Assessment of the Economic Impact of Cruise Ships to Vanuatu

Executive Summary

AUGUST 2014
This study into the economic impact of cruise ships to Vanuatu was commissioned by the Australian Department of Foreign Affairs and Trade, Carnival Australia and IFC, a member of the World Bank Group.

It was conducted by consultancy firm Net Balance Management Group Pty Ltd using methodology similar to that of studies undertaken in Australia and the Caribbean on a regular basis.

Data for the study was provided by Carnival Australia and Royal Caribbean Cruises International.

**About the Australian Aid Program**

On 18 June 2014, Australia’s Minister for Foreign Affairs launched a new development policy, Australian aid: promoting prosperity, reducing poverty, enhancing stability. Australia’s aid program has a stronger focus on private sector development, including aid for trade, recognising that the private sector is the primary driver of economic growth and poverty reduction. Australia is investing in education, health, humanitarian assistance, and empowering women and girls, reflecting the links between human development and economic growth. Australia’s aid effort is focused firmly in the Indo-Pacific.

**About the International Finance Corporation**

The International Finance Corporation (IFC), a member of the World Bank Group, is the largest global development institution focused exclusively on the private sector. Working with private enterprises in about 100 countries, IFC uses capital, expertise, and influence to help eliminate extreme poverty and boost shared prosperity. In FY14, IFC provided more than $22 billion in financing to improve lives in developing countries and tackle the most urgent challenges of development. For more information, visit www.ifc.org.

IFC’s work in the Pacific is guided by the Pacific Partnership, through which IFC works with the Australian and New Zealand governments to stimulate private sector investment and reduce poverty in the region.

**About Carnival Australia**

Carnival Australia was formed in July 2004 to meet the growing demand for cruising and the number of Carnival Corporation & plc cruise companies homeporting ships from Australia and New Zealand. Since then, Carnival Australia has led the rapid expansion of the industry, which has tripled in the past five years alone and now sees well over 600,000 Australians take a cruise holiday each year. Today Carnival Australia represents three homeported brands in Australia – Carnival Cruise Lines, P&O Cruises and Princess Cruises – as well as another four international cruise brands that visit the region annually – Cunard Line, Holland America Line, P&O Cruises World Cruising and Seabourn. For more information, visit www.carnivalaustralia.com.
Summary of Results

The World Bank Group, DFAT - Australia, and Carnival Australia have partnered to conduct this study of the economic impact of cruise ship tourism in Vanuatu. Data gathering and analysis for this study was carried out by Net Balance Management Group.

Over the past 10 years, Vanuatu’s cruise arrivals have grown by 15% per year. Cruising to Vanuatu has been buoyed by an advantageous location within a few days’ sail of Australia, a varied destination offering centred on Port Vila, and consistently positive passenger feedback. In 2013, more than 240,000 people arrived in Vanuatu by cruise ship. This translates into 490,000 passenger days.

The goal of this study is to quantify the economic impacts of cruising, and to provide data on the cruise sector’s effect on economic activity. The study then identifies a set of investment opportunities that can help to increase the economic benefits of cruise tourism in Vanuatu. This report therefore seeks to provide a platform that can be used by government, the private sector and donor partners to support further strategic, targeted development of cruising.

Data on tourism, and by extension on cruise tourism, is not readily available in Vanuatu. This report is an attempt to capture initial economic information about the cruise industry and to provide a point of departure for additional research into the economic, social and environmental impacts of the cruise sector.

Key Findings

The key results from the study are summarised in the bullet points below. All amounts are in Australian dollars ($).

- Cruise companies, their passengers and crew spent $34.6 million in Vanuatu in 2013\(^1\). This is equivalent to approximately 10% of Vanuatu’s exports\(^2\). Private businesses receive 90% of this expenditure.
- Additional indirect stimulus impacts, estimated at $18.6 million, resulted from second round spending by businesses benefiting from direct cruise-related expenditure.
- Each cruise ship voyage brings an average of $260,000 in spending to Vanuatu\(^3\) and one cruise ship passenger brings $125 of spending.
- Additional economic benefits estimated at $30 million over 10 years, have been identified through priority investments profiled in this report; these opportunities are focused on destination development and providing improved access to the cruise market for Vanuatu businesses and individuals.
- In Vanuatu, the cruise industry is estimated to generate up to 3,250 total employment opportunities\(^4\).
- Cruise passengers spend $96 per day in Port Vila, $45 per day in Luganville and $11 per day in Mystery Island\(^5\).
- Port Vila receives 85% of all passenger expenditure in Vanuatu (and 80% of all direct expenditure). This is due to Vila’s high number of calls and well-developed excursions and shopping opportunities.

