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Australia's live music sector: an occupation-based analysis

Working paper

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Key findings

- Australia's live music sector makes a significant contribution to our social and cultural fabric. It is a key part of our creative economy, but is also embedded within a broader ecosystem of jobs, skills and industries.
- Australia's live music sector is comprised of around **41,000 workers**, based on 2019–20 tax data, including **14,200 primary workers** (jobs at the core of live music), **10,000 supporting workers** (some functions involve live music) and **16,800 auxiliary workers** (jobs that indirectly support live music). This estimate is based on the occupation that accounts for a person's primary source of income. Some sector workers may not appear in the statistics if this is not their main job.
- Employment for the sector grew by **4.6 per cent** a year (compounding) between 2015-16 (36,000 workers) and 2018–19 (41,200). Employment fell slightly to 41,000 workers between 2018–19 and 2019–20. This may reflect initial impacts of the COVID-19 pandemic.
- New South Wales and Victoria employ **63 per cent** of the sector and have the largest proportion of live music workers relative to their labour force.
- Australia's live music sector workers are mostly male (**56 per cent**). For primary workers within the live music sector, almost three quarters are male (**73 per cent**).

- Live music workers have lower average salaries and wages, and higher rates of income derived from secondary jobs compared to the rest of the economy. Live music workers earn **$57,600** on average, compared to **$65,100** for the overall economy (total income earned in 2019–20).
- The gender pay gap in the live music sector is **18 per cent**. Males had total taxable income of $62,500 on average, compared to $51,400 for women in 2019–20. For the overall economy, the comparable gender pay gap was **29 per cent**.
- The sector has a diversified ecosystem with **78 per cent** of employment falling outside the 'arts and recreation services' industry division, reflecting the inclusion of supporting and auxiliary workers.
- Research by industry bodies estimates that in 2019 the sector contributed **$5.7 billion** to the economy in industry value added, and **9.7 million patrons** attended a ticketed live music event.
- The live music sector was heavily disrupted by COVID-19 with an **80 per cent fall** in the number of promoted events from 35,800 in 2019 to just 7,300 in 2020.
- Throughout the pandemic, payroll jobs in the 'creative and performing arts' subdivision remained far lower than the overall economy, falling by as much as **30 per cent** in April 2020 and by **17 per cent** in September 2021 (compared to March 2020).

Introduction

Live music in Australia involves a diverse set of skills, occupations and industries – from the artists and performers to stage technicians and crews, event organisers and managers. The live music sector generates economic activity through its entrepreneurship, innovation and creativity, and is an important part of Australia's social and cultural fabric. This paper investigates the economic and cultural benefits live music delivers to Australia.

While economic data is readily available for the broader arts and recreation services industry, less is known about Australia's live music sector. The approach to defining and describing the live music sector tends to vary from study to study.

BCARR has developed a novel occupation-based framework using Australian Taxation Office (ATO) data to estimate the number of live music workers and their characteristics. A key benefit of the approach is that tax data is updated annually and has standardised occupational classifications. This allows a time series to be constructed and improves the ability to classify and capture the diverse workers within the live music ecosystem. A limitation of this approach is that tax data records only a person's primary occupation. This means that live music workers whose primary source of income is not live music may be excluded from the data. This may include primary workers, such as musicians, who are at the core of music performances.

This framework is experimental and seeks to provide estimates that reflect the diverse range of occupations involved in putting on a live music performance. It aims to provide a foundation for future research.

Part 1 of this report presents the findings of this occupation-based analysis. **Part 2** reviews existing literature and data regarding the economic value of the live music sector, explores the impacts of COVID-19, and acknowledges the broader social and cultural benefits provided by a vibrant live music sector.

Frameworks for analysing the live music sector

Existing literature about the live music sector is typically limited by available data which, in many cases, captures only a subset of musical genres, performance locations and venues, or limited information about whether the performance is ticketed or not. These studies often rely on information provided in membership based surveys of live music patrons, venues and promoters.

Figure 1 shows some of the common frameworks for classifying live music used in different studies, and how they relate to the different components that make up the sector.

Figure 1. Common live music frameworks

Genre-based	Location-based	Ticket-based
• Contemporary music • Classical music • Traditional and folk music • Opera • Musical theatre • Contemporary music festivals	• Pubs and clubs • Halls and multi-purpose venues • Live music venues • Stadiums • On the street • Festivals • Theatres	• Ticketed events • Non-ticketed events

Source: BCARR Analysis

Using occupations to analyse the live music sector

Bureau of Communications, Arts and Regional Research (BCARR) has taken a broader approach than other studies by defining the live music sector based on worker occupations.
A detailed list of occupations has been developed (see Table 9, 10, 11) to show the wider array of occupations needed to put on a performance, including both the creative professions that perform and promote live music and the auxiliary roles that enable and support performances to take place.

The analysis uses widely accessible datasets that apply the Australian and New Zealand Standard Classification of Occupations (ANZSCO) framework. This allows a detailed (6-digit ANZSCO) classification of the workers over time, [i] providing a 'bottom up' approach to defining the sector based on the detailed kinds of work people do. The benefits of this approach include insights into the wider live music ecosystem, breakdowns by region, and characteristics of workers by gender and income.

However, some limitations of the occupations-based approach include not being able to estimate the number of businesses involved with live music, or to measure the size of economic output for the sector. A further disadvantage is the difficulty in isolating live music functions from the other aspects of an occupation. To overcome this disadvantage, BCARR has categorised all in-scope live music occupations into three groups that reflect the anticipated magnitude of their involvement in the sector (Table 1). Each group has been assigned a percentage that represents the share of total workers in that group that are assumed to have live music involvement.

Table 1. In-scope shares of live music occupation groups

Live music occupation group	In-scope share (%)	Description
Primary	100%	Occupations which carry out activities that are at the core of live music performance.
Supporting	25%	Occupations where only a portion of the functions may involve live music.
Auxiliary	1.5%	More general occupations that span all parts of the economy and can involve jobs that indirectly support live music and are part of the live music ecosystem.

Source: BCARR analysis

The in-scope share indicated in Table 1 is not the same as determining the proportion of each worker's duties that relate to live music, but is intended to apply to the occupation as a whole. For example, all (100 per cent) musicians, who are in the primary group, are assumed to have some live music involvement, despite knowing some time will likely be devoted to recording, rather than performing live. Similarly, 25 per cent of ticket collectors are assumed to have some live music involvement, and 1.5 per cent of hospitality workers, in the auxiliary group, are assumed to have live music involvement.

Analysis on the number and characteristics of live music workers is limited to their main occupation, as reported to the Australian Taxation Office or in the Australian Bureau of Statistics (ABS) Census. Where people involved in the live music sector hold multiple jobs, this means that the data will not record the occupation of second or third jobs, or separately detail how much these jobs contribute to their overall income. For example, this means that musicians who perform live, but have their main source of income coming from a different occupation, will not show up as musicians in the data. However, they may be included in other occupations included in the study. For example, they may be listed in the supporting workers group if their main source of income was working as a music teacher). This reflects underlying limitations with key sources of economic data.

Appendix A includes further information on the framework employed, including a scenario analysis to test the in-scope shares, and a full list of in-scope occupations.

i The ANZSCO framework is a skill based hierarchical classification system used to categorise occupations. The various levels of occupation aggregation within the framework group similar specialisations. ANZSCO allows for more detailed analysis than an industry framework, one that uses the Australian and New Zealand Standard Industrial Classification (ANZSIC) system which does not contain information detailed enough to separate live music activity from other activities.

Part 1:

An occupation-based analysis of the live music sector

Estimating the size of the live music sector

Australia's live music sector was estimated to comprise 41,000 workers in 2019–20. This included 14,200 workers in the primary group, 10,000 in the supporting group and 16,800 in the auxiliary group (Table 2).

Table 2. Total workers by occupation group and estimated number included in the live music sector

Live music occupation group	Estimated number of live music workers	Total number of workers in relevant occupations
Primary workers	14,200	14,200
Supporting workers	10,000	40,000
Auxiliary workers	16,800	1,120,900
Total	**41,000**	**1,175,000**

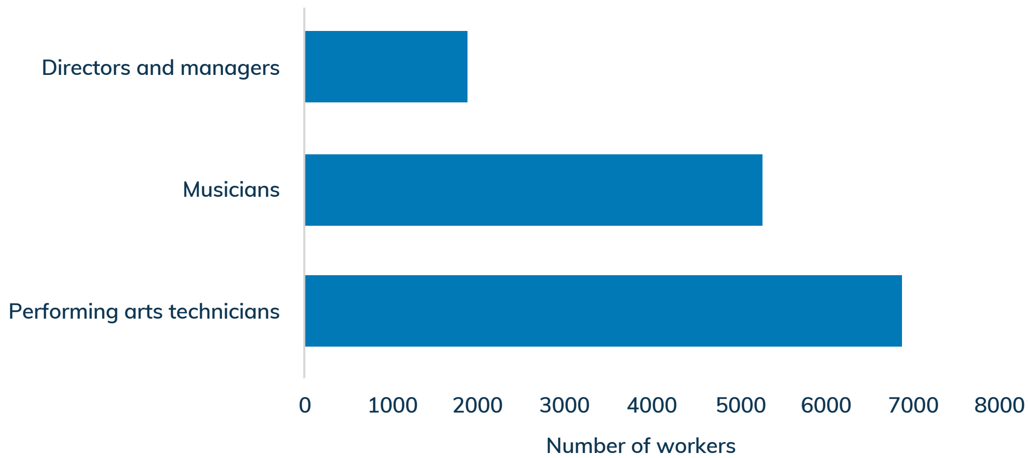
Source: BCARR analysis of 2019–20 ATO taxation statistics. Notes: Includes individuals who identify their primary job as within live music and does not account for secondary jobs. Sums of occupation groups may not add up to totals due to rounding. Numbers rounded to the nearest hundred workers.

Of the 14,200 people in the primary workers group, around 6,900 were performing arts technicians (49 per cent), 5,300 were musicians (38 per cent) and 1,900 (14 per cent) were directors and managers (Figure 2). Among technicians, the majority related to sound (4,700 workers) and light (1,700 workers). [ii] Among musicians, there were around 2,100 instrumental musicians and 800 singers, and a further 2,200 musicians which the data did not further classify. [iii] Directors include artistic directors, stage managers and music directors, all of which had 600 to 700 workers.

Occupational themes are also observed in the supporting and auxiliary workers groups. The supporting workers group contains around 10,000 workers including arts and media professionals not captured in the primary group, as well as teachers and specialist managers. Media producers were the most common occupation (2,100 workers), followed by music teachers (1,600 workers) and entertainers or variety artists (1,200 workers).

The auxiliary group has around 16,800 workers and contains more diverse occupations that span all parts of the economy. This includes retail workers (5,400 workers), hospitality and kitchen staff (4,200 workers), professional services workers (2,000 workers) and building and logistics workers (1,500 workers).[iv] The number of workers in each occupation split by occupation group can be seen in further detail in Appendix A.

Figure 2. Number of live music primary workers by occupation in 2019-20



Source: BCARR analysis of 2019–20 ATO taxation statistics. Notes: Other occupations include performing arts apprentices and musicians not specified.

ii Remaining technicians include musical instrument makers or repairers, performing arts technician apprentices and technicians not elsewhere classified.

iii ABS has cited musicologists, music researchers and music copyists as examples of music professionals not elsewhere classified. Remaining music professionals include composers and musicians not specified.

iv Hospitality occupations include kitchenhands, chefs, bar attendants, bar useful or bussers, and street vendors. Professional services include intellectual property lawyers and accountants. Building and logistic includes freight handlers and labourers not elsewhere classified.

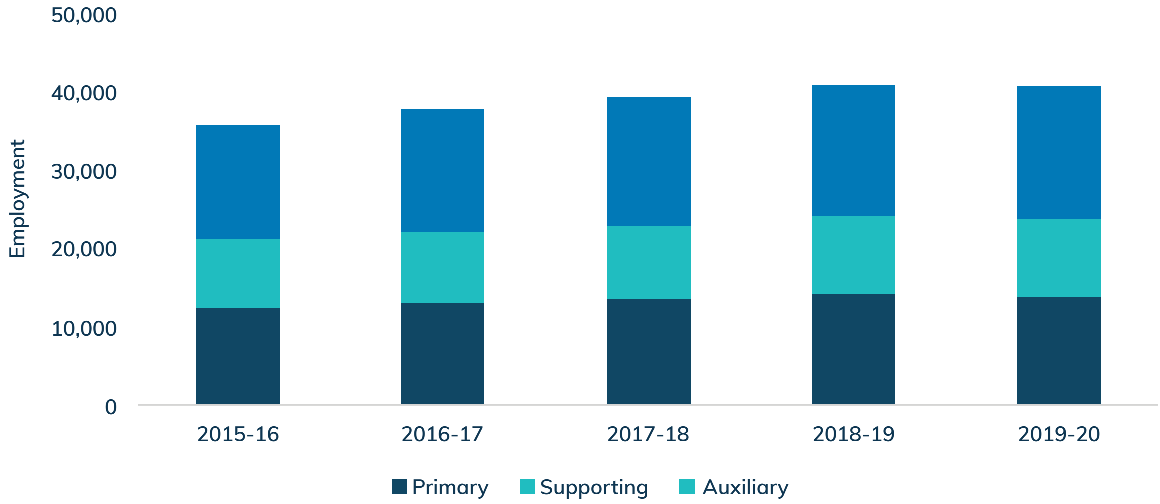
Employment growth

Live music employment was increasing prior to the COVID-19 pandemic, but stalled during 2019–20 (Figure 3). In the period before the COVID-19 pandemic, ATO data showed that total employment in the live music sector grew from around 36,000 workers in 2015–16 to 41,200 in 2018–19. This represented a compound annual growth rate of 4.6 per cent.

