

# Economic Impact of Bluesfest 2021

Prepared for Bluesfest Group

July 2021





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# INTRODUCTION

Lawrence Consulting was commissioned by Bluesfest Group (including Bluesfest Services Pty Ltd and Bluesfest Touring Pty Ltd) to undertake an assessment of the economic impact of Bluesfest 2021 – both the negative impacts of the cancellation of the event for the second straight year due to COVID-19 together with the positive effects of the unrecoverable operational spending on the festival – on the Byron Shire, Northern Rivers, New South Wales and Australia.

Bluesfest is one of Australia's most acclaimed and respected Festivals and has been the inspiration for dozens of blues world music and blues and roots festivals around Australia. The analysis is an update of and variation to previous annual reports completed by Lawrence Consulting and has adopted a similar methodology to the report prepared following the cancellation of Bluesfest 2020, based on specific information collected from festival patrons in 2019 regarding their spending patterns when visiting the Byron Shire and Northern Rivers regions for the purpose of determining the economic loss from the cancellation of Bluesfest 2021.

The economic impact assessment has concentrated on the quantitative impact of Bluesfest 2021, specifically the impact of actual and foregone spending in Byron Shire, and the Northern Rivers region, New South Wales and Australia more generally, of the opportunity cost of no spectators at the event together with the turnover of Bluesfest Services Pty Ltd and consequent local and regional purchases of goods and services.

The following sections of this report present the results of the economic impact analysis.

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# PROJECT METHODOLOGY

## Approach

Cultural activities such as Bluesfest 2021 generate economic benefits for the regional economy through operational expenditure associated with the organisation / event as well as benefits associated with tourism expenditure / turnover within the region. As a part of ongoing operations, economic impacts from Bluesfest are generated by organisational and facility operations, visiting performers and spectator spending. The most visible direct impacts are spectator spending on tickets, food and beverages, parking, merchandise and camping at the venue, whilst subsequent rounds of spending include indirect or off-site tourism expenditure and business supply chain purchases.

The opportunity cost from the cancellation of Bluesfest 2021 along with the positive contribution made through significant unrecovered event spending to the economies of the Byron Shire, Northern Rivers, New South Wales and Australia has been assessed using the **LocalImpact** economic model, based on input-output tables developed specifically for each region. All input data, except where referenced in the report, has been supplied by the proponent, Bluesfest Services Pty Ltd.

The stimulus from economic activity can be traced through the economy in several different ways:

- The first round effect, or direct effect, are those from the activities expenditure in purchasing goods from other industries;
- The second round effects are those from the supplying industries increasing their purchases to meet the additional demand. The second and subsequent rounds of purchasing are termed the indirect effects; and
- The consumption-induced effects, which recognise that the level of local production is important in determining regional levels of household consumption, that this in turn will be spent locally to a large extent and therefore influence the level of regional consumption and the level of output of each sector.

(Note: Caution should be exercised when interpreting the consumption impacts as they are generally expected to overestimate the actual impact.)

These effects can be represented by multipliers. There are commonly four different types of multipliers:

- Output;
- Income;
- Employment; and
- Value added.

## Output

The output impact measures the increase in gross sales throughout the whole economy by summing all the individual transactions resulting, directly and indirectly, from the economic stimulus. The output impacts, are however, regarded as overstating the impact on the economy as they count all goods and services used in one stage of production as an input to later stages of production, hence counting their contribution more than once.

## Income

The income impact measures the additional amount of wages and salaries paid to employees of the industry under consideration and to other industries benefiting from the stimulus to the economy.



## Employment

The employment impact measures the number of jobs created by the stimulus, both directly and indirectly. It should be noted that the short-term response to increased demand might be for employers to ask existing staff to work overtime. As a consequence, lower employment than the level indicated by the economic impact of the stimulus will result. This short-term scenario is particularly true where the demand stimulus is seen as temporary or where there is spare capacity in the economy (i.e. unemployment).

## Value Added

The value added or Gross Regional Product<sup>1</sup> (GRP) impact measures only the net activity at each stage of production. GRP is defined as the addition of consumption, investment and government expenditure, plus exports of goods and services, minus imports of goods and services for a region. The GRP impacts are the preferred measure for the assessment and contribution of a stimulus to the economy.

