



New Runway Project

FINAL
MAJOR DEVELOPMENT PLAN

SUBMISSION SUMMARY
FEBRUARY 2021

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ACKNOWLEDGEMENT OF COUNTRY

Hello, this is Whadjuk Country! Perth Airport operates on the traditional lands of the Whadjuk people of the Noongar Nation. We respect their ongoing cultural connection to this region. We value the insights and guidance of the Noongar signatories to the Perth Airport Partnership Agreement, as we work together to preserve and honour this connection.

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1 Introduction

Consistent with the requirements of the *Airports Act 1996* (Airports Act), Perth Airport developed a Preliminary Draft Major Development Plan (MDP) for the New Runway Project (NRP), which was published in May 2018. A 60 business-day public comment period for the Preliminary Draft MDP commenced on 31 May 2018 and closed on 24 August 2018.

This document summarises the issues raised during the public comment period and how Perth Airport gave due regard to the issues raised.

2 Submission Summary

During public comment period Perth Airport accepted submissions via email, an online portal and hard copy. Perth Airport received 2,030 submissions across these media as illustrated in Table 1.

Source	Count
Post	768
Online	682
Email	580
Total	2,030

Table 1 Submissions by Source

Source: Perth Airport

Submissions were divided into eight categories as presented in Table 2.

Category	Number of Submissions
Aviation Industry	7
Government	17
Non-Government Organisations	6
Community - Directly to Minister	31
Community (Group)	12
Community (School)	8
Community (Individual)	879
Community (Form Letter)	1,070
Total	2,030

Table 2 List of Submissions by Category

Source: Perth Airport

2.1 Identifying Unique Submissions

Perth Airport collated all submissions received into a consolidated list, accepting one submission per individual as identified by an email address and suburb. Where a submission had been made by an individual across different platforms or multiple times in hard copy and email, the submissions were combined to ensure that all issues raised were addressed and not duplicated for individuals.

Standard 'form letters' received during the public consultation process were also collated and the number of these letters were assessed. Of the 2,030 submissions received, 1,070 were classified as form letters. Perth Airport identified 13 unique form letters as shown in Table 3.

Form Letter Reference Name	Number Submitted
CFL1	3
CFL2	110
CFL3a	156
CFL3b	267
CFL3c	16
CFL4	174
CFL5	110
CFL6	18
CFL7	84
CFL8	2
CFL9	6
CFL10	107
CFL11	17
Total	1070

Table 3 Form Letters Received

Source: Perth Airport

Of the 2,030 submissions, 960 were considered to be unique submissions.

Combining the 960 unique submissions with the 13 unique form letters identified, produced a total of 973 unique submissions received by Perth Airport during the public comment period.

2.2 Dispersion of Submissions

Figure 1 and Figure 2 illustrate the dispersion of submissions received during the NRP public comment period. Submissions were received as far south as Bunbury (not shown on map), north to Gabbadah and east to York.

