

# Economic Impact Analysis

## Tourism on Tasmania's King Island



REPORT PREPARED FOR  
TOURISM TASMANIA AND THE  
CRADLE COAST AUTHORITY

June 2013

**REMP**LAN

# Economic Impact Analysis

## Tourism on Tasmania's King Island

**This project has been conducted by REMPLAN**

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June 2013

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### RESOURCES

All modelling has been undertaken using REMPLAN™ software that has been authored by Principal Research Fellow (ret.), Ian Pinge, at La Trobe University Bendigo.

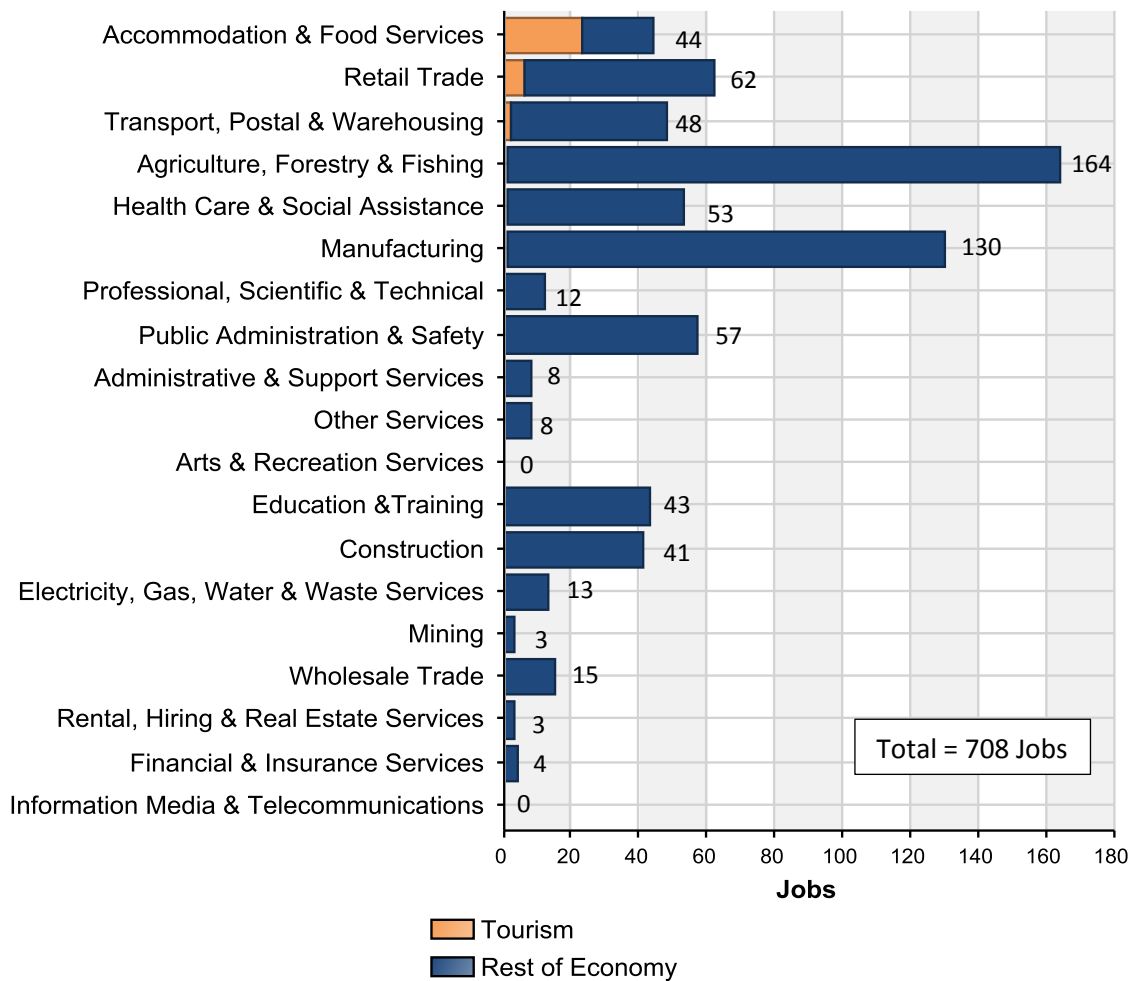
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## Executive Summary

King Island is situated in the middle of the Bass Strait between Victoria and Tasmania's North West coast. Based on the ABS 2011 Census, the resident population of King Island's was 1,563 with the local economy supporting 708 jobs. A key objective of this study has been to estimate the proportion of these jobs that are supported by the demand for goods and services by visitors to the region, as opposed to demand by local residents.

### ES -1 Employment Servicing Visitors and Locals



Source: REMPLAN Tourism Analysis Module

Of the 708 people employed in King Island, it is estimated that demand by visitors for goods and services supports 34 jobs (highlighted in orange above). The Tourism sector represents 4.9% of total employment in King Island, compared to 7.2% for the State of Tasmania. The major tourism related industries in King Island are 'Accommodation & Food Services' (23 jobs) and 'Retail Trade' (6 jobs).

The Tourism sector in King Island is estimated to generate \$5.0 million in annual economic output. The industries contributing the most to the Tourism sector are the greatest beneficiaries of expenditure by visitors. On average, for each dollar spent by a tourist in King Island, it is estimated

that typically \$0.49 is spent on 'Accommodation and Food Services', \$0.15 on 'Transport, Postal & Warehousing', \$0.12 on 'Manufacturing' and \$0.09 on 'Retail Trade'.

For every dollar of direct expenditure by visitors to King Island, the broader local economy is estimated to benefit by a further \$0.40 once flow-on industrial and consumption effects are taken into consideration. This can also be expressed as a tourism output multiplier of 1.40.

