

The Economic and Cultural Contributions of Live Music Venues in the City of Sydney, 2016

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Valuing Live Music

This report considers the cultural and economic value of venue-based live music activity within the City of Sydney (CoS) local government area (LGA). This report utilises a cost-benefit-analysis methodology previously employed to examine the value of live music to the Australian community at a national level (Live Music Office, 2015); as well as sports, tourism and the visual arts. This methodology combines economic analysis with qualitative accounts of consumer and producer experiences to provide a holistic account of the various ways live music benefits the community, and how live music activity is enabled and constrained. The application of this methodology across multiple sectors demonstrates the strength of this approach as a means of generating standardised, rigorous and comparable data to inform policy and decision-making.

Methodology

Articulating the cultural and economic value of live music to the Australian community is complex, due to the significant intangible benefits derived from experiencing live music and the interdependent commercial and creative motivations that drive the sector. Live music affects individual and community states of physical, human, social, and symbolic capital, which is converted by users into a set of economically valuable outputs that impact upon the welfare of society. Our model adopts best-practice principles of cost and benefit analysis to estimate the value of this cluster of activities associated with live music making in the CoS LGA.

To achieve this, we asked consumers to identify what they spend on attending live music in the CoS LGA (costs), as well as the benefits that flow from this activity. We also explore the experience of producers of venue-based live music within the CoS LGA through qualitative interview data. This contributes to understanding how the market for live music operates within the LGA, what the enabling and constraining factors may be, and where government and industry might invest most effectively.

Primary data collected for this research covers the 2015 financial year and comprised:

- telephone survey interviews with residents of Sydney including consumers and non-consumers of live music (n=404)
- face-to-face survey interviews with attendees of live music events in Sydney (n=679), and
- face to face interviews with industry professionals, including venue owners; bookers and managers.

We have also drawn on secondary data from the Australian Performing Rights Association, Live Performance Australia and the our own previous research to provide an estimate volume of attendance during this period.

Design of the qualitative survey and interview questionnaire was informed by existing literature and the previous national study (Live Music Office, 2015). In particular the survey used for this study incorporates categories of costs and

benefits identified by consumers in the national study. These were used to improve the accuracy of consumers' reported spending on live music activity; the perceived benefits resulting from this; and to provide a basis for comparison with the national report.

Qualitative content analysis was used to identify themes that described similar responses to interview and survey questions. These themes were refined and, where possible, standardised across responses from producers and consumers. All data was collected confidentially and a strict collection and management protocol was observed, ensuring all participants remain anonymous in this report.

Cost Benefit Analysis

Cost-benefit analysis (CBA) is the Australian government-preferred approach to evaluating policy choices (Office of Best Practice Regulation, 2005). CBA is required to identify real and opportunity costs associated with expenditure, and benefits that flow, including economic impacts, preferences and avoided costs. Within CBA, avoided cost theory assumes that the positive change in public welfare enabled by live music is a benefit that would otherwise need to be met by the community to maintain the status quo.

The cost-benefit approach also demands identification of the recipients of benefits and the bearers of costs. In developing and applying a framework for a complete economic valuation of an activity, it is necessary to quantify the costs and benefits to:

- government at all levels
- producers
- users, and
- the community, environment and society.

This study is concerned with estimating the value of live music making in Sydney over a fixed period—in this case, one year. As this study values live music making in the City of Sydney only on the basis of 2016 performances, a conservative position is adopted by tending, where necessary, to overestimate costs and underestimate benefits.

The other refinement made here to the cost-benefit approach is the offer of a more complete illustration of the value creation process. This is because the notion of value is relational, in that the meaning and activity of creating value emerges from a complex set of interconnected social relations (Ollman, 1976). Any study of value should therefore focus on the process by which value is created and ascribed (B. K. Johnson, Mondello, & Whitehead, 2007).

Cost Benefit Framework

Every activity has its inputs, which come at a cost. These include the direct costs of the goods and services, which enable it, and the costs of consumption that might otherwise have been spent on alternative activities (for example, the cost of the time an individual spends performing the activity, or the otherwise fallow infrastructure they demand for its performance).

From the investment of these current and opportunity costs, we create the activity; in this instance, the live music making ecosystem. This, in turn, may

alter (for better or worse) one or all of the four states of human capital in the individuals and society participating in it.

Physical capital refers here to the saleable assets created by the activity. *Human capital* refers to, among other things, a person's health, psychological well-being, knowledge and skills; whereas, *social capital* is an individual's extant levels of happiness, trust, and engagement with others. *Symbolic capital* recognises the extent to which the activity and its artefacts inspire an individual, or gives them something to aspire to.

