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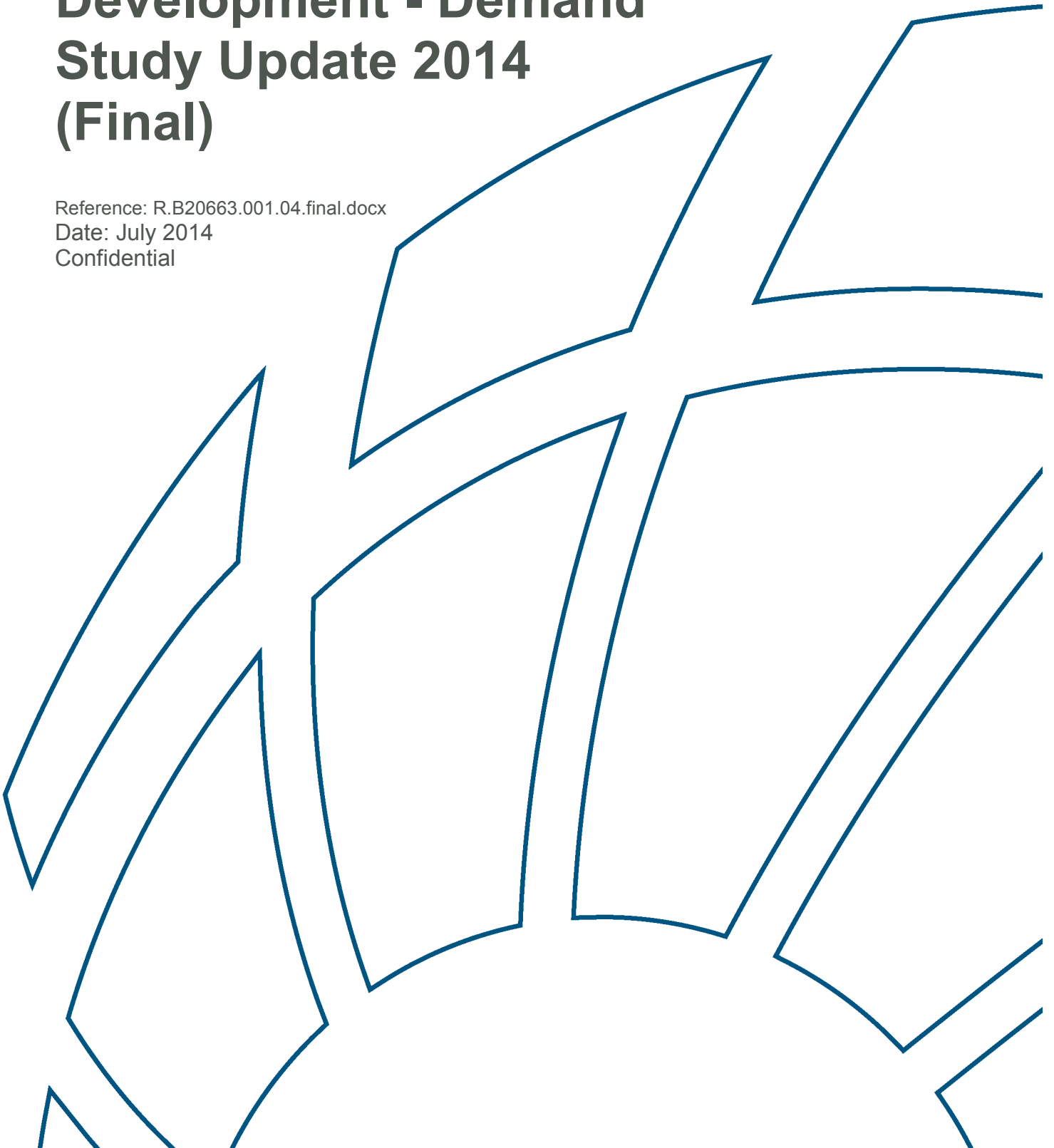
Appendix D.6

Cairns Cruise Shipping Development - Demand Study 2014



Cairns Cruise Shipping Development - Demand Study Update 2014 (Final)

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Cairns Cruise Shipping Development - Demand Study Update 2014 (Final)

Prepared for: Ports North

Prepared by: BMT WBM Pty Ltd (Member of the BMT group of companies)


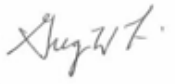

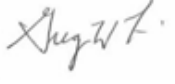

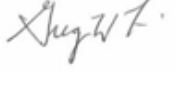

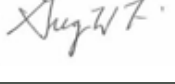
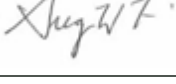
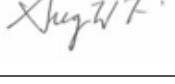
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Executive Summary

Executive Summary

Purpose

Ports North commissioned the preparation of a Demand Study (BMT WBM 2011) as part of its Cruise Shipping Development Strategy in 2011 to examine current and future demand for cruise shipping in Cairns. A key aspect of the Study was to assess the effect improved infrastructure at the Port (in the form of a wider shipping channel and provision of bunker fuel) could have to expand tourism cruise ship opportunities by allowing larger vessels to enter the port.

This Demand Study Update Report (2014) has been prepared to update the 2011 Study and will form an input to the Cairns Shipping Development Project Environmental Impact Statement (EIS) currently in preparation under relevant Federal and State legislation.

This report summarises the findings of the updated demand analysis and further consultation with cruise ship companies and other stakeholders undertaken since the 2011 study.

Overview of Cruise Industry*Global and National*

The global cruise industry is a \$60 + billion industry that employs over 100,000 seagoing staff and 20,000 on-shore staff, and carries 21.7 million passengers annually an increase of 4 million since the 2011 study (CLIA, 2014). The industry is primarily based on the Northern Hemisphere market where the bulk of the world's cruising populations reside.

In terms of market penetration 3% of Australians have cruised and while this is significant in world percentage terms, being the highest outside the USA it relates to a very small number of passengers globally, some 694,062 in 2012, an increase of 11% from 2011, which followed an increase of 34% in 2011, the highest of any other nation (International Cruise Council of Australia, Cruise Industry Report 2012).

However, at the Cruise3Sixty Conference held in Sydney in February 2014 it was stated that the number of Australian passengers has increased by 200% since 2002 and it was predicted that Australia would have a market penetration of 4.5% by 2020, the highest in the world, and 10% by 2030 (Cruising, Worldwide Cruising News and Pictorial Issue 87, February 2014).

Moreover in a media statement on 12 February 2014 the CEO of Carnival Australia stated the seven brands will have 21 ships cruising to and from Australia and New Zealand this year. Obviously this could be of immense benefit to Cairns if all these Mega ships are able to berth in the city.

Regional - Cairns

The Great Barrier Reef (GBR) is one of the three Australian icons for the cruise tourism industry. Cairns is strategically situated to provide access to the GBR particularly as Cairns has a range of varied natural attractions and tourism products that are supported by high quality, well managed and reliable operators.

For almost two decades Cairns enjoyed more cruise ship visits than any other port in Australasia but in recent years that share, along with other Queensland ports, has fallen considerably. Current use of the Port of Cairns by cruise ships is split between those vessels that can access the entrance channel and moor at Trinity Wharves and the larger ships that must anchor at Yorkeys Knob. Ships that cannot access the port will typically anchor approximately 2 km offshore from Yorkeys Knob and ferry their passengers ashore by

Executive Summary

tender. Passengers are ferried ashore either by the ships tenders or by catamarans from the Cairns reef fleet.

Figure 1 shows the total number of ship visits to Trinity Wharves and Yorkeys Knob between 1995 and 2014 (using currently scheduled arrivals for 2014). This ship visits shown in Figure 1 exclude Adventure Class ships that home port at Cairns. 2013 saw an atypical reduction in ship visits to Cairns mainly related to a reduction in the number of Mid-size ships using Trinity Wharves, however the cruise ship bookings for 2014 reverse the losses of 2013.

Overall, from observation of ship numbers from 2007-2014, the following conclusions can be made:

- There has been an overall increase of 17 ship visits equating to an annual increase of around 6%;
- The general trends clearly show a decrease in ship visits at Trinity Wharves and an increase in ship visits at Yorkeys Knob corresponding to the general increase in ship sizes.

As outlined above, Mega class cruise ships that call at Cairns typically must anchor at Yorkeys Knob. The *Rhapsody of the Seas* is an exception to this general rule, noting it can access Trinity Wharves under favourable tidal and weather conditions. However, this ship will be replaced in 2015 by a larger ship which will mean that no Mega cruise ships in Australasia will be able to reach Trinity Wharves.



Figure 1 Ships Visits at Cairns Trinity Wharves and Yorkeys Knob

Responding to Larger Cruise Ships

Being unable to reach Trinity Wharves because of the existing channel dimensions ultimately restricts the number of overnight ship visits to the port and the number of passengers (and crew) disembarking to visit the city and to undertake associated tourism activities. It also adversely affects the presentation experience of Cairns to visitors.

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With the size of cruise ships being built increasing (see Table 1 below), it is essential that the Port of Cairns is positioned to respond to the changing cruise industry, particularly if it is to fully realise the economic benefits that flow to tourism operators, retailers and other business owners from the disembarking passengers and crew of these large vessels.

The passenger carrying capacity of these ships is also relevant to cruise shipping in Cairns. The largest ships currently in Australia are *Voyager of the Seas* with 3114 lower berths and 3838 maximum berths and *Celebrity Solstice* with 2852 lower berths and 3145 maximum berths. These ships are 15 and 8 years old respectively.

The 31 Mega cruise ships built or being built between 2011 and 2018 have an average passenger capacity [lower berth] of 3336 and a maximum capacity of over 3700 berths.

Some of these ships will inevitably replace some of the older, and in time all of the Mega cruise ships visiting Yorkeys Knob will be too large to enable effective transfer of passengers by tender, leading to future Mega ships not visiting Cairns unless the channel access is improved.

Five years ago it was not predicted Australia would ever see ships the size of *Voyager of the Seas* and now that it is a reality, the next generation ships will inevitably visit Australia.

Table 1 Cruise Ships Being Built

| Year | Ships built | Able to access Trinity Wharves [under 240m LOA] | Unable to access Trinity Wharves [over 240m LOA] |
|--------------|-------------|--|--|
| 2009 | 13 | 2 | 11 or 85% of those built |
| 2010 | 14 | 4 | 10 or 71% of those built |
| 2011 | 7 | 1 | 6 or 86% of those built |
| 2012 to 2018 | 38 | 7 | 31 or 82% of those built or on order |
| Total | 72 | 14 [however several are for specialist markets and will not visit Australia] | 58 or 81% of those built or on order |

Demand Analysis

Methodology

The demand analysis update examines demand for cruising in Cairns as well as the suitability of infrastructure and services to meet the demand. In this regard, the report has adopted a classification for cruise ships (from smallest to largest) as follows –

- Adventure/Expedition class ships (~100 passengers);
- Boutique class ships (generally 200 – 500 passengers);
- Mid-sized class ships (generally 500 – 1500 passengers); and
- Mega class ships (2000+ passengers).

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Adventure/Expedition class ships (~100 passengers) have not been re-considered in the Demand Study Update on the basis that these ships are not affected by potential infrastructure upgrades envisioned by the Cairns Shipping Development Project.

The classifications outlined for the three main ship classes of interest - Boutique, Mid-sized and Mega ships – have been carried forward into the 2014 Update despite there being a change internationally in the classifications. This will make the 2014 update compatible with the 2011 study.

The study period adopted for the demand analysis is 2016, 2021 and 2026. These timeframes take into account that forward itinerary planning by cruise lines coupled with the likely time to announce or make any changes to infrastructure in Cairns would most likely not affect cruise visitation until 2016 at the earliest but more realistically 2018.

The demand analysis provides a high, medium and low projection for the key metric of ship visits at port for each of the three classes of cruise ship. These projections are based on a ship by ship analysis of companies that call or are likely to call at Cairns with and without infrastructure improvement and consideration of published industry growth targets. This includes the national industry target of 17% growth for Mega ships (AEC /CDU 2012-2013 Economic Impact Report), noting the actual annual growth rate of Mega ships is quoted as being up to 20% per year for the past five years by the major cruise ship companies.

The 2011 study indicated that the key infrastructure improvements able to deliver the greatest opportunities for increased ship visits by large vessels and prospective home porting at the Port of Cairns are as follows:

- Provision of bunker fuel; and
- Capital and maintenance dredging of the entrance channel and swing basin to accommodate larger ships.

Accordingly, the demand analysis in 2011 examined: (a) demand based on the existing (e.g. unimproved) scenario; and (b) demand with an improved infrastructure scenario. This analysis has been updated as part of the current 2014 report with the following outcomes:

Unimproved Infrastructure (Do Nothing) Scenario

- The classes of ships with the most potential for growth are Mid-sized and Mega cruise ships which aligns with the trend within the cruise industry toward building and operating larger ships (e.g. Mega class).
- The projections take into account that the Mega class vessels currently calling at Cairns (including the older Mid-Size Regal Class P&O vessels) will likely be replaced with larger ships between 2016 and 2021 (or earlier).
- However, increased demand is unlikely to be achieved in the longer term at Yorkeys Knob for Mega ships. As outlined above, one of the key factors that would prevent such growth levels from being achieved is the increase in ship size and more importantly passenger capacity which will see a corresponding increase in time and logistics to ferry passengers to and from the shore, thus limiting the time available for shore excursions. This is expected to result in an eventual decline in passenger and crew satisfaction levels, and ultimately, usage of the port.