Applying the tourism industry multiplier of 1.40 to the direct output generated by King Island's tourism sector of \$5.0 million, the total value (direct + industrial + consumption) of tourism to the region's economy is estimated at up to \$7.0 million. This economic output is estimated to support 48 jobs in the region.

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# 1. Introduction

## 1.1 Purpose and Aim

This report has been prepared in response to a request from the Department of Development, Tourism and the Arts to assess the economic benefits of tourism on Tasmania's King Island.

Tourism is an amalgam of activities such as retail, accommodation, cafes & restaurants, cultural & recreational services, and is unique to each region. This report will detail the unique structure of tourism for King Island in terms of employment, output, wages and salaries and value-added, and will examine tourism's contribution to the local economy relative to the other industry sectors. In addition, the supply chain linkages between tourism and the other industry sectors in the local economy will be identified. That is, for each dollar of output generated by tourism, the value of intermediate goods and services that can be supplied in the local region will be identified. These local supply chains provide the basis for estimating the multiplier impact of tourism to the local economy.

## 1.2 Data and Methodology

For this report REMPLAN<sup>1</sup> economic modelling has been applied to acquire area-specific industrial economic data. REMPLAN models are built on the latest available datasets sourced from the Australian Bureau of Statistics (ABS) and Tourism Research Australia (TRA). The main demographic and economic datasets used in this report include:

- ABS, Place of work data from the 2011 Census of Population and Housing
- ABS, 2008/2009, ABS, National Input /Output Tables
- ABS, June 2010, Tasmania's Gross State Product
- ABS, 2010, Tourism Satellite Account
- 2008/2009 and 2011/2012, Tourism Research Australia, Regional Tourism Profiles; North West Region

These datasets have been used to build REMPLAN Tourism datasets, detailing the economic contributions of Tourism alongside estimates for other industry sectors for King Island.

Under the methodological approach applied in this report, the economic contributions of the Tourism sector are determined by the number of local/regional tourism related jobs as a proportion of tourism related jobs at the national level. Therefore, the greater the number of local jobs in tourism intensive sectors such as accommodation, the greater the estimate of the region's tourism product output, and the greater the region's proportionate contribution to Australia's tourism product output.

Previous research that relies on visitor expenditure from Tourism Research Australia may overestimate the value of tourism output relative to the output associated with servicing demand for goods and services by local people. The employment based approach applied in this report removes the potential for such anomalies to arise as the number of tourism jobs in an area is always a sub-component of the overall level of employment.

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<sup>1</sup> [www.remplan.com.au](http://www.remplan.com.au)

### 1.3 Region Definition

The economic impact analysis has been undertaken in the local government area of King Island (M). King Island is located in the middle of the Bass Strait between Victoria and Tasmania's North West coast. There are three small islands surrounding King Island, New Year Island and Christmas Island situated to the northwest, and Councillor Island to the east.

Map 1-1 King Island



Source: REMPLAN MapBuilder

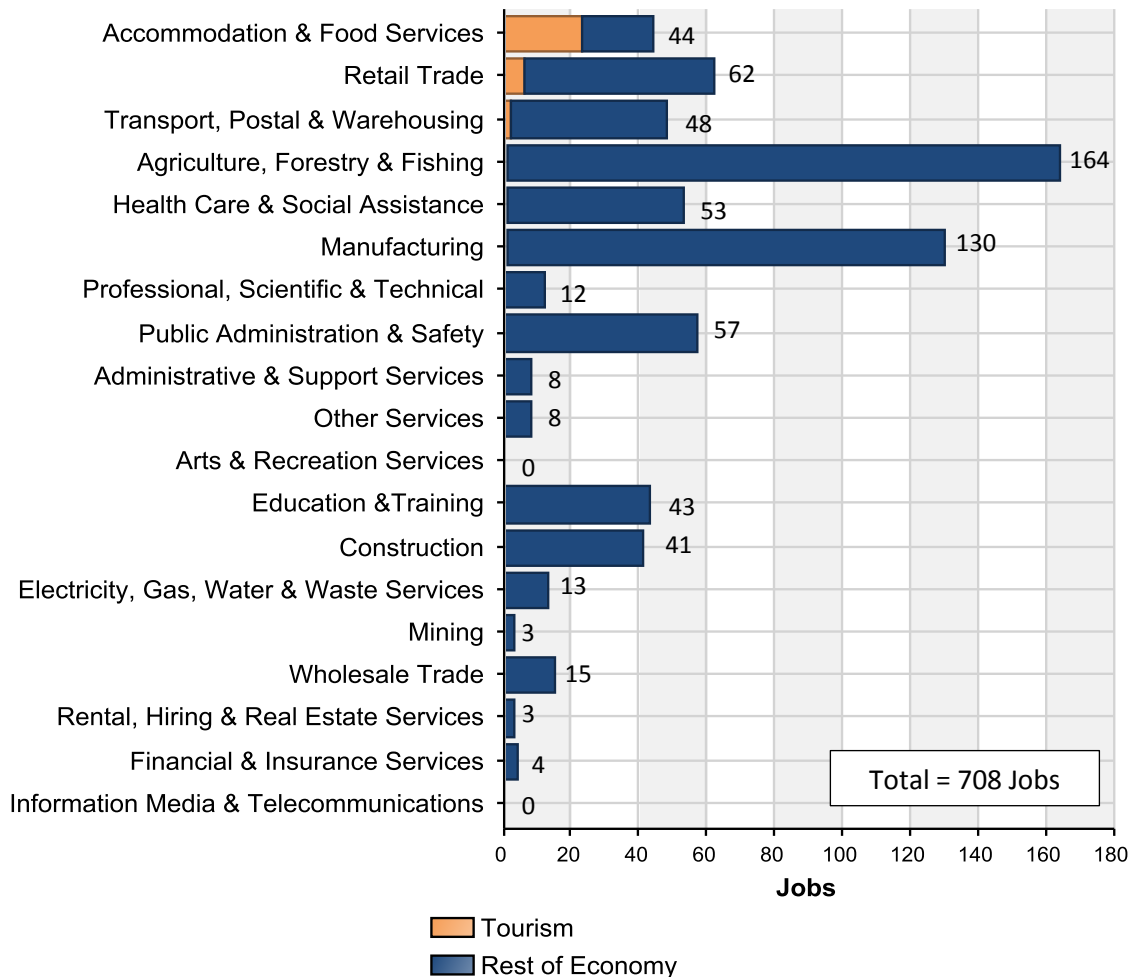
It is noted that the region is defined by Regional Tourism Organisation (RTO) boundaries, which differs from the tourism region as defined by Tourism Research Australia.