## Limitations

Limitations or qualifiers that should be raised when using input-output analysis include:

- The inputs purchased by each industry are a function of the level of output of that industry. The input function is generally assumed linear and homogenous of degree one (which implies constant returns to scale and no substitution between inputs);
- Each commodity (or group of commodities) is supplied by a single industry or sector of production. This implies that there is only one method used to produce each commodity and that each sector has only a single primary output;
- The total effect of carrying on several types of production is the sum of the separate effects. This rules out external economies and diseconomies and is known simply as the additivity assumption. This generally does not reflect real world operations;
- The system is in equilibrium at given prices. This is obviously not the case in an economic system subject to external influences;
- In the static input-output model, there are no capacity constraints so that the supply of each good is perfectly elastic. Each industry can supply whatever quantity is demanded of it and there are no capital restrictions. This assumption would come into play depending upon the magnitude of the changes in quantities demanded, brought about through changes in taxation levels; and
- The input-output model is an optimisation model that allocates resources between sectors to their most efficient use. This is not expected to happen all of the time in the “real world” and as such results from the input output analysis may overestimate the actual impact delivered on ground.

Input-output techniques provide a solid approach for taking account of the inter-relationships between the various sectors of the economy in the short-term and hence are an appropriate tool for determining the direct and indirect economic impact of Bluesfest 2021.

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<sup>1</sup> This is also known as Gross State Product (GSP) or Gross National Product (GNP) depending on the level of the analysis.

## Description of Stimulus

### Data Inputs

The total annual expenditure for Bluesfest Services Pty Ltd on Bluesfest 2021 was approximately \$8.7 million in 2020/21 – including approximately \$1.2 million in wages and salaries to 17.0 fulltime staff and all purchases of goods and services – which represented a substantial increase of 120.5% from the level of expenditure in 2019/20 (\$4.0 million). Spending by Bluesfest Services on Bluesfest 2021 in Byron Shire was approximately \$3.3 million (up 229.3%), whilst the amount of expenditure across the rest of the Northern Rivers was \$1.5 million (up 54.7%).

Separate to Bluesfest 2021, Bluesfest Touring Pty Ltd spent approximately \$1.5 million on Bluesfest Touring in 2020/21, which represented a significant annual decrease of 54.1%.

Total expenditure by Bluesfest Group in 2020/21 was approximately \$10.2 million (up 41.2%), of which an estimated \$3.3 million was spent within Byron Shire.

Region	Bluesfest 2021			Bluesfest Touring			Total		
	Level (\$)	% of total	Ann % chg	Level (\$)	% of total	Ann % chg	Level (\$)	% of total	Ann % chg
Byron Shire	3,257,338	37.4%	229.3%	3,676	0.2%	-91.8%	3,261,014	31.9%	215.3%
Northern Rivers	1,459,863	16.7%	54.7%	12,764	0.8%	1.7%	1,472,627	14.4%	54.0%
Rest of New South Wales	2,625,555	30.1%	215.1%	511,520	33.9%	-27.8%	3,137,074	30.7%	103.5%
Interstate	1,373,402	15.8%	43.3%	981,563	65.0%	142.9%	2,354,965	23.0%	72.9%
International	1,046	0.0%	-99.5%	0	0.0%	-100.0%	1,046	0.0%	-100.0%
<b>Total</b>	<b>8,717,203</b>	<b>100.0%</b>	<b>120.5%</b>	<b>1,509,523</b>	<b>100.0%</b>	<b>-54.1%</b>	<b>10,226,726</b>	<b>100.0%</b>	<b>41.2%</b>