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Improved Infrastructure Scenario (provision of bunker fuel and channel dredging)

Channel infrastructure improvements (to 130 m width) and provision of bunker fuel can influence demand for each class of ship as follows:

- Boutique cruise ships would benefit from having a supply of bunker fuel available as it would enable them to travel further from Cairns in safety and it would certainly be necessary to enable them to consider base porting in Cairns. These ships are not dependant on the channel infrastructure.
- Mid-size cruise ships would also benefit from having a supply of bunker fuel available as it would enable them to travel further from Cairns in safety, and would be necessary to enable them to consider base porting in Cairns. Some companies have advised they now have to factor a contingency to call at Gladstone for fuel which they are loathe to do.
- Some of the longer Mid-size ships are already at or beyond the automatic acceptance level for cruise ships entering Cairns and the trend will be for lengths to increase, either from current ships being extended or by current ships being replaced by the smaller Mega ships first introduced 20 + years ago. Thus the operators of these ships would see merit in, and benefit from improvements to the channel access.
- Both Cairns and the operators of Mega cruise ships would benefit most from the channel access to Trinity Wharves being improved such that the majority of Mega ships can berth safely in Cairns. As the number of Mega cruise ships increase there will be even more demand for this access and if not available it could lead to a reduction in cruise ship visits as the larger ships will find it more difficult to operate at Yorkeys Knob hence leading to more passenger dissatisfaction with the destination.
- A supply of bunker fuel at Trinity Wharves would be an added advantage to Mega ships as it would allow the ships to take on fuel midway through an itinerary from Brisbane or Sydney or consider using Cairns as a base port.

Summary of Cruise Demand

A summary of demand (based on a medium growth projection) for ship visits are shown in Table 2 and Figure 2, showing demand with and without improved infrastructure. Figure 3 shows the effect improved infrastructure will have on estimated passenger (pax) numbers based on the ship visits shown in Figure 2.

The provision of bunker fuel and channel improvements can increase demand considerably from the unimproved scenario in terms of the total number of ships visits by 2026 (79 to 110), and almost doubling the total number of Mega ship visits by 2026 (32 to 63) based on a conservative (medium) growth projection. Adopting the high growth projection, this could escalate to up to 90 Mega ship visits and 173 total cruise ship visits by 2026.

As shown in Figure 3, the increased ship visits - particularly by Mega class ships - will have corresponding positive impacts on overall passenger numbers when comparing the no change versus improved infrastructure scenarios over time.

The significant economic benefits of the increased passenger numbers with improved infrastructure will be that the bulk of these passengers (as well as crew which are not included in these figures) will be able to efficiently disembark at Trinity Wharves and into Cairns city centre during both day visits and overnight visits

Executive Summary

as opposed to the day-time only tendering operations at Yorkeys Knob where cruise ships do not stay overnight.

In parallel with the demand analysis update, consultation was undertaken with key stakeholders in January 2014 including cruise ship companies, in-bound tourism operators, port service providers and Government and tourism stakeholders. Many of these companies and groups were consulted previously as part of the January 2011 study. As was the case in 2011, the prospect of improved infrastructure to attract cruise vessels to the Port of Cairns was reinforced strongly during consultation, particularly with key cruise industry representatives.

In particular, their comments supported the findings that growth will be marginal without infrastructure investment and that the provision of bunker fuel and channel dredging would make the port much more attractive to future operations.

These comments were recently reinforced in a newspaper article quoting Carnival Corporation Chief Executive Ann Sherry in *The Australian* dated 13 Jun 2014, which noted that:

'In Cairns it was vital for the planned dredging of Trinity Inlet to go ahead so that the Queensland city could achieve its potential as a cruising hub for the region, including Papua New Guinea and Asia'.

Indeed if the channel dredging does not take place then Cairns, North Queensland including Townsville and the Whitsundays are likely to experience a downturn in cruise tourism with knock on effects for Brisbane which would no longer be a base port for cruises to the Great Barrier Reef region and beyond.

Conclusions

In conducting this Demand Update the following conclusions were reached:

- (1) Cruise tourism is possibly the fastest growing sector of the tourism industry with Australia having the highest growth rate in the world.
- (2) The future of cruise tourism lies with the Mega cruise ships which are being built at an increasing rate and by 2018 will exceed the number of all other cruise ships combined.
- (3) If Cairns wishes to retain its position as a premier world cruise destination then it must embrace Mega cruise ships and provide them with access to either Trinity Wharves or alternative berths in close proximity to the city.
- (4) If Cairns chooses not to provide access for Mega cruise ships then Cairns will inevitably decline in a very few years as a premier world cruise destination thereby causing serious consequences for tourism and its associated revenue not only in Cairns but in Far North Queensland and inevitably Townsville, the Whitsundays and eventually Brisbane.
- (5) A decision to provide guaranteed access to Trinity Wharves is needed urgently given the lead times associated with preparing and selling cruise ship itineraries.

Table 2 Cruise Demand Predictions (With and Without Infrastructure Improvement)

| Demand without improvement of infrastructure | 2016 | 2021 | 2026 |
|---|-------------|-------------|-------------|
| Mega | 32 | 34 | 32 |
| Mid –size | 27 | 34 | 39 |
| Boutique | 8 | 8 | 8 |
| Total ships | 67 | 76 | 79 |
| Demand with improved infrastructure | 2016 | 2021 | 2026 |
| Mega | 34 | 52 | 63 |
| Mid –size | 27 | 34 | 39 |
| Boutique | 8 | 8 | 8 |
| Total ships | 69 | 94 | 110 |

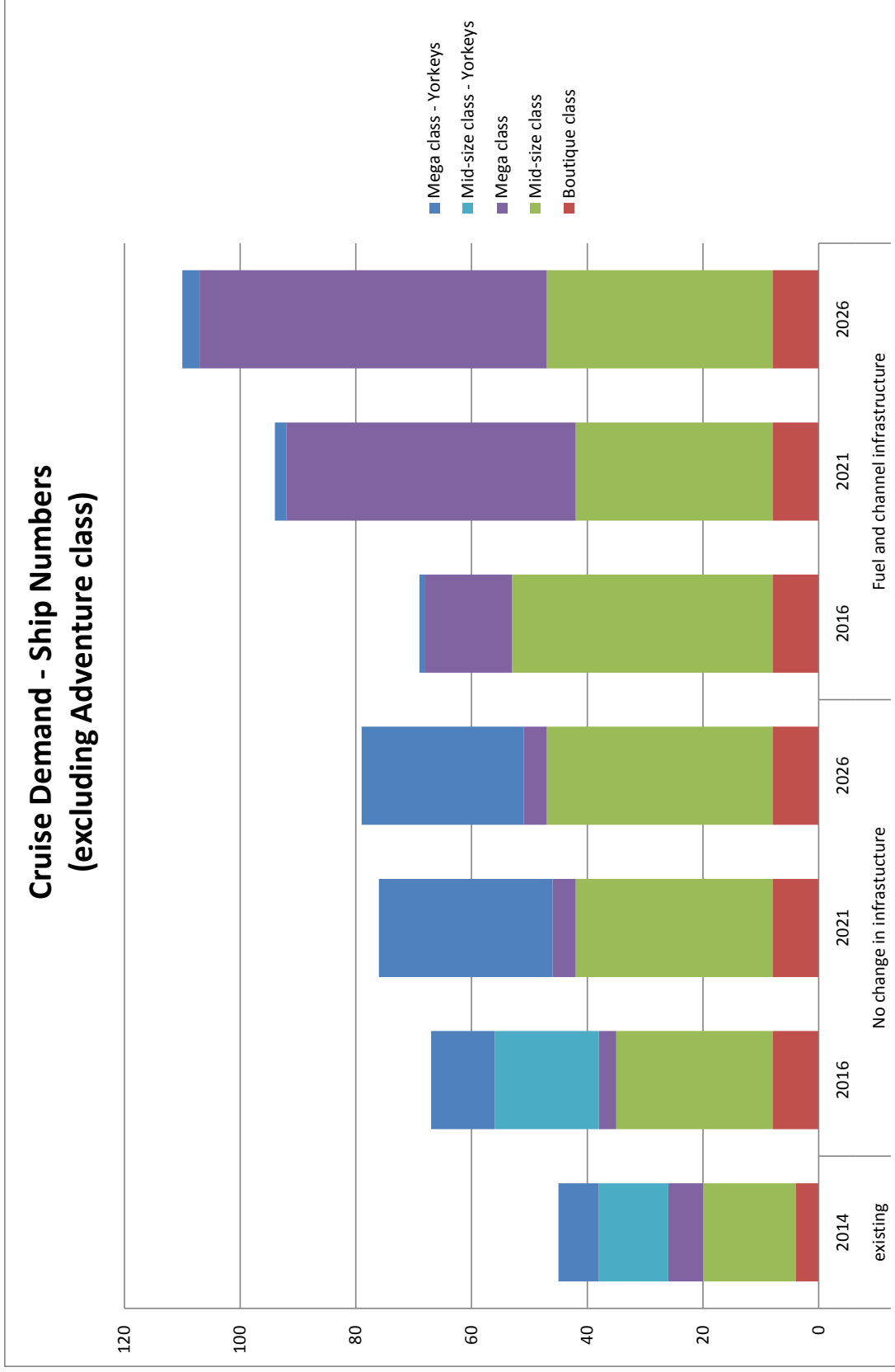


Figure 2 Cruise Demand Predictions (With and Without Infrastructure Improvement) – Ship Visits

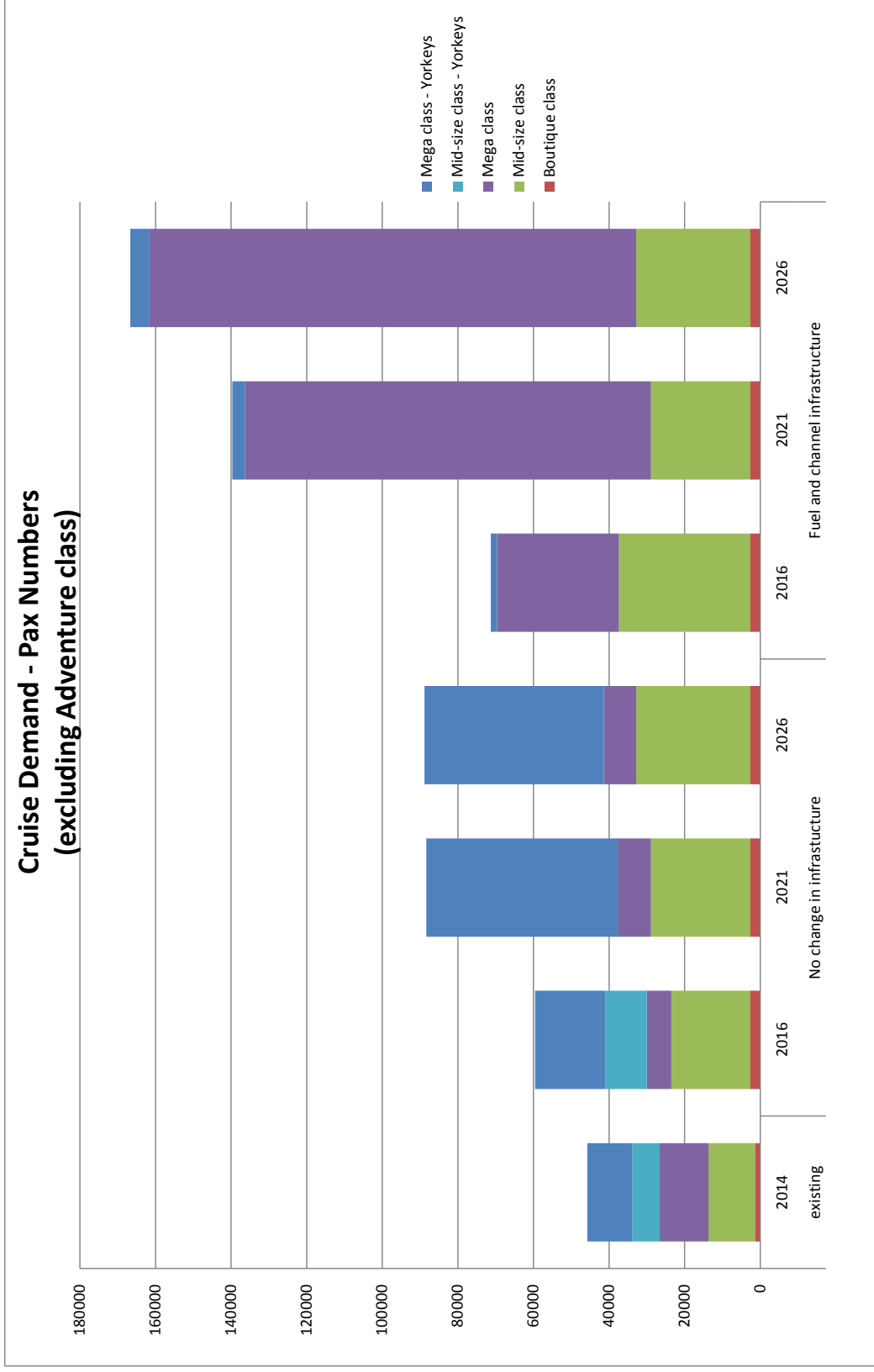


Figure 3 Cruise Demand Predictions (With and Without Infrastructure Improvement) – Passenger Numbers

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Introduction

1 Introduction

Ports North commissioned the preparation of a Demand Study (BMT WBM 2011) as part of its Cruise Shipping Development Strategy in 2011 to examine current and future demand for cruise shipping in Cairns. A key aspect of the Study was to assess the effect improved infrastructure at the Port (in the form of a wider shipping channel and provision of bunker fuel) could have to expand tourism cruise ship opportunities by allowing larger vessels to enter the port.

