

DEPARTMENT OF LOCAL GOVERNMENT,
SPORT AND CULTURAL INDUSTRIES

SOCIAL IMPACTS OF CULTURE AND THE ARTS WA

FINAL REPORT

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Department of
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**Culture
Counts**

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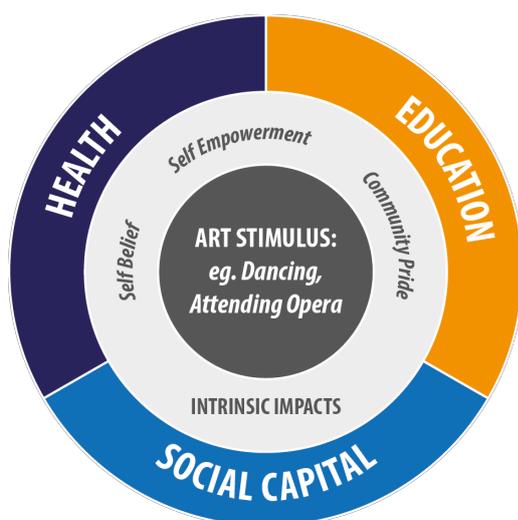
1 EXECUTIVE SUMMARY

Artistic and cultural organisations are increasingly being required to justify the funding they receive through the direct benefits associated with their activities. This poses a challenge for the arts community as their primary drivers are not necessarily quantifiable (e.g. the delivery of high-quality artistic experiences, provoking thought or developing artistic ability). Despite significant progress in impact research, there remains a sense that the sector lacks robust methodologies for demonstrating the contribution of artistic and cultural activities to wider social and economic policy goals and the scale of their contributions.

This Social Impact study identifies and quantifies social benefits in the broader community that are generated through participation or attendance at artistic and cultural activities. These benefits are commonly referred to as instrumental impacts. They encompass different impact domains (economic, social, civic, cultural and environmental¹). This study is focused on social instrumental impacts. The pathways by which social impacts are realised has been captured in a predictive model that associates the social impacts with the activity (stimulus) that created it.

When people interact with artistic activities, they have experiences, thoughts and feelings that can be described as intrinsic outcomes. Intrinsic outcomes have been successfully identified through a large body of research (McCarthy et al 2001; Holden 2004, 2006, 2009) and can be measured through the Public Value Measurement Framework (PVMF) dimensions developed by Culture Counts and former WA State Government Department of Culture and the Arts. Artistic and cultural activities stimulate intrinsic responses such as increased self-belief, self-empowerment, sense of belonging and other outcomes that contribute to the improved social wellbeing of a person. Through these intrinsic changes, there can be associated positive social instrumental impacts. An extensive literature review was undertaken to identify positive social impacts clearly linked to artistic and cultural activities. The review covered a diverse spectrum of studies and identified three main social instrumental impacts that have the potential to be quantified (Figure 1).

Figure 1. Impact Pathway - Measurable Social Outcomes



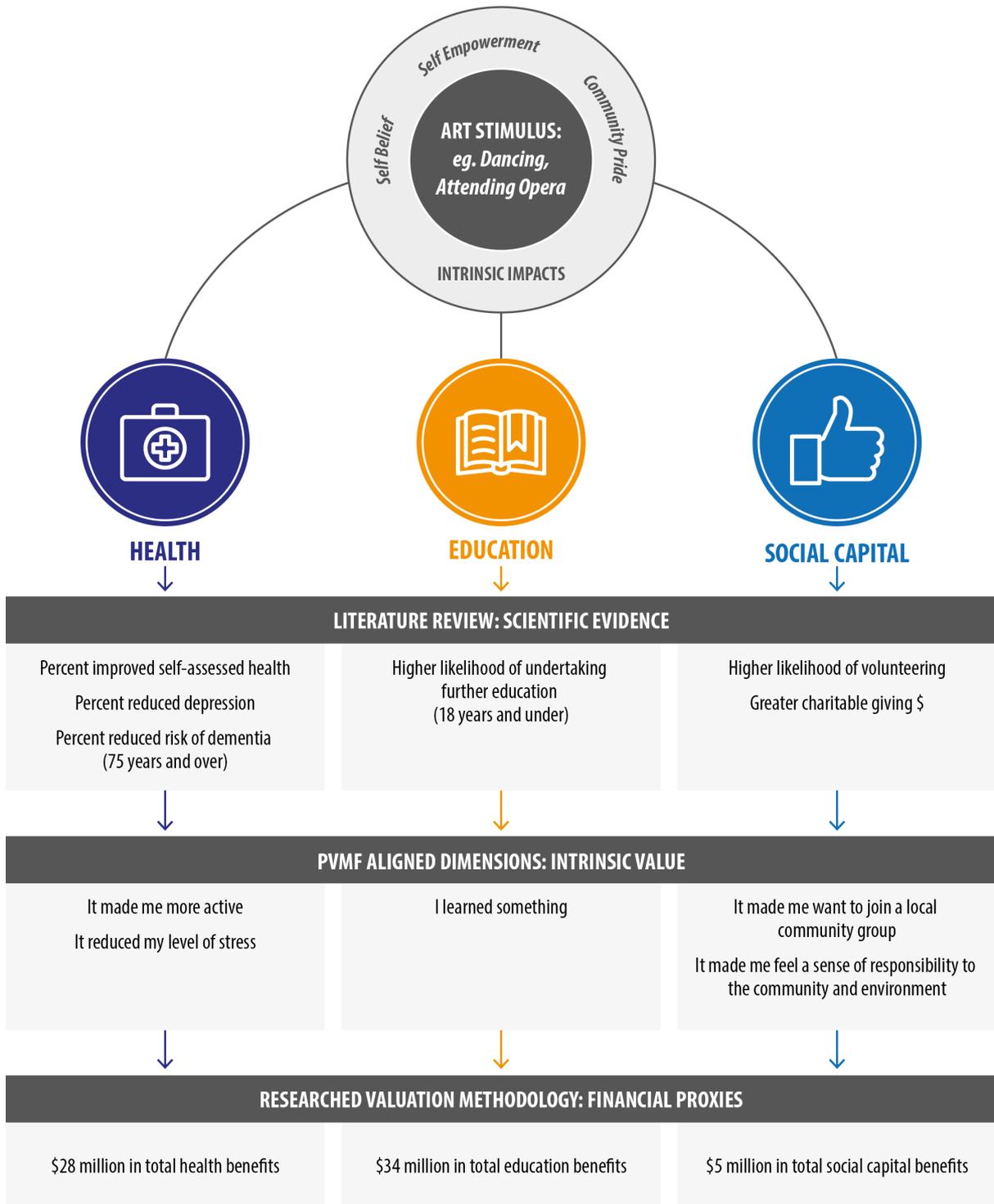
¹ Cultural Development Network – www.culturaldevelopment.net.au/outcomes

Further research aligned intrinsic outcomes with the identified instrumental impacts and selected current PVMF dimensions and new dimensions were identified that create a link between the two. The necessary evidence was identified to estimate the potential impact associated with the schedule of artistic and cultural activities conducted by the Department's funded organisations. Valuation methods were assessed, and a model created to monetise the impact associated with these activities. PVMF dimension results from 2016 were used to estimate the intrinsic value from the art consumers point of view and establish the final estimate of value for the Department. Quantifying the health, education and social capital impacts of artistic and cultural activities is achieved through the following steps:

- Establishing a base case (i.e. the schedule of artistic and cultural activities that would have been achieved without Department funding)
- Finding scientific evidence of an impact (e.g. a causal relationship between dancing and self-assessed health)
- Identifying the scale of the impact (e.g. % improvement in self-assessed health score)
- Identifying the impacted population (e.g. persons 35 years and over)
- Linking the impact to a financial proxy (e.g. research shows that higher self-assessed health scores indicate lower likelihood of visiting the GP)
- Quantifying the financial proxies (e.g. \$ cost of a visit to the GP)
- Measuring the intrinsic impact of the funded organisations and applying it to derive the final estimated value

Through the application of these steps it was possible to estimate the value of the impact from the Department's contribution to funded organisations (Figure 2).

Figure 2. Impact Value Pathways



Total health benefits attributable to the Department's funding equate to \$28 million. Education benefits total approximately \$34 million and Social Capital benefits are estimated to amount to \$5 million. It is estimated that the Department's funding provides a benefit to funding ratio of approximately 5 to 1. This indicates that for every dollar of funding provided by the Department to funded organisations, there is approximately \$5 of social instrumental benefit in the broader community.

While the model provides a conservative estimate of the impact that the Department generates through the funded organisations, there are three main limitations to the application of these estimates:

1. Benefit calculations are conservative:
 - o Some benefits of artistic and cultural activities cannot be quantified
 - o There are gaps in the available research that limit the number of benefits that can be quantified
2. The benefits can be investigated by artform, but there is limited applicability to individual organisations due to the nature of the research (it is based on participation in artistic and cultural activities on an ongoing basis, not a single event or series of workshops)
3. Opportunity costs were not considered (should funding be removed from artistic and cultural activities it could be used somewhere else - the benefits associated with other possible applications of the funding were not estimated).

Future development of the model should focus on improving the data inputs. The Department should undertake regular reviews of available research on the social impact of artistic and cultural activities. The data collected from funded organisations should be adapted to meet the input requirements of the valuation model and the Culture Counts platform will need to be updated to include proposed dimensions.

Implementing the model will require the Department to engage with representative stakeholders from various artforms. The process should be used to communicate the importance of developing value estimates to support the arts community to secure funding. The Department should continue the work with the selected stakeholders to establish sets of core dimensions in the PVMF that can be used to provide art form specific measurements of intrinsic values that relate to instrumental impacts. This will provide more accurate value estimates of the Department's overall impact and enable the estimation of artform specific instrumental benefits. The ability to communicate the value statement of the Department with an understanding of the contribution made by each artform is a significant step towards ensuring that the arts community is able to secure funding to maintain and potentially increase the availability of artistic and cultural activities in Perth and regional WA.

2 INTRODUCTION

2.1 Background

The contribution of arts and culture to individuals and society across economic and social outcome domains has been recognised since the 1980s by researchers from diverse academic disciplines including sociology, anthropology, cultural geography and cultural economics.