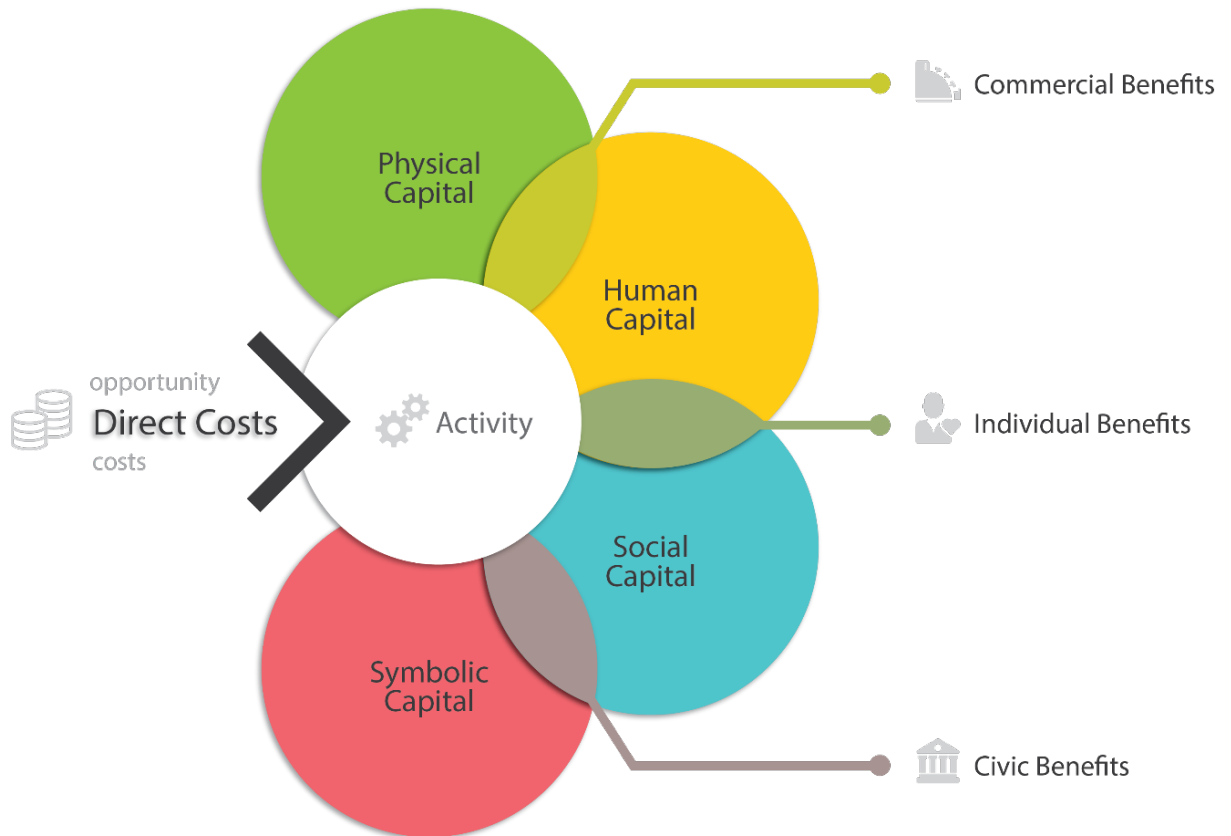


Figure 1: Cost / Benefit Framework

Capital of any kind, however, is a latent attribute. As such, it does not so much defeat measurement; it is just that its measurement is highly arbitrary and, for economic purposes, somewhat pointless. It is only when the potential of capital is **expressed** that it has utility, or *value*. Tangible and measurable expressions of capital include changes to an individual’s health, productivity and well-being; and, changes to commercial and civic net worth (through enlarged (or diminished) profits and/or avoided (or added) costs).

Demographics and Volume of Live Music Consumption

Given the issues previously identified face-to-face and telephone surveys are more reliable source of economic data for the purposes of this cost benefit analysis.

The field survey sampled attendees of live music events. In order to normalise the sample we therefore weighted it against the most recent ABS data on “popular concert” attendance (ABS, 2015a).

Age	Weight
18 to 24	0.52
25 to 34	0.60
35 to 44	1.19
45 to 54	3.03
55 to 64	11.00
65+	11.00

Applying the weights shown in the above table, sample ages were not significantly different from the population distributions of popular music patrons ($p > 0.05$ for both).

Weighting does not account, for other potential biases introduced by our sampling method. For example, a disproportionate number of respondents were highly engaged by live music, and performing musicians and industry workers were potentially over-represented.

In addition a randomized telephone survey of Sydney residents was conducted. In order to normalise the sample we therefore weighted it against the most recent ABS data on the population of Sydney (ABS 2016).

Age	Male	Female
18 to 24	4.50	2.88
25 to 34	3.48	2.23
35 to 44	2.27	1.45
45 to 54	1.11	0.71
55 to 64	0.78	0.50
65+	0.71	0.45

After applying the weights shown above sample age and gender were not significantly different from the population distributions of popular music patrons ($p > 0.05$ for both).

Live Music Consumption

A satellite account is a standard developed by the United Nations to measure economic sectors and industries not defined in national accounts (UNWTO, 2002). As there is no official satellite account for live music, this study relies on the one used in the earlier UTAS report for the Live Music Office (2015).

Consumption of live music involves a variety of related purchases. Purchased measures are:

- Accommodation and related expenses
- Clothes and fashion
- Food, beverages and other consumables
- Fuel, motor vehicle and travel expenses
- Memberships and subscriptions
- Merchandise (including CDs, programs, memorabilia)
- Phone, internet and communication expenses, and
- Tickets / entry fees

Composition of consumer spending is shown below and provides a baseline to a number of the estimates of costs and benefits. Compared to the previous national study of live music, audiences reported spend more on food and beverage, less on travel and more on tickets.

Category	Percentage of Spend
Tickets	29.20%
Food, Beverages and other Consumables	38.20%
Merchandise	9.14%
Clothes	1.37%
Memberships	1.23%
Travel	13.69%
Phone	0.41%
Accommodation	6.75%

Our field survey captured engaged consumers whose attendance at live music events. Modelling the costs and benefits of live music in Australia depends, on an estimate of the volume of activity consumption. In other words, how much and how often do people consume live music?

