## **Economic Impact Analysis**

Tourism in Tasmania's North West

REPORT PREPARED FOR
TOURISM TASMANIA AND THE
CRADLE COAST AUTHORITY

June 2013



## **Economic Impact Analysis**

Tourism in Tasmania's North West

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All figures and data presented in this document are based on data sourced from the Australia Bureau of Statistics (ABS), and other government agencies. Tourism data are sourced from Tourism Tasmania, Tourism Research Australia and the Australian Bureau of Statistics Tourism Satellite Account. Using ABS datasets, the regional economic modelling software REMPLAN, developed by REMPLAN has been applied to generate industrial economic data estimates. This document is provided in good faith with every effort made to provide accurate data and apply comprehensive knowledge. However, REMPLAN does not guarantee the accuracy of data nor the conclusions drawn from this information. A decision to pursue any actions based on information presented in the report is wholly the responsibility of the party concerned. REMPLAN advises any party to conduct detailed feasibility studies and seek professional advice before proceeding with any action and accepts no responsibility for the consequences of pursuing any of the findings or actions discussed in the document.

#### **RESOURCES**

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

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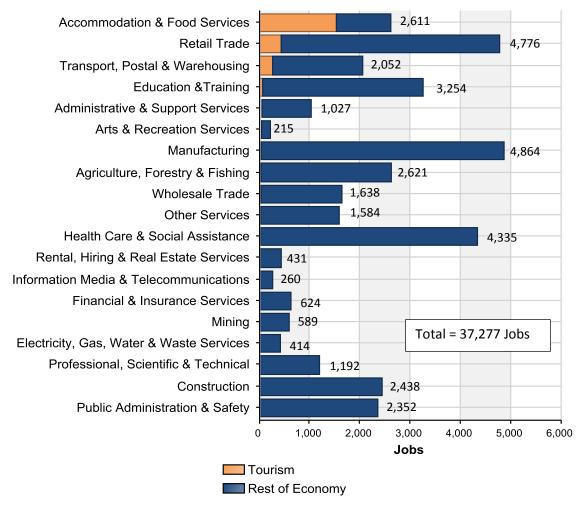
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## **Executive Summary**

The North West region is a coastline of towns and cities. It has wildlife and unspoilt natural scenery for travellers to explore. Based on the ABS 2011 Census, the North West's residential population is estimated at 102,905 people with the local economy supporting 37,277 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**

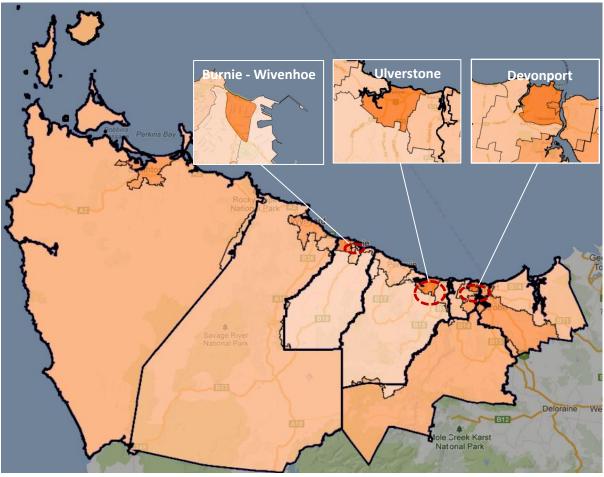


Source: REMPLAN Tourism Analysis Module

Of the 37,277 people employed in the North West, it is estimated that demand by visitors for goods and services supports 2,514 jobs (highlighted in orange above). That is, the Tourism sector represents 6.7% of total employment in North West, compared to 7.2% for the State of Tasmania overall. The major tourism related industries in North West are 'Accommodation & Food Services' (1,528 jobs), 'Retail Trade' (429 jobs) and 'Transport, Postal & Warehousing' (259 jobs). There is a concentration of tourism jobs in the destination zones of Devonport, Wivenhoe and Ulverstone, shown in the following map.



#### **ES -2 Tourism Employment Locations**



Source: REMPLAN MapBuilder

The Tourism sector in the North West is estimated to generate \$356.9 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 the North West, it is estimated that typically \$0.48 is spent on 'Accommodation & Food Services', \$0.18 on 'Transport, Postal & Warehousing', and \$0.10 on 'Retail Trade'.

For every dollar of direct expenditure by visitors in the North West, the broader local economy is estimated to benefit by a further \$0.73 once flow-on industrial and consumption effects are taken into consideration. This can also be expressed as a tourism output multiplier of 1.73.