Contemporary understanding of social and cultural value has developed over the past two decades to recognise three distinct elements: intrinsic, instrumental and institutional (McCarthy et al 2001; Holden 2004, 2006, 2009):

- Intrinsic value relates to the value that is unique to the cultural sector, including the individual, subjective effects that artistic and cultural experiences have on us and our judgements of their aesthetic quality
- Instrumental value is a more objective benefit measure, relating to the contribution that culture makes (either directly or indirectly) to specific economic and social goals. These include outcomes such as creating employment, attracting tourism, improving educational outcomes, contributions to social outcomes and positive impacts on health and wellbeing
- Institutional value relates to the value that society collectively places on culture and the way that the interactions between cultural organisations and the public generate trust and contribute to producing a democratic and well-functioning society

Areas of instrumental and institutional impact supported by existing national and international literature include (but are not limited to):

- Civic agency and engagement
- Urban regeneration
- Health (mental and physical), ageing and subjective wellbeing (quality of life)
- Social capital development (social inclusion, cohesion and connectedness)
- Cultural identity and belonging (personal and community level)
- Learning and development (cognitive and behavioural outcomes and educational attainment)

Arguments for supporting artistic and cultural activities are increasingly being based on their instrumental impacts on individuals, society and the economy. Despite significant progress made by research bodies, funders of cultural activity and cultural institutions in the last decade, there remains a sense that the sector lacks robust methodologies for demonstrating exactly how public funding for artistic and cultural activities contributes to wider social and economic policy goals and the scale of contributions.

Generally, only economic outcomes associated with the one-off investment in the activity and visitor expenditure are quantified, due to the difficulty in monetising the intrinsic impacts on individuals and instrumental impacts on social outcomes associated with participation.

This provides an incomplete account of total value of the investment in arts and culture and limits the ability of the sector to make a holistic case for support against competing uses.

Evidence of connections between participation in arts and culture and broader instrumental outcomes on the economy and society has been used predominately in an attempt to provide justification for government funding (Farrell, 2016) however, efforts to identify relationships and where possible, apply methodologies to measure the broader impacts generated through investments in arts and culture deliver several key benefits:

- It contributes to an understanding of the intrinsic impacts of arts and culture on individuals
- It supports the identification of the pathways by which participation in arts and culture stimulate broader instrumental changes to the economy and society
- It facilitates the identification and application of appropriate metrics for estimating the monetary value of social return generated through investments in arts and culture, enabling the sector to demonstrate its value in an increasingly competitive environment
- It provides evidence to inform policy development, enabling a more efficient application of scarce resources to achieve greater social impact (Flatau et al 2015)

Governments and cultural organisations internationally, are realising the need to more clearly articulate the demonstrable value of culture through the lens of measurable impacts that fit with government decision-making processes. With economics being the dominant government language, the cultural sector, which typically operates under social and cultural concepts, needs an approach that can capture and articulate a fuller range of associated benefits.

2.2 Context for the Project

In July 2011, the then Department of Culture and the Arts (DCA) in Western Australia commissioned Michael Chappell of Pracsys Economics and John Knell of the Intelligence Agency (UK) to undertake work that would enable the Department to better understand and measure the public value it creates through its investments in arts and culture, and in its role as a development agency for the sector (Chappell and Knell 2012).

The project resulted in a new public value measurement framework (PVMF) including newly developed metrics and standardised definitions that could be used to measure outcomes of funded activity. The metrics were informed by a review of international best practice around the identification and measurement of the value created by the arts and engagement with artists, cultural leaders, and creative industry professionals from WA.

Holden's model (2009) was used as the basis for the PVMF logic model, which focussed specifically on the measurement of the intrinsic value of artistic and cultural experiences, artistic quality and reach. The quality dimension included measures for originality, rigour, authenticity, innovation and excellence and the dimensions related to the reach of artistic experiences included measures for audience numbers, diversity and the extent of connection with target communities of interest.

A measurement and evaluation system - Culture Counts - was created to collect, measure and analyse these components of value. The system was made free to the Department's funded organisations, and its application over the past three years has contributed to a robust dataset of the intrinsic impact of publicly funded artistic and cultural activity in WA. The system has since been tested elsewhere in Australia and in the United

Kingdom, providing comparable national and international data to examine intrinsic value across different regions.

Recognising the relationships between the intrinsic outcomes of cultural activities for attendees, participants and practitioners and broader instrumental and institutional effects across economic, social, cultural, civic and environmental domains, Culture Counts has collaborated with the Cultural Development Network² over several years to expand upon the set of PVMF quality and reach dimensions and has recently won a contract with Arts Council England to provide measurement services to arts organisations and investigate/develop benchmarking opportunities for intrinsic impacts.

Many local governments and cultural organisations using the system have been collecting public, peer and artist feedback on metrics related to instrumental and institutional outcomes including appreciation for diversity, connection to heritage, equality, safety and security, sense of place, civic participation and employment prospects.

2.3 Purpose

The PVMF together with the Culture Counts software platform and the established dimensions of quality and reach have enabled the State Government to better capture the intrinsic impact of State-funded artistic and cultural activity. The standardised dimensions and quantitative scaling system have supported the aggregation of outcomes and opportunities for comparisons within and across art-forms, organisations and regions providing unique insights and supporting decision-making.

The existing framework however, focusses on artistic outcomes and intrinsic outcomes for audiences and is limited in its ability to measure the extent of wider social impacts generated through the investment. In late 2017, Culture and the Arts (WA) identified the need for further development of the framework, to increase its ability to report on the extent of social impact created through its investment in arts and culture and contribute to a wider benefit case for the sector. Culture and the Arts (WA) engaged Culture Counts, to undertake a research project to identify appropriate techniques, metrics and data collection approaches to enable the quantification of social impact.

To understand and quantify social impacts certain elements need to be identified, including:

- The primary and secondary social benefits generated through cultural and artistic engagement
- The most appropriate means of accurately measuring the extent of these benefits
- The most appropriate techniques for expressing them in monetary terms through the identification of financial proxies i.e. alternative interventions that would create the same social impacts for which financial costs are known

Various methodologies have been explored internationally, including techniques such as contingent valuation, social return on investment (SROI) and subjective wellbeing measurement, each with advantages and methodological limitations.

² Visit the Cultural Development Network (CDN) website for more information on their measurable outcomes schema for cultural activity: <http://www.culturaldevelopment.net.au/outcomes/>

While many of these measurement techniques have been successfully applied in particular contexts, for example, participatory arts and arts-based therapies intended primarily to achieve social benefits, alternative approaches are required in order to measure the impact of a broader range of cultural practices.

The application of a single measurement framework across a diversity of cultural activity funded by the State Government must resolve the practical and technical challenges associated with data collection and impact attribution.

Culture Counts' approach to this project has been informed by Australian and international academic research projects in cultural value measurement to identify suitable social impact methodologies that are credible, practical and tailored to suit the WA context. The approach includes the investigation and measurement of both instrumental and intrinsic value. It is important to note that the scope does not include assessments relevant to institutional value, which require engagement with non-attendees and is outside of what could be reasonably expected of institutions/organisations responsible for data collection.

2.4 Scope of Work

The scope of work included the following key phases:

PHASE 1: LITERATURE REVIEW, DEVELOPMENT OF IMPACT PATHWAYS

1.1 Literature Review

An extensive literature review was undertaken to investigate the recognised social outcomes associated with attendance and participation in artistic and cultural events and activities. Three key areas of social impact have been identified including health, education and social capital.

1.2 Development of Impact Pathways

The relationship between artistic and cultural events and activities and social outcomes within each of these areas have been mapped in a series of impact pathways (or logic models). These pathways visually present the way in which change occurs. The findings of the literature review and impact pathways can be found in Section 3: Literature Review and Impact Pathways – Social Outcomes Associated with Participation in Arts and Cultural Activities.

1.3 Implications for the Outcomes Measurement Framework

An assessment of the existing outcomes measurement framework has been undertaken, with social outcomes identified through the literature review reviewed in the context of existing outcome areas within the broader measurement framework to identify areas of alignment and potential gaps.

Documentation of new elements to be added to the existing outcomes measurement framework, to incorporate the core social outcomes and support the development of an analytical model that can be used to facilitate the measurement of social impact, drawing on user generated data and grant management systems data (See Section 3: Literature Review and Impact Pathways – Implications of the Outcomes Measurement Framework).

PHASE 2: DEVELOPMENT OF THE EVALUATION MODEL AND CALCULATION METHODOLOGY

2.1 Assessment of Impact Measurement Methods

A review of contemporary social impact measurement methodologies, including their advantages, limitations and specific relevance to the artistic and cultural sector has been undertaken to inform a recommended, hybrid evaluation approach (See Section 4: Valuation Techniques – Recommended Evaluation Approach).

2.2 Identification of Key Metrics and Financial Proxies

Drawing on the findings of a selected number of core research studies, a series of metrics have been identified in order to estimate the extent of social impact on affected populations (See Section 5: Evaluation Model and Applications – Key Research and Evidence). Financial proxies for social outcomes have been identified, to enable social impacts to be expressed in monetary terms.

2.3 Development of the Evaluation Model and Calculation Methodology

A comprehensive value calculation methodology has been developed, incorporating key metrics and financial proxies and inputs from data fields available through the Online Grants Management System (OGMS) together with a set of proposed social impact dimensions.

2.4 Briefing Note 1: Research Findings, The Proposed Evaluation Model and Applications

This report has been prepared, summarising the findings of the literature review and the evaluation model that is proposed to enable the Department to measure social impact. Additional input and output measures required to supplement data already collected through the OGMS have been identified, in addition to the proposed social impact dimensions.

PHASE 3: APPLICATION OF THE EVALUATION MODEL

3.1 Data Collection

The proposed dimensions and additional input indicators were introduced to a selection of the existing funded organisations, as a supplement to current core artistic quality and reach dimensions. These organisations agreed to participate over a period of approximately one and a half months to capture a meaningful sample of responses across artform categories. Attendance and participation data was provided by the Department to enable application of the model, with national attendance by artform statistics used to align the data with the model requirements. Survey data captured over the trial period was assessed for quality purposes however was not included in the model due to an insufficient sample to be statistically significant. Survey data for the past year from the Culture Counts PVMF was instead used to inform an assessment of the social impact of investments made over the financial year.

3.2 Final Impact Modelling and Reporting

The final social impact has been calculated utilising the established evaluation model and calculation methodology. This briefing note has been updated to include an executive summary and a final impact summary section, incorporating the outcome of the modelling together with a summary of perceived advantages, limitations and potential improvements to the model and implementation methodology into the future.

3 LITERATURE REVIEW AND IMPACT PATHWAYS

The focus of this literature review is the potential impact of artistic and cultural activities on instrumental social outcomes. Specifically, the Review:

- Identifies direct and indirect relationships between participation in artistic and cultural programs/activities and intrinsic and instrumental social impacts for individuals and communities
- Maps the pathways by which artistic and cultural activities generate instrumental impacts
- Provides a gap analysis to assess the suitability of the PVMF to measure the contribution of artistic and cultural activities to instrumental social impacts

The literature review aimed to identify the primary social impact areas which have, through research, been shown to be associated with arts participation and attendance. These impact areas and the associated impact pathways form the foundation of the evaluation model. The impacts considered in the following section and the proposed evaluation model are not intended to be exhaustive, but instead represent the priority areas in which a relationship is known to exist, and measurement of impact would be both appropriate and achievable.