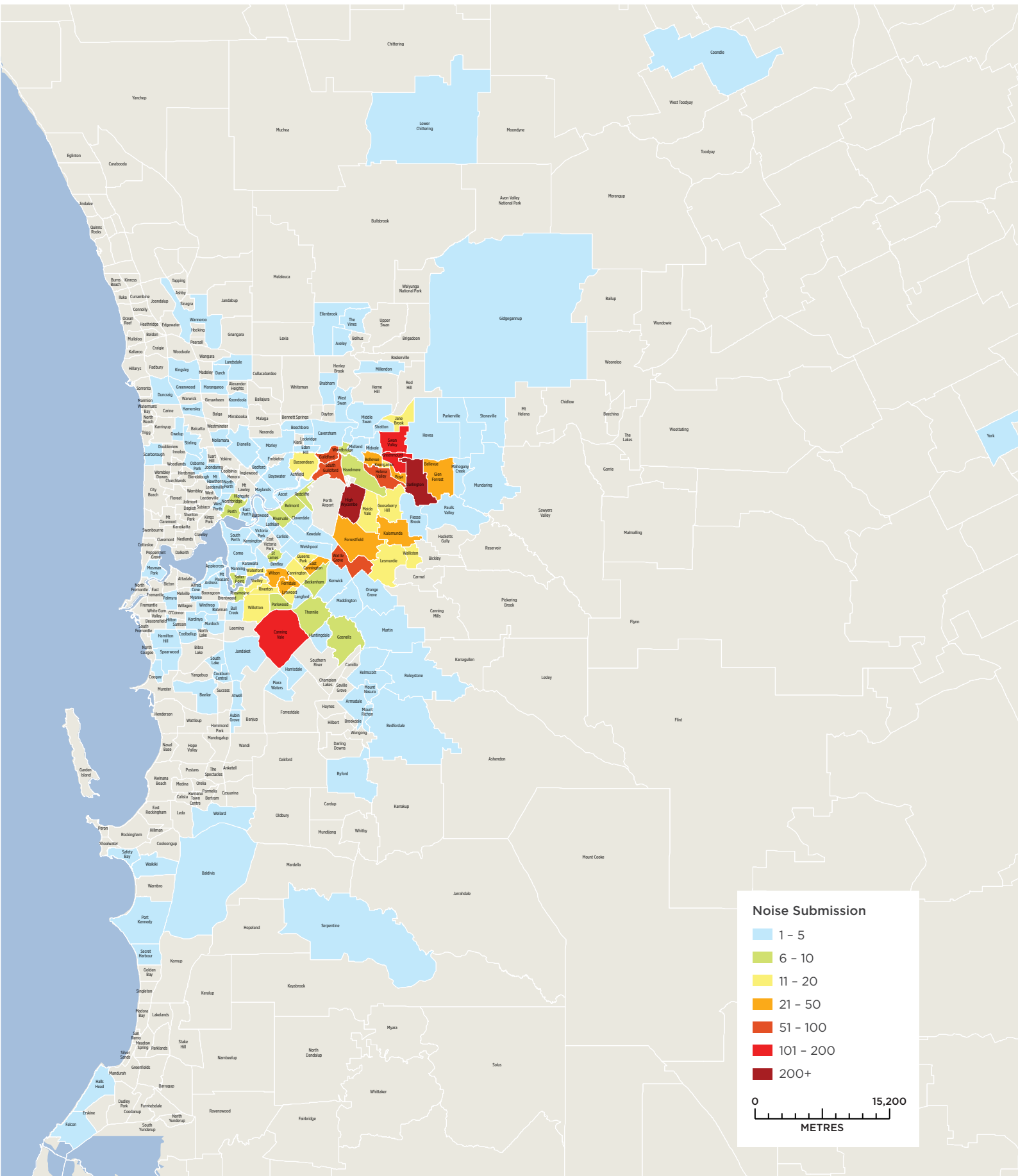


Figure 1 New Runway Project Distribution of Submission Received
Source: Perth Airport

