MACEDON RANGES VISITOR ECONOMY IMPACT STUDY

FINAL REPORT

JUNE 2017   MACEDON RANGES SHIRE

Urban Enterprise   Urban Planning / Land Economics / Tourism Planning / Industry Software

www.urbanenterprise.com.au

AUTHORS

Mike Ruzzene

Danielle Cousens

Urban Enterprise

Urban Planning, Land Economics, Tourism Planning & Industry Software

389 St Georges Rd, Fitzroy North, VIC 3068

(03) 9482 3888

www.urbanenterprise.com.au

CONTENTS

ACRONYMS & GLOSSARY

LGA – Local Government Area

SA2 – Statistical Area Level 2

A Statistical area level 2 (SA2) is one of the spatial units defined under the Australian Statistical Geography Standard (ASGS). The ASGS is a hierarchical geographical classification, defined by the Australian Bureau of Statistics (ABS) The ABS describes a SA2 as 'a general-purpose medium-sized area built from whole SA1s. Their aim is to represent a community that interacts together socially and economically'

EXECUTIVE SUMMARY

THE REGION

The Macedon Ranges region is compiled of four key sub regions, which have different product profiles affecting their visitation and associated economic impact. These sub regions are:

- Kyneton – Malmsbury Sub Region (includes the SA2 of Kyneton);
- Woodend – Macedon Sub Region (includes the SA2s of Woodend and Macedon);
- Gisborne Sub Region (includes the SA2s of Gisborne and Riddells Creek); and
- Lancefield – Romsey Sub Region (includes the SA2 of Romsey).

VISITATION

In 2016, the Macedon Ranges attracted 1.67 million visitors, with over 1 million daytrip visitors and 654,000 overnight visitors. This represents a 47%, 74% and 62% growth in overnight, daytrip and total visitation respectively since the 2009 Tourism Economic Impact Study.

The Woodend – Macedon Sub Region attracted the largest number of daytrip visitors within the Macedon Ranges, capturing around 40% of total visitation, whilst overnight visitation is more balanced across the sub regions, with both Kyneton – Malmsbury Sub Region and Woodend – Macedon Sub Region the highest, attracting a similar level of overnight visitors.

Overall Woodend – Macedon Sub Region attracted 37% of all visitors to the Macedon Ranges, with 610,000 visitors in 2016. The Romsey – Lancefield Sub Region attracted the lowest level of visitation, receiving 220,000 visitors in 2016.

VISITOR ECONOMY IMPACT

Visitor expenditure in Macedon Ranges in 2016 was $273 million, a 56% increase in visitor expenditure calculated in 2009.

The Woodend – Macedon Sub Region attracted the highest level of visitor expenditure ($92 Million) and supported the largest number of tourism jobs (796) of the Macedon Ranges Sub Regions, closely followed by Kyneton – Malmsbury ($85 Million in expenditure and 734 jobs).

Overall, the economic impact of the visitor economy in the Macedon Ranges is estimated at $456 million in regional output and 2,355 jobs, with the value and jobs of the visitor economy in the Macedon Ranges growing 56% between 2009 and 2016.

1. INTRODUCTION

1.1. BACKGROUND

Tourism Macedon Ranges appointed Urban Enterprise to undertake an impact assessment of the visitor economy in the Macedon Ranges Shire.

The study will build on a previous economic impact assessment undertaken in 2009.

The study was commissioned in response to the lack of local level tourism data relating to the tourism industry, relating to employment, visitation and visitor expenditure impacts.

This report prepared by Urban Enterprise provides an analysis of the impact of the visitor economy and performance of the tourism industry in Macedon Ranges Shire.

The project has been designed to identify:

- The number of visitors to the Macedon Ranges Shire;
- Visitor expenditure to the Macedon Ranges Shire; and
- Impact of the visitor economy to the Macedon Ranges Shire.

1.2. METHODOLOGY

The study draws on primary and secondary research including:

- Macedon Ranges Tourism Impact Study 2009;
- Population and Visitor Estimator (PAVE) model;
- Australian Bureau of Statistics (ABS) data; and
- Tourism Satellite Accounts (ABS).

A summary of the methodology used to calculate the impact of the visitor economy and performance of the tourism sector in Macedon Ranges Shire, is outlined below.