3.1 Social Outcomes Associated with Participation in Arts and Cultural Activities

A key component of this project was an extensive review of relevant national and international research and literature on the impacts of engagement in arts and culture to support the identification of direct and indirect relationships between artistic and cultural programs and instrumental social outcomes for individuals and communities.

The literature review revealed three broad areas in which a relationship exists between engagement in arts and culture and measurable social outcomes including health, education and social capital. Within each of these broad outcome areas exists a subset of more specific outcomes, described in more detail in the following sections.

3.1.1 Health

Across studies that investigate the relationships between engagement in arts and culture and broader outcomes, those relating to health, including both physical and mental health, feature prominently.

While most health outcomes shown to be positively associated with participation in artistic and cultural activities are indirect benefits, that is, secondary to the act of participating itself, some can be directly linked to physical health benefits. For example, dancing is a physical activity that directly impacts physical health through movement, increased heart rate, etc.

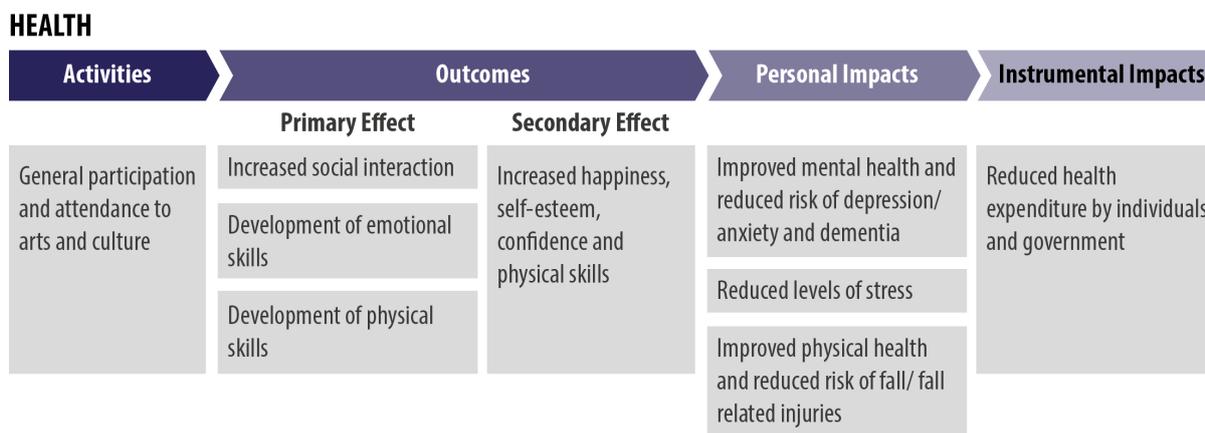
The therapeutic health benefits shown to be positively associated with participation in artistic and cultural are mostly gained through social interaction and personal skills development, which boost confidence and self-esteem (Taylor et al, 2015) (Figure 3).

Studies examined as part of the review identified that arts participation and attendance is related to the following health outcomes:

- Improved overall health and wellbeing (Farrell, 2016, Fujiwara 2014 and Cuypers 2011)
- Improved mental health (Cohen et al 2006)

- Reduced depression/anxiety (Cuypers 2011 and Cohen et al 2006)
- Lower levels of stress (Fancourt 2016)
- Reduced risk of dementia in persons over 75 (Verghese 2003)
- Reduced risk of fall/fall related injuries in persons over 65 (Cohen et al)

Figure 3. Impact Pathway - The Impact of Participation in the Arts on Health



Source: Pracsys and Culture Counts 2018, Taylor et al 2015

3.1.2 Education

Studies that investigate the relationships between engagement in arts and culture and educational outcomes generally relate to arts education programs or are focused on outcomes for young people. While the development of artistic skills including performance or visual art creation and presentation represent direct benefits of participation in arts programs, the review focused on the broader educational benefits of general participation and attendance in arts and culture which focus largely on indirect outcomes for example, the development of abilities that improve education outcomes and average exam scores and increased motivation to learn/engage in education.

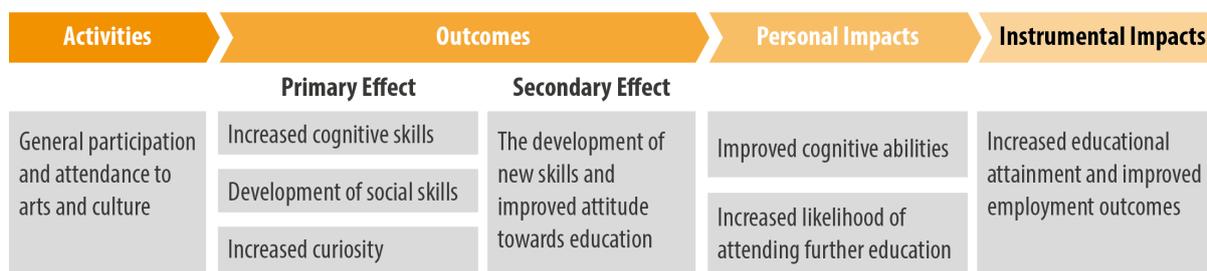
Studies examined as part of the review identified that arts participation and attendance is related to the following educational outcomes:

- Increased likelihood of intent to undertake further education (Fujiwara 2014)
- Improved educational attainment, cognitive abilities, transferable skills, literacy skills (Tripney et al 2010³)

³ This was a meta-analysis that drew the results from multiple papers

Figure 4. Impact Pathway - The Impact of Participation in the Arts on Education

EDUCATION



Source: Pracsys and Culture Counts 2018, Taylor et al 2015

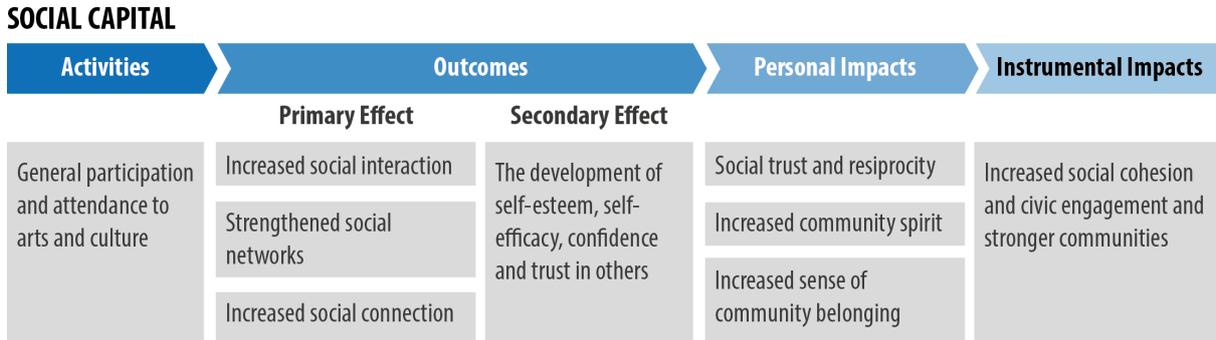
3.1.3 Social Capital

The relationship between the arts and the development of social capital features prominently across research studies and overall, the volume of evidence indicates that a positive relationship exists between the arts and various components of social capital. For the purpose of this study, social capital can be defined as '(the) features of social organisation such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit' (Putnam 1995). Artistic and cultural activities provide opportunities for social interaction which contribute to the development of social relationships and networks and enhance self-esteem (Figure 5). Artistic and cultural activities can bring together people with similar interests and also unite people from diverse backgrounds and social levels in a shared experience, facilitating the accumulation of social capital - specifically bonding and bridging social capital.

Measuring the value of social capital can be challenging due to the intrinsic nature of outcomes such as trust, sense of belonging and self-esteem, to name a few. Certain indicators of social capital can be used as a measure for achieving social capital outcomes. These indicators include participation in volunteering and associative activities, charitable donations and participation in political processes) (Siegler 2014). Where these indicators are performing well it indicates that there is a higher level of social capital in the community. Studies examined as part of the review identified direct links between arts participation and attendance and positive changes in the following indicators of social capital:

- Increased likelihood of volunteering (civic engagement) (Fujiwara et al 2014, National Endowment of the Arts 2009)
- Increased charitable giving (Fujiwara et al 2014)
- Increased likelihood of voting (civic engagement) (Catterall 2012)

Figure 5. Impact Pathway - The Impact of Participation in the Arts on Social Capital

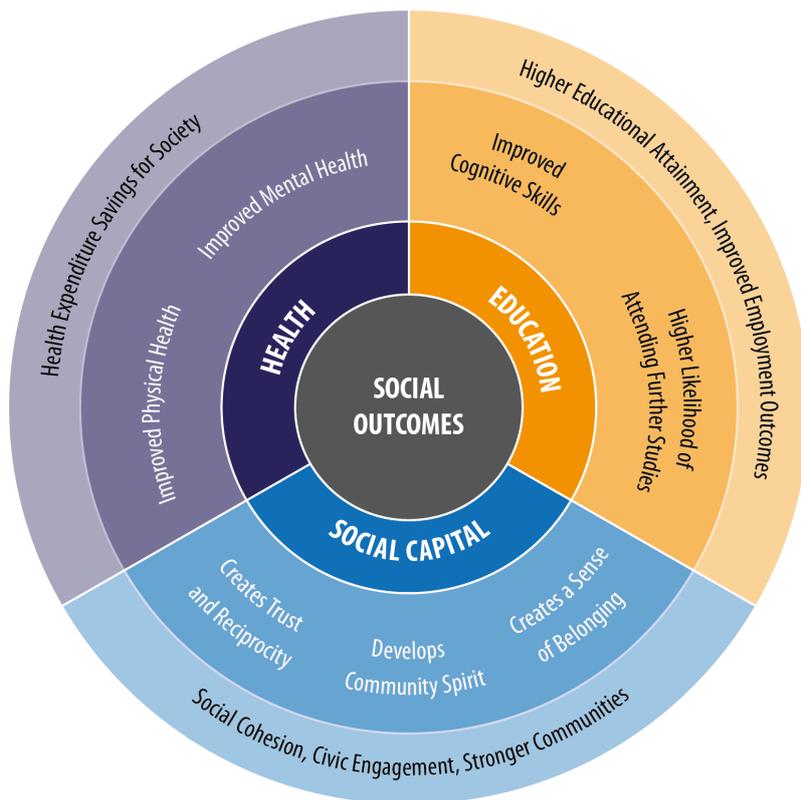


Source: Pracsys and Culture Counts 2018, Taylor et al 2015

3.1.4 Impact Pathway Summary

The impact pathways for each social outcome have been summarised in Figure 6.