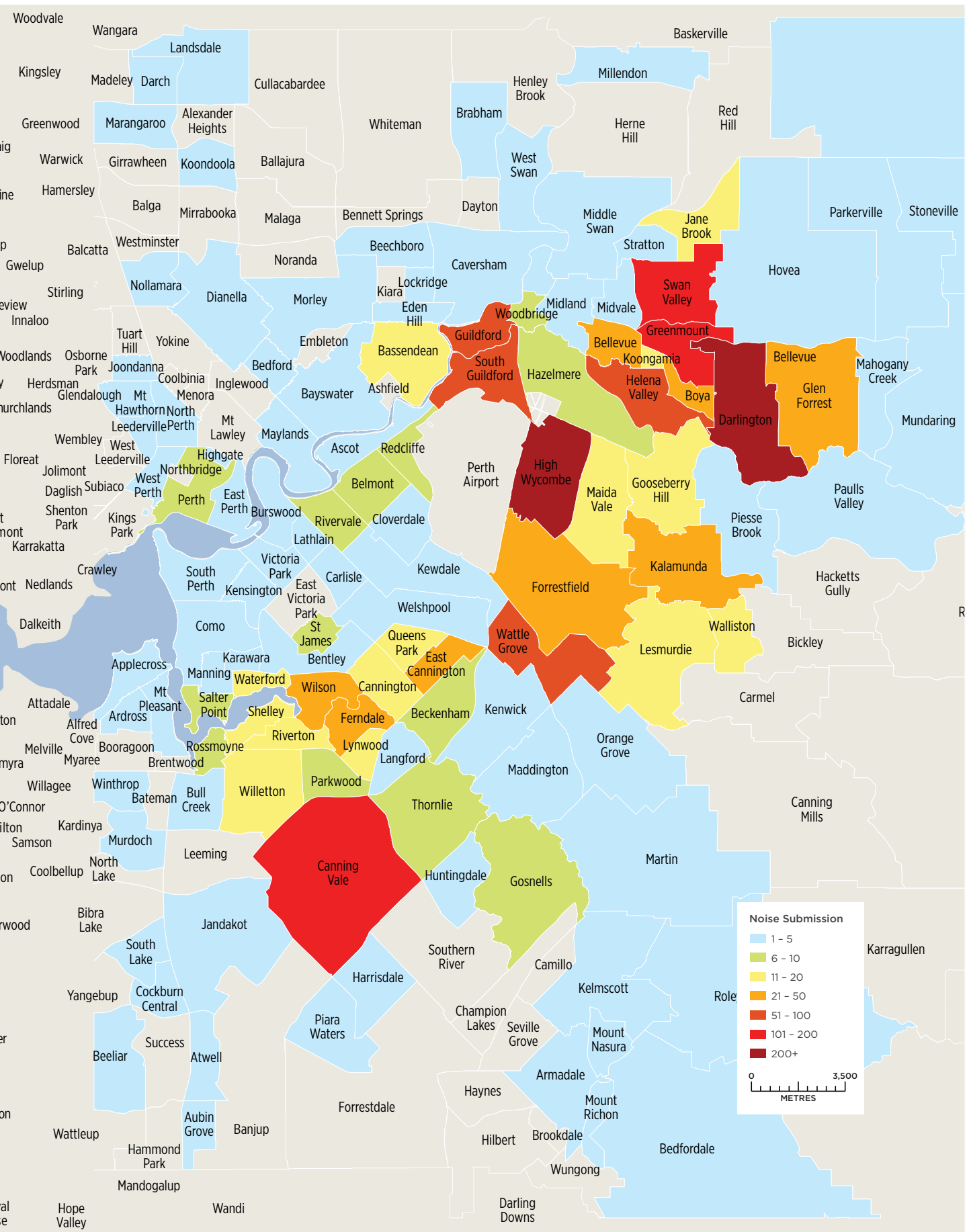


Figure 2 NRP Project Distribution of Submissions Received Around Perth Airport
 Source: Perth Airport

Table 4 identifies the top 10 suburbs for receipt of submissions during the public comment period.

Rank	Suburb	Number of submissions
1	Darlington	237
2	High Wycombe	226
3	Canning Vale	172
4	Swan View	109
5	Greenmount	101
6	Wattle Grove	90
7	Helena Valley	77
8	South Guildford	68
9	Bellevue	49
10	Glen Forrest	41
Total		1,170

Table 4 Top 10 Suburbs that made submissions
Source: Perth Airport

The top 10 suburbs represent approximately 58 per cent of all submissions received, as seen in Figure 3.