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\(^1\) Expenditure impact is extrapolated from detailed data gathered at the three major ports of call: Port Vila, Luganville, and Mystery Island. It is assumed that the three remaining ports of call, Champagne Beach, Wala and Pentecost, see benefits similar to Mystery Island. The capacity of some ships (the Carnival Spirit) is almost 20% greater than some others and this assumes the mix of ships would remain the same over time. The projected number of calls to each port in Vanuatu was sourced from the cruise industry.

\(^2\) VNSO, 2012 National Accounts of Vanuatu

\(^3\) Calculated as direct expenditure of cruise tourism in 2013 divided by the number of Carnival and RCI unique ship voyages to Vanuatu in 2013. This is an average and impact varies by the number of calls and mix of ports included in a particular itinerary.

\(^4\) The wage portion of cruise tourism spend in 2013, divided by average salary in relevant sectors leads to an estimate of 1,170 full time equivalent (FTE) jobs resulting from cruise ship activity. Given the nature of employment in developing countries in the sectors concerned, which rarely corresponds to a notion such as FTE, a range has been provided to account for part-time (not less than 33%) employment opportunities resulting from cruise tourism . 1,061 businesses working in sectors that supply cruise tourism were registered in the municipalities of Port Vila and Luganville in 2013.

\(^5\) Average spend of all passengers going ashore at each port, including local portion of tour spend and including passengers who went ashore but did not spend money.
• The survey found a strong positive correlation between passenger satisfaction and spending: the more satisfied a passenger with the variety of things to see and do, the longer they stay ashore, and the more they spend.

• The survey found some unmet demand in sales of handicrafts, clothing and jewelry, pointing to the need for better market research to capitalize on missed sales opportunities.

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• The survey found some unmet demand in sales of handicrafts, clothing and jewelry, pointing to the need for better market research to capitalize on missed sales opportunities.

In the coming years, cruise industry related expenditure coming into Vanuatu is expected to grow with increases in size and number of cruise ships traveling into the South Pacific.

**FIGURE 1: SUMMARY OF ECONOMIC IMPACTS, VANUATU**
Future Outlook

In 2014, Vanuatu is scheduled to host more than 230 cruise ship calls across 6 ports: Port Vila, Santo (Luganville), Mystery Island, Pentecost, Champagne Bay and Wala. The three ports of Port Vila, Luganville and Mystery Island host 85% of all cruise ship calls to Vanuatu.

Cruise tourism in Vanuatu is anchored around Port Vila, which is a popular destination with passengers and is one of two Vanuatu destinations, along with Luganville, which allows ships to moor alongside a wharf. While Luganville wharf awaits repairs and potential upgrade to services, Port Vila remains the key destination in Vanuatu which allows ships to receive critical supplies and to complete customs and processing formalities in Vanuatu. Ensuring that Port Vila can continue to accommodate more ships, and ships of increasing size, are key to supporting the stable development of cruise tourism in the medium term.

A development plan for the industry which seeks to support Vila being able to moor two ships simultaneously, or, alternatively, to develop Luganville as a functional alternative to Vila, is important if Vanuatu seeks to receive an increasing portion of the expected growth of the cruising industry over the coming 5 to 10 years.

Looking beyond the objective of increasing revenues by increasing the number of cruise ship visits, Vanuatu can also enhance and more equitably distribute the economic benefits it sees from the cruise industry. This study profiles a set of investments that can help Vanuatu to achieve these goals. The investments can be broadly categorized into the following types:

- Improvements to mapping and repairs/upgrades to critical infrastructure
- Development of a limited number of new destinations
- Ensuring Vanuatu’s businesses and individuals have more direct access to the cruise market

While this report presents investments through the lens of net economic benefit, this analysis does not capture distributional effects, which will clearly be larger for some opportunities than others. Investments that can measurably improve the circumstances of a diverse set of communities in a sustainable manner can be given particular attention if a wider segment of the population is to be included in the economic benefits brought by the cruise industry.