This Demand Study Update Report (2014) has been prepared to update the 2011 Study and will form an input to the Cairns Shipping Development Project Environmental Impact Statement (EIS) currently in preparation under relevant Federal and State legislation.

Accordingly, this report provides an updated overview and snapshot of the cruise ship industry, provides an updated demand analysis for cruise shipping in Cairns and summarises the outcomes of further consultation undertaken with cruise ship companies and other stakeholders in January 2014.

The report is set out as follows:

- Section 2: Provides an overview and snapshot of the cruise ship industry and operations at the Port of Cairns (Trinity Wharves) and Yorkeys Knob
- Section 3: Outlines methodology and findings of the updated demand analysis and identifies how improved infrastructure affects future demand
- Section 4: Provides a discussion of key trigger points and trends underpinning the demand forecasts, a summary of outcomes of additional consultation and conclusions
- Section 5: References

Appendix A contains a summary of the existing and potential Mega class cruise ships and companies that visit Cairns.

Appendix B contains a summary of consultation including groups and entities contacted.

2 Overview of Cruise Industry and Operations at Cairns

2.1 An overview of the cruise industry

In order to more fully understand Cairns' place in servicing the cruise industry, it is useful to provide some background knowledge of the cruise industry worldwide and in terms of the Asia Pacific Region, Australia and Queensland. Where practicable, information has been updated since discussion in the 2011 report.

Global

The global cruise industry is a \$60 + billion industry that employs over 100,000 seagoing staff, 20,000 on-shore staff, and carries 21.7 million passengers annually an increase of 4 million since the 2011 study (CLIA State of the Cruise Industry Findings 2014). The industry is primarily based on the Northern Hemisphere market where the bulk of the world's cruising populations reside.

The largest market is North America where the market penetration is around 3.1% of the population, followed by Australia with 3%, then the UK with some 2.5% of the population, followed by high population countries such as Germany and Spain. While Australia has the second highest penetration rate of 3% of the population and is also growing at a faster rate than all other nations, due its relatively low population size, the Australian market contributes a relatively minor proportion of the economic value of the global cruise ship industry. Consequently the bulk of the world's cruise ships operate in the Northern Hemisphere and traditionally only head for the southern hemisphere and Asia during the Northern Hemisphere winter. Nevertheless Australians are an important source market for several cruise lines.

National

In terms of market penetration 3% of Australians have cruised and while this is significant in world percentage terms, being the highest outside the USA it relates to a very small number of passengers globally, some 694,062 in 2012 an increase of 11% from 2011 which followed an increase of 34% in 2011, the highest of any other nation (International Cruise Council of Australia [ICCA] Cruise Industry Report, 2012).

At the Cruise3Sixty Conference held in Sydney in February 2014 it was stated that the number of Australian passengers has increased by 200% since 2002 and it was predicted that Australia would have a market penetration of 4.5% by 2020, the highest in the world, and 10% by 2030 (Cruising, Worldwide Cruising News and Pictorial Issue 87, February 2014).

Moreover in a media statement on 12 February 2014 the CEO of Carnival Australia stated the seven brands will have 21 ships cruising to and from Australia and New Zealand this year.

There are only three vessels permanently based in the region, two of which are in Sydney and two which base in Auckland, Brisbane, Fremantle and Melbourne at various times. These locally based vessels offer a total of 4,800 berths (or about 250,000 berths a year) to a predominantly Australian and New Zealand combined population (28 million). In addition to the locally based cruise ships, each year up to 40 international cruise ships, operated by 18-30 different companies, call at Australasian ports. This predominantly occurs between the months of November and April when it

Overview of Cruise Industry and Operations at Cairns

is too cold and rough to cruise in the northern hemisphere winter. These cruise ships carry a mix of international, Australian and New Zealand passengers and have become very popular.

Queensland is not considered by most international cruise companies to be a separate itinerary area. It is simply part of the Asia Pacific, South Pacific or Australasian region, depending on the Cruise Lines preferred name. Other than Coral Princess Cruises with their Cairns-based operation using small adventure ships operating 12 months a year, all other cruise companies including Carnival Australia and Royal Caribbean International which include Queensland and Cairns in their itineraries do so as part of a their regional itineraries although the basing of a P & O Australia ship in Brisbane has increased domestic cruising to the state. A second ship will be based there in 2015 thereby increasing cruising within Queensland.

Regional - Cairns

The Great Barrier Reef (GBR) is one of the three Australian icons for the cruise tourism industry. Cairns is strategically situated to provide access to the GBR particularly as Cairns has a range of varied natural attractions and tourism products that are supported by high quality, well managed and reliable operators.

Current use of the Port of Cairns by cruise ships is split between those vessels that can access the entrance channel and moor at Trinity Wharves and the larger ships that must anchor at Yorkeys Knob. Only Coral Princess Cruises uses an all Australian itinerary basing in Cairns and cruising the Great Barrier Reef.

For ships that can access them, the main shipping berths in the Port of Cairns lie on the western side of the Trinity Inlet adjacent to the city. A turning basin (the Crystal Basin) is located adjacent to the wharves which is 360 m in diameter at draughts of 7.0 m, and 380 m diameter at draughts of 6.3 m. The Crystal Basin is the principal swing basin used by cruise ships to access wharves 1–5.

Access between the sea and the port is via a 7.1 nautical mile long channel comprised of the 5.3 nm Entrance Channel and 1.8 nm Trinity Channel. The average width of the channel is 90 m and the channel has a design depth of 8.3 m below lowest astronomical tide (LAT). The depth of the channel is regularly monitored and dredged by Ports North as required. Maintenance dredging typically occurs annually, and over dredging is undertaken for insurance purposes in some areas of the channel.

Ships that cannot access the port will typically anchor approximately 2 km offshore from Yorkeys Knob and ferry their passengers ashore by tender. Passengers are ferried ashore either by the ships tenders or by catamarans from the Cairns reef fleet.

2.2 Cruise ship types and classes used in this report

2.2.1 Cruise ship classes

The notion of cruising can be most easily explained by reference to the definition of a Cruise Ship. The definition of a Cruise Ship in most common use, and which has been adopted for the purpose of this report is:

"A vessel undertaking scheduled, deep water cruises of two days or more with a passenger capacity of 100 or more."

Overview of Cruise Industry and Operations at Cairns

This definition is the same as that adopted for the Australian 'National Cruise Shipping Strategy 1995' and the majority of the world's cruise associations, e.g. Cruise Down Under, Cruise New Zealand, Cruise Europe, Cruise the Atlantic, and Medcruise.

Throughout this report, the cruise ships named have their length overall (LOA), draft (the depth of water required by the ship to stay afloat), and passenger capacity mentioned, not their gross tonnage (grt). These qualities are important as they affect the cruise ship's ability to access port infrastructure and determine the destination's ability to provide quality shore itineraries for the passengers.

There are various types of cruise ships which can range from 2-star through to 6-star ratings. The higher star rated cruise ships being more expensive and with, generally, a higher spend rate ashore at transit ports and before joining or after leaving the cruise at base ports. The vast majority of cruise ships that visit Cairns and other Australian ports are overseas owned.

In brief, the importance of the differences between each type of cruise ship is as follows:

Adventure Cruise and Expedition Cruise Ships: This ship class is the smallest, can access the most destinations, require least infrastructure, have the least passenger spend while cruising but can have the highest pre and post cruise expenditure. Return visits by passengers are higher. They are ideally suited to base porting in Queensland for all or part of the year. They can generally be distinguished from Boutique cruise ships (see below) as they carry zodiacs or other craft capable of landing passengers on beaches or exploring inland waterways

Of the current 28 adventure cruise ships operating in the world of which 15 are ice breakers or are ice strengthened only 4 visit Australia. Those Adventure/expedition ships that are either based in Cairns or have visited include:

- *Coral Princess 1* and 2, 46-50 passengers which operate from Cairns.
- *Oceanic Discoverer 72* passengers, owned by Coral Princess Cruises of Cairns which visits several times each year between cruises to the Kimberley, Papua New Guinea, Solomon Islands Vanuatu, New Caledonia and New Zealand.
- *Orion 1* 106 passengers operated by Sydney based Orion Expeditions which visit several times each year between cruises to the Kimberley, Papua New Guinea, Asia, East Coast of Australia, Tasmania and Antarctica. Currently *Orion 1* is the highest rated in the world, however its purchase by overseas owners could mean it being transferred to more lucrative cruising grounds outside Australia.

Boutique Cruise Ships: This ship class is often small although the newly built ships are getting larger, require top quality infrastructure and services, may have the highest passenger spend rate and high pre and post cruise expenditure. Return visits by passengers to shore destinations may also be higher. They have and do use Queensland base ports between cruise sectors however of the top ten operators of Boutique ships, only 4 visit Australia. Those Boutique ships which have visited Cairns include:

- The five Seabourn ships, part of the Carnival Group, which carry between 200 to 462 passengers, range in length from 134 to 198 metres, have drafts of 5-6 metres and which have visited Cairns most years for the past 19 years as part of their worldwide cruising itineraries;

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three of these have been sold from 2014 to 2015 to a company which has never cruised in Australia so it would seem these three ships may not continue to visit.

- The three ships of the Regent Seven Seas fleet which carry between 490 and 752 passengers, range in length from 171 to 217 metres, have drafts between 6.5-7 metres and which have visited Cairns most years for the past 9 years as part of their worldwide cruising itineraries. They are the largest of the Boutique cruise ships at present and are larger than some Mid-size ships which may have influenced the change in international classifications shown previously.
- The five ships of the Hapag Lloyd fleet which carry between 164 and 516 passengers, range in length from 112 to 225 metres, have drafts between 4.7-6.3 metres and which have visited Cairns most years for the past 16 years as part of their worldwide cruising itineraries carrying predominantly German passengers.
- The five ships of the Silversea Cruises fleet which carry between 296 and 576 passengers, range in length from 156 to 186 metres, have drafts between 5.3-6.4 metres and which have visited Cairns most years for the past 15 years as part of their worldwide cruising itineraries.

In addition to these there are several cruise companies with just one Boutique ship which visit Cairns from time to time but seldom every year, these include:

- *Deutschland* carrying 505 predominantly German passengers (LOA 175 metres, draft 5.8 metres). However, a recent change in management may mean that this ship will not cruise to Australia again
- *The World*, a ship owned by its residents which can carry between 376 and 976 passengers in their individual apartments. It has an LOA of 196 metres and draft of 6.7 metres and often spends several days in port.
- *Spirit of Adventure* carrying up to 420 passengers with an LOA of 139 metres and draft of 5 metres, this ship has been sold and seems unlikely to visit Australia again.

Two other companies operating sailing ships, Star Clipper Cruises and Windstar Cruises have yet to visit Cairns but both have expressed interest in the past, while a French company Compagnie du Ponant has established an office in Sydney to service Australia and its ship *L'Austral* has visited Cairns.

Mid-size Cruise Ships: This ship class requires adequate shore infrastructure and greater channel depths. These ships prefer to berth alongside a wharf and need adequate variety and capacity of shore tours for their passengers. Some are suited to use Queensland for base ports between cruise sectors. This class is probably the optimum and largest cruise ships suitable to be based in Queensland for year round cruising for the foreseeable future. Of the 53 [down from 76 in 2011] Mid-Size cruise ships, 28 visit Australia. Those companies which operate Mid-Size ships which have visited Cairns include:

- In the Carnival Group of companies are ships from Carnival Cruises with two mega ships from late 2014, Holland America Cruises which operates most years, P&O Australia based in Sydney and operating domestic, South Pacific and New Zealand cruises, (P&O UK has predominantly around the world cruises), and Princess Cruises which has based at least one ship in Australia

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for the cruise season and now use Mega cruise ships all but one of which cannot access Trinity Wharves.

- The Royal Caribbean International and Celebrity Cruises Group have based several ships in Australia for several years but from 2015 they will all be Mega cruise ships that are unable to access Trinity Wharves.
- There has been a trend in recent years for Mid-size cruise ships to be lengthened to provide more passenger accommodation and improve the cost effectiveness of the ship, at least six of the Mid-size ships which visit Cairns have been lengthened by between 20 and 40 metres with the result that some are approaching the length of Mega cruise ships. With only 5 Mid-size cruise ships built between 2012 and 2018 and those visiting Australia having an average age of 22 years the availability of these ships which are able to access Trinity Wharves will continue to decline.

Mega Cruise Ships: This class of ship will normally only use major population centres with adequate shore infrastructure, generally including a cruise terminal.

