

AIR ROUTE CONNECTIVITY IN MID AND NORTH WEST OF WESTERN AUSTRALIA

Survey Data Analysis

MAP - AUSTRALIA & SOUTH EAST ASIA



An Initiative of the following airports in the mid and north west of Western Australia:



























Contents

Conten	nts	1
1.0	OVERVIEW	4
2.0	METHODOLOGY	5
3.0	DATA LIMITATIONS	6
4.0	INTRA-STATE CONNECTIONS WITHIN WA BY REGION	7
4.1	Kimberley Region	8
4.2	Pilbara Region	11
4.3	Gascoyne & Mid West Region	14
5.0	INTRA-STATE CONNECTIONS WITHIN WA BY AIRPORT	17
5.1	BROOME	18
5.1.1	Location & Current Air Services	18
5.1.2	Demand Profile	18
5.1.3	Survey results	19
5.1.4	Connections from Broome	19
5.2	CARNARVON	22
5.2.1	Location & Current Air Services	22
5.2.2	Demand Profile	22
5.2.3	Survey results	23
5.2.4	Connections from Carnarvon	23
5.3	DERBY (Curtin)	26
5.3.1	Location & Current Air Services	26
5.3.2	Demand Profile	26
5.3.3	Survey results	26
5.3.4	Connections from Derby	27
5.4	EXMOUTH (Learmonth)	30
5.4.1	Location & Current Air Services	30
5.4.2	Demand Profile	30
5.4.3	Survey results	31
5.4.4	Connections from Exmouth	31
5.5	FITZROY CROSSING	33
5.5.1	Location & Current Air Services	33
5.5.2	Demand Profile	33
5.5.3	Survey results	33
5.6	GERALDTON	34
5.6.1	Location & Current Air Services	34
5.6.2	Demand Profile	34
5.6.3	Survey results	35
561	Connections from Geraldton	25

5.7	HA	ALLS CREEK	38
5.7.	.1	Location & Current Air Services	38
5.7.	.2	Demand Profile	38
5.7.	.3	Survey results	39
5.7.	.4	Connections from Halls Creek	39
5.8	KA	RRATHA	42
5.8.	.1	Location & Current Air Services	42
5.8.	.2	Demand Profile	42
5.8.	.3	Survey results	43
5.8.	.4	Connections from Karratha	43
5.9	KU	INUNURRA	46
5.9.	.1	Location & Current Air Services	46
5.9.	.2	Demand Profile	46
5.9.	.3	Survey results	46
5.9.	.4	Connections from Kununurra	46
5.10	NE	WMAN	48
5.10	0.1	Location & Current Air Services	48
5.10	0.2	Demand Profile	48
5.10	0.3	Survey results	49
5.10	0.4	Connections from Newman	49
5.11	ON	vslow	52
5.13	1.1	Location & Current Air Services	52
5.13	1.2	Demand Profile	52
5.13	1.3	Survey results	53
5.13	1.4	Connections from Onslow	53
5.12	PA	NNAWONICA	56
5.12	2.1	Location & Current Air Services	56
5.12	2.2	Demand Profile	56
5.12	2.3	Survey results	56
5.12	2.4	Connections from Pannawonica	56
5.13	PA	RABURDOO	58
5.13	3.1	Location & Current Air Services	58
5.13	3.2	Demand Profile	58
5.13	3.3	Survey results	58
5.13	3.4	Connections from Paraburdoo	59
5.14	PO	PRT HEDLAND	62
5.14	4.1	Location & Current Air Services	62
5.14	4.2	Demand Profile	62
5.14	4.3	Survey results	63
5.14	4.4	Connections from Port Hedland	63

5.15	SHARK BAY	66
5.15	5.1 Location & Current Air Services	66
5.15	5.2 Demand Profile	66
5.15	5.3 Survey results	67
5.15	5.4 Connections from Shark Bay	67
6.0	INTERSTATE CONNECTIONS	69
6.1	Desire for interstate connections	70
6.2	Departing airport	70
6.3	Interstate destination	71
6.4	Frequency of travel	71
7.0	INTERNATIONAL CONNECTIONS	75
7.1	Desire for international connections	76
7.2	Departing airport	76
7.3	International destination	77
7.4	Frequency of travel	77

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Pages 65, 66: Shire of Shark Bay

1.0 OVERVIEW

Connecting communities in Western Australia's north is a challenge due to the vast distances between towns & services; limited and sometimes inaccessible roads infrastructure; and small population centres. Air travel is often seen as the travel option of choice, particularly for business travellers, tourists and visitors to the Kimberley, Pilbara, Gascoyne and Mid-west regions. However the lack of air connectivity between the airports in the northwest of WA is a common complaint of visitors who generally have to travel back to Perth to continue onto their next holiday destination. Conducting business across the region is also affected by a lack of air route connections which impacts business operations not only financially, but also on the time taken to travel a circuitous route by road or air rather than from point A to B.

With this in mind, 15 airports across 12 Local Government Areas worked collaboratively to prepare a survey for each of their communities to understand where people would like to connect to if an option was available, with intra-state as well as interstate and international connections being considered.

Whilst it is not the intent to diminish existing direct services to Perth for each community as these are considered vital, a more inclusive hub-and-spoke model of air travel across the north of WA to increase regional connectivity and ease the air traffic burden on Perth may be considered as an option. The survey data aims to provide an understanding of community uptake to determine whether such connections would be considered viable by airlines. It was also a consideration of the surveys not to have each airport competing for interstate and international connections as this would be an unrealistic option for most of the airports due to a number of factors such as airport design, passenger catchment size etc, and would likely result in none of the services being well supported.

The survey also clearly stated to participants that there was no guarantee of new services commencing, although airports would likely provide the results to their airline partners for consideration.

Member for Pilbara Brendon Grylls MLA launched the survey on 1 October 2015 for its six-week campaign. Links to the survey were also available via Tourism WA, WALGA, Australian Airports Association and various other State and Federal members of parliament's websites and social media sites. Community members were advised of the survey via local media, local visitors centres, social media, airport &/or Council websites and print media.

3,376 responses were received across all 15 surveys with the following for each survey area:

Broome	83	Carnarvon	105	Derby	32
Exmouth	434	Fitzroy Crossing	-	Geraldton	180
Halls Creek	14	Karratha	1924	Kununurra	21
Newman	189	Onslow	32	Pannawonica	2
Paraburdoo	48	Port Hedland	256	Shark Bay	56

Analysis of results is provided for each port in relation to intra-state connectivity and aggregated results for interstate and international connections. Each airport has been provided with the data specific to their port to further promote their own connectivity options.

In summary, interconnections to other ports within northern WA is supported by respondents with the main reasons for travel being holiday/leisure and business. The availability of links to other ports whom have additional connections interstate and internationally was also supported. As the survey focussed on community needs, only 17% across all of the survey responses were from out of town FIFO travellers. It can be assumed that there would be further uptake of inter-connected services if resource companies had provided the survey to their employees. Of note, however, is the high level of discontent in regards to ticket prices especially in traditional mining port towns and towns with smaller airline operators.

2.0 METHODOLOGY

The survey consisted of 12 questions covering 5 main sections – general information, FIFO, connections within WA (intra-state), interstate connections and international connections. As the aim of the survey was to look to expand interconnectivity without the detriment to existing services, those services currently available were not considered as part of the survey. The survey also clearly stated to participants that whilst the data would be used to inform airlines and progress their interests, the airports could not guarantee any new services would commence as a result of the responses received.

General information

This section sought the participants' postcode (to determine the catchment area for the airport) and current frequency of travel (to determine current usage patterns). The current frequency of travel did not seek to define the purpose of travel.

FIFO

Where a participant responded to yes to being a FIFO worker, they were asked 3 additional questions on FIFO travel; namely whether they lived in the region or based elsewhere and work in the region; if flights to their workplace flew directly from the region; and if they fly to/from another airport to get to their place of work. For the latter question, the airport was to be specified.

Intra-state Connections

Participants were asked to provide their 1st and 2nd choice for intra-state connections, their primary reason for travel to that destination and how often they would likely travel there. The selection was limited to 2 choices and not a ranking of each port for ease of data collation. An 'Other connections' free-text section was included to provide participants with an opportunity to identify additional connections they would like introduced. Each of the collaborating airports was provided as an option for connection in each survey (excluding the port to which the survey related).

<u>Interstate Connections</u>

This section also asked for 1st and 2nd option for interstate connections; asking airport, destination and frequency of travel. Only limited airports were available for selection for interstate connections due to their currently servicing or desire to service interstate connections. Those airports for consideration of interstate services were Broome, Geraldton, Karratha and Port Hedland including options for 'any airport' or Perth. All participants were asked to respond 'Yes-especially if connections from their port', 'Yes-even if they had to drive from their home town' or 'No' on whether they'd consider using any of these airport for interstate connections. The options for destination were Adelaide, Brisbane, Canberra, Darwin, Gold Coast, Melbourne and Sydney. Frequency was the same as for intra-state connections.

International Connections

Identical to interstate connections for airport and frequency with the options for destination being Bali, China, Hong Kong, Indonesia, Malaysia, Middle East, New Zealand, Philippines and Singapore.

Section 4 of this report provides information about each airport and their intra-state connectivity and FIFO responses. Section 5 deals with interstate connections and Section 6 with international connections.

All location and demand data contained within this report was sourced from the participating airports and references Australian Bureau of Statistics 2011 data wherever [ABS] is noted. Other airport-specific data was provided by each participating airport.

3.0 DATA LIMITATIONS

The following errors were made in preparation of the surveys which need to be considered when reviewing the results.

All surveys

Singapore was not an available option for international destination for the first week of the survey. Some optional comments included Singapore as the destination of choice. These comments have not been included into the data at this time.

Karratha survey

For intra-state connections, Karratha airport was included in the list of destinations. This option was removed on the 4^{th} day of the survey, however 43 respondents had identified Karratha as their 1^{st} destination of choice and 18 their 2^{nd} destination of choice.

Newman survey

The option of Newman for interstate and international connections was included in this survey only. Newman was not provided as an option for direct interstate connections for any of the remaining surveys, therefore data is limited to Newman responses only. However, it is likely that only Newman residents and FIFO workers would consider using Newman as an interstate and international connection.

through a better network will make our towns and regional cities more affordable to access by air'.

Hon Brendon Grylls MLA

'Ultimately more connections

SECTION 4 INTRA-STATE CONNECTIONS WITHIN WA BY REGION



4.0 INTRASTATE CONNECTIONS BY REGION

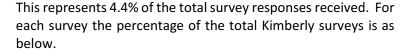
Four Western Australian regions were included in the surveys being the Kimberley, Pilbara, Gascoyne and Mid-West. For convenience, the Gascoyne and Mid-West were combined into one region as their business is more closely aligned.

One factor that has not been controlled in the results is the significant bias due to Karratha responses being 57% of all responses received over all 15 survey groups. Bias or weighting calculations to 'smooth out' the data is beyond the scope of this survey report but may be undertaken by individual airport operators prior to discussions with airlines or other interested parties.

This section of the report looks at responses within the region as an aggregated group of results. For individual airport responses, see Section 5 of this report.

4.1 Kimberley Region

150 responses were received from the Kimberly region, being the Broome, Derby (Curtin), Fitzroy Crossing Halls Creek and Kununurra surveys.



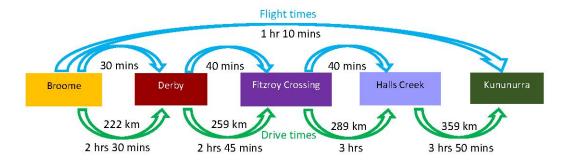


Survey	# responses	% of total	% of Kimberley	% of population	% of population
		responses	region responses	(Town Centre)	(Local Government Area)
Broome	83	2.46%	55%	0.65%	0.55%
Derby	32	0.95%	21%	0.98%	0.38%
Fitzroy Crossing	=	0.00%	0%	0.00%	0.00%
Halls Creek	14	0.41%	9%	0.97%	0.39%
Kununurra	21	0.62%	14%	0.46%	0.27%

4.1.1 Catchment Area

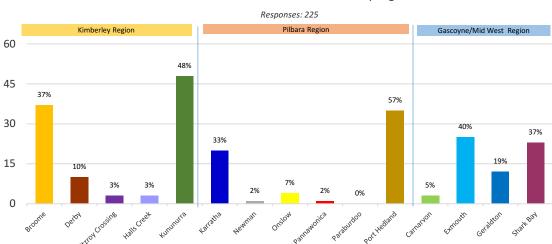
The Kimberley region has a population of 34,794 [ABS]. The results received from Kimberly region survey respondents therefore represents 0.43% of the total population of the region.

The drive & flight times between each are indicated on the below:



4.1.2 Intra-state connections for Kimberley group

Of all of the regions surveyed, the Kimberley has the most existing inter-connections between airports. Even so, within the Kimberley region Kimberley residents want to connect primarily to Kununurra and Broome with the smaller towns of Halls Creek and Derby seeking connections to Kununurra.

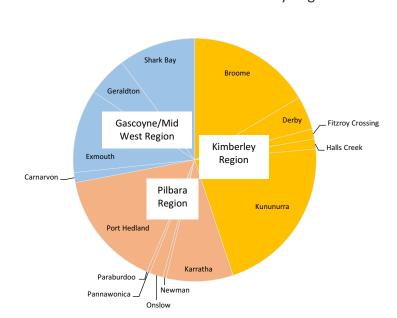


Connections within WA from Kimberly region

When considering travel into the Pilbara, connections to Port Hedland (57%) and Karratha (33%) are preferred. This is mainly due to work and connections to other air services offered by these ports with some holiday/leisure.

Travel to the Gascoyne & Mid-West region is all about holiday and leisure thus supporting 77% of preferred connections into the two essentially holiday destinations of Exmouth and Shark Bay. Many interstate and international leisure travellers also seek to connect the world-heritage areas of Shark Bay, Ningaloo Coast and Purnululu as well as a visit to Cable Beach and other iconic Kimberley attractions.

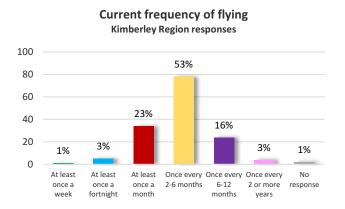
The below diagram is an aggregate of all the Kimberley responses detailing where they'd like to connect to.

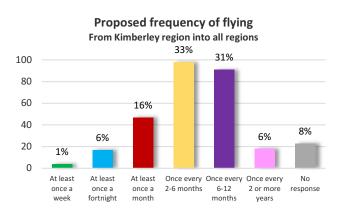


Connections within WA from Kimberley Region

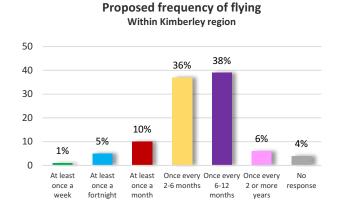
4.1.3 Current & proposed frequency of travel

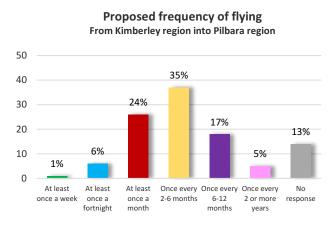
Of the 148 responses received from Kimberley respondents on current travel, more than half indicted current air travel at least once every 6 months or less. Some respondents indicated that travel would be more frequent if pricing was more reasonable (especially for families).