An important finding in the report is that industry sectors benefiting from visitor expenditure in the North West include 'Administrative & Support Services' and 'Wholesale Trade', despite these sectors not typically having direct connection to tourist activities. This highlights the fact that the region's economy is an interconnected system where direct benefits to one industry will ripple through the economy to impact on all sectors to varying degrees.

Applying the tourism industry multiplier of 1.73 to the direct output generated by the North West's tourism sector of \$356.9 million, the total value (direct + industrial + consumption) of tourism to the region's economy is estimated at up to \$617.4 million. This economic output is estimated to support 4,349 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 in the North West of Tasmania.

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 the North West region 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 will provide a basis for estimating the multiplying impact of tourism to 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
- 2011/2012, Tourism Research Australia, Regional Tourism Profiles; North West Region and Tasmania (State) for international visitors' expenditure

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

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 the total 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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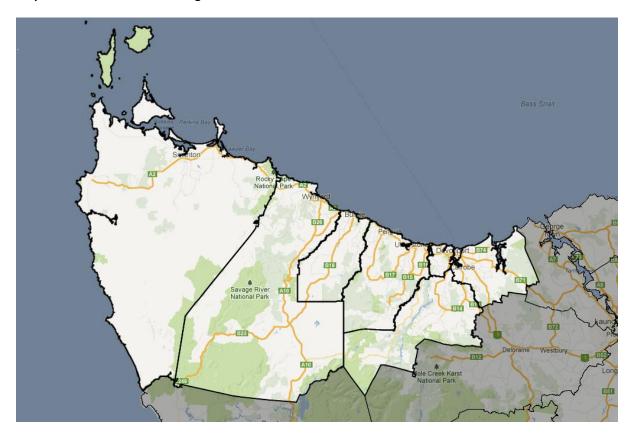


<sup>&</sup>lt;sup>1</sup> <u>www.remplan.com.au</u>

#### 1.3 Region Definition

The economic impact analysis has been undertaken in the context of the North West of Tasmania, which is defined by the combined boundaries of the local government areas of: Burnie (C), Central Coast (M), Circular Head (M), Devonport (C), Kentish (M), Latrobe (M) and Waratah/Wynyard (M).

Map 1-1 North West Tourism Region



Source: REMPLAN MapBuilder

It is noted that the region is defined by Regional Tourism Organisations, which is different from the ABS definition.

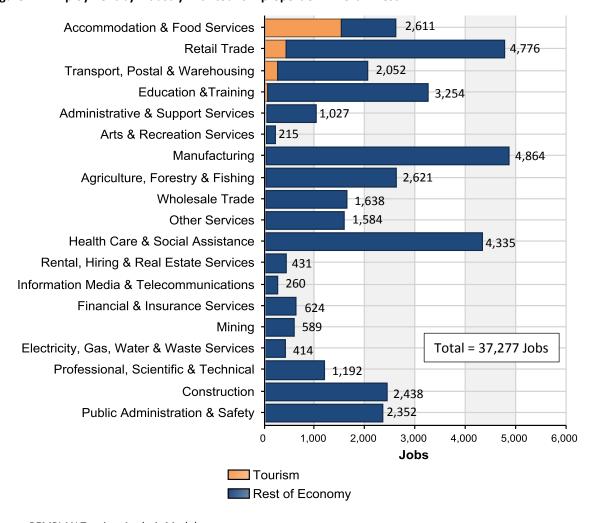


#### 2. North West Tourism

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 is estimated to service the demand from visitors to the North West. The remainder is the estimated proportion of employment attributable to servicing demand from local businesses and consumers.

#### 2.1 Tourism Employment

Figure 2-1 Employment by industry with tourism proportion - North West



Source: REMPLAN Tourism Analysis Module

In total, the North West economy supports 37,277<sup>3</sup> jobs, of which the total tourism related employment estimate is 2,514 jobs. The 'Accommodation & Food Services' sector employs 2,611 people, of which 1,528 (60.8%) of these jobs are attributable to the tourism sector, accounting for

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



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<sup>&</sup>lt;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.

the highest proportion of employees servicing demand for goods and services from visitors to the North West region.

Figure 2-2 provides a breakdown of the number of jobs servicing visitors in each industry sector in the North West. It is estimated that the Tourism sector employs 2,514 people in total, which represents 6.7 % of total employment in the region.

By comparison, the Tourism sector in Tasmania is estimated to employ 15,137 people, which represents 7.2% of total jobs across the State, similar to the North West being 6.7%.