Employment then fell slightly between 2018–19 and 2019–20 to 41,000 workers. This may reflect initial impacts of the COVID-19 pandemic, although the data captures only three months of COVID-19 disruption, from March to June 2020. A more full picture of the pandemic's disruption to the live music performance ecosystem may be more evident in 2020–21 financial year taxation data.[v] However, acute impacts on live music may be obscured by averaging effects associated with the breadth of occupations included in the analysis, and the nature of income tax data. For insights on COVID-19 impacts, refer to the 'Economic impacts of COVID-19' section of the report.

Figure 3 shows the proportion of workers in each live music occupation group has remained relatively stable. The auxiliary group contains the greatest number of workers in the sector with around 41 per cent, followed by the primary group with around 35 per cent and then the supporting group with around 24 per cent.

Figure 3. Number of live music workers over time



Source: BCARR analysis of ATO taxation statistics across multiple financial years.

Box 1: Other estimates of live music sector employment

Other studies have estimated the total number of jobs in the Australian live music sector to range from **42,000 to 65,000**, depending on how the scope of the sector was defined, source data and analytical approach taken. The varied definitions of the live music sector adopted makes comparison difficult.

- **Live Entertainment Industry Forum** commissioned analysis estimated **42,066 employees** (full time equivalent) in the live music sector in 2019.[1] This consisted of 14,587 employees in licenced live music venues and 27,479 involved in live performances outside licenced venues (e.g. festivals). Of those involved in venue based live music, just over half (52 per cent) were directly involved, with the remain in supporting parts of the sector, including occupations such as bar and hotel staff.
- **Live Music Office** estimated the number of jobs created by the live music sector was approximately **65,000** in 2014.[2] Of these, around 38,000 full time workers and 27,000 were part time workers.
- **ABS** data shows that the 'creative and performing arts' subdivision employed around **47,000 people**, as at August 2019.[3] While this industry subdivision does not capture all live music activity, the subdivision contains essential live music activities related to performing arts operation, performing arts venue operation, and creative artists, musicians, writers and performers.
- **Australia Council** commissioned analysis that estimated the share of the live music sector that were practising musicians was approximately **15,400** in 2014–15.[4] The study found that the number of practising musicians was close to 32 per cent of all 48,000 artistic vocations.[vi] This study had a broad scope, including professional artists whose main occupation may not be in their creative field, but who nevertheless identify as a professional artist.

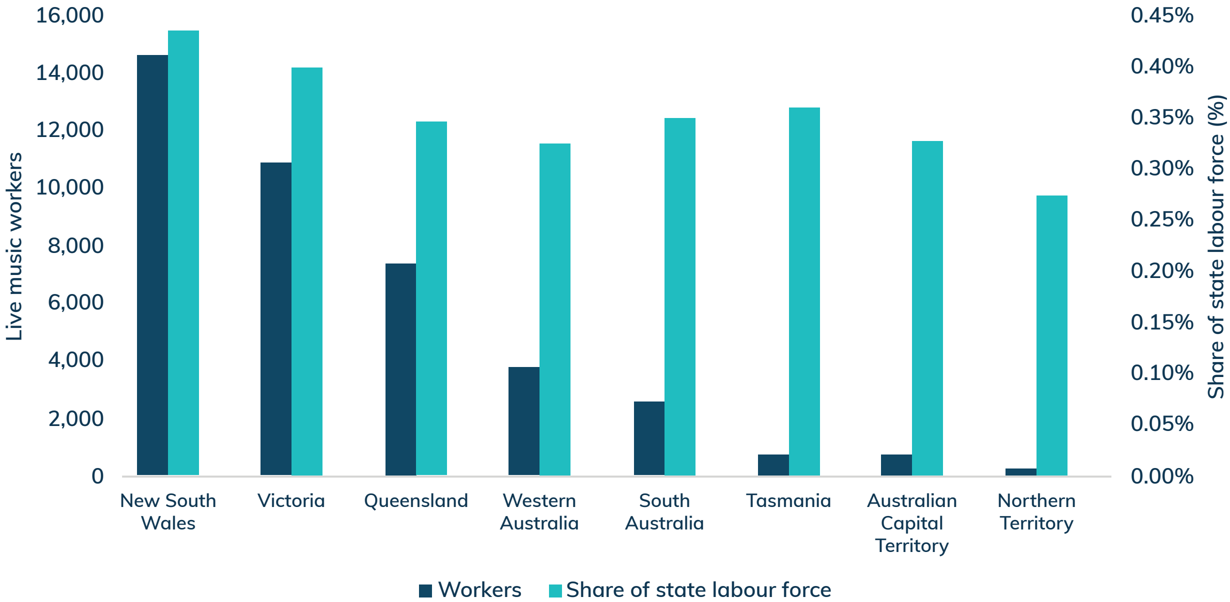
v 2020–21 data not available at time of reporting.
vi There are eight broad artist groups considered by the study, including writers, visual artists, craft practitioners, actors/directors, dancers/choreographers, musicians, composers, and community, cultural development artists.

Live music workers by state and territory

In Australia, the majority of live music employment takes place across the eastern states, where a large proportion of Australia's population is located. [vii] Analysing 2016 Census data for each state and territory using the occupation-based approach to defining the sector shows New South Wales had the largest share of all live music workers (36 per cent), followed by Victoria (27 per cent) and Queensland (18 per cent) (Figure 4).

New South Wales and Victoria also have the largest share of live music workers when compared with the size of their overall labour force. This measure takes account of the relative size of each state and territory, giving an indication of the jurisdictions of live music workers. In both states, around 0.40 per cent of their labour force were involved in the sector. Tasmania had the next highest share with 0.36 per cent.

Figure 4. Live music employment by state (number of live music workers and proportion of labour force)



Source: BCARR analysis of custom ABS 2016 Census data.

Characteristics of workers in the live music sector

BCARR analysis of ATO taxation statistics using the occupation-based approach found that live music workers typically earn less than the average Australian worker. The analysis found that women make up a smaller proportion of workers in the sector, comprising only 44 per cent of employment. Women also earned less than men, with a gender pay gap of 18 per cent. In interpreting these statistics, it is important to remember that music professionals are more likely to be multiple job holders[5] or derive more of their income from other sources. This impacts who is captured by the analysis.

This analysis is confined to information collected for taxation purposes. This means that ATO statistics provide information on income and gender, but not broader demographic information that would provide insights into the presence of LGBQTI groups, First Nations Australians and other groups in the music industry. Other research approaches, including surveys, may be better suited to exploring questions of representation and equality within the industry.

Income

The average total income for workers in the live music sector is $57,700 per year, according to 2019–20 ATO taxation statistics (Table 3).[viii] Average income in the sector is 13 per cent lower than the economy wide average total income of $66,500 per year. [6] Total income averaged $64,500 for primary workers and $62,200 for supporting workers. Income disparity is highest among auxiliary workers, who had average total incomes of $49,300 per year (26 per cent lower than the economy wide average).

The average income for occupations in the primary worker group do not deviate far from the average of $64,500 for the category overall. The majority of workers are either musicians or technicians, with average total incomes spanning $49,400 to $79,000. The highest income occupation in the primary group was 'artistic directors', averaging $95,100. The occupation with the lowest income was the 'apprentice performing arts technicians' category, with an average total income of $30,400.

The artistic and creative occupations within the supporting workers group show a broader range of incomes, compared to the primary workers. Directors in film, television, radio or stage, as well as media producers, had the highest average total incomes, spanning $69,600 to $104,300. Lower income occupations in this group included workers within the 'actors, dancers and other entertainers (not elsewhere classified)' occupation category and 'ticket collectors or ushers', with average total incomes of $28,300 or less. This may reflect a range of factors including the rate of remuneration for this work or the presence of casual or part time work.

vii Employment location has been determined on the basis of place of work
viii Average total income is used in the analysis because it comprises all income sources, including salaries and wages, interest from bank accounts and investment, rent income, government pensions and allowances, and others.

The auxiliary group contains a variety of occupations from across the economy, including hospitality, construction, media, professional services and other creative professions. As a result, average incomes vary widely. Hospitality workers tend to have the lowest total incomes, for example bar staff ($27,000) and kitchen staff ($35,400). In comparison, professional services occupations, such as lawyers and accountants, had average total incomes upwards of $100,000. Further detail of occupations and incomes are in Appendix A.

Table 3. Average income by occupation group

Occupation group	Primary	Supporting	Auxiliary	Total live music sector	Total economy
Average total income ($)	64,500	62,200	49,300	**57,700**	**66,500**

Source: BCARR analysis of 2018–19 ATO taxation statistics. Notes: Average total incomes have been calculated using the weighted average of the number workers in each occupation group.

This information about average total incomes from ATO taxation data includes income from all sources, including multiple jobs other than the one listed as a person's principal occupation. However, the data does not inform us about the proportion of income derived from live music sector related occupations, or the nature of occupations that may correspond to the multiple jobs worked by many in the sector. To provide insights of this nature it is necessary to consider other sources.

Australia Council research surveying practising professional artists found that the average gross income for musicians in 2014–15 was $52,900.[ix] [7] In comparison, the average gross income for all artists was $48,400. These statistics included different streams of income which relate to the primary artistic occupation, other arts related work and also non arts work.[x] Of all artists, musicians had the lowest share of income earned from their primary artistic occupation, with only 29 per cent coming from their musical work and the remaining 71 per cent from other arts related and non arts work.

Another survey based study of music professionals conducted by researchers at Griffith University found that just under 50 per cent held more than one work role (including all paid, volunteer and unpaid work, whether music-related or not).[8] The research found 27 per cent held two roles, 13 per cent held three roles, and 8 per cent held more than three roles. This study considered some of the most common ANZSCO occupations listed by respondents to better understand the nature of people's portfolio careers (that is, one in which a person works in a number of concurrent, sometimes impermanent roles). This included music directors, music teachers and artistic directors, where more than 86 per cent held more than one role. Around 82 per cent of musicians (instrumental) and sound technicians held more than one role, as did around 70 per cent of singers.

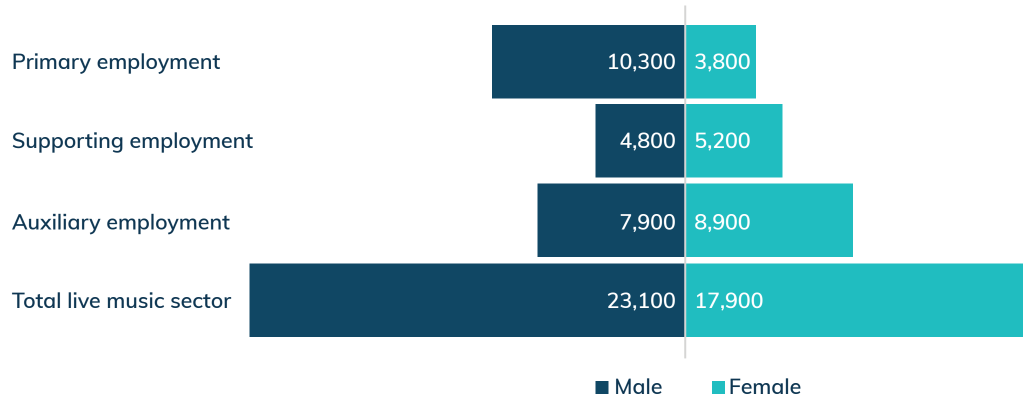
Data from the ABS also shows that arts and creative industries have a greater share of people working secondary jobs than the rest of the economy. Within the arts and recreation services industry, 7.6 per cent of workers held another job in June 2019, compared to 5.7 per cent for the entire economy.[9]

Gender patterns in occupation choice and income

While taxation data does not offer a great deal of demographic information, it is possible to draw some broad conclusions about the relationship of gender to employment in particular occupations and to the amount of income people report. These rely on the manner in which gender is captured by taxation statistics.

As shown in Figure 5, using the occupation-based approach adopted for this study, men were found to be more prevalent in the live music sector than women in 2019–20 (56 per cent, compared to 44 per cent). This disparity is mainly caused by the pattern of employment within the primary occupation group, where male workers comprise almost three quarters of all workers (73 per cent). Within the supporting and auxiliary occupation groups, women are slightly more represented (52 per cent and 53 per cent, respectively). Taxation data for the economy as a whole indicates a relatively even balance, with 51 per cent recording their gender as male, and 49 per cent reporting their gender as female.