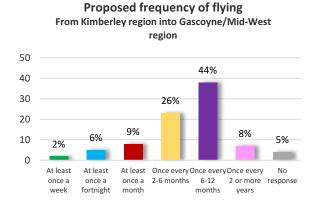




When comparing to proposed frequency of travel into connecting ports (provided connections available) the frequency of travel pushes out to once every 2-12 months due to the strong responses around holiday/leisure travel both within the Kimberley region and into the Gascoyne/Mid-West region. Travel into the Pilbara region was more frequent due to the work/business connections sought into this region.



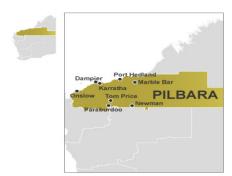




4.2 Pilbara Region

2,451 responses were received from the Pilbara region, being the Karratha, Newman, Onslow, Pannawonica, Paraburdoo and Port Hedland surveys.

This represents 72.6% of the total survey responses received which was greatly influenced by over 50% of all responses from the Karratha survey. For each survey the percentage of the total Pilbara surveys is as below.

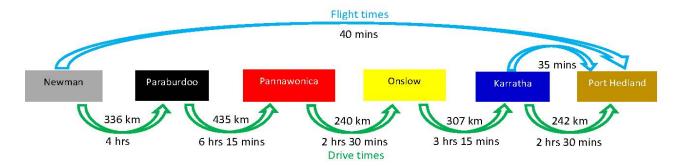


Survey	# responses	% of total responses	% of Pilbara region responses	% of population (Town Centre)	% of population (Local Government Area)
Karratha	1924	56.99%	79%	11.68%	8.40%
Newman	189	5.60%	8%	3.45%	1.58%
Onslow	32	0.95%	1%	4.80%	0.32%
Pannawonica	2	0.06%	<1%	0.31%	0.02%
Paraburdoo	48	1.42%	2%	3.18%	0.48%
Port Hedland	256	7.58%	10%	1.86%	1.70%

4.2.1 Catchment Area

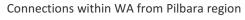
The Pilbara region has a population of 59,894 [ABS]. The results received from Pilbara region survey respondents therefore represents 4.09% of the total population of the region.

The drive & flight times between each are indicated on the below:

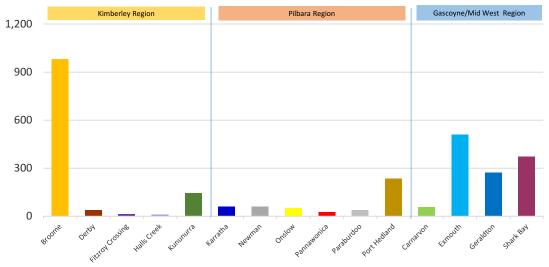


4.2.2 Intra-state connections from Pilbara region

An existing air connection exists twice a week between Karratha & Port Hedland (and then onto Broome & Darwin) and once a week between Newman and Port Hedland (one way only). Pilbara respondents favoured the leisure destination ports with other ports for work, shopping, schooling and connections to other destinations etc. 49% of travel within the Pilbara was sought to Port Hedland for international connections to Bali, however it must be noted that 82% of that result was from Karratha respondents with their large sample size significantly biasing the results.



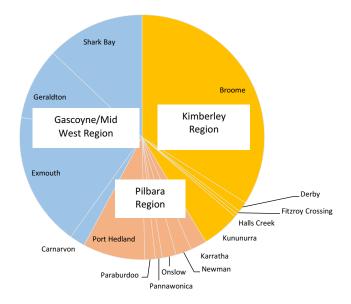
Responses: 2593



When considering travel into the Kimberley, connections to Broome dominated (82%) and then Kununurra (33%). This is mainly due to holiday/leisure interests.

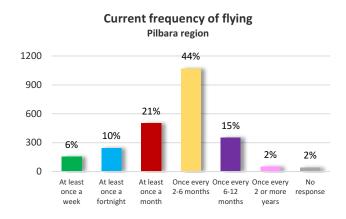
Travel to the Gascoyne & Mid-West region again is for holiday and leisure (73%) of preferred connections into the two essentially holiday destinations of Exmouth and Shark Bay. Geraldton also was a high responder for schooling, work and holidays. The below diagram is an aggregate of all the Pilbara responses detailing where they'd like to connect to.

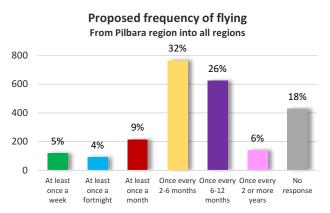
Connections within WA from Pilbara Region



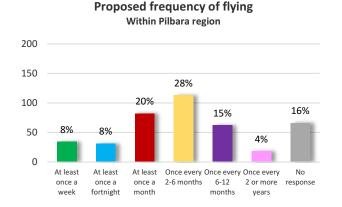
4.2.3 Current & proposed frequency of travel

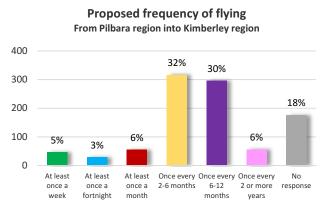
Of the 2,407 responses received from Pilbara respondents on current travel, more than half indicted current air travel is at least once every 6 months or less.

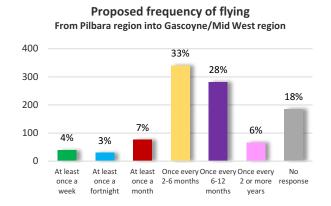




Similar to the Kimberley region results, when comparing to proposed frequency of travel into connecting ports (provided connections available) the frequency of travel pushes out to once every 2-12 months due to the strong responses around holiday/leisure travel into the Kimberley region and into the Gascoyne/Mid-West region.







4.3 Gascoyne/Mid-West Region



775 responses were received from the Gascoyne & Mid-West regions, being the Carnarvon, Exmouth & Shark Bay surveys in the Gascoyne and the Geraldton survey in the Mid-West region.



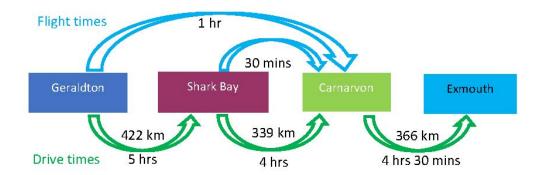
This represents 23.0% of the total survey responses with the Exmouth survey response being the second highest of all surveys received. For each survey the percentage of the total Gascoyne/Mid-West surveys is as below.

Survey	# responses	% of total	% of Gascoyne /	% of population	% of population
		responses	Mid-West region	(Town Centre)	(Local Government Area)
			responses		
Carnarvon	105	3.11%	14%	2.30%	1.81%
Exmouth	434	12.86%	56%	19.66%	18.14%
Geraldton	180	5.33%	23%	0.57%	0.50%
Shark Bay	56	1.66%	7%	25.34%	6.53%

4.3.1 Catchment Area

The Gascoyne region has a population of 9,291 [ABS] and the Mid-West region a population of 53,657 [ABS]. The results received from Gascoyne region survey respondents therefore represents 6.4% of the total population of the region and for the Mid-West region 0.34%. Combined, the population is 62,948 with 1.23% responses.

The drive & flight times between each are indicated on the below:

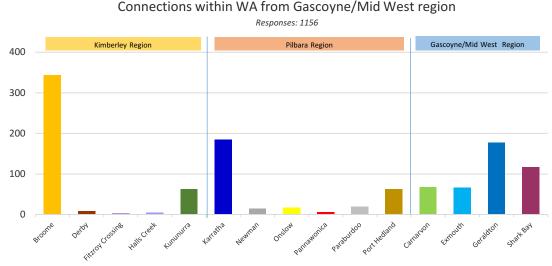


4.3.2 Intra-state connections from Gascoyne / Mid-West region

to holiday/leisure interests and business connectivity.

An existing regulated air connection exists between Carnarvon and Shark Bay (and Perth) with Skippers Aviation also connecting from Geraldton to Carnarvon twice a week (one way only). Gascoyne/Mid-West respondents were all about connections to Broome (to link tourism destinations) and to other ports for work, shopping, schooling and intra-state, interstate and international connections.

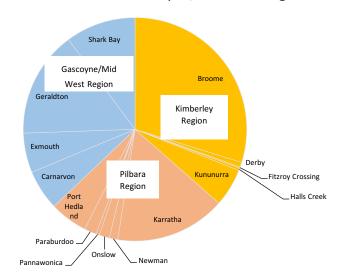
41% of travel within the region was sought to Geraldton for a variety of reasons and between the two world-heritage areas of Shark Bay and Exmouth.



When considering travel into the Kimberley, connections to Broome dominated (82%). This is mainly due

Travel to the Pilbara region was for business/work with some holiday/leisure but mostly for connections to interstate and international ports. It is assumed that Karratha connections dominated responses as there are connection from Karratha to Broome already in place and to connect the Pilbara and Gascoyne then provides options other than via Perth.

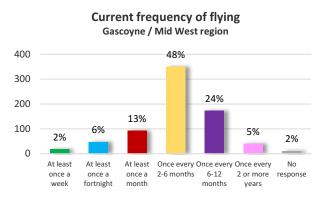
The below diagram is an aggregate of all the Gascoyne/Mid-West responses detailing where they'd like to connect to.

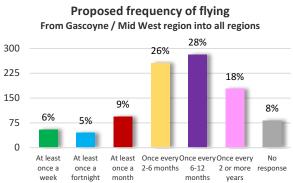


Connections within WA from Gascoyne/Mid West Region

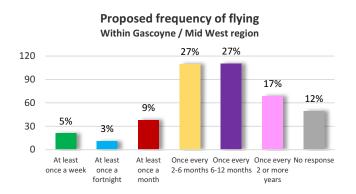
4.3.3 Current & proposed frequency of travel

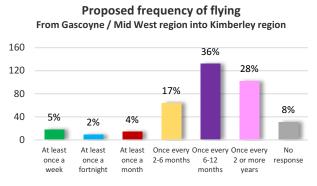
Of the 731 responses received from Gascoyne & Mid-West respondents on current travel, more than half indicted current air travel is at least once every 6 months or less, although weekly frequency increased due to work/business and FIFO connection options.

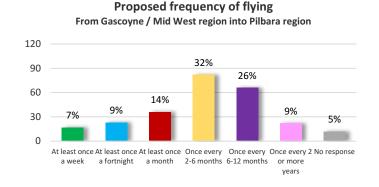




Similar to the other region results, when comparing to proposed frequency of travel into connecting ports (provided connections available) the frequency of travel pushes out to once every 2-12 months due to the strong responses around holiday/leisure travel.







SECTION 5 INTRA-STATE CONNECTIONS WITHIN WA BY AIRPORT



5.1 BROOME

5.1.1 Location & Current Air Services

Broome International Airport is a privately owned and operated airport that services the Shire of Broome which has a population over 17,250 people [ABS]. The town is around 2,300km northwest of Perth; a 3 day drive or 2 hours flight. The main economic drivers for the area are tourism, pearling and oil & gas.

There are currently 30 air services to Perth each week provided by Qantas Airways, Qantaslink and Virgin Australia; 7 Airnorth services to Kununurra/Darwin; twice weekly Airnorth service to Karratha/Port Hedland; and seasonal interstate services to Sydney, Melbourne and Brisbane via Qantas and Virgin. There is also a weekly Virgin Australia service to West Angelis.

5.1.2 Demand Profile

Around 400,000 passengers use Broome Airport each year. The majority of travel is tourism (around 65%) however travel for off-shore oil and gas construction and drilling is increasing. Tourist season (May-Sept) sees an influx of passengers visiting the region and flight schedules, particularly to interstate desitnations such as Melbourne, change to meet the additional demand. Around 35% is business/government travel and includes other reasons for travel such as visiting friends and relatives (VFR).

'At the moments flights to and from Broome are very expensive and it is difficult to justify air travel. A low cost airline would be extremely favourable and flying to desirable destinations direct would be desirable as this would also cut costs and increase my likelihood to travel'

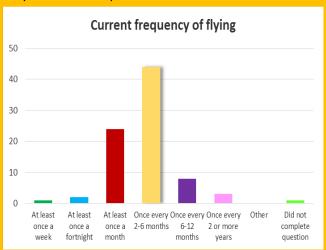


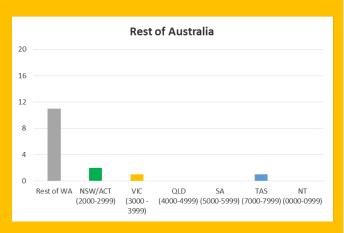
5.1.3 Survey results

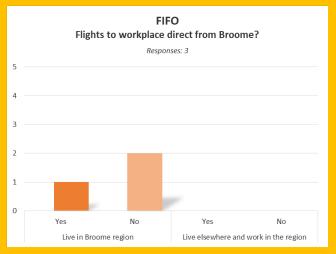
83 responses were received from the Broome survey. 67 (82%) were from those living in Broome community, 11 (13%) from the rest of WA and 4 (5%) from interstate locations across Australia.

Of those, 33% stated they regularly used air travel at least once a month or less, 53% once every 2-6 months and 14% once every 6 months or more.

3 FIFO responses were received (4% of all responses) and all live in the area and FIFO out of Broome. 1 has flights directly to the workplace from Broome and 2 fly to their workplace via Perth.







A number of responses suggested consideration of low-cost carriers operating into Broome to support the tourism market as well as the re-introduction of international flights and cheaper air fares.

5.1.4 Connections from Broome

The top 3 connections sought by Broome respondents were to Kununurra (20%), Port Hedland (19%) and 15% to Exmouth, Karratha and Shark Bay. The main reasons for travel are holiday/leisure and work/business with some responses for connections to international flights (eg. Bali flight to/from Port Hedland).

When considering frequency from and to Broome, the following percentages were for travel at least once a week to at least once every 2-6 months:

- 58% to and 53% from Kununurra;
- 50% to and 36% from Port Hedland;
- 40% to and 27% from Exmouth (Note: 62% from Exmouth if travel every 6-12 months incl.);
- 46% to and 46% from Karratha; and
- 21% to and 25% from Shark Bay (note: 63% from Shark Bay if travel every 6-12 months incl.).

Connections to these five ports accounts for 84% of responses and the reciprocal top connection response from all these ports except Shark Bay where it is the number 3 response. See the following page for graphs on travel to and from Kununurra and Port Hedland.





5.2 CARNARVON

5.2.1 Location & Current Air Services

Carnarvon Airport services the Shire of Carnarvon which has a population of around 5,800 people. The town is around 900km north of Perth; a 10-hour drive or 2½ hours flight (Brasilia EMB120 aircraft). Current air connections are to/from Perth with Skippers Aviation and varies between the summer (8 flights per week) and winter (10 flights per week) schedules. During winter, there is a daily service with a second service each Monday, Wednesday and Thursday. During the summer schedule, the second service only operates on a Wednesday. Around 25,000 passengers use the service per annum¹ which is a decrease on previous numbers under the current contract period. Passenger numbers also includes residents and visitors to the Upper Gascoyne region who drive around 174 km (3½ hours) to Carnarvon for the service. The air service is a Regulated Route with Shark Bay (Monkey Mia) under the Western Australia Department of Transport Regulate Air Routes Scheme. The current contract for the regulated service ends on 16 February 2016 however a contract extension has been agreed by the Department with Skippers Aviation until 27 June 2017.

