

1. Gears and Beers

Gears and Beers is an annual event held in Wagga Wagga NSW that combines cycling with a craft beer and cider festival. Gears and Beers is “fast becoming a must do event for cyclists around the country who enjoy a quality beer at the end of a ride” [1]. The event is run by the Wollundry Rotary Club of Wagga Wagga and all the money collected via rider registrations is donated to charity. Now in its sixth year, Gears and Beers offers six courses for cyclists to choose from ranging from 7kms to 130km. The craft beer and cider festival hosted 19 beer and cider brewers, 5 entertainment acts plus local food and beverage vendors. The festival is open to the public and costs \$10 to enter. Wollundry Rotary engaged Regional Development Australia (RDA) Riverina to conduct a tourism impact analysis of the craft beer and cider festival component of Gears and Beers 2019.

2. Methodology

2.1. Data Collection

RDA Riverina developed a [survey instrument](#) (see [appendix](#)) using survey monkey to determine the number of local, domestic overnight and international visitors who attended the Gear and Beers craft beer and cider festival on Sunday October 6th, 2019. Information collected included their reason for attending, postcode, type of accommodation where applicable, as well as how much money they anticipated spending at the event and where applicable on their accommodation.

Using this survey instrument, Gears and Beers attendees were interviewed by volunteers at the event who entered the answers into the online survey using a mobile device.

2.2. Sample Size

227 attendees were interviewed at the event, 217 of these responses were complete. Four responses were collected from volunteers and were excluded from the study since they were not considered to be economic units. For this report an economic unit is defined as a person who would have spent money at the event. This includes riders and attendees over the age of 18 and excludes children, volunteers and vendors.

The final sample size included 213 responses, this was 5.34% of economic units at the event and 4.28% of all attendees. This enables us to present data in this report with a 95% confidence level and a margin of error of 7%.

2.3. Analysis

Tourism impact analysis was performed using the economic modelling and planning system, REMPLAN [2].

2.4. Assumptions

Figures obtained from Gears and Beers directly, indicate that the total number of attendees at the festival on 6th October 2019 was 4982. This included 2887 riders, 1100 attendees over the age of 18, over 800 children, 120 vendors and workers and 75 Wollundry Rotary volunteers. Of these attendees, 3987 were considered economic units. For this report an economic unit is defined as a person who would have spent money at the event. This includes riders and attendees over the age of 18 and excludes children, volunteers and vendors.

This analysis assumes that the figures obtained using the survey instrument are indicative of the entire event with a confidence level of 95% and a margin of error of 7%. This means that figures estimated from the survey instrument are likely to be within 7 percentage points of the true value 95% of the time.

The average number of nights stayed by international visitors was 13.5, however only a single night was attributed to the event for the tourism impact analysis in REMPLAN.

For the purposes of the tourism impact analysis in REMPLAN Economy (2018 Release 1), only domestic overnight visitor and international visitors that did not stay with friends and family were used to calculate the economic impact. This is because REMPLAN Economy makes assumptions about what proportion of each dollar spent in town is spent on accommodation, as these visitors will not have spent money on local accommodation, they are unlikely to meet this assumption and have been excluded from this portion of the analysis.

3. Results

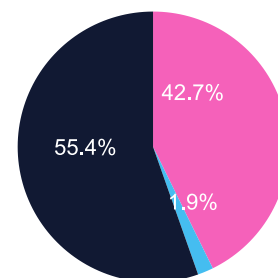
3.1. Attendees

3.1.1. Visitor Type and Reason for Attending

42.7% of Gears and Beers attendees were local residents who travelled to the festival for the day and then back home again that night, 55.4% of attendees were domestic overnight visitors who stayed in town for one or more nights, just 1.9% of attendees were international visitors.

Riders dominated the domestic overnight visitors, making up 69.5% of all domestic overnight visitors while the majority of local visitors attended for the craft beer and cider festival at 54.9%.

Percent of Visitors by Visitor Type



Visitor Type

- Domestic Overnight Visitor
- International Visitor
- Local Visitor / Day Tripper

Figure 1 Percentage of visitors by visitor type for the event.