The top three industry sectors in terms of tourism employment, when combined, represent 2,216 jobs, or 88% of total tourism related employment.

Accommodation & Food Services 1,528 Retail Trade 429 Transport, Postal & Warehousing 259 **Education &Training** 62 Administrative & Support Services 46 Arts & Recreation Services 39 Manufacturing 33 Agriculture, Forestry & Fishing 28 Wholesale Trade 26 Other Services 23 Health Care & Social Assistance 20 Rental, Hiring & Real Estate Services 15 Information Media & Telecommunications Ownership of Dwellings Electricity, Gas, Water & Waste Services 0 0 Professional, Scientific & Technical Total = 2,514 Jobs Public Administration & Safety Financial & Insurance Services 0 Construction 800 1,000 1,200 1,400 1,600 1,800 0 200 400 600 Jobs

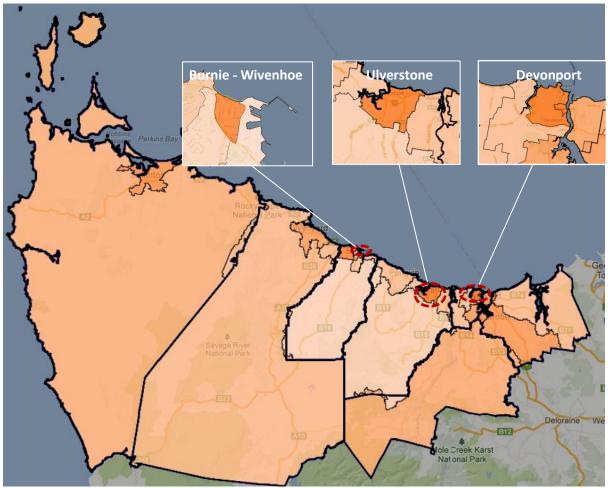
Figure 2-2 Employment attributable to Tourism - North West

Source: REMPLAN Tourism Analysis Module

The map below highlights the concentrations of 'Accommodation & Food Services' jobs in the North West regarding the degree to which the respective destination zones attract and service visitors. The highest concentrations are found in the destination zones of Devonport, Burnie - Wivenhoe and Ulverstone (these are shown in Map 2-2 with red boundary).



Map 2-1 Tourism employment locations



Source: REMPLAN MapBuilder



#### 2.2 Tourism Output

The total output<sup>4</sup> generated by the North West economy is estimated at \$10,079.1 million. The estimated output generated by tourism for each industry sector has been deducted and consolidated into a separate Tourism sector.

The North West's Tourism related output is estimated to be \$356.9 million:

- Representing 3.5% of total regional output and an estimated 2,514 jobs.
- At the state level, Tasmania's tourism sector generates \$2,178.3 million of output, which accounts for 4.2% of total state output of \$51,621.4 million.
- The North West's tourism sector approximately contributes 16.4% of the State's tourism output in Tasmania.

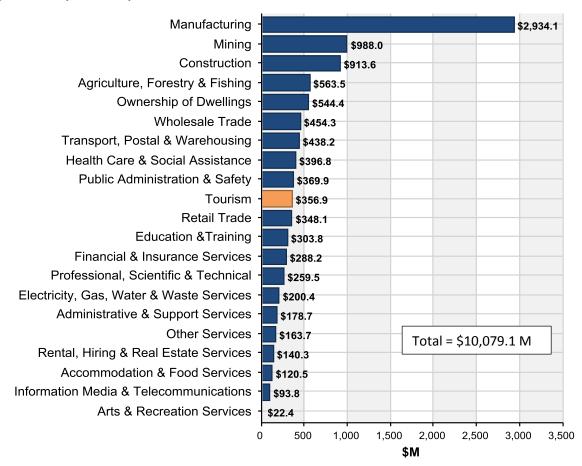


Figure 2-3 Output with separate Tourism sector - North West

Source: REMPLAN Tourism Analysis Module

<sup>&</sup>lt;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 the North West's tourism output are detailed in Figure 2-4. Total tourism output is estimated to be \$356.9 million, of which, almost half (47.6%) is attributable to the 'Accommodation & Food Services' sector, accounting for \$169.8 million. Other significant tourism related sectors in North West are 'Transport, Postal & Warehousing' and 'Retail Trade', which combined represent \$97.7 million, or 27.4% of total regional tourism output.