## 2. Tourism – King Island

Tourism is an amalgam of activities such as retail, accommodation, cafes & restaurants, cultural & recreational services, and is unique to each region. The figure below shows the number of people employed<sup>2</sup> by industry sector that are estimated to service the demand from visitors to King Island. The remainder is the number of jobs that are attributable to servicing demand from local businesses and consumers.

### 2.1 Tourism Employment

Figure 2-1 Employment by industry with tourism proportion – King Island



Source: REMPLAN Tourism Analysis Module

In total, the King Island economy supports 708 jobs<sup>3</sup>, of which the total tourism related employment estimate is 34 jobs (4.9%). Within King Island, the ‘Accommodation and Food Services’ sector employs 44 people, of which 23 (52.3%) of these jobs are attributable to the tourism sector, which

<sup>2</sup> The employment data represents the number of people employed by businesses / organisations in each of the industry sectors in the defined regions. In this report the employment data is place of work data and represents total numbers of employees without any conversions to full-time equivalence.

<sup>3</sup> Employment figures are based on the Australian Bureau of Statistics place of work employment data from the 2011 Census.

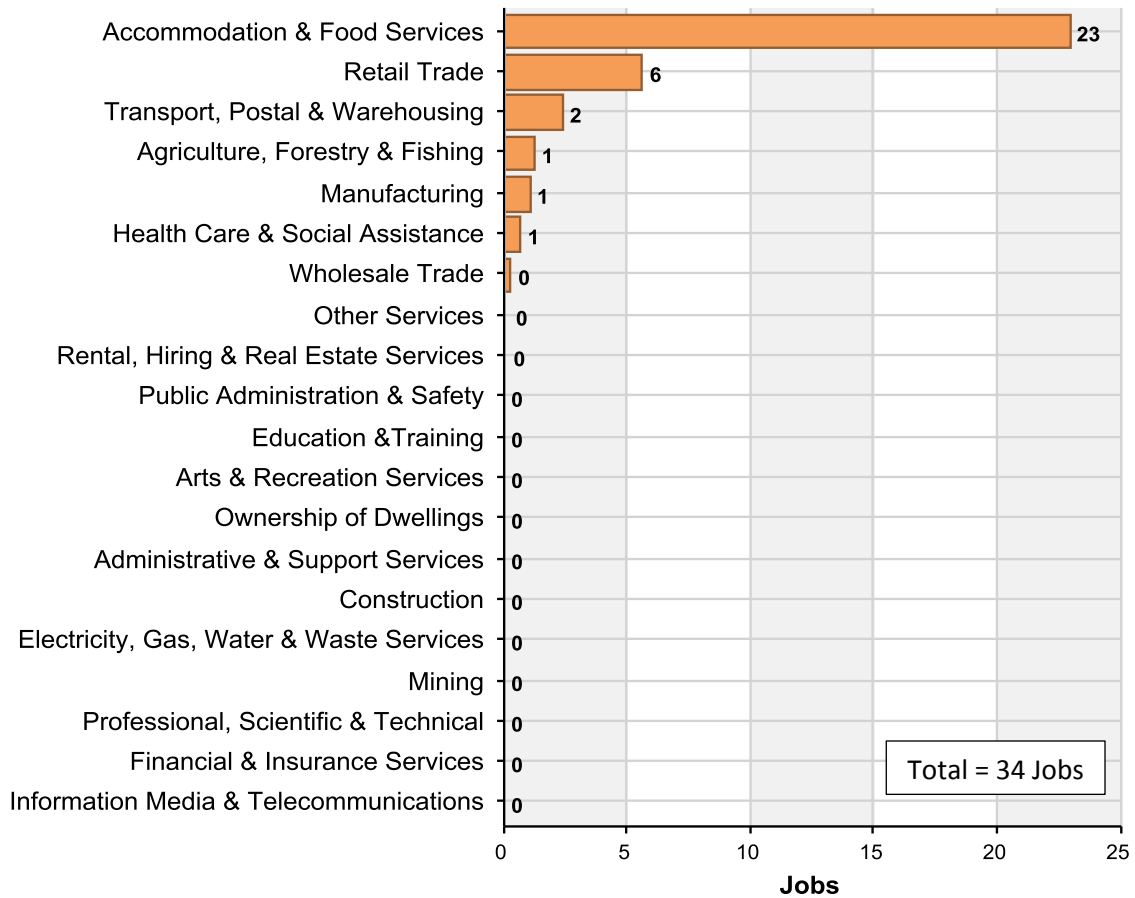


has the highest proportion of employees servicing demand for goods and services from visitors to King Island.

Figure 2-2 provides a breakdown of the number of jobs servicing visitors in each industry sector in King Island. It is estimated that the Tourism sector employs 34 people in total, which represents 4.9% of total employment in the region. The 23 jobs in the 'Accommodation and Food Services', sector represent 67% of King Island's total tourism related employment.

By comparison, the tourism sector in Tasmania is estimated to employ 15,137 people, which represents 7.2% of total jobs across the State.