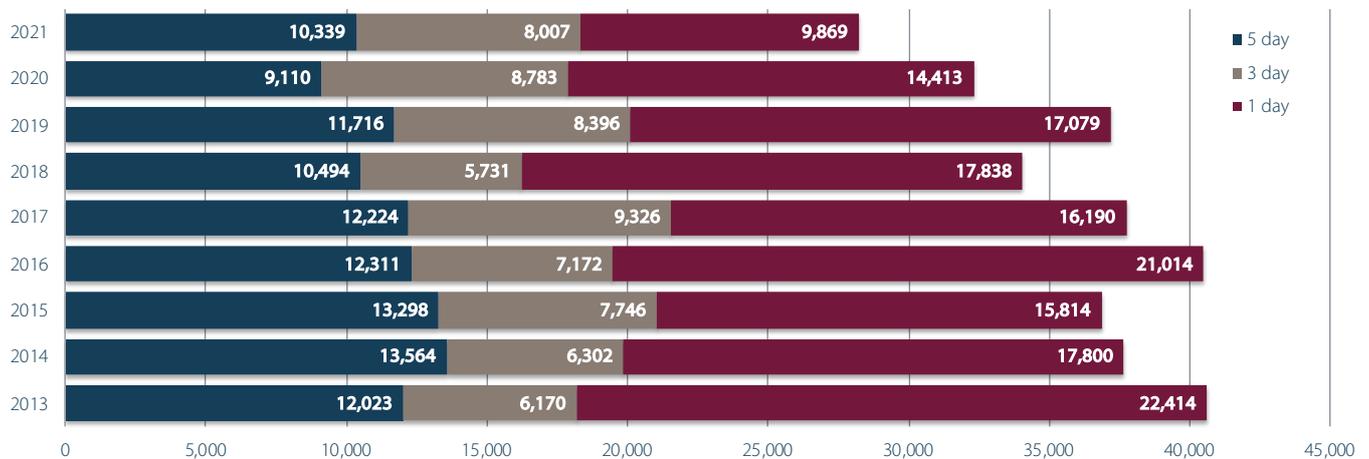
Bluesfest is also a significant cultural and tourism attraction for both local residents and visitors to the region. The total number of persons who were to attend the event in 2021 was estimated at 28,215, as determined through individual ticket sales prior to March 31, when the event was cancelled. This represented a significant annual decrease of 12.7% from the level recorded for the 2020 cancelled event (32,306) as well as the last festival conducted in 2019 (37,191).

Ticket type	Level 2021 (cancelled)	Annual % change	Level 2020 (cancelled)	Level 2019	Level 2018	Level 2017	Level 2016
5-day	10,339	13.5%	9,110	11,716	10,494	12,224	12,311
3-day	8,007	-8.8%	8,783	8,396	5,731	9,326	7,172
1-day	9,869	-31.5%	14,413	17,079	17,838	16,190	21,014
<b>Total attendance</b>	<b>28,215</b>	<b>-12.7%</b>	<b>32,306</b>	<b>37,191</b>	<b>34,063</b>	<b>37,740</b>	<b>40,497</b>

Source: Bluesfest Services

In terms of ticket type, the number of 3-day (8,007) and single-day (9,869) tickets decreased annually in 2021 by 8.8% and 31.5%, respectively, although in contrast the total number of 5-day tickets grew by 13.5% to 10,339.

## Bluesfest Attendance by Individual Ticket Type



Source: Bluesfest Services

Taking into account regional length of stay, visitor origin and expenditure patterns from data obtained from festival patron surveys in 2019, which identified average daily expenditure of approximately \$304 per person across a range of spending categories, the foregone annual stimulus to the Byron Shire, Northern Rivers and New South Wales economies associated with the total prospective attendance at Bluesfest 2021 was estimated at \$26.9 million, \$44.8 million and \$63.3 million, respectively. A summary of the foregone tourism expenditure for 2021 is provided in the following table.

**Table 3: Foregone Indirect Tourism Expenditure by Type, Bluesfest 2021 (\$ million)**

Expenditure type	Byron Shire	Northern Rivers	New South Wales
Accommodation	7.5	12.6	17.8
Food & beverage	5.4	9.0	12.8
Road transport	1.0	1.7	2.6
Retail shopping	7.9	13.2	18.5
Attractions	5.0	8.3	11.7
<b>Total off-site expenditure</b>	<b>26.9</b>	<b>44.8</b>	<b>63.3</b>

## Displacements & Leakages

Displacement arises when an economic stimulus such as Bluesfest 2021 takes market share from other existing local firms or organisations, or 'displaces' alternative uses of project funds that might otherwise have occurred. Leakages are defined as the proportion of project outputs that flow out of the catchment area, i.e. purchases from outside the region. In relation to the operation of Bluesfest 2021 and the foregone tourism benefits from the cancellation of the event, for the purpose of this analysis it has been assumed that both the Byron Shire and Northern Rivers region are closed economies, i.e. any displacement and leakages are considered marginal. All expenditure related to the stimulus has been assumed to be made within each region – where not otherwise identified – in order to represent the additional and foregone economic activity generated by Bluesfest 2021.