The definition of a mega cruise ship is generally applied as being 70,000 tonnes and larger, however in recent years the size and passenger carrying capacity has increased enormously. The first mega cruise ship, *Sovereign of the Seas* built in 1988 of 73,192 grt and carries up to 2,852 passengers whereas the largest mega ship today the *Allure of the Seas* built in 2011 of 225,282 grt and carries over 5,400 passengers. Three sister ships are on order for delivery before 2018 and the average capacity of all Mega cruise ships has risen to 3336 passengers.[lower berth]

High passenger numbers on these ships mean high expenditure for those passengers that disembark for shore-based tours or for general tourism and sightseeing at way port destinations. Ships from this class (including a large number of which are currently being built by ship companies) are typically too large to enter the Port of Cairns entrance channel and must anchor off Yorkeys Knob and tender passengers to shore. Examples of Mega cruise ships that have visited Cairns include:

- Several of the Carnival Group's fleet including Cunard's *Queen Elizabeth* and *Queen Victoria*, each over 90,000 grt, 294 metres LOA and carrying over 2000 passengers, *Queen Mary* of 150,000 grt, 345 metres LOA carrying over 2600 passengers, P&O UK's *Arcadia* of 83,000 grt, 285 metres LOA carrying over 2000 passengers, Princess Cruises *Diamond Princess* and *Sapphire Princess* each of 113,000 grt, 290 metres LOA carrying some 2700 passengers.
- Royal Caribbean International, the operators of the world's largest Mega ships has been calling at the Port of Cairns with the *Rhapsody of the Seas* of 78,000 grt, 279 metres LOA carrying over 2000 passengers while from 2015 *Radiance of the Seas* of 90,000 grt and 293 metres LOA carrying 2100 passengers and the *Voyager of the Seas* of 137,000 grt and 311 metres LOA carrying between 3100 and 3800 passengers will be their ships that will only be able to visit Yorkeys Knob.
- Other Mega ship visits include *Celebrity Solstice* of 122,000 grt and 317 metres LOA carrying 2850 passengers, and *Costa Deliziosa* of 92,000 grt and 293 metres LOA carrying over 2300 passengers.

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Brisbane is the only current port in Queensland which has any likelihood of becoming a possible base port for the Mega cruise ship class given its population base and airlift capacity. However, Mega class ships can also be of critical economic importance to Cairns as a transit port (or way port) along a regional or round the world cruise itinerary, particularly if such vessels could be accommodated at Trinity Wharves where the bulk of passengers (and crew) could easily disembark while the ship was in port.

2.2.2 Changes to cruise classes and fleets since the 2011 Demand Study

Descriptions of cruise ships classes have changed since the 2011 Demand Study as follows:

| 2011 Description | Number of passengers | 2014 Description | Number of passengers |
|---|----------------------|-------------------|----------------------|
| Mega Cruise Ship | 2000+ | Large Resort Ship | 1751 to 6500 |
| Mid –size ship | 500-1500 | Mid –size ship | 751-1750 |
| No definition, this capacity covered both Boutique and Mid-size ships | | Small ship | 251-750 |
| Boutique ship | 200-500 | Boutique ship | 50-250 |
| Adventure/Expedition Ships | Less than 100 | Adventure ships | Not defined |

Adventure/Expedition class ships (~100 passengers) have not been re-considered in the Demand Study Update on the basis that these ships are not affected by potential infrastructure upgrades envisioned by the Cairns Shipping Development Project (namely, provision of bunker fuel and channel improvements).

For the purpose of this update report we have continued to use the 2011 definitions (for Mega, Mid-size, Boutique) throughout to ensure compatibility with the 2011 report.

The following section summarises changes to the cruise fleets since the 2011 study:

- Carnival Group - including -
 - Carnival Cruises- the only Carnival ship seasonally based in Australia, *Carnival Spirit*, is a Mega cruise ship and cannot access Trinity Wharves, it is expected to visit Yorkeys Knob in 2015 and will be joined by a sister ship *Carnival Legend* in late 2014.
 - Costa Cruises- Carnival's Italian brand commenced visiting Australia with a mid-size ship in 2012 but its Mega cruise ship, *Costa Deliziosa* which cannot access Trinity Wharves is expected to visit Yorkeys Knob in 2015.

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- Cunard Cruise Line- its three Mega cruise ships which cannot access Trinity Wharves are expected to continue visiting Yorkeys Knob on their world cruises.
- Holland America Line- Holland America Line has recently announced an agreement for the transfer of two additional Mid-sized ships *Ryndam* and *Statendam* to their sister brand P&O Cruises in Australia, with delivery scheduled for November 2015. These Mid-sized ships will be able to access Trinity Wharves.
- P&O Australia- although Mid-size these Regal class ships cannot access Trinity Wharves so will continue to visit Yorkeys Knob, but as they are 23-25 years old they will probably be replaced by Mega cruise ships from the Carnival Group.
- P&O UK- annual visits are likely by one or more of three Mega cruise ships as part of their world cruises, only one ship *Oriana* can access Trinity Wharves.
- Princess Cruises- two to three of their Mega cruise ships are likely to visit Yorkeys Knob as part of their annual regional deployment.
- Seabourn Cruises - is selling three of its 5 Boutique ships and we may see a reduction in calls in Australia until it builds a new ship in 2016.
- Classic International Cruises - this Portuguese company which operated the *Athena* in Australian waters for several months each year went into liquidation - its ships were sold and no longer operate in Australia. Refer to Transocean below.
- Le Ponant - a French company operating Boutique and Expedition ships [total 5 ships] has commenced cruises in and from Australia and has the potential to use Cairns as a base port for some of its ships.
- MSC Cruises - a large cruise company operating mostly Mega Cruise ships will commence visiting Australia in 2015 with one visit to Yorkeys Knob expected.
- National Geographic Cruises - worldwide operator of expedition ships has acquired the Australian company Orion Expedition Cruises and will commence operations in Australia in 2014. It has the potential to use Cairns as a base port for some of its cruises, however there is a risk that under its new ownership that Orion could leave Australia for more profitable cruising regions.
- Oceania Cruises - [5 ships] has built two larger ships and has commenced using one of these ships for annual voyages to Australia, generally calling at Cairns.
- Orion Expeditions - this Australian company with one cruise ship has ceased operations and has been acquired by National Geographic Cruises [refer above].
- Royal Caribbean International Cruises- including:-
 - Azamara Cruises-operates two Mid-size ships and will commence cruising in Australia in 2014 with a potential to use Cairns as a base port for some of its cruises.
 - Celebrity Cruises-has increased its presence in Australia from two mega ships to three, the largest Celebrity Solstice having a capacity of 2850 passengers with an LOA of 317 metres

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so it can only use Yorkeys Knob. From 2015 its one ship *Celebrity Century* that can access Trinity Wharves will be replaced by a Mega cruise ship which cannot.

- Royal Caribbean will continue to operate three Mega cruise ships which will only be able to visit Yorkeys Knob, its one ship *Rhapsody of the Seas* that can access Trinity Wharves will be replaced by a larger Mega cruise ship in 2015. This company has advised of additional visits to Cairns including possible home basing if channel access to Trinity Wharves can accommodate its ships.
- Transocean Cruises-German company operating one Mid-size ship, *Astor*, has filled the gap left by Classical International Cruises and will operate in Australia from early 2014.

2.3 Key factors influencing the local cruise industry

2.3.1 Global influences

Although most easily explained by reference to each cruising region, the major external influences, which have affected and will continue to impact upon the development of cruise shipping in Australia and more specifically Queensland, are as follows:

- A massive and rapid growth in cruising worldwide, the current growth rate being around 9% annually. This growth is influenced by the number of shipboard berths and the increase in the number and capacity of cruise ships being built;
- The increase in cruise ship capacity will accelerate the number of vessels that are likely to transfer to cruising roles in peripheral regional markets. In the medium term, Australia can expect to see far more Mega cruise ships both in around the world and domestic cruises. Already in 2014 the Mega cruise ships in service [138] are close to exceeding the number of all other classes combined [146]. By 2018 with 31 new builds they will be in the majority. This has obvious implications for immediate infrastructure development;
- The aging world population, causing a rapid increase in overall passenger demand and international market size; influenced by the popularity of cruising with the "baby boomer" section of the population who are seeking more varied and adventurous destinations;
- Increased globalisation of the industry combined with seasonality necessitates the deployment of an increasing number of mega cruise ships to warmer climates during the Northern Hemisphere winter; and
- Increased consumer awareness of the Australasian cruising region together with an improving international that positions Australia as an attractive option as a destination for deploying ships to and as a cruising destination in its own right.

2.3.2 Regional influences

Northern Hemisphere

The cruise industry in both the North American and European markets is experiencing rapid growth. The American market provides an excellent example of where the growth is from. Over 12 million Americans cruise annually despite the fact the market penetration rate is only 3.1% (up from

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2.3% in 2003). Surveys by Cruise Lines International Association (CLIA) shows that 56% of its target audience (41 million people) were "interested" in a cruise vacation and 32% (13 million people) "definitely/probably will" take a cruise over the next five years.

In Europe, the number of Britons who took a cruise has tripled to 1.7 million in less than 10 years, an increase of 8% per year, representing a market penetration rate of 2.5%, thus closing the gap on America. Similarly 1.6 million Germans cruise each year followed by 860,000 Italians, 730,000 Canadians, 730,000 Brazilians, 600,000 Spaniards and 520,000 from France (CLIA Cruise Industry Report 2014). These growth rates have led both American and European companies basing some of their largest vessels in the Mediterranean for year round cruising, and in Northern Europe in summer rather than in the Caribbean, which is the most popular cruising region in the world.

In summary, the demand for cruising internationally is very healthy with a large number of vessels being built to satisfy the demand. Also, as the current northern popular destinations become too crowded, and passengers seek new destinations, there will inevitably be increased interest in destinations such as Australasia, South America, Asia, Africa and the Middle East.

Asia Pacific

There has been a lot of interest shown in cruising in Asia and the major players have, in addition to their around the world cruises, based mid-size and mega ships there with varying, but not consistent levels of success with the latest target market being the large potential market in China. Some 600,000 Asians cruise each year so the market penetration from such a heavily populated region is low.

Australia will benefit once this Asian market develops as the natural extension of Asian cruises is to Australasia and during the Northern Hemisphere winter it is likely the Asian based ships will move south to Australasia.

Initially there were only a handful of small operators with small cruise ships based and operating in the Asia Pacific plus larger vessels operating a small number of Asia Pacific sector voyages as part of a world cruise. These were also supplemented by the seasonal repositioning of some vessels.

The major player has been Star Cruises of Malaysia but for the past few seasons the Carnival Group has expanded into the region basing a Costa ship there. Royal Caribbean International has a ship based there and introduced a Mega cruise ship in 2011 which has moved to Australia for part of the season.

A rise in the domestic Chinese cruise market has been going on for a few years but for the foreseeable future will continue to cater to the high-end gambling business on cruises customized to the mainland Chinese culture.

Several international cruise lines based in the West have been making inroads in an attempt to capture a share of the huge, untapped market for Chinese cruise passengers. Most notably, Costa, Star Cruises and Royal Caribbean have vastly expanded the size of the ships largely catering to the Chinese. In 2013 Royal Caribbean introduced the 137,276 gross ton, 3,114 passenger *Voyager of the Seas* to China on a seasonal basis. It is understood that China is constructing its own 100,000 gross ton cruise ship by 2018 in a domestic Chinese shipyard that

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has never previously built a passenger vessel. However although China may have one of the largest source markets for cruise passengers by 2026 it is most unlikely that this will have any effect on Cairns. Traditionally Asians prefer short cruises of around 4 days within the Asian region destinations in Korea, Russia and Japan and Cairns is simply too far away to entice them to visit other than by air. Moreover most of the ships being used will be Mega cruise ships which cannot access Trinity Wharves (from Maritimematters.com).

During the Cruise Shipping Asia-Pacific Convention in late 2013 the first ever white paper providing a comprehensive analysis of cruising throughout Asia was presented, predicting a robust future but also challenges and constraints (Cruise Business Review 3/2013).

Closer to Australia, in Fiji, there are 2 operators (Blue Lagoon Cruises and Captain Cook Cruises) with 7 small vessels with a total of 420 berths. These vessels operate only within Fijian waters. Tahiti has also long had vessels based there. Currently Paul Gauguin Cruises (332 berths) is providing cruises in the waters of Polynesia, largely for North American passengers.

Australasia

In general terms, Australasia has yet to become recognised as a cruising region in its own right, however it is definitely a growth area. Currently it is included in both the Asia Pacific Region and the Around-the-World Cruising Sector by cruise statisticians.

Despite in the past few years of global economic recession between 2011 and 2014 there has still been high growth in the industry in Australasia. In 2011-2012 there was a 34% increase in Australian passenger numbers followed by 11% in 2012-2013 which were both the highest in the world. The Australian participation rate grew from 2.7% in 2011 to 3.0% in 2012 making it the second highest in the world behind the USA [3,1%] (International Cruise Council of Australia 2012). In terms of visits to Australia the number of passenger days rose 24% over the previous year to 1,814, of which Queensland accounted for 456 (25%). Passenger expenditure in Australia rose 29.6% to \$574.1 million while total expenditure by the cruise industry rose 23.2% (AEC/CDU 2012-2013 Economic Impact Report).

For itinerary planning purposes, most cruise companies regard Australia itself as being part of the greater South Pacific area - essentially for itineraries which range from Tahiti or Hawaii in the east through to Bali and Singapore in the west. Even the major companies based in the region such as the Carnival Group's P&O Australia and Royal Caribbean International tend to have cruise itineraries that cover much of the total region. Those cruise lines that base ships in Australia and New Zealand during the Northern Hemisphere cruising season have itineraries which cruise the South Pacific, New Caledonia, New Zealand as well as Around Australia cruises. Advice from the cruise lines is that the Australia-New Zealand itineraries have reached saturation point.

In terms of market penetration only 3% [up from 2.1% in 2011] of Australians have cruised and while this is significant in world percentage terms it relates to a very small number of passengers globally, some 694,000 [up from 466,000 in 2010] of which 66% undertake local cruises to the South Pacific, New Zealand and around Australia. A sizeable proportion (16%) cruise overseas plus up to 6% who take river cruises in Europe and Asia (ICCA, 2010).

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There are only three vessels permanently based in the region, two of which are in Sydney and two which base in Auckland, Brisbane and Fremantle at various times. These locally based vessels offer a total of 4,800 berths (or about 250,000 berths a year) to a predominantly Australian and New Zealand combined population (28 million). In addition to the locally based cruise ships, each year up to 40 international cruise ships, operated by 18-30 different companies, call at Australasian ports. This predominantly occurs between the months of November and April when it is too cold and rough to cruise in the northern hemisphere winter. These cruise ships carry a mix of international, Australian and New Zealand passengers and have become very popular.

