, I think you would expect to have a very small number.

Senator RHIANNON: When you made the correction, you included scope 3 with scope 1 and scope 2. What do you now say the percentage of greenhouse gas emissions is?

Mr McRandle: I would need to go and check the details of exactly what the error was and just remind myself of how that was corrected.

Senator RHIANNON: It is certainly disappointing that this information is not here. When you take that on notice and you provide that information, can you say when the correction was made and what the new figure is in terms of the total percentage of greenhouse gas emissions for scope 1, scope 2 and scope 3 and for scope 3 separately.

Mr McRandle: Yes, we will do that.

Rural & Regional Affairs and Transport Legislation Committee
ANSWERS TO QUESTIONS ON NOTICE
Additional Estimates 2015 - 2016
Infrastructure and Regional Development

Answer:

Chapter 12, Table 12-41 of the draft EIS (page 161 of Volume 2) summarises the amount of greenhouse gases predicted to be generated as Scope 3 emissions. That is, emissions from the combustion of jet fuel by aircraft departing the airport in 2030. Departing aircraft are expected to generate 2,524,504 tonnes of greenhouse gas per year (correct figure). This was incorrectly written as 2,187 tonnes (see figures below) on the individual web chapter.

Previous figures, Chapter 12

Table 12-40 – Summary of estimated annual Scope 1 and 2 greenhouse gas emissions

Scope	Source	Fuel type	Annual quantity	Units	Annual emissions (t CO ₂ -e)
1	Ground support equipment	Transport diesel oil	0.85	ML	2
		Transport gasoline	2	ML	5
1	Auxiliary power unit	Stationary gasoline (jet fuel)	5	ML	11
1	Boilers	Stationary natural gas	1,489,809	m ³	3,005
1	Generators	Stationary diesel oil	0.04	ML	113
1	Fire training	Stationary Kerosene (jet fuel)	0.01	ML	0.01
1	Wastewater treatment plant	N/A	1,935	ML	1204
1	Fugitive emissions	Transport gasoline (jet fuel)	985	ML	104
1	Fugitive emissions	Transport diesel oil	0.85	ML	0.1
1	Fugitive emissions	Transport gasoline	2	ML	0.2
2	Electricity	N/A	124,392,000	kWh	106,977
TOTAL					111,422

Table 12-41 – Summary of estimated annual Scope 3 greenhouse gas emissions

Scope	Source	Fuel type	Annual quantity	Annual emissions (t CO ₂ -e)
3	In flight aviation fuel	Transport gasoline (jet fuel)	988	2,187

Updated figures, Chapter 12

Table 12-40 – Summary of estimated annual Scope 1 and 2 greenhouse gas emissions

Scope	Source	Fuel type	Annual quantity	Units	Annual emissions (t CO ₂ -e)
1	Ground support equipment	Transport diesel oil	0.85	ML	2,282
		Transport gasoline	2	ML	4,776
1	Auxiliary power unit	Stationary gasoline (jet fuel)	5	ML	10,575
1	Boilers	Stationary natural gas	1,489,809	m ³	3,005
1	Generators	Stationary diesel oil	0.04	ML	113
1	Fire training	Stationary Kerosene (jet fuel)	0.01	ML	14
1	Wastewater treatment plant	N/A	1,935	ML	1204
1	Fugitive emissions	Transport gasoline (jet fuel)	985	ML	104
1	Fugitive emissions	Transport diesel oil	0.85	ML	0.1
1	Fugitive emissions	Transport gasoline	2	ML	0.2
2	Electricity	N/A	124,392,000	kWh	106,977
TOTAL					129,462

Table 12-41 – Summary of estimated annual Scope 3 greenhouse gas emissions

Scope	Source	Fuel type	Annual quantity	Annual emissions (t CO ₂ -e)
3	In flight aviation fuel	Transport gasoline (jet fuel)	988	2,524,504

In Chapter 32, Table 32-7 of the draft EIS (page 86 of Volume 3) summarises the amount of all relevant greenhouse gases predicted to occur from the proposed airport (Scope 1, 2 and 3 emissions) in the longer term around 2063. Departing aircraft are expected to generate 20,570,033 tonnes of greenhouse gas per year (correct figure). This was incorrectly written as 17,819 tonnes (see figures below) on the individual web chapter.

Previous figures, Chapter 32

Table 32-7 – Summary of estimated annual Scope 1, 2 and 3 greenhouse gas emissions (long term development)

Scope	Source	Fuel type	Annual quantity	Units	Annual emissions (t CO ₂ e)
1	Ground support equipment	Transport diesel oil	8	ML	17
		Transport gasoline	13	ML	31
1	Auxiliary power unit	Stationary gasoline (jet fuel)	33	ML	89
1	Boilers	Stationary natural gas	11,735,513	m ³	23,874
1	Generators	Stationary diesel oil	0.05	ML	143
1	Fire training	Stationary kerosene	0.03	ML	0.1
1	Wastewater treatment plant	N/A	9782	ML	6092
1	Fugitive emissions	Transport gasoline (jet fuel)	9030	ML	846
1	Fugitive emissions	Transport diesel oil	6	ML	0.7
1	Fugitive emissions	Transport gasoline	13	ML	1
2	Electricity	N/A	755,112,000	kWh	649,396
Total					880,288
3	In flight aviation fuel	Transport gasoline (jet fuel)	8,030	ML	17,819