**FIGURE 2: POTENTIAL GROWTH IN DIRECT ECONOMIC IMPACTS FROM INVESTMENT OPPORTUNITIES**

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct expenditure - organic growth</th>
<th>Key infrastructure investments</th>
<th>Market access investment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>$34.6m</td>
<td></td>
<td></td>
<td>$34.6m</td>
</tr>
<tr>
<td>2016</td>
<td>$42.8m</td>
<td>$8.8m</td>
<td>$4.2m</td>
<td>$55.8m</td>
</tr>
</tbody>
</table>
Summary of Methodology

A survey of passengers and crew was undertaken in Port Vila, Luganville and Mystery Island between March and May 2014. These three ports account for 85% of all cruise calls to Vanuatu. Carnival brand (P&O, Princess, Carnival, Holland America) and Royal Caribbean ships participated in the survey. A total of 4,039 passenger and 926 crew surveys were processed for data (this excludes unusable surveys). Passenger surveys reported on behalf of 8,839 passengers, given an average of 2.2 people per party. Passengers’ response rate was 21%, in line with methodology parameters.

The study was structured to capture the direct and indirect economic impact of cruise ships in Vanuatu:

- **Direct impact** is the cash-flow generated by cruise ship activity in Vanuatu: direct expenditure by passengers, crew and the ship operator on goods and services. Data was captured through surveys of passengers and crew on board ships, as well as through information obtained from cruise ship companies.

- **Indirect stimulus** impact has been calculated as the second round of expenditure on the cruise tourism supply chain: local businesses using cash-flows received from cruise ship activity to purchase the inputs required to carry out their business activities. Indirect stimulus impact therefore measures the value of cash redistribution of cruise ship tourist expenditure through the economy. Data was collected through a survey of businesses in Port Vila and Mystery Island; methodology included face to face interviews and focus groups with businesses and government.

- **Direct employment impact** is estimated through a business survey and face to face interviews carried out in Port Vila. The total employment was calculated using estimated average full time monthly wage and proportion of cruise ship tourism expenditure flowing to wages for each sector. A range was then provided between the resulting number of FTE jobs and part time jobs, to account for the nature of employment in a number of sub-sectors affected by cruise (handicrafts, transport).

- **Induced impacts** measure the economic impact of flow on expenditure by private beneficiaries who indirectly benefit from cruise ship tourism spending – for example when employees spend their salaries on purchases or living expenses. These impacts have not been considered as part of this study.

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6 For example, indirect economic impacts are created when a tour operator spends money on fuel and salaries to carry out its activity. New beneficiaries (fuel provider, employees) are then involved.
Background

Globally, the cruise ship industry has grown substantially over the past decade and while the Pacific islands have participated in this growth, the Pacific region most likely accounts for only about 2% of global passenger numbers. The Australian market accounts for about 70-75% of regional passengers, with New Zealand the next most important source market.

Increasing numbers of cruise ships (P&O brand) are now being based year-round at Australian ports (Sydney & Brisbane). The general pattern is for itineraries to be focused on Australian, New Zealand and nearby Asian destinations over the September – March Australian summer period; with Pacific island destinations being favoured during the April/May – July/August period.

In terms of overall passenger numbers for cruises departing and returning to Australia, Carnival Australia is the biggest operator in the region (about 60%). Royal Caribbean is the next largest (about 35%); but with no full-time Australian-based ships. In line with global trends, the sizes of vessels operating in the region are increasing, with most now having 2,000 plus passenger capacity.

Despite its small share of the global market, the Pacific cruise ship business is growing steadily; with annual growth of about 20% to 25% experienced over the past 5 years, with New Caledonia and Vanuatu destinations accounting for the large majority of this growth.

The majority of cruise ships visiting the Pacific islands operate out of bases in Sydney and Brisbane. Customer preference for relatively short duration (7 to 10 day) itineraries and maximum port calls, effectively restricts most itineraries to New Caledonia and southern/western Vanuatu destinations. Other destinations, such as Samoa and Tonga, are disadvantaged by distance (and required sailing days) from Australian ports. The trend to shorter duration itineraries has also meant that cruise ship calls at Fiji destinations, while they have experienced some growth (roughly 15%-20% over the past 5 years), have experienced much lower growth than calls in Vanuatu and New Caledonia. The latter have increased by about 80% over the same period.