Figure 5. Live music workers count by gender in 2019–20



Source: BCARR analysis of ATO taxation statistics 2019–20. Notes: Sums of occupation groups will not add up to the total due to rounding.

ix Average gross income relates entirely to earned income and does not include income such as interest, dividends, pensions and government allowances.

x Primary artistic occupation refers to the artists core creative practice whereas arts related work refers to other paid work related to the arts but separate to their creative field.

Performing arts technicians drove the imbalance within the primary workers category, with more than seven times more male workers (6,100) than female workers (860). Music professionals also exhibit a degree of gender imbalance, with musicians 1.6 times more likely to be male (3,300) than female (2,100). For directors and managers there was a closer gender split, with 1.1 times more men (1,000) than women (900), led by larger numbers of female stage managers.

Because the approach to estimating numbers of supporting and auxiliary group workers allocates a proportion of workers in an occupation to the live music sector, information about the gender makeup of workers in these categories is more inferential in nature. The following statistics assume that the gender breakdown of music industry workers within a relevant occupation reflect the overall composition for that occupation. In reality, the makeup of the live music workforce may differ from an occupation as a whole. Therefore, these results should be taken with caution and understood to be indicative estimates.

Female workers marginally outnumbered male workers in the supporting group due to larger numbers of women working as arts administrators and managers, where there are over three times more women (780) than men (260) estimated to be working in the live music sector. Other occupations with more women than men included: music teachers (private tuition), with 1.4 times more female workers (960 vs. 690); actors, dancers and entertainers, with 1.2 times more female workers (900 vs. 750); and media producers, with 1.2 times more women than men (1,160 vs 980). In contrast, there is a greater number of men in occupations such as crowd controller, with seven times more male workers (800 vs. 110), and supporting group directors, where there were 1.6 times more male workers (390 vs. 250).

Similarly, female workers also outnumber male workers in the auxiliary group. A greater number of women were recorded as retail workers, where twice as many female workers were estimated to be in the live music sector (3,610 vs. 1,790). Nearly 1.2 times more women were recorded as professional service workers, like accountants (1,070 vs. 930). In contrast, there were nearly eight times more male building and logistics workers (1,370 vs. 170) and 1.4 times more men working as hospitality and kitchen staff (2,400 vs. 1,770).

Estimates based on ATO statistics for 2019–20 found that women in the live music sector had lower average total incomes than men. The gap between average total income for men and women in the sector was $11,100, with male workers averaging $62,500 and female workers $51,400 (Table 4). This represents a gender pay gap of 18 per cent. The estimated income gap between male and female workers existed within all three occupational groups, as well as nearly every individual occupation included within them.

For the economy as a whole, the gender pay gap measured using taxation data was 29 per cent in 2019-20, with male workers earning $77,800 and female workers earning $54,900 (Table 4). For comparison Workplace Gender Equality Agency data shows the gender pay gap for full-time workers was 14.1 per cent at July 2022 and 22.8 per cent based on total remuneration in large non-public sector organisations in 2021-22.[10]

Table 4. Average total income of males and females by occupation group in 2019–20

Occupation group	Male	Female	Pay gap
Primary	$67,100	$57,600	14%
Supporting	$65,800	$58,800	11%
Auxiliary	$54,600	$44,500	18%
Total live music	**$62,500**	**$51,400**	**18%**
Total economy	**$77,800**	**$54,900**	**29%**

Source: BCARR analysis of ATO taxation statistics 2019–20. Notes: Averages incomes have been found by taking a weighted average of the number of workers in each occupation group.

The gender pay gap in live music was also recognised by the Australia Council in a study which found that female artists earned 32 per cent less than male artists in 2014–15.[11] Female musicians were also found to be less represented in the sector, making up 45 per cent of all musicians, however there was a near even split among other artist groups. The study found that female artists earn less, despite having higher education qualifications (83 per cent of women have an academic degree compared to 70 per cent of men), sharing similar sociodemographic attributes, and spending as much time per week on their creative work. Among the challenge's women reported in that study were childcare responsibilities, with 38 per cent stating that caring for children had restricted their work as an artist, compared to 18 per cent of men. A greater proportion of women (39 per cent) also reported that their spouse or partner's income was extremely important for supporting their creative work than men (25 per cent).[12]

Another study also noted a lack of female representation exists within festival line-ups and music awards, and in key leadership positions within the industry.[13]

Box 2: Patterns of work

Australia Council research assessing the patterns of work for musicians in 2014–15 found a majority would like to spend more time pursuing their creative work.[14] Only 18 per cent of musicians spent all their time working in their creative field. This increased to 49 per cent when including other arts related work.[xi]

Outcomes across all types of artists included in the study indicated the main obstacles that prohibited more time being spent in their creative field were insufficient income from the arts (65 per cent), work not being available (12 per cent) and domestic responsibilities (9 per cent).

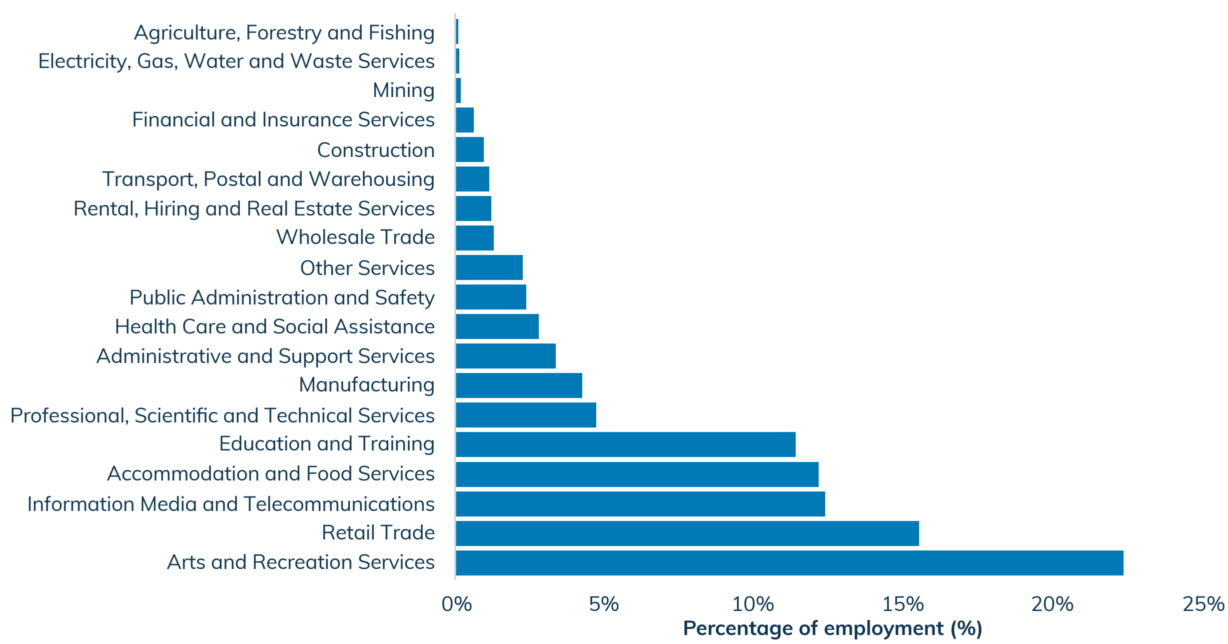
Surveyed musicians stated that their main sources of income came from freelance/self-employed contracts (42 per cent), followed by casual employment without a contract (38 per cent). Only 5 per cent of musicians stated that their income came from a salary or wage (long-term employment contract). This pattern of insecure work was found to hold true for all artists, where 81 per cent identified as freelancers or self-employed, and 19 per cent as salary or wage earners.

A 2020 survey conducted for the Live Entertainment Industry Forum found over 62 per cent of employees in the live entertainment industry (which includes live music as well as other major events and professional sport) were either casual, contract or part time workers.[15] The remaining 38 per cent were full time workers.

Understanding the industry structure of the live music ecosystem

Live music is supported by workers from a diverse set of industries. To better understand the live music ecosystem, BCARR has analysed 2016 ABS Census data to match the occupations of live music workers to the industries they work in (Figure 6). Close to 75 per cent of live music workers come from five industries: arts and recreation services (22 per cent), retail trade (16 per cent), accommodation and food services (12 per cent), information media and telecommunications (12 per cent), and education and training (11 per cent). These industries reflect the many functions required to stage a live music event (see Table 7, Appendix A).

Figure 6. Live music employment by industry



Source: BCARR analysis of customised 2016 ABS Census data

xi For artists who do not work full time in their creative field, arts related work offers a way of staying in touch with their creative skills. Examples include arts study and arts teaching.

The arts and recreation services industry contain the largest number of live music workers. These workers are most commonly found in the primary occupation group, and mainly perform functions relating to the contributions of artists, the technical side of staging a performance, and management services needed to advance performances. The retail trade industry almost exclusively contains 'sales assistant' workers found in the auxiliary group, and includes workers that perform promotional activities. Live music workers in information media and telecommunications industry are predominantly from the primary and supporting occupation groups. They have some overlap in function with workers found in the arts and recreation services industry, such as those relating to delivering performances, including technical and production activities. The accommodation and food services industry contain workers in hospitality roles catering to audiences, including bar staff, kitchenhands, chefs, and food and drink vendors. Roles in the education and training industry consist of functions related to where musicians learn their craft, including music teachers and educators.

Figure 7 outlines some functions needed to put on a live performance and the types of occupations involved in providing them. Each broad category contains links to industries across the live music ecosystem.

Figure 7. Examples of occupations needed to stage a live music event

PERFORMERS AND ARTISTS
The main attraction
- Musician
- Singers
- Other entertainers

EVENT ORGANISERS
Make an event happen
- Artist managers
- Tour managers
- Event managers
- Stage managers
- Professional service workers

EVENT STAFF
Deliver the event from front-of-house to back-of-house
- Technicians
- Production assistants and stagehands
- Logistics and freight workers
- Security staff
- Ticketing staff

PROMOTION
Promote an event to sell tickets to audiences
- Advertising and public relations
- Multimedia designers
- Media producers and photographers

HOSPITALITY
Cater to live music audiences
- Bar staff
- Food vendors and kitchen staff
- Retail workers
- Cleaners

Source: BCARR analysis.

Part 2:

Recognising the economic value of the live music sector and the impacts of COVID-19

Value of the live music sector

To complement the occupational analysis presented above, the following discussion briefly reviews some of the existing literature regarding the economic and other benefits of the live music sector.

The value of the live music sector can be measured using indicators of economic output, such as industry gross value added (GVA), industry revenue or expenditure, as well as participation measures such as audience attendance.

Measures of economic value

Various studies have estimated the economic value of live music to Australia. When seeking to determine the economic contribution of live music, industry GVA provides the best measure. Industry GVA describes the value generated by live music industry output after deducting the cost of goods and services used in the production process that come from other sources (e.g. equipment and energy costs).

Analysis commissioned by the Live Entertainment Industry Forum found that GVA for the live music sector was **$5.7 billion** in 2019, including both direct and indirect (multiplier) effects.[16] This equated to 34 per cent of the value add for the broader live entertainment industry ($16.7 billion), which includes other live performances, major events and professional sports.

Research commissioned by the Live Music Office estimated that GVA to the Australian economy was **$4.4 billion** in 2014.[17] On a state and territory basis, New South Wales was estimated to contribute the largest share ($1.6 billion), followed by Victoria ($1.3 billion), Queensland ($720 million) and Western Australia ($470 million). The study also produced a much broader assessment of the overall contribution to society factoring in commercial, civic and individual benefits, estimating this at $15.7 billion.

For comparison, GVA in the arts and recreation services division was $15.9 billion in 2018–19.[18]

Further explanation of the approaches taken in these studies is provided at Appendix B.

Box 3: The role of artist managers

Research commissioned by the Association of Artist Managers (AAM) estimate that for every $1 invested in artist managers almost $20 is returned to stakeholders in quantified benefits, emphasising their important role in the music industry.[19] Artist managers interact with live music promoters, booking agents, record labels and marketing, and provide support to artists. Artist managers also help to operationalise live music events, including connecting artists to live music events, providing event logistics, and overseeing marketing and budgeting for tours and events.

Ticket revenue

Another approach to estimate the value of the live music sector is to measure attendance and revenue for live events. Participation in ticketed events is a useful measure as it demonstrates both people's engagement with live music and their willingness to pay for the experience.

According to the Live Performance Australia (LPA) Ticket Attendance and Revenue Report, approximately 9.7 million people attended a ticketed live music performance in 2019, generating over $1 billion in revenue from ticket sales (Table 5).[20] Attendance to live music represented 41 per cent of all attendance to live performance events. Record highs in live music attendance and revenue generated within Australia occurred in 2018 and 2019. However, the COVID-19 pandemic has severely disrupted the sector. In 2020, both revenue and attendance declined by around two-thirds from 2019. Similar decreases were experienced in broader live performance events in Australia.

Table 5. Attendance and ticket revenue from live music and live performance

Year	Live music attendance ('000)	Live music ticket revenue ($ million)	Live performance attendance ('000)	All live performance ticket revenue ($ million)
2016	6,330	520	18,780	1,430
2017	9,320	930	23,030	1,880
2018	10,580	1,100	25,790	2,060
2019	9,740	1,020	23,860	1,960
2020	3,310	360	7,760	610

Source: Live Performance Australia (LPA) & Ernst & Young (EY) 2019 and 2020 Ticket Attendance and Revenue Report. Notes: Live music has been defined as contemporary music and contemporary music festivals. This definition is narrower than overall live performance which includes classical music, opera and musicals, as well as other live performance disciplines. Additionally, LPA data does not capture all live music in Australia and is based on information provided by regular providers and Australian Major Performing Arts Group (AMPAG)/ National Performing Arts Partnership (NPAP) companies.

A range of industry factors and economic conditions can impact ticket sales. For promoters and venues, revenue will fluctuate with their ability to attract popular performers and stage these events. The ability to attract high profile international acts can vary over time.[21] Australia's geographic isolation can pose challenges in attracting international touring performers, as can the large distance between our major cities.[22] Household spending patterns and discretionary income will also affect spending on live music, with changing pressures on household budgets impacting how much is spent on recreational activities.[23]

Other expenditure related to live music events

While ticket sales are a significant source of industry revenue, other sources can include merchandise sales, corporate sponsorships, licensing revenue, food and beverage purchases, government funding, and other commercial revenue. The 2014 Live Music Office report estimated that consumers spent $5 billion on live music, of which ticket sales (19.2 per cent) and food and beverage (29.3 per cent) accounted for less than 50 per cent of patron expenditure.[xii] [24] Other significant streams of revenue identified in the study include the combined 30 per cent on travel and accommodation, 7.6 per cent on merchandise and 7.6 per cent on communications.

These findings highlight the indirect benefits flowing from live music events. Patrons may, for example, pay for transport to see a performance (public transport, parking or taxis) and purchase food and drink in the surrounding area. Where performances and festivals occur in a regional town, the location may also benefit from accommodation, hospitality and tourism spending in the area.

Cities and regions have leveraged the potential indirect opportunities that live music offers. For example, the Melbourne Music Plan sees tourism as a key focus area, citing partnerships with industry stakeholders and promotional material to increase the city's profile as a music destination.[25] A 2017 live music census found that Melbourne had one live music venue for every 9,503 residents – the most on a per capita basis anywhere in the world.[26] A 2011 study found that visitors were more likely to participate in a cultural activity in Victoria than elsewhere in Australia.[27] The same study found this perception extended to performers, with 83 per cent of respondents stating they believed there are greater opportunities to perform in Victoria than elsewhere.

The regional town of Tamworth is widely recognised as Australia's 'country music capital' and home of the annual Tamworth Country Music Festival, benefitting commercially from ingraining country music as a core part of its identity. In addition to the festival, Tamworth has museums and cultural exhibits dedicated to country music and shares a sister city partnership with Nashville (USA), a city globally known for its country music scene.[28]

There is an appetite for holding events in regional and rural areas. Potential benefits for event organisers include access to large areas of land that enable multiple performance stages to be set up alongside other cultural activities in an enclosed community setting. For regional towns, these events provide economic opportunities arising from employment and expenditure associated with planning and staging an event, and a potential boost in tourism. Indirect benefits may help reinvigorate regional communities and 'keep a town on the map' with a unique offering that can draw audiences each year.[29] Non-economic benefits of live music can include social connections with community, self-expression and improved understanding of others. This may be of particular benefit to younger people who are highly engaged with the arts.[30]

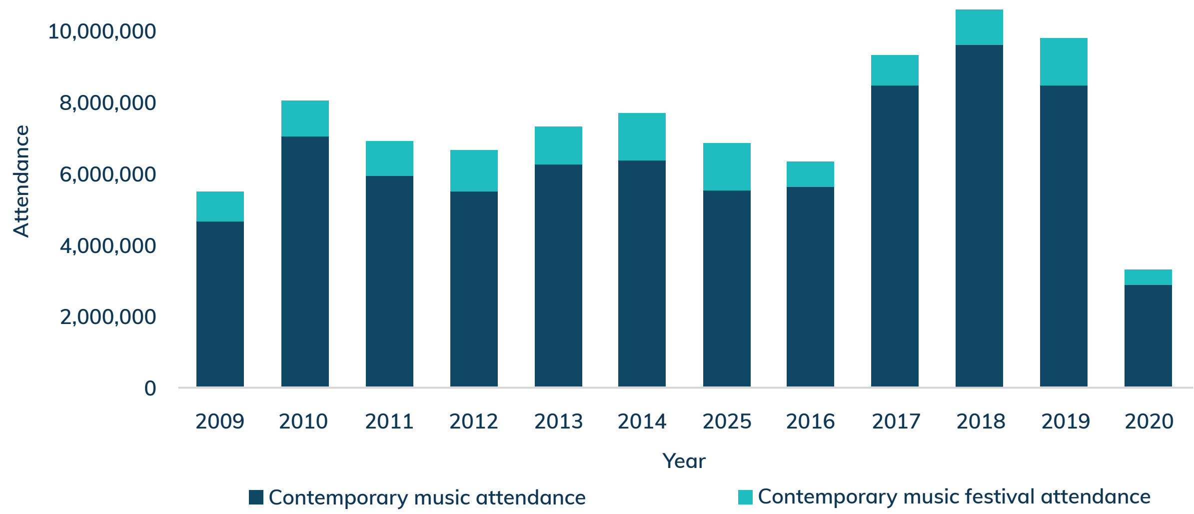
Attendance patterns at live music events

Recent trends in live music from the Ticket Attendance and Revenue Report shows attendance peaking in 2018 and then falling dramatically with COVID-19 restrictions in 2020 (Figure 8).[xiii] Of the 9.7 million people attending a live music event in 2019, around 85 per cent attended a contemporary music event and 15 per cent a contemporary music festival.

xii Food and beverage expenditure may include consumption outside of live music venues.

xiii Attendance comparisons to previous years cannot be made with complete accuracy as data collection methodologies may contain inconsistencies from year to year, the categorisation of some events have changed, and new providers have been surveyed.

Figure 8. Live Performance Australia live music attendance



Source: Live Performance Australia (LPA) & Ernst & Young (EY) 2019 and 2020 Ticket Attendance and Revenue Report.

Figure 9 shows live music attendance in 2019 was highest in the most populous states.[xiv] Viewed on a per capita basis, the highest levels of engagement with live music were found in Western Australia, the Australian Capital Territory (ACT) and Victoria, which all had attendance levels equivalent to over 40 per cent of their population.

Other studies vary in estimates for attendance at live music events, ranging from 7.4 million to 17.5 million, reflecting different reference years and ways of calculating these estimates.

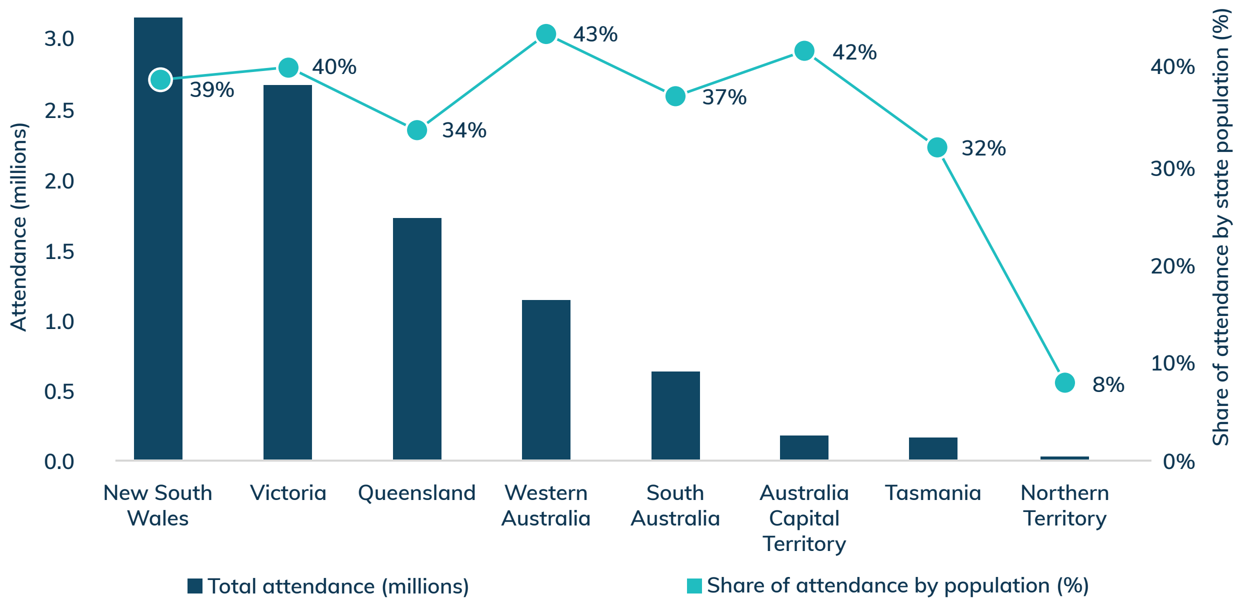
The cultural attendance survey by the ABS places total attendance at live music concerts and performances at around 7.4 million in 2017–18, equivalent to around 38 per cent of Australians.[xv] [31] This exceeded attendance to most other cultural venues and events, including libraries (6 million), museums (5.4 million) and art galleries (5.4 million).

An arts participation survey conducted by the Australia Council estimated that 9.9 million patrons attended live music events in 2019 (equivalent to 48 per cent of Australians).[xvi]

At the higher end of the range, the Live Music Office report estimated attendance for ticketed events was close to 17.5 million in 2014. This rose to an estimated 49.3 million attendees once free events were considered. This study is distinctive for combining multiple sources of promoter and venue data to provide a broader measure of attendance.

Further information about these studies and the methodologies is provided at Appendix B.

Figure 9. Live music attendance by state and territory, 2019



Source: BCARR analysis of Live Performance Australia (LPA) & Ernst & Young (EY) 2019 and 2020 Ticket Attendance and Revenue Report.

xiv ABS findings on attendance found similar shares of attendance by jurisdiction.
xv Total attendance includes of multiple visits by patrons.
xvi Music festivals were not included in this survey question.

Tracking COVID-19 impacts on the sector

The COVID-19 pandemic severely disrupted the live music sector. Measures to curb the spread of COVID-19 resulted in the cancellations and postponement of live music events in many locations. This significantly decreased the number of live music events and attendees in 2020 and 2021. Relatedly, consumer sentiment towards attendance at live music events was negatively impacted during this period.

Significant disruptions have been felt by the sector, including impacts on employment and economic value. However, there are signs of recovery with patrons cautiously re-engaging. This section reviews available research and data to help track these impacts.

Cancellation of events

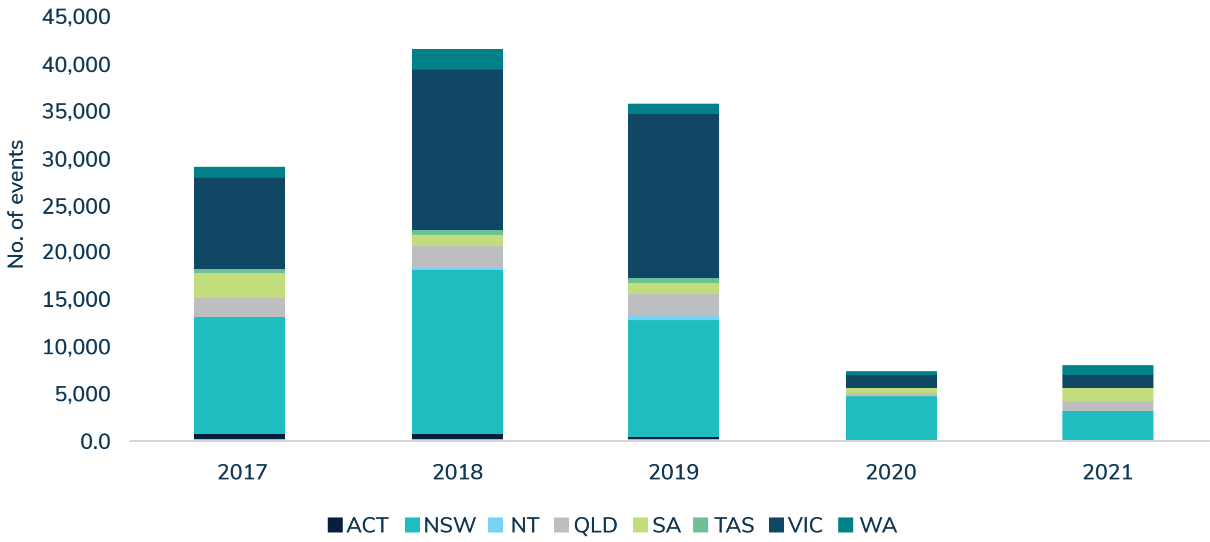
As noted above, attendance to ticketed live music events dropped from 9.7 million in 2019 to 3.3 million in 2020, a decline of two-thirds (see Table 5 and Figure 8). This reflected the cancellation of events as well as hesitancy by patrons to engage with live music during the pandemic.