Figure 6. Social Outcomes and Related Impacts



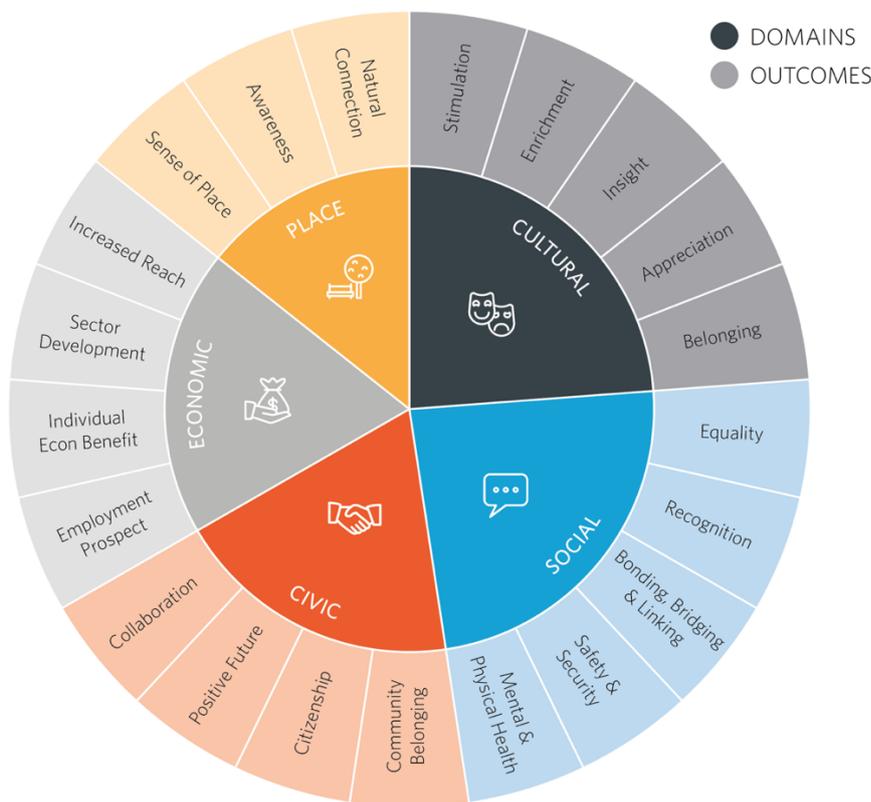
Source: Pracsys 2018

3.2 Implications for the Measurement Framework

The current PVMF focuses on the measurement of outcomes relating to artistic quality and reach. The quality dimension included measures for originality, rigour, authenticity, innovation and excellence and the dimensions related to the reach of artistic experiences included measures for audience numbers, diversity and the extent of connection with target communities of interest.

Recognising the relationships between the intrinsic outcomes of cultural activities for attendees, participants and practitioners and broader instrumental and institutional effects across economic, social, cultural, civic and environmental domains, Culture Counts has collaborated with the Cultural Development Network⁴ over several years to expand upon the set of PVMF quality and reach dimensions. New dimensions have been added to the framework which enable measurement and reporting against a broader range of outcome areas known to be associated with cultural engagement (Figure 7).

Figure 7: Measurable Outcomes of Cultural Engagement



Source: Culture Counts 2017 based on the Cultural Development Network (CDN)

⁴ Visit The Cultural Development Network (CDN) website for more information on their measurable outcomes schema for cultural activity: <http://www.culturaldevelopment.net.au/outcomes/>

The literature review confirmed key areas of alignment between research on measurable social outcomes associated with participation and attendance to arts and culture and the domains and outcome areas within the Cultural Development Network's measurable outcomes schema for cultural activity.

Secondary research undertaken by the project team identified internationally recognised indicators used to measure social outcomes (Canadian Index of Wellbeing 2018). These indicators were mapped against the existing outcomes framework and existing standardised measures. This alignment demonstrates that the current outcomes framework provides a strong foundation from which to expand the Department's ability to report on social impact.

Figure 8: Alignment Between Instrumental Social Outcomes, the Current Framework and Recognised Indicators

Social Impact Focus Areas (Literature Review)	Domain (CDN)	Outcome Area (CDN)	Existing Measures (Culture Counts)	Recognised Indicator of Social Outcomes (Canadian Index of Wellbeing 2018)
Health	Social	Mental Health and Physical Health - Greater quality of life, health and wellbeing	<i>Activity - It made me more physically active</i>	Average monthly frequency of participation in physical activity lasting over 15 minutes.
			<i>Quality of Life- It helped me to enjoy a greater quality of life</i>	Percentage of population that rates their overall health as very good or excellent.
			<i>Wellbeing - It had a positive impact on my physical health and mental wellbeing</i>	
Education	Cultural	Stimulation - Creative expression stimulated	<i>Creativity - It inspired my own creativity</i>	Percentage of population aged 25 and older participating in education-related activities.
			<i>Curiosity - It sparked my curiosity and made me want to find out more</i>	
			<i>Imagination - It opened my mind to new possibilities</i>	
	Cultural	Insight - New knowledge, ideas and insights gained	<i>Insight - It helped me gain new insight or knowledge</i>	
			<i>Learning - I learned something new</i>	
			<i>Challenge - It challenged me to think in a different way</i>	



Social Impact Focus Areas (Literature Review)	Domain (CDN)	Outcome Area (CDN)	Existing Measures (Culture Counts)	Recognised Indicator of Social Outcomes (Canadian Index of Wellbeing 2018)
Social Capital	Social	Bonding, Bridging & Linking - Connection with other people	<i>Bond - It helped me connect to others like me</i>	*-
			<i>New People - I got to know people who are different to me</i>	
	Civic	Citizenship - Active citizenship, leadership stimulated	<i>Leadership - It inspired me to play a leadership role in the community</i>	Percentage of population that volunteers for a law, advocacy or political group.
			<i>Responsibility - I feel a greater sense of responsibility to the community and environment</i>	
			<i>Decision-making - It enabled me to get involved in community decision-making</i>	
		<i>Membership - It encouraged me to join a local group</i>	<ul style="list-style-type: none"> - Percentage of population reporting unpaid, formal volunteering for groups or organisations. - Percentage of population that provides unpaid help to others on their own. - Average number of hours volunteering for culture and/or recreation organisations. 	
	<i>Participation - It encouraged me to participate in community activities</i>			

Source: Culture Counts 2017 based on the Cultural Development Network (CDN)

*Recognised indicators of social capital focus on the civic domain, relating to participation in civic processes and associations that demonstrate collaboration between groups.

A gap analysis was undertaken to identify instances where indicators of social impact do not have a corresponding intrinsic measure within the existing framework. New measures were explored to fill these gaps and have been identified in (Figure 9).

Figure 9: Proposed PVMF Dimension Statements and Instrumental Indicators

Social Impact Focus Areas (Literature Review)	Proposed Measures (Culture Counts)	Recognised Indicator of Social Outcomes (Canadian Index of Wellbeing 2018)
Health	<i>Relaxation - It made me feel more relaxed</i>	Percentage of population that rates their mental health as very good or excellent.
	<i>Stress - It helped me to reduce my level of stress</i>	
	<i>Socialisation - It encouraged me to participate in more social activities</i>	
Education	<i>Responsibility - I feel a greater sense of responsibility for younger generations</i>	Amount of time spent in talk-based activities with children aged 0 to 14 years.
	<i>Thinking - It made me think about the ideas/themes/issues</i>	Percentage of population aged 25 and older participating in education-related activities.
	<i>Future Learning - It inspired me to learn more/engage in the subject matter</i>	
Social Capital	<i>Cultural Membership - It encouraged me to join a local cultural/recreational group</i>	Average number of hours volunteering for culture and/or recreation organisations.

Source: Culture Counts 2017 based on the Cultural Development Network (CDN), Canadian Index of Wellbeing 2018

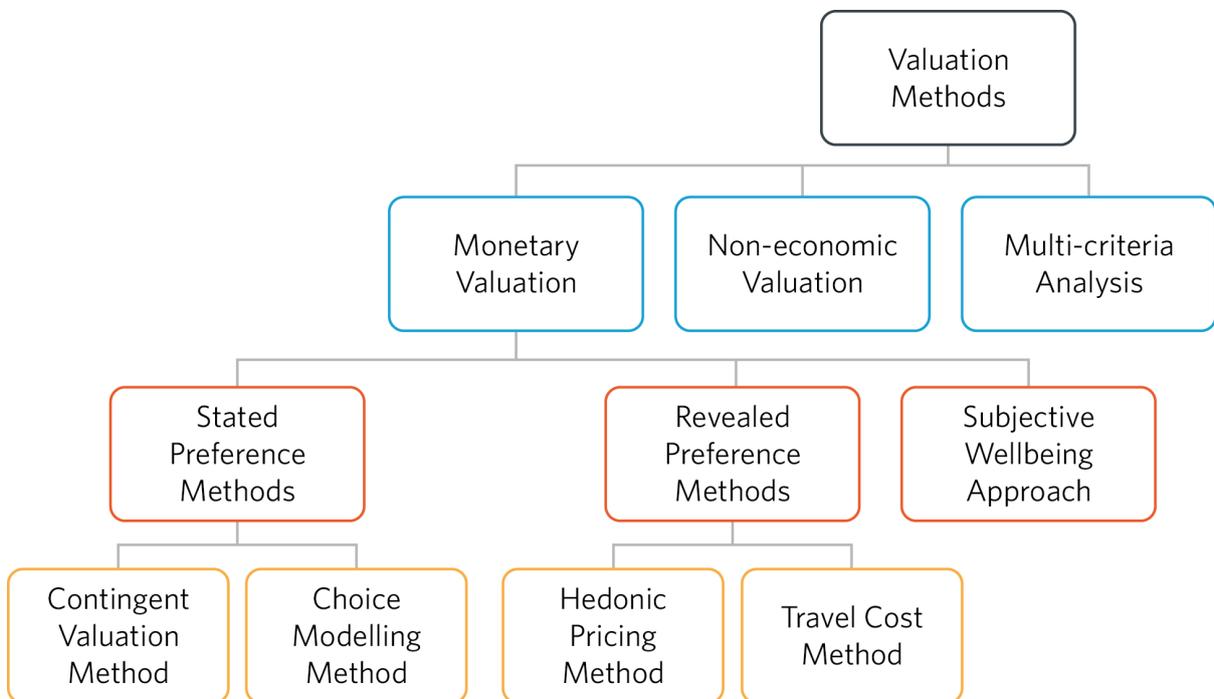
Analysis of the relationships between measures within the existing framework and their alignment to the social impact focus areas and recognised indicators of social outcomes that were identified through the literature review demonstrates that the current measures provide a valuable tool for determining the extent to which a social outcome has been achieved for an individual through their experience of attending or participation. The combined set of intrinsic measures provides funded organisations with a variety of measures related to social instrumental impact that can be applied through the PVMF in evaluations. The inclusion of these measures should be based on the art form and the nature of the event being measured (i.e. active/passive participation, educational/recreational, etc.). Subsets of these intrinsic measures should be developed as templates to assist funded organisations in applying them appropriately (see Section 8.2, Implementation).