Other than Coral Princess Cruises with their Cairns-based operation operating 12 months a year, all other cruise companies including Carnival Australia and Royal Caribbean International include Queensland and Cairns in their itineraries and do so as part of a their regional itineraries although the basing of a Carnival Australia ship in Brisbane has increased domestic cruising to the state.

2.4 Previous and current usage at Cairns

2.4.1 Previous usage

For almost two decades Cairns enjoyed more cruise ship visits than any other port in Australasia but in recent years that share, along with other Queensland ports, has fallen considerably for three main reasons:

- The withdrawal in 2008 of Captain Cook Cruises from Cairns where it had provided two sailings each week to the GBR for some 16 years initially aboard *Reef Escape* and then the *Reef Endeavour*.
- The decline in the number of Adventure Cruise/Expedition class cruise vessels visiting the GBR to the extent there are very few visits today. Carrying around 100+ passengers several previously used Cairns as a base. Their decline is for a number of reasons including, change of ownership, the perception that the GBR was becoming a mainstream destination, the complex cabotage rules and other somewhat complicated and costly procedures administered by various regulatory agencies which simply made Australia too complicated and costly to visit. Separately none of these ships have been built since 2010 and the supply of ex-research and similar vessels suitable for conversion has declined therefore Adventure Cruise/Expedition ships are in short supply and target more lucrative markets such as Antarctica and the Arctic.
- The growth in size of cruise ships whereby the Mega size cruise ships are fast becoming the Mid-size ships of yesteryear and Cairns with its channel limitations is simply unable to accept them into the port and so they have to anchor off and tender their passengers ashore at Yorkeys Knob which is less reliable, less attractive and more stressful for passengers and particularly the crew.

Table 2-1 shows the recent history of new ships entering service which clearly indicates the majority will be unable to access Trinity Wharves. A key point here is that over 80% of the new ships built since 2009 would be unable to access Trinity Wharves. Consultation indicated that future ships will be even larger with 18% of new builds [7 ships] being 339m and over.

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Table 2-1 Cruise Ships Being Built

| Year | Ships built | Able to access Trinity Wharves [under 240m LOA] | Unable to access Trinity Wharves [over 240m LOA] |
|--------------|-------------|--|--|
| 2009 | 13 | 2 | 11 or 85% of those built |
| 2010 | 14 | 4 | 10 or 71% of those built |
| 2011 | 7 | 1 | 6 or 86% of those built |
| 2012 to 2018 | 38 | 7 | 31 or 82% of those built or on order |
| Total | 72 | 14 [however several are for specialist markets and will not visit Australia] | 58 or 81% of those built or on order |

2.4.2 Current usage

Current use of the Port of Cairns by cruise ships is split between those vessels that can access the channel and moor at Trinity Wharves and the larger ships that must anchor at Yorkeys Knob. An overview of cruise ship statistics that call at the port is provided in Appendix A.

Figure 2-1 shows cruise ship visits by Boutique, Mid-size and Mega cruise ships since 1995. The graph excludes Adventure Class ships which home port at Cairns.

2013 saw an atypical reduction in ship visits to Cairns mainly related to a reduction in the number of Mid-size ships using Trinity Wharves, however the cruise ship bookings for 2014 reverse the losses of 2013.

Overall, from observation of ship numbers from 2007-2014, the following conclusions can be made:

- There has been an overall increase of 17 ship visits equating to an annual increase of around 6%;
- The general trends clearly show a decrease in ship visits at Trinity Wharves and an increase in ship visits at Yorkeys Knob corresponding to the general increase in ship sizes.

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Figure 2-1 Ship Visits 1995 – 2014 (Source: Ports North unpublished data)

AECgroup in its 2012-2013 annual industry Economic Impact Report for Cruise Down Under recorded Cairns/Yorkeys Knob as having the following statistics with respect to cruise shipping:

| Year | 2011-2012 | 2012-2013 |
|------------------------------|-----------|-----------|
| Visit days | 47 | 43 |
| Passenger days at port | 48,188 | 44,149 |
| Crew days at port | 12,963 | 12,751 |
| Passenger spend [millions] | 9.6 | 8.9 |
| Crew spend [millions] | 0.9 | 0.86 |
| Operational spend [millions] | 2.2 | 1.79 |
| Corporate spend [millions] | 0 | .04 |
| Total spend | 12.7 | 11.6 |

The reduction in expenditure can be partly attributed to the fact that for ships anchored off Yorkeys Knob the spending opportunities for passengers are reduced as many consider the time and expense of travelling to the Cairns CBD are excessive, the crew are not allowed ashore as it is not a proclaimed port hence they cannot spend and port authority charges are reduced considerably.

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Trinity Wharves

In a typical year, based on a review of bookings since 2010, some 20-25 different ships operated by 14-16 different companies will make 27-31 visits to Cairns' Trinity Wharves. However, these numbers are reducing which can be attributed to the increasing numbers of Mega cruise ships replacing Mid-size ships that must use Yorkeys Knob due to channel limitations.

Based on consultation undertaken as part of the 2011 study, cruise lines indicated their preference for Trinity Wharves as follows:

"The main attraction is that Cairns provides us with an alongside berth rather than an anchorage as might be found at Yorkeys Knob and Port Douglas. Furthermore, when compared to other Australian ports such as Brisbane, the central location of the berth is very popular with our guests." - from a UK company with 4 ships 2 of which make around the world cruises and visit Cairns most years.

"Proximity to the main part of city from terminal/docking location. Good flight connections and proximity of airport to pier. The service of providing local band Barbary Coast (I believe that is their name) and the local tropical fruit tasting, welcoming passengers back to the ship from their day ashore, it is a great service that is appreciated by both pax and crew." – from a US company with 5 ships one of which visits Cairns most years.

Similar comments were received in the 2014 consultation process.

Yorkeys Knob

In the same period of time since 2010, some 4-10 different ships operated by 2-9 different companies will make 9-23 visits to Yorkeys Knob where they will typically anchor approximately 2 km offshore and ferry their passengers ashore by tender. Passengers are ferried ashore either by the ships tenders or by catamarans from the Cairns reef fleet.

The cruise ships that use Yorkeys Knob are unable to berth at Trinity Wharves due to either the manoeuvrability characteristics of the ship or the ship's size which limits the ability to use the channel.

Those companies whose ships have to anchor off Yorkeys would unanimously prefer to use Trinity Wharves and during the consultation process in both 2011 and 2014 gave the following reasons:

- When operating domestic cruises the crew can only go ashore from proclaimed ports such as Cairns so they are denied any time ashore for the duration of the cruise as every destination e.g. Whitsundays, Port Douglas, Cooktown, Yorkeys are non-proclaimed hence the only opportunity is at the base port e.g. Brisbane or Sydney where due to passenger turnaround the crew are too busy to be given shore leave. Morale suffers and the crew are unable to give passengers first hand positive impressions of the destination (i.e. Cairns);
- Given the prevailing winds and sea conditions the tender transfer can be difficult and lengthy and at time too dangerous to operate;
- The time available for shore excursions is reduced and sometimes tours are delayed or missed;

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- There is no opportunity for maintenance as the ship remains fully operational for the duration of the cruise; and
- The opportunity for an overnight stay is denied which reduces the economic benefit to Cairns tourism operators, retailers and other businesses.

The passenger carrying capacity of these Mega cruise ships is also a significant factor to whether the passenger capacity makes the use of Yorkeys Knob viable in the next 10-15 years.

There are currently 21 Mega cruise ships which visit Cairns and have to anchor off Yorkeys Knob as they are too large to navigate the current channel to Trinity Wharf and hence the centre of Cairns. The average passenger capacity [lower berth] of these ships is 2091 passengers, however in peak periods such as school holidays this average could rise as high as 2300 if upper berths are utilised. The average age of these ships is 13 years.

The largest ships currently in Australia are *Voyager of the Seas* with 3114 lower berths and 3838 maximum berths and *Celebrity Solstice* with 2852 lower berths and 3145 maximum berths. These ships are 15 and 8 years old respectively.

The 31 Mega cruise ships built or being built between 2011 and 2018 have an average passenger capacity [lower berth] of 3336 and a maximum capacity of over 3700 berths. Some of these ships will inevitably replace some of the older, and in time all of the Mega cruise ships currently visiting Yorkeys Knob and these passenger capacities will be too large to enable transfer of passengers by tender, hence it is very likely that these future Mega ships will not visit Cairns unless the channel access is improved.

The class of ships replacing the 15 year old *Voyager of the Seas* carry 4180 lower berth passengers and a maximum of 4905, while earlier ships of the company carry between 5408 [lower berth] and 6360 maximum.

Five years ago it was not predicted Australia would ever see ships the size of *Voyager of the Seas* and now that it is a reality, the next generation ships will inevitably visit Australia.

Consequently if Cairns is to halt this decline and attempt to regain its previous status, it has to address and overcome its limitations namely to identify and address the channel limitations that will enable large ships to visit the city and wherever possible stop overnight.

In this context, Cairns remains a strategic, popular and attractive destination for cruise companies; however currently more and more of them are unable to access it.

3 Demand Analysis

3.1 Background

This section updates the analysis of demand for cruise shipping at the Port of Cairns based on the approach, methodology and findings as outlined in the 2011 demand study (BMT WBM 2011). The demand analysis has been developed based on the different classes of ships identified in section 2 of this report that may use Cairns as a home port or as a transit port as part of longer itineraries.

The analysis draws from desktop studies on cruise ship demand for Queensland (DEEDI 2010), Australia wide (AECgroup) and associated economic analyses for the Australian cruise sector (Access Economics 2009) as well as new analysis undertaken as part of the current study based on the historical, current and likely future ship visits to Cairns.

3.2 Methodology

A comprehensive report entitled, 'Queensland Mega and Adventure/Expedition Cruise Ship Market Demand Study 2025 DEEDI' (hereafter referred to as DEEDI) was carried out for the Queensland Government in late 2010. This report which formed part of the reference documents provided by Ports North for the 2011 study, was referred to in depth by the authors and its predicted growth rates were considered and in some cases adopted.

Whereas the DEEDI report was a whole of Queensland report, the authors of the 2011 and 2014 reports concentrated solely on the demand predictions for Cairns. As such, instead of using overall state-wide percentage (%) increases and relying upon the AEC data that is compiled each year for the whole of Australia and for each state, the 2011 and 2014 studies analysed the visits by every cruise company and ship which has visited or is likely to visit Cairns, and then made demand predictions for each ship taking into consideration the market drivers the type and size of ship, its owners, the ship's passenger nationalities and voyage patterns.

For instance while percentage increases might indicate that a particular cruise line may have sufficient passengers to increase the number of visits to Cairns, if that company has a limited number of ships and is committed to a certain type of cruising, e.g. around the world, then it may choose to maintain its committed schedules and forego the additional demand for Cairns. In addition companies known to be interested in Cairns (based on research and/or consultation) were included in the predictions.

The study period adopted for the analysis was discussed and agreed with Ports North as being 2016, 2021 and 2026. These timeframes take into account that forward itinerary planning by cruise lines coupled with the likely time to announce or make any changes to the infrastructure in Cairns would most likely not affect cruise visitation until 2015 at the earliest.

In order to correlate and validate the specific Cairns demand analysis against previous growth rates for Queensland and the Far North Queensland Region quoted in DEEDI and other cruise economic reports and taking into account the uncertainty inherent in the analysis, a low, medium and high projection of demand has been estimated where the following applies:

Demand Analysis

| Ship Type | Boutique | Mid-size | Mega |
|----------------------------|----------|----------|------|
| Low growth projection % | 2 | 4 | 4 |
| Medium growth projection % | 5 | 6 | 10 |
| High growth projection % | 8 | 8 | 17 |

In the above, the 17% high growth rate projected for Mega ships reflects the growth rate published by Cruise Down Under (AEC /CDU 2012-2013 Economic Impact Report), noting the actual annual growth rate of Mega ships is quoted as being up to 20% per year for the past five years by the major cruise ship companies. The low and medium growth rates for Mega class and growth projections adopted for other classes of cruise ships mirror similar growth rates adopted in the 2011 study.

3.3 Demand Predictions (Summary)

Based upon the detailed analysis of each class of cruise ship, taking into account the individual owners and ships, a comparison of predicted demand has been made for 2016, 2021 and 2026

As the predictions have been made based on individual company and ship cruise patterns at the Port of Cairns (as opposed to applying a generic growth rate to current ship visits) they are considered both conservative and achievable.

Table 3-2 reflects predicted cruise ship visits with and without infrastructure improvement using the medium growth projection from Table 3-1. The improved infrastructure predictions assume that channel improvements and provision of bunker fuel are available at the port by 2016.

Figure 3-1 shows a graphical representation of Table 3-2 in terms of ship numbers. In particular, this graph separates and shows those cruise ships that would continue to have to use Yorkeys Knob (the older less manoeuvrable Mid-size ships and Mega ships) without channel improvement versus the improved infrastructure scenario where all but one Mega cruise ship (the *Queen Mary*) projected to visit Cairns over the selected planning period would be able to access Trinity Wharves.

Figure 3-2 shows estimated passenger (pax) numbers associated with the predicted ship visits shown in Figure 3-1 (again showing the effect of infrastructure improvement on overall pax numbers).