Accommodation & Food Services \$169.8 Transport, Postal & Warehousing \$63.3 Retail Trade \$34.4 Ownership of Dwellings \$25.2 Manufacturing \$20.0 Administrative & Support Services \$8.5 Wholesale Trade \$7.4 Agriculture, Forestry & Fishing \$6.0 **Education &Training** \$5.9 Rental, Hiring & Real Estate Services \$5.5 Arts & Recreation Services \$4.9 Other Services \$2.4 Health Care & Social Assistance \$1.8 Information Media & Telecommunications \$1.7 Construction \$0.0 Financial & Insurance Services \$0.0 Electricity, Gas, Water & Waste Services \$0.0 Total = \$356.9 M Professional, Scientific & Technical \$0.0 Public Administration & Safety \$0.0 Mining \$0.0 25 50 75 100 125 150 175 200 \$M

Figure 2-4 Output attributable to Tourism - North West

Source: REMPLAN Tourism Analysis Module



#### 2.3 Tourism Wages and Salaries

The total wages and salaries paid to employees who work in all industry sectors in the North West is estimated to be \$2,024.1 million. The 2,514 people employed in the tourism sector are estimated to receive \$85.9 million in wages and salaries, which is 4.2% 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.

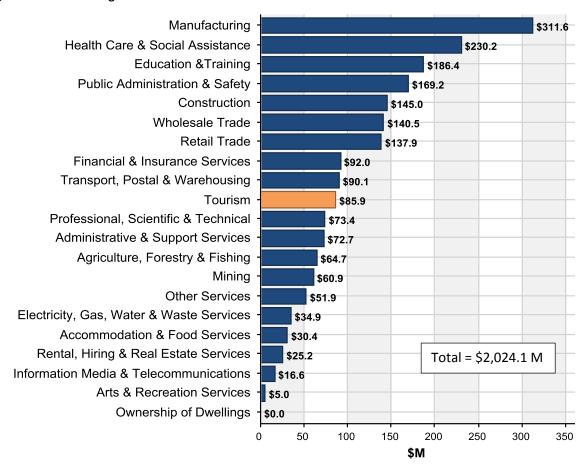


Figure 2-5 Tourism wages and salaries - North West

Source: REMPLAN Tourism Analysis Module

A proportion of wages and salaries are spent on the consumption of goods and services, and part of this consumption is expected to be captured within the North West delivering further economic benefits (see figure 3-2).



#### 2.4 Tourism Value-Added

The value that is added by industry sectors in the North West 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 \$4,254.1 million, of which the tourism sector contributes \$161.9 million or 3.8%.

The tourism sector in Tasmania generates \$979.8 million of value-added, representing 4.4% of the State's total value-added, a marginally higher proportionate contribution compared to the North West (3.8%). The North West's tourism sector contributes 16.5% (\$161.9 million) of the State's tourism value-added (\$979.8 million).

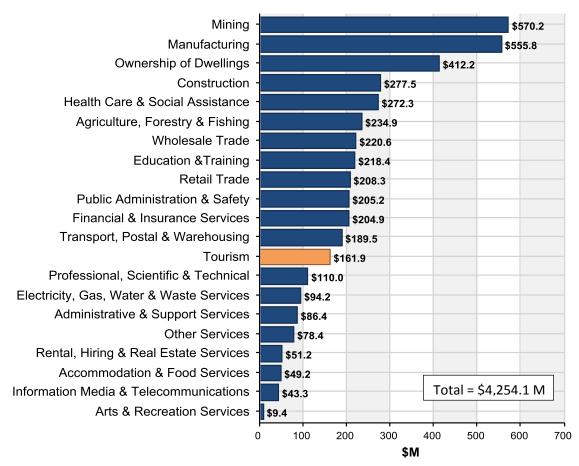


Figure 2-6 Tourism value-added - North West

Source: REMPLAN Tourism Analysis Module

Value added represents the contributions that industries make to North West's Gross Regional Product (GRP)<sup>6</sup> and Tasmania's Gross State Product.

<sup>&</sup>lt;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.



<sup>&</sup>lt;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.

## 3. Supply Chains

The Tourism sector in the North West is estimated to generate \$356.9 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 North West's economy benefits from each dollar spent by a tourist.