The number of promoted live music events fell from 35,800 in 2019 to 7,300 in 2020, close to an 80 per cent decrease (Figure 10). This decrease was driven by measures to curb the spread of COVID-19, such as social distancing, venue capacity limits, outdoor gathering limits and travel restrictions. These measures resulted in the cancellation or postponement of live music events. Falls in the number of live music events in 2020 reflected the varied impact of COVID-19 across Australia, with some jurisdictions experiencing greater falls than others. The sharpest declines occurred in Victoria and the Northern Territory where the number of events fell by over 90 per cent from the year prior.

By August 2020, 35 major festivals and festival tours had been cancelled.[32] In 2021, prominent events affected by cancellations and postponements included Miley Cyrus, Iron Maiden, Tame Impala, Bluesfest, Groovin the Moo, and Splendour in the Grass, among many others. The loss of international acts hit the sector particularly hard. Music festivals often have a strong reliance on international acts. These cancelled events were expected to create job opportunities and promote tourism, particularly in regional areas.[33] Advocacy group '*I Lost My Gig Australia*' estimated that the number of cancelled gigs and performances due to COVID-19 was close to 32,800, as at August 2021.[34]

The number of live music events in 2021 increased by 7 per cent from 2020 levels, offering a small sign of improvement. However, the number of nationwide events in 2021 (7,900) was still down 78 per cent from 2019 levels. This reflected continued COVID-19 restrictions in NSW and Victoria throughout 2021. Victoria reported very modest increases in the number of events, while New South Wales shed a further 1,400 events.

Figure 10. COVID-19 impact on the number of live music events



Source: APRA AMCOS promoted events data.

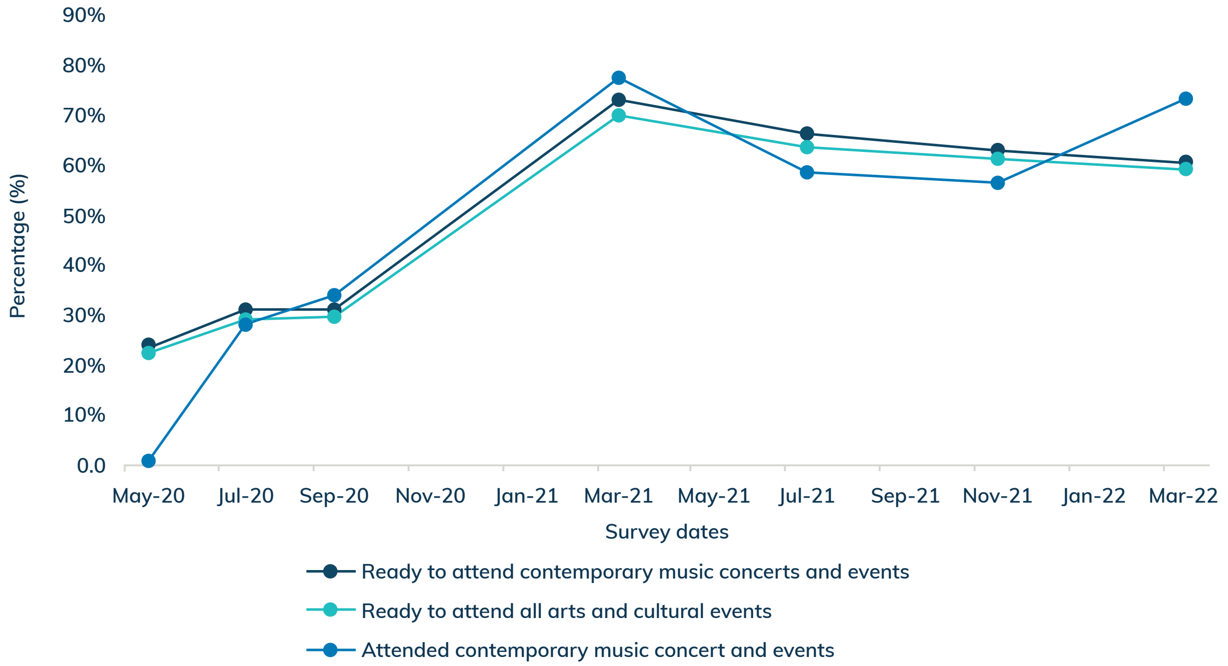
Attendance and patron sentiment

Attendance to live music events during the pandemic is closely matched by patron level of comfort. According to survey data from the Australia Council Audience Outlook Monitor, there is still some hesitation to attend live music events (Figure 11).[xvii] Data for March 2022 found close to 60 per cent of patrons were comfortable with attending contemporary music events, and 73 per cent of patrons did in fact attend contemporary music events during the previous fortnight.

xvii Patrons captured in the survey only include those who are on the contact database of at least one of the participating organizations and therefore represent active arts and cultural event attendees. Audience Outlook Monitor surveys are available for May 2020, July 2020, September 2020, March 2021, July 2021, November 2021 and March 2022.

Attendance and patron sentiment have fluctuated with COVID-19 conditions. Respondents cited concerns about transmitting the virus to at risk groups, being vulnerable to the virus themselves, as well as the risk of being a close contact.[35]

Figure 11. Selected survey responses on attendance and patron sentiment



Source: BCARR analysis of Australia Council Audience Outlook Monitor survey data. Notes: Each data point represents the different survey periods at which survey information has been collected.

Google measures of search interest and mobility

Another way to monitor levels of engagement with live music is to track levels of relevant internet search engine queries. Google trends data shows searches relating to 'events and listings', 'clubs and nightlife', and 'concerts and music festivals' fell dramatically at the beginning of 2020 and have remained lower than pre-tpandemic levels (Figure 12). This data provides a proxy for interest in a topic,[36] with an index score of 100 indicating the point at which the category was most searched over the period commencing January 2017.

In February 2020, just prior to the COVID-19 pandemic, there were high levels of interest in 'concerts and music festivals', reflecting the popularity of Australia's music festivals. Popular search queries included the Fire Fight bushfire relief concert, Splendour in the Grass presale tickets, Laneway festival and the Groovin the Moo festival. In the following two years, searches and interest in live music fell away as tours and events were cancelled.

Despite the fall in late 2020, interest in 'clubs and nightlife' rebounded more quickly and reflects interest in bars and pubs, which fluctuated with restrictions. Higher index scores over 2020 and 2021 have tended to coincide with periods when COVID-19 restrictions were eased.

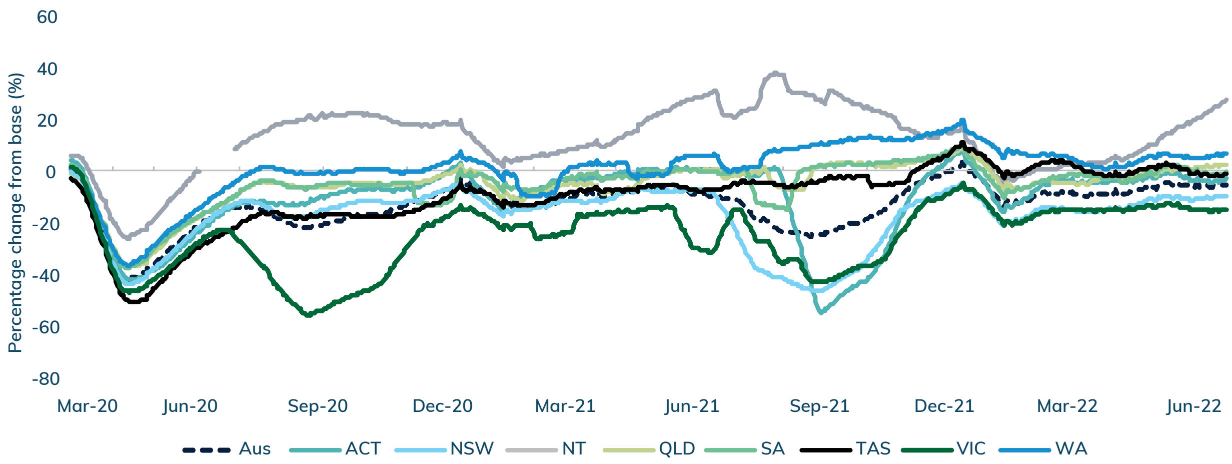
Figure 12. Google search interest in live music related categories

Note: 100 indicates the point at which the category was most searched over the period commencing January 2017.
Source: Google Trends, Accessed: 12/2022 (https://www.google.com/trends).

Google COVID-19 Community Mobility Reports data for the 'retail and recreation' category shows that the movement of people to recreational establishments dropped during COVID-19 (Figure 13). This data includes live music establishments as part of a broader category spanning restaurants, cafes, shopping centres, theme parks, museums, libraries and movie theatres. While not explicitly focused on the live music ecosystem, this data is illustrative of the broader dynamics affecting the sector as a result of COVID-19.

Retail and recreation mobility dropped by 22 per cent on average over the 3-month period from March to June 2020. Victoria bore the worst of these lockdown induced effects, with data showing that mobility was on average 35 per cent below the baseline across the second half of 2020. Other major declines occurred during the second half of 2021, when movement for Australia as a whole was 20 per cent below pre-pandemic levels over the period from June to September. This period was marked by shorter lockdowns across Queensland, Western Australia, Victoria, and the Northern Territory, and the start of more stringent measures in greater Sydney.

Figure 13. Recreation and retail mobility index



Sources/notes: Google LLC "Google COVID-19 Community Mobility Reports" Accessed: 08/2022. Notes: Mobility changes are in comparison to a baseline value for each day of the week (the median values for each day of the week between 3 Jan to 6 Feb 2020). Data volatility has been treated using a 30-day moving average. The gap in the Northern Territory series reflects where there was not enough data for that duration.

Economic impacts of COVID-19

Analysis commissioned by the Live Entertainment Industry Forum estimated that economic activity attributable to live music shows and events fell by $4.9 billion in industry gross value added (86 per cent) in 2020 compared to 2019. This reflects the impact of COVID-19, with a reduction from $5.7 billion in 2019 to just $0.8 billion in 2020.[37] The analysis also estimated a reduction of 36,200 jobs during the pandemic, falling from 42,100 in 2019 to just 5,900 in 2020. This includes jobs directly and indirectly related to live music across industries such as accommodation and food services and arts and recreation services. Value add and jobs in the broader live entertainment industry also decreased significantly over this period from $16.7 billion in 2019 to $5.8 billion in 2020, and from 122,600 jobs in 2019 to 43,100 jobs in 2020.

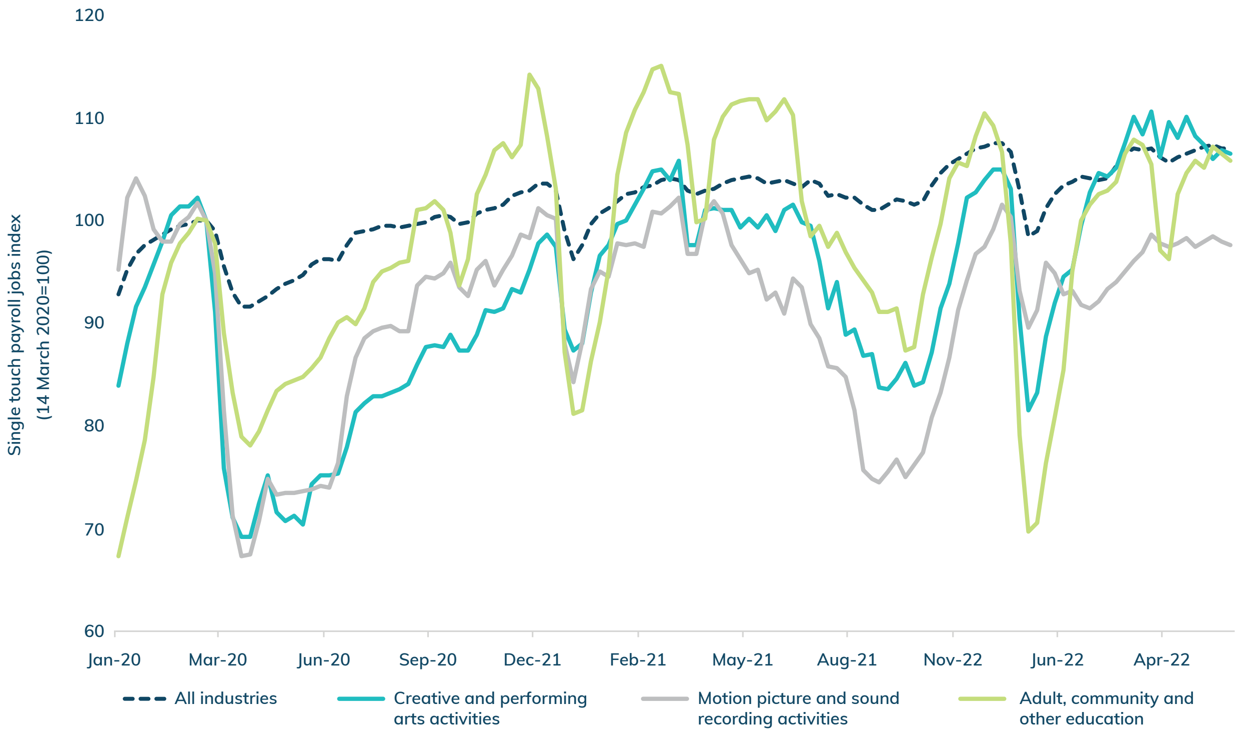
Single Touch Payroll data

Payroll data provides another useful measure for tracking the economic impact of COVID-19. The ABS Single Touch Payroll jobs index for relevant ANZSIC industry classifications fell significantly during the early stages of the pandemic and during the second half of 2021. Figure 14 shows data for the 'creative and performing arts', 'motion picture and sound recording' and 'adult, community and other education' subdivisions,[xviii] as well as the economy as a whole.