**Figure 2-2 Employment attributable to Tourism – King Island**



Source: REMPLAN Tourism Analysis Module

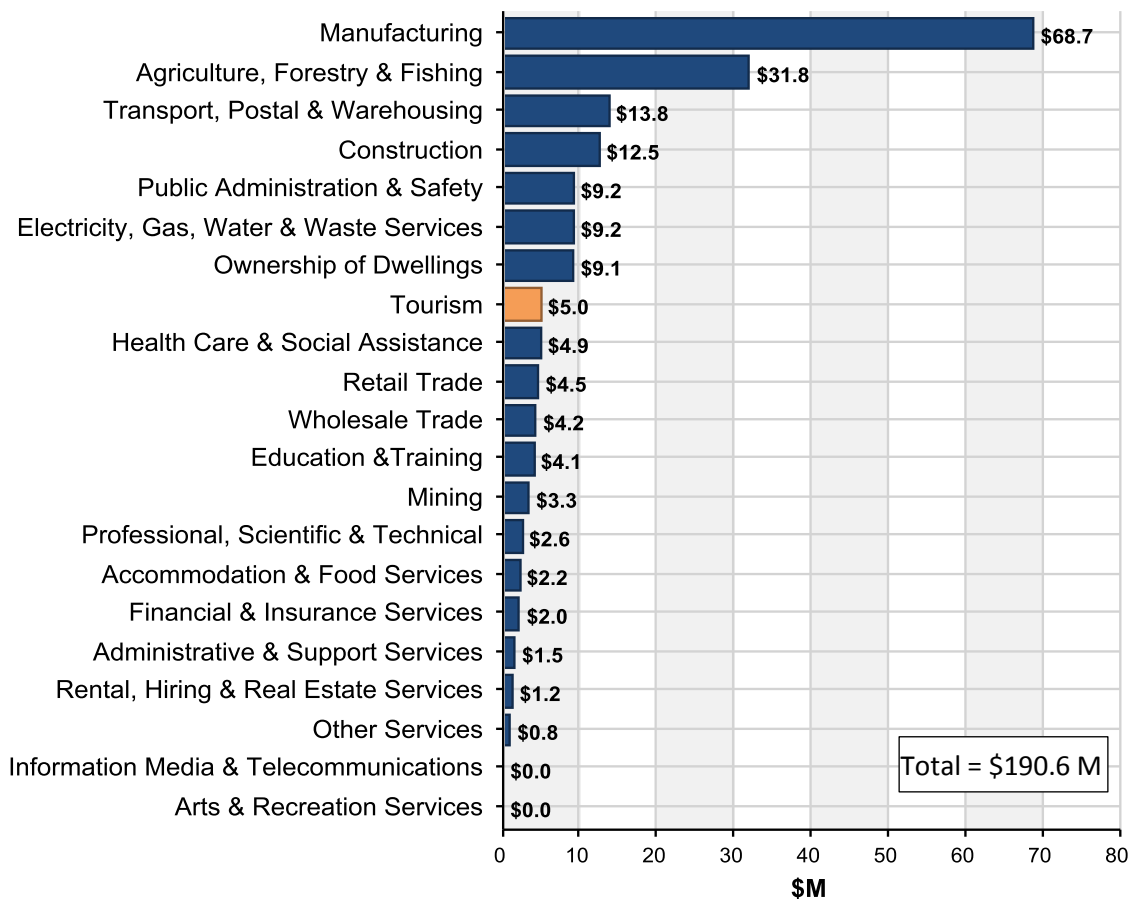
## 2.2 Tourism Output

The total output<sup>4</sup> generated by the King Island economy is estimated at \$190.6 million. The estimated output generated by tourism for each industry sector has been deducted and consolidated into a separate tourism sector. The 34 people employed in the tourism sector are estimated to generate \$5.0 million in direct economic output, which represents 2.6% of total output.

King Island's tourism related output is estimated to be \$5.0 million:

- Representing 2.6% of total region output and an estimated 34 jobs.
- At the state level, Tasmania's tourism sector generates \$2,178.32 million of output, which accounts for 4.2% of the total state output of \$51,621.4 million.
- The King Island tourism sector is estimated to contribute just over 0.2% of the state's tourism output in Tasmania.