Updated figures, Chapter 32

Table 32-7 – Summary of estimated annual Scope 1, 2 and 3 greenhouse gas emissions (long term development)

Scope	Source	Fuel type	Annual quantity	Units	Annual emissions (t CO ₂ e)
1	Ground support equipment	Transport diesel oil	8	ML	18,910
		Transport gasoline	13	ML	30,728
1	Auxiliary power unit	Stationary gasoline (jet fuel)	33	ML	88,566
1	Boilers	Stationary natural gas	11,735,513	m ³	23,674
1	Generators	Stationary diesel oil	0.05	ML	143
1	Fire training	Stationary kerosene	0.03	ML	74
1	Wastewater treatment plant	N/A	9,782	ML	6,092
1	Fugitive emissions	Transport gasoline (jet fuel)	9030	ML	846
1	Fugitive emissions	Transport diesel oil	6	ML	0.7
1	Fugitive emissions	Transport gasoline	13	ML	1
2	Electricity	N/A	755,112,000	kWh	649,396
Total Scope 1 and 2					816,439
3	In flight aviation fuel	Transport gasoline (jet fuel)	8,030	ML	20,570,033

When this error was recognised, it was corrected on the versions of Chapters 12 and 32 on the Department's website on 4 December 2015.

Rural & Regional Affairs and Transport Legislation Committee
ANSWERS TO QUESTIONS ON NOTICE
Additional Estimates 2015 - 2016
Infrastructure and Regional Development

Question no.: 06

Program: n/a

Division/Agency: Western Sydney Unit

Topic: Night flights

Proof Hansard Page: 134 (8 February 2016)

Senator Cameron, Doug asked:

Mr Harfield: There are some areas where, with the runway 05/23 configuration down to the south-west, you could have flights arriving from the south-west and taking off to the south-west, for example. This is part of what would happen during the detailed design work, where we would set up the noise abatement procedures associated with the operations of the airport.

Senator CAMERON: So what are the populated areas that would then be affected by that?

Mr Harfield: I am just talking off the top of my head about possible solutions; I do not have—

Mr Mrdak: This is all set out—

Mr Harfield: This is about what we would have to do during the detailed design work.

Mr Mrdak: Senator, the details of that operation are all set out in the EIS.

Senator CAMERON: Maybe you can point me to where it is in the EIS.

Mr Mrdak: I am happy to do that.

Senator CAMERON: It is a big EIS with a number of volumes, so, if you say that is dealt with, I am happy to have a look at that.

Mr Mrdak: We will give you the details of that.

Answer:

Chapter 10 and Appendix E1 of the Western Sydney Airport Draft Environmental Impact Statement (draft EIS) provide an assessment of aircraft overflight noise impacts for Stage 1 of the proposed airport.

Rural & Regional Affairs and Transport Legislation Committee
ANSWERS TO QUESTIONS ON NOTICE
Additional Estimates 2015 - 2016
Infrastructure and Regional Development

Question no.: 07

Program: n/a

Division/Agency: Western Sydney Unit

Topic: Joint Scoping Study of Rail Needs for Western Sydney

Proof Hansard Page: Written

Senator Sterle, Glenn asked:

1. How is this progressing?
2. Who is commissioning the Study – which NSW department/agencies are involved?
3. Who is conducting the study?
4. What is the actual scope of the Study?
5. When is it expected to be completed?
6. Will the Study be released to the public for comment?
7. What is “western Sydney” for the purposes of the Study?
8. Is Infrastructure Australia or Infrastructure NSW involved in the Study? If so, how?
9. Are similar Joint Studies occurring in other capital cities? If not, why not?

Answer:

1. – 3. The joint Scoping Study of Rail Needs for Western Sydney (the Study), was commissioned and announced by the Commonwealth and NSW Governments on 13 November 2015. The Department of Infrastructure and Regional Development are working closely on the Study with Transport for New South Wales (TfNSW). The project is being overseen by a Steering Committee co-chaired by Deputy Secretaries from the Department of Infrastructure and Regional Development and from Transport for New South Wales (TfNSW). TfNSW has engaged a range of specialist consultants to conduct the Study.
4. The Study will determine the need, timing and service options for rail investment to service Western Sydney and Western Sydney Airport, including an assessment of the economic, population and commercial drivers for different rail connections, travel speeds and service types in the region. The Terms of Reference for the Study are available at: <http://www.transport.nsw.gov.au/projects-western-sydney-airport>.
5. The Study is expected to be completed by late 2016.
6. It is anticipated that a draft discussion paper will be available for public consideration and comment in mid-2016.
7. The definition of ‘Western Sydney’ will be defined in the Study. The study area approximately corresponds to the three Metropolitan Districts that make up Western Sydney: West, West Central and South West Districts. The study area includes the local government areas of: the Blue Mountains, Hawkesbury, Penrith, Auburn, Bankstown, Blacktown, Holroyd, Parramatta, The Hills, Camden, Campbelltown, Fairfield, Liverpool, and Wollondilly.
8. Infrastructure Australia and Infrastructure NSW will be consulted.
9. The purpose of the Study is to support planning for the Western Sydney Airport and Western Sydney and, as such there are no similar Joint Studies being conducted elsewhere.