1.3. IMPACT OF THE VISITOR ECONOMY

CHANGING DEFINITION OF THE VISITOR ECONOMY

As the economic impact of tourism has become more widely researched and its impacts more closely understood, the traditional definition has evolved to a more complex appreciation of the industry. It is now recognised that visitor activity does not occur in isolation and contributes to the wider investment and jobs across a range of industry sectors. As recognised by the Victorian Visitor Economy Strategy (2016) the 'visitor economy' refers to the production of goods and services for consumption by visitors, which includes the industries that directly service visitors such as hotels, transport providers, tour companies and attractions, as well as intermediaries and those involved indirectly, such as retail and food production.

NUMBER OF VISITORS

This analysis has been prepared to present a more holistic representation of visitation to the Shire. Relying on Tourism Research Australia's National Visitor Survey (NVS) and International Visitor Survey (IVS) data in isolation does not provide an accurate account of total visitation to the Macedon Ranges for the following reasons:

- IVS and NVS data does not capture visitation for persons 14 years and under;
- Sampling methods for the NVS do not effectively capture holiday home visitors, due to the biased nature of holiday home ownership. This results in underestimating the number of visitors staying in holiday homes and for the Macedon Ranges which has many non-permanent rate payers, underestimates total overnight visitation to the Shire;
- The IVS does not provide estimates of international daytrippers to the Macedon Ranges.

In response to the underestimation of visitation to the Macedon Ranges, Urban Enterprise provides new estimates on visitation to the Macedon Ranges Shire, accounting wholly for the holiday home sector, visitors aged under 14 and international visitation.

In addition, NVS/IVS data is not accurate below the LGA level for the Macedon Ranges, due to the low sample size. Urban Enterprises PAVE model has been developed to provide visitor estimates for small areas.

Urban Enterprise has applied this model to a number of areas in the past including Greater Shepparton, Strathbogie Shire, Murrindindi Shire, Mansfield Shire, Mitchell Shire, Surf Coast Shire, Mornington Peninsula Shire and City of Frankston. This work has been used for economic impact modelling for those areas and also for understanding visitation at the small area level.

The number of visitors to the Macedon Ranges Shire has been calculated using Urban Enterprise's PAVE model. The model uses a number of algorithms which draw on local level accommodation data (number of establishments and guest rooms), ABS Survey of Tourist Accommodation data (occupancy rates) and National Visitor Survey Data (visitor proportions).

VISITOR EXPENDITURE

Visitor expenditure is calculated by multiplying the number of daytrip and overnight visitors by the expenditure per visitor identified in the National Visitor Survey (Tourism Research Australia).

TOURISM EMPLOYMENT

The total number of employees by industry type is identified through Census Data (2006), provided by the Australian Bureau of Statistics. A tourism multiplier is then obtained from Tourism Satellite Accounts, provided by the Australian Bureau of Statistics and used to calculate the number of employees directly attributed to tourism.

1.4. MACEDON RANGES SHIRE SUB REGIONS

Urban Enterprise will be providing data in this report for a range of sub regions that align with the tourism geography of the Macedon Ranges Shire.

Sub regions include:

- Kyneton – Malmsbury Sub Region (includes the SA2 of Kyneton).
- Woodend – Macedon Sub Region (includes the SA2s of Woodend and Macedon);
- Gisborne Sub Region (includes the SA2s of Gisborne and Riddells Creek); and
- Lancefield – Romsey Sub Region (includes the SA2 of Romsey).

FIGURE 1 MACEDON RANGES SHIRE SUB REGIONS

Source: Urban Enterprise

2. ESTIMATED VISITATION

2.1. INTRODUCTION

This section provides an overview of visitation to the Macedon Ranges and its sub regions as defined in this report.

Visitation data presented has been prepared using Urban Enterprise's PAVE model and builds on the analysis undertaken for the 2009 Macedon Ranges Tourism Impact Study.

2.2. VISITATION OVERVIEW 2009-2016

Figure 1 provides an outline of visitation to the Macedon Ranges for 2009 and 2016.

In 2016, the Macedon Ranges attracted 1.6 million visitors, with over 1 million daytrip visitors and 651,000 overnight visitors.

Macedon Ranges has attracted significant growth in visitation since the preparation of the 2009 Macedon Ranges Tourism Impact Study, growing 47% in overnight visitation, 74% in daytrip visitation and 62% in total visitation.

TABLE 1 VISITATION TO THE MACEDON RANGES SHIRE 2009 - 2016

	2009	2016	GROWTH 2009-2016
Overnight Visitation	446,461	654,106	47%
Daytrip Visitation	585,000	1,017,900	74%
Total Visitation	1,031,461	1,672,007*	62%

*Total Visitation is not equal to the sum of Overnight and Daytrip Visitation as provided in Table 1 due to rounding of visitation to the Kyneton – Malmsbury Sub Region. See Table 4 for further information.

2.3. VISITATION BY SUB REGION 2016

DAYTRIP VISITATION – SUB REGIONS

Table 2 provides an outline of daytrip visitation to Macedon Ranges Sub Regions for 2016.

Woodend – Macedon Sub Region attracts the largest number of daytrip visitors within the Macedon Ranges, capturing around 40% of total visitation. This Sub Region includes a number of popular attractions including Woodend township, Mount Macedon and Hanging Rock. These destinations are popular for daytrip visitors.

Kyneton – Malmsbury attracts 30% of the Macedon Ranges daytrippers, drawn mainly to Kyneton's popular village attractions including cafes, restaurants and arts attractions.

TABLE 2 DAYTRIP VISITATION BY SUB REGION

SUB REGION	2016	% OF TOTAL VISITATION
Romsey - Lancefield Sub Region	110,137	11%
Kyneton - Malmsbury Sub Region	310,708	30%
Woodend - Macedon Sub Region	403,404	40%
Gisborne Sub Region	193,651	19%
TOTAL	1,017,900	100%

FIGURE 2 DAYTRIP VISITORS AND PROPORTION OF DAYTRIP VISITATION BY SUB REGION
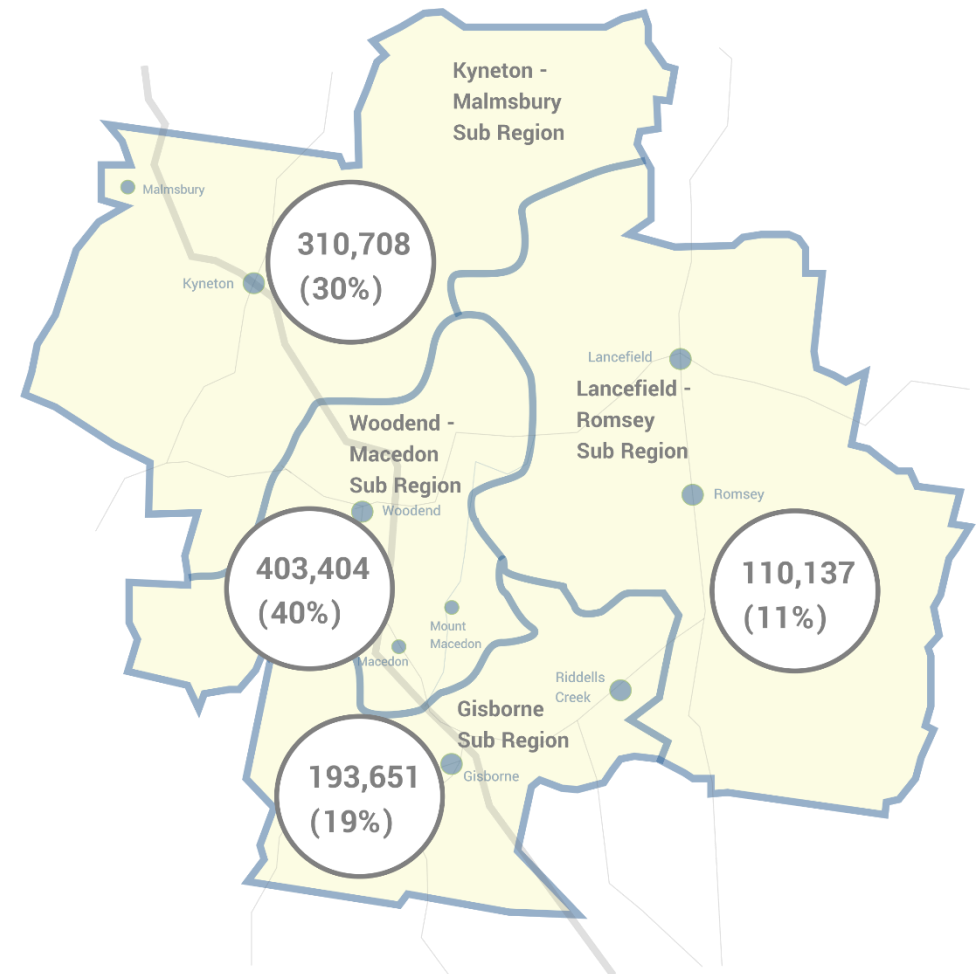
OVERNIGHT VISITATION – SUB REGIONS

Table 3 provides an overview of overnight visitation to Macedon Ranges Sub Regions.

Overnight visitation is more balanced across the sub regions, with both Kyneton – Malmsbury Sub Region and Woodend – Macedon Sub Region the highest, attracting a similar level of overnight visitors.

Many visitors staying overnight in the Macedon Ranges, stay with friends and family, so overnight visitation does not align to tourism product as well as daytrip visitation. This highlights the lack of visitor accommodation in the key sub regions of Kyneton – Malmsbury and Woodend – Macedon.

TABLE 3 OVERNIGHT VISITATION 2016

SUB REGION	2016	% of TOTAL VISITATION
Romsey - Lancefield Sub Region	110,357	17%
Kyneton - Malmsbury Sub Region	205,356	31%
Woodend - Macedon Sub Region	207,392	32%
Gisborne Sub Region	131,001	20%
TOTAL	654,106	100%

FIGURE 3 OVERNIGHT VISITORS AND PROPORTION OF OVERNIGHT VISITATION BY SUB REGION
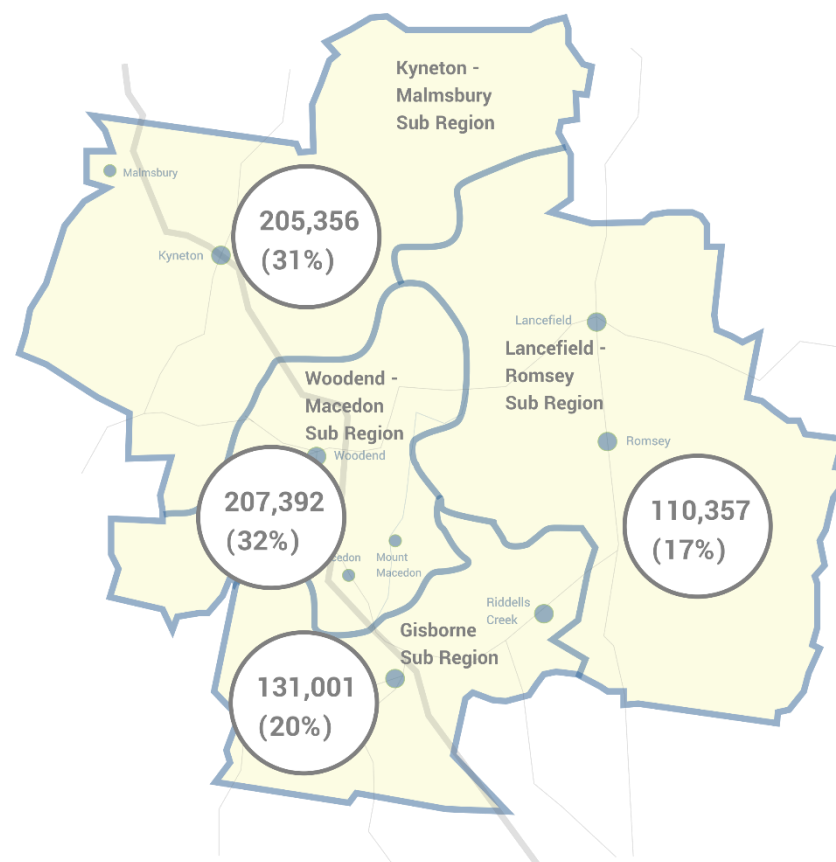
TOTAL VISITATION

Table 4 provides an overview of total visitation to each of the Macedon Ranges Sub Regions.

Woodend – Macedon Sub Region attracts 37% of all visitors to the Macedon Ranges, with 610,000 visitors in 2016. This is followed by Kyneton – Malmsbury which attracted 31% of visitation with 516,000 visitors.

Romsey – Lancefield Sub Region has the lowest level of visitation, attracting 220,000 visitors in 2016. This reflects the smaller population base and lower levels of tourism product in the Sub Region.

TABLE 4 TOTAL VISITATION

SUB REGION	2016	% OF TOTAL VISITATION
Romsey - Lancefield Sub Region	220,494	13%
Kyneton - Malmsbury Sub Region	516,065	31%
Woodend - Macedon Sub Region	610,796	37%
Gisborne Sub Region	324,652	19%
TOTAL	1,672,007	100%

FIGURE 4 TOTAL VISITORS AND PROPORTION OF TOTAL VISITATION BY SUB REGION
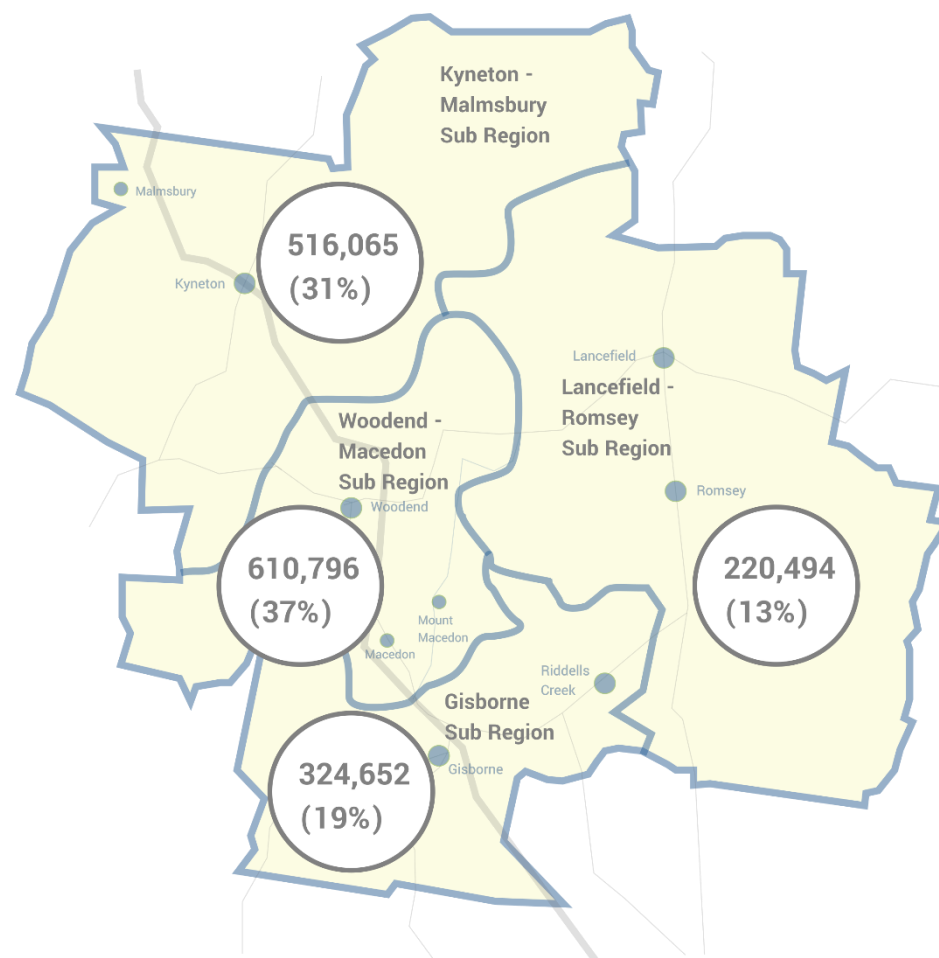
3. ECONOMIC IMPACT OF THE VISITOR ECONOMY

3.1. INTRODUCTION

This section provides an estimate of the economic impact of the visitor economy in the Macedon Ranges Shire and segments impacts down to the sub regional level.

Economic impact modelling has been developed by using visitor direct expenditure and applying input-output modelling for flow on benefits, total output and jobs.

Input-Output (I-O) analysis is a widely-used technique for estimating economic impacts of an activity in a region. It examines how the industry affects an economy through its linkages between all other sectors in the industry. The Economic Impact assessment examines the visitor economy's total impact to the Gross Regional Output of the region.

The analysis also assesses the level of Full Time Equivalent (FTE) employment generated as a result of the expenditure. FTE employment is the estimated number of annual full time equivalent jobs supported by the economic impact.

Indirect expenditure refers to the flow-on expenditure in to other industries within the Macedon Ranges which is generated by the visitor economy. Refer to Appendix A for more detail.

3.2. VISITOR EXPENDITURE

VISITOR EXPENDITURE 2009-2016

Table 5 provides an outline of visitor expenditure, comparing 2009 with 2016.

Total visitor expenditure in Macedon Ranges in 2016 was $273 million, a 56% increase in visitor expenditure calculated in 2009.

TABLE 5 VISITOR EXPENDITURE 2009-2016

	2009	2016	GROWTH 2009-2016
OVERNIGHT VISITORS	$135,000,000	$201,464,942	49%
DAYTRIP VISITORS	$40,000,000	$72,270,900	81%
TOTAL VISITORS	$175,000,000	$273,735,842	56%

VISITOR EXPENDITURE BY SUB REGION

Table 6 provides an outline of visitor expenditure by Sub Region.

Woodend – Macedon Sub Region attracts the highest level of visitor expenditure ($92 Million) of the Macedon Ranges Sub Regions, closely followed by Kyneton – Malmsbury ($85 Million).

TABLE 6 VISITOR EXPENDITURE BY SUB REGION

SUB REGION	TOTAL VISITOR EXPENDITURE	PROPORTION OF EXPENDITURE
Romsey - Lancefield Sub Region	$41,809,823	15%
Kyneton - Malmsbury Sub Region	$85,309,986	31%
Woodend - Macedon Sub Region	$92,518,384	34%
Gisborne Sub Region	$54,097,650	20%
TOTAL	$273,735,842.24	100%

FIGURE 5 VISITOR EXPENDITURE BY SUB REGION
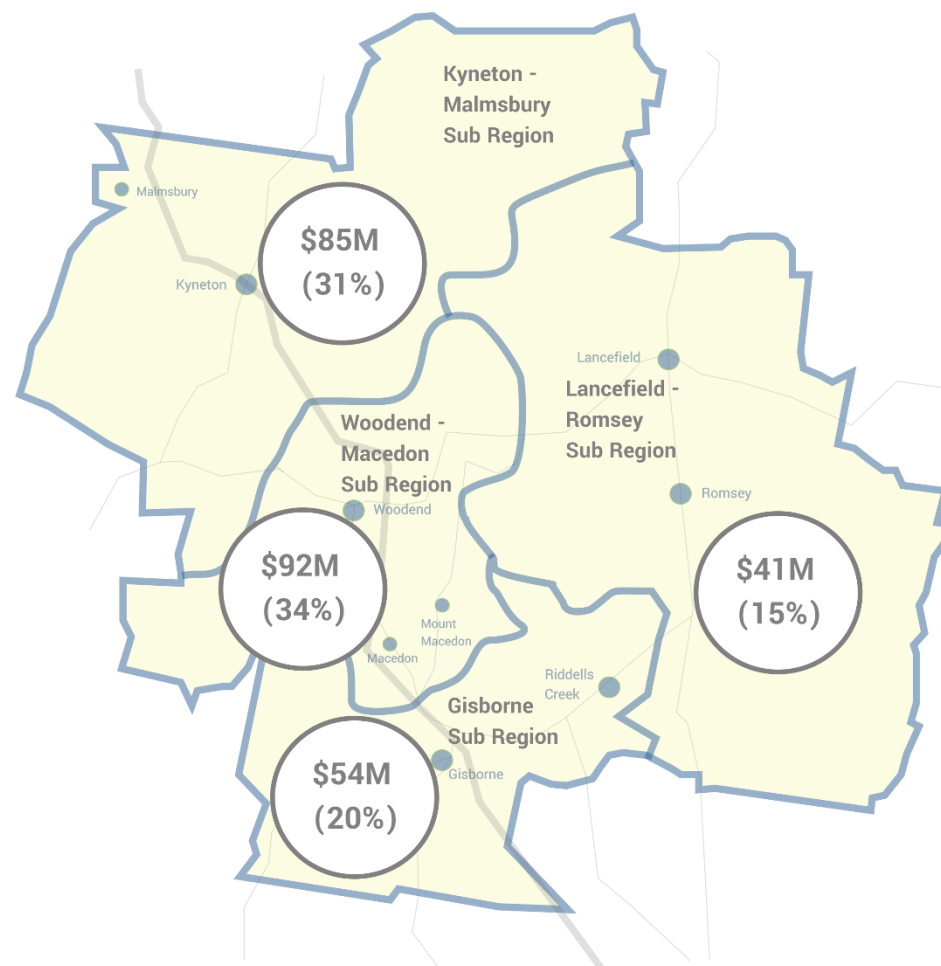
3.3. ECONOMIC IMPACT

SUMMARY OF IMPACT OF THE VISITOR ECONOMY IN THE MACEDON RANGES

The impact of the visitor economy in the Macedon Ranges is estimated at $456 million in regional output and 2,355 total jobs.

Direct expenditure is calculated based on the direct expenditure per visitor to the Macedon Ranges. This is considered to be the impact of tourism. Indirect expenditure refers to the flow-on expenditure to other industries generated by the direct expenditure and has been derived from input-output modelling. Direct and indirect expenditure combined is considered to be regional output and therefore the impact of the visitor economy.

TABLE 7 IMPACT OF THE VISITOR ECONOMY IN THE MACEDON RANGES

	2009	2016
DIRECT EXPENDITURE	$175,000,000	$273,735,842
INDIRECT EXPENDITURE	$117,000,000	$183,011,963
OUTPUT	$292,000,000	$456,747,805
EXPENDITURE PER VISITOR (OVERNIGHT)	$302.38	$308.00
EXPENDITURE PER VISITOR (DAYTRIP)	$68.38	$71.00
TOTAL JOBS (DIRECT AND INDIRECT)	1505	2,355
% GROWTH IN JOBS 2009-2016		56%

Table 8 provides an overview of direct jobs associated with tourism compared to other industry sectors in Macedon Ranges. An estimated 1413 jobs are directly related to touri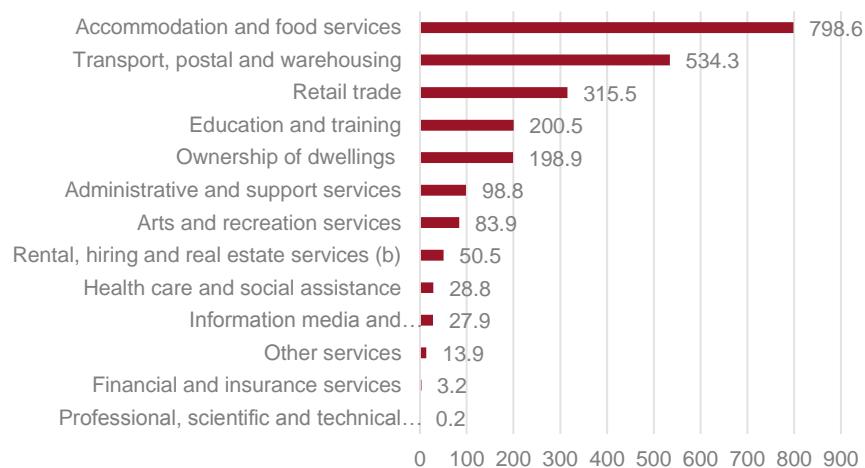sm in the Macedon Ranges (Table 8). Figure 6 shows an estimated breakdown of direct and indirect visitor economy jobs across industry divisions.

TABLE 8 PROPORTION OF JOBS BY INDUSTRY (DIRECT)

INDUSTRY DIVISION	NUMBER	% OF TOTAL
Retail Trade	1,509	14%
Tourism (Direct jobs)	1,413	13%
Health Care and Social Assistance	1,331	13%
Education and Training	1,234	12%
Construction	1,046	10%
Manufacturing	963	9%
Accommodation and Food Services	842	8%
Professional, Scientific and Technical Services	654	6%
Public Administration and Safety	632	6%
Agriculture, Forestry and Fishing	535	5%
Other Services	474	4%
Financial and Insurance Services	385	4%
Wholesale Trade	367	3%
Transport, Postal and Warehousing	330	3%
Arts and Recreation Services	318	3%

Administrative and Support Services	286	3%
Rental, Hiring and Real Estate Services	230	2%
Industry not classified	130	1%
Information Media and Telecommunications	94	1%
Electricity, Gas, Water and Waste Services	47	0%
Mining	6	0%
Total	10,613	100%

FIGURE 6 NUMBER OF VISITOR ECONOMY JOBS IN THE MACEDON RANGES BY INDUSTRY DIVISION

Accommodation and food services — 798.6
Transport, postal and warehousing — 534.3
Retail trade — 315.5
Education and training — 200.5
Ownership of dwellings — 198.9
Administrative and support services — 98.8
Arts and recreation services — 83.9
Rental, hiring and real estate services (b) — 50.5
Health care and social assistance — 28.8
Information media and… — 27.9
Other services — 13.9
Financial and insurance services — 3.2
Professional, scientific and technical… — 0.2

Source: ABS Tourism Satellite Accounts 2016, visitor economy jobs proportion modelled by Urban Enterprise 2017.

SUB REGIONAL VISITOR ECONOMY JOBS

Figure 7 provides an overview of jobs in the visitor economy by Sub Region.

Woodend – Macedon Sub Region and Kyneton – Malmsbury Sub Regions have the largest number of visitor economy jobs with 796 and 734 jobs respectively.

FIGURE 7 VISITOR ECONOMY JOBS BY SUB REGION
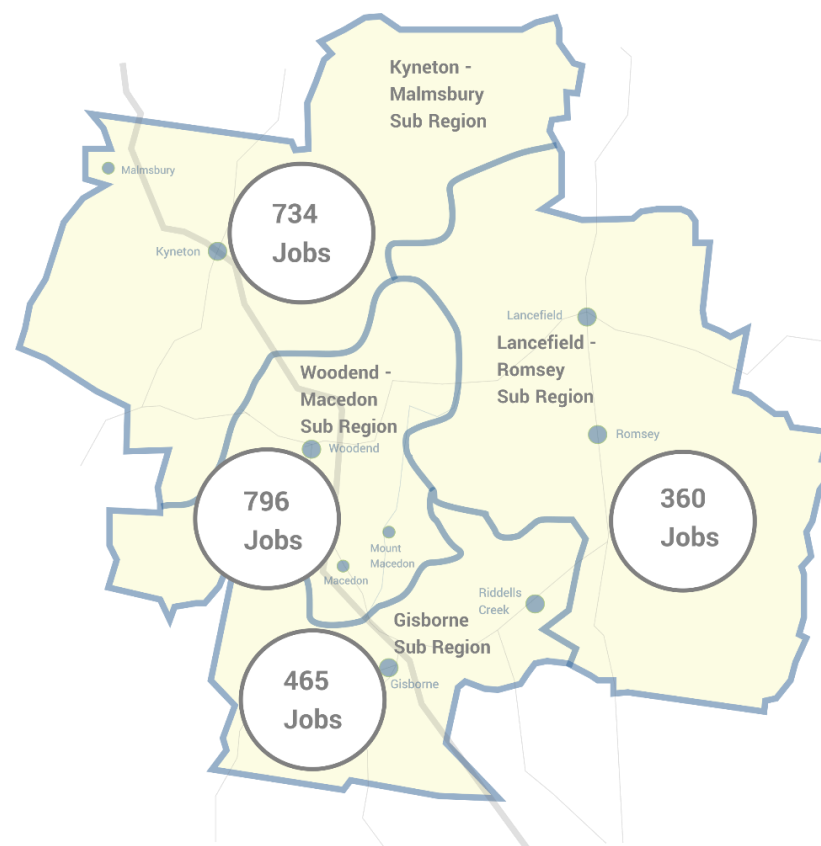
APPENDIX A

INPUT-OUTPUT MODEL

INTRODUCTION

The following section provides the description of use and methodology of the economic impact assessment through a regional input-output table. Urban Enterprise has constructed regional specific input-output multipliers for the areas within the Macedon Ranges.

WHAT IS AN INPUT-OUTPUT TABLE?

An Input-Output (I-O) table fulfils two key functions; it is a descriptive framework for showing the relationship between industries and sectors and between inputs and outputs in an economy. It is also an analytical tool for measuring the impact of autonomous disturbances on an economy's output, employment and income. Utilising the Leontief Inverse and several other augmentation methods, the economic impact of expenditure in the region can be depicted through the I-O model.

INPUT-OUTPUT MODEL METHODOLOGY

As regional input-output models are not readily available, top-down techniques drawing and modifying direct import coefficients from the most recent 2006-2007 Australian National I-O tables are necessary to study the economic affects within small regional areas.

The report will further utilise input-output model technique from Flegg and Webber (2000), the Augmented Flegg Location Quotient (AFLQ) adjustment technique to construct a Regional Input-Output Table[1]. The AFLQ adjustment technique will allow for accounting the regional industry mix of the region, the relative size of the region's economy and cross industry relationships.

The report will utilise the ABS 2007 Input-Output Industry Groups (IOIG) consisting of 111 industry sectors for the economic impact analysis. The Total Economic Impact is constructed through three categories:

- **Initial Output Effects** – the estimated initial expenditure on the general regional economy.
- **Production Induced Effects** – this is the estimated impact of the Initial Output Effects on the general economy. The Production Induced Effects are made up of two components:
  - **The First Round Effects** – is the amount of output required from all industries of the economy to product the Initial Output Effect; and
  - **Industrial Support Effects** – the effects of the second and subsequent rounds of induced production;
- **Consumption Induced Effects** – the induced production of extra goods and services as a result of private final consumption expenditure of households affected by the initial output affects.

---

[1]Flegg. A.T., Webber, C.D., and Elliot, M.V., 1995, On The Appropriate Use of Location-Quotients In Generating Regional Input-Output Tables, Regional Studies, Vol. 29, No. 6,