5.2.2 Demand Profile

There are five main industries in the Carnarvon and Upper Gascoyne regions being agricultre/horticulture, pastoral, fishing, mining (salt) and tourism. The majority of travel currently seen at Carnarvon Airport is business related (50%) with around 20% for medical and the remainder being tourism and other purposes.

Whilst Coral Bay is within the Shire of Carnarvon, many of their services are aligned with Exmouth and Learmonth Airport is 1 hour travel versus 2 ½ hours to Carnarvon. It is assumed that Coral Bay residents may have responded to the Exmouth (Learmonth) survey rather than the Carnarvon survey as Learmonth is the airport they most frequently use.

'Having connecting air routes from
Carnarvon would greatly benefit our local
industries, particularly tourism. I own
tourism accommodation and many of our
clients would like to travel to other places in
WA, but are unable as they need to return
to Perth in order to fly anywhere else in the
state'.

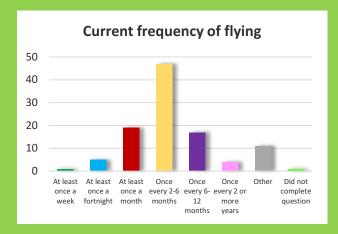


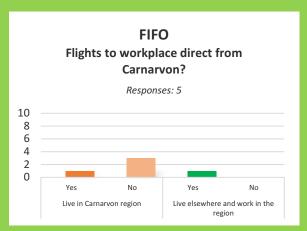
¹ Review of Regulated Regular Public Transport Air Routes in Western Australia, Department of Transport, 2014

5.2.3 Survey results

105 responses were received from the Carnarvon survey. 97 (92%) were from those living in the Carnarvon region and 8 (8%) from the rest of WA. Of those, 24% stated they regularly used air travel at least once a month or less with 45% once every 2-6 months and 16% every 6-12 months. 10% of responses were received for the 'other' category with the majority of reasons being that air travel is too expensive to consider.

Five (5%) FIFO responses were received with 4 of those (80%) living in the Carnarvon region and 1 (20%) elsewhere. Of the 4 living in the region, only 1 has direct flights to their workplace with the other 3 travelling via Perth.





Most respondents also voiced their concerns about the price of the current air service and the lack of connectivity to other airlines, destinations and schedules.

5.2.4 Connections from Carnarvon

The top 3 connections sought by Carnarvon respondents were to Geraldton (35%), Broome (21%) and Exmouth (18%). The main reasons for travel were for work/business and holiday/leisure as well as the many other reasons option.

When considering frequency from and to Carnarvon, the following percentages were for travel at least once a week to at least one every 2-6 months:

- 77% from Carnarvon to Geraldton and 60% from Geraldton to Carnarvon;
- 48% to Broome and no responses from Broome to Carnarvon on the Broome survey. (Note however that an additional 42% indicated travel to Broome once every 6-12 months): and
- 68% to Exmouth and 61% from Exmouth.

Connections to these three ports was supported by 70% of respondents. If connections to Karratha (12%) and Shark Bay (8%) were also included then this satisfies 90% of intra-state connections desired by Carnarvon respondents.

See the following page for graphs on travel to these destinations compared to the responses received from the destination airports' survey.





5.3 DERBY (Curtin)

5.3.1 Location & Current Air Services

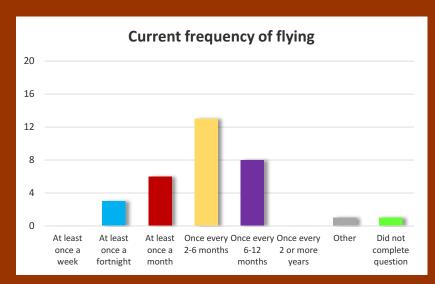
Derby (Curtin) Airport services the Shire of Derby/West Kimberley which has a population of 8,000 people of which 4,500 make up the catchment area for Curtin Airport. The airport is located 40 km south of Derby as a civil lease on Curtin RAAF Base. Derby is around 2,394km northwest of Perth; a 25 hour drive or 2½ hour flight. Current air connections are to/from Perth with Virgin Australia once daily on Monday, Wednesday and Friday with an F100 (100 seat) aircraft. For the prior 4 years, around 40,000 passengers used the airport however due to a significant downturn in mining sector activities in the region, flight services and passenger numbers have decreased to the above schedule. The air service is a Regulated Route under the Western Australia Department of Transport's Regulated Air Routes Scheme. The current contract for the regulated service ends on 16 February 2016.

5.3.2 Demand Profile

The majority of travel currently seen at Curtin Airport is local travel (around 75%) with some VFR (10%), business (10%) and mining (5%, previously 40%). Whilst the town of Derby services a healthy tourism population of around 50,000 people per annum, this is predominantly due to the self-drive traveller using Derby as it is one of the gateways to the Gibb River Road. Similarly, Derby Airport, located within the townsite, sees scenic operators flying visitors out to the iconic horizontal waterfalls.

5.3.3 Survey Results

32 responses were received from the Derby survey, all of which were from those living in the Derby community. Of those, 28% stated they regularly used air travel at least once a month or less, with 41% once every 2-6 months and 25% every 6 or more months.



3 FIFO responses were received all of whom live in the Derby region who have to fly via Perth (66%) or Broome (33%) to reach their workplace.

Most respondents were concerned with the reduction in services and how this is impacting the community and business in Derby

5.3.4 Connections from Derby

The top 3 connections sought by Derby respondents were to Kununurra (31%), and Port Hedland & Broome (both with 19%) which accounts for 69% of the preferred connections within WA for Derby respondents. The main reasons for travel were to connect with other air services within WA as well as interstate and international connections. Work/business was also a predominant reason for travel.

When considering frequency from and to Derby, the following percentages were for travel at least once a week to at least one every 2-6 months:

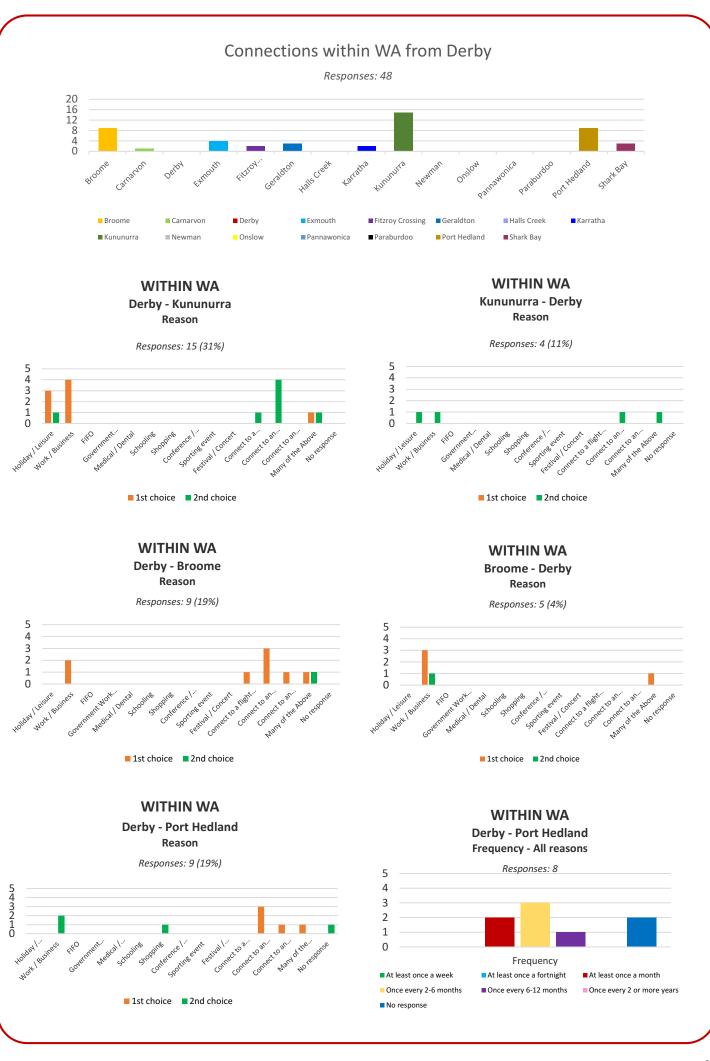
- 47% from Derby to Kununurra and 60% from Kununurra to Derby;
- 56% to and 100% from Broome; and
- 63% to Port Hedland and no responses from Port Hedland to Derby on the Port Hedland survey.

Connections to these three ports was supported by 69% of respondents. If connections to Exmouth (8%) and Geraldton & Shark Bay (6% each) were also included then this satisfies 90% of intra-state connections desired by Derby respondents.

See the following page for graphs on travel to these destinations compared to the responses received from the destination airports' survey.

'This is a GREAT service!! I would be extremely disappointed if we were to lose it. To have to travel to Broome to catch a flight involves a drive of two hours STARTING a minimum four hours prior to the plane leaving! On return it is such a long drive back after sitting on a plane for two and a half hours! Two and a half hours on the plane, two and a half hours driving just to get home!'

Welcome To Curfin Acrodrome Domesfic Terminal Derby





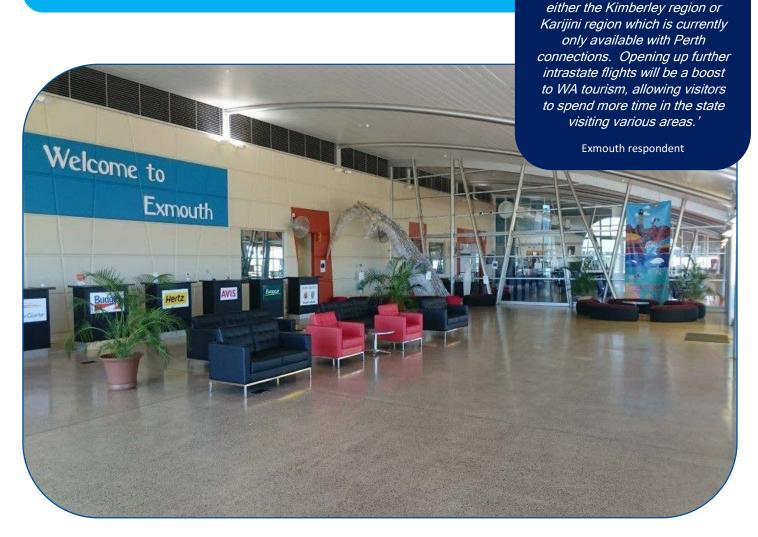
5.4 EXMOUTH (Learmonth)

5.4.1 Location & Current Air Services

Learmonth Airport services the Shire of Exmouth which has a permanent population of 2,200 people [ABS] which swells to 7,000 during tourist season. The airport is located 36 km south of Exmouth and 1 hour north of Coral Bay as a civil lease on RAAF Learmonth. Learmonth is nearly 1,300km northwest of Perth; a 14-hour drive or just under 2 hours flight time (F100 and B717 aircraft). Current air connections are to/from Perth with QantasLink / Network Aviation twice daily each weekday and once per day on weekend days with around 86,000 passengers using the airport per annum. The air service forms part of a partially regulated Route under the Western Australia Department of Transport Regulate Air Routes Scheme. The current contract for the regulated service ends on 16 February 2016 and the Department has indicated that the air route will be open to full competition thereafter.

5.4.2 Demand Profile

Around 60% of travel to Learmonth is tourism-related with 20% business (off-shore oil and gas, government travel and other business) and the remainder residents and VFR. Learmonth Heliport services approximately 30,000 RPT passengers per annum to fly to off-shore oil and gas facilities. There is a Defence presence around Exmouth with facilities such as Harold E Holt and RAAF Learmonth and this may grow in the future. Many visitors come to visit the world-heritage Ningaloo Reef from overseas, across Australia and within WA annually and it is a popular getaway spot for Pilbara residents.

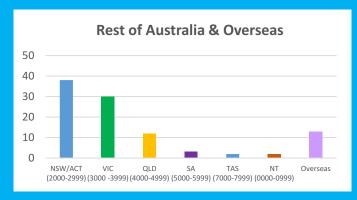


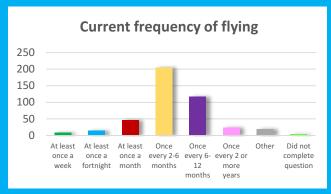
'A lot of our guests want to combine a Ningaloo holiday with

5.4.3 Survey results

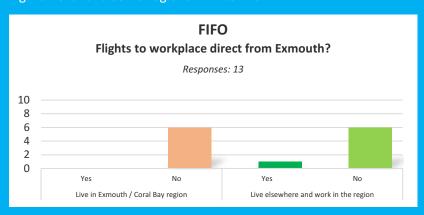
434 responses were received from the Exmouth survey representing around 20% of the population of the area. 166 (39%) were from those living in the Exmouth & Coral Bay communities (assuming 6701 postcode represents Coral Bay residents only and not Carnarvon residents), 160 (38%) from the rest of WA and 100 (23%) from international and interstate locations across Australia. These last two categories are reflective of the tourism and FIFO passengers into Exmouth.

16% stated they regularly used air travel at least once a month or less, 47% once every 2-6 months and 32% once every 6 or more months.





23 responses (5%) were received from FIFO workers. Of those, 6 (23%) indicated they live in the Exmouth/Coral Bay region, 7 (30%) indicated they live elsewhere and work in the region and the remainder (43%) did not respond to the question. For the locals, there were no direct flights to their workplaces seeing them mostly travelling via Perth and some regional WA towns.



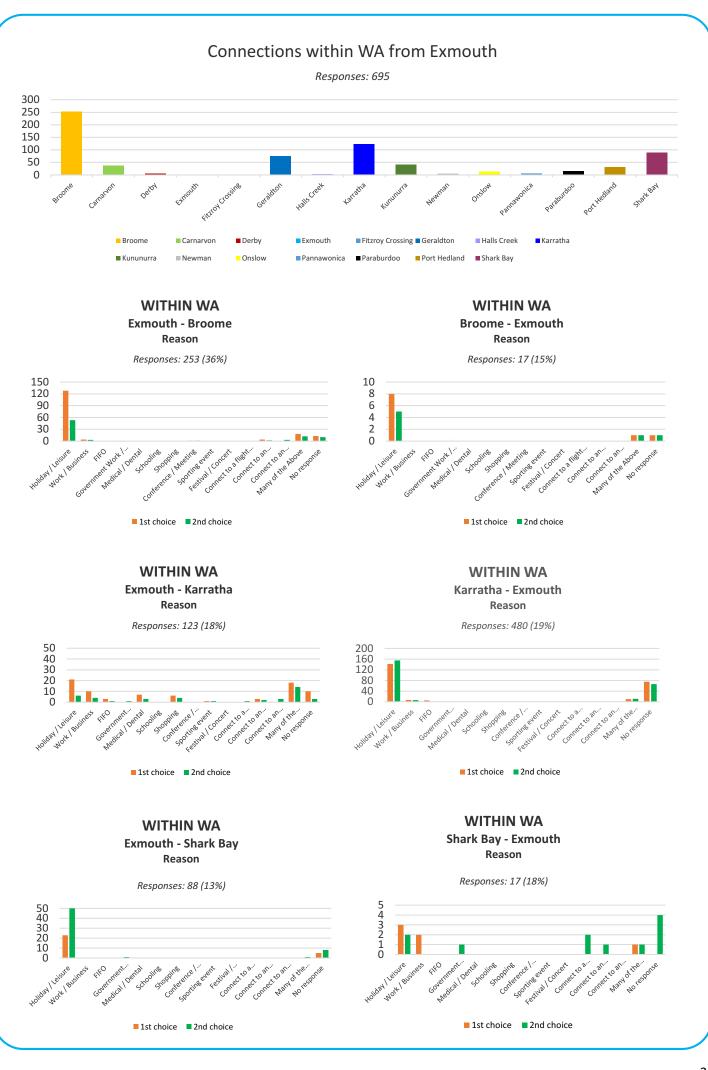
5.4.4 Connections from Exmouth

The top 3 connections sought by Exmouth respondents were Broome (36%), Karratha (18%) and Shark Bay (13%) with Exmouth being the eq.3rd, 2nd and 2nd destination of choice on the reciprocal surveys. Connections to these three ports was supported by 67% of respondents. If Geraldton (11%), Kununurra (6%) and Carnarvon (5%) are included, then 89% of connections desired by Exmouth respondents are satisfied. A variety of reasons were identified for travel with holiday/leisure as well as for connections to other destinations being well represented.