Expenditure on the production of live music in New South Wales local government areas was provided by APRA. This allowed for an estimation of the percentage of live music that occurs within the Sydney LGA. Used with attendance and sales figures from Live Performance Australia (LPA) and the

Australian Performing Rights Association (APRA AMCOS) (Ernst & Young, 2011, 2014) to estimate the total consumer spend on tickets for live music in Sydney.

Live Music in Sydney

The structure of the live music sector is largely informal and highly interdependent. The role that venues, managers, bookers, promoters and other businesses play in promoting and delivering live music are interrelated and difficult to disentangle.

The organization and operation of much live music activity happens across venues and is fostered by independent contractors, managers, small promotion companies or consortiums and labels. Much of the workforce comprises self-employed contractors and part-time employees with multiple jobs and / or income streams.

Business dealings appear to be largely informal and reliant on interpersonal relationships, becoming more formalised as businesses and / or partnerships become established. Because of this, 'Insider' knowledge of audience trends, strong networks and affective relationships appear highly valued.

Venues

In Sydney, primary purpose live music venues are split between small-to-medium (S2M) enterprises and larger or conglomerates that operate multiple venues nationally / internationally. Although larger capacity venues tend towards the latter this split is not always related to venue size.

The takeover of small and medium sized venues (pubs and clubs) by larger conglomerates is perceived as impacting live music activity in both positive and negative ways. These venues are more likely to view live music as a point of differentiation for an otherwise profitable business; be willing to offer a guaranteed spend on live music; and have the capacity to take on risk and invest in opening new rooms. However, in this context live music activity is more likely to be seen as a loss-leader for food and alcohol sales or income from poker machines and may not be sustainable in the long-term.

Many venues operating as independent small-to-medium businesses operate as for-hire operations where the venue will either charge an outright fee or take a split of the ticket sales. These venues are less likely to offer guarantees than venues for whom music is cross-subsidised by other income. Depending on the size and profile of the venue they may also buy-in shows where they need additional events. Responsibility for managing bookings typically falls to a staff member or an independent promoter or promoters, who may manage bookings across multiple venues. Some interviewees commented that venues elsewhere in the world function differently to Sydney in this regard, and are more likely to act as promoters or buy in talent.

The capacity of venues in Sydney appears stratified in a way that may not exist elsewhere in Australia. Interviewees noted that other cities have a reasonable distribution of venue sizes that approximately double in capacity from 100 to 2000. By contrast, promoters and managers commented on a lack of smaller and intermediate (200-300 capacity) venues in the CoS. In particular there was a

perceived lack of incubator venues offering incidental live music that serve as key developmental steps in the careers of emerging performers and promoters; and that feed talent and audiences into larger venues. Sydney appears to have a reasonably formalized progression of venues for local and touring artists. It was noted that, particularly in the absence of more intermediate sized venues, performers are either constrained by playing smaller venues than they may be able to fill, or are forced to take on significant risk by playing venues that are larger than they might be ready for.

Problematically, the costs associated with establishing new venues are seen as prohibitive and this appears compounded by a lack of suitable, affordable, commercial property available in an appropriate location. Several interviewees also mentioned concerns over navigating regulations and compliance costs, particularly in relation to access and soundproofing, as disincentives for establishing new venues in the CoS. Opening up new live music rooms in existing pubs and clubs may provide a cheaper solution to establishing new venues, however the owners / operators need to be willing to view this as a long-term investment and may not see any real profits for several years.

Additionally, the layout of the Sydney CBD, a relatively low concentration of venues compared to other Australian cities and public transport were identified as limiting factors for live music activity. These factors appear to conspire to discourage audience migration between venues and casual music discovery. Several respondents also noted that the 'hub and spoke' structure of public transport may discourage venues opening outside of the inner suburbs.

There appears to be a demand for under-ages live music events in the CoS that is not currently being met. Under ages or all ages events were identified as difficult for primary purpose venues due to difficulties around licensing for mixed audiences. All-ages events where alcohol is not sold are typically more expensive than regular events due to venues / promoters foregoing income from alcohol sales. Alternative venues such as PCYC's are seen as being very expensive, due in part for the need to hire in production and security. The cost and complexity of licensing was also identified as an inhibitor of all-ages events in alternate venues.

Income, costs and alternate revenue streams

Income for businesses in the sector aligns generally with reported consumer spending and includes ticket and food and beverage sales; venue hire; sponsorships and ad money; merchandise; performance royalties; and grant funding.

Significant costs were identified as rent; staff; marketing; venue hire; production costs; accommodation; touring logistics; regulatory compliance; and security / policing.

The specific mix of income and costs varied across the sector. For example where a venue may be able to generate income from venue hire, food and beverage sales and tickets, independent promoters may only receive a split of ticket sales or a percentage of the venues overall spend on live acts. The relatively high cost of rent, infrastructure and staffing were identified as encouraging sole-traders working from home offices. It was also noted that high accommodation and rent costs in Sydney

impact touring negatively.

Profit margins were identified as low across the board and difficult to sustain through live music activity on its own. Many interviewees noted that live music activity was often cross-subsidised or part of a folio of interrelated commercial activity. Interestingly in this regard, it appears difficult for venues to diversify their revenue streams while maintaining a focus on live music.