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7 Cruise Lines International Association (CLIA) Australasia data indicate that the Australasian region accounted for nearly 6% of global deployments in 2013, and about 30% of the region’s deployments targeted the South Pacific.
8 Though some ships are focused on New Caledonia & Vanuatu on a year-round basis.
9 Carnival, P&O Cruises and Princess brands.
Summary of Findings

On average, one cruise ship voyage brings in $260,000 and one ship passenger brings $125 to the economy, in direct expenditure. While these headline numbers present an overall picture, impacts are not evenly distributed, with Vila stops capturing more spending per call and per passenger, given the number of activities and shopping opportunities.

**TABLE 1: DIRECT ECONOMIC IMPACT PER SHIP CALL AND PER PASSENGER (2013)**

<table>
<thead>
<tr>
<th>PORT</th>
<th>DIRECT IMPACT PER SHIP CALL</th>
<th>DIRECT IMPACT PER PASSENGER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port Vila</td>
<td>$243,900</td>
<td>$117</td>
</tr>
<tr>
<td>Luganville</td>
<td>$133,600</td>
<td>$64</td>
</tr>
<tr>
<td>Mystery Island</td>
<td>$43,100</td>
<td>$21</td>
</tr>
</tbody>
</table>

Remaining data in this report refers to the three surveyed ports of call: Port Vila, Luganville and Mystery Island, unless specifically noted. These ports account for the majority of the cruise sector’s total impact on Vanuatu.

Direct Economic Impacts

The main sources of direct economic expenditure in country are:

- expenditure by passengers going ashore on the day of their visits (including local portion of pre-purchased tours)
- expenditure by cruise companies on services such as port agent services, and port/landing fees and dues;
- expenditure by crew members going ashore (concentrated on food/beverage and local transportation).

Passengers, crew and the cruise companies spent a total of $34.6 million in Vanuatu in 2013; of this direct expenditure, the 3 surveyed ports account for $33.0 million. When extrapolated over a whole year, this direct expenditure translates into the following impact for industries servicing the cruise sector in Vanuatu.
FIGURE 3: DIRECT EXPENDITURE (3 PORTS) PER INDUSTRY (AUD)

- Economy: $33 million
- Tours and Entertainment: $10 million
- Duty Free: $4.2 million
- Souvenirs: $4.1 million
- Government: $3.4 million
- Transport: $3.2 million
- Services: $3.2 million
- Retail: $2.6 million
- Food & Beverage: $2.3 million

FIGURE 4: SUMMARY OF DIRECT EXPENDITURE BY SOURCE AND INDIVIDUAL EXPENDITURE PER PORT

**Direct spend by Source**
- Economy: $33 million
- Tours and Entertainment: $10 million
- Duty Free: $4.2 million
- Souvenirs: $4.1 million
- Government: $3.4 million
- Transport: $3.2 million
- Services: $3.2 million
- Retail: $2.6 million
- Food & Beverage: $2.3 million

**Individual spend per Port**
- Port Vila: $96 million (Passenger Spend: $45 million, Crew Spend: $51 million)
- Lugarville: $29 million (Passenger Spend: $4 million, Crew Spend: $8 million)
- Mystery Island: $11 million (Passenger Spend: $2 million, Crew Spend: $3 million)
Direct expenditure by passengers dominates total direct impact, especially in Port Vila, where both excursions and shopping opportunities are well developed\textsuperscript{10}.

The number of visits to a port of call is as important a driver of overall impact as individual spend, as can be seen from a comparison of Luganville and Mystery Island – while average passenger and crew spend in Mystery Island is only 22\% of spend in Luganville, the number of calls to Mystery Island render total annual impacts larger. Luganville, which has the alongside berthing facilities favoured by the industry, is scheduled to receive more visits in 2014 than 2013, but the state of repair of the wharf has been one of the factors that has slowed growth in ship calls.

Figure 5 presents a comparison of the share of expenditure on key items, per port of call. According to industry data, on average 97\% of passengers go ashore in Port Vila, and 91\% go ashore in Luganville, where ships dock and the same in Mystery Island, where passengers are tendered to shore\textsuperscript{11}. The breakdown shows that the patterns of spending vary between ports of call, as expected given different spending opportunities in each location.

\textbf{FIGURE 5: PASSENGER SPEND BREAKDOWN}

Australian and New Zealand passengers were found to spend more at each port than ‘international’ (chiefly North America and Europe) passengers coming to the region.