4 VALUATION TECHNIQUES

There have been several studies extensive studies that review and assess various methodologies for measuring cultural value. The most influential and thorough include ‘Valuation Techniques for Social Cost-Benefit Analysis’ prepared by HM Treasury and the Department for Work and Pensions, which supplements the Green Book⁵ and ‘Measuring the Value of Culture: a Report to the Department for Culture Media and Sport’. This overview concentrates predominantly on the methods discussed within these two studies.

There are a number of economic and non-economic valuation methods, which are discussed in literature and have been applied to measure the value of investments in culture (Figure 10). The project team has reviewed this literature and undertaken an assessment of the relative strengths and weaknesses of each approach and obtained specific examples of how the method is utilised.

Figure 10: Summary of Valuation Methods



Source: Pracsys and Culture Counts 2018

⁵ HM Treasury guidance on how to appraise and evaluate policies, projects and programmes.

4.1 Monetary Valuation

Economists seek to monetise the impact of a policy, good or life event by looking at the impact these things have on utility, specifically, a person's welfare, wellbeing and happiness. The following five techniques are based on the theoretical basis that the non-market value of a good can be expressed as the impact on utility.

CONTINGENT VALUATION METHOD

Description

Contingent valuation is a method of measurement founded on obtaining an understanding of what people would be willing to pay for a particular good or service, for example having a museum in their city or visiting a theatre show.

The method involves the construction of a hypothetical market of the good or experience and it focuses on the valuation of non-market goods. The data is captured via a questionnaire and the Willingness to Pay (WTP) or Willingness to Accept (WTA) value is estimated based on the data captured from the sample of people surveyed.

Advantages

- Widely used and researched⁶
- In-principle can be used to value any non-market good
- The reasons behind the respondent's choices can be explored
- Ex-ante and ex-post application

Disadvantages

- Costly
- Has survey-related biases
- Hypothetical bias (respondents may overstate their true WTP because they do not face a budget constraint)
- Protest valuations (respondents with a positive and true WTP may put forward a zero stated valuation)

Application Example

Contingent valuation has been used to value a range of cultural goods and services:

- Benefits of hosting the Olympic Games (Eftac 2005)
- Irish public broadcasting (Delaney and O'Toole 2006)
- A Finnish Museum (Tohmo 2004)
- World Heritage site in Vietnam (Tuan and Navrud 2008)
- Valuing the Queensland Museum: A Contingent Valuation Study (Queensland Government 2009)

⁶ Carson (2004) collated a bibliography that exceeds 5000 studies. Best-practice guidance manuals are produced (Carson and Mitchell, 1989; Bateman et al, 2002)

CHOICE MODELLING METHOD

Description

Choice modelling focusses on the attributes of a good and their respective values. A choice modelling questionnaire presents respondents with a series of alternative descriptions of a good or service based on the varying quality or levels of the good's attributes. Respondents are not directly asked their WTP or WTA, but the valuations are derived from their responses to a choice of options. Options usually include a financial value.

Advantages

- In-principle can be used to value any non-market good attribute
- The reasons behind the respondent's choices can be explored
- Ex-ante application
- Can be used to estimate the value of the attributes of non-market good

Disadvantages

- Costly
- Has survey-related biases
- Relatively newer than contingent valuation and less broadly applied
- Does not directly value goods

Application Example

The method has been used to value the museum and gallery layout (Kinghorn and Willis 2007) and cultural capital generated by museums and galleries (Kinghorn and Willis 2008). It has also been used to make policy recommendations to the British Museum (Aposolakis and Jaffry 2010).

HEDONIC PRICING METHOD

Description

Hedonic pricing is method which involves examining people's actual purchasing decisions in markets related to the non-market good in question. It is most commonly applied using data from housing and labour markets.

Advantages

- Estimates are based on real economic choices
- Secondary data is often available

Disadvantages

- Cannot capture non-use and option values
- Usually based on the markets which often only loosely related to non-market goods in the cultural sector
- Market imperfections such as asymmetric information
- Difficulty to isolate a single variable in overall house price or wage

Application Example

The method is predominantly used in environmental economics and rarely used in cultural sector. One of the few examples is the estimation of the value of cultural heritage by Ruijgrok (2006). The study showed that in two Dutch towns an estimated 15% of property prices were based on historic characteristics of the buildings.

TRAVEL COST METHOD

Description

In the travel cost method, the preferences are revealed by the amount of time people are willing to spend travelling to consume good or service. The monetary values are attributed based on the value of time and fuel costs. The travel cost method has predominantly been used to estimate the value of recreational sites (rivers, parks, beaches) or the value of changes in the characteristics of a site i.e. ease of access.

Advantages

- Based on market prices
- Has been used to value a range of cultural goods and services and compare those values

Disadvantages

- May undervalue people who have only short travel times
- Doesn't capture non-use and option values
- Potentially costly primary research

Application Example

- The recreational value of Lake McKenzie, Fraser Island: an application of the travel cost method (Fleming and Cook, 2008)
- Value of heritage sites in Armenia (Alberini and Longo 2006)
- World heritage site of the Alto Douro wine region in Portugal (Fonseca and Rebelo, 2010)
- Comparison of the value of Dutch museums (Boter et al, 2005)

SUBJECTIVE WELLBEING APPROACH

Description

Subjective Wellbeing approach is an emerging method in valuation, developed as an alternative to the four methods discussed above. The central assumption of the approach is that measures of life satisfaction or wellbeing are an appropriate proxy variable for measuring the utility of a good.

Valuations are derived by understanding the impact of an event or activity on wellbeing and then comparing that to the amount of income that would be required to achieve the same change in wellbeing, known as income compensation.

Advantages

- Avoids many of the criticism of economic valuation techniques
- Has been used by the Department of Culture, Media and Sport in the UK to value the engagement with cultural activity
- Given that the method usually exploits large national datasets, the sample sizes are more representative of the population in general
- Fewer biases

Disadvantages

- Relatively new and research into refining the method is ongoing
- The relationship between income and wellbeing is not fully understood

Application Example

There is a range of studies employing this method in valuing health and environmental problems such as air quality, and its applications in the valuation of cultural activities is growing. Fujiwara (2013) used data extracted from the UK 'Taking Part' survey to quantify the monetary value of the benefits of museum visits, participation in the arts, being an audience to the arts and participation in sports.

The UK Department for Culture, Media and Sport based on the analysis of the British Household Panel Survey for the periods 1996–2000 and 2002–2007 (Marsh et al. 2010) has revealed that the positive effect of engagement in cultural activities increases with the frequency of engagement.

4.2 Non-economic Valuation

Non-economic valuation methodologies attempt to capture non-monetary values of cultural engagement, such as the degree of the realisation of the production and the impact on audience, such as enjoyment and the meaning they draw from cultural engagement.

NON ECONOMIC VALUATION

Description

Non-economic methods of measuring cultural benefits are qualitative methods, which seek to evaluate the activities of cultural institutions or programs and construct a case for the value based on those evaluations. The theoretical basis behind these methods is the assumption that dollar benefits are not capturing the real outputs of the organisation and to complete the picture the benefits to the audience such as captivation and intellectual stimulation needs to be considered.

Advantages

- Methods are designed specifically for the cultural sector
- Avoids the philosophical objections associated with the economic valuation of culture
- Non-economic methods can provide a good narrative to contextualize economic estimates of cultural value

Disadvantages

- No consensus on method
- No common unit of account, so results cannot be aggregated
- Cannot be used in Cost-Benefit Analysis or fit within the standard government decision-making as there is no monetary values attached
- Mainly useful when making comparative funding decisions across different forms of culture

Application Example

- Shakespeare institutions, new media and the language of cultural value (Rumbold, 2010)
- Supporting Excellence in the Arts London (McMaster, 2008)
- Conservation Principles: Policies and Guidance London (English Heritage, 2008)

4.3 Multi-Criteria Analysis

Multi-criteria analysis aims to combine the monetary and non-economic valuations.

MULTI CRITERIA ANALYSIS

Description

Multi-criteria analysis (MCA) establishes preferences between options based on specific sets of objectives, for which the measurement criteria have been established. The method allows a combination of narrative values and monetised values to be considered.

Advantages

- Integrates qualitative, quantitative and monetized data
- Can involve expert judgement on the weighing of criteria
- Mitigates the critiques of just basing decisions on economic data

Disadvantages

- Involves the measurement of cultural value, so doesn't avoid the difficulties associated with previous methods
- Judgment involved in relative weights for each criterion

Application Example

MCA is commonly used for decisions with regard to the built environment (Mulgan et al 2006) and is recommended by Department of Transport in the New Approach to Transport Appraisal (DfT 2009). This form of MCA integrates factors such as environmental impact, in terms of carbon emissions, with transport times and intangible values, such as the importance of heritage.

4.4 Recommended Evaluation Approach

Cultural value is a complex phenomenon with no current cross-disciplinary agreement on the best measurement approach. No method can fully capture the extent of the social benefits associated with culture however, the described techniques can help to elicit values for these.

More pragmatic monetary valuation approaches are supported by the current modes of policy decision-making and can practically be used for policy applications. Non-economic approaches can provide a good narrative to contextualise economic estimates of cultural value.

Based on an assessment of the relative advantages and disadvantages of existing measurement techniques, the approach recommended by the project team for valuing social impact into the future involves:

- The application of the generalised monetary values derived from high quality research on the impacts of arts participation and attendance on health, education and social capital
- Adjustment of the obtained monetary values by the extent to which a social outcome has been achieved for an individual through their experience of attending or participating, as measured through the standardised dimension statements relevant to health, education and social capital. These adjustments can be interpreted as the degree to which the full, monetary value is likely to have been achieved.

5 EVALUATION MODEL AND APPLICATIONS

The proposed process for quantifying social impact is based on:

- The literature review of potential quantification methods and their relative advantages and disadvantages
- Constraints imposed by the secondary data sources that were identified
- Constraints imposed by the level of primary data that can reasonably be collected to inform the process

Based on the methodologies identified, it is proposed that a combination of methods is used to quantify the social impact of participation in artistic and cultural activities supported by the Department. The method would borrow from recognised fields such as Social Return on Investment (SROI), health cost reduction approaches and the use of appropriate financial proxies to deliver a dollar estimate of the social impact.

This provides the most flexibility with regards to the type of data that can be collected and used to provide a monetary value estimate. The following sections will identify the evidence that can be used to quantify social outcomes and the proposed methodology for estimating value.