Several interviewees noted that advertising money was actively moving into the live music space, most obviously through branded events. Sponsorship and grants were also seen to be a viable, though not reliable, source of income for festivals, community events and individual artists. Venues and promoters expressed the opinion that grants were not a viable proposition for their businesses and / or were too difficult to obtain.

Risk

Live music as a commercial venture appears precarious due to the relatively high risk and operating costs of promoting live music; significant barriers for establishing new venues or events; and relatively low returns from ticket, and even food and beverage, sales.

Costs and risk appear to scale as businesses become more established, requiring businesses to diversify their revenue streams and / or spread risk across multiple venues, tours, contracts or artists. As small businesses' such as venues', promoters' or managers' activities scale there may be a tendency to take on debt that can be difficult to service.

The outlook of many interviewees was characterised by a high degree of uncertainty and industry workers typically manage several part-time jobs or contracts in order to secure a living wage. Tellingly, high levels of psychological and financial stress leading to burnout appear to be a feature of the sector.

Many interviewees noted that in recent years the sector has been impacted negatively by changes in consumer behavior as well as regulation and enforcement affecting live music provision. Due to the precarious nature of the sector changes to regulation, in particular, have the potential to significantly impact businesses in unexpected or unforeseen ways.

Audiences numbers and lockout laws

There is a perception that audiences for live music in Sydney have tapered since approx. 2010. This shift is ascribed to increased and wider range of competing entertainment; live music audiences trending toward electronic music; a decline in casual music consumption and discovery with the closure of venues; and rising cost of living.

Several interviewees commented on a decline in foot traffic and audience numbers in and around the CBD in recent years, accelerated or caused by the introduction of the so-called lockout laws in 2014. This has tended to encourage venues to function as entertainment destinations rather than as part of a precinct, where audiences are already in the area and might hop between venues over the course of an evening. By

implication, this means venues in these areas are less able to take on risk in the form of untested performers and are less likely to program free events or casual live music. Additionally, limiting trading hours for primary purpose live music venues were seen as having a greater impact than for regular pubs or clubs as audiences were less likely to purchase food or beverages during performances.

According to the accounts of industry workers, the lockout laws have caused or were linked to the closure of live music venues within the CBD entertainment precinct. The introduction of the lockout laws is generally seen as heavy handed and non-consultative. There appears to be significant anger and frustration that the implications of these laws may not have been thought through before their implementation. Surviving venues have seen some increase in patronage in the short-term, but are uncertain as to their longer-term prospects and are unclear if exemptions would remedy issues of reduced volume of foot-traffic in and around the CBD. Newtown was identified as an emerging precinct for live music but this was not seen as deliberate or, by extension, well managed.

Regulation, enforcement and compliance

Compliance with the various regulations governing the provision of live music was often identified as difficult to manage and a barrier to entry for new businesses. Regulatory and enforcement authorities are often perceived as monolithic and industry workers typically find it difficult to navigate government systems and processes. There is a perception regulators don't understand live music or consult with industry and are therefore unaware of impacts that their decisions might make. In particular existing regulations are perceived as not considering how live music might differ from other forms of entertainment.

Related to this, is a general lack of perceived agency in relation to regulation and enforcement. Live music venues and promoters identified specific instances where the profitability of their businesses and their reputation had been damaged by regulation and enforcement issues outside of their control.

Policing and enforcement in particular was perceived as reactive and in some cases unnecessarily aggressive, with the potential to impact negatively on patronage. Security and policing costs were also described as disproportionate to risk for one-off live music events and festivals, and that this was an inhibitor of new ventures.

Costs

The labour, materials and infrastructure that enable live music in Sydney are either directly purchased or donated at a cost. Given the scarcity of resources, diversion of money to live music implies other opportunities are denied—a social cost that is also considered.

The total social and economic cost of live music making in Sydney and related enterprises in 2016 is estimated to be **\$93.99 million**. This includes direct costs of \$92.86 million and opportunity costs of \$1.13 million.

Direct costs

Direct costs estimate the change to final demand attributable to live music making in the City of Sydney, 2016. To avoid double counts, intermediate inputs including costs of production are not counted separately.

The sum of relevant live music tickets sales is estimated to be \$24.48 million.

Using our basic satellite account of consumption – wherein ticket sales are 26.4 per cent of consumers' live music expenditure – we estimate by extrapolation that in 2016 consumers directly spent \$92.86 million on live music in Sydney.

These costs proportionally align with estimates made in the Live Music Office (2015) study. It should be noted that these costs appear significantly broader in their coverage and greater than previous costs attributed to live music making in other studies. These departures are reasonably explained by the differences in methodology as described in Live Music Office (2015).

Live music making is further subsidised by individuals, businesses and various levels of government through other venue revenue, volunteering, sponsorships, grants programs, free concerts et cetera. The sum of these investments is what is known in economics as the shadow price (McKean, 1968). Shadow price has the net effect of either enlarging producer profits or reducing the cost to consumers. As such, it is a real stimulus to live music production in Australia and relevant to the scope of our enquiry. Unfortunately it was beyond our means in this instance to gather the necessary data, and the development of a more comprehensive live music satellite account is recommended as a direction for future research.

Opportunity Costs

An opportunity cost is the value lost as a result of making a decision between mutually exclusive choices. Before assessing the economic benefits of live music making in Sydney, the next best alternative for allocated resources is considered. It is assumed that if individual purchases were withheld because the community placed no value on live music, that contribution could be invested in long term capital growth.