\textsuperscript{10} Note that expenditure by the cruise companies has been allocated to each location based on number of calls. It may however go back to companies or government bodies based in Port Vila. In Mystery Island, the landing fees are paid directly to the land owning community and can be allocated to community projects (schools, health services, etc). This is classified under “government” for convenience. No indirect economic impact has been calculated on these landing fees.

\textsuperscript{11} Based on information provided by the cruise companies on the ships surveyed in March – May 2014. These estimates were used in the extrapolation of the impacts over a whole year, as only people going ashore have the opportunity to spend.
The most significant factor influencing levels of passenger spending is class of ship. Driving this difference are the premium ships’ longer itineraries and higher number of port calls. Vanuatu results are in line with global industry data, which shows that premium ships tend to have lower average spend per call. When extrapolating for a year of economic impact, survey data was weighted to account for this difference.

12 Pre-booked tour spend is excluded
A number of driving factors of passenger expenditure were explored:

- There is a significant difference in total expenditure per passenger on the day of the visit between those who purchased tours in advance and those who did not for both Port Vila and Luganville, with passengers spending less if they pre-purchased a tour. There are also differences for certain items of expenditure, with slightly less spend on transport and duty free for those who pre-purchased tours, but slightly more on souvenirs.

- There is a significant negative correlation between total passenger spend and trip duration, i.e. passengers on longer cruises spend less, as previously observed by cruise companies.

- There is a strong correlation between the amount of expenditure and the ship class (contemporary / premium) but no difference in the makeup of expenditure, i.e. passengers on contemporary ship spend more than premium passengers do, on the same items.

- There is a strong positive correlation between satisfaction with the variety of things to see and do and expenditure on souvenirs, entertainment and total spend per passenger.

- There is a positive correlation between the number of hours spent ashore and the mean expenditure (up to 7 hours, after which mean expenditure reduced).
FIGURE 8: CORRELATION BETWEEN SATISFACTION WITH VARIETY OF THINGS TO SEE AND DO AND MEAN EXPENDITURE

FIGURE 9: PERCENTAGE OF PEOPLE WHO STATED THEY WOULD HAVE SPENT MORE IF MORE WAS AVAILABLE
Between 20% and 33% of passengers who spent money on food and beverages, clothing, watches and jewellery, and souvenirs declared that they would have spent more on those items, if more options had been available. Survey data shows greater opportunities for increasing purchases from customers already spending money, than from finding additional sales through growing the customer base. These findings point to a need for additional research on passenger purchasing preferences.

Passengers were also asked to rate their likelihood of returning to Vanuatu for a land-based or resort vacation within the next three years. Vanuatu results were in line with responses seen globally: approximately 30% of respondents said they were either very likely or extremely likely (4 or 5) to return for a resort holiday. Responses did not differ strongly by port – with the exception of Luganville, where respondents were more negative.

**FIGURE 10: PASSENGER LIKELIHOOD OF RETURNING TO VANUATU FOR A VACATION IN THE NEXT THREE YEARS, BY PORT OF CALL**

(1=Not at all likely, 5=Extremely likely)

As a next step, Vanuatu can include a relevant question in upcoming international visitor surveys, to assess the share of tourists arriving by air that have previously visited on a cruise.

There was a significant positive correlation between passengers’ likelihood of returning for a land-based vacation and total spend per passenger at Port Vila and Luganville. There was significantly less correlation at Mystery Island, pointing to either the nature of that port experience, or again to opportunities to increase the variety of activities offered.
Per person, spending by crew members is roughly half of that by passengers. Overall, however, spend is a function of volumes; as there are fewer crew members than passengers on board a ship (around 700-800 for 2000 passengers), and a smaller proportion of the crew goes ashore (about 25% in Port Vila and Luganville and half this figure in Mystery Island), aggregate spend of ship crew is much smaller than that of passengers. A relatively high share of crew spend is allocated to food and beverage and transport.