5.1 Key Research and Evidence Base

The literature review sought to identify and quantify positive relationships between artistic and cultural activities and social outcomes and, where possible, provide evidence of causality (i.e. that the arts or cultural activity caused a positive impact, taking into account external factors). Throughout the process it became evident that much research had been conducted to identify potential positive relationships, however, research that demonstrated causality was limited and involved small scale studies. A series of studies were identified that provided:

- Strong evidence of a positive relationship between artistic and cultural activities and social outcomes
- A measure of the impact on relevant social outcomes
- Analysis that provides medium to high levels of confidence in their identification of causality

The findings of these studies have been used to inform assumptions applied in the proposed social impact measurement methodology.

5.1.1 The HUNT Study

Study Title: Patterns of receptive and creative cultural activities and their association with perceived health, anxiety, depression and satisfaction with life among adults: the HUNT study, Norway

Author(s): Cuypers et al 2011

Evidence: Medium level evidence of for causality

Key Findings:

- Positive impact on health and mental health
- Difference between males and females
- Dose effect (i.e. more frequent participation results in greater benefit)

Takeaways: Percentage Improvement Associated with Participation by Activity Type

Gender	Art/Cultural Activity Type	Good Health	Good Life Satisfaction	Low Anxiety Score	Low Depression Score
Female	Museum/ art exhibition	0%	0%	9%	13%
	Concert/ theatre/ film	0%	0%	14%	21%
	Music/ singing/ theatre	7%	6%	0%	0%
	Dance	14%	14%	11%	10%
	Association/ club meeting	9%	17%	18%	12%
Male	Museum/ art exhibition	14%	10%	13%	33%
	Concert/ theatre/ film	14%	16%	28%	39%
	Music/ singing/ theatre	0%	0%	0%	8%
	Dance	9%	12%	0%	0%
	Association/ club meeting	12%	11%	16%	18%

Description: The aim of this study was to analyse the relationship between receptive (passive) and creative (active) cultural activity and outcomes such as:

- Perceived health
- Anxiety
- Depression
- Satisfaction with life

The analysis examined the relationship between participation in specified arts (active: Dance, Music/singing/theatre; passive Museum/art exhibition, concert/theatre/film) and the above outcomes, using survey data from the HUNT survey in Norway that was provided to over 50,000 people.

A multivariate logistic regression model was used to analyse survey results and accounted for cofactors such as age, chronic disease, limitation in social contact, physical activity, smoking, body mass index and alcohol consumption. The model also accounted for differences in outcomes across genders and the specific nature of the engagement - passive versus active.

Significant positive relationships were found between participation in cultural events and each of the outcomes. Different relationships were identified for males and females based on passive and active cultural engagement. The study also identified a positive dose relationship between cultural engagement and dependent outcomes, specifically, a greater frequency of participation in artistic and cultural activities indicated a greater positive relationship for both males and females. Although the study was undertaken

across a very large sample the study highlighted that further research would be required to demonstrate a causal relationship between cultural activities and the observed outcomes⁷.

5.1.2 Quantifying the Social Impacts of Culture

Study Title: Quantifying the Social Impacts of Culture and Sport

Author(s): Fujiwara et al 2014

Evidence: Strong positive relationships, medium level of evidence for causality

Key Findings:

- Positive impact on self-perceived health
- Increased likelihood of intent to undertake further education
- Increased likelihood of volunteering
- Higher levels of charitable giving

Takeaways: Positive Change in Metric

Outcome	Participation Type	Art type	Impact	Demographic
Education	Active	All arts	14%	16 - 18 year olds
	Passive	Dance Shows	13%	
Volunteering	Active	All arts	5%	General Population
	Passive	All arts	5%	
Charitable Giving	Active	All arts	GBP 37.33	General Population
	Passive	All arts	GBP 25.77	

Description: The aim of this study was to investigate the relationship between participation in sports and cultural activities and a range of social outcomes, including:

- Health
- Education
- Employment
- Civic engagement

Data from the 'Understanding Society' survey was used for the analysis. The survey is a large and representative sample of the UK population. The survey contains information on engagement in sports and culture including:

- Participation in artistic and cultural activities
- Attendance to artistic and cultural events
- Participation in sports, team sports and individual sports
- Visitation to museums, heritage sites and libraries

⁷ Węziak-Białowolska (2016) did not find a causal relationship

The study controlled for multiple determinants of a given outcome using regression analysis and accounted for cofactors such as age, gender, income group, education and place of residence. The paper found significant positive relationships between multiple cultural activities and each of the outcome areas and the methodology was viewed as appropriate for causal inference. It does not provide definitive evidence of a causal relationship between cultural activities and the relevant outcomes.

Further research using experimental methods or regression discontinuity design methods to assess causality may be appropriate. It does however state that the method used provides results that could be used to inform policy-making decisions.

5.1.3 The Impact of Professionally Conducted Cultural Programs on Older Adults

Study Title: The Impact of Professionally Conducted Cultural Programs on the Physical Health, Mental Health, and Social Functioning of Older Adults

Author(s): Cohen et al 2006

Evidence: Strong positive relationships, high level of evidence for causality

Key Findings:

- Improved self-rating of health
- Reduced visitation to GP/doctor
- Reduced instances of falls
- Improved morale scores
- Increased rate of participation in activities

Takeaways: Positive Change in Metric

Metric	Impact	Demographic
Reduced Visits to GP	30% reduction	Persons 65 years and older

Description: The aim of this study was to measure the impact of professionally conducted community-based cultural programs on the physical health, mental health, and social activities of individuals aged 65 and older.

The study investigated potential impacts, including:

- Rating of physical health
- Frequency of doctor visits
- Medication use
- Instances of falls
- Number of health problems
- Morale
- Loneliness
- Activity level

The study was used a quasi-experimental design placing 166 healthy, ambulant persons aged over 65 into either an intervention group (an ongoing chorale directed by a professional conductor) or a control group. Established assessment questionnaires and self-reported measures were used to obtain results. Analysis was undertaken one year from commencement of the study. It controlled for baseline differences and revealed positive impacts across the range of measured outcomes. Due to the longitudinal nature of the analysis it provides a strong indication that participation in the art/cultural activity was the cause of identified positive impacts.

5.1.4 Leisure Activities and the Risk of Dementia in the Elderly

Study Title: Leisure activities and the risk of dementia in the elderly

Author(s): Verghese et al 2003

Evidence: Strong positive relationships, high level of evidence for causality

Key Findings:

- Reduced risk of dementia in persons 75 years and over

Takeaways: Positive Change in Metric

Metric	Impact	Demographic
Reduced Risk of Dementia	7% reduction in risk	75 and over

Description: The study was a 21-year longitudinal study designed to investigate the association between leisure activities and the risk of dementia. The study included 469 persons older than 75 without dementia at baseline. Frequency of participation was assessed at baseline to enable analysis of change in activity level while the analysis accounted for cofactors such as age, sex, educational level, presence or absence of chronic medical illnesses and base-line cognitive status.

The study found that leisure activities such as playing musical instruments, dancing and writing were associated with a reduced risk of dementia.

5.2 Value Calculation Methodology

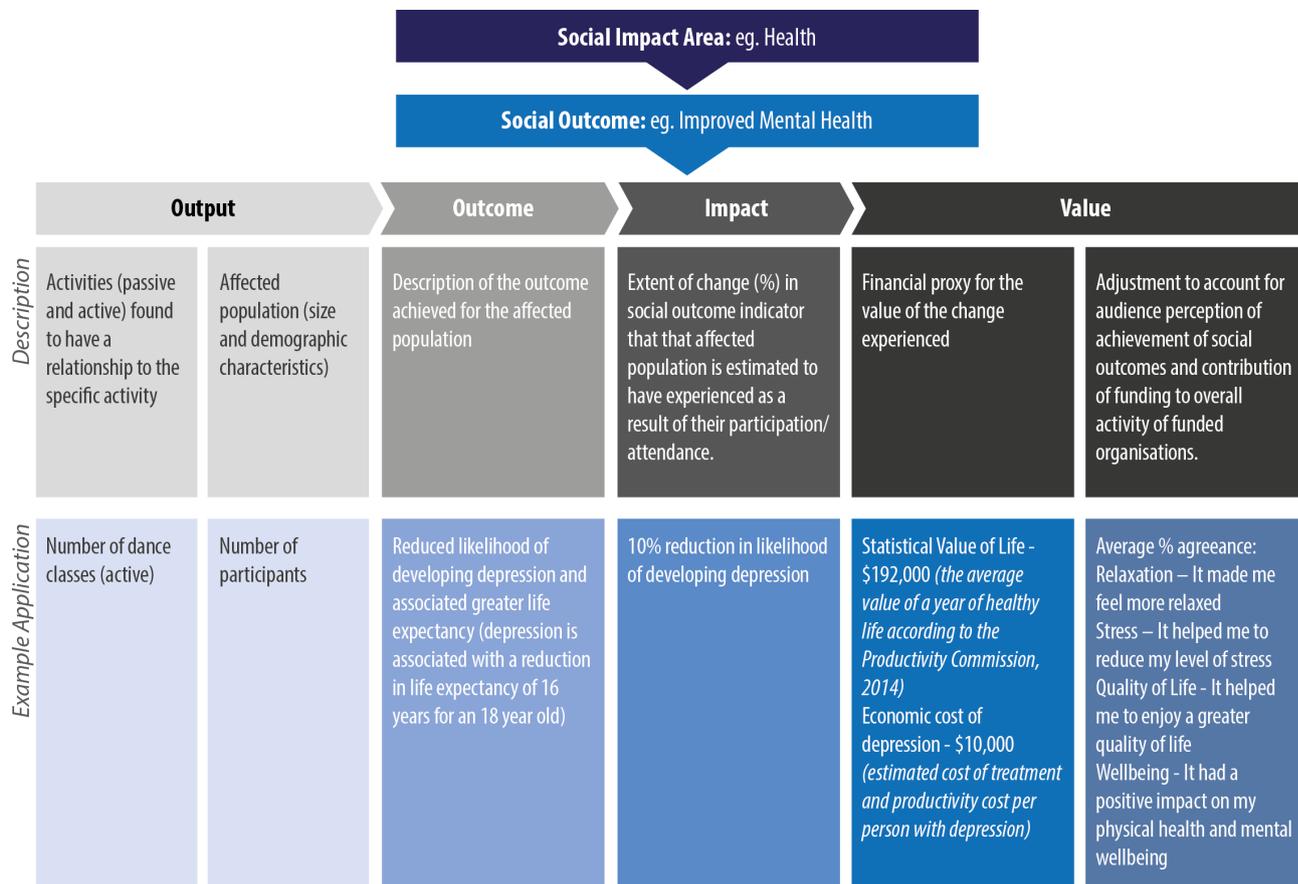
The research undertaken by the project team has informed the development of a calculation methodology that could be used to quantify the extents of social impact generated through the Department's investments in arts and culture. The model draws on inputs including: level of attendance/participation; the demographic characteristics of the attending/participating individuals; the nature of their engagement (active versus passive); and the extent to which each specific cultural activity is deemed to have achieved the desired social outcomes through user generated data.