Therefore the opportunity costs is at least equal to interest forgone on the investment.

$$\text{Live music opportunity cost} = I \times r$$

$$I = \text{investment}$$

$$r = \text{rate of return on investment}$$

The rate of return is determined from the 10-year bond rate of 2.52 per cent, as at 1 April, 2016 (RBA, 2016). 1.3 per cent is the long-run inflation rate, based on the final year projection of the percentage change in consumer price index (ABS, 2016b).

$$r = i - \pi$$

$$r = \text{real discount rate (or cost of investment)}$$

$$i = \text{nominal long-run interest rate (3.49 per cent)}$$

$$\pi = \text{long-run inflation forecast (2.3 per cent)}$$

Therefore applying the long-run cost of investment of 1.22 per cent, the gross opportunity cost of live music making in the City of Sydney in 2016 is approximately \$1.13 million.

Benefits

The economically valuable outputs of live music that impact on the welfare of all City of Sydney residents is considered in this next section. It is estimated that in 2016 live music making in Sydney enabled at least **\$353.56 million** worth of such benefits across the community.

Using the Regional Input-Output Matrix (RIOM) model, it is estimated consumers' expenditure on live music increased output in the Sydney economy by \$175.69 million. Increases in wages, rents, profits and taxes associated with the increase in production are estimated to deliver \$89.87 million of additional value, or profit, to all Sydney based producers (compared to an alternative case where expenditure on live music ceased). Together with a productivity premium of \$35.18 million, the sum of benefits returned to businesses as a result of live music making in Sydney in 2016 was estimated to be \$71.18 million.

Expenditure associated with live music making in Sydney is further estimated to enable nearly **1,200 full-time and part-time jobs** worth \$50.87 million and taxation revenue to all tiers of government of \$3.00 million. Total civic benefits are estimated to be \$54.87 million.

Patrons of live music making in Sydney revealed their satisfaction with live music purchases to be worth \$84.53 million. Non-consumers, though not engaged, identified well being associated with having live music making in Sydney; estimated to be \$51.12 million. Total individual benefits from live music in Sydney are estimated to be \$353.56 million in 2016.

Commercial benefits

Expenditure associated with live music making in Sydney can be understood in two contexts. Firstly, spending by individuals, businesses and government on live music making in Sydney reveals value the community perceives. Secondly, expenditure creates change in final demand producing economic impact on employment, output and gross national product. Economic impact includes the impact on intermediate goods and compensation of employees.

Analysis of total impact, including indirect effects, is based on an understanding that industries, and individual companies within these industries, do not exist in a vacuum, but use each other's products to produce their own. Thus, an increase in demand for one industry's products leads to increases in the demand of other 'linked' industries.

RIOM is a closed model that applies the ABS Australian 2012-13 transaction tables (ABS, 2015) in conjunction with demand and employment information for each Australian State and Territory to model the impact of changes in demand on these regional economies, estimating changes in their output, employment and gross state product.

The transaction tables used in the model identify 60 industries across 19 industry sectors. For expenditure allocated to each industry sector, a unique multiplier impact is calculated estimating the impact on gross supply, output, gross state product (following the value-added method), employment, wages, imports and taxation.

As previously noted, the producers and consumers of live music making in Sydney spent \$757.84 million in 2016. This figure represents final demand in five main industry categories:

- Accommodation
- Internet and Telecommunications
- Heritage, museums and the arts
- Retail Trade, and
- Road transport.

Changes in employment and gross state product (GSP) are proportional to changes in output following the constant return to scale assumption inherent in I/O models.

The estimated economic impact of direct live music making in Australia related and motivated expenditure is shown below:

Demand Expenditure (\$MM)	Output Impact (\$MM)	GSP Impact (\$MM)	Producer Surplus (\$MM)
\$92.86	\$175.69	\$89.87	\$36.00

In RIOM each type of expenditure is allocated to a specific industry sector for the determination of economic impact. It is estimated that the impact of this expenditure is to increase output in the Sydney economy by \$175.69 million. This includes the production of intermediate goods as well as imports of \$35.32 million.

The Gross Value Added (GVA) to the Sydney economy is therefore \$84.73 million, or 0.02 % of NSW's Gross State Product (GSP) of \$513.31 billion (ABS, 2015a). Sydney firms also enjoy a net commercial benefit that is attributable to live music making. Producers' surplus is an economic measure of the difference between the price a producer receives and the minimum amount they would be willing to accept. The difference, or surplus amount, is the benefit a producer receives for selling the good.

As material inputs are already allowed for, and the assumption is that the infrastructure would exist regardless of live music making, if GVA is discounted by the cost of labour and taxes we are left with a theoretical surplus to firms of \$36.00 million.

In equilibrium, surplus represents the fair return to providers of capital sufficient to cover the cost of investment and the opportunity cost of capital. This is fundamentally a short-run concept in competitive markets. In the long-run, economic profits (profits in excess of the cost of capital) would generate new entrants that reduce profitability to normal.

The nature of this modelling means the \$36.00 million is distributed amongst all Sydney firms who contribute intermediate or final goods and/or services that are consumed as a result of live music making in Sydney, and not just live music producers.

Following the methodology used in the Live Music Office (2015) report, the acknowledgement of a productivity gain associated with live music attendance, a commercial productivity premium was further estimated for Sydney 2016.

Accounting for positive and negative productivity impacts, the net productivity benefit is estimated to be \$35.18 million. Giving a total commercial benefit from live music of \$71.18 million in 2016.