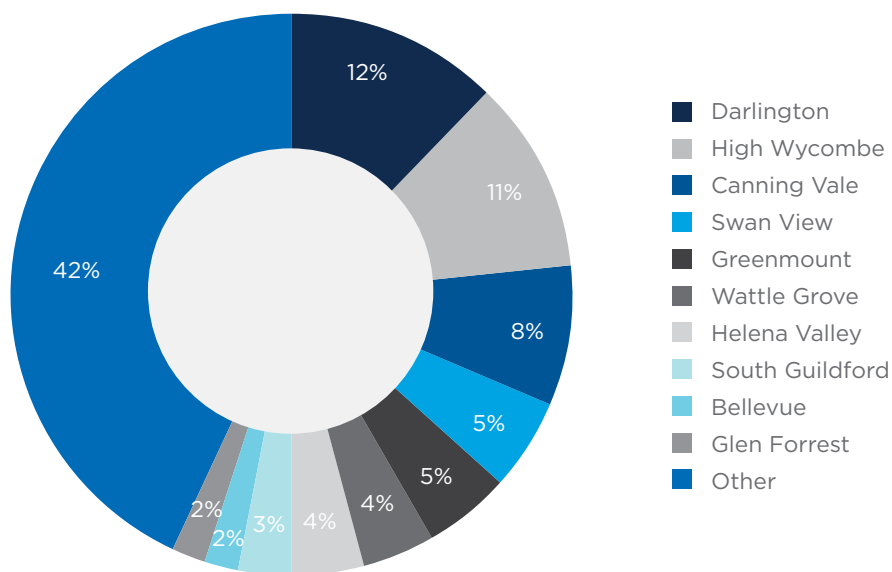


Figure 3 Submission by Suburb
Source: Perth Airport

3 Comments Received

Perth Airport separated the 973 unique submissions into comments to identify all issues raised. This process yielded 4,735 individual comments.

4 Due Regard

In accordance with Section 92(2)(iii) of the Airports Act, Perth Airport was required to demonstrate that it gave due regard for the comments received in preparing the draft plan. Perth Airport identified 178 consistent themes and developed standard responses to address these concerns and where a standard response was inadequate to cover the issues raised, the comment was responded to with a bespoke response.

The full text of all submissions received was provided to the Minister for their consideration.

5 Issues Raised

The top 10 issues raised across all submissions are listed in Table 5.

	Standard response title	Number of times issue raised
1	Aircraft Noise - Darlington	352
2	Social Impact - General	296
3	Current Aircraft Noise	269
4	Impact to Property Value	267
5	Insulation Scheme	262
6	Health Impact Assessment	234
7	Aircraft Noise Information	216
8	Air Quality - Assessment	211
9	Aircraft Noise Management - Curfew	181
10	Health - Cognitive Impact	165

Table 5 Top 10 Issues
Source: Perth Airport

5.1 Top Issue by Submission Category

This section discusses the most common issues raised within each category and Perth Airport's response.

5.1.1 Aviation Industry

Perth Airport received seven submissions from members of the aviation community and five of the seven submission raised the issue of proposed changes to the airspace South of Perth. Section 21.4.4.2 of the MDP outlined the need to amend airspace to allow aircraft to be processed via the long final leg required for independent parallel instrument approaches. The practical impact of this proposed change was that airspace that is currently used for pilot training near Jandakot Airport would need to be moved south an additional eight nautical miles (15 kilometres).

Respondents associated with the general aviation training sector voiced strong objections to the proposed change, as it was considered that this would ultimately lead to increased costs for their business and student pilots, who would be subjected to flying for a longer period of time before reaching the training area.

Perth Airport acknowledges that the proposed change to airspace south of Perth is a burden on the General Aviation community when it is not required 97.5% of the time. Technological advances and changes to the operating regulations as detailed in 21.4.1.4 of the MDP, will have progressed to a stage where alternative options are available with less demanding requirements for additional controlled airspace to support optimal operations. This would allow for independent approaches in IMC conditions between two aircraft if one is RNP-AR equipped with two non-equipped aircraft having to undertake dependent approaches. Whilst this would not maximise the potential capacity at

Perth Airport, it may be sufficient to process the traffic demand on day of opening with minimal delays.

To address the aviation industry concerns raised, Perth Airport removed Figure 21-8 from the MDP and changed increased airspace statements in the MDP from 'will' to 'may'. The changes also acknowledge that new regulations may allow the airport to accommodate the demand on day of opening with minimal delay, whilst not achieving maximum capacity. The final decision on whether changes may be required to controlled airspace will be determined during the final design and will be subject to widespread consultation.

5.1.2 Government

Perth Airport received 17 submissions from 'Government' organisations. While comments were predominantly split in line with department responsibilities, the theme of aircraft noise impacts was consistent across submissions received.