Key findings from these graphs and tables are as follows:

- Demand for Mega class cruise ships in Cairns can likely be maintained for a period of time without infrastructure improvement (32 ship visits maintained at Yorkeys in 2026) but in the longer term as the current cruise ship fleet is replaced with larger vessels, it is expected that Mega cruise ship visits (carrying 2000 or more passengers each) will reduce due the time and difficulty involved in tendering passengers ashore from Yorkeys Knob.
- Alternatively, the provision of bunker fuel and channel improvements to allow more cruise ships to call at Trinity Wharves can increase the demand considerably in terms of the total number of

Demand Analysis

ships visits by 2026 (79 to 110), and almost doubling the total number of Mega ship visits by 2026 (32 to 63) based on a conservative (medium) growth projection. Adopting the high growth projection, this could escalate to up to 90 Mega class cruise ship visits and 173 total cruise ship visits by 2026.

- The total number of additional Mega class cruise ship visits at Cairns as a result of the infrastructure improvements is predicted to be between 31 ships (based on the medium growth projection [63-32]) and 58 ships (based on the high growth projection[90-32]) by 2026. The difference could be even more significant if Mega ship visits are lost to Cairns due to ongoing issues with the use of Yorkeys Knob under the no infrastructure improvement case.
- Demand for Mid-size cruise ships will increase similarly over the period 2016 to 2026 (27 to 39 ships using the medium growth projection) both with or without infrastructure improvement as this class of ships are not dependant on channel improvement. However there may be improvement in demand as a result of bunker fuel provision which is reflected in the high growth projection (59 ships by 2026).
- Likewise, Boutique class cruise ships visits could increase from 8 to 24 ship visits by 2026 with the provision of bunker fuel under the high growth projection but is expected to remain steady under the medium growth projection (8 ships in 2016 maintained in 2026).
- Since the original demand study was completed, expected calls for Boutique and smaller Mid-sized ships and the benefits of bunker fuel provision at the port are not perceived to be as strong as was predicted back in 2011. However, this further underpins the industry push in the region toward larger ships and the importance of catering for Mega ships at Trinity Wharves.
- As shown in Figure 3-2, predicted passenger numbers between the 'no change to infrastructure' and 'improved infrastructure' scenarios are similar at 2016 (~60,000 pax under the 'no change' scenario versus ~70,000 pax with the provision of 'fuel and channel infrastructure') but diverge considerably for the 2021 and 2026 scenarios. Whereas passenger numbers will level off to about 88,000 pax in 2021 under the 'no change' scenario, growth is expected to result in 140,000 pax in 2021 and over 160,000 pax in 2026 for the 'improved infrastructure' scenario. This reflects the higher number of Mega cruise ships that will be able to come to the port as a result of the improved channel width.
- The significant economic benefits of the increased passenger numbers with improved infrastructure will be that the bulk of these passengers (as well as crew which are not included in these figures) will be able to efficiently disembark at Trinity Wharves and into Cairns city centre during both day visits and overnight visits as opposed to the day-time only tendering operations at Yorkeys Knob where cruise ships do not stay overnight.

The prospect of improved infrastructure to attract cruise vessels to the Port of Cairns was reinforced strongly during consultation with key cruise industry representatives both in 2011 and again as part of the consultation undertaken as part of the current 2014 update study (see Section 4).

Demand Analysis

In particular, their comments supported the findings that growth will be marginal without infrastructure investment and that the provision of bunker fuel and channel dredging (for Mega class ships) would make the port much more attractive to future operations.

Table 3-1 Comparison of All Classes – Low, Medium and High Growth Projections

*** The below table assumes bunker fuel and channel upgrades are implemented in 2016*

| Ship Type | 2016 | | | 2021 | | | 2026 | | |
|------------------|------|--------|------|------|--------|------|------|--------|------|
| | Low | Medium | High | Low | Medium | High | Low | Medium | High |
| Mega | 32 | 34 | 39 | 34 | 52 | 62 | 32 | 63 | 90 |
| Mid Size | 26 | 27 | 39 | 28 | 34 | 43 | 30 | 39 | 59 |
| Boutique | 8 | 8 | 8 | 8 | 8 | 16 | 8 | 8 | 24 |
| Total, all Ships | 66 | 69 | 92 | 70 | 94 | 121 | 70 | 110 | 173 |

Table 3-2 Cruise Demand Predictions (Without and With Infrastructure Improvement)

| Demand without improvement of infrastructure | 2016 | 2021 | 2026 |
|--|------|------|------|
| Mega | 32 | 34 | 32 |
| Mid –size | 27 | 34 | 39 |
| Boutique | 8 | 8 | 8 |
| Total ships | 67 | 76 | 79 |
| Demand with improved infrastructure | 2016 | 2021 | 2026 |
| Mega | 34 | 52 | 63 |
| Mid –size | 27 | 34 | 39 |
| Boutique | 8 | 8 | 8 |
| Total ships | 69 | 94 | 110 |

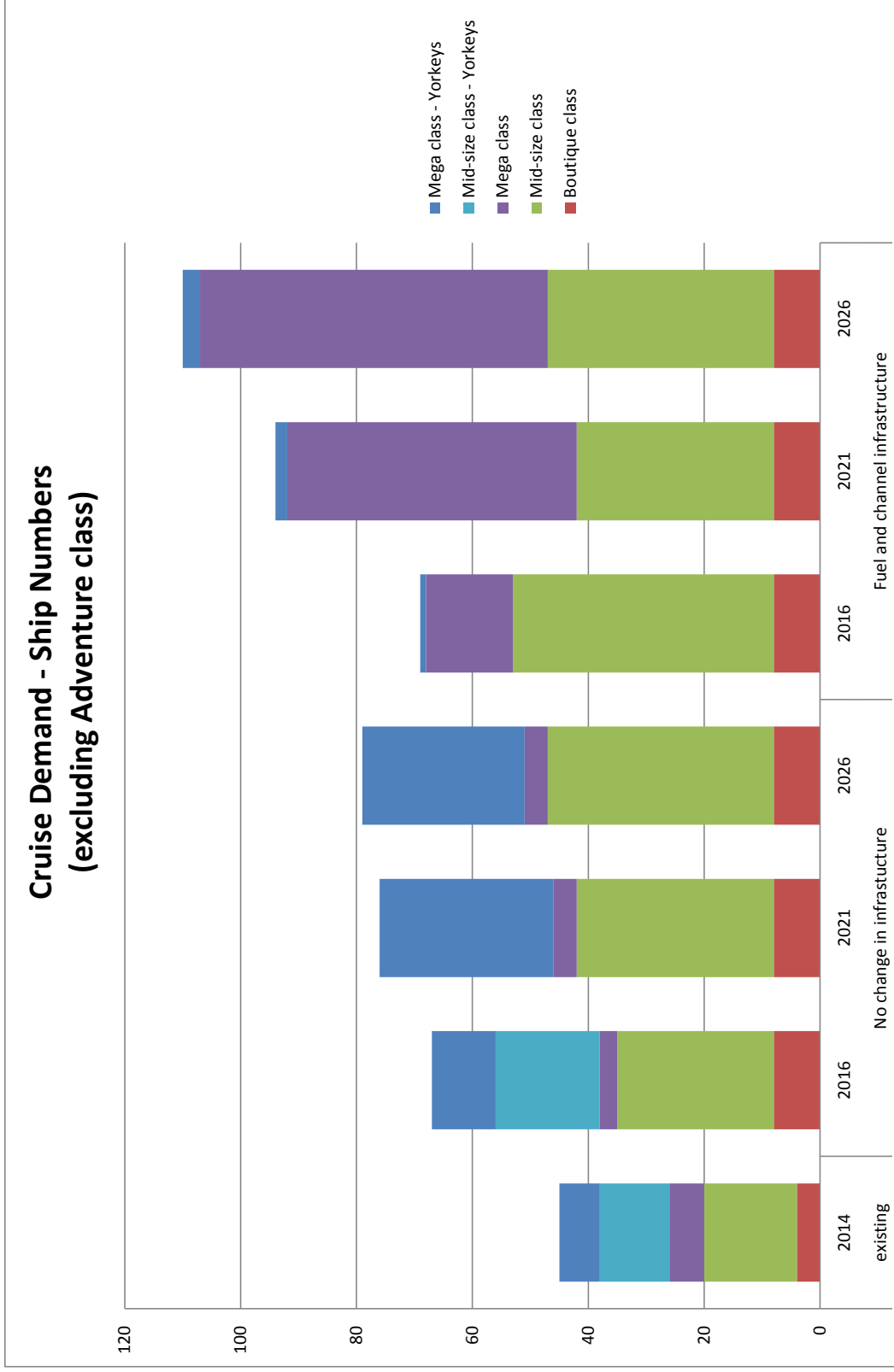


Figure 3-1 Cruise Demand Predictions (With and Without Infrastructure Improvement) – Ship Visits

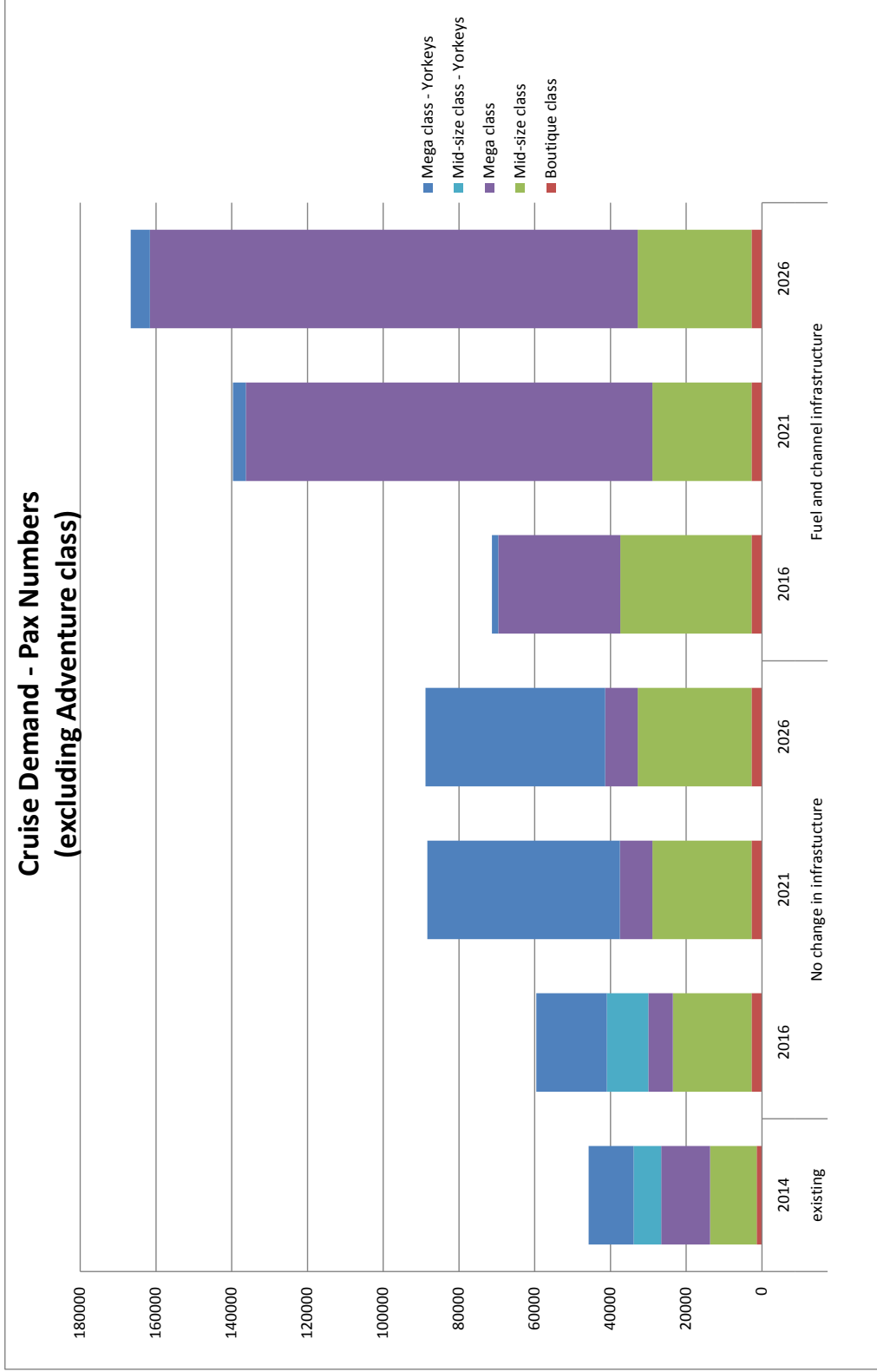


Figure 3-2 Cruise Demand Predictions (With and Without Infrastructure Improvement) – Passenger Numbers

4 Discussion, Additional Consultation and Conclusions

4.1 Trigger points that could affect future growth and demand

While the demand projections presented in Section 3 have been developed with the best available information, cruising is an international industry and the deployment of ships is affected by a range of factors including but not limited to seasons, weather, population, international sporting and social events, prevailing fashions and trends, politics, the economy and of course most of all the availability of people willing to spend their money on cruising as opposed to other pursuits.