FIGURE 11: TOTAL SPEND PER PASSENGER (AUD) AGAINST LIKELIHOOD OF RETURNING TO VANUATU FOR A VACATION IN THE NEXT THREE YEARS, BY PORT OF CALL

(1=Not at all likely, 5=Extremely likely)

Per person, spending by crew members is roughly half of that by passengers. Overall, however, spend is a function of volumes; as there are fewer crew members than passengers on board a ship (around 700-800 for 2000 passengers), and a smaller proportion of the crew goes ashore (about 25% in Port Vila and Luganville and half this figure in Mystery Island), aggregate spend of ship crew is much smaller than that of passengers. A relatively high share of crew spend is allocated to food and beverage and transport.
Indirect Economic Impacts

Indirect or stimulus impact occurs when businesses use cash-flows received from cruise ship activity to purchase the inputs required to carry out their business activities. As these businesses employ people and purchase goods and services, money is recirculated through the economy, effectively “multiplying” the direct impact. Overall the indirect economic impact is estimated at about 59% of the overall direct expenditure with businesses (“second round” impacts only)\(^{13}\). This means that “leakages” out of the economy correspond to 41% of the direct expenditure with businesses, bearing in mind that no leakage has been calculated or included on direct expenditure with Government.

**FIGURE 13: SUMMARY OF INDIRECT ECONOMIC IMPACTS**

As there is no income tax in Vanuatu, government benefits from the Value-Added Tax and the import duty (except on Duty Free items). The major part of the indirect economic impact (85%) benefits businesses and individuals. “Leakages” occur when cash-flows end up benefitting offshore operators (see glossary). Leakage are particularly significant in small island economies that depend heavily on imports.

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\(^{13}\) The indirect impact is calculated on the direct spend by passengers and crew members. As most of the direct company spend is made of payments to government (and staff), no indirect economic impact is calculated on this portion of the direct expenditure.
Employment

Overall, it is estimated that the number of jobs created/sustained by cruise ship tourism in Vanuatu ranges from 1,170 FTE jobs to 3,250 part time jobs.\textsuperscript{14}

Direct employment impacts were derived and calculated using average full time salaries for employees in each sector. This information was obtained from interviews with businesses linked to the cruise ship industry\textsuperscript{15}. However, it is recognized that the nature of employment in Vanuatu, in sectors such as handicrafts and transport in particular, varies from that of developed economies, having more part time and unregistered employment. In this sense, an approach such as “employment opportunities provided” may be more appropriate.

World Bank research, based on census data and data from the National Provident Fund, has found that approximately 12\% of all working-age Ni-Vanuatu are formally employed\textsuperscript{16}. For the purposes of this study, to capture the potential for a large proportion of the workforce to be part time, a range has been provided between an assumption of complete full time employment and part time employment (assumed to be greater than 33\%).

A larger number of people can be assumed to benefit, as informal economic activities and subsistence agriculture are often combined with more formal means of employment, and full time employment may often not be sought by individuals. In particular in locations such as Mystery Island, the concentration of jobs on handicrafts and services reflects a more informal range of offering. It is therefore likely that services and goods sold to tourists would represent a part time activity, but the sole source of cash income for the individuals concerned.

\textsuperscript{14} This number includes the 120 ni-Vanuatu employed on P&O cruise ships

\textsuperscript{15} No impact on employment by government was included, as fees and contributions go to the general budget and it would be difficult to assess what proportion of the government employees are directly dealing with cruise-related issues.

\textsuperscript{16} Well-being from Work in the Pacific Islands Countries, World Bank, East Asia Pacific, 2013.
Summary of investment opportunities

As a part of the research for this report, 10 initiatives to increase economic benefits of cruise tourism were identified and costed out. The costing is based on standard assumptions (provided in the annexes), using best available information at the time of data gathering. Initiatives were selected through a consultation process involving the cruise industry, DFAT-Australia and stakeholders in-country.

Key criteria for selection were (i) potential to significantly increase the volume and/or the value of cruise ship visits to the country; (ii) not fully covered through ongoing or planned initiatives. A balance between infrastructure initiatives and initiatives to increase market access was sought. A summary of high-level results is given below and more detail can be found in the body and annexes to the report.