Perth Airport undertook a detailed assessment of the impacts of future aircraft noise on communities. Section 22 describes in detail aircraft noise modelling completed and presents the ANEF and a series of noise above contours based on the proposed flight corridors. Section 25 investigated the social impact of aircraft noise and dissected the number of dwellings and community facilities that would be exposed to aircraft noise day before opening of the new runway, day of opening of the new runway and then in 2045.

On an average day (24-hour period) at day of opening (2025), it is estimated that:

- the number of existing dwellings to experience five or more aircraft noise events above 65 decibels (dBA) is expected to decrease from approximately 83,600 to 78,000,
- of these, approximately 46,300 dwellings will average at least five fewer daily noise events,
- 25,600 dwellings will average at least five additional daily noise events,
- nearly 8,200 dwellings will be newly affected, and
- by 2045, due to the growth in aircraft movements, the number of dwellings exposed will increase to approximately 82,600.

Opportunities to minimise noise impacts on communities will be considered by Airservices Australia when developing the final flight paths. This phase also includes the development of both air traffic management and noise abatement procedures.

While Airservices will be responsible for undertaking consultation with the community during the final airspace design process. Perth Airport has updated the MDP to reflect that once the final airspace design is complete, Perth Airport will revise the aircraft noise modelling and flight path communications materials, including the online Aircraft Noise and Information Portal. A Stakeholder Engagement Plan will be developed to ensure the community is informed of the updated flight path and aircraft noise information.

5.1.3 Non-Government Organisation

Six submissions were classified as being from Non-Government Organisations, with this category including submissions from the Chamber of Commerce and Industry WA, Study Perth, The Committee for Perth, The Tourism and Transport Forum, Tourism Council of WA and the Australian Hotels Association.

All submissions spoke to the importance and need for the new runway to ensure that Perth can continue to grow and prosper. Submissions reiterated the economic benefits described in the MDP, noting construction of the New Runway will add \$1.03 billion to Perth's real economic output, \$1.1 billion to real income and on average create 169 full time equivalent positions per year. Importantly, the avoided delay costs as a result of constructing the runway and enabling additional capacity are estimated to be \$430 million in per annum in 2017 dollars. In line with Master Plan 2014, Perth Airport contributes \$2.61 billion to gross regional product and more than \$6.16 billion to tourism. These are benefits that would not be fully realised should the new runway project not proceed.

5.1.4 Community (Direct to Minister)

31 submissions were submitted directly to the Hon Michael McCormack and then forwarded by the (then) Department of Infrastructure, Transport, Cities and Regional Development to Perth Airport for consideration. Amongst the 39 issues raised, the predominant item was that of aircraft noise from current operations.

Issues and complaints regarding existing flight paths and current aircraft noise were not within the purview of the MDP. However, existing aircraft noise levels were assessed as part of the Aircraft Noise Assessment (see Section 22.5.4 of the MDP).

Perth Airport details its approach to aircraft noise management in Section 22.5 of the MDP with this also outlining the roles and responsibilities of various organisations as part of the Aircraft Noise Management Strategy. Perth Airport has only some direct control over the management of ground-based aircraft noise, however, Perth Airport takes a key role in educating the public about aircraft noise, why aircraft fly where they fly and how best to minimise the effects of aircraft noise.

Airservices Australia manages and maintains aircraft navigation, surveillance, and noise monitoring infrastructure, including the establishment of flight paths at Perth Airport. Airservices Australia is also responsible for managing noise complaints and enquiries through the Noise Complaints and Information Service.

5.1.5 Community (Group)

Perth Airport received 12 submissions classified as being from Community Groups. The top issue raised in these submissions was split equally across future aircraft noise over the suburb of Darlington due to a proposed flight corridor and the health impacts associated with increased exposure to aircraft noise.

Aircraft Noise - Darlington

Darlington is located approximately 9 kilometres East of Perth Airport and the new runway. Section 21.4.3 of the MDP details the proposed flight corridors developed by Perth Airport with Airservices Australia to guide the assessment of impacts and the final airspace and flight path design.