Within the time period of this study (2016-2026) some of factors that could affect demand positively for all cruise ship classes are as follows:

- Cairns is an established cruise destination, well located geographically with good, reliable tourism services and therefore should remain in the forefront when considering cruises to Australia.
- Due to the economic difficulties in America and Europe passenger demand may diminish thus making Australia more attractive for cruising as it has the potential as a source for passengers.
- Increased instability in North Africa and the Middle East could lead to greater ship deployment to the Asia Pacific region.
- Planned improvements to the Panama Canal will make it easier for ships to transit from the Caribbean to the Pacific.
- The value of the Australian dollar has dropped 12 cents against the US dollar since 2011. This will make it cheaper for cruise lines to visit and even base their ships in Australia. It could also lead to more Australian passengers cruising on ships in Australia as the cost of travelling overseas has increased considerably.
- As the popular cruises to New Zealand reach saturation point this may assist in attracting ships to Cairns.
- As the Asian cruise market grows and the number of mega ships based there increases then Australia should see more of them positioning here in the Northern Hemisphere winter.
- If suitable attractive itineraries are developed with Cairns as a base port there will be an opportunity to attract a company to trial base porting in Cairns.
- If innovative ways are developed to include the cost of travel to and from Cairns in the cruise fare this would enhance the possibility of base porting.

Alternatively, factors that could affect demand negatively for all cruise ship classes include:

- If the Australian dollar returns to parity with the USD, cruise companies may seek to entice Australian passengers to cruise on ships based elsewhere in the world.
- If the American and European economies recover and cruise bookings there increase there will be less incentive to send or base cruise ships in Australia.

Discussion, Additional Consultation and Conclusions

- If the American economy does not improve and the current 40% of Americans who make up the worldwide passengers drops, as Australia is an expensive long haul destination passenger numbers could drop thus reducing the number of ships coming to Australia.
- As the trend to year round cruising in the Mediterranean, and more recently in Northern Europe becomes established and successful there will be less incentive to send cruise ships to Australia during the northern hemisphere winter.
- Cairns and the region within driving distance of the port does not have a sufficient population base to sustain base porting, particularly for a large ship. A rule of thumb used in the cruise industry states a port within 4 hours driving time of about 3 million people should be able to sustain an average size cruise ship.
- In the current cruise market the price for the cruise is all important and the cost of passengers travelling to or from Cairns makes base porting too expensive for them.

More specific issues that will or may affect cruise shipping at the Port of Cairns are as follows:

- Cruise companies view Australasia as a whole, not as a series of countries, states and ports and they have to design their itineraries as well as decide on the deployment of their ships based on the infrastructure available.
- As such, if Brisbane and Sydney are unable to cope with their own berthing requirements then there may be an opportunity to attract more of these ships to Cairns, particularly if they are able to berth at Trinity Wharves. It is predicted only 15% of all cruise ships will be able to berth west of the Sydney Harbour Bridge by 2020 and there is currently only one berth to the east.
- If Cairns becomes more attractive and convenient for Mega cruise ships the number of cruises from ships home ported in Sydney and Brisbane would increase thus increasing revenue for these ports. The bunkering opportunity would extend the ships' range, crew morale and hence passenger experience would improve as crews would be able to go ashore in Cairns and the ships would have the opportunity to visit alternative ports or anchorages thus improving their tourism economies. Separately the opportunity to home base Mega cruise ships in Cairns would not only benefit Cairns but the other destinations which could more easily be reached on new itineraries in the region.
- Currently Port Douglas has received between 19 and 31 visits per year where ships that have already called at Cairns or are proceeding to Cairns anchor off Port Douglas and tender passengers ashore, weather and sea conditions permitting. These visits are likely to continue in the future while ships continue to call at Cairns, however visitor numbers may increase where ships are able to overnight at Trinity Wharves enabling more passengers to visit Port Douglas and the Daintree by coach and for some include an overnight stay in Port Douglas before re-joining the ship. These overnight stays are popular with passengers.
- As the Asian cruise market grows and the number of mega ships based there increases then Australia should see more of these ships positioning here in the Northern Hemisphere winter.

Discussion, Additional Consultation and Conclusions

- Relevant to the above points about base porting and access to the Asian market was a recent newspaper article quoting Carnival Corporation Chief Executive Ann Sherry in *The Australian* dated 13 Jun 2014, which stated:

'In Cairns it was vital for the planned dredging of Trinity Inlet to go ahead so that the Queensland city could achieve its potential as a cruising hub for the region, including Papua New Guinea and Asia'.

4.2 Outcomes of additional consultation

As part of the demand update Mega, Mid-size and Boutique cruise companies were re-contacted to provide advice about the following matters:

- QUESTION 1- Assuming the channel infrastructure is improved and bunker fuel is made available, would you consider your ship calling more frequently and if so what number of annual calls would you envisage?
- QUESTION 2- What is the main attraction for you to use Cairns and what added attractions might induce you to call more often?
- QUESTION 3- Assuming viable itineraries are developed suitable for your ship and your passengers would you consider using Cairns as a base port for part or all of your cruise season?
- QUESTION 4- Do you have any suggestions or requirements that might be included in the recommendations to Ports North that would improve the infrastructure and/or operation of Cairns for your ships and passengers?
- QUESTION 5- Once your ships are able to berth in the heart of Cairns will you continue to anchor off Port Douglas or would you have your passengers visit it by coach from Cairns?

In addition a range of additional stakeholders were contacted for comment (but not all replying within the allotted time) including:

- Cruise Down Under;
- Local Shipping Agents;
- In-bound tourism Ground handlers;
- Tourism agencies (including Tourism Queensland); and
- Cairns Airport.

The major cruise companies which schedule the greatest number of visits also provided valuable input. Key outcomes and findings of this additional consultation are as follows:

- If Mega cruise ships are able to berth at Trinity Wharves then the number of visits will increase.
- If bunker fuel is available it will enable companies to consider Cairns as a base port.
- Similarly if bunker fuel is available ships will be induced to call which might otherwise bypass Cairns.

Discussion, Additional Consultation and Conclusions

- If sufficient air lift capacity is available then one major cruise company would consider home basing a Mega cruise ship in Cairns, to do so berthing alongside at Trinity Wharves would be essential. If one commenced home basing others would be bound to follow.
- Cairns remains an attractive, popular destination with passengers but the ships need to be able to berth at Trinity Wharves, tendering is not popular with passengers and Yorkeys Knob is not an attractive destination.

For further information refer Appendix B.

4.3 Conclusions

In conducting this Demand Update the following conclusions were reached:

1/ Cruise tourism is possibly the fastest growing sector of the tourism industry with Australia having the highest growth rate in the world.

2/ The future of cruise tourism lies with the Mega cruise ships which are being built at an increasing rate and by 2018 will exceed the number of all other cruise ships combined.

3/ If Cairns wishes to retain its position as a premier world cruise destination then it must embrace Mega cruise ships and provide them with access to either Trinity Wharves or alternative berths in close proximity to the city.

4/ If Cairns chooses not to provide access for Mega cruise ships then Cairns will inevitably decline in a very few years as a premier world cruise destination thereby causing serious consequences for tourism not only in Cairns but in Far North Queensland and inevitably Townsville, the Whitsundays and eventually Brisbane.

5/ A decision to provide guaranteed access to Trinity Wharves is needed urgently given the lead times associated with preparing and selling cruise ship itineraries.

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Appendix A Potential Cruise Mega Ships and Companies that Visit Cairns

NOTE The three significant limitations for ships visiting Trinity Wharf are 1/ Length of Ship [LOA], 2/Ship's draft and 3/Manoeuvrability
Those ships affected by these are highlighted in ORANGE
All the ships listed should be able to operate without changes to dredging, channel or infrastructure.
Current Queensland Transport policy is for ships over 240m LOA to undertake a simulator study to prove they are suitable.
Ships highlighted in GREEN are over 240mLOA but have berthed safely