Distribution of Impacts

The spread of the impacts across different industry groups provides additional information. Distributions are presented in the following tables and graphs. The largest contributing increases to the Output and GSP (GVA) are seen in the Retail trade sector (G) and the Arts and recreation services sector (R).

Figure 2 Impacts on Output and GSP (See Table 1 Impacts on Output and GSP for data)

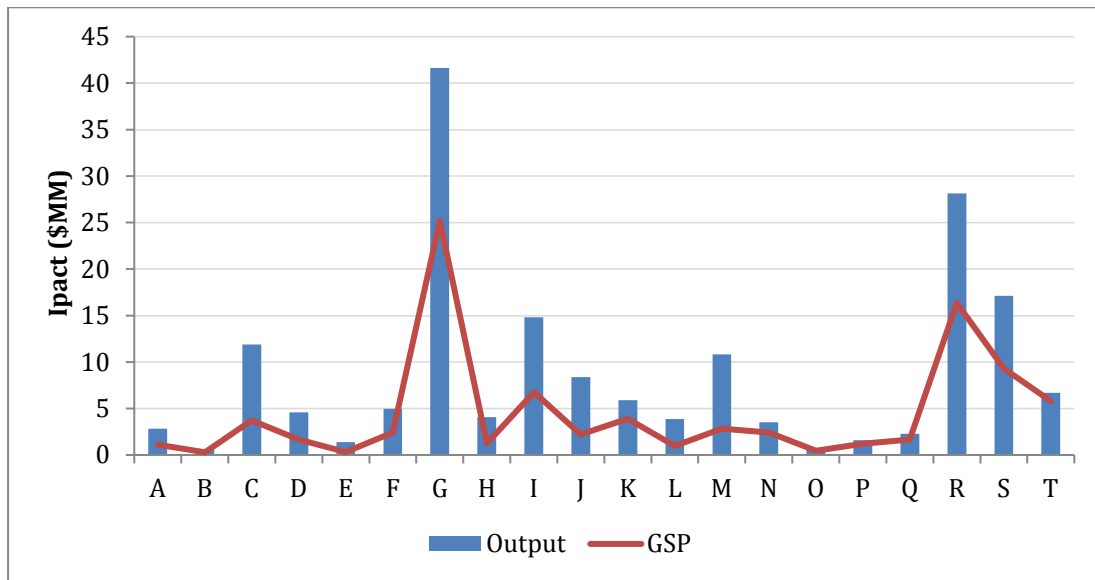


Figure 3 Impacts on wages and employment (See Table 2 Impacts on employment and wages for data)

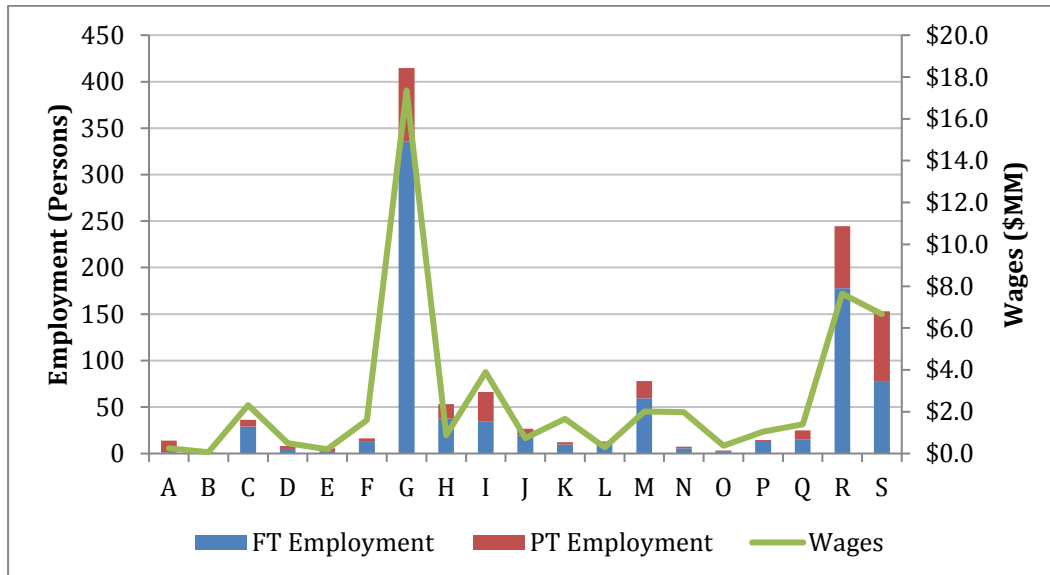


Table 1 Impacts on Output and GSP

Sector	Code	Output (\$mm)	GSP (\$mm)
Agriculture, Forestry & fishing	A	2.84	1.12
Mining	B	0.57	0.29
Manufacturing	C	11.89	3.72
Electricity, Gas, Water and Waste Services	D	4.58	1.66
Construction	E	1.37	0.33
Wholesale Trade	F	4.95	2.42
Retail Trade	G	41.63	25.19
Accommodation and Food Services	H	4.07	1.26
Transport, Postal and Warehousing	I	14.81	6.77
Information Media and Telecommunications	J	8.36	2.22
Financial and Insurance Services	K	5.90	3.89
Rental, Hiring and Real Estate Services	L	3.87	0.97
Professional, Scientific and Technical Services	M	10.82	2.83
Administrative and Support Services	N	3.50	2.42
Public Administration and Safety	O	0.72	0.46
Education and Training	P	1.59	1.21
Health Care and Social Assistance	Q	2.28	1.66
Arts and Recreation Services	R	28.12	16.36
Other Services	S	17.11	9.31
Ownership of dwellings	T	6.70	5.78
Total		168.99	84.09