Figure 2-3 Output with separate Tourism sector – King Island

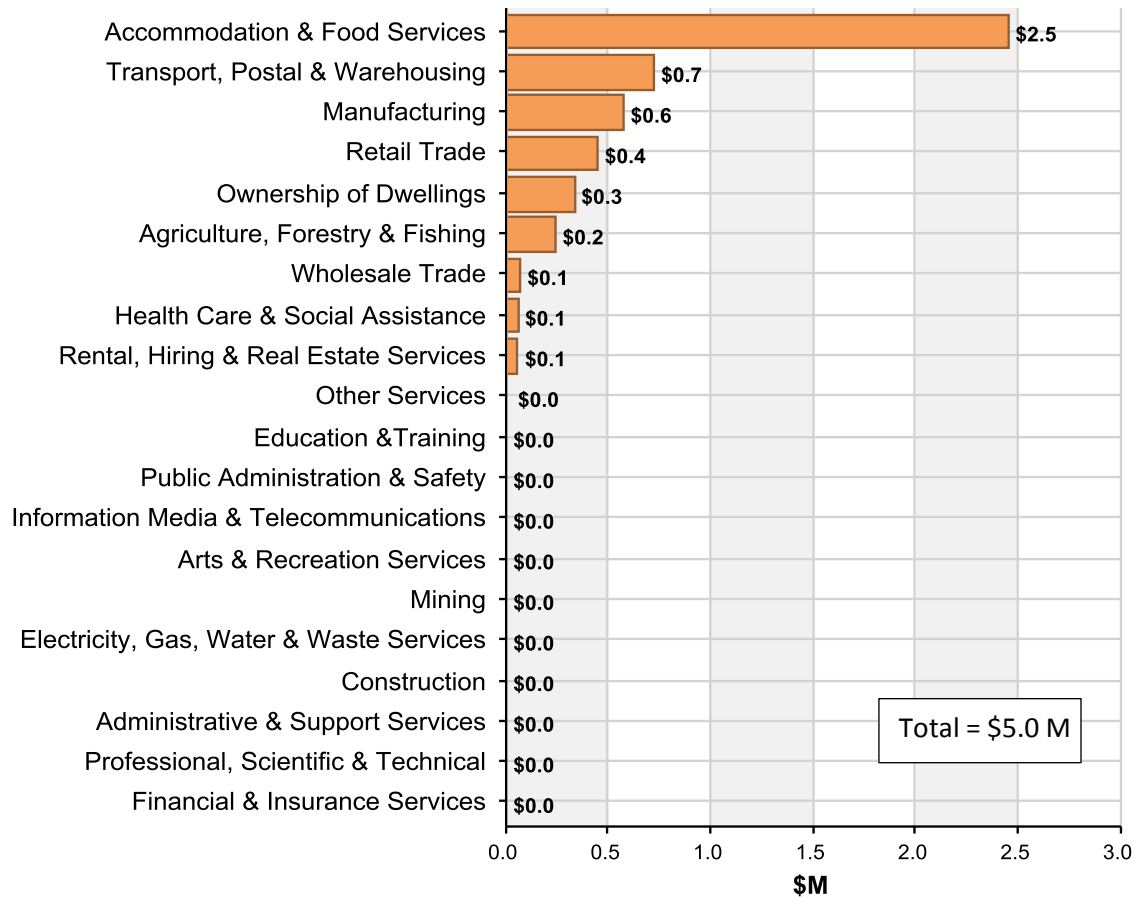


Source: REMPLAN Tourism Analysis Module

<sup>4</sup> Output data represents the gross revenue generated by businesses/organisations in each of the industry sectors in a defined region. Gross revenue is also referred to as total sales or total income. The output generated to service demand from visitors for each industry sector has been estimated through applying industry profiles from the Australian Bureau of Statistics Tourism Satellite Account and consolidated into a separate Tourism sector, shown highlighted in gold in the graph.

The industries contributing to King Island's tourism output are detailed in Figure 2-4. Of total tourism output of \$5.0 million, approximately half (\$2.5 million) is attributable to the 'Accommodation & Food Services' sector. The other top tourism output contributors in King Island are 'Transport, Postal & Warehousing' (\$0.7 million) and 'Manufacturing' (\$0.6 million), which combined represent 26% of total regional tourism output.

Figure 2-4 Output attributable to Tourism – King Island



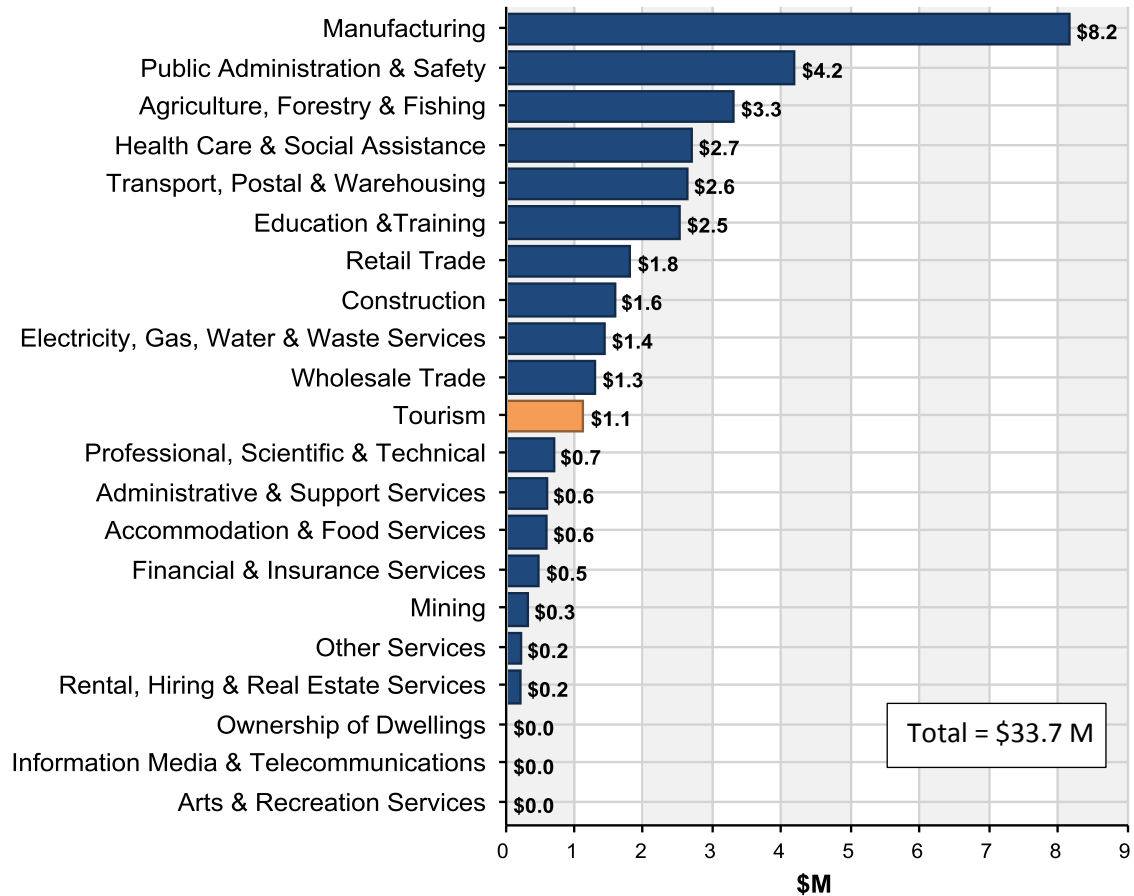
Source: REMPLAN Tourism Analysis Module

### 2.3 Tourism Wages and Salaries

The total wages and salaries paid to employees who work in King Island is estimated to be \$33.7 million. The 34 people employed in the tourism sector are estimated to receive \$1.1 million in wages and salaries, which equates to 3.3% of total wages and salaries in this region.