MDP Figure 21-7 illustrates a proposed corridor that tracks to the East from the New Runway over a series of suburbs, including Darlington. The corridor is required to cater for turbo prop aircraft that are generally slower than jets. This would assist air traffic controllers to maximise the capacity of the airspace if a jet is departing on the new runway after a turbo prop. Modelling by Perth Airport identified that on day of opening, there would be a maximum of 19 flights forecast to use this route on any given 24-hour weekday period or an average of 10 aircraft. By 2045, the maximum forecast number of flights in a 24-hour period was 22, or an average of 11 flights.

Perth Airport examined the impact of the proposed corridor on Darlington and identified 137 dwellings in Darlington within the N65 contours for the 2025 Without NRP scenario. With the opening of the NRP, there are 127 dwellings within the N65 contours, of which 39 dwellings will experience an increase in daily noise events, 24 dwellings will experience a reduction in daily noise events, 64 dwellings will have unchanged noise exposure and 1 dwelling will be newly exposed to aircraft noise events. By 2045, 142 dwellings are forecast to be exposed to N65 noise events.

There are no dwellings in Darlington that are within the significant noise affected contour (above ANEF 30) as identified in the *Airports Act 1996*.

MDP Section 25.9 (Suburb Overview) identified no public facilities in Darlington within either the N65 day, N65 evening and/or N60 night contours presented in the MDP. There are no public facilities in Darlington within the significant noise affected contour (above ANEF 30).

The corridors presented do not represent a detailed design of the airspace and flight paths and should be considered as the guiding principles that will inform the airspace and flight path detailed design process (refer to MDP Section 21.6). These proposed flight corridors were developed in conjunction with Airservices Australia to ensure the design is a workable solution addressing safety as the number one consideration. As the actual flight paths are subject to Airservices Australia final design prior to opening of the runway, the actual location of flight paths have not been finalised.

The Preliminary Draft MDP was silent on the use of the corridor by turbo prop aircraft and as such, Perth Airport subsequently amended Section 21.4.3.2 to reflect that the departure route over Darlington would be for turbo prop aircraft.

Further consultation will be undertaken with the community during the final airspace design process. Once the final airspace design is complete, Perth Airport will revise the aircraft noise modelling and flight path communications materials, including the online Aircraft Noise and Information Portal. A Stakeholder Engagement Plan will be developed to ensure the community is informed of the updated flight path and aircraft noise information.

Health Impact Assessment

Submissions also raised concern about the increased exposure to aircraft noise that resulted from the airspace management plan presented in Section 21 of the MDP.

Perth Airport commissioned a detailed assessment of the potential health impact of aircraft noise exposure and air emissions from the operations of the NRP, which is presented in MDP Section 24. The study considered psychological effects, cognitive impairment, cardiovascular disease, sleep disturbance, annoyance, emissions and auditory health.

The assessment considered 168 research articles, reviews and guidelines published between 1993 and 2017. The literature and research examining the health impacts of aircraft noise and emissions is extensive, diverse and draws on a range of Australian and international guidelines, including those published by the World Health Organization and Australian Environmental Health Standing Committee.

Each research article was assessed in terms of its methodology, strength of findings and relevance to Perth Airport operations. Many studies were based on aircraft traffic volume and noise levels that are very different from current operations at Perth Airport, or from what is expected as a result of the NRP operations. However, the research does provide conclusions that were considered for the NRP. The key issues are likely to be cognition impairment in learning for schools overflown, sleep disturbance (due to the knock-on effects of sleep deprivation) and stress as a result of annoyance.

The opening of the new runway will alter the pattern of aircraft noise exposure and result in reduced aircraft noise for some populations under existing air routes and increased or new noise events for others. Strategies to minimise aircraft noise impact, which are detailed in MDP Section 22, can assist in reducing the health consequences of aircraft noise exposure. These include appropriate land planning around airports, careful route planning, noise abatement procedures, provision of clear and comprehensible information about the likely exposure to aircraft noise, as well as information to assist those affected by the noise to undertake amelioration measures that can reduce noise penetration into homes. As a result, any potential health impacts resulting from NRP operations are likely to be small or restricted to relatively few people.

5.1.6 Community (School)

Perth Airport received eight submissions that were classified as being from schools. The main issue raised concerned the impact of increased aircraft noise exposure on the cognitive ability of students.

Perth Airport commissioned a detailed assessment of the potential health impact of aircraft noise exposure from the operations of the NRP, which is presented in Section 24 of the MDP. Cognitive impairment was one of the main health consequences considered in the study.

The Health Impact Assessment acknowledges that there is evidence to conclude that aircraft noise exposure can have a detrimental effect on some cognitive outcomes and some areas of learning in primary age school children, with the most evidence for reading comprehension and some types of memory. Research on cognition effects in adults is limited, but does point to there being no significant impact.

The social impact assessment presented in MDP Section 25 identifies that there are 66 schools within the N65 day (6am-7pm) contours for the 2025 Without NRP scenario. With the opening of the NRP, this reduces to 60 schools due to the spread of aircraft movements across two runways, with 13 schools no longer within the N65 contours and 10 schools newly within the N65 contours. Of the 10 schools newly within the N65 contours, five schools are forecast to experience 5-9 daily N65 events, two schools are forecast to experience 10-19 daily N65 events, and three schools will have between 20-49 daily N65 events.

By 2045, there are 67 schools forecast to be exposed to N65 noise events.

There are 11 kindergartens and pre-schools within the N65 contours for each of the scenarios, with two kindergartens newly within N65 contours (5-9 and 10-19 daily N65 events respectively) at day of NRP opening.

Each of the schools, kindergartens and pre-schools are identified in MDP Section 25.9 (Suburb Overview) and the forecast daily noise event contour for each N65 scenario is provided for each facility.

There are no schools within the significant noise affected contour (above ANEF 30), as identified in the *Airports Act 1996*.

In addition to the aircraft noise management initiatives detailed in MDP Section 22 (Noise), mitigation measures include careful route planning during final airspace design, a review of noise abatement procedures for NRP and parallel runway operations, improved use of new navigation technology, and provision of timely information. Perth Airport has committed to engaging directly with newly impacted education facilities once the final flights have been determined.

5.1.7 Community (Individual)

Perth Airport received 879 submissions that were classified as being from individual community members. Similar to the response received from community groups, the main issue raised was aircraft noise over the suburb of Darlington. Please see Section 5.1.5 for response.

5.1.8 Community (Form Letters)

Perth Airport received 1,070 form letters of which 13 were unique. The main issue raised was how Perth Airport would be offsetting the environmental impacts of the NRP.

As described in Section 6.20.8, construction of the new runway will require clearing and site development of approximately 293 hectares. This will impact on flora and fauna within the NRP area.

As per MDP Section 17.9.1, Perth Airport is currently working with the Department of Environment and Energy and the Department of Biodiversity Conservation and Attractions, to develop an Offset Framework for the Perth Airport Estate. The overarching Perth Airport Estate Offset Framework will be implemented on a project by project basis to provide an Offset Proposal for each project, including NRP.

The Perth Airport Estate Offset Framework includes provision of offsets for each of the following Environmental Values:

- Carnaby's Black Cockatoo
- Baudin's Black Cockatoo
- Forest Red-tailed Black Cockatoo
- Banksia Woodlands of the Swan Coastal Plain
- *Macarthuria keigheryi*
- *Conospermum undulatum*

For each project, the Offset Framework will be implemented for environmental values that are considered to have significant residual impacts. For the NRP, all of the above environmental values are relevant and hence the resulting Offset Proposal will include offsets for each of these.

6 Conclusion

The aim of this document was to summarise issues raised during the public consultation phase for the NRP MDP, which was conducted between May and August 2018. A range of submissions were received from all Stakeholder groups across the Perth Metropolitan area and beyond, with key themes becoming evident during Perth Airport's detailed assessment of all submissions received. Key themes were focussed on aircraft noise, social impact, property values, dwelling insulation and health impacts. Perth Airport gave due regard to all submissions during the preparation of the Draft MDP.

Perth Airport  | New Runway Project

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