The model utilises financial proxies as a means of measuring the monetary value of social outcomes achieved through participation and attendance to arts and culture, facilitated by the Department's investment.

Dimension statements connected to the recognised social impact variables are used as a means of adjusting the total monetary value, to ensure that the specific unique characteristics of cultural activities funded, and their relative achievement of the social outcomes is taken into account. A further adjustment is applied to

account for the extent to which the Department’s investment contributed to the overall of activity and associated participation and attendance generated (Figure 11). Detailed calculation methodologies are provided in the tables that follow.

Figure 11. Illustration of Value Calculation Methodology



Source: Pracsys and Culture Counts 2018

5.2.1 Health Value Calculation

Arts/ Cultural Activity (Passive/Active)	Demographic	Impact	Impact %	Financial Proxy	Metric
Outcome Area: Reduced Risk of Dementia				\$35,763	\$ cost per person with dementia (National Average)
Dancing, Playing Musical Instruments other activities that impact cognitive function (Active)	75 +	Reduced risk of dementia in persons 75 and over that participated regularly in the activity	7%		
Outcome Area: Reduced GP Visits				\$41.46	\$ per visit (National Average)
Professionally organised cultural activities (Active)	65 +	Reduction in the number of visits to a GP for persons 65 that participated regularly in the activity	30%		
Music, Singing, Theatre (Active)	Females	Higher self-assessed health for persons who participated in the activity. Higher perceived health is associated with a reduction in the number of annual visits to a GP	7%		
Dance (Active)	Females		14%		
Museum, Art Gallery, Exhibition, Music, Singing, Theatre, Concert, Film (Passive)	Males		14%		
Outcome Area: Reduced Anxiety				\$191,025	\$ per statistical life year gained (National Estimate)
Music, Singing, Theatre (Active)	Males	Reduced likelihood of persons having low-medium (or higher) levels of anxiety. Low-medium levels of anxiety are associated with a 3.8% increase in mortality	8%		
Dancing (Active)	Females		11%		
Museum, Art Gallery, Exhibition (Passive)	Males		14%		
Music, Singing, Theatre, Concert, Film (Passive)	Males		28%		
Museum, Art Gallery, Exhibition (Passive)	Females		9%		
Music, Singing, Theatre, Concert, Film (Passive)	Females		14%		
Outcome Area: Reduced Depression				\$10,000	\$ economic cost avoided per person who would otherwise have lived with depression
Dancing (Active)	Females	Reduced likelihood of persons having depression. Depression is associated with a reduced life expectancy of 16 years. Living with depression also has a direct annual economic cost	10%		
Museum, Art Gallery, Exhibition (Passive)	Males		33%		
Music, Singing, Theatre, Concert, Film (Passive)	Males		39%		
Museum, Art Gallery, Exhibition (Passive)	Females		13%		
Music, Singing, Theatre, Concert, Film (Passive)	Females		21%		



Arts/ Cultural Activity (Passive/Active)	Demographic	Impact	Impact %	Financial Proxy	Metric
Current					
<ul style="list-style-type: none"> • Activity - It made me more physically active • Quality of Life- It helped me to enjoy a greater quality of life • Wellbeing - It had a positive impact on my physical health and mental wellbeing 					
Proposed Additions					
<ul style="list-style-type: none"> • Relaxation - It made me feel more relaxed • Stress - It helped me to reduce my level of stress • Socialisation - It encouraged me to participate in more social activities 					

Source: Pracsys and Culture Counts 2018

5.2.2 Education Value Calculation

Arts/ Cultural Activity (Passive/Active)	Demographic	Impact	Impact %	Financial Proxy	Metric
Outcome Area: Level of Education					
Average Across all Active Participation in Arts Activities	16 - 18-year-old males	Increased likelihood of intent to participate in further studies (this study assumed that the increased likelihood applied to all levels of education and accounted for the increased cost of further education. Further accounted for differences in expected lifetime salary between males and females)	14%	\$42,554	Average additional lifetime earnings per 16 - 18-year-old participant accounting for a shift of 14% of participants achieving higher education and the earning difference between males and females (Average for all levels of education)
	16 - 18-year-old females		14%	\$29,348	
Attending Dance Events (Passive)	16 - 18 year old males	Increased likelihood of intent to participate in further studies (this study assumed that the increased likelihood applied to all levels of education and accounted for the increased cost of further education. Further accounted for differences in expected lifetime salary between males and females)	13%	\$39,234	Average additional lifetime earnings per 16 - 18-year-old participant accounting for a shift of 13% of participants achieving higher education and the earning difference between males and females
	16 - 18 year old females		13%	\$27,059	



Arts/ Cultural Activity (Passive/Active)	Demographic	Impact	Impact %	Financial Proxy	Metric
Dimensions					
Current					
<ul style="list-style-type: none"> • Creativity - It inspired my own creativity • Curiosity - It sparked my curiosity and made me want to find out more • Imagination - It opened my mind to new possibilities • Insight - It helped me gain new insight or knowledge • Learning - I learned something new • Challenge - It challenged me to think in a different way 					
Proposed Additions					
<ul style="list-style-type: none"> • Challenge - It challenged my preconceptions or assumptions • Responsibility - I feel a greater sense of responsibility for younger generations • Thinking - It made me think about the ideas/themes/issues • Future Learning - It inspired me to learn more/ It inspired me to undertake further research/ It inspired me to engage in the subject matter 					

Source: Pracsys and Culture Counts 2018

5.2.3 Social Capital Value Calculation

Arts/ Cultural Activity (Passive/Active)	Demographic	Impact	Impact %	Financial Proxy	Metric
Outcome Area: Volunteering					
Participation in Arts and Cultural Activities (Active)	All who volunteer less than 11 hours per year or do not volunteer	Increased likelihood of frequent volunteering - at least once a fortnight)	5%	\$25 productivity per hour \$49 Civic benefit per hour \$24 Individual benefit per hour	
Participation in Arts and Cultural Activities (Passive)	All who volunteer less than 11 hours per year or do not volunteer		5%		
Outcome Area: Charitable Donations					
Participation in Arts and Cultural Activities (Active)	All who donate currently	Increase amount of charitable giving	17%	\$35	\$/per person who donates
Participation in Arts and Cultural Activities (Passive)	All who donate currently		12%	\$24	\$/per person who donates
Proposed Dimensions					
Current					
<ul style="list-style-type: none"> • Bond - It helped me connect to others like me • New People - I got to know people who are different to me • Leadership - It inspired me to play a leadership role in the community • Responsibility - I feel a greater sense of responsibility to the community and environment • Decision-making - It enabled me to get involved in community decision-making • Membership - It encouraged me to join a local group 					
Proposed additions					
<ul style="list-style-type: none"> • Participation - It encouraged me to participate in community activities • Cultural Membership - It encouraged me to join a local cultural/recreational group • Cultural Participation - It encouraged me to participate in cultural activities more frequently 					

Source: Pracsys and Culture Counts 2018

5.3 Accounting for Intrinsic Value

Intrinsic value is that form of value that is unique to the cultural sector and is not found anywhere else. This type of value is very hard to define, but for Holden (2004, 2006) it is associated with ideas of aesthetic excellence and individual enjoyment. Intrinsic value is therefore highly subjective and can be difficult to fit into the language of outputs and outcomes associated with instrumental value measurement.

The existing measurement framework applied by the Department (the PVMF) currently estimates intrinsic value of cultural activities through a set of standardised outcome dimension statements (see Section 3.2 Implications for the Measurement Framework). These dimensions relate to outcomes such as captivation, innovation, risk, challenge, authenticity, connection and meaning. Average scores (or levels of agreement) with the dimensions provide an understanding of the extent to which the activity/event is perceived to have met the specified outcome, with opportunities for benchmarking across the activities/events of a single organisation and the portfolio as a whole to better understand the intrinsic value being achieved by various programs.

There is the opportunity to incorporate a financial measure of the intrinsic value that is estimated through the current framework. Developing a financial estimate of the intrinsic value of artistic and cultural activities would be beneficial as it would provide a monetary representation of intrinsic value, that is measured by the current framework, from the perspective of the consumer. The monetary impact attributable to intrinsic value could include but is not limited to:

- Personal enjoyment derived from participation or attendance
- The opportunity cost of the time spent participating/attending (including travel time)

The integration of a financial metric that attempts to quantify the intrinsic value of participation or attendance to individuals in monetary terms will enable further analysis of the relationship between specific intrinsic outcomes – such as captivation, innovation or risk – and the overall intrinsic value of artistic and cultural activities. This would provide insights such as the relative contribution of specific intrinsic outcomes and intrinsic value, further developing the Department's understanding of consumer preferences.

Based on the review of valuation methodologies, contingent valuation methods have been identified as a potential method for monetising intrinsic value. Contingent valuation is based on understanding of what people are willing to pay for a particular service. Generally, the higher people value things for intrinsic reasons the more they are willing to pay for them. Very often what people have paid (especially when event is free of charge) does not reflect the real personal value or enjoyment they are deriving from consuming the service. There are some advantages in applying this method to arts events ex-post⁸ as in many cases the market already exists, and the amount that an individual has paid to attend an event can be compared to the value that the individual places on the experience after the event.

It is therefore proposed that a willingness to pay (WTP) question is integrated into evaluations and asked post event, to provide a measure of intrinsic value. The following elements could be included:

- Audiences could be asked to consider travel costs and the time taken to participate/attend

⁸ Contingent valuation can be done pre-event (ex-ante) or post-event (ex-post). The nature of Culture Counts evaluations dictates that any contingent valuation will occur after an event has taken place (ex-post).

-
- Attendants could be asked to estimate the price they would be willing to pay to see the participate/attend the event or activity after they have seen it
 - It would need to be explained to the respondents that the results of the survey will not affect the actual cost of the event to reduce the likelihood of protest valuations

While the intrinsic value is theorised as being different to instrumental value (Holden 2004) insufficient research has been conducted to determine if the two are mutually exclusive. For some economists the cultural value is the basis for any instrumental value and therefore measuring monetised intrinsic value and monetised instrumental value as two separate elements may cause some double counting (Throsby 2006). Therefore, it is proposed that the value components calculated for instrumental and intrinsic impacts will are not summed but used as complementary measures of social impact. It is also recommended that a measure to capture frequency of participation is integrated into the framework to enable the modelling of differences in outcomes across audience members with different frequencies of engagement in culture.