In comparison, Tasmania's tourism sector pays \$530.6 million in wages and salaries to workers, which represents 4.5% of total wages and salaries in the state economy.

Figure 2-5 Tourism wages and salaries – King Island



Source: REMPLAN Tourism Analysis Module

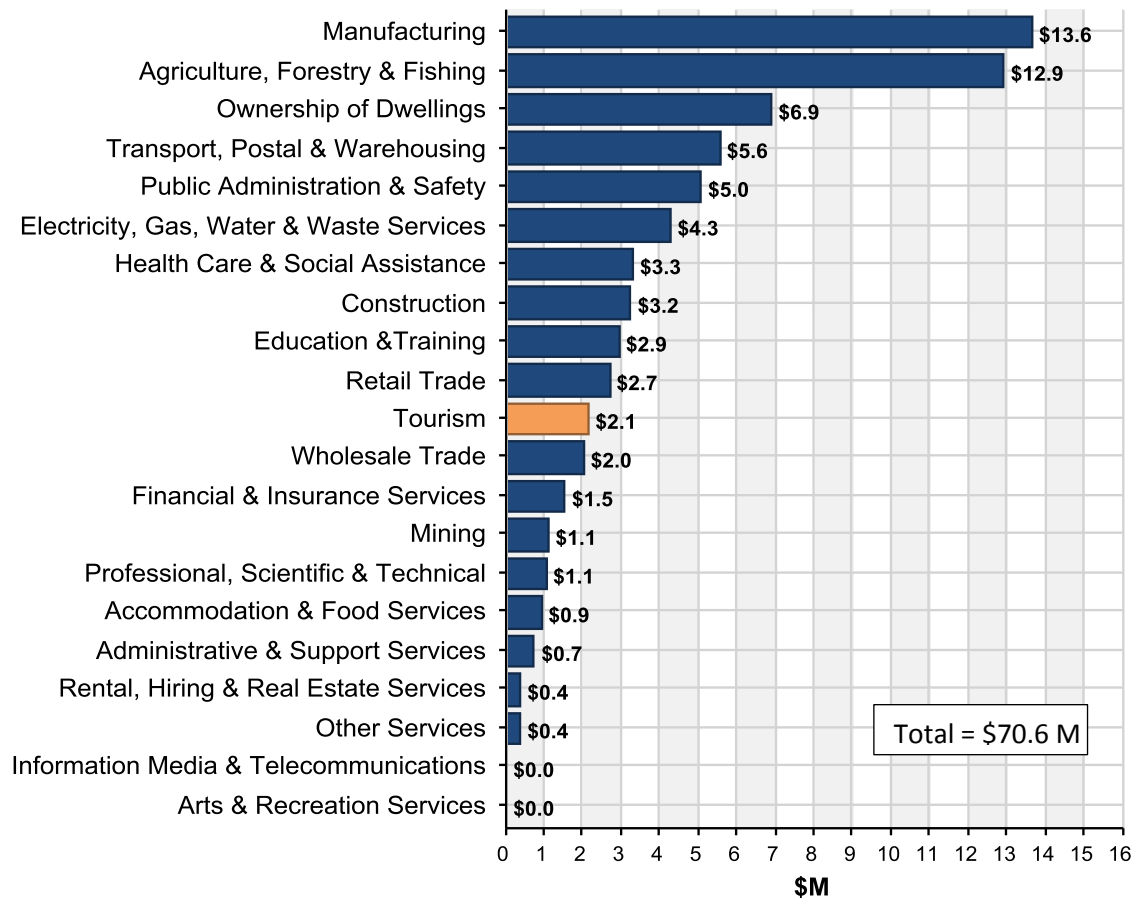
Note that a proportion of these wages and salaries is typically spent on the consumption of goods and services, and part of this consumption is expected to be captured within King Island delivering further economic benefits (see Figure 3-2).

## 2.4 Tourism Value-Added

The value that is added by industry sectors in King Island to intermediate goods and services is presented in Figure 2-6. The total value-added<sup>5</sup> in the Region across all industry sectors is estimated at \$70.6 million, of which the tourism sector contributes \$2.1 million or 3%.

In comparison, the tourism sector in Tasmania generates \$979.8 million of value-added, representing 4.4% of the State’s total value-added. King Island’s tourism contribution to the region’s value-added (3%) is lower than the state tourism sector average.

Figure 2-6 Tourism value-added – King Island



Source: REMPLAN Tourism Analysis Module

Value-added represents the contributions that industries make to King Island’s Gross Regional Product (GRP)<sup>6</sup> and Tasmania’s Gross State Product.