Table 2 Impacts on employment and wages

Sector	Code	Employment (persons)	Wages (\$mm)
Agriculture, Forestry & fishing	A	13.74	0.24
Mining	B	0.77	0.06
Manufacturing	C	36.10	2.32
Electricity, Gas, Water and Waste Services	D	7.94	0.50
Construction	E	5.70	0.21
Wholesale Trade	F	16.34	1.60
Retail Trade	G	414.58	17.36
Accommodation and Food Services	H	53.07	0.87
Transport, Postal and Warehousing	I	66.26	3.89
Information Media and Telecommunications	J	26.77	0.74
Financial and Insurance Services	K	12.18	1.65
Rental, Hiring and Real Estate Services	L	12.79	0.30
Professional, Scientific and Technical Services	M	77.85	2.01

Administrative and Support Services	N	7.49	1.98
Public Administration and Safety	O	3.11	0.37
Education and Training	P	14.54	1.05
Health Care and Social Assistance	Q	25.00	1.39
Arts and Recreation Services	R	244.65	7.65
Other Services	S	152.94	6.66
Total	Total	1,192.71	50.87

Civic benefits

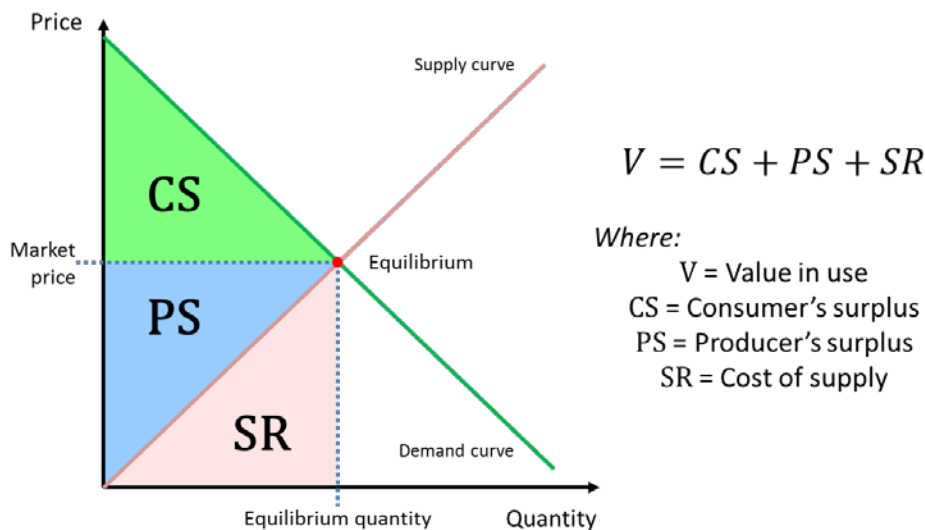
For the purposes of this study, a civic benefit is a contribution made by having live music making in Sydney that would otherwise have to be provided (presumably by the state) if the same community-wide standard of living were to be enjoyed. In other words, it typically represents a cost avoided by government. Two instances of civic benefit are identified. Expenditure associated with live music making in Sydney is estimated to generate in the order of 1,192 jobs, 848 of which are full-time. Wages of \$50.87 million are directly returned to households, with an equivalent welfare cost avoided by government. The estimate of taxes generated by live music expenditure is \$3.00 million. Taxation receipts may not be directly proportional to the relevant investment of each tier of government. Nevertheless, it is unlikely that the live music industry receives an equivalent quantum of re-investment from government; it could be argued that direct tax returns from live music making are used to finance other policy and social investments, such as hospitals and schools. Civic benefits acknowledged but not quantified by this study include the significant levels of volunteering that occur within live music making in Sydney, as well as the costs potentially avoided by our civil systems of health, criminal and social justice. No doubt many more could also be identified; this is recommended as a direction for future research.

Individual benefits

Consumers engaging with live music through the purchase of a good or service are assumed to derive some benefit. A rational economic framework assumes that decision-makers are acting to maximise utility in and do not intentionally make decisions that reduce utility. Therefore, for each act of participation or consumption, there is a gross benefit (consumer surplus) attached. Gross benefit is at least equal to consumer's expenditure. The revealed preference framework can be applied to identify the minimum benefits associated with expenditure. In this case, the \$92.86 million households spend on tickets, food and beverages, and other purchases. Determining the benefits to individuals associated with their engagement involves adding their revealed preferences to the contingent value of their of live music consumption. It is found that consumers recognise a well-being surplus of \$84.55 million that was directly attributable to having live music making in Sydney in 2016.

Use value

Transactions occurring in markets are argued to be a social good because the exchange will only occur when both buyer and seller perceive value in the deal. For the vendor, this means making a profit; known as producers' surplus. Producers' surplus is estimated in the Commercial Benefits section of this report. Consumer's surplus is the value above what they pay for a good or service, and assumes that welfare of both parties is improved. Markets for goods and services that do not meet this twin threshold do not occur naturally. Consumer surplus is an important benefit in calculating the net costs or benefits of an activity, for it allows us to arrive at a *use value* of a product or service. The use value is the sum of the purchase price and consumer surplus.