<table>
<thead>
<tr>
<th>INFRASTRUCTURE / DESTINATION DEVELOPMENT</th>
<th>NET BENEFIT</th>
<th>NPV* BENEFITS</th>
<th>COSTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home-basing a cruise ship in the Pacific**</td>
<td>$6.1</td>
<td>$6.1</td>
<td>$0.0</td>
</tr>
<tr>
<td>Opening Tanna as a destination - Lowanatom</td>
<td>$5.9</td>
<td>$11.8</td>
<td>$5.9</td>
</tr>
<tr>
<td>Opening Tanna as a destination - Waesisi</td>
<td>$4.9</td>
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<tr>
<td>Opening SW Bay</td>
<td>$3.7</td>
<td>$4.8</td>
<td>$1.1</td>
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<tr>
<td>Mystery Island: inner and outer anchorage mapping</td>
<td>$1.3</td>
<td>$1.4</td>
<td>$0.1</td>
</tr>
<tr>
<td>Luganville: wharf repair</td>
<td>$1.1</td>
<td>$19.1</td>
<td>$18.0</td>
</tr>
<tr>
<td>Opening Ureparapara</td>
<td>$1.1</td>
<td>$2.2</td>
<td>$1.1</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>MARKET ACCESS</th>
<th>NET BENEFIT</th>
<th>NPV* BENEFITS</th>
<th>COSTS</th>
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</thead>
<tbody>
<tr>
<td>Increasing local purchasing by cruise companies</td>
<td>$8.6</td>
<td>$9.5</td>
<td>$0.9</td>
</tr>
<tr>
<td>Employment for ni-Vanuatu people on board P&amp;O ships</td>
<td>$1.2</td>
<td>$4.9</td>
<td>$3.7</td>
</tr>
<tr>
<td>TVET business training for cruise micro-entrepreneurs</td>
<td>$0.9</td>
<td>$1.0</td>
<td>$0.1</td>
</tr>
<tr>
<td>Handicrafts enhancement program</td>
<td>$0.7</td>
<td>$1.1</td>
<td>$0.4</td>
</tr>
</tbody>
</table>

* Costs and benefits of infrastructure investments are estimated over 10 years. Cost and benefits of local purchasing and handicrafts estimated over 5 years; employment estimated over 3 years (a training cycle) and TVET business training over 2 years.

**Home basing a cruise ship in the Pacific is a relatively complex initiative that requires substantial additional scoping, making it a longer-term initiative than comparable items in this chart; it is included here for purposes of assessment against other potential infrastructure investments.
Key points from the assessment of infrastructure investment opportunities

- **Tanna destination development and Luganville wharf repair / redevelopment.** Only the expected benefits arising for cruise ship tourism have been calculated here; actual benefits are likely larger due to impact on overall trade of goods.

- **Repairing Luganville wharf** is an imperative if it is to retain cruise traffic, as its current state poses significant safety concerns. It is recommended that a scoping of repair costs be undertaken, (rather than a full redevelopment of the wharf precinct), to gain an exact understanding of the minimum investment required. The cost-benefit uses estimates for wharf repair only, as provided by Sanma Provincial Government Council. Wharf repair and targeted upgrade of services at Luganville could also help to reduce any future capacity constraints and congestion in Port Vila due to increase in cruise traffic.

- **Capacity constraints at Port Vila.** Port Vila, accounting for more than half of total port calls, is the main destination for cruise vessels coming into Vanuatu, and is likely to continue to play this role in future, due to positive passenger feedback and the requirements of ships on Pacific voyages. A sustainable development plan for cruising to Vanuatu should account for potential continued growth in number and size of ships coming to Vanuatu and needing to berth in Vila. Two approaches to managing this are enhancing the capabilities of the cargo wharf now being upgraded, to allow it to take cruise vessels when required, or revamping Luganville as a functional secondary option. The costs and potential benefits of these options are clearly different as revamping Luganville would likely have greater distributional effects (and address potential congestion resulting from two ships simultaneously in Vila) but would also require more resources.

- **Hydrography mapping in Mystery Island.** The cost of the mapping is minimal compared to the benefit this call brings to the local community (both in landing fees and benefits to the local market stall vendors). It should be considered a pre-requisite to further developing the destination from a value point of view (e.g. tours).

- **Home basing a cruise ship in the Pacific.** This is a longer term and more complex initiative than comparators on this chart, as it would introduce a fundamentally new offer to the market. Demand for such an offer requires further research. It would also require the involvement and cooperation of a number of entities, public and private. The benefits and costs noted here are for Vanuatu only. The calculation assumes a ship is based in Fiji. Basing a ship in the Pacific does not require additional investment for Vanuatu, unless the success of the initiative is such that airport infrastructure needs to be upgraded (being considered by the government independently of the impact of cruise ships).