Percent of Visitors by Visitor Type and Reason for Attending

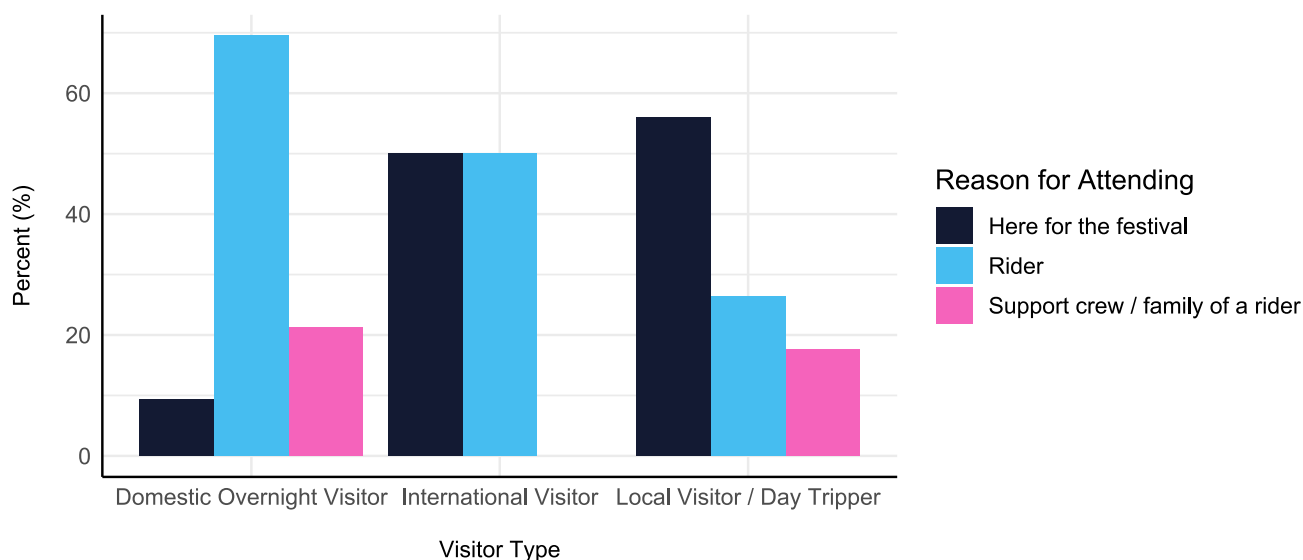


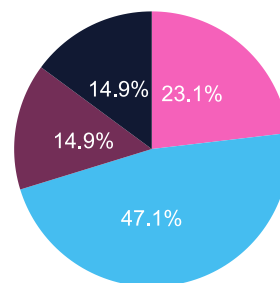
Figure 2 Percentage of visitor by reason for attending and visitor type.

3.1.2. Accommodation

Domestic overnight and international visitors primarily stayed in hotels or motels at 47.1%, followed by staying with family or friends at 23.1%, Airbnb properties at 14.9% and Camping or Caravans at 14.9%.

The average number of nights stayed by domestic overnight visitors was 2.36 (± 0.96) and 13.50 (± 13.89) for international visitors.

Accommodation Type



Accommodation Type

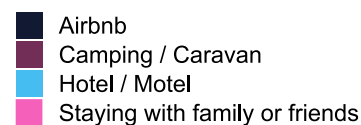


Figure 3 Percentage of visitors who stayed in each type of accommodation.

3.2. Tourism Impact Analysis

The following information is adapted directly from the REMPLAN Economy tourism impact analysis [2].

3.2.1. Output

It is estimated that Gears and Beers would create a [direct increase](#) in [output](#) of \$1,009,071 dollars. From this, it is estimated that the demand for intermediate goods and services would rise by \$415,323 dollars. The [supply-chain effects](#) include multiple rounds of flow-on effects, as servicing sectors increase their own output and demand for local goods and services in response to the direct change to the economy.

The increases in direct and indirect output would typically correspond to the creation of jobs in the economy for the duration of the tourism activity. Corresponding to this change in employment would be an increase in the total of wages and salaries paid to employees. A proportion of these wages and salaries are typically spent on consumption and a proportion of this expenditure is captured in the local economy. The [consumption effects](#) under this scenario are estimated at \$437,679 dollars.

For the duration of the event, total output, including all direct, supply-chain and consumption effects is estimated to increase by up to \$1,862,073 dollars.

Output - REMPLAN Economy (2018 Release 1)

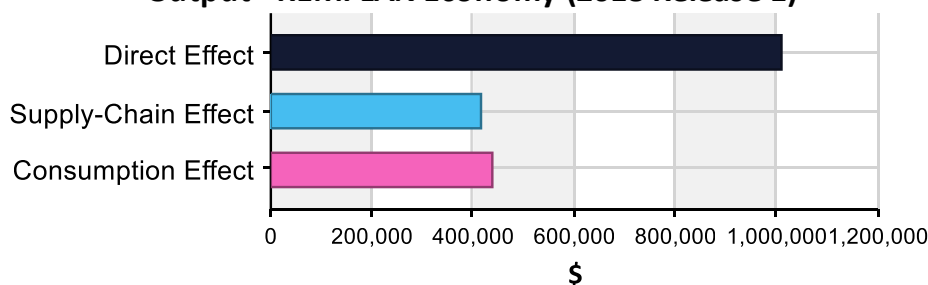


Figure 4 REMPLAN Economy Output

Table 1 REMPLAN Economy Tourism Impact Summary

Impact Summary	Direct Effect	Supply-Chain Flow-On Effect	Consumption Flow-On Effect	Total
Output (\$)	1,009,071	415,323	437,679	1,862,073
Long Term Employment (Jobs)	5	1	1	7
Wages and Salaries (\$)	294,333	98,109	102,731	495,173
Value-Added (\$)	482,444	179,445	239,079	900,968

3.2.2. Wages and Salaries

From a direct increase in output of \$1,009,071 dollars it is estimated that direct [wages and salaries](#) would increase by \$294,333 dollars. From this direct expansion in the economy, flow-on supply-chain effects in terms of local purchases of goods and services are anticipated, and it is estimated that these indirect impacts would result in the gain of a further job and a further increase in wages and salaries of \$98,109 dollars.

The increase in direct and indirect output and the corresponding creation of jobs in the economy for the duration of the event are expected to result in an increase in the wages and salaries paid to employees. A proportion of these wages and salaries are typically spent on consumption and a proportion of this expenditure is captured in the local economy. The consumption effects under this scenario are expected to further boost employment in sectors such as retail therefore further increasing wages and salaries by \$102,731 dollars.

For the duration of the event, total wages and salaries, including all direct, supply-chain and consumption effects is estimated to increase by up to \$495,173 dollars.

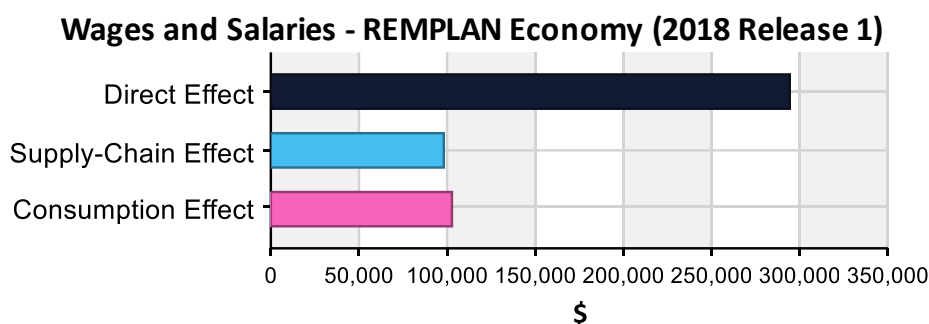


Figure 5 REMPLAN Economy Wages and Salaries

3.2.3. Value-Added

From a direct increase in output of \$1,009,071 dollars the corresponding increase in direct [value-added](#) is estimated at \$482,444 dollars. From this direct expansion in the economy, flow-on supply-chain effects in terms of local purchases of goods and services are anticipated, and it is estimated that these indirect impacts would result in a further increase to value-added of \$179,445 dollars.

The increase in direct and indirect output and the corresponding boost to jobs in the economy for the duration of the tourism activity are expected to result in an increase in the wages and salaries paid to employees. A proportion of these wages and salaries are typically spent on consumption and a proportion of this expenditure is captured in the local economy. The consumption effects under this scenario are expected to further boost value-added by \$239,079 dollars.