Our surveys of live music consumers reveal that value for live music related goods and services consumed in Sydney in 2016 was \$92.86 million; therefore users perceive at least this much value in the activity.

Survey respondents were then asked if they would hypothetically be willing to pay (WTP) an additional amount for those benefits not quantified in their purchase, and the value this contribution might be worth over 12 months. WTP is thus a quantification of individual's satisfaction with their consumption, in this case of live music.

There is evidence to suggest some respondents to the live music telephone survey misrepresented their WTP. Of the 404 telephone survey respondents, 22 reported a WTP greater than 10 per cent of their annual income. Without controlling for misrepresented preferences, analysis will therefore overestimate the true WTP for consumers of live music.

To control for attempts to influence analysis, WTP was capped at 10 per cent of an individual's reported annual income. WTP should not be confused with an individual's capacity to pay (as it is a measure of gross satisfaction), capping allowed for WTP to vary while lowering the influence of misrepresented preferences. WTP was capped for 22 responses, or 5.4 per cent of the sample. Average user WTP is conservatively estimated to be \$1611.2, or approximately \$30 per week, with a standard error of \$241. There is a 95 per cent probability that the true mean WTP lies in the interval \$1138.78 and \$2083.62.

As 32.9 per cent of the population aged 18 years and over attended a live music event in 2016 (ABS, 2010a), this reveals a gross consumer surplus of \$84.53 million, or 101% of their actual expenditure (not including shadow costs). The gross value-in-use of live music making in Sydney, being the sum of market price and consumer surplus, is therefore estimated to be \$177.39 million.

Non-use value

To this point, the methods described have exclusively considered the use value for consumers of live music. It is recognised, that residents might value live music, even if they do not purchase or otherwise engage with it. This other 33 percentage of Sydney residents are distinguished here as *non-users*.

The concept of non-use value is commonly used in economics to estimate the benefits of environmental resources, which are difficult to value through markets (Hanemann, 1993).

In this report, non-use value is derived from individuals who do not engage with live music, but recognise its benefits to the whole community. Our telephone survey respondents who reported not attending live music had an average willingness to pay of \$477.8, approximately \$9 per week. Across the 18 and above population of Sydney who do not attend live music this equates to a non-use value of \$51.12 million.

A cautionary note

Expressions of willingness to pay essentially measure satisfaction, and should not be confused with a desire on the part of consumers to pay more. In terms of value, increasing prices would result in a zero sum for current live music patrons, as the consumers' surplus would be converted into producers' surplus for no net gain.

Even though it is also known that ticket prices of live events are relatively inelastic; anecdotally, at least, non-consumers are highly price sensitive. Therefore, non-users would be alienated by price rises that were not linked to new value, and this would reflect in their adjusted WTP. As it is assumed that the greatest community benefit can be realised by converting non-consumers of live music into patrons, deliberating exploiting the presently high levels of the community's WTP—by either increasing prices or withdrawing subsidies—is likely to be counter-productive.

The Value of Live Music in the City of Sydney, 2016

Costs			
Direct		\$92.86	
Opportunity		\$1.13	\$93.99
Benefits			
Commercial			
Producers' surplus	\$36.00		
Productivity	\$35.18	\$71.18	
Civic			
Employment	\$50.87		
Taxation revenue	\$3.00	\$53.87	
Individual			
Patrons	\$177.39		
Non-users	\$51.12	\$228.51	\$353.56
Net benefit			\$259.57
Benefit : cost ratio		3.76	: 1

The community-wide value of live music making in the City of Sydney is the sum of the benefits enabled. This study estimates these to be worth \$353.56 million in 2016. This figure is significantly greater than previous estimates based on price or economic impact; however, it is likely to be an underestimation given the limitations of the available data and forensic techniques.

On its own, \$353.56 million is a fairly meaningless sum. The power of numbers lies in their ability to provide a standardised basis for comparison, and—short of performing the same exercise for every other human activity—a top-line valuation of every human endeavour is impractical, if not impossible.

For that reason this study contrasts the net value of live music making in Sydney with the cost of inputs. It can be seen that for every dollar invested by the community, over three dollars are returned.

The 3.76:1, benefit to cost ratio reported here is larger than that estimated in the Live Music Office (2015) report. The major difference between these reports is the inclusion of non-use value in the current study. As discussed previously non-use value asserts that people who do not directly consume a good or service may place a value on its existence. The inclusion of non-use value restricts the ability to directly compare the 2015 BCR and this reports BCR estimate. Removing the non-use value estimate from the City of Sydney cost benefit analysis allows for a direct comparison. With non-user value removed the BCR for live music in the City of Sydney is 3.22:1, a slightly higher value than estimated for the whole of Australia.

It is beyond the brief of this project to make recommendations as to how government investment in live music making in Sydney can be made more efficient. That would require the application of the model to specific programs and policy contingencies. The results reported nevertheless reveal a number of outcomes that should be of particular interest to the community.

This analysis has shown that, because the external benefits of live music making in Sydney exceed the social costs, the outcome is in fact efficient. We conclude that those who invest their time and money in enabling live music making in Sydney are supporting the common good. Hopefully this report can educate readers to the economically real and significant value of live music making in Sydney.

Although there are a number of limitations to the findings that would benefit from future research, the opportunity now exists for decision makers in both industry and government to leverage this framework for continual improvement in the marketing and delivery of their services.

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