- **Cannibalization.** An important consideration is the potential for new destinations to “cannibalise” traffic from existing destinations, as they may prove to be more popular. This has not been considered as part of the cost-benefit analysis (as much of the dynamic is currently not predictable), and every call has been considered additional to Vanuatu. This should be put in the perspective of an overall increase in traffic as additional, and often larger, ships are added to schedules (Carnival and RCI expect to add 6 ships in the region by 2016).
Key points from assessment of market access programs to increase the value of cruise tourism:

- **Accessing the cruise market requires focused support.** While the cruise industry presents an important market opportunity for Vanuatu businesses, market access initiatives would require a comprehensive approach. Support would need to be targeted to helping firms supply the cruise market specifically (including marketing), and structured to meet the specific needs and challenges of a small set of firms that have potential to become direct suppliers. If Vanuatu businesses were to gain access to sales channels onboard cruise ships, key distributional effects would be additional employment/wages generated, including through business models that aggregate the output of smaller producers, such as Tanna Coffee (which currently supplies P&O ships). Close involvement of the industry is needed for these initiatives to succeed.

- **Handicrafts have important distributional effects.** A comprehensive handicraft enhancement program, building on New Zealand’s existing Ambassador Program and the proposed South Pacific Regional Handicraft Project, has the potential to add value and to deliver distributional impacts to the outer islands for the poorest segments of the population, which would make this initiative uniquely valuable.

- **Local sourcing for cruise ships.** P&O source Tanna Coffee and Vanuatu water for their ships. Increasing local purchasing would require a program of support to Vanuatu producers to meet operator requirements in terms of quantity, quality, and consistency; initial opportunities exist with a limited number of businesses that are already exporting and/or local market leaders.

- **Employment on board cruise ships.** The full value of training and upskilling of tourism staff in a rotational arrangement is difficult to assess through an initial cost-benefit review, as most of the value will accrue to individual employees in the sector over time. It would nevertheless represent a significant underpinning of the industry’s commitment to ‘local content’ in the short/medium term.
Limitations of this Study

- The focus of the report is predominantly on economic impact from cruise tourism expenditure. The report does not aim to assess the environmental impacts – such as pollution effects and the management of waste streams – that result from cruise traffic. While the cruise industry aims to apply best environmental and social management practices to its activities globally, a review of environmental issues including: i) control of pollution in sensitive areas; ii) application of regional and national environmental standards; and iii) public health infrastructure to manage sewage and other waste streams, is warranted in order to have a more complete picture of the overall impact of cruise tourism.

- A number of additional impacts, related to pressure on existing infrastructure coming from cruise, have not been quantified through the impact calculations undertaken for this report: the opportunity cost of delays to cargo ships that are unable to berth in Port Vila while cruise ships are in port, and potential traffic congestion in Vila town on cruise ship days are examples. These broader impacts, which relate to the state of infrastructure and provisioning at ports of call, are outside the scope of this study. The urban development and wharf redevelopment programs coming online in Vila are looking at these issues in detail; Luganville wharf redevelopment should assess the value of 2 berths during the feasibility.

- The study does not assess in detail the relationship between cruise and land-based tourism or the economic value that each brings. A brief review of findings of the 2010 Millennium Challenge Account study, which provides these comparisons, is included in the report.

- The tax revenue impact for the Government of Vanuatu has been considered as part of calculation of the indirect stimulus in terms of import duty and VAT. Business registration fees have not been included, as these could not be accurately apportioned.

- A full list of people and business interviewed is not included in this report, for reasons of confidentiality. Data was aggregated so that information cannot be traced to any particular business. Similarly, for reasons of commercial confidentiality, information provided by the cruise ship companies has been aggregated.

- Data on tours booked by cruise companies on behalf of passengers was collected directly from the cruise companies, and included in the direct economic impact totals.

- For purposes of extrapolation, it was assumed that the three ports of call not surveyed (Wala, Pentecost, and Champagne Bay) would see benefits similar to Mystery Island. Call frequency is taken from cruise company data. Limited data is available on the Vanuatu economy. Estimates of sector employment as well as general information for indirect impact, was sourced through a direct survey of businesses, stakeholder interviews and focus groups, then cross-referenced with available data.

- The overall sampling rate used for (passenger) spend analysis was 21.4%, after filtering. While the response rate and the large number of passengers surveyed allowed for a low error margin on overall spend, the discrepancies in response rates between ships did not always allow for a detailed statistical assessment of sub-samples.