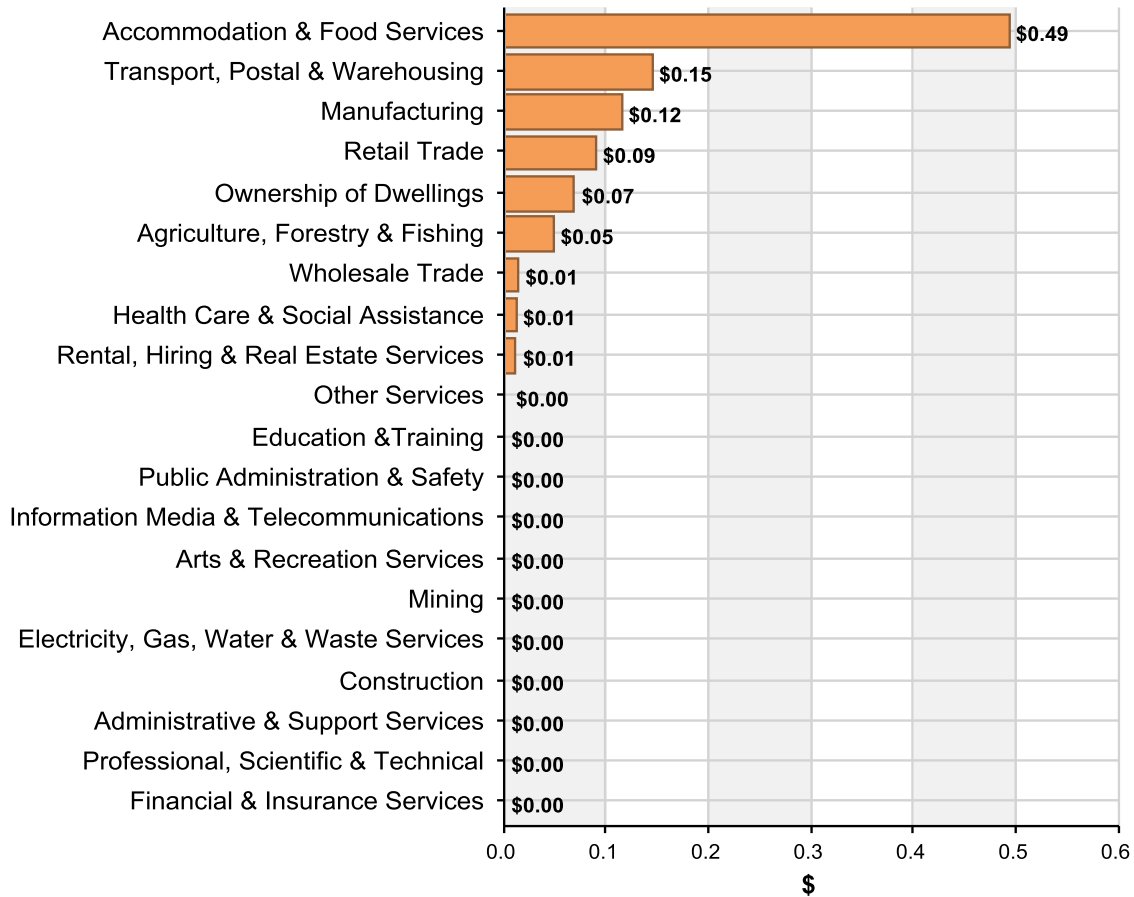
<sup>5</sup> Value Added represents the marginal economic value that is added by each industry sector in a defined region. Value-Added can be calculated by subtracting local expenditure and expenditure on regional imports from the output generated by an industry sector, or alternatively, by adding the Wages and Salaries paid to local employees, the gross operating surplus and taxes on products and production. Value-Added by industry sector is the major element in the calculation of Gross Regional Product.

<sup>6</sup> GRP is the total value-added to final goods and services produced in the region over the period of one year; this includes exports but excludes imports. This methodology is the same as that used to calculate Gross Domestic Product (GDP) at a national level. GRP can be measured by either the expenditure approach or the incomes approach.

### 3. Supply Chains

The Tourism sector in King Island is estimated to generate \$5.0 million in annual economic output. The industries contributing the most to the Tourism sector are the greatest beneficiaries of expenditure by visitors. The figure below provides insights regarding how the King Island economy benefits from each dollar spent by a tourist.

**Figure 3-1 Distribution of each \$1 spent by a visitor – King Island**



Source: REMPLAN Tourism Analysis Module

For each dollar spent by a tourist in King Island, it is estimated that typically \$0.49 is spent on 'Accommodation & Food Services', \$0.15 on 'Transport, Postal & Warehousing', \$0.12 on 'Manufacturing' and \$0.09 on 'Retail Trade'.

This data provides the basis for understanding the likely direct benefits for King Island should visitation and the associated expenditure increase. An increase in the number of tourists would boost the revenue generated by tourism related business, which would increase their demand for intermediate goods and services, some of which are likely to be sourced locally. These flow-on benefits associated with purchases of local intermediate goods and services are referred as industrial effects.

In addition, increased demand for goods and services from tourists would typically support local jobs, and the payments of wages and salaries in local businesses would deliver further benefits related to household consumption in the Region’s economy.

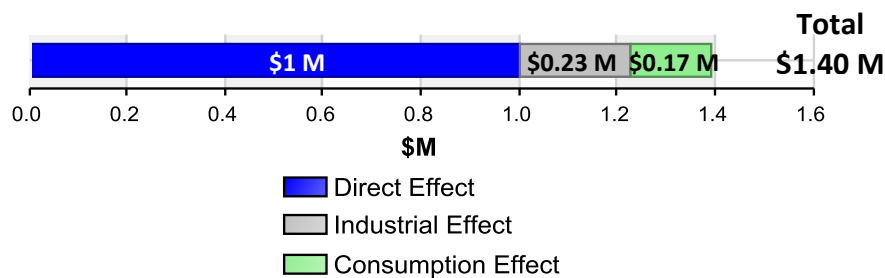
Based on the tourist expenditure distribution across industry sectors illustrated in Figure 3-1, impact modelling was undertaken to estimate the likely flow-on industrial and consumption effects for every \$1 million of direct expenditure by visitors to King Island.