For the duration of the event, total value-added, including all direct, supply-chain and consumption effects is estimated to increase by up to \$900,968 dollars.

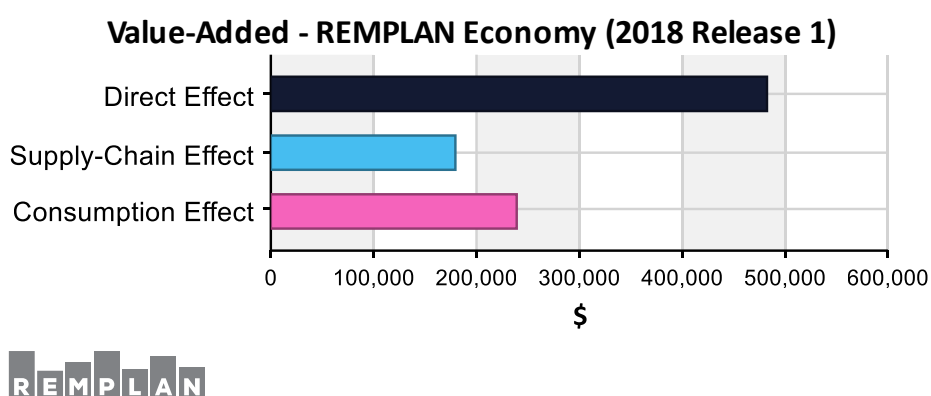


Figure 6 REMPLAN Economy Value-added

3.2.4. Long-term Employment

In the long term (over a 12-month period) the level of demand and output from the event would typically correspond to 5 jobs. From this direct expansion in the economy, flow-on supply-chain effects in terms of local purchases of goods and services are anticipated, and it is estimated that these indirect impacts would result in the gain of a further job.

The increase in direct and indirect output and the corresponding creation of jobs in the economy are expected to result in an increase in the wages and salaries paid to employees. A proportion of these wages and salaries are typically spent on consumption and a proportion of this expenditure is captured in the local economy. The consumption effects under this scenario are estimated to further boost employment by 1 job.

On an annualised basis, total employment, including all direct, supply-chain and consumption effects is estimated to increase by up to 7 jobs.

These direct and flow-on employment impacts are limited to the duration of the event and no inference is made that the impacts will extend beyond this period.

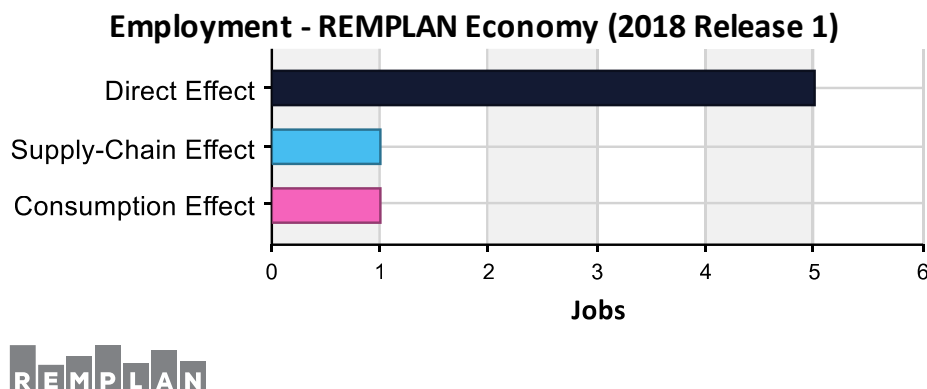


Figure 7 REMPLAN Economy Long Term Employment

3.2.5. Gross Regional Product (GRP)

The [Gross Regional Product](#) for Wagga Wagga was calculated using the Expenditure method. Using this tourism impact scenario, GRP in Wagga Wagga is estimated to increase by \$900,968 dollars (0.02%) to \$5.37 billion dollars.