| Company | Fleet size | Prev Visits | Aust office | Head Office | Ships | Pax cap | Crew | LOA | Beam | Draft | GRT | Year built | Type | Channel width req'd | | | |
|----------------------------|------------|-------------|-------------|-------------|---------------------------|---------|------|-----|------|-------|---------|------------|-----------|---------------------|------|------|-----------|
| Carnival Group | 106 | | | | | | | | | | | | | 100m | 130m | 140m | over 140m |
| Carnival Australia | 1 | Yes | Sydney | USA | Carnival Spirit | 2124 | 930 | 293 | 32 | 8 | 85,920 | 2001 | Mega | | 130m | | |
| Costa | 16 | | Sydney | Italy | Costa Deliziosa | 2260 | 1050 | 292 | 34 | 8 | 92,700 | 2010 | Mega | | 130m | | |
| | | Yes | | | Costa NeoRomantica | 1578 | 662 | 221 | 31 | 8 | 57,150 | 1993 | Mid-size | 100m | | | |
| Cunard | 3 | Yes | Sydney | UK | Queen Mary 2 | 2620 | 1254 | 345 | 45 | 10 | 150,000 | 2004 | Mega | | | | 140 |
| | | Yes | | | Queen Elizabeth | 2014 | 1001 | 294 | 32 | 8 | 90,400 | 2010 | Mega | | 130m | | |
| | | Yes | | | Queen Victoria | 2014 | 1001 | 294 | 32 | 8 | 90,049 | 2007 | Mega | | 130m | | |
| Holland America | 15 | Yes | Sydney | USA | Amsterdam | 1380 | 600 | 238 | 32 | 8 | 61,000 | 2000 | Mid-size | 100m | | | |
| | | Yes | | | Volendam | 1440 | 561 | 238 | 32 | 8 | 63,000 | 1999 | Mid-size | 100m | | | |
| P&O Australia | 3 | Yes | Sydney | Sydney | Pacific Dawn | 1590 | 696 | 247 | 32 | 8 | 69,845 | 1991 | Mid-size | | 130m | | |
| | | Yes | | | Pacific Jewel | 1590 | 677 | 245 | 32 | 8 | 69,845 | 1990 | Mid-size | | 130m | | |
| | | Yes | | | Pacific Pearl | 1624 | 514 | 247 | 32 | 8 | 63,524 | 1989 | Mid-size | | 130m | | |
| P & O UK | 8 | Yes | Sydney | UK | Arcadia | 2064 | 886 | 286 | 32 | 8 | 82,972 | 2005 | Mega | | 130m | | |
| | | Yes | | | Aurora | 1868 | 816 | 270 | 33 | 8 | 76,152 | 2000 | Mega | | 130m | | |
| | | Yes | | | Oriana | 1828 | 760 | 260 | 32 | 8 | 69,153 | 1995 | Mega | 100m | | | |
| Princess | 18 | Yes | Sydney | USA | Dawn Princess | 2100 | 900 | 261 | 32 | 8 | 77,499 | 1997 | Mega | | 130m | | |
| | | Yes | | | Diamond Princess | 2674 | 1238 | 290 | 38 | 8 | 113,000 | 2004 | Mega | | 130m | | |
| | | Yes | | | Ocean & Pacific Princess | 688 | 373 | 181 | 26 | 6 | 30,277 | 1999 | Mid-size | 100m | | | |
| | | Yes | | | Sea Princess | 2016 | 850 | 261 | 32 | 8 | 77,690 | 1998 | Mega | | 130m | | |
| | | Yes | | | Sun Princess | 1950 | 900 | 261 | 32 | 8 | 77,499 | 1995 | Mega | | 130m | | |
| Seabourn | 6 | Yes | Sydney | USA | Seabourn Odyssey | 450 | 330 | 198 | 26 | 7 | 31,500 | 2009 | Boutique | 100m | | | |
| | | Yes | | | Seabourn Quest | 450 | 330 | 198 | 26 | 7 | 32,000 | 2011 | Boutique | 100m | | | |
| RCCI Group | 40 | | | | | | | | | | | | | | | | |
| Azamara | 2 | Yes | Sydney | USA | Azamara Quest | 684 | 386 | 181 | 26 | 6 | 30,277 | 2000 | Mid-size | 100m | | | |
| Celebrity | 11 | Yes | Sydney | USA | Celebrity Century | 1750 | 858 | 246 | 32 | 8 | 70,606 | 1995 | Mega | 100m | | | |
| | | Yes | | | Celebrity Millennium | 1950 | 990 | 294 | 32 | 8 | 90,228 | 2000 | Mega | | 130m | | |
| | | Yes | | | Celebrity Solstice | 2852 | 1210 | 315 | 37 | 8 | 121,878 | 2008 | Mega | | 130m | | |
| RCCI | 22 | Yes | Sydney | USA | Radiance of the Seas | 2100 | 858 | 293 | 32 | 9 | 90,090 | 2001 | Mega | | 130m | | |
| | | Yes | | | Rhapsody of the Seas | 2000 | 765 | 279 | 32 | 8 | 78,491 | 1997 | Mega | 100m | | | |
| | | No | | | Voyager of the Seas | 3114 | 1176 | 311 | 49 | 9 | 137,280 | 1999 | Mega | | 130m | | |
| Star Group | 4 | No | Sydney | Malaysia | Superstar Gemini | 800 | 470 | 164 | 28 | 6 | 50,764 | 1992 | Mid-size | 100m | | | |
| | | Yes | | | Superstar Virgo | 1966 | 1300 | 268 | 32 | 8 | 75,338 | 1999 | Mega | 100m | | | |
| NCL | 13 | Yes | Sydney | USA | Norwegian Sky | 2002 | 800 | 260 | 32 | 8 | 77,104 | 1999 | Mega | 100m | | | |
| Prestige Group | 21 | | | | | | | | | | | | | | | | |
| Oceania | 5 | Yes | Sydney | USA | Insignia/ Nautica | 684 | 386 | 181 | 26 | 6 | 30,277 | 1998 | Mid-size | 100m | | | |
| | | Yes | | | Marina | 1250 | 800 | 239 | 32 | 8 | 66,084 | 2011 | Mid-size | 100m | | | |
| Seven Seas | 3 | Yes | | USA | Seven Seas Voyager | 708 | 445 | 204 | 29 | 7 | 41,500 | 2003 | Mid-size | 100m | | | |
| Others-alphabetical | | | | | | | | | | | | | | | | | |
| Coral Princess | 3 | Yes | Cairns | Cairns | Coral Princess | 50 | 12 | 35 | | | | | Mini | 100m | | | |
| | | Yes | | | Coral Princess 2 | 46 | 12 | 35 | | | | | Mini | 100m | | | |
| | | Yes | | | Oceanic Discoverer | 72 | 20 | 63 | | | 1,779 | | Adventure | 100m | | | |
| Cruise & Maritime | 2 | Yes | | UK | Discovery | 710 | 350 | 169 | 25 | 8 | 21,186 | 1972 | Mid-size | 100m | | | |
| Crystal | 2 | Yes | | USA | Crystal Serenity | 1100 | 650 | 250 | 34 | 8 | 68,870 | 2003 | Mid-size | 100m | | | |
| | | Yes | | | Crystal Symphony | 960 | 545 | 237 | 30 | 8 | 51,044 | 1995 | Mid-size | 100m | | | |
| Fred Olsen | 4 | Yes | | UK | Black Watch | 761 | 310 | 205 | 25 | 8 | 28,668 | 1972 | Mid-size | 100m | | | |
| Hapag Lloyd | 4 | Yes | | Germany | C Columbus | 410 | 170 | 144 | 21 | 6 | 15,067 | | Mid-size | 100m | | | |
| | | Yes | | | Europa | 408 | 264 | 199 | 24 | 6 | 28,437 | 1999 | Mid-size | 100m | | | |
| Lindblad Expeditions | 5 | Yes | Sydney | USA | National Geo Orion | 90 | 49 | 91 | 18 | 6 | 4,575 | 2003 | Adventure | 100m | | | |
| MSC | 12 | | 2015 Sydney | Italy | MSC Orchestra | 2550 | 987 | 294 | 32 | 8 | 92,409 | 2007 | Mega | | 130m | | |
| Noble Caledonia | 2 | Yes | | USA | Caledonian Sky | 114 | 74 | 91 | 15 | 4 | 4,200 | 1991 | Adventure | 100m | | | |
| NYK | 1 | Yes | | Japan | Asuka 2 | 800 | 470 | 241 | 30 | 8 | 50,142 | 1990 | Mid-size | 100m | | | |
| Paul Gauguin | 2 | Yes | | France | Paul Gauguin | 332 | 215 | 156 | 22 | 5 | 19,200 | 1998 | Mid-size | 100m | | | |
| Peter Deilman | 1 | Yes | | Germany | Deutschland | 552 | 270 | 175 | 23 | 6 | 22,400 | 1998 | Mid-size | 100m | | | |
| Phoenix Seiresen | 3 | Yes | | Germany | Albatros | 862 | 340 | 206 | 25 | 8 | 28,078 | 1973 | Mid-size | 100m | | | |
| | | Yes | | | Amadea | 594 | 292 | 193 | 25 | 7 | 28,856 | 1991 | Mid-size | 100m | | | |
| | | Yes | | | Artania | 1176 | 520 | 230 | 30 | 8 | 44,348 | 1984 | Mid-size | 100m | | | |
| Ponant Cruises | 4 | Yes | Sydney | France | L'Austral | 224 | 140 | 142 | 18 | 5 | 10,944 | 2011 | Boutique | 100m | | | |
| Residensea | 1 | Yes | | USA | The World | 396 | 320 | 196 | 30 | 7 | 45,000 | 1995 | Mid-size | 100m | | | |
| Saga | 2 | Yes | | UK | Saga Sapphire | 706 | 415 | 199 | 29 | 9 | 37,301 | 1982 | Mid-size | 100m | | | |
| Seadream Yacht Club | 2 | | 2014 | USA | Seadream 2 | 112 | 95 | 105 | 15 | 4 | 4,333 | 1985 | Boutique | 100m | | | |
| Silversea | 6 | | 2014 Sydney | USA | Silver Explorer | 132 | 111 | 108 | 16 | 4 | 6,072 | 1989 | Adventure | 100m | | | |
| | | Yes | | | Silver Shadow | 388 | 295 | 186 | 25 | 6 | 28,258 | 2000 | Mid-size | 100m | | | |
| | | Yes | | | Silver Wind | 296 | 197 | 156 | 21 | 6 | 16,927 | 1995 | Boutique | 100m | | | |
| Star Clipper | 3 | No | | USA | Royal Clipper | 228 | 100 | 134 | 17 | 6 | 5,061 | 2000 | Sail | 100m | | | |
| | | No | | | Star Clipper & Star Flyer | 170 | 72 | 112 | 15 | 6 | 2,298 | 1992 | Sail | 100m | | | |
| Swan Hellenic | 1 | Yes | | UK | Minerva | 380 | 157 | 133 | 20 | 6 | 12,892 | 1996 | Mid-size | 100m | | | |
| Transocean | 1 | | 2014 | Germany | Astor | 590 | 300 | 177 | 23 | 6 | 20,606 | 1987 | Mid-size | 100m | | | |
| Voyages of Discovery | 1 | Yes | | UK | Discovery | 710 | 350 | 169 | 25 | 8 | 21,186 | 1972 | Mid-size | 100m | | | |
| Voyages to Antiquity | 1 | No | | UK | Aegean Odyssey | 378 | 200 | 141 | 21 | 7 | 12,094 | 1974 | Mid-size | 100m | | | |
| Windstar | 3+3 | No | | USA | Wind Spirit & Wind Star | 148 | 88 | 134 | 16 | 4 | 5,350 | 1986 | Sail | 100m | | | |
| | | Yes | | | Wind Surf | 308 | 163 | 20 | 20 | 5 | 14,475 | 1990 | Sail | 100m | | | |
| | | Yes | | | Star Legend from 2015 | 212 | 160 | 135 | 19 | 5 | 9,961 | 1992 | Boutique | 100m | | | |
| | | Yes | | | Star Pride from 2014 | 212 | 160 | 134 | 19 | 5 | 9,975 | 1988 | Boutique | 100m | | | |
| | | Yes | | | Star Spirit from 2015 | 212 | 160 | 134 | 19 | 5 | 9,975 | 1989 | Boutique | 100m | | | |
| Zegrahm | 1 | Yes | | USA | Clipper Odyssey | 128 | 52 | 103 | 16 | 4 | 5,210 | 1989 | Adventure | 100m | | | |

Appendix B Consultation Summary

APPENDIX B CONSULTATION SUMMARY

Feedback from Cruise Industry

| Question No | Comment/Response | Company |
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| <p>QUESTION 1- Assuming the channel infrastructure is improved and bunker fuel is made available, would you consider your ship calling more frequently and if so what would number of annual calls would you envisage?</p> | <p>We have experienced some serious problems about fuel availability in Australia and any improvement that could be made to facilitate bunkering operations will definitely be good news for us and all cruise lines. With this said, we already include calls to Cairns every time our ships are deployed in the area. I don't foresee a considerable increase in number of calls due to improved bunker facilities but rather a necessity to maintain current business.</p> | <p>An upmarket US based cruise company with 8 ships of which 2-3 visit Australia most years.</p> |
| | <p>Being mainly ex. UK, we rarely call Australia because of the distance. We would only call on our world cruise, so unlikely to exceed 1 call per year. However, bunker availability would certainly help.</p> | <p>A well-established UK cruise company with four mid size ships which has cruised to Australia including Cairns for many years.</p> |
| | <p>Yes. We would call more frequently. We anticipate continuing to operate approximately 60 departures from Sydney each year on 5 ships (3 x ### and 2 x ###). Note that we have already announced that in 2015 we are moving ### to Europe, and she will be replaced by a larger ship. So no ###/### ships will be able to access Port of Cairns from April 2015.</p> <p>If an alongside berth in Cairns was available, I would anticipate we would call 12 times each season as Queensland/Barrier Reef cruises sailing ex Sydney as they would constitute approximately 20% of departures. Additionally, repositioning cruises to/from Singapore and our round Australia programs would also call at Cairns. This would add as many as 6 additional calls.</p> <p>We are also investigating www calling at Cairns. We are also considering a Brisbane program if the proposed Luggage Point pier is developed. This would likely be a summer season and would add a further 9-10 calls at Cairns.</p> <p>Summary:</p> <p>Ex Sydney.....12</p> <p>Round Australia.... 2</p> | <p>A very large US cruise company operating multiple brands with up to 5 ships based in Australia for the annual cruise season and others calling occasionally on around the world or sector cruises</p> |

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| | Repositionings4 Ex Brisbane.....10 Www.....2 Total30 | |
| | Have no plans in place to visit Australia as part of their schedule and my last experience was many years ago. | A UK company with one ship which previously cruised in Australia most years and included Cairns |
| QUESTION 2- What is the main attraction for you to use Cairns and what added attractions might induce you to call more often? | We do mainly wildlife and rainforest tours in Cairns but the main attraction is the Great Barrier Reef tours from here. Second to that is the Skyrail rainforest tram. | An upmarket US based cruise company with 8 ships of which 2-3 visit Australia most years |
| | Close location to Great Barrier Reef, for tours. | A well-established UK cruise company with four mid size ships which has cruised to Australia including Cairns for many years. |
| | Cairns is a globally recognised destination and would assist in the sale and promotion of cruises to the region. The existing tourism infrastructure provides ample touring opportunities and self guided experiences. I am not sure that further attractions are necessarily required. If the wharf is adequate and the channel is adequate, they are competitively priced, and fuel is available, then that would be sufficient to attract the ships | A very large US cruise company operating multiple brands with up to 5 ships based in Australia for the annual cruise season and others calling occasionally on around the world or sector cruises |

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| <p>QUESTION 3- Assuming viable itineraries are developed suitable for your ship and your passengers would you consider using Cairns as a base port for part or all of your cruise season?</p> | <p>Again, we already include Cairns in our itineraries when our ships are deployed in the area</p> | <p>An upmarket US based cruise company with 8 ships of which 2-3 visit Australia most years</p> |
| | <p>We are mainly ex. UK, so unlikely. The poor selling reposition cruises from UK to Cairns and v.v. kill it, but there was an idea of a short season within a world cruise, but is not currently being considered</p> | <p>A well-established UK cruise company with four mid size ships which has cruised to Australia including Cairns for many years.</p> |
| | <p>We would consider a small number of sailing ex Cairns. the challenge would be flying in/out approx 3,500 pax to join or leave the ship in Cairns. I am not sure what the total airlift is into Cairns each day, however we would need to understand air capacity and air cost. It is appealing, however the air capacity would be the greater of the limitations.</p> <p>If we offered a 7 day cruise program round trip Cairns and air lift required pax to extend their stay either pre or post cruise, then this will increase the cost of the overall holiday and reduce the appeal. Many pax will arrive early or stay later, however pax will need to have the choice. We would prefer <u>not</u> to have a situation where air lift forced 1,000 pax to remain 2 nights and 1,000 pax to remain 1 night pre or post cruise (for example) as we would prefer the maximum flexibility to meet consumer demand. It may be that pax do 7 night cruise and then 7 night land?? However we need to be able to offer the choice.</p> <p>We would certainly like to undertake a season. I would suggest 8-10 sailings in the 1st season.</p> | <p>A very large US cruise company operating multiple brands with up to 5 ships based in Australia for the annual cruise season and others calling occasionally on around the world or sector cruises</p> |

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| <p>QUESTION 4- Do you have any suggestions or requirements which might be included in the recommendations to Ports North which would improve the infrastructure and/or operation of Cairns for your ships and passengers</p> | <p>Overall, I think Cairns is a great destination as it is. One suggestion I could make is trying to facilitate dispatching of “boat tours” to Reef Barrier directly from the seaside of our ships. Currently passengers have to debark shoreside and be transferred to other pier where they embark on the tour boat.</p> | <p>An upmarket US based cruise company with 8 ships of which 2-3 visit Australia most years</p> |
| | <p>Our main issues within the area are (a) the reliable provision of bunkers in recognised cruise ports of call, and (b) discharge of grey water.</p> <p>We would like to rely on bunkers from a port without having to schedule Gladstone as a contingency and also have free/cheap waste water disposal in port rather than use precious time to divert 12nm out to discharge.</p> | <p>A well-established UK cruise company with four mid size ships which has cruised to Australia including Cairns for many years.</p> |
| | <p>Providing standard services such as pilots, tugs, linesman, stevedores, security etc continue to be available on site then we should be provided for.</p> <p>Bus access is ample, proximity to the CBD and the mariner is excellent.</p> <p>Gangways are currently leased from Navy and are most likely inadequate. I am not sure of any tidal issues that would impact storing, or if fenders are available or required? We would need to give that some thought.</p> | <p>A very large US cruise company operating multiple brands with up to 5 ships based in Australia for the annual cruise season and others calling occasionally on around the world or sector cruises</p> |
| <p>QUESTION 5- Once your ships are able to berth in the heart of Cairns will you continue to anchor off Port Douglas or would you have your passengers visit it by coach from Cairns?</p> | <p>If we could access Port of Cairns we would no longer call at Yorkey's Knob. The only pax going to that area would be on a tour to experience Sky Rail, or if they visited the proposed resort complex that is yet to be built. We would not propose to offer tours to Yorkeys Knob.</p> <p>NOTE-after seeking clarification re Port Douglas or Port Douglas we concluded the company thought that Yorkeys Knob was the anchorage for Port Douglas so we didn't pursue the matter further.</p> | <p>A very large US cruise company operating multiple brands with up to 5 ships based in Australia for the annual cruise season and others calling occasionally on around the world or sector cruises</p> |



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