**Table 3-1 Economic Impacts of Visitor Expenditure – King Island**

Output	Direct Effect (\$M)	Industrial Effect (\$M)	Consumption Effect (\$M)	Total (\$M)
Agriculture, Forestry & Fishing	\$0.05	\$0.04	\$0.00	\$0.10
Mining		\$0.00	\$0.00	\$0.00
Manufacturing	\$0.12	\$0.05	\$0.01	\$0.18
Electricity, Gas, Water & Waste Services		\$0.01	\$0.00	\$0.01
Construction		\$0.02	\$0.00	\$0.02
Wholesale Trade	\$0.01	\$0.01	\$0.01	\$0.03
Retail Trade	\$0.09	\$0.01	\$0.02	\$0.12
Accommodation & Food Services	\$0.49	\$0.00	\$0.02	\$0.51
Transport, Postal & Warehousing	\$0.15	\$0.03	\$0.01	\$0.19
Information Media & Telecommunications		\$0.00	\$0.00	\$0.00
Financial & Insurance Services		\$0.01	\$0.01	\$0.02
Rental, Hiring & Real Estate Services	\$0.08	\$0.01	\$0.06	\$0.14
Professional, Scientific & Technical Services		\$0.02	\$0.00	\$0.02
Administrative & Support Services		\$0.02	\$0.00	\$0.02
Public Administration & Safety		\$0.00	\$0.00	\$0.01
Education & Training		\$0.00	\$0.01	\$0.01
Health Care & Social Assistance	\$0.01	\$0.00	\$0.01	\$0.02
Arts & Recreation Services		\$0.00	\$0.00	\$0.00
Other Services		\$0.00	\$0.00	\$0.01
<b>TOTAL</b>	<b>\$1.00</b>	<b>\$0.23</b>	<b>\$0.17</b>	<b>\$1.40</b>
<b>Multiplier</b>		<u>Type 1</u> 1.23		<u>Type 2</u> 1.40

Source: REMPLAN Impact Analysis Model

**Figure 3-2 \$1 Million Visitor Expenditure Impact Scenario**



For \$1 million of direct expenditure by visitors to King Island, the local economy is estimated to benefit by a further \$0.40 million once flow-on industrial and consumption effects are taken into consideration. This can also be expressed as a tourism output multiplier of 1.40.

Applying the tourism industry multiplier of 1.40 to the direct output generated by King Island's tourism sector of \$5.0 million, the total value (direct + industrial + consumption) of tourism to the region's economy is estimated at up to \$7.0 million. This economic output is estimated to support 48 jobs in the region.

In comparison to the state level impact modelling scenario, the Tourism sector output multiplier for Tasmania is 2.10, which implies that \$1 million of visitor expenditure captured by Tasmania's economy would deliver a further \$1.1 million benefit to the state.



## 4. Value of Events, Festivals and Peak Seasons

The previous section details how visitors' expenditure is likely to flow through the King Island economy to benefit other industry sectors. A key question remaining is: how much is each visitor to the area likely to spend?

This information can be captured via visitor surveys or sourced from previous studies undertaken in relation to similar events. Tourism Research Australia's Regional Tourism profiles also provide broad guidance for the North West region regarding expenditure by visitor type.

**Figure 4-1 Visitor Expenditure Profile**

	Expenditure (\$M)	Visitors ('000)	Average stay (Nights)	Average trip expenditure (\$)	Average nightly expenditure (\$)
Domestic day <sup>7</sup>	92	892	-	103	-
Domestic overnight <sup>8</sup>	209	337	3	619	192
International <sup>9</sup>	13	20	7	626	88

Source: 2011-12, Tourism Research Australia (TRA), Regional Tourism Profiles; North West Region for domestic visitors and State level (Tasmania) for international visitors' average expenditure.

As King Island is regarded as part of the North West region by Tourism Research Australia, there exists no specific information for King Island. According to the Annual report of King Island Visitor Survey 2008-2009 supported by King Island Tourism<sup>10</sup>, there were 6,162 visitors to King Island during the year. Among that, 41% of visitors were from Victoria, 31% from Tasmania, and less than 1% from overseas. Each visitor spent an overall average of 4.4 nights in King Island. Combined with the North West tourism profile 2008-09 and 2011-12, the number of visitors is estimated at 5,336 during 2011-12, with 5,305 domestic visitors and 31 overseas visitors. Applying average trip expenditure of North West, visitor expenditure for King Island is estimated to be \$4.8 million.

Estimated expenditure by visitors combined with the supply chain analysis and impact modelling presented in section 3 provides a basis upon which to estimate the value to the King Island economy of events, festivals and peak visitation periods.

<sup>7</sup> A domestic visitor is defined by Tourism Research Australia as:

- the length of time away from the usual place of residence for travel (less than one year);
- the distance travelled from home (40 kilometre round trip from home for overnight travel, and 50 kilometre trip from home for same day travel); and
- Travel is not part of normal travel for employment (or non-commuter travel).

<sup>8</sup> As per Tourism Research Australia, a domestic overnight visitor is an Australian who undertakes an overnight trip. A person is a visitor to a location if they stay one or more nights in the location while travelling and they are said to have made a visit to the location. Therefore, a traveller may be a visitor to several different locations and consequently a trip may include multiple visits. Within each geographic region, net visitor numbers are reported. That is, a traveller is reported as only one visitor to a geographic region, irrespective of the number of places visited within the area.

<sup>9</sup> As per Tourism Research Australia, an International visitor is a visitor who visits another country. As for overnight travel, only international travel where the respondent is away from home for less than 12 months is included.

<sup>10</sup> [http://www.kingisland.tas.gov.au/webdata/resources/files/FINAL\\_Visitor\\_Survey\\_Annual\\_Report\\_0809.pdf](http://www.kingisland.tas.gov.au/webdata/resources/files/FINAL_Visitor_Survey_Annual_Report_0809.pdf)