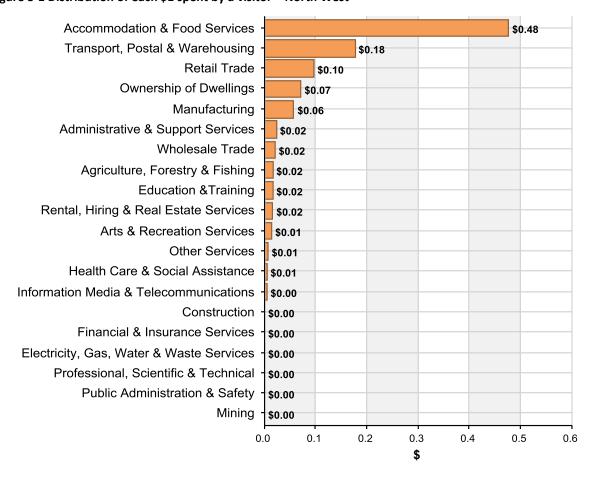


Figure 3-1 Distribution of each \$1 spent by a visitor - North West

Source: REMPLAN Tourism Analysis Module

For each dollar spent by a tourist in the North West, it is estimated that typically \$0.48 is spent on 'Accommodation & Food Services', \$0.18 on 'Transport, Postal & Warehousing', and \$0.10 on 'Retail Trade'.

This data provides the basis for understanding the likely direct benefits for the North West 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 payment of wages and salaries in local businesses would deliver further benefits related to household consumption in the region's economy.

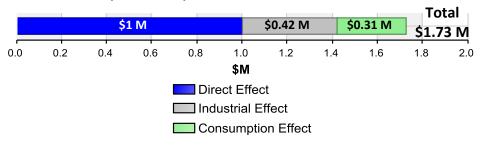
Based on the tourist expenditure distribution across industry sectors illustrated in Figure 3-1, impact modelling was undertaken to estimate the likely flow-on industrial and consumption effects for every \$1 million of direct expenditure by visitors to the North West.

Table 3-1 Economic Impacts of Visitor Expenditure - North West

Output	Direct Effect (\$M)	Industrial Effect (\$M)	Consumption Effect (\$M)	Total (\$M)
Agriculture, Forestry & Fishing	\$0.02	\$0.03	\$0.01	\$0.06
Mining		\$0.00	\$0.00	\$0.01
Manufacturing	\$0.06	\$0.10	\$0.04	\$0.19
Electricity, Gas, Water & Waste Services		\$0.01	\$0.01	\$0.02
Construction		\$0.02	\$0.01	\$0.03
Wholesale Trade	\$0.02	\$0.03	\$0.02	\$0.07
Retail Trade	\$0.10	\$0.01	\$0.04	\$0.15
Accommodation & Food Services	\$0.48	\$0.01	\$0.02	\$0.51
Transport, Postal & Warehousing	\$0.18	\$0.04	\$0.01	\$0.23
Information Media & Telecommunications		\$0.02	\$0.01	\$0.02
Financial & Insurance Services		\$0.02	\$0.02	\$0.05
Rental, Hiring & Real Estate Services	\$0.09	\$0.02	\$0.07	\$0.18
Professional, Scientific & Technical Services		\$0.03	\$0.01	\$0.04
Administrative & Support Services	\$0.02	\$0.04	\$0.01	\$0.07
Public Administration & Safety		\$0.01	\$0.00	\$0.01
Education & Training	\$0.02	\$0.00	\$0.01	\$0.03
Health Care & Social Assistance	\$0.01	\$0.00	\$0.02	\$0.02
Arts & Recreation Services	\$0.01	\$0.00	\$0.00	\$0.02
Other Services	\$0.01	\$0.02	\$0.01	\$0.03
TOTAL	\$1.00	\$0.42	\$0.31	\$1.73
		<u>Type 1</u>		Type 2
Multiplier		1.42		1.73

Source: REMPLAN Impact Analysis Model

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





For \$1 million of direct expenditure by visitors to the North West, the local economy is estimated to benefit by a further \$0.73, once flow-on industrial and consumption effects are taken into consideration. This can also be expressed as a tourism output multiplier of 1.73.

Applying the tourism industry multiplier of 1.73 to the direct output generated by the North West's Tourism sector of \$356.9 million, the total value (direct + industrial + consumption) of tourism to the Region's economy is estimated at up to \$617.4 million. This economic output is estimated to support 4,349 jobs in the region.

In comparison to the state level impact modelling scenatrio, the Tourism sector output multiplier for Tasmania is 2.11, 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

Section 3 details how visitors' to the North West spend their money and how this expenditure is likely to flow through the 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 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.

Expenditure estimates per visitor combined with the supply chain analysis and impact modelling presented in Section 3 provide a basis upon which to estimate the value of events, festivals and peak visitation periods to the North West economy.

<sup>&</sup>lt;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.



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

<sup>•</sup> the length of time away from the usual place of residence for travel (less than one year);

<sup>•</sup> 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

<sup>•</sup> Travel is not part of normal travel for employment (or non-commuter travel).

<sup>&</sup>lt;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.