4. Summary

Gears and Beers 2019 is estimated to have contributed the following for the duration of the event:

- Total increase in output of \$1,862,073
- Total increase in wages and salaries of \$495,173
- Increase of \$900,968 in total value-added
- Increase of 7 jobs to the Wagga Wagga local government area
- Additional social and economic benefits from the donation of rider registration fees to local charity which have not been assessed in this report

Based on these findings, Gears and Beers 2019 has had a positive impact on the local economy and local, out of town and international visitors who travel to Wagga Wagga to participate in the races or attend the festival. It is recommended that the event continue to be supported into the future.

It is important to note that money raised by Wollundry Rotary was donated to local charities. This has its own significant social and economic benefit. These benefits have not been assessed and are beyond the scope of this report which deals only with the economic impact of the craft beer and cider festival. These benefits would be additional to the economic benefits detailed in this report.

5. References

- [1] Gears and Beers, [Online]. Available: <https://gearsandbeers.org.au/>.
- [2] REMPLAN Economy, "REMPLAN Economic Modelling and Planning System," 2018 Release 1. [Online]. Available: <https://www.remplan.com.au/>.

6. Definitions

6.1. Output

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. (REMPLAN).

6.2. Direct Effects

Economic impact of the money spent in the region directly because of the event.

6.3. Supply Chain Effects

Economic impact of the flow on effects to the supply chain. That is the processes, businesses organisations, and people etc. involved in the production of goods and services.

6.4. Consumption Effects

Economic impact of the flow on effect of increases in wages and salaries. That is, the money that is then spent in the region by people with more money in their pockets.

6.5. Value-added

Represents the marginal economic value that is added by each industry sector in a defined region. For example, the difference between the sales price of a product and the cost of producing the product. Value-Added by industry sector is the major element in the calculation of Gross Regional Product.

6.6. Gross Regional Product

GRP is the net measure of wealth generated by the region.

6.7. Wages and Salaries

The total Wages (a fixed regular payment earned for work or services, often per hour of work) and Salaries (a fixed regular payment, often expressed as an annual sum, made by an employer to an employee) paid by businesses/organisations in each of the industry sectors in a defined region.

6.8. Survey Instrument

A questionnaire with standardised questions and answers used to collect data.

7. Appendix

Gears and Beers Tourism Research 2019

All Visitors

1. What brings you to Gears and Beers?

- ☐ Rider
- ☐ Support crew / family of a rider
- ☐ Here for the festival
- ☐ Other (please specify)

2. Which of the following best describes you?

- ☐ Local Visitor / Day Tripper
- ☐ Domestic Overnight Visitor
- ☐ International Visitor

Gears and Beers Tourism Research 2019

Local Visitors and Day Trippers

3. What is your postcode

4. Approximately how much money do you think you will spend at Gears and Beers?

- ☐ \$0
- ☐ Less than \$100
- ☐ \$100 - \$200
- ☐ More than \$200

Gears and Beers Tourism Research 2019

Domestic Overnight Visitors

5. What is your postcode?

6. How many nights are you staying in Wagga Wagga?

7. What type of accommodation are you staying in?

- ☐ Hotel / Motel
- ☐ Staying with family and friends
- ☐ Camping / Caravan
- ☐ Airbnb
- ☐ Other (please specify)

8. How much money do you think you will spend at Gears and Beers?

- ☐ \$0
- ☐ Less than \$100
- ☐ \$100 - \$200
- ☐ More than \$200

9. How much money do you think you will spend while you are in Wagga Wagga
(Including Accommodation)?

- ☐ \$0
- ☐ Less than \$200
- ☐ \$200 - \$500
- ☐ More than \$500

Gears and Beers Tourism Research 2019

International Visitors

10. Where are you visiting from?

11. How many nights are you staying in Wagga Wagga?

12. What type of accommodation are you staying in?

- ☐ Hotel / Motel
- ☐ Staying with friends or family
- ☐ Camping / Caravan
- ☐ Airbnb
- ☐ Other (please specify)

13. How much money do you think you will spend at Gears and Beers?

- ☐ \$0
- ☐ Less than \$100
- ☐ \$100 - \$200
- ☐ More than \$200

14. How much money do you think you will spend while you are in Wagga Wagga (Including Accommodation)?

- ☐ \$0
- ☐ Less than \$200
- ☐ \$200 - \$500
- ☐ More than \$500