When considering frequency from and to Exmouth, the following percentages were for travel at least once a week to at least once every 2-6 months. If including all frequency responses except a nil response, these are included below in brackets respectively:

- 27% to and 40% from Broome (92% to and 93% from Broome);
- 58% to and 54% from Karratha (95% to and 81% from Karratha); and
- 13% to and 46% from Shark Bay (85% to and 62% from Shark Bay).

See the following page for graphs on travel to these destinations compared to the responses received from the destination airports' survey.



5.5 FITZROY CROSSING

5.5.1 Location & Current Air Services

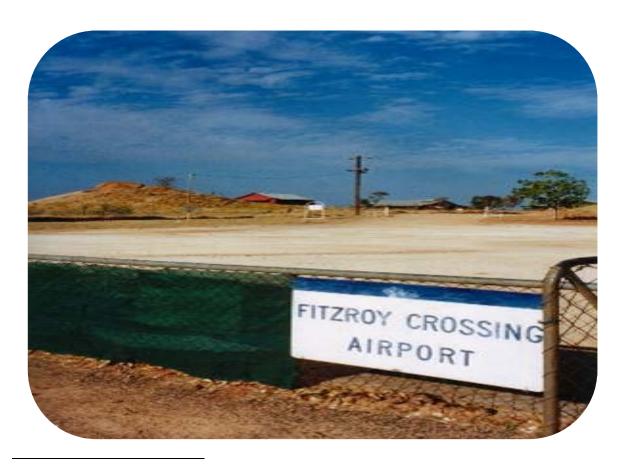
Fitzroy Crossing is situated within the Shire of Derby/West Kimberley and is an additional 260km further east than Derby on the Great Northern Highway. Fitzroy Crossing is 2,566 km from Perth and 2½ hours drive to/from Derby. The town site has a population of around 1,100 people which services a large number of indigenous communities living in the Fitzroy valley.

5.5.2 Demand Profile

The Monday, Wednesday and Friday RPT service operates from Broome-Derby-Fitzroy Crossing-Halls Creek-Fitzroy Crossing-Derby-Broome and services around 450 passengers per annum¹. The service is subsidised by the Department of Transport under contract, with Skippers Aviation providing the current service.

5.5.3 Survey results

Unfortunately no responses were received from the Fitzroy Crossing survey. This may be due to a number of factors, one of which being that the survey was only available in electronic format. Also, as there is a subsidised service already in place connecting the community to a number of airports in the Kimberley region and to Broome where additional connections are available, community members may not have felt the need to complete the survey as there connectivity needs may already be met.



 $^{^{\}mathrm{1}}$ Investigation into the feasibility of improved flight services for Halls Creek, AMS, April 2013

5.6 GERALDTON

5.6.1 Location & Current Air Services

Geraldton Airport services the City of Greater Geraldton which has a population of 41,087 as well as being the main RPT airport for the 58,183 people who live in the Mid West region. Geraldton is 430 km from Perth which is around a 4 ½ hour drive. Flights to Perth are around 1 hour in duration in a F100 aircraft. There are around 30 flights per week to Perth run by QantasLink and Virgin primarily using F100 (100 seat) aircraft as well a twice weekly Perth-Geraldton-Carnarvon flight operated by Skippers Aviation using Brasilia EMB120 (21 seat) aircraft. Around 120,000 passengers use Geraldton Airport each year. Geraldton Airport is also a nominated alternate landing facility to Perth for B737-800 and A320 aircraft inbound from Asia and the Eastern States, primarily when weather affects Perth Airport operations.

5.6.2 Demand Profile

Around 65% of travel is business related with the remaining 35% attributed to tourism and private travel. The main economic drivers for the region are mining, agriculture, retail, manufacturing, tourism, building/construction and fisheries. Geraldton is also the home base for a number of FIFO workers working in the north-west of WA. Travel for education and medical reasons often occurs when the economics comparing time and cost to road travel are more viable.

The Mid West Chamber of Commerce and Industry has also been conducting a survey on air connections to the Pilbara amongst their members. With over 100 responses, >76% indicated they make regular business trips to the Pilbara centres with around 60% at least once a month. 81% indicated that trips to the Pilbara centres would increase if more direct flights introduced (subject to price) with over 60% also supporting a stop at Exmouth/Learmonth¹.



¹ Data courtesy of Mid West Chamber of Commerce and Industry's *Pilbara Airline Services* survey 2015.

5.6.3 Survey results

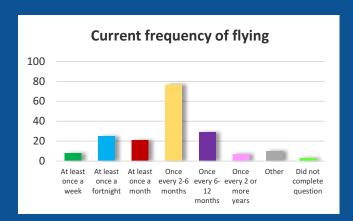
180 responses were received from the Geraldton survey. 155 (88%) were from those living in the Geraldton community 18 (10%) from the rest of WA and 3 (2%) from interstate locations across Australia.

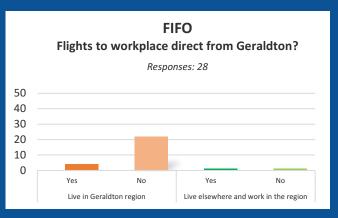
Of those, 54 (30%) stated they regularly used air travel at least once a month or less, 77 (43%) once every 2-6 months and 36 (20%) once every 6 or more months.

28 (16%) FIFO responses were received of which 97% live in the region. Of those that live in the region, 79% indicated they don't have direct flights to their workplace and travel via Perth, Carnarvon and Wiluna to get there.

5.6.4 Connections from Geraldton

The top 3 connections sought by Geraldton respondents were to Broome (25%), Karratha (16%) and Exmouth (14%) with Geraldton being the eq. 6th, 4th and 4th destination of choice from the respective airports.





There were a variety of reasons for travel including work/business, holiday/leisure, shopping, government work, connections to other destinations and the many other reasons option.

When considering frequency from and to Carnarvon, the following percentages were for travel at least once a week to at least once every 2-6 months. If including all frequency responses except a nil response, these are included below in brackets respectively:

- 30% from Geraldton to Broome and zero % from Broome to Geraldton (89% to and 80% from Broome);
- 79% to and 52% from Karratha (97% to and 82% from Karratha); and
- 57% to and 50% from Exmouth (100% to and 89% from Exmouth).

Connections to these three ports was supported by 56% of respondents. If connections to Port Hedland (12%), Shark Bay (10%) and Carnarvon (9%) were also included then this satisfies 87% of intra-state connections desired by Geraldton respondents.

See the following page for graphs on travel to these destinations compared to the responses received from the destination airports' survey.

'It is a major inconvenience to have to travel to the northern regions of WA via Perth when the flights North go literally over the top of Geraldton. Surely it would be possible for a least one flight a day to stop in Geraldton on its way north. There are a lot of people who have to travel to Perth then back over Geraldton to head up north regularly for work.'

Geraldton respondent



'The Mid and North west regions used to be well serviced by "the milk run" - flights up the coast stopping at major regional centres along the way, including Exmouth, Karratha and Port Hedland. It is a huge lack in our tourism and travel options to no longer have these routes serviced except via Perth.'

Geraldton respondent



5.7 HALLS CREEK

5.7.1 Location & Current Air Services

Halls Creek is the gateway to a range of world renowned natural attractions, including the World Heritage listed Bungle Bungle ranges of Purnululu National Park. Halls Creek is 362km south of Kununurra (around 4 hour drive), 1,288km south-west of Darwin and 2,873km north-east of Perth and has a population in the town of around 1,400 and around 3,500 across the whole of the Shire. Whilst Halls Creek airport is the closest RPT airport to Purnululu National Park, most tourists opt to fly into Kununurra and take a scenic flight from there over the Bungle Bungles.

The current air service is the Department of Transport's subsidized Broome-Derby-Fitzroy Crossing-Halls Creek-Fitzroy Crossing-Derby-Broome service provided 3 times a week and operated by Skippers Aviation using a Conquest (9 seats). There is minimal passenger demand (as it is a 2 ½ hour flight time to Broome) and the service is predominantly used by PATS medical transfers and government workers providing services to the town and local communities. Annual passenger numbers are around 1,000 per annum¹.

5.7.2 Demand Profile

The Shire of Halls Creek have contracted Aerodrome Management Services (AMS) to operate the airport since 2010. In 2013, AMS undertook an investigation on flight services to Halls Creek which identified that residents sought direct flights to Kununurra.¹

As Halls Creek is the 'town centre' for a number of indigenous communities, connections to these communities was sought by those residents responding to the survey.

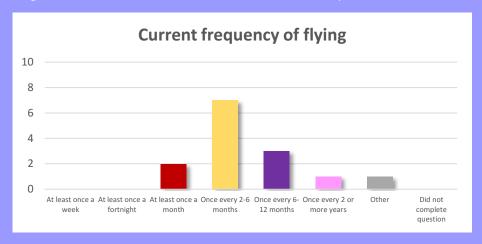
'A reasonably priced link between Halls
Creek and Kununurra is the key to
access to the rest of the region,
interstate and national.'



 $^{^{1}}$ 'Investigation into the Feasibility of Improved Flight Services for Halls Creek', AMS, April 2013.

5.7.3 Survey results

14 responses were received from the Halls Creek survey with all respondents living in the Halls Creek community, Of those, 2 respondents (14%) stated they regularly used air travel at least once a month, 7 (50%) once every 2-6 months and 4 (29%) once every 6 months or more. One respondent (7%) indicated 'other' and stated that they travel once every 6 months but would do so more regularly if connections to ports with flights to south-east Asia were available. No FIFO responses were received.



5.7.4 Connections from Halls Creek

The top 3 connections sought by the 26 Halls Creek respondents were 13 to Broome (50%), 10 to Kununurra (38%) and 1 response (4%) to each of Derby, Geraldton and Port Hedland. Connections to these ports comprised 100% of responses.

The main reason for travel were for connections to other ports with access to intrastate, interstate and international flights.

When considering frequency from and to Halls Creek, the following percentages were for travel at least once a week to at least one every 2-6 months:

- 75% from Halls Creek to Broome and 100% from Broome to Halls Creek;
- 67% to and 100% from Kununurra;
- 100% to Derby with nil responses received from the Derby survey to Halls Creek;
- 100% to and 50% from Geraldton; and
- 100% to Port Hedland with nil responses received from the Port Hedland survey to Halls Creek

It is to be noted that the responses to travel to Halls Creek from the reciprocal port surveys were all 2 responses or less and are therefore not statistically valid.

See the following page for graphs on travel to Broome and Kununurra compared to the responses received from the destination airports' survey.

'More air services the better as many organisation will utilise this also for medical transport for patients - sometimes long bus trips are too much on elderly and mothers.'

Halls Creek respondent

Connections within WA from Halls Creek Responses: 26 20 16 12 8 4 ■ Broome ■ Carnarvon ■ Derby ■ Exmouth Fitzroy Crossing Geraldton ■ Halls Creek ■ Karratha **WITHIN WA WITHIN WA** Halls Creek - Broome **Broome - Halls Creek** Reason Reason Responses: 13 (50%) Responses: 2 (2%) 5 4 3 2 1 1 ■1st choice ■2nd choice ■1st choice ■2nd choice WITHIN WA **WITHIN WA** Kununurra - Halls Creek Halls Creek - Kununurra Reason Reason Responses: 10 (38%) Responses: 1 (3%) 5 4 3 3 2 2 1 1

■ 1st choice ■ 2nd choice

■ 1st choice ■ 2nd choice



5.8 KARRATHA

5.8.1 Location & Current Air Services

The City of Karratha is serviced by Karratha Airport, WA's largest regional airport by RPT passenger numbers. The population forecast for the City is 27,010 for 2015 to grow to 41,049 by 2036¹. The City encompasses a total land area of over 15,000 square kilometres and is predominantly rural, with growing population centres in the township of Karratha and the smaller townships of Dampier, Roebourne and Wickham/Point Samson. The main industries in the City are mining (iron ore and gas extraction), salt production, and cattle and sheep grazing, with some fishing and tourism.

The major industrial areas are the Dampier and Cape Lambert Ports, with an industrial estate to the south of Karratha. The City's main retail area is the Karratha CBD, with a smaller centre at Wickham. Roebourne features one tertiary institution (Pilbara Institute) and a number of primary and secondary schools.

At a distance from Perth of 1,535km, the drive time to Perth is around 16 hours and flight time is 2 hours 15 minutes.

5.8.2 Demand Profile

The key employment sectors are mining and construction, and to a lesser extent, retail, transport, education, tourism and property and business services. This results in a passenger mix of around 70% business, 15% VFR, 5% Tourism and 10% other. Around 850,000 passengers use Karratha airport each year with forward estimates of the airport servicing 1 million passengers. Reasons for use are primarily FIFO, business, events and connections to Port Hedland, Broome and Darwin via the twice-weekly Airnorth A320 service. An additional 79 aircraft ranging from B738 to F100 operate Perth-Karratha each week via by Qantas, QantasLink, Virgin Australia and Alliance.

'We have a fantastic new airport. Let's use it to its full potential! International, interstate, and intrastate!!!'



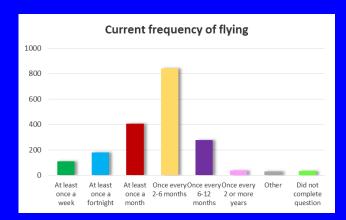
¹ Source: http://forecast.id.com.au/karratha/home

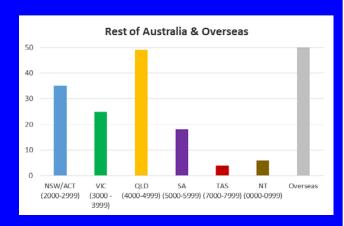
5.8.3 Survey results

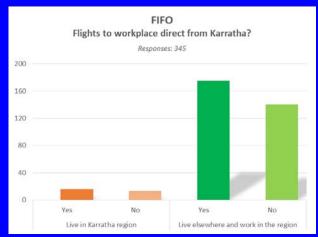
1924 responses were received from the Karratha survey. 1235 (64%) were from those living in the Karratha community, 501 (26%) from the rest of WA and 187 (10%) from international and interstate locations across Australia.

Of those, 36% stated they regularly used air travel at least once a month or less; 58% every 2-12 months and 2% once every 2 or more years.

393 FIFO responses were received (20%). 8% indicated they lived in the Karratha region with 81% living elsewhere and working in the region and 11% not providing a response. 56% in total provided FIFO workers with flights directly to the workplace. 55% of FIFO is from Perth with 38% from other towns across Australia and 7% from overseas.







5.8.4 Connections from Karratha

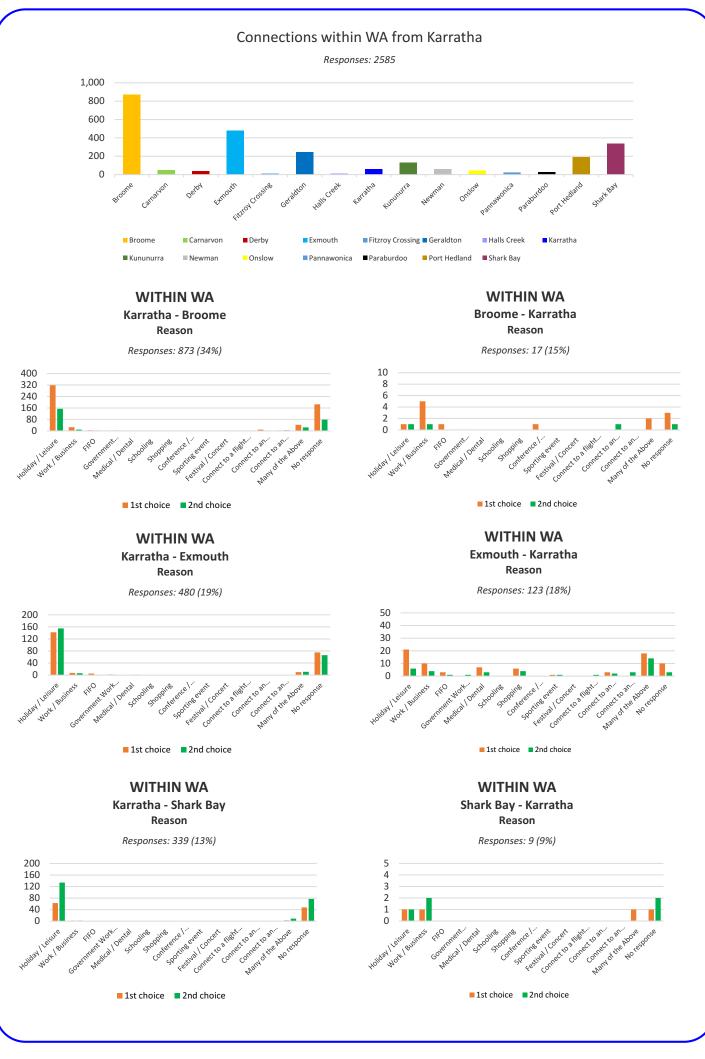
The top 3 connections sought by Karratha respondents were to Broome (34%), Exmouth (19%) and Shark Bay (13%) with Karratha being the eq.3rd, 2nd and 4th desired location response in the reciprocal surveys. The main reasons for travel from Karratha to these destinations is holiday/leisure however there were many other reasons indicated for reciprocal travel such as medical, shopping and connections to other destinations.

When considering frequency from and to Karratha, the following percentages were for travel at least once a week to at least once every 2-6 months. If including all frequency responses except a nil response, these are included below in brackets respectively:

- 46% to and 15% from Broome (79% to and 85% from);
- 54% to and 58% from Exmouth (81% to and 95% from); and
- 35% to and 67% from Shark Bay (79% to and 100% from).

See the following page for travel to these destinations compared to responses received from the destination airport survey.

Most respondents were concerned with the lack of connectivity to other ports (especially interstate and international hubs like Singapore) as well as the price of airline tickets which are around \$800 return. There was high desire to bring back interstate flights to connect with families.





5.9 KUNUNURRA

5.9.1 Location & Current Air Services

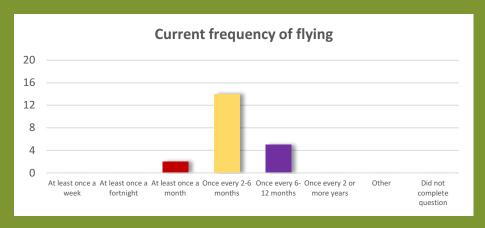
Kununurra and Wyndham are serviced by the East Kimberly Regional Airport (EKRA). Located in the heart of Kununurra, it serves a population of around 7,000 and sees around 86,000 passengers per annum. Kununurra is the most northern RPT airport in WA and is 3,214km from Perth. Total drive time to Perth is 33 hours or a 3 hour flight. Due to its location close to the WA/NT border, there are more air services to Darwin than Perth with 7 services to Darwin-Kununurra-Broome return and 3 Darwin-Kununurra return per week. There are also 4 services to Perth each week.

5.9.2 Demand Profile

The economic drivers for Kununurra are tourism, agriculture, aquaculture, mining, government services and the Wyndham port facility. Around 40% travel is for business, 30% tourism and 30% personal/VFR. There are also numerous aboriginal communities serviced by small charter airlines operating into EKRA. Most Kununurra locals consider Darwin their capital city airport over Perth due to the proximity and frequency of flights.

5.9.3 Survey results

21 responses were received from the Kununurra survey with all of those living in the Kununurra community. Of those, 2 (10%) stated they regularly used air travel at least once a month or less, 14 (67%) once every 2-6 months and 5 (24%) once every 6-12 months. No FIFO responses were received.

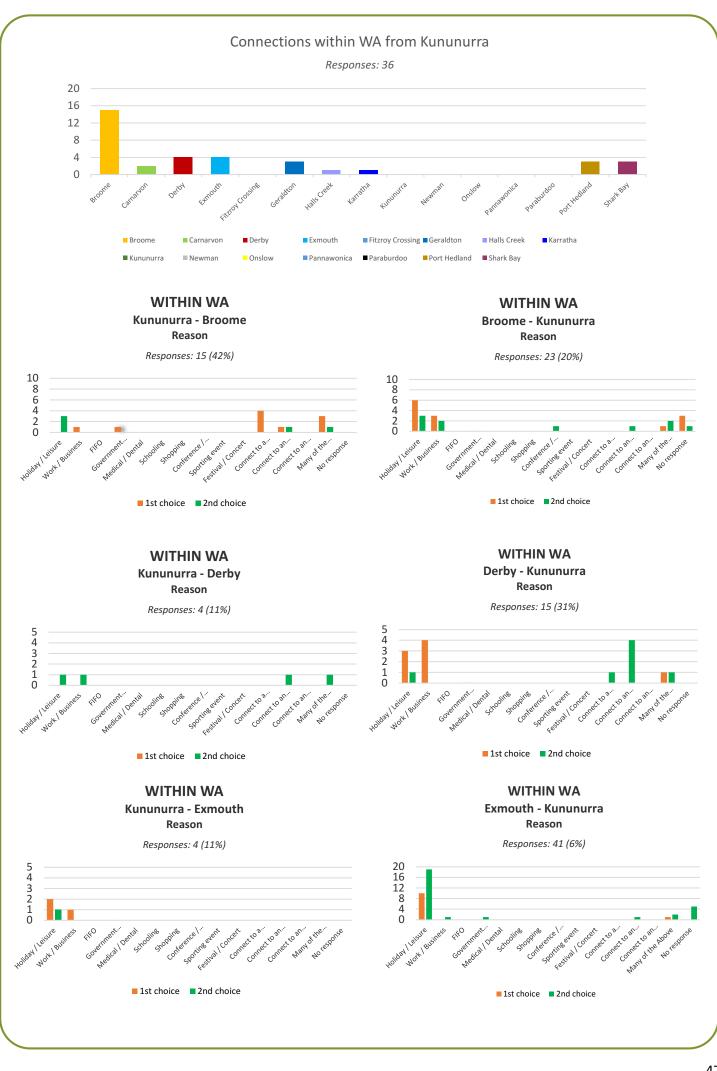


5.9.4 Connections from Kununurra

Of the 21 total survey responses, the top 3 connections sought by Kununurra respondents were 15 to Broome (42%) and 4 each to Derby and Exmouth (11% each). There were also 3 responses each to Geraldton, Port Hedland and Shark Bay (8% each). Connections to these six ports was supported by 88% of respondents. A variety of reasons for travel including work/business and holiday/leisure as well as for connections to other destinations.

When considering frequency from and to Kununurra, the following percentages were for travel at least once a week to at least once every 2-6 months. If including all frequency responses except a nil response, these are included below in brackets respectively:

- 53% to and 58% from Broome (80% to and 95% from Broome);
- 50% to and 47% from Derby (100% to and 93% from Derby); and
- 50% to and 19% from Exmouth (100% to and 94% from Exmouth).



5.10 NEWMAN

5.10.1 Location & Current Air Services

Newman is located around 1,280 km north of Perth which is a 12-14 hour drive or 1 hour 45 minute flight. The Shire of East Pilbara is the largest Local Government Area in Australia and has a population of around 15,500 people.

There are currently 49 services between Newman and Perth each week as well as 1 service via Port Hedland to Perth. Air travel is seen as a vital link for this inland mining town with around 380,000 passengers using Newman airport each year.

5 10 2 Demand Profile

The passenger mix at Newman Airport is 95% FIFO servicing the iron ore mining industry surrounding the town, 3% business and 2% leisure/tourism. Passenger numbers are highly dependent upon increase and decrease in staff operations at the resource companies. In addition, a significant number of the mines operating around Newman have their own airfields which reduces the number of passenger using this local government owned and operated airport.

'Regional air services can improve people's access to services without having to go to Perth, which will enhance the long-term sustainability of the Pilbara. Also help to improve the regional identity.'

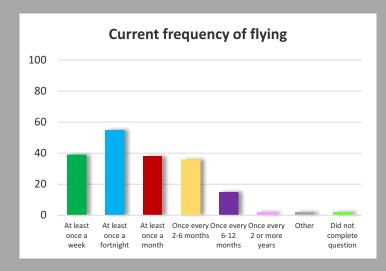
Newman survey response

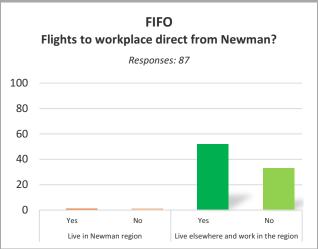


5.10.3 Survey results

189 responses were received from the Newman survey. 32 (17%) were from those living in the Newman community, 138 (73%) from the rest of WA (in line with the high FIFO passenger traffic) and 19 (10%) from interstate locations across Australia. Of those, 70% stated they regularly used air travel at least once a month or less, 19% once every 2-6 months and 9% once every 6 or more months.

102 FIFO responses were received representing 57% of all responses. Of these, only 2 lived in the region and 86 (84%) live elsewhere and work in the region. 61% of flights are direct to the workplace with 39% non-direct travel. The majority of travel is via Perth with some from Queensland and Busselton.





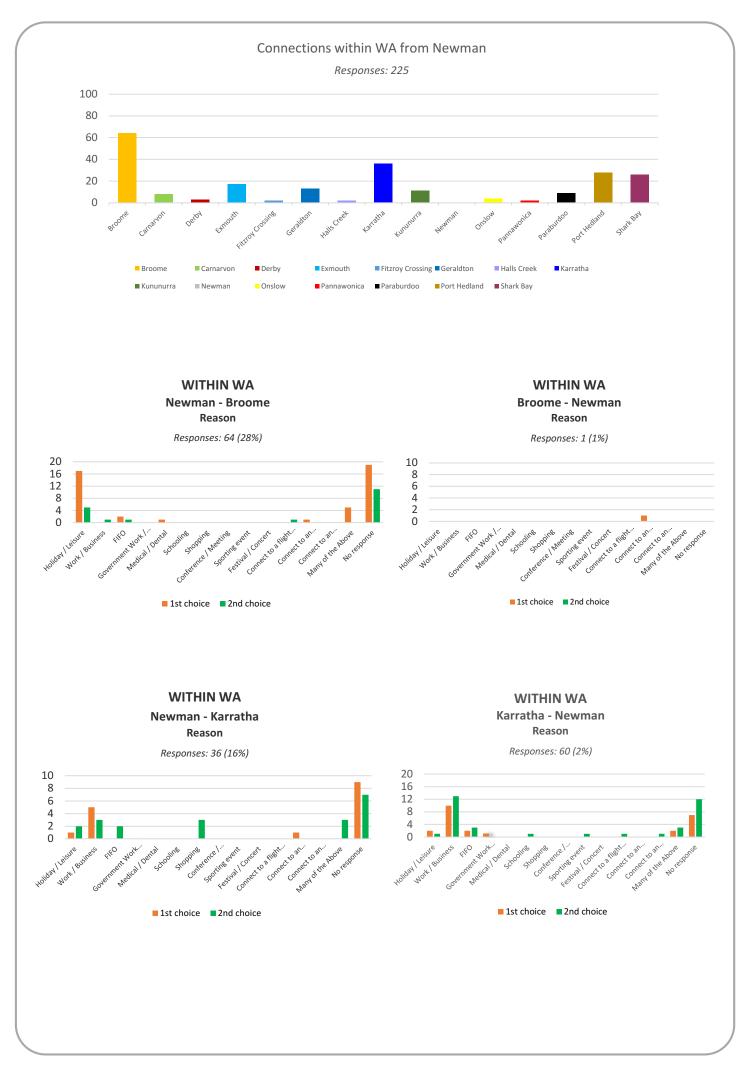
5.10.4 Connections from Newman

Of the 181 total survey responses, the top 3 connections sought by Newman respondents were 64 to Broome (28%), 36 (16%) to Karratha and 12% each to Port Hedland and Shark Bay. Connections to these four ports was supported by 68% of respondents.

A variety of reasons for travel was provided but mainly for work/business (including government work/business), then holiday/leisure, shopping and medical/dental as well as for connections to other destinations.

When considering frequency from and to Newman, the following percentages were for travel at least once a week to at least once every 2-6 months. If including all frequency responses except a nil response, these are included below in brackets respectively:

- 44% to and zero% from Broome (/9% to and 100% from Broome);
- 65% to and 59% from Karratha (85% to and 76% from Karratha);
- 63% to and 90% from Port Hedland (94% to and 90% from Port Hedland); and
- 21% to and no responses from the Shark Bay survey (71% to Shark Bay).





5.11 ONSLOW

5.11.1 Location & Current Air Services

Onslow is 1,368km north of Perth which is around a 13 hour drive or 2 hour flight time. The population of Onslow is around 1,000 local residents with an additional 5,000-7,000 FIFO workers in town at any one time. Onslow is an isolated town with the closest town (and airport) being around 300km away. There are limited medical and retail services available.

Virgin Australia Regional Airlines operates 26 closed charter F100 services a week and 5 open charter F100 services a week on which 10-15 seats are available for general public purchase. A \$45M predominantly privately-funded redevelopment of the airport was completed in August 2015 seeing new runway, apron and terminal infrastructure development.

5.11.2 Demand Profile

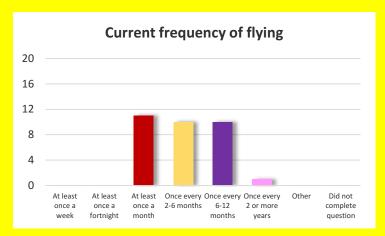
The primary industries in Onslow are the salt mine and the current construction of the Wheatstone and Macedon gas plants. There is also a developing tourism and fishing industry. Current passenger mix is 80% business (including FIFO) and 20% the balance of VFR and other. Whilst construction on the gas plants continues, significant passenger traffic will likely be seen however this would be expected to decrease once the gas plants are operational to operational/production staff only (experience shows this to be around 10-15% of construction personnel numbers). Wheatsone will have 50 residential staff with the balance of wrokers being FIFO.

'Given it is likely that the volume of flights will be limited to 2-3 flights to/from Onslow per week once Wheatstone construction is complete, it would be very desirable to have connections from Karratha and or Exmouth so that we can fly to/from Perth without then having to drive the 300-400kms to either of these towns and potentially pay a lot of money for parking.'



5.11.3 Survey results

32 responses were received from the Onslow survey with 31 (97%) from those living in the Onslow community and 1 from elsewhere in WA. Of those, 11 (34%) stated they regularly used air travel at least once a month or less with 10 (31%) once every 2-6 months and 11 (34%) once every 6 or more months.



2 responses from FIFO workers were received. Both residing outside of Onslow and work in the area and travel to their workplace via Perth.

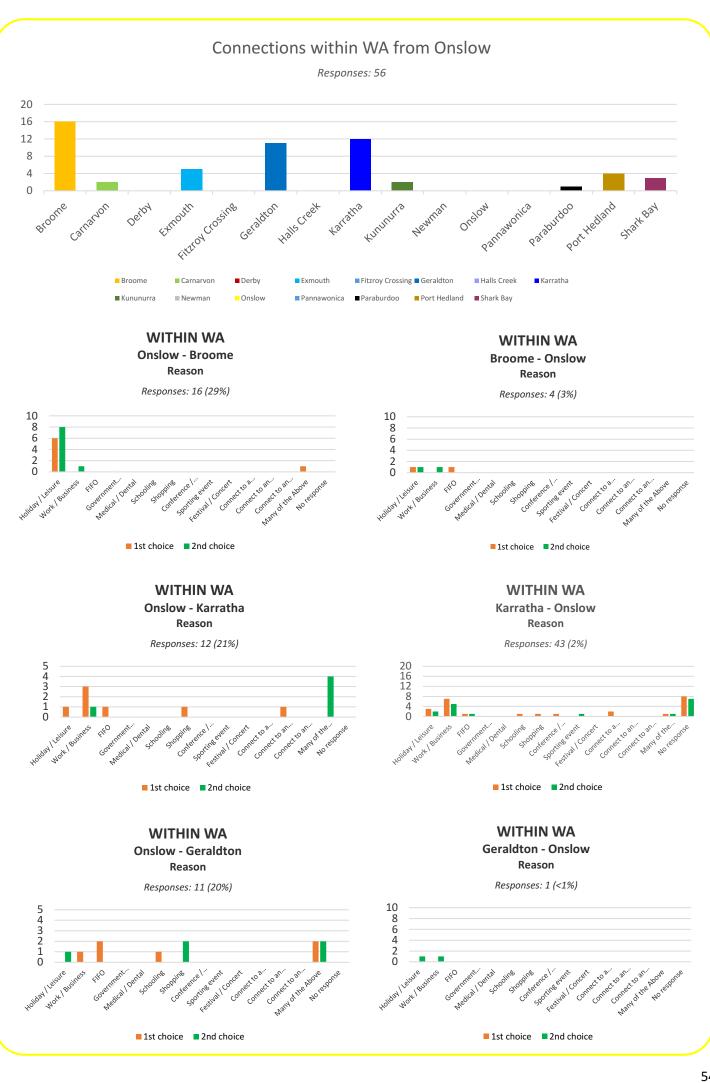
5.11.4 Connections from Onslow

The top 3 connections sought by Onslow respondents were Broome (29%), Karratha (21%) and Geraldton (20%) with Onslow being the 8th, 10th and eq.12th destination of choice on the reciprocal surveys. Connections to these three ports was supported by 70% of respondents. If Exmouth (9%) and Port Hedland (7%) are included, then 86% of connections desired by Onslow respondents are satisfied.

A variety of reasons were identified for travel with work/business and holiday/leisure as well as for connections to other destinations being well represented.

When considering frequency from and to Onslow, the following percentages were for travel at least once a week to at least once every 2-6 months. If including all frequency responses except a nil response, these are included below in brackets respectively:

- 44% to and 25% from Broome (100% to and 50% from Broome);
- 92% to and 61% from Karratha (92% to and 82% from Karratha); and
- 64% to and 100% from Geraldton (91% to and 100% from Geraldton).





5.12 PANNAWONICA

5.12.1 Location & Current Air Services

Pannawonica is a 'closed' mining town with the local mine operated by Rio Tinto in the Shire of Ashburton and has a population of around 700. There is a non-certified air strip in town which is limited to private charter operations. There is no closed charter or RPT service available.

5.12.2 Demand Profile

Local family travel, FIFO and business work.

5.12.3 Survey results

Only 2 responses were received from the Pannawonica survey with both living in the Pannawonica region. One (50%) indicated they regularly used air travel once every 2-6 months, the other once every 6-12 months. Neither of the respondents indicated they were FIFO workers.

5.12.4 Connections from Pannawonica

There were only 3 responses to this question with one response each for Broome, Exmouth and Geraldton. All responses reasons for travel were for holiday/leisure with a frequency of once every 2-6 months. The reciprocal survey responses had travel to Pannawonica ranked 10th or below.



5.13 PARABURDOO

5.13.1 Location & Current Air Services

Paraburdoo Airport is the airport servicing the Rio Tinto Paraburdoo Mine as well as the town of Tom Price which is 71km away. It is located in the Shire of Ashburton but the airport is owned and operated by Rio Tinto with Aerodrome Management Services providing contracted day-to-day operations management.

Tom Price is located approximately 1,600 km from Perth (about an 18 hour drive) and is situated on the edge of the Hamersley Ranges and is the closest airport to Karijini National Park. Tom Price has a population of around 3,000 and Paraburdoo a population of around 1,500 [ABS].

F100 and B717 aircraft operate into Paraburdoo around 4 times per day with predominantly Qantas aircraft (130 RPT aircraft per month).

5.13.2 Demand Profile

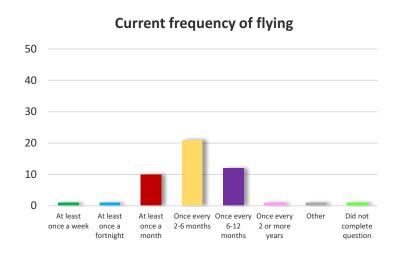
Paraburdoo Airport predominantly sees mining industry passengers with around 80% business/FIFO and the remainder local traffic (inclusive of VFR, medical and business). Industries over both towns are mining and tourism servicing around 140,000 passengers per annum.

5.13.3 Survey results

48 responses were received from the Paraburdoo survey. 47 (98%) were from those living in the Paraburdoo & Tom Price communities with 46% and 52% of response respectively and 1 response (2%) from Queensland.

Of those, 25% stated they regularly used air travel at least once a month or less, 44% once every 2-6 months and 27% once every 6 or more months.

One FIFO response was received with the respondent living in the Paraburdoo region without flights directly to their workplace.



'I think that our current options are quite good in terms of connectivity with Qantas. The issue for most people is the price of the Paraburdoo - Perth leg of any travel. Unfortunately, I don't think this will change if I was able to connect through Karratha or Port Hedland as opposed to Perth...'

Paraburdoo respondent

5.13.3 Connections from Paraburdoo

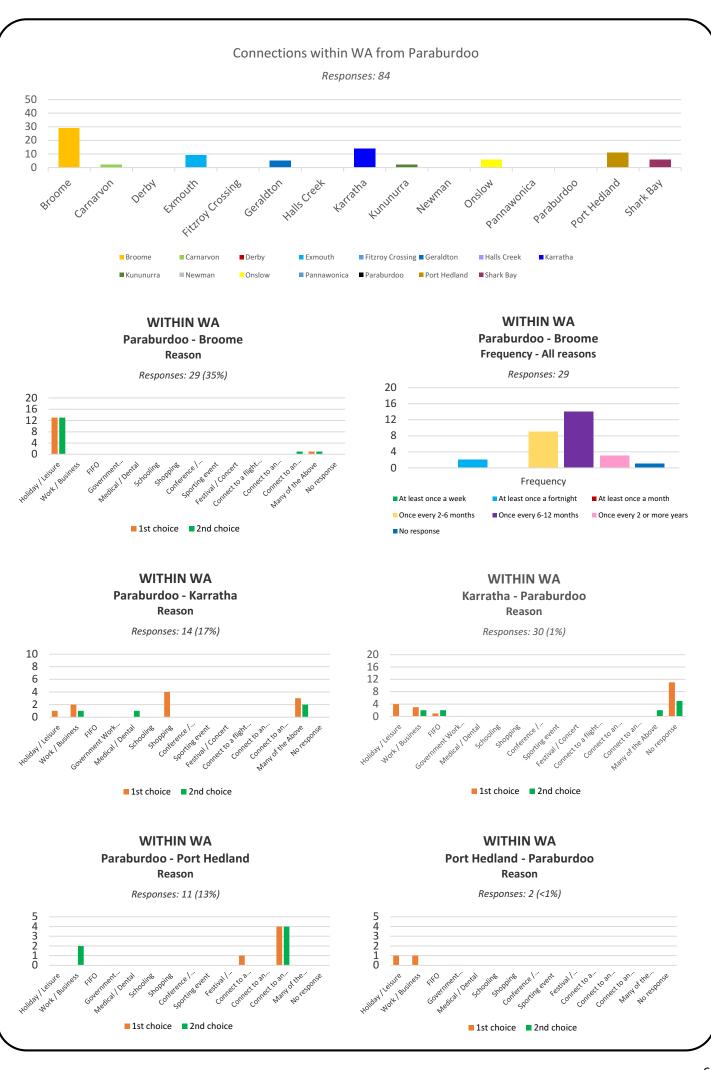
The top 3 connections sought by Paraburdoo/Tom Price respondents were to Broome (35%), Karratha (17%) and Port Hedland (13%) with Paraburdoo being the 10th or below destination of choice on the reciprocal surveys. Connections to these three ports was supported by 64% of respondents. If Exmouth (11%) was included, then 75% of connections desired by Paraburdoo/Tom Price respondents are satisfied.

A variety of reasons were identified for travel with holiday/leisure (Broome), shopping (Karratha) as well as work/business, connections to other destinations and 'many reasons' being represented.

When considering frequency from and to Paraburdoo, the following percentages were for travel at least once a week to at least once every 2-6 months. If including all frequency responses except a nil response, these are included below in brackets respectively:

- 38% to and zero% from Broome (97% to Broome);
- 86% to and 79% from Karratha (93% to and 86% from Karratha); and
- 45% to and 50% from Port Hedland (91% to and 50% from Port Hedland).







5.14 PORT HEDLAND

5.14.1 Location & Current Air Services

Port Hedland is 1649 km from Perth, which is a 17 ¼ hour trip by road or a 2 hour 10 minute flight departing from Port Hedland International Airport (PHIA). Currently, there are 46 services to and from Perth each week provided by Qantas/QantasLink and Virgin Australia using a variety of B737, B717 and F100 aircraft. Twice weekly is Airnorth's Darwin -Broome-Karratha-Port Hedland-Broome-Darwin service using an Embraer 170. In addition, there is a B737 service to Melbourne, Brisbane and Bali each week. There is also one flight each Monday arriving from Newman prior to departing to Perth. Charter services to Christmas Creek and Cloudbreak mine sites also operate once a week.

5.14.2 Demand Profile

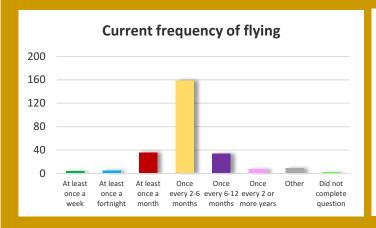
Iron ore mining and export of the product from the port of Port Hedland are the main industries. Around 80% of passengers are FIFO, 10% business and the remaining 10% to other travel. Passenger numbers more than doubled from 2008/09 to 2011/12 with the peak number of passengers over 512,000 in 2012/13 with a softening to around 470,000 in recent years.

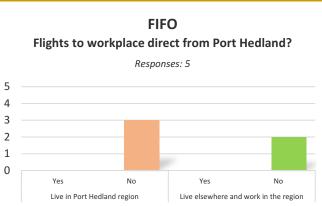
time consuming, often taking a full day or overnight to travel between the north west and the east coast. More regular direct services between Port Hedland and Sydney/Melbourne/Brisbane would be fantastic. The current Tuesday only services are not conducive for weekend



5.14.3 Survey results

256 responses were received from the Port Hedland survey. 240 (94%) were from those living in the Port Hedland community , 12(5%) from the rest of WA and 4 (1%) from interstate locations across Australia. Of those, 45 (18%) stated they regularly used air travel at least once a month or less, 159 (62%) once every 2-6 months and 41 (16%) once every 6 months or more. As for other surveys, there was 4% 'other' with the main reasons being infrequent travel due to cost of tickets (especially for a family) but would travel more if ticket prices were more reasonable. 6 FIFO responses were received which was 2% of the total responses to this question. Of these, 3 (50%) live in the Port Hedland region and 2 (33%) live elsewhere and work in the region. For all, however, there are no flights to their workplace directly from Port Hedland. Travel is via Perth or New South Wales.





5.14.4 Connections from Port Hedland

The top 3 connections sought by Port Hedland respondents were to Broome (36%), Exmouth (18%) and Geraldton (15%). The main reasons for travel were for holiday/leisure, work/business and connections to other destinations as well as the many other reasons option.

When considering frequency from and to Port Hedland, the following percentages were for travel at least once a week to at least one every 2-6 months. If including all frequency responses except a nil response, these are included below in brackets respectively:

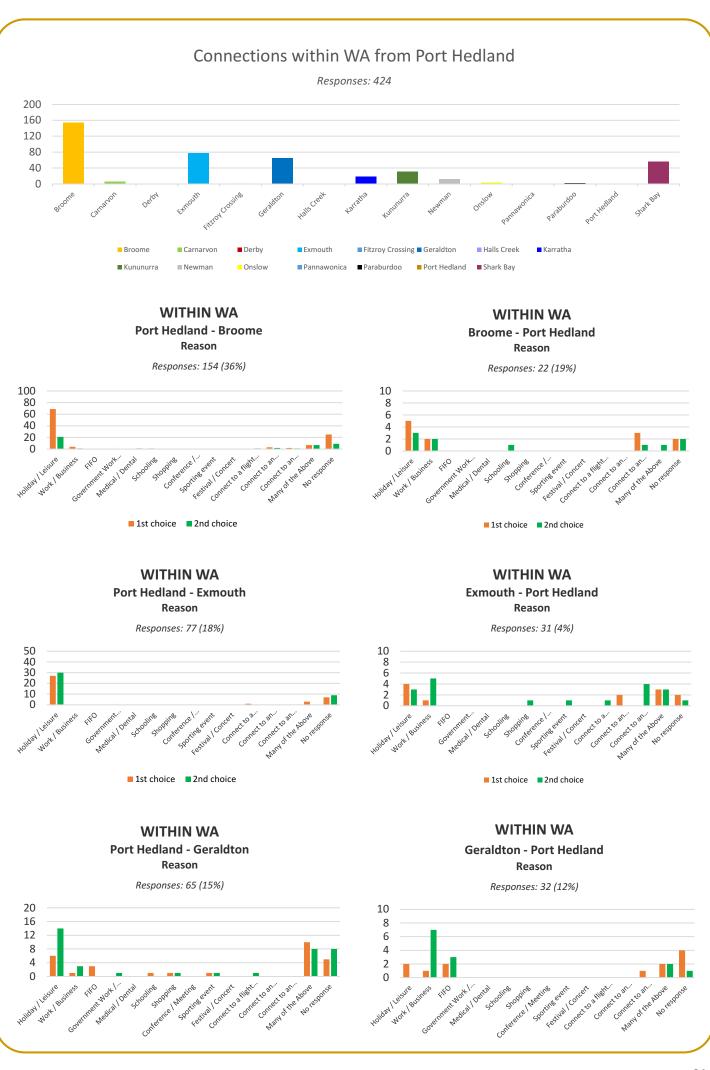
- 53% from Port Hedland to Broome and 50% from Broome to Port Hedland (81% to and 83% from);
- 52% to and 39% from Exmouth (90% to and 93% from); and
- 46% to and 75% from Geraldton (81% to and 95% from).

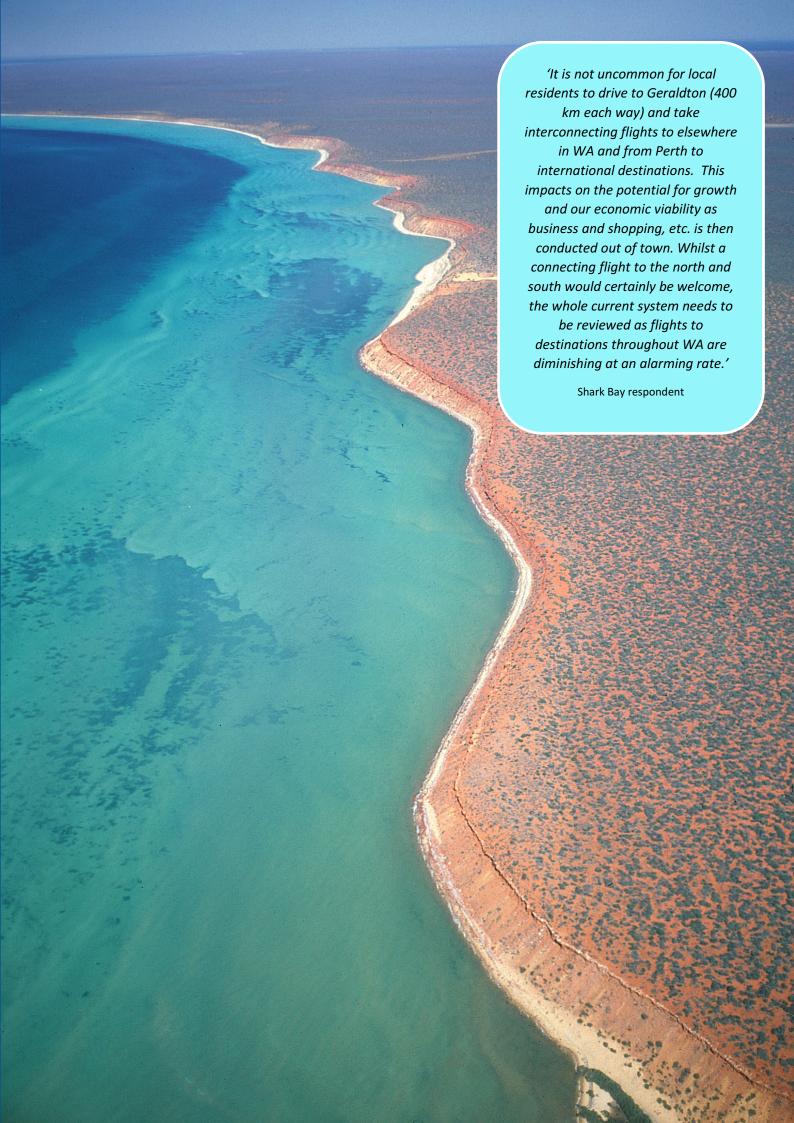
Connections to these three ports was supported by 70% of respondents. If connections to Shark Bay (13%) were also included then this satisfies 83% of intra-state connections desired by Port Hedland respondents.

See the following page for graphs on travel to these destinations compared to the responses received from the destination airports' survey.

'Flights also need to reasonably priced, they won't get used if they are priced out of reach of the average person. Not everyone works in the mines.'

Port Hedland respondent





5.15 SHARK BAY

5.15.1 Location & Current Air Services

The Shark Bay/Monkey Mia world heritage region has a permanent population of around 930 but hosts over 100,000 visitors each year. The airport servicing the Shark Bay region is located in the Monkey Mia Dolphin Resort which is owned and operated by RAC. The Shark Bay World Heritage area covers more than 2.2 million hectares and includes marine reserves and a national park. To drive to Perth takes around 9 hours (832km of which 140km is to the main road) and it is 4 hours to its nearest facilities in Northampton.

Skippers Aviation currently have a deed of service with the Department of Transport to operate the Perth-Carnarvon-Monkey Mia air route. The current service sees 4 flights per week; Tuesday, Friday, Saturday and Sunday using aircraft ranging from the 19 seat Metro 23 up to the 36 seat Dash-8 100. The Department has yet to advise who will operate this regulated air route service from 17 February 2016.

5.15.2 Demand Profile

The chance to see dolphins in their natural environment is one of many attractions offered throughout Shark Bay and is often a 'bucket list' item for interstate and international tourists. Also high on international tourists agenda is seeing the three World Heritage Areas located within Western Australia, namely Shark Bay, the Ningaloo Reef and Purnululu National Park (Bungle Bungles).

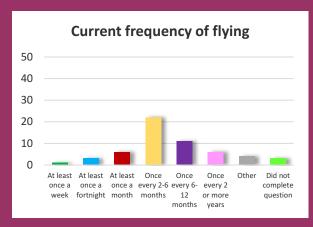
Tourism and fishing adventures are therefore the key economic drivers of the area and the usual passenger mix is 75% tourism, 10% business and 15% medical. Over the past five years under the current regulated route deed around 3,500 passengers have used the airport.

'This is not only a service that the local community use it is also for visitors to the region. There is an increased need to make this service obtainable and user-friendly to the tourism market, at the moment the service is limited and this makes it a second choice to driving into the area.'



5.15.3 Survey results

56 responses were received from the Shark Bay survey. 49 (88%) were from those living in the Shark Bay region and 7 (12%) from the rest of WA. Of those, 18% stated they regularly used air travel at least once a month or less with 59% at least once a year. 5 FIFO responses were received (10%) of which 4 live in the Shark Bay region. 2 of the FIFO workers indicated they fly to their worksite via Gerladton and the other 2 via Perth.





5.15.4 Connections from Shark Bay

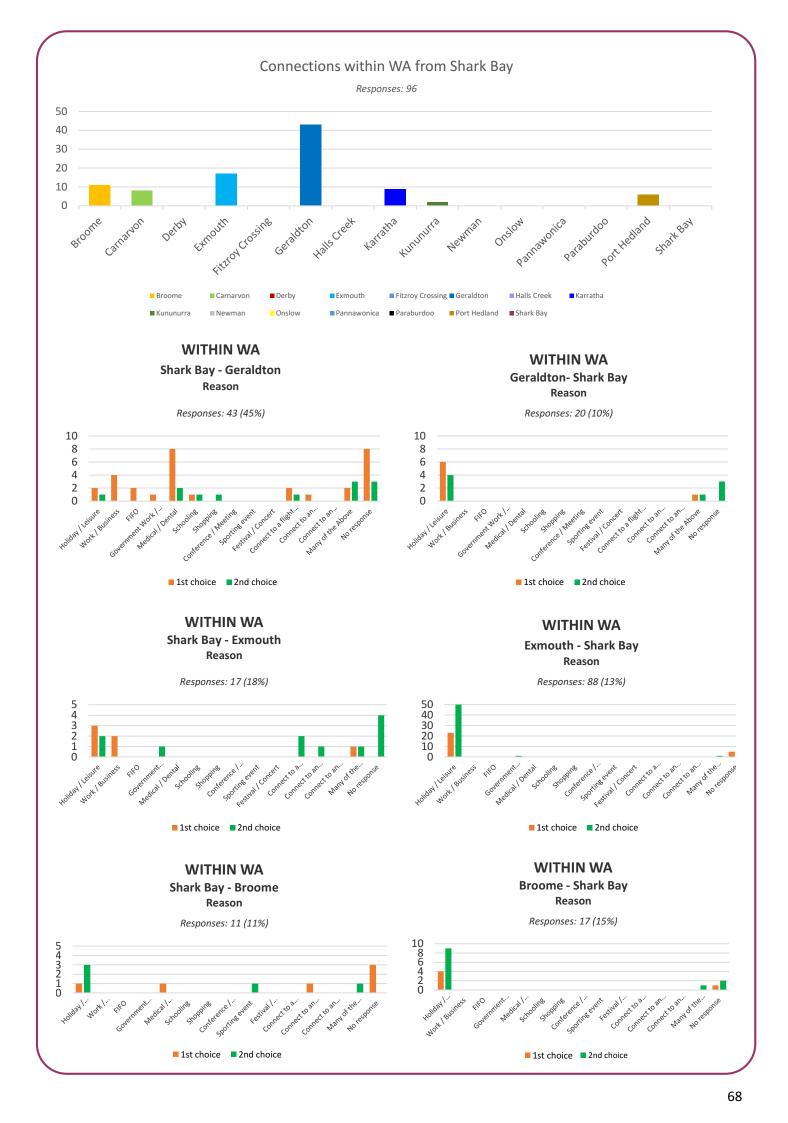
The top 3 connections sought by Shark Bay respondents were to Geraldton (45%), Exmouth (18%) and Broome (11%) with Shark Bay being the 5th, 3rd and eq.3rd destination of choice on the reciprocal surveys.

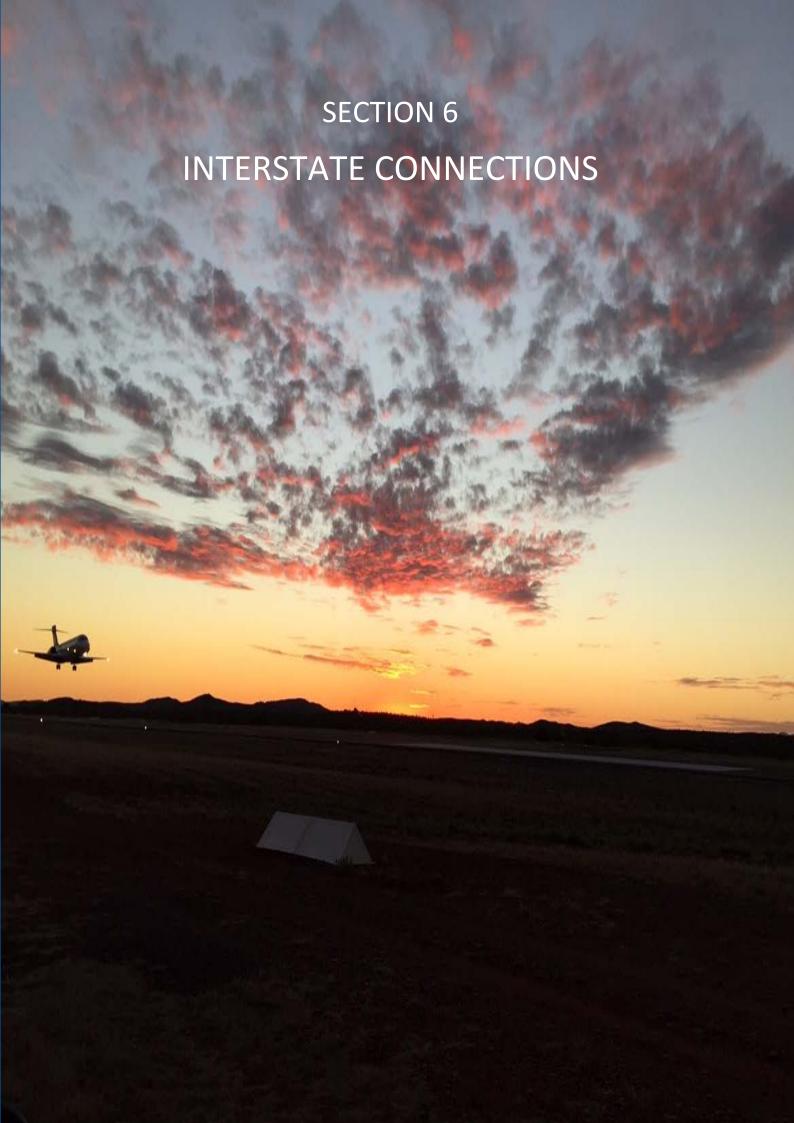
There were a variety of reasons to travel from Shark Bay to Geraldton such as medical, schooling and work with travel to Exmouth and Broome primarily for leisure.

Most respondents were keen to see connections between the world heritage areas within WA to benefit the tourists visiting the region. It was also noted that any connections would need to be in line with the cost to drive to the other location.

When considering frequency of flights from and to Shark Bay, the following percentages were achieved for travel at least once a week to at least once every 2-6 months. If including all frequency responses except a nil response, these are included below in brackets respectively:

- 69% to and 31% from Geraldton (81% to and 85% from);
- 46% to and 13% from Exmouth (62% to and 85% from); and
- 25% to and 21% from Broome (75% to and 100% from).

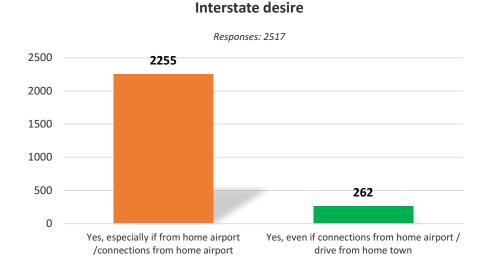




6.0 INTERSTATE CONNECTIONS

6.1 Desire for interstate connections

78% of respondents from all surveys answered yes to the desire for interstate connections, particularly if from the home airport (ie. Broome, Geraldton, Karratha, Newman* & Port Hedland) or if connections were available from the home airport to the departing airport (the remaining airports in the study). 9% answered yes to interstate connections even if they had to connect to another airport either by air connections or driving. The remaining 13% indicated no desire for interstate connections.

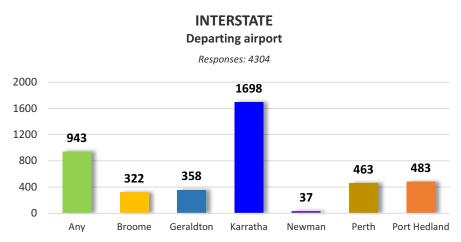


6.2 Departing airport

4304 responses were received across the 15 surveys for in regards to interstate connections. The percentage of total responses from each survey area are detailed in the table below:

Broome	3%	Carnarvon	4%	Derby	1%
Exmouth	11%	Fitzroy Crossing	0%	Geraldton	6%
Halls Creek	1%	Karratha	56%	Kununurra	1%
Newman	3%	Onslow	1%	Pannawonica	<1%
Paraburdoo	2%	Port Hedland	10%	Shark Bay	2%

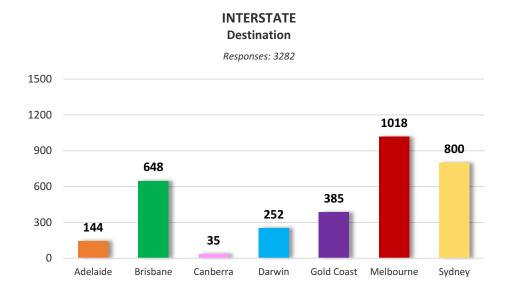
The preferred airport for interstate connections is Karratha (39%) although many (22%) responded that any airport would be considered based on the price and availability of service.



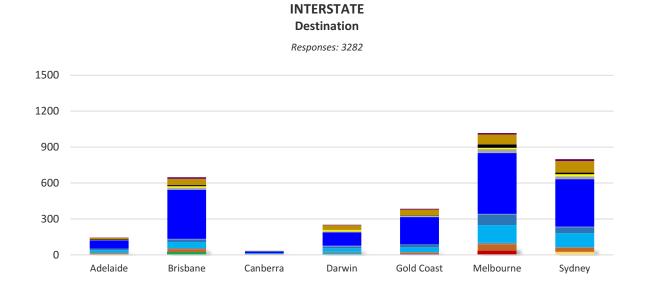
^{*}Newman option only provided to Newman survey participants.

6.3 Interstate destination

Melbourne is the preferred destination for interstate connections (31%) followed by Sydney (24%), Brisbane (20%), Gold Coast (12%), Darwin (8%), Adelaide (4%) and Canberra (1%).



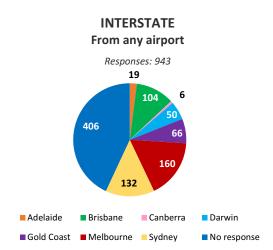
When considering the breakdown of individual airport survey responses, the following columns shows destination by each survey (colour is as shown for each airport in section 4 of this report)

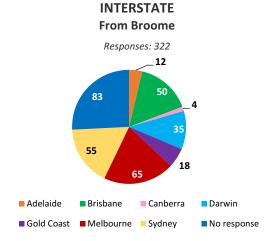


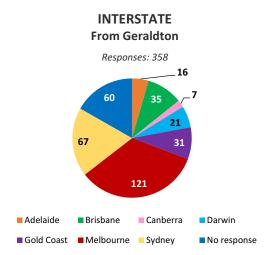
6.4 Frequency of travel

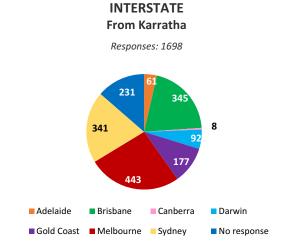
Frequency of travel to interstate destinations was almost equal between once every 2-6 months and once every 6-12 months with around 36% for each. It is noted that only 17% of all responses were from FIFO workers, so this would most likely be more frequent travel to interstate destinations if FIFO responses were canvassed and included.

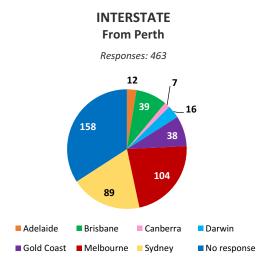
The following charts show preferred destinations and frequency for each of the airports considered for interstate operations.

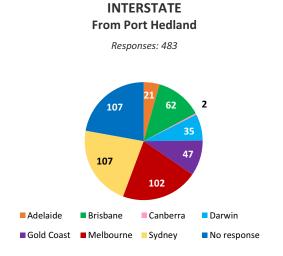






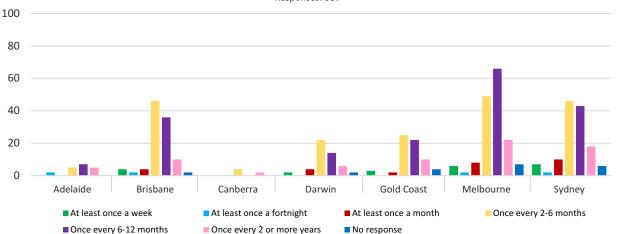






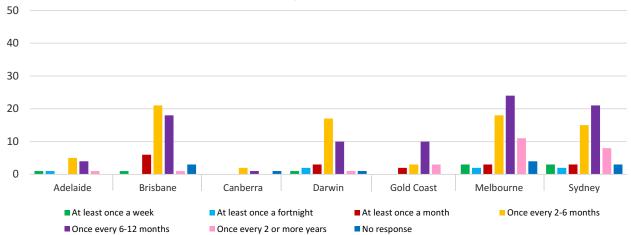


Responses: 537

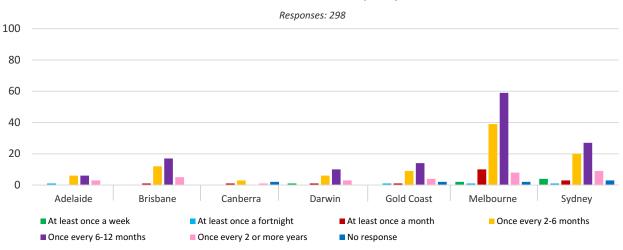


INTERSTATE From Broome with frequency

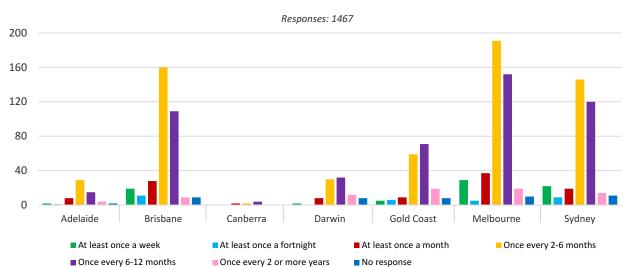
Responses: 239



INTERSTATE From Geraldton with frequency

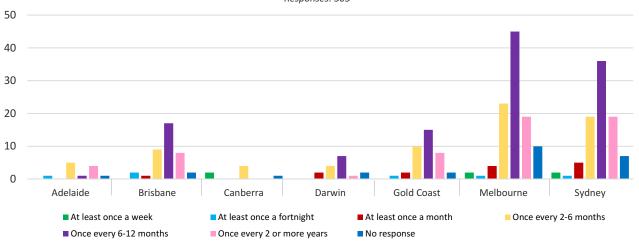






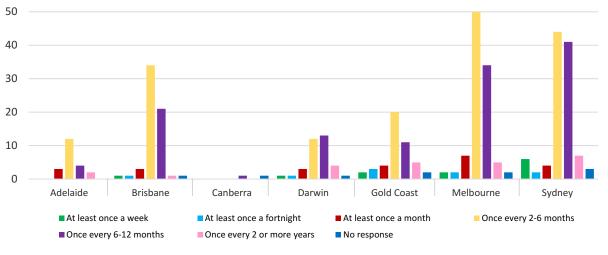
INTERSTATE From Perth with frequency

Responses: 305



INTERSTATE From Port Hedland with frequency

Responses: 376

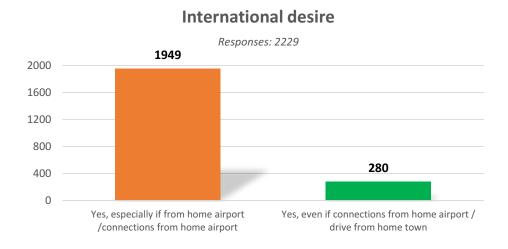




7.0 INTERNATIONAL CONNECTIONS

7.1 Desire for international connections

72% of respondents from all surveys answered yes to the desire for international connections, particularly if from the home airport (ie. Broome, Geraldton, Karratha, Newman* & Port Hedland) or if connections were available from the home airport to the departing airport (the remaining airports in the study). 10% answered yes to international connections even if they had to connect to another airport either by air connections or driving. The remaining 17% indicated no desire for international connections.

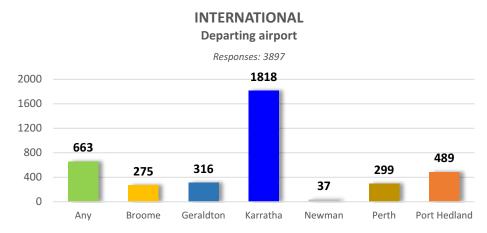


7.2 Departing airport

3897 responses were received across the 15 surveys for in regards to international connections. The percentage of total responses from each survey area are detailed in the table below:

Broome	3%	Carnarvon	4%	Derby	1%
Exmouth	9%	Fitzroy Crossing	0%	Geraldton	6%
Halls Creek	1%	Karratha	58%	Kununurra	1%
Newman	3%	Onslow	1%	Pannawonica	<1%
Paraburdoo	1%	Port Hedland	10%	Shark Bay	2%

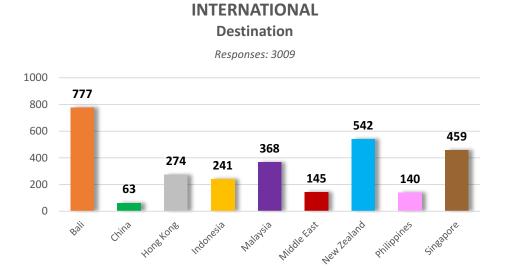
The preferred airport for international connections is Karratha (47%) although many (17%) responded that any airport would be considered based on the price and availability of service.



^{*}Newman option only provided to Newman survey participants.

7.3 International destination

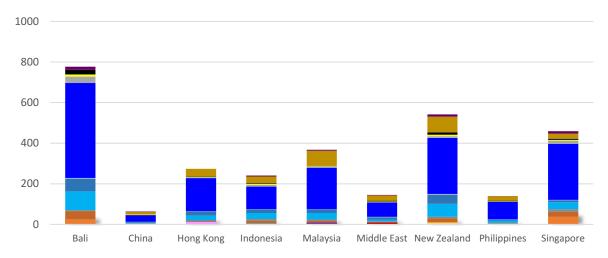
Bali is the preferred destination for international connections (26%) followed by New Zealand (18%), Singapore (15%), Malaysia (12%), Hong Kong (9%), Indonesia (8%), Middle East (5%), Philippines (5%) and China (2%).



When considering the breakdown of individual airport survey responses, the following columns shows destination by each survey (colour is as shown for each airport in section 4 of this report)



Responses: 3009



7.4 Frequency of travel

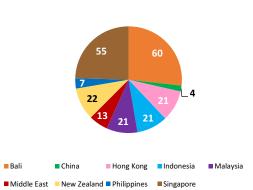
Frequency of travel to international destinations is most commonly once every 2-6 months then once every 6-12 months. Previous construction periods in the Pilbara has seen FIFO workers travelling there via Perth from international destinations such as Singapore and Indonesia which might add to the frequency and desire for international air connections when construction occurs.

The following charts show preferred connections and frequency for each of the airports considered for international operations.

INTERNATIONAL From any airport Responses: 663 ■ Bali ■ China ■ Hong Kong ■ Indonesia ■ Malaysia ■ Middle East ■ New Zealand ■ Philippines ■ Singapore

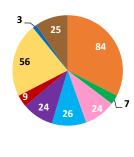
INTERNATIONAL From Broome

Responses: 275



INTERNATIONAL From Geraldton

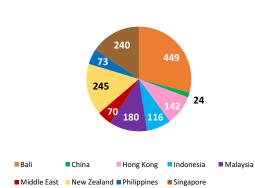
Responses: 316





INTERNATIONAL From Karratha

Responses: 1818



INTERNATIONAL From Perth

Responses: 299

■ Bali

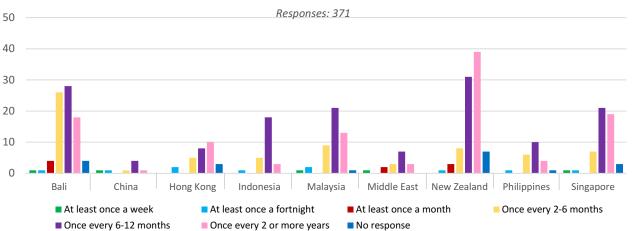


INTERNATIONAL From Port Hedland

Responses: 489

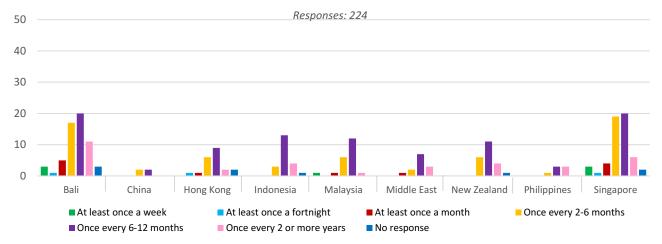


INTERNATIONAL From any airport with frequency

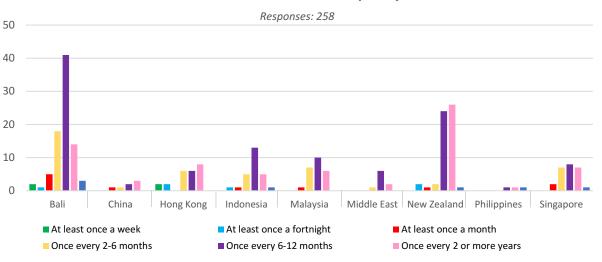


INTERNATIONAL

From Broome with frequency

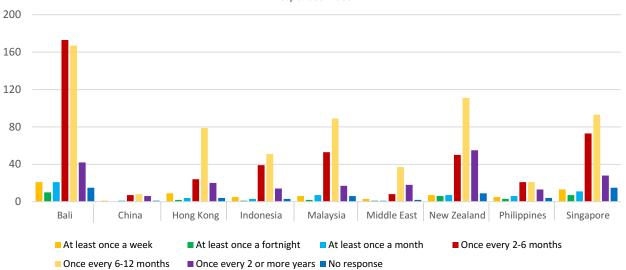


INTERNATIONAL From Geraldton with frequency



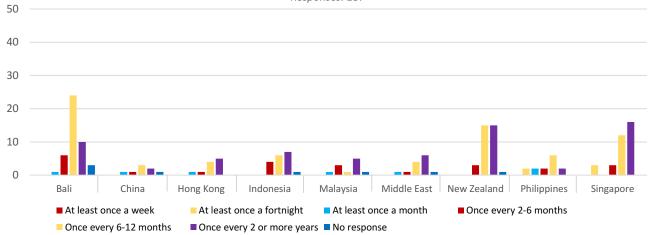
INTERNATIONAL From Karratha with frequency

Responses: 1539



INTERNATIONAL From Perth with frequency

Responses: 187



INTERNATIONAL From Port Hedland with frequency