These subdivisions experienced employment falls greater than the overall economy throughout the pandemic. Employment in the 'creative and performing arts' and 'motion picture and sound recording' industry subdivisions reached their lowest points in early 2020, falling by approximately 30 per cent by early April 2020. Employment in the 'adult, community and other education' sector tends to be more cyclical, experiencing falls at the beginning of each year, but also fared worse than the overall economy during the pandemic. Payroll data since the beginning of 2022 indicates a recovery in employment in the 'creative and performing arts' and 'adult, community and other education' subdivisions, however 'motion picture and sound recording' remains lower.

xviii Around 60 per cent of workers in the primary and supporting live music sector occupation groups used in this report were in these three subdivisions.

Figure 14. Single touch payroll employment for selected industry subdivisions



Source: Weekly Payroll Jobs and Wages in Australia, week ending 11 June 2022, ABS. Notes: Employment levels are compared against the base where the index was 100 which was at the week ending 14 March 2020 (the 100th reported case of COVID-19 in Australia).

Other benefits of live music

Live music also has significant non-economic benefits for society. The following discussion outlines some of these benefits, based on a review of available literature and research.

Providing pathways for local talent and artist development

A healthy live music sector is supported by venues and promoters that provide a consistent pipeline of events which help local talent to build a career in music and gain valuable hands on experience. Exposure and experience within the sector and opportunities to perform live are vital to building a career in live music and developing requisite skills. Research on these skills points to disciplinary agility, social networking capability, enterprise and career self-management – much of which relates to career musicians creating employment for themselves.[38] Venues have an important role in this development process, particularly in the phases of careers focused on initial discovery and building a profile, where exposure to the industry and stagecraft are pivotal.[39] It is in smaller venues and the 'pub circuit' where musicians often begin to make a name for themselves, and it is here where local musical talent is nurtured in a space that is authentic for them.[40]

Cultural benefits

There is evidence that Australians strongly value the cultural benefits of live music. This includes attendance to events, which before COVID-19 had been growing year on year.

An Australia Council arts participation survey found 48 per cent of respondents reported attending a live music event in 2019, more than any other live art form.[41] Participation was also up from previous survey results in 2016 (43 per cent). Examining the societal benefits, 84 per cent of survey respondents agreed that there are significant positive impacts to society and their lives. When assessing the motivating factors behind attending, almost two thirds (63 per cent) stated it was to have fun and be entertained. Other common responses were to socialise and connect with others (41 per cent), understand other perspectives and cultures (33 per cent), and to improve their wellbeing (25 per cent).[xix]

Other studies point to wellbeing measures being greater for people who engaged in music via dancing or attending musical events, compared to those who are not engaged.[42] Another finding relates to attachment to place, pointing to a sense of identity and pride associated with local live music subcultures and iconic venues.[43] The existence of live music subcultures cultivated over time by performers, attendees, venues, and the musical styles associated with particular regions, speak to the importance of live music in our cultural lives, and have been promoted by cities and local councils as way of selling a vibrant nightlife.[44]

xix Responses do not add up to 100 per cent due multiple responses selected.

Conclusion

BCARR's occupation-based analysis seeks to add to research on the live music sector and serve as a foundation to better understand the diverse range of workers that contribute to a vibrant live music scene. The framework uses ATO taxation data to estimate the size of Australia's live music sector workforce at around 41,000 people in 2019–20. The analysis finds that live music workers are more likely to be male and have lower incomes than the average person. It also explored aspects of gender imbalance in participation and income. The analyses also show the live music sector is supported by workers across the economy, reflecting the many functions needed to stage performances.

Data from a range of sources show that the sector was heavily disrupted by the effects of COVID-19. The number of events, employment and patron sentiment towards attending live music all reveal significant reductions during the pandemic.

The approach taken in this analysis is experimental and aims to fill a gap in existing research by providing a method to capture the varied elements of the live music ecosystem using official statistics. Future research would benefit from a more detailed mapping of the occupations that contribute to the sector, including to refine assumptions relating to the auxiliary worker category.

Appendix A:

Methodology

Defining live music on an occupation basis

BCARR has used Australian and New Zealand Standard Classification of Occupations (ANZSCO) definitions to determine the scope of the live music sector.

Occupations were analysed by the extent that they involve activity in live music. All six-digit ANZSCO occupation codes were assessed and relevant occupations were placed into three categories: 'primary', 'supporting' or 'auxiliary'.

- **Primary occupations:** are directly related to live music and considered essential to the sector. This includes creative occupations which involve individual creativity, skill and talent. Included are musicians and related music professionals who perform, and personnel needed to stage performances (Table 9).
- **Supporting occupations:** involve workers that support live music performances but where only a portion of their function may involve live music. These occupations have an explicit reference to either music, stage, performance or entertainment (Table 10).
- **Auxiliary occupations:** include workers across the economy which help to deliver live music performances. They will generally span across the manufacturing and distribution stages of the 'creative chain' (Table 11).[45]

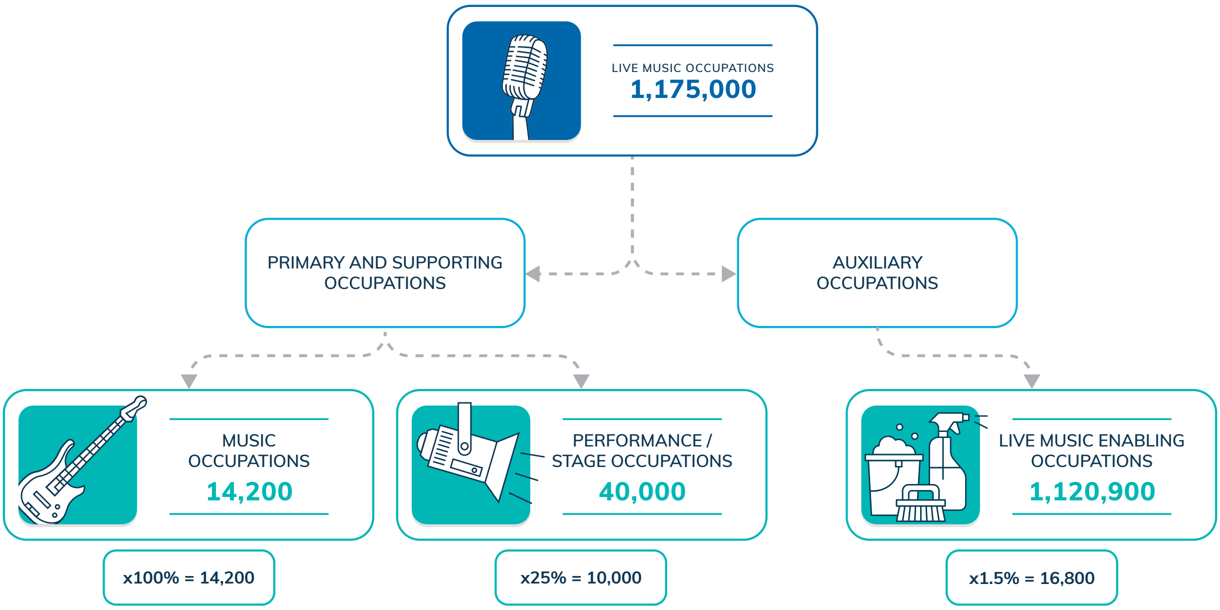
Together, the occupations represent a comprehensive list of activity related to the live music sector. Care has been taken in selecting occupation classifications that consider the broader live music ecosystem and how these occupations interact.

Estimating live music characteristics of employment

Number of live music workers

The number of persons employed within the live music sector is established using the most recent Australian Taxation Office (ATO) *Taxation Statistics* from 2019–20. This dataset contains information on the number of persons employed within each six-digit Australian and New Zealand Standard Classification of Occupations (ANZSCO) grouping as well as breakdowns by gender.

Figure 15. Flowchart of 2019–20 unadjusted employment by occupation groups



Source: BCARR analysis of ATO 2019–20 taxation statistics.

The analysis adjusts the number of workers within the live music sector based on their occupation group. Primary occupations are essential to the sector and all of the occupations identified in this group are wholly in-scope. This differs from the treatment of supporting and auxiliary occupations where many functions do not relate to live music.

In order to best represent the size of the industry, **25 per cent** of supporting occupations, and **1.5 per cent** of auxiliary occupations were deemed in-scope.

The portion of each group attributable to the live music industry was determined after:

- analysing the occupations involved in every stage of live music performance and assessing the scale of their activity
- sensitivity testing proportions using employment estimates from administrative grants data
- reviewing available literature on employment within the industry, and
- consultation with stakeholders.

Scenario analysis

BCARR's analysis of live music employment is based on a range of assumptions that influence the estimated size of the live music workforce. Given the uncertainty around those assumptions, BCARR has used sensitivity testing on the potential range of workers involved in live music.

Table 6 shows that workers in the live music sector could range from **33,400 to 48,600** in 2019-20. The potential range of workers is influenced by changing the percentages of in-scope workers applied to each of the supporting and auxiliary groups. These percentages reflect an estimate of the proportion of workers in the supporting and auxiliary groups that have any live music involvement. Scenarios have been developed that sensitivity test different occupation group percentages to estimate the size of the live music workforce.

In developing these scenarios, BCARR has used employment information from administrative grants data related to live music. The analysis matches ANZSCO occupations data with the job types provided by music venues and promoters in administrative grants data. To estimate the number of workers, BCARR has benchmarked the number of employees within in-scope ANZSCO occupations to the proportion these job types comprise in overall employment from the grants data.

Three different scenarios have been tested that change percentages of the supporting and auxiliary groups to best match the proportion of job types in grants data. These represent a possible range for the number of workers in the live music sector. Percentages beyond the lower and upper bound for each group begin to stray away from the proportions of different job types found in RISE grants data.

The scenarios include:

- Lower bound: Supporting group percentage is 20 per cent and Auxiliary group percentage is 1 per cent
- Base case: Supporting group percentage is 25 per cent and Auxiliary group percentage is 1.5 per cent
- Upper bound: Supporting group percentage 30 per cent and Auxiliary group percentage is 2 per cent

Table 6. Sensitivity of estimated workers in the live music sector in 2019-20

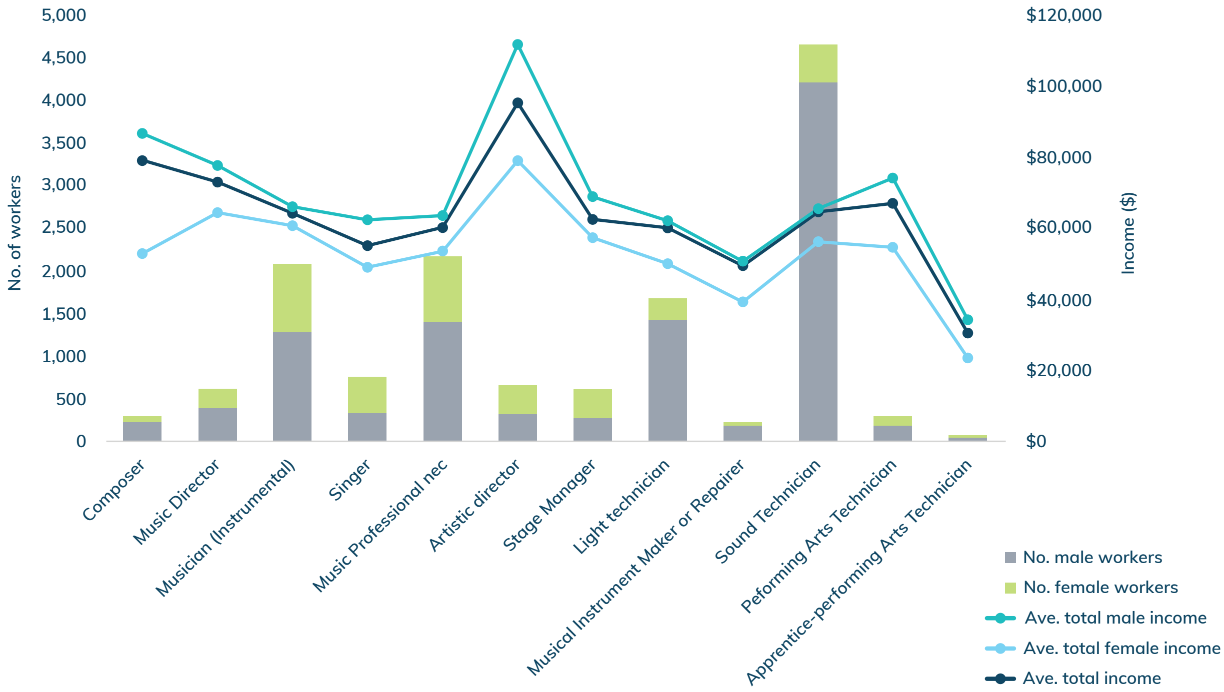
Scenarios	Supporting occupation group (%)	Auxiliary occupation group (%)	Primary occupation group workers	Supporting occupation group workers	Auxiliary occupation group workers	Total workers in live music
Lower bound	20%	1%	14,200	8,000	11,200	33,400
Base case	25%	1.5%	14,200	10,000	16,800	41,000
Upper bound	30%	2%	14,200	12,000	22,400	48,600

Source: BCARR analysis. Primary group workers are assumed to all have live music involvement therefore the percentage (100 per cent) does not change in any scenario.

Live music income and characteristics

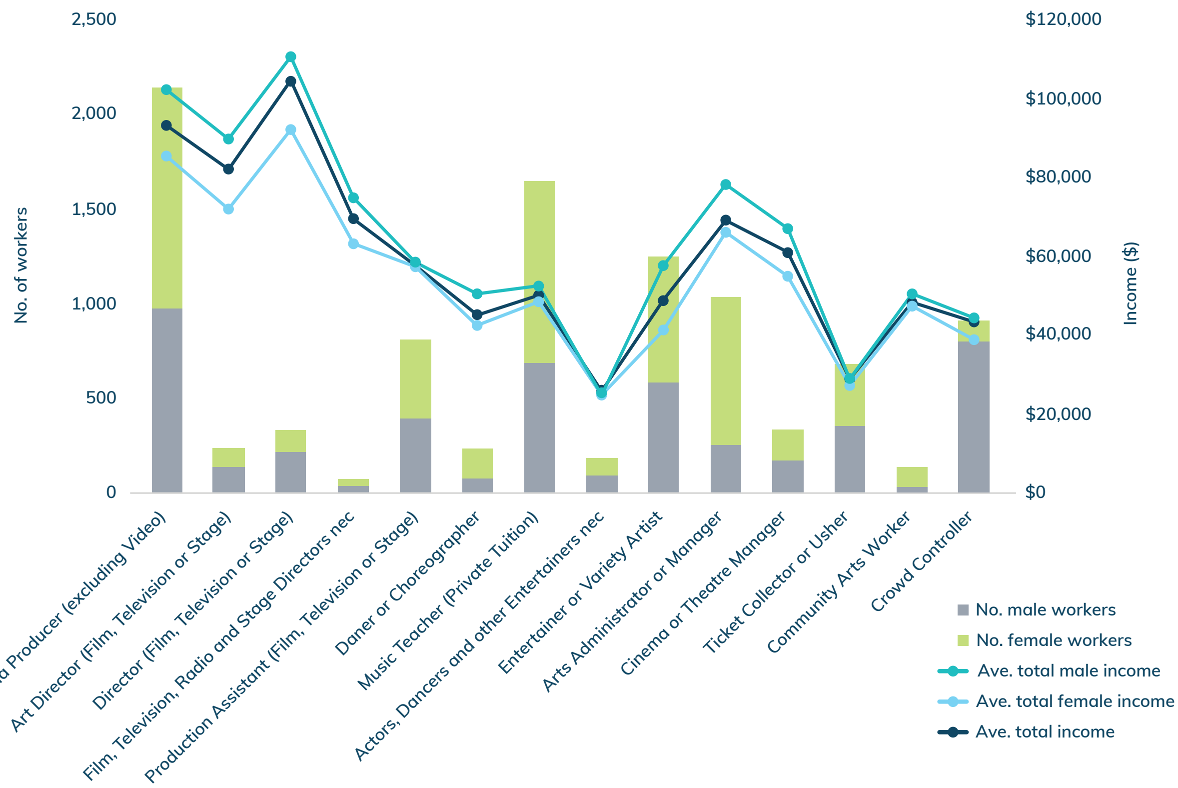
The incomes and gender splits of workers in the live music sector has been determined using 2019–20 ATO taxation data (Figure 16 to Figure 18). Average total income of workers refers to all assessable income that can be earned from sources such as salary and wages, government allowances, interest income and rent. Salary and wages may contain income from one or more jobs that are not listed as the primary occupation.

Figure 16. Number of primary workers and income by gender



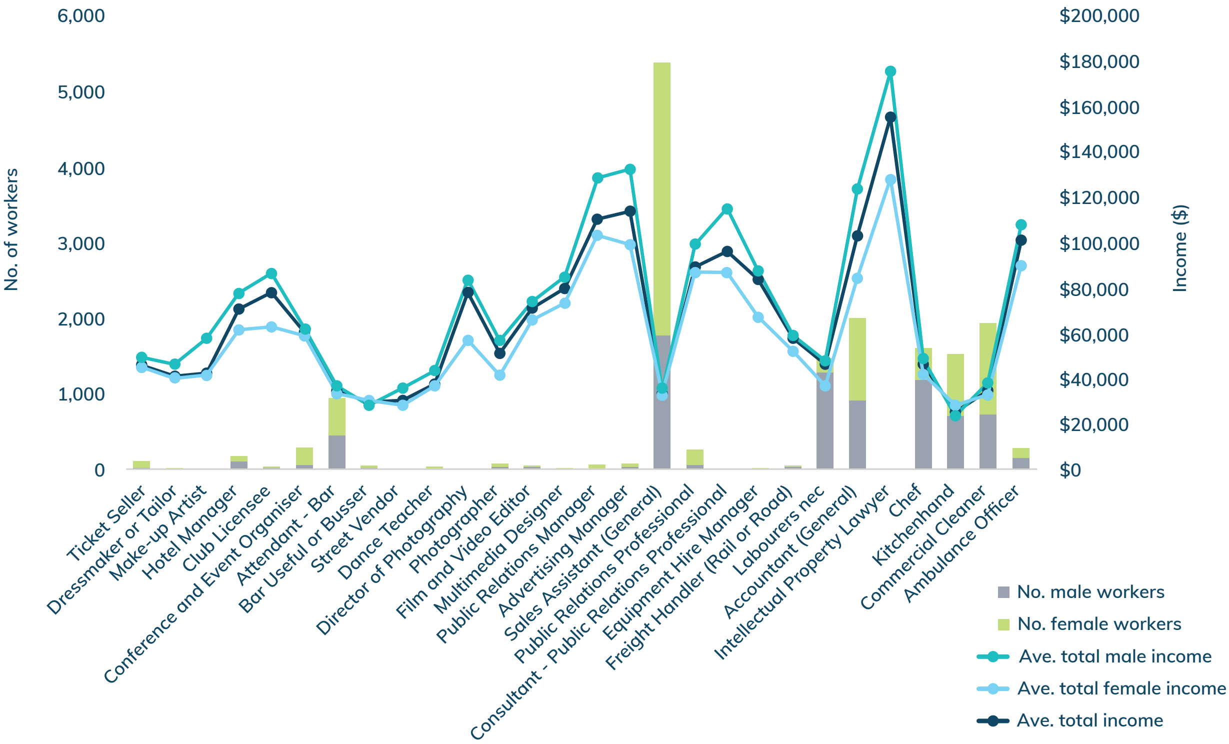
Source: BCARR analysis of 2019–20 ATO taxation statistics.

Figure 17. Number of supporting workers and income by gender



Source: BCARR analysis of 2019–20 ATO taxation statistics.

Figure 18. Number of auxiliary workers and income by gender



Source: BCARR analysis of 2019–20 ATO taxation statistics.

Live music occupations in other industries

Specific industries have been identified by analysing the proportions of six-digit ANZSCO occupations in four-digit ANZSIC industry classes using custom ABS 2016 Census data. The dataset contains information on the number of employed persons in ANZSCO defined occupations for all the industries in which workers of that occupation are employed in. Table 7 shows the proportion of live music workers employed in different industries.

Table 7. Live music employment in various industries

Industry	Percentage (%)
Arts and Recreation Services	22%
Retail Trade	16%
Information Media and Telecommunications	12%
Accommodation and Food Services	12%
Education and Training	11%
Professional, Scientific and Technical Services	5%
Manufacturing	4%
Administrative and Support Services	3%
Health Care and Social Assistance	3%
Public Administration and Safety	3%
Other Services	2%
Wholesale Trade	1%
Rental, Hiring and Real Estate Services	1%
Transport, Postal and Warehousing	1%
Construction	1%
Financial and Insurance Services	1%
Mining	0%
Electricity, Gas, Water and Waste Services	0%
Agriculture, Forestry and Fishing	0%
Total	**100%**

Source: BCARR analysis of customised 2016 ABS Census data. Notes: Counts of occupations are based on the place of work. The sum of industry percentages does not add up to the total due to rounding.

Table 8 shows the spread of industries supported by live music workers, split by occupation groups. Primary group workers are largely from the arts and recreation services industry (49 per cent) as well as the information media and telecommunications industry (16 per cent), reflecting the high involvement of musicians and other creative workers, as well as technicians.

Supporting group workers are predominantly found in the education and training industry (33 per cent), information media and telecommunications industry (29 per cent) and the arts and recreation services industry (20 per cent). The share of workers in each industry is reflective of the large number of music teachers, production and stage workers, entertainers and other venue staff.

Auxiliary workers are more densely concentrated in retail trade (34 per cent) and the accommodation and food services industry (24 per cent). These shares are largely driven by a large number of sales assistants that are only tangentially involved in live music and hospitality workers. The spread of industries is greater among the auxiliary workers than in the other occupation groups and is indicative of the wide variety of occupations.

Table 8. Proportion of primary, supporting and auxiliary live music sector workers in various industries

Primary	Supporting	Auxiliary	ANZSIC Division
4%	2%	24%	Accommodation and Food Services
2%	1%	6%	Administrative and Support Services
0%	0%	0%	Agriculture, Forestry and Fishing
49%	20%	2%	Arts and Recreation Services
1%	0%	1%	Construction
9%	33%	3%	Education and Training
0%	0%	0%	Electricity, Gas, Water and Waste Services
0%	0%	1%	Financial and Insurance Services
1%	1%	5%	Health Care and Social Assistance
16%	29%	1%	Information Media and Telecommunications
4%	3%	5%	Manufacturing
0%	0%	1%	Mining
5%	1%	1%	Other Services
2%	5%	7%	Professional, Scientific and Technical Services
3%	3%	2%	Public Administration and Safety
2%	0%	1%	Rental, Hiring and Real Estate Services
1%	1%	34%	Retail Trade
0%	0%	3%	Transport, Postal and Warehousing
0%	0%	3%	Wholesale Trade

Source: BCARR analysis of customised 2016 ABS Census data.

List of in-scope occupations

Table 9. List of in-scope primary occupations

Occupation code	Occupation Name	Specialisations
211200	Musician – type not specified	
211211	Composer	Writes new and rearranges existing musical compositions such as songs, operas, symphonies, musical scores and advertising jingles.
211212	Music Director	Conducts choirs, orchestras, bands, ensembles, opera companies and musical performances.
211213	Musician (Instrumental)	Entertains by playing one or more musical instruments.
211214	Singer	Entertains by singing songs.
211299	Music Professionals nec	This occupation group covers Music Professionals not elsewhere classified.
212111	Artistic director	Determines and oversees implementation of artistic policies for a performing arts organisation such as a theatre company, dance company, music ensemble, festival or venue.
212316	Stage Manager	Plans, organises, supervises and coordinates the activities of workers responsible for placing sets and properties, and operating lighting and sound equipment as part of film, television or stage productions.
399513	Light technician	Positions and controls lighting equipment for film, television or video productions or stage performances.
399515	Musical Instrument Maker or Repairer	Builds, repairs and restores musical instruments, and modifies and tunes them to owners' specifications.
399516	Sound Technician	Operates audio equipment to record, enhance, mix and amplify sound in support of television, radio, film or video productions, or stage performances.
399599	Performing arts Technician nec	This occupation group covers Performing Arts Technicians not elsewhere classified.
939904	Apprentice – performing arts technician[xx]	

Source: ABS ANZSCO definitions.

xx Note that this category is not included in the standard ANSCO classification framework for occupations, but is included in the ATO taxation data. It has been retained as it is consistent with the live music ecosystem approach adopted for this research.

Table 10. List of in-scope supporting occupations

Occupation code	Occupation Name	Specialisations
139911	Arts Administrator or Manager	Plans, organises, directs, controls, coordinates and promotes artistic and cultural policies, programs, projects and services.
149912	Cinema or Theatre Manager	Organises and controls the operations of a cinema or theatre.
211112	Dancer or Choreographer	Entertains by performing dances, or creates dance compositions.
211113	Entertainer or Variety Artist	Entertains by performing a variety of acts using a mix of acting, singing, dance and movement skills.
211199	Actors, Dancers and other Entertainers nec	This occupation group covers Actors, Dancers and Other Entertainers not elsewhere classified.
212112	Media Producer (excluding Video)	Plans, administers and reviews activities concerned with publishing, or the production of films, television or radio programs, theatre, music, festivals or other artistic activities.
212311	Art Director (Film, Television or Stage)	Plans, organises and controls artistic aspects of film, television or stage productions.
212312	Director (Film, Television, Radio or Stage)	Interprets and approves selection of scripts, and directs and instructs cast and crew during filming, recording or performance of productions.
212399	Film, Television, Radio and Stage Directors nec	This occupation group covers Film, Television, Radio and Stage Directors not elsewhere classified.
249214	Music Teacher (Private Tuition)	Teaches students in the practice, theory and performance of music in private training establishments.
272611	Community arts worker	Identifies issues of local need, concerns and aspirations through community consultation, and designs and implements strategies to facilitate and encourage community arts projects and happenings, and promote the value of community cultural development.
442213	Crowd Controller	Carries out crowd control duties at entertainment, sporting or recreational venues.
599912	Production Assistant (Film, Television, Radio or Stage)	Provides technical, administrative and organisational support to producers or directors for film, television, radio or stage productions.
899921	Ticket Collector or Usher	Collects tickets or admission passes and ushers patrons to their seats at an entertainment, sporting or recreational venue, prepares the venue before an event and locks up premises afterwards.

Source: ABS ANZSCO definitions.

Table 11. List of in-scope auxiliary occupations

Occupation code	Occupation Name	Specialisations
131113	Advertising Manager	Plans, organises, directs, controls and coordinates the advertising activities within an organisation.
131114	Public Relations Manager	Plans, organises, directs, controls and coordinates the public relations activities within an organisation.
141311	Hotel manager	Organises and controls the operations of a hotel or motel to provide guest accommodation, meals and other services.
141411	Club licensee	Organises and controls the operations of a licensed club to provide food, beverages, gaming, entertainment, sporting and other amenities for members.
149311	Conference and event organiser	Organises and coordinates services for conferences, events, functions, banquets and seminars.
149915	Equipment Hire Manager	Organises and controls the operations of an establishment engaged in the hiring out of equipment to companies involved in areas such as building and engineering construction, government, mining and resources, manufacturing, maintenance, special events, and to individuals for personal use.
211311	Photographer	Operates a still camera to take photographs.
212313	Director of photography	Plans, directs and coordinates filming to control the quality and style of photography in films or videos.
212314	Film and Video Editor	Makes and implements editorial decisions regarding mood, pace and climax of films, television programs, video productions or commercials.
221111	Accountant (General)	Provides services relating to compliance based financial reporting, auditing, insolvency and accounting information systems; and advises on associated record–keeping requirements. Registration or licensing may be required for certain services such as auditing.
225311	Public Relations Professionals	Plans, develops, implements and evaluates information and communication strategies that create an understanding and a favourable view of an organisation, its goods and services, and its role in the community.
232413	Multimedia Designer	Plans, designs and develops the production of digitally delivered information, promotional content, instructional material and entertainment through online and recorded digital media using static and animated information, text, pictures, video and sound to produce information and entertainment tailored to an intended audience and purpose.
249212	Dance Teacher	Teaches students in the practice, theory and performance of dance in private training establishments.
271214	Intellectual Property Lawyer	Provides legal advice, prepares and drafts legal documents, and conducts negotiations on behalf of clients on matters associated with protecting intellectual capital, utilising patent law, copyright law and licensing. Registration or licensing is required.
351311	Chef	Plans and organises the preparation and cooking of food in a dining or catering establishment.
393213	Dressmaker or Tailor	Makes, alters and repairs women's and men's tailored garments, formal wear, couturier clothing, and special occasion wear such as suits, dresses, coats, evening wear and bridal wear.
399514	Make Up Artist	Designs and applies make up to actors, presenters and other performing artists.

Occupation code	Occupation Name	Specialisations
411111	Ambulance Officer	Provides specialised transport services and emergency health care for injured, sick, infirm and aged persons.
431111	Attendant – bar	Prepares, mixes and serves alcoholic and non–alcoholic drinks to patrons in a bar in a licensed establishment.
431911	Bar useful or busser	Cleans and maintains public areas in a bar, club or dining establishment by collecting and returning dishes, cutlery and glasses to the kitchen or bar, wiping tables, bars and spillages, and emptying bins and ashtrays
621111	Sales Assistant (General)	Sells goods and services, such as food, clothing, hardware, household appliances, office supplies and cosmetics, in a retail or wholesale establishment.
621713	Street Vendor	Sells goods or services to customers at a street or market location.
639411	Ticket Seller	Sells tickets and makes reservations for services such as travel and admission to sporting and entertainment venues.
811211	Commercial Cleaner	Cleans offices, residential complexes, hospitals, schools, industrial work areas, industrial machines, construction sites and other commercial premises using heavy duty cleaning equipment
851311	Kitchenhand	Assists kitchen and service staff in preparing and serving food, and cleans food preparation and service areas.
891111	Freight Handler (Rail or Road)	Loads and unloads freight trucks, containers and rail cars.
899999	Labourers nec	This occupation group covers Labourers not elsewhere classified (includes stagehand).
922502	Consultant – public relations professional	

Source: ABS ANZSCO definitions.

Limitations

The following describes some of the limitations of this approach.

- Certain occupations in the live music sector will not map neatly across to the ANZSCO classification system, which has been used to define the sector. An example is roadies and stagehands whose functions can map across to numerous ANZSCO occupations including 'freight handlers' (891111), 'labourers nec' (899999), 'production assistants' (599912) and 'stage managers' (212316).
- ATO taxation statistics are limited to providing the number of employees in an occupation that is their main or primary job. BCARR's analysis is likely to underestimate the size of the live music sector as it is not able to capture workers whose secondary employment might be related to live music. For example, this is likely to underestimate the number of musicians involved in the sector.
- ATO taxation statistics do not separate income from salary and wages for multiple jobs held. It is not known from this data how much income is earned from live music by in-scope workers. Additionally, BCARR is unable to capture income earned by workers whose primary job is not in live music but whose secondary occupation might be live music related.
- Most recent ATO taxation data is from 2019–20 and will not fully capture the impacts of the COVID-19 pandemic on employment by occupation. Any movements in workers leaving the live music sector to other industries during the pandemic can only be captured using (currently unavailable) 2021 Census data.
- Due to a lack of granular data, BCARR has not been able to estimate the economic value of live music. Live music cuts across many industries and even the most granular four-digit ANZSIC industry level data does not separate live music output from other economic outputs.
- In-scope shares of live music involvement have been simplified for the analysis. Within each occupation group, occupations are assumed to have the same in-scope percentage of live music involvement.


VOLUME
EXPRESSION

Appendix B:

Estimates of live music value

Estimates of Live Music Value

This paper relies on a range of data sources to measure the value of the live music sector. These sources, shown in Table 12 and Table 13, estimate the contribution of the sector using indicators of economic value and attendance.

Economic value

Table 12 shows the economic value of live music as calculated from different sources. It also shows the methodology used by each study in estimating economic value.

Table 12. Definition and methodology of live music economic contributions

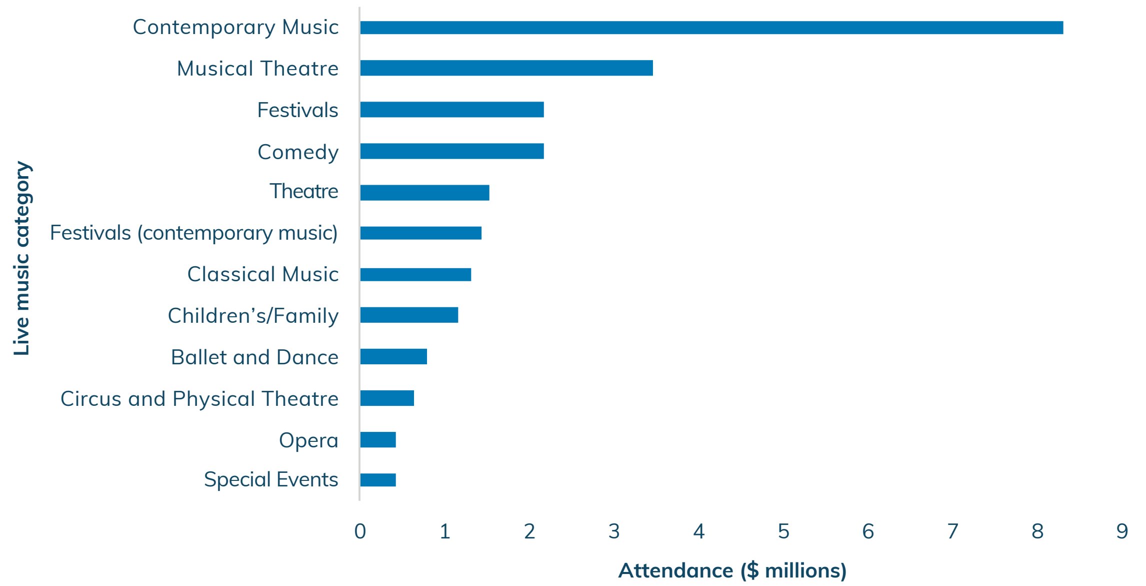
Study	Estimated economic value ($)	Approach
Live Music Office (2014)	$4.4 billion	Components of GVA have been estimated using input/output modelling. The impact of wages for workers created $2.2 billion, producer surplus and net profit created $1.2 billion and taxes generated is $950 million.
Ernst & Young (2020) – Economic contribution of Australia's live entertainment sector	$5.7 billion	Calculated by measuring all market related expenditure flows for specified industries or activities. The approach is bottom up, collecting industry ticketing revenue, other revenue, Government funding and expenditure by patrons to events from wide ranging industry participants.[xxi]

Source: BCARR review of selected literature.

Attendance

Figure 19 shows attendance to live performance events in 2019, by category. In total, attendance to all live performance events was close to 23.9 million. This paper has taken a narrow definition of live music and categorised it as contemporary music and contemporary music festivals that together were attended by 9.7 million people (41 per cent). The top most attended categories were 'contemporary music' with 8.3 million people (35 per cent), followed by 'musical theatre' with 3.5 million people (14 per cent), 'festivals' with 2.2 million people (9 per cent) and 'comedy' with 2.2 million people (9 per cent).

Figure 19. Live performance attendance by genre, 2019



Source: Live Performance Australia (LPA) and Ernst & Young (EY) 2019 and 2020 Ticket Attendance and Revenue Report

xxi EY have stated that where data was not available, the market/industry contributions from previous studies has been used to estimate current value.

Table 13. Attendance of live music from various literature

Study	Live music attendance	Approach
ABS – Attendance at Selected Cultural Venues and Events, Australia (2017–18)[46]	7.4 million	A nationally representative survey on cultural participation conducted between July 2017 to June 2018. Total attendance to live music events is derived from extrapolating the 38 per cent of respondents that stated they attended live music concerts and performances.
LPA 2019 and 2020 Ticket Attendance and Revenue Report (2021)[47]	9.7 million (2019)	A survey of participating organisations that includes major ticketing companies, larger venues and promoters, Australian Major Performing Arts Group (AMPAG) companies and National Performing Arts Partnership (NPAP) companies. New providers of data have been added to the survey over previous years. The study is likely to understate attendance as many independent and smaller venues are not captured. Live music has been categorized as Contemporary music and Contemporary music festivals.
Australia Council for the Arts, Creating our future: Results of the national arts participation survey (2019)[48]	9.9 million	A nationally representative survey of attendance to the arts in 2019. Total attendance to live music events is derived from extrapolating the 48 per cent of respondents that stated they had attended live music events during the year. Live music has been categorised as all types of genres including contemporary music, classical, traditional or folk, opera, art music, and others.
Live Music Australia (2014)[49]	17.5 million	Figures have been estimated from aggregating attendance to ticketed events from a number of sources. Attendance to contemporary music concerts was close to 6.3 million and attendance to festivals was 1.1 million in 2013, taken from the LPA ticket attendance and revenue report. A further 10.2 million ticketed events has been sourced from the 2011 EY report on the Economic contribution of the venue based live music industry in Australia report. The Live Music Office has assumed there is minimal double counting between the two sources.

Source: BCARR analysis of selected literature

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