6 PILOT RESULTS

6.1 Development

The literature review identified a list of PVMF dimensions both current and proposed that align with the identified social instrumental impacts (see Section 3.2, Implications for the Measurement Framework). The wording of these dimensions and their appropriateness for use in the model required testing. A pilot test of the dimensions was organised with a sub-section of the Department's funded organisations⁹. Due to timing requirements, the Perth Theatre Trust and two major arts organisations were included to enable a greater sample size of responses (Figure 12). These two organisations do not form part of the impact that the model is attempting to assess, but the model could be applied to these organisations in future.

Figure 12. Pilot Organisations

Organisation Type	Organisation Name	Artform
State Body	Perth Theatre Trust	Theatre
Major Arts Organisation	WA Ballet	Ballet
	Black Swan Theatre	Theatre
Funded Organisations	WAM	Music
		SOTA Festival
	FORM	Art gallery
		Theatre

A subset of the aligned dimensions was selected with guidance from the Department to develop a short survey. The selected dimensions were chosen to provide a cross section of health, education and social capital relevant dimensions (Figure 13).

Figure 13. Pilot Dimensions

Instrumental Impact	Dimension and Statements	Comments
Health	Activity: It made me more active	Used for dance classes - active participation
	Relaxation: It made me feel more relaxed	The Relaxation dimension was substituted with the Stress dimension in later surveys to identify which is more appropriate. One of these statements was included across all surveys
	Stress: It reduced my level of stress (interchanged with Relaxation dimension)	
	Wellbeing: It had a positive impact on my mental wellbeing	These dimensions were applied across all surveys
	Socialisation: It encouraged me to participate in more social activities	

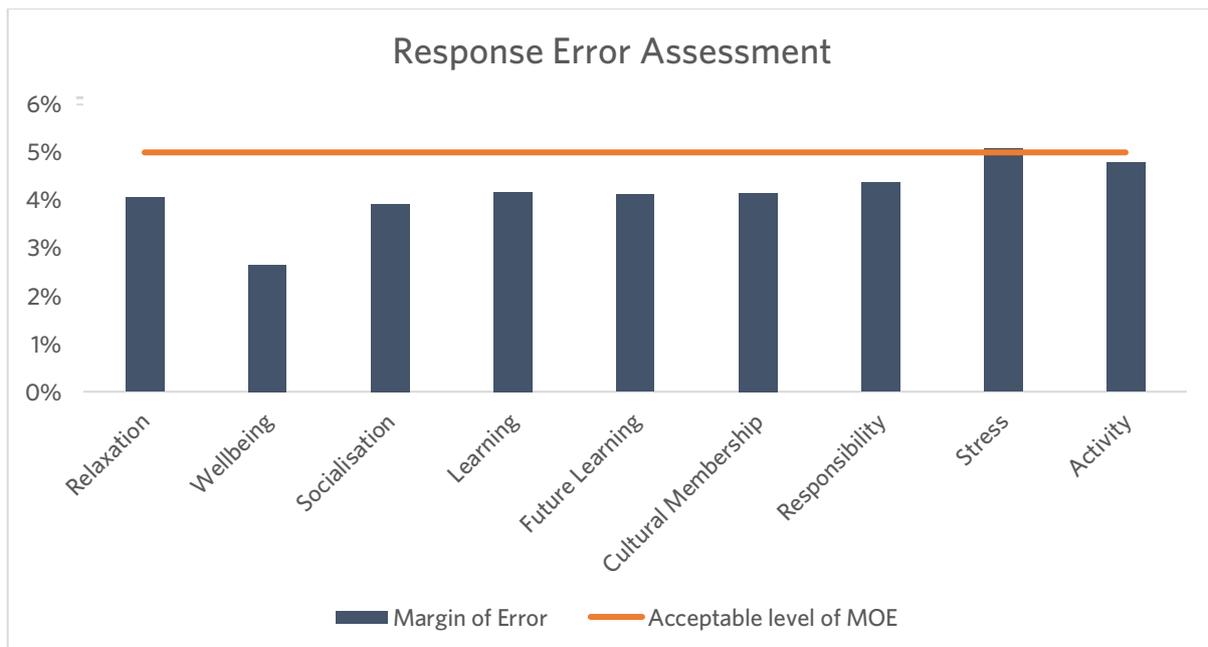
⁹ Pilot organisations were selected in consultation with the Department

Instrumental Impact	Dimension and Statements	Comments
Education	Learning: I learned something new	
	Future Learning: It inspired me to learn more/engage in the subject matter	
Social Capital	Cultural Membership: It encouraged me to join a local cultural/recreational group	
	Responsibility: I feel a greater sense of responsibility to the community and environment	

6.2 Response Analysis

The dimension results were collated from the different surveys to test the response results. The Margin of Error across all survey results was tested to ensure that the variance in dimension responses was within an acceptable range (Figure 14).

Figure 14. Response Error Assessment

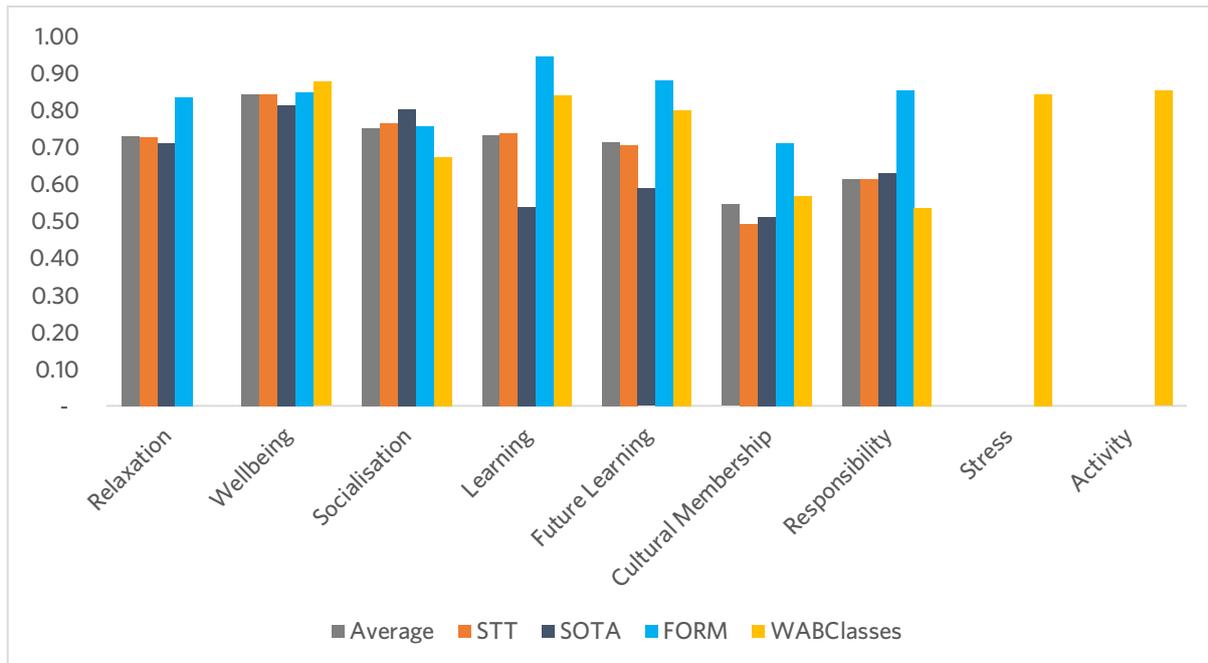


The results indicate that all dimensions tested had an acceptable level of error in the responses (Stress and Activity both had smaller sample sizes: n = 49). The results were further analysed to assess any findings that could be attributed to the dimensions. The main observations included (Figure 15):

- The average Wellbeing score was high across all surveys (0.84) with WA Ballet classes scoring the highest (0.88)
- The SOTA festival had the highest socialisation scores (0.80 compared to an average of 0.75)

- The FORM exhibition and WA Ballet Classes had significantly higher scores for Learning (0.84, 0.94) and Future Learning (0.88, 0.80) compared to the respective averages (Learning: 0.73, Future Learning: 0.71)
- FORM had the highest scores for Relaxation, Cultural Membership and Responsibility, however the sample size was much smaller than other surveys

Figure 15. Dimension Scores by Organisation



6.3 Pilot Conclusions

The results from the pilot demonstrated that the selected dimensions are appropriate for use in the PVMF with acceptable Margins of Error. The pilot results indicate that there could be some differences between artforms in dimension results. This implies that some artforms could contribute greater benefit to some instrumental impacts and less to others. The report supports the inclusion of proposed dimensions in the PVMF.

6.4 Willingness to Pay

The pilot included a Willingness to Pay (WTP) question in an attempt to measure the intrinsic value of participating in artistic and cultural activities organised by the Department’s funded organisation. A question regarding price paid for attendance was also included in order to provide a comparison to the WTP question and the ability to estimate the change in value achieved through the experience of the event Three version of the willingness to pay question were tested (Figure 16).

Figure 16. Willingness to Pay Question

Question Version	Question Components	Comments
Willingness to Pay (intro statement and question - version 1)	The following question attempts to value the impact of the event. The results of the survey will not affect the actual cost of the event as it is understood to represent value including more than the ticket price paid by a patron.	This version of the question included costs such as transport and the value of time taken to attend the event.
	Considering the associated travel costs, time and ticket costs, please indicate how much you would be willing to pay to attend the event based on your experience of the event?	
Willingness to Pay (intro statement and two questions - version 2)	How much did you pay to attend this event (including ticket, transport and your time)?	This version of the question included costs such as transport and the value of time taken to attend the event.
	The following question seeks your input into the overall value of the event. Your response will not affect the actual cost of the event.	
	How much would you be willing to pay to attend this event (including ticket, transport and your time)?	
Willingness to Pay (intro statement and two questions - version 3)	How much did you pay for your ticket/entry to this event?	This version of the question specifically excluded costs outside of the ticket price. The rationale was that travel and time costs could be estimated based on a person's postcode, removing variables such as individuals valuing their time differently.
	The following question seeks your input into the overall value of the event. Your response will not affect the actual cost of the event.	
	Is the value of your experience higher or lower than the cost of attending the event?	
	What is the value you would attribute to the event?	

The margins of error for the WTP question were well over the accepted level (acceptable MOE ~ 5%). Multiple versions of the WTP question were implemented through a review process that was aimed at improving the reliability of results. While the final version has the potential to provide better results, a larger sample size is required to evaluate whether it is suitable. The main findings are:

- Events without an entry fee demonstrated an average WTP of between \$15 and \$20
- The third version of the question was able to identify that 22% of persons believed the value of the event they attended was higher than the cost of their ticket/entry, valuing their experience at 13% greater than what they paid (small sample size)

A WTP question has the potential to provide useful information for both the Department and its funded organisations. Although the small sample size between questions lead to high margins of error for question responses the final version of the question provided promising results. It is recommended that this version of the question is further investigated through future surveys.

7 MODEL RESULTS

The Social Impact model was used to estimate the total benefit generated by the Department through its funded organisations. In order to estimate benefits it was necessary to:

