

**Air Freight Opportunities to and from Asia - Potential: Geraldton Airport?**

**National Transport Conference  
Perth: July 2018**

**Bob Davis  
City of Greater Geraldton**



- “WHERE”:** GERALDTON Western Australia.
- 424 km by Road from Perth – about 4 hours drive.
  - 373 km by Air from Perth – about 50 minutes by F100 Jet.
  - Daily RPT jet services by both QantasLink and Virgin.
  - Major logistics and services hub for the Midwest, Gascoyne and Murchison regions of Western Australia.



### GOING TO “WHY” .....

**WA:** largest State by area, with the most dispersed population settlement pattern.

**A million square miles - but WA has only 11.4% of the Nation’s RPT airports.**

**WA population concentrated in Perth, with its seaport Fremantle.**

**Major Regional Centres in WA are few, have relatively small populations, are long distances from Perth, are long distances apart.**

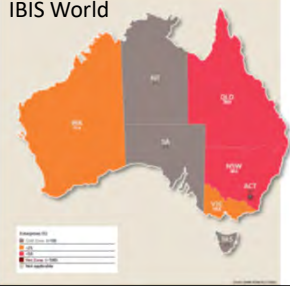
**Perth Airport IS the State’s primary Aviation hub.**

**Fremantle IS the State’s primary Container-trade Seaport.**

**Regional seaports are mainly geared for export of BULK commodities (minerals, grains), live cattle and sheep, with minimal capacity for import/export via Containers.**

**Away from the Perth/Peel region, competitiveness of producers (and hopeful exporters) of perishables is *handicapped by the Costs of Distance – Transport and Time - to Export Port* ..... hence to Market.**

IBIS World



### GOING TO “WHY” ...



**Transport & Logistics Challenge:  
Huge Economic Catchment Zone**

**Carnarvon and Geraldton are long established Horticulture centres - significant production of fresh fruit and vegetables.**

**Areas around Eneabba are home to the most significant production of Geraldton Wax, the global staple for arrangement of **Cut Flowers**, currently exported via Perth.**

**Substantial pastoral grazing lands producing **Cattle, Sheep and Goats**.**

**Coastal strip is home to the **most valuable Fishery in WA**, the Western Rock Lobster, exported live via Perth Airport.**

**Aquaculture is emerging as a strong development, for Saltwater Finfish. Also an established base for premium Marron and Yabbies.**



**ABARES 2014**  
Australia's airfreight food exports  
Expanding supply chain options

Lindsay Hogan  
Australian Bureau of Agricultural and Resource Economics and Sciences  
4-5 March 2014

**“WHAT”:  
PART OF  
NATIONAL  
EXPORT  
TRADE GROWTH**



**Hort Innovation**  
September 2017  
Hort Frontiers  
Strategic Partnership Initiative  
Request for proposal for Research & Development

AM 16012  
Study of airfreight capacity for Australian horticulture exports to Asia and the Middle East



**FINDING THE SWEET SPOT:  
GROWING WA VEGETABLE EXPORTS**  
FINAL REPORT, v1.00g, November 2016  
**2016**

CORIOLIS  
vegetablesWA  
Sustainable Horticulture



**Hort Innovation** **mla** **Wine Australia** **Dairy Australia**  
MEAT & LIVESTOCK AUSTRALIA

**Media Release** **June 2018**  
14 June 2018

**Australian agricultural sectors join forces to meet Chinese demand**

An alliance of Australia's meat, wine, dairy and horticulture industries will this week embark on a mission to reinforce the nation's position as a premium food source for high-end Chinese consumers.

The Premium Australian Food and Wine Collaboration is a new cross-industry partnership comprising Dairy Australia, Meat & Livestock Australia; Horticulture Innovation Australia and Wine Australia, in cooperation with Austrade.

It is focussed on growing agricultural trade with Australia's major food export partner.



**Hong Kong freight flights - Toowoomba**  
Cathay Pacific started weekly freighter flights from Wagner's Wellcamp Airport to Hong Kong November 2016.





**2014**  
Avalon Airport  
Flying made easy

Avalon Airport:  
Victoria's Live Animal Freight Centre  
- a business case

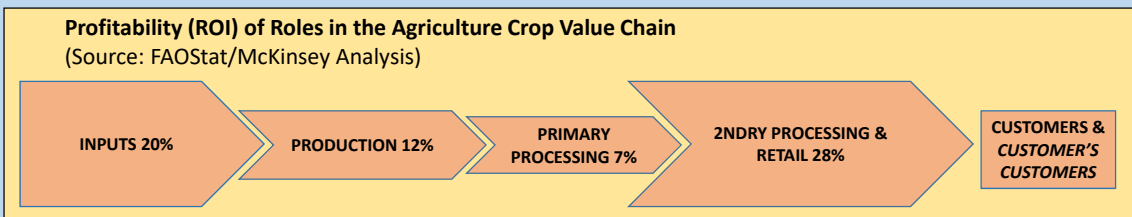
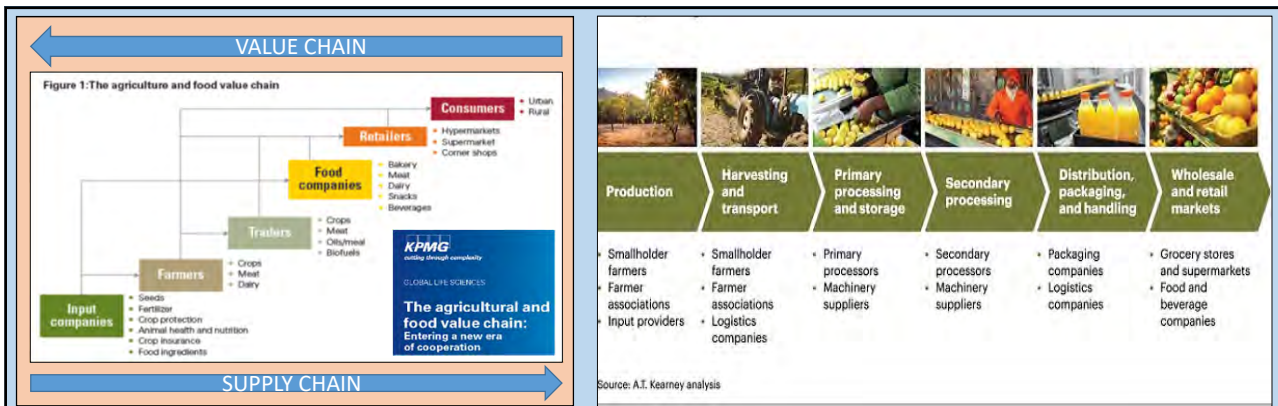


**Agricultural exports identified for Tamworth's airfreight bid**  
‘The Land’ 22 March 2018:  
The push for *Tamworth to become an international air freight centre* is gathering momentum with positive signs from the federal and state governments they want to see the project succeed.

Tamworth Regional Council has pinpointed the main exports from a potential international facility that will focus on prime beef, dairy and horticultural products.

With China seen as the main destination, Tamworth Council is actively seeking ways to solve the issue of **what will be imported into Australia by incoming freight planes.**

**MIDWEST/GASCOYNE  
COMPETE WITH OTHER  
HORTICULTURE AND MEAT  
REGIONS NATIONALLY FOR  
ENTRY TO NEW OFFSHORE  
MARKETS VIA AIRFREIGHT**



**EXPORTS: AGRI-BUSINESS SECTORS APPRAISING PROSPECTIVE VALUE CHAINS – NOT JUST THEIR SUPPLY CHAINS**

**GERALDTON SEAPORT**

Annual exports 16M tonnes  
Iron Ore 12M tonnes  
Wheat 2.5M tonnes  
12.6M tonnes to China

**Geraldton has a long-established Seaport for Trade.**

For bulk mineral and agricultural commodities, significant heavy rail and road transport infrastructure already in place across the regional hinterland, establishing and enabling a major Seaport catchment zone.

North West Coastal Highway through Geraldton - major heavy vehicle route connecting Kimberley, Pilbara, Murchison, Gascoyne and Midwest regions to Perth and Fremantle.

Geraldton - an established multi-modal logistics hub: Road – Rail – Sea - Air with associated infrastructure, facilities and support services.

Significant benefits for planning AIRPORT functions:

- Surface transport infrastructure network already in place.
- *Geraldton already has permanent presence of Federal Border Force personnel and services - Immigration, Customs, Quarantine.*

## State Government investment in Midwest/Gascoyne Horticulture



**Significant Horticulture centres:**  
 Carnarvon.....890km by road to Perth.  
 Geraldton.....424km by road to Perth.

*Time-to-Market is a commercial imperative for Premium Fresh Produce*

(Ditto for Premium Fresh Seafood, and Chilled Meats)

## THE MURCHISON, GASCOYNE AND MID WEST REGIONS ALSO DO BEEF & SHEEP.....







**City of Greater Geraldton has been actively developing direct local government to local government relationships with cities in the Peoples Republic of China for about a decade:**

- **Sister City – Zhanjiang, Guangdong Province**
- **Strategic Partner City – Zhoushan, Zhejiang Province**
- **Strategic Partner City – Linfen, Shanxi Province.**



**Why China? Because:**

- **A significant proportion of Midwest grain and mineral exports already go to China;**
- **Chinese interests have significant investments in Mines (not just iron ore) and Land in the region; and**
- **Mainland Chinese tourists have discovered the uncongested attractions and experiences of Australia’s Coral Coast, the unique experiences of Kalbarri, Pink Lake and the Houtman Abrolhos Islands off Geraldton**

**Abrolhos Islands**

**Pink Lake**

**Growing in the Midwest – Tourists from Mainland China**

### AIRFREIGHT – SOME ‘PRAGMATICS’:

- Primarily for High Value products typically ‘small’ in weight/volume.
- Medicines/pharmaceuticals, perishable time-sensitive premium foods, precious metals (e.g. gold out of Perth), gemstones, scientific equipment, electronic/digital consumer equipment (e.g. tablets, mobile phones).
- Not cost-competitive with intermodal combination land/sea surface cargo for Bulk commodities.
- Greatest advantage – *Speed* from source to destination.
- For time-sensitive fresh produce, need to minimise Time-Cost.

### AIRFREIGHT – SOME MORE ‘PRAGMATICS’ .....

- No *scheduled* dedicated *Freighter* Aircraft services through Perth.
- Belly freight capacity in International Passenger aircraft – lots!
- Airfreight into Perth in Passenger belly cargo perhaps \$3-4/Kg?
- Airfreight outbound from Perth in Passenger aircraft belly cargo perhaps \$1/Kg ?
- Pivotal factor for Exporters: Intermodal Surface/Air Dollar-cost and **Time-cost for fresh produce** to Pre-export facilities and the Airport.
- Pivotal factor for Importers: Intermodal Air/Surface Dollar-cost and Time-cost for distribution to Customer Markets – wholesalers, e-stores, bricks-n-mortar retailers.

### AND ....EVEN MORE AIRFREIGHT 'PRAGMATICS' .....

- Airfreight economics: dependable volumes for regular profitable loads....to justify aircraft and crew deployment.
- **Midwest/Gascoyne/Murchison production of Horticulture, Livestock and Seafood - mitigates single points of failure in supply.**
- Cargo consolidation needs feedlots, PEQ facilities, abattoirs, freezers, chillers, cool rooms.
- **Pivotal issue: Selection of Mode (Freighter versus Belly cargo).**
- De-risking initial uncertainty of excess cargo capacity likely to drive decision towards Passenger Aircraft Belly Cargo.
- **De-risking initial services will see allocation of aircraft with the *minimum* seat and freight capacity, capable of the target mission distance between airports.**

### AIRFREIGHT – AND FINALLY....*SOME MORE* 'PRAGMATICS'....

- De-risking - benefitted by *Freight in both directions*  
.....not just one-way Exports.
- That requires *Import* infrastructure, facilities and services – Freight terminal, Bond Stores, warehousing, and Border Force at the WA regional airport – not just Export infrastructure and facilities.
- Mixture of Business/Investor and Tourism passengers for viability.
- **Tourism growth potential – actually happening: Australia's Coral Coast – Abrolhos Islands – Geraldton Hub.**
- Specials - Charter freighters (e.g. FedEx for JIT delivery of purified Graphite to Graphene factories in China, Taiwan)

.....and of course there's more to the whole story.

**If it wasn't challenging everybody would already be doing it !**



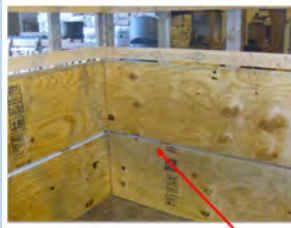
**EXAMPLE - LIVE EXPORTS:  
NEW LOCAL BUSINESS  
CAPACITY REQUIRED**



**LIVE CATTLE AIRFREIGHT**



**Requirements in Transporting Livestock Shipment – Cattle/ Buffalo**



Mesh must be built to cover the ventilation vent or holes around 4 sides of the container.

Blair Size	IATA I.D. Code (ATA Code)	Illustration	Int Volume : m <sup>3</sup> (RP)		Loadable Aircraft & Compt	Loadable Livestock Weight : kg (lb)
			L External Dimension cm (in)	W Internal Dimension cm (in)		
KRW	IC DC		13.4 (480)		74F/744FMD	2494 (5560)
			L 307 (121)	287 (113)		
			W 233 (92)	210 (83)		
			H 241 (95)	220 (87)		
KAP	IC DC		455 (1600)		74F/744FMD	2268 (5000)
			L 309 (122)	299 (118)		
			W 220 (87)	200 (79)		
			H 160 (63)	140 (55)		
			295 (105)		+CEILING PANEL 38 (84)	



Sufficient absorbent material must be placed inside the container to prevent leak of waste.



Side walls must be higher than the animal's back.

Species	Weight (kg)	Animals per single tier pallet (96 x 125in)	
		Heads per layer on main deck (Bottom / middle / top layer)	Heads per lower deck pallet
Cattle / Buffalo	300	7 / 5	6
	500	4	3
	700 or above	4	Not allowed

**AIRCRAFT CONSIDERATIONS**

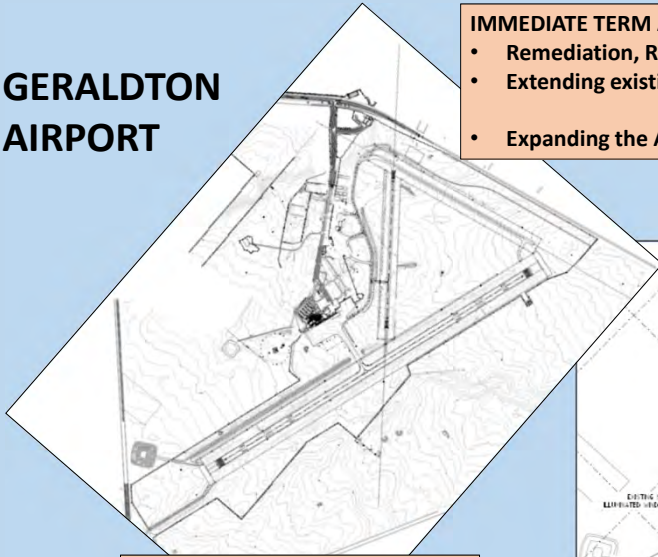


City	Air Distance to Geraldton (Km)	B737-800: 5,425km	B737-8 MAX: 6,500km	A320-200: 5,700km	A320 NEO: 6,110km	A330-200: 13,400km	B777 Variants: 9,700-15,800km
Jakarta	2,645						
Melbourne	2,982						
Sydney	3,507						
Singapore	3,546						
Manilla	4,877						
Hong Kong	5,697						
Guangzhou	5,780						
Zhoushan	6,591						
Shanghai	6,720						
Linfen	7,228						
New Delhi	7,528						
Tokyo	7,643						
Beijing	7,648						
Dubai	8,739						
Doha	9,038						

- Most likely for initial services: A330-200 with up to 250 PAX , cargo capacity of 26xLD3 containers or 8 pallets plus 3 LD3s (about 35 tonnes) including PAX Baggage (say - 12 LD3s).
- Freight capacity with full PAX: 14LD3s.
- Viability needs average 70+% PAX factor (175) and 60+% Freight factor (12 LD3s).
- Weekly service: 52 returns/year, 104 flights, would need about 9,100 passenger movements (arrival + departure) and 1450-1700 tonnes of freight in total from a combination of imports and exports.
- Bi-weekly service: 104 returns/year, 208 flights, would need about 18,100 passenger movements (arrival + departure), and 2900+ tonnes of freight in total from combination of imports and exports.

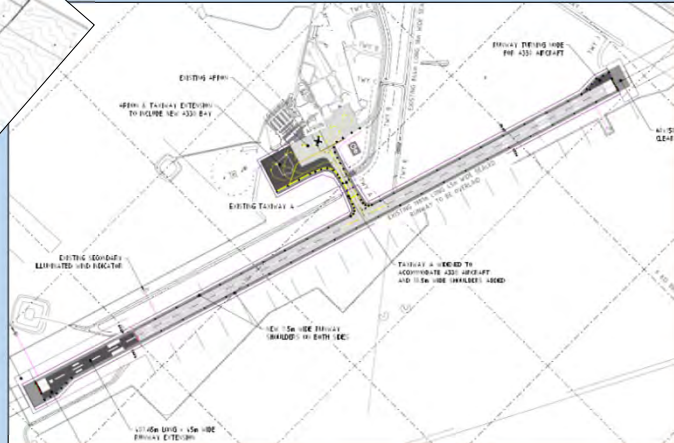
**For A330 need minimum 9100 return passengers and - say - 1500 tonnes of freight (combined inbound/outbound) Annually for basic weekly service viability.**

# GERALDTON AIRPORT

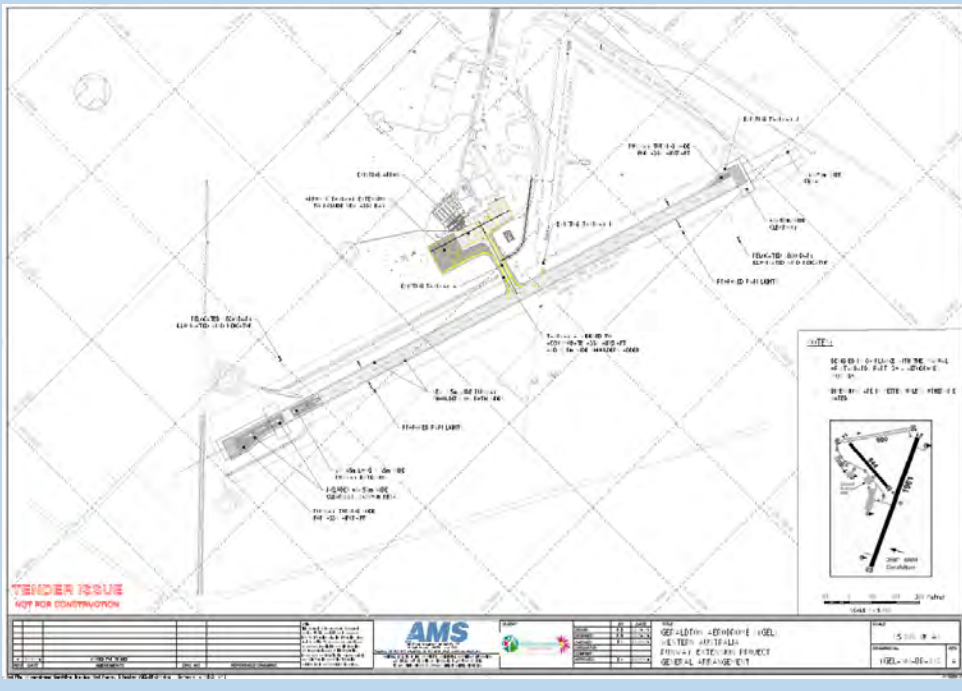


- IMMEDIATE TERM ACTION – CAPACITY UPGRADE**
- Remediation, Renewal and Asphalt Overlay of existing airside pavements;
  - Extending existing runway 03/21 from 1981x45M to 2400x45M with PCN >50; and
  - Expanding the Apron to provide an additional 4E Bay.

**Likely construction commencement  
October 2018**



**FUNDING :**  
 Commonwealth BBRF \$10.0M  
 State Government \$6.5M  
 CGG Council \$7.5M

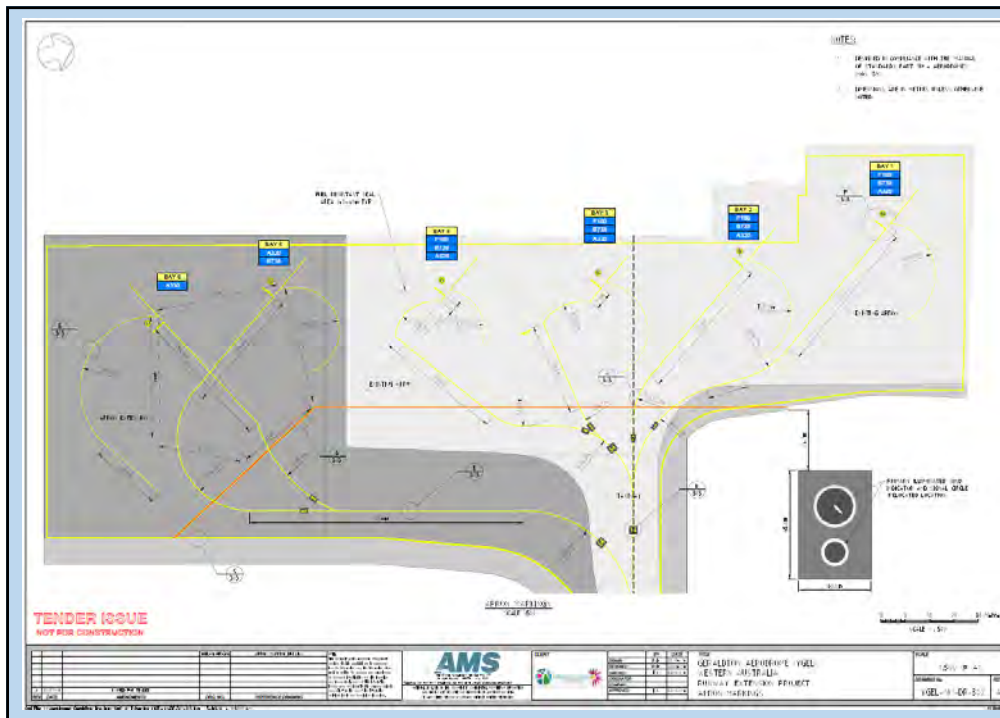


**RUNWAY:**  
 Strengthened/Overlaid  
 Extended to 2400M  
 Shoulders raised/sealed  
 Lights replaced  
 PAPI replaced

**TAXIWAY:**  
 Strengthened/Overlaid  
 Widened  
 New shoulders sealed

**APRON:**  
 Strengthened/Overlaid  
 Extended  
 New 4E Bay

**RESCUE & FIRE FIGHTING**  
 Too small for provision  
 of ARFFS by Airservices.  
 Options will depend on  
 Carrier demand.



**MAIN APRON:**

**Taxi-In/Taxi-Out**

**All 6 Bays able to accommodate A320/B737 types**

**Bay 6 for 4E Types Marked for A330**

**Ground Support Equipment needs to be determined for 4E types.**

### BENEFITS FROM GERALDTON AIRPORT CAPACITY UPGRADE

- Enable further development of Coral Coast Tourism – International, Interstate.
- Catalytic benefits – proposals for new Hotel/Resort developments for Tourism.
- Opportunities for Regional Carriers to grow inter-region passenger services.
- Enable development of Trade in Midwest/Gascoyne/Murchison produce by Airfreight.
- Enable development of Import of high-value digital consumer goods from China, leveraging availability of:
  - daily RPT services for retail distribution from Geraldton e-commerce warehouses, and
  - Kimberley/Pilbara return-leg road transport for back-loading wholesale loads to Perth.

**There is always Risk of under-utilisation in the early years of new Airport capacity! That's the nature of the beast. Just-in-time 'little' capacity increments don't work.....!**

### MAJOR AVIATION NETWORK BENEFIT:

- 2400x45 metre runway with PCN>50 within one hour flight time of Perth.
- Provides a new *Alternative Landing Airport* option for smaller 4E aircraft types.
- Enables aircraft inbound to Perth to carry less Reserve Fuel, freeing up capacity within MTOW for paying load, or reducing fuel burn costs – or a combination of both.



**Thank You...**  
**Happy to take questions during the Panel discussion**



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