# ECONOMIC IMPACT

## Direct Operating Expenditure

### Bluesfest 2021

The net annual regional economic impact – i.e. direct, indirect and consumption-induced – associated with the operation of Bluesfest 2021 on the Byron Shire include (refer table below):

- An estimated direct output of \$8.7 million and additional flow on increases in output of \$4.5 million through other industries, for a total industry impact of \$13.2 million. A further \$0.9 million in output in the region can be associated with consumption-induced effects;
- Estimated direct income (wages and salaries) of \$1.2 million, with \$0.8 million in additional income generated through flow on effects in other industries and a further \$0.2 million from household spending;
- Approximately 17.0 direct full-time equivalent (FTE) employment positions, with an estimated additional 16.4 employment positions supported indirectly through other industries and household consumption for a total employment impact of 33.4 FTEs; and
- An estimated contribution to GRP of \$4.2 million from direct effects, with a further flow on impact of \$2.2 million through other industries for a total industry value added of \$6.4 million. An additional \$0.4 million in gross regional product can be attributed to consumption-induced effects.

**Table 4: Economic Impact of Bluesfest 2021, Direct Operating Expenditure**

	Byron Shire	Northern Rivers	New South Wales	Australia
<b>Output (\$ million)</b>				
Direct	8.7	8.7	8.7	8.7
Indirect	4.5	6.9	11.6	16.1
Consumption	0.9	2.3	7.1	9.0
<b>Total</b>	<b>14.2</b>	<b>17.9</b>	<b>27.4</b>	<b>33.8</b>
% change from 2019	-40.0%	-35.4%	-28.4%	-39.4%
<b>Income (\$ million)</b>				
Direct	1.2	1.2	1.2	1.2
Indirect	0.8	1.3	2.3	3.3
Consumption	0.2	0.8	2.2	2.7
<b>Total</b>	<b>2.1</b>	<b>3.2</b>	<b>5.7</b>	<b>7.2</b>
% change from 2019	-24.4%	-24.4%	-18.9%	-36.2%
<b>Employment (fte persons)</b>				
Direct	17.0	17.0	17.0	17.0
Indirect	13.1	21.3	34.0	45.3
Consumption	3.2	15.3	33.5	41.1
<b>Total</b>	<b>33.4</b>	<b>53.6</b>	<b>84.5</b>	<b>103.4</b>
% change from 2019	-6.4%	-15.2%	-17.9%	-39.5%
<b>Value added (\$ million)</b>				
Direct	4.2	4.2	4.2	4.2
Indirect	2.2	3.4	5.7	7.8
Consumption	0.4	1.8	4.6	6.6
<b>Total</b>	<b>6.9</b>	<b>9.4</b>	<b>14.5</b>	<b>18.6</b>
% change from 2019	-42.3%	-37.1%	-29.8%	-40.3%



## Bluesfest Touring

The net annual economic impact in 2020/21 associated with Bluesfest Touring operations include (refer table below):

- Total output of \$0.0 million in Byron Shire, \$1.4 million in New South Wales and \$4.5 million in Australia;
- Estimated total income (wages and salaries) of \$0.0 million in Byron Shire, \$0.4 million in New South Wales and \$1.3 million in Australia;
- Approximately 0.0 full-time equivalent (FTE) employment positions in Byron Shire, 2.1 FTEs in New South Wales and 5.7 FTEs in Australia; and
- An estimated contribution to GRP of \$0.0 million in Byron Shire, \$0.9 million in New South Wales and \$2.9 million in Australia.

**Table 5: Economic Impact of Bluesfest Touring 2020/21, Direct Operating Expenditure**

	Byron Shire	Northern Rivers	New South Wales	Australia
<b>Output (\$ million)</b>				
Direct	0.0	0.0	0.5	1.5
Indirect	0.0	0.0	0.2	1.0
Consumption	0.0	0.0	0.7	2.0
<b>Total</b>	<b>0.0</b>	<b>0.0</b>	<b>1.4</b>	<b>4.5</b>
% change from 2019	-99.2%	-96.4%	-66.8%	-34.6%
<b>Income (\$ million)</b>				
Direct	0.0	0.0	0.2	0.5
Indirect	0.0	0.0	0.0	0.3
Consumption	0.0	0.0	0.2	0.6
<b>Total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.4</b>	<b>1.3</b>
% change from 2019	-99.5%	-97.7%	-65.0%	-29.0%
<b>Employment (fte persons)</b>				
Direct	0.0	0.1	2.1	5.7
Indirect	0.0	0.0	0.6	2.9
Consumption	0.0	0.1	3.3	9.2
<b>Total</b>	<b>0.0</b>	<b>0.1</b>	<b>6.0</b>	<b>17.8</b>
% change from 2019	-99.5%	-97.6%	-67.8%	-37.3%
<b>Value added (\$ million)</b>				
Direct	0.0	0.0	0.3	0.9
Indirect	0.0	0.0	0.1	0.5
Consumption	0.0	0.0	0.4	1.5
<b>Total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.9</b>	<b>2.9</b>
% change from 2019	-99.3%	-97.2%	-65.3%	-30.7%

## Summary of Impacts

The direct and total economic impacts associated with Bluesfest Services (i.e. Bluesfest 2021 and Bluesfest Touring) on the Byron Shire, the Northern Rivers and New South Wales in 2020/21 are provided in the following table and include:

- Total output of \$14.2 million in Byron Shire, \$17.9 million in the Northern Rivers and \$28.8 million in New South Wales;
- Estimated total income (wages and salaries) of \$2.1 million in Byron Shire, \$3.3 million in the Northern Rivers and \$6.1 million in New South Wales;
- Approximately 33.4 full-time equivalent (FTE) employment positions in Byron Shire, 53.7 FTEs in the Northern Rivers and 90.5 FTEs in New South Wales; and
- An estimated contribution to GRP of \$6.9 million in Byron Shire, \$9.4 million in the Northern Rivers and \$15.4 million in New South Wales.

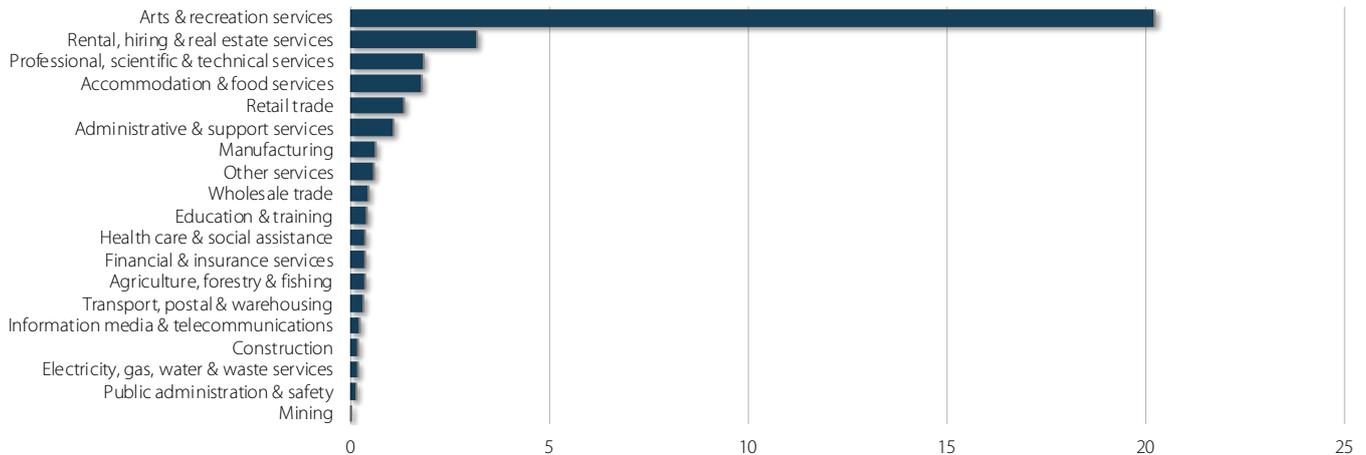
**Table 6: Summary of Economic Impacts of Bluesfest 2021**

	Byron Shire	Northern Rivers	New South Wales	Australia
<b>Bluesfest 2021 Operations</b>				
Output (\$ million)	14.2	17.9	27.4	33.8
Income (\$ million)	2.1	3.2	5.7	7.2
Employment (fte persons)	33.4	53.6	84.5	103.4
Value added (\$ million)	6.9	9.4	14.5	18.6
<b>Bluesfest Touring</b>				
Output (\$ million)	0.0	0.0	1.4	4.5
Income (\$ million)	0.0	0.0	0.4	1.3
Employment (fte persons)	0.0	0.1	6.0	17.8
Value added (\$ million)	0.0	0.0	0.9	2.9
<b>Total</b>				
Output (\$ million)	14.2	17.9	28.8	38.2
Income (\$ million)	2.1	3.3	6.1	8.5
Employment (fte persons)	33.4	53.7	90.5	121.2
Value added (\$ million)	6.9	9.4	15.4	21.5

The flow-on impacts from Bluesfest 2021 to other industries across Byron Shire as derived from the **LocalImpact** model have been disaggregated in order to measure the contribution in other areas of the local economy. The following table (Table 7) demonstrates that the Arts & Recreation Services industry benefits most in terms of total output (\$9.2 million), followed by Rental, Hiring & Real Estate Services (\$2.1 million) and Professional, Scientific & Technical Services (\$0.6 million).

## Estimated Local Employment Supported by Bluesfest 2021

Byron LGA (FTEs)



**Table 7: Estimated Disaggregated Industry Impacts of Bluesfest 2021, Byron Shire**

Industry division	Industry output (\$ million)	Direct employment (FTEs)
Agriculture, Forestry and Fishing	0.131	0.329
Mining	0.005	0.006
Manufacturing	0.303	0.599
Electricity, Gas, Water and Waste Services	0.150	0.169
Construction	0.088	0.179
Wholesale Trade	0.210	0.449
Retail Trade	0.169	1.322
Accommodation and Food Services	0.241	1.754
Transport, Postal and Warehousing	0.117	0.322
Information Media and Telecommunications	0.105	0.210
Financial and Insurance Services	0.228	0.345
Rental, Hiring and Real Estate Services	2.075	3.139
Professional, Scientific and Technical Services	0.607	1.836
Administrative and Support Services	0.262	1.043
Public Administration and Safety	0.027	0.140
Education and Training	0.050	0.399
Health Care and Social Assistance	0.050	0.355
Arts and Recreation Services	9.247	20.215
Other Services	0.088	0.574
<b>Total</b>	<b>14.153</b>	<b>33.387</b>

## Foregone Tourism Spending

The economic impacts of the loss of tourism expenditure associated with the cancellation of Bluesfest 2021 for the Byron Shire include (refer Table 8 below):

- An estimated direct output of \$26.9 million and additional flow on increases in output of \$14.0 million through other industries, for a total industry impact of \$40.9 million. A further \$10.0 million in output in the region can be associated with consumption-induced effects;
- Estimated direct income (wages and salaries) of \$5.7 million, with \$2.5 million in additional income generated through flow on effects in other industries and a further \$1.8 million from household spending;
- Approximately 186.7 direct full-time equivalent (FTE) employment positions, with an estimated additional 72.0 employment positions supported indirectly through other industries and household consumption for a total employment impact of 258.7 FTEs; and
- An estimated contribution to GRP of \$13.9 million from direct effects, with a further flow on impact of \$6.6 million through other industries for a total industry value added of \$20.5 million. An additional \$4.8 million in gross regional product can be attributed to consumption-induced effects.

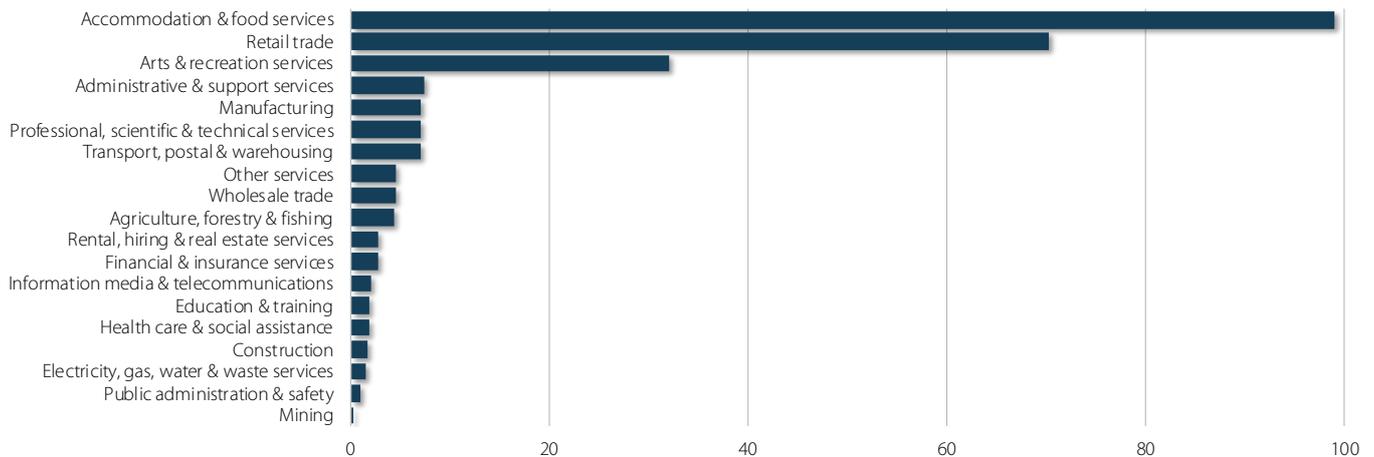
**Table 8: Economic Impact (Loss) of Cancellation of Bluesfest 2021, Indirect Tourism Expenditure**

	Byron Shire	Northern Rivers	New South Wales	Australia
<b>Output (\$ million)</b>				
Direct	26.9	44.8	63.3	63.3
Indirect	14.0	26.5	41.6	51.2
Consumption	10.0	26.4	66.1	66.7
<b>Total</b>	<b>50.9</b>	<b>97.7</b>	<b>171.0</b>	<b>181.2</b>
<b>Income (\$ million)</b>				
Direct	5.7	9.6	13.5	13.5
Indirect	2.5	4.7	7.8	10.1
Consumption	1.8	9.0	20.2	20.7
<b>Total</b>	<b>10.0</b>	<b>23.2</b>	<b>41.5</b>	<b>44.2</b>
<b>Employment (fte persons)</b>				
Direct	186.7	311.1	438.3	438.3
Indirect	37.2	69.3	107.4	134.9
Consumption	34.8	175.2	317.6	323.8
<b>Total</b>	<b>258.7</b>	<b>555.6</b>	<b>863.3</b>	<b>897.0</b>
<b>Value added (\$ million)</b>				
Direct	13.9	23.1	32.6	32.6
Indirect	6.6	12.7	20.0	24.4
Consumption	4.8	20.3	43.5	51.6
<b>Total</b>	<b>25.3</b>	<b>56.1</b>	<b>96.1</b>	<b>108.6</b>

The flow-on impacts from the loss of tourism spending due to the cancellation of Bluesfest 2021 to other industries across Byron Shire as derived from the **LocalImpact** model are substantial and have been disaggregated in order to measure the foregone contribution in other areas of the economy. The following table (Table 9) demonstrates that the Accommodation & Food Services industry was impacted the most in terms of loss of total output (\$14.1 million), followed by Retail Trade (\$9.0 million) and Arts & Recreation Services (\$5.3 million).

## Estimated Local Employment Foregone by Bluesfest 2021 Cancellation

Byron LGA (FTEs)



**Table 9: Estimated Disaggregated Industry Impacts of Bluesfest 2021 (Foregone Tourism Spending), Byron Shire**

Industry division	Industry output (\$ million)	Direct employment (FTEs)
Agriculture, Forestry and Fishing	1.8	4.4
Mining	0.0	0.1
Manufacturing	3.9	7.1
Electricity, Gas, Water and Waste Services	1.4	1.5
Construction	0.9	1.8
Wholesale Trade	2.1	4.5
Retail Trade	9.0	70.1
Accommodation and Food Services	14.1	99.0
Transport, Postal and Warehousing	2.3	7.1
Information Media and Telecommunications	1.1	2.0
Financial and Insurance Services	1.8	2.7
Rental, Hiring and Real Estate Services	1.8	2.8
Professional, Scientific and Technical Services	2.3	7.1
Administrative and Support Services	1.8	7.4
Public Administration and Safety	0.2	1.0
Education and Training	0.2	1.9
Health Care and Social Assistance	0.3	1.9
Arts and Recreation Services	5.3	32.0
Other Services	0.7	4.6
<b>Total</b>	<b>50.9</b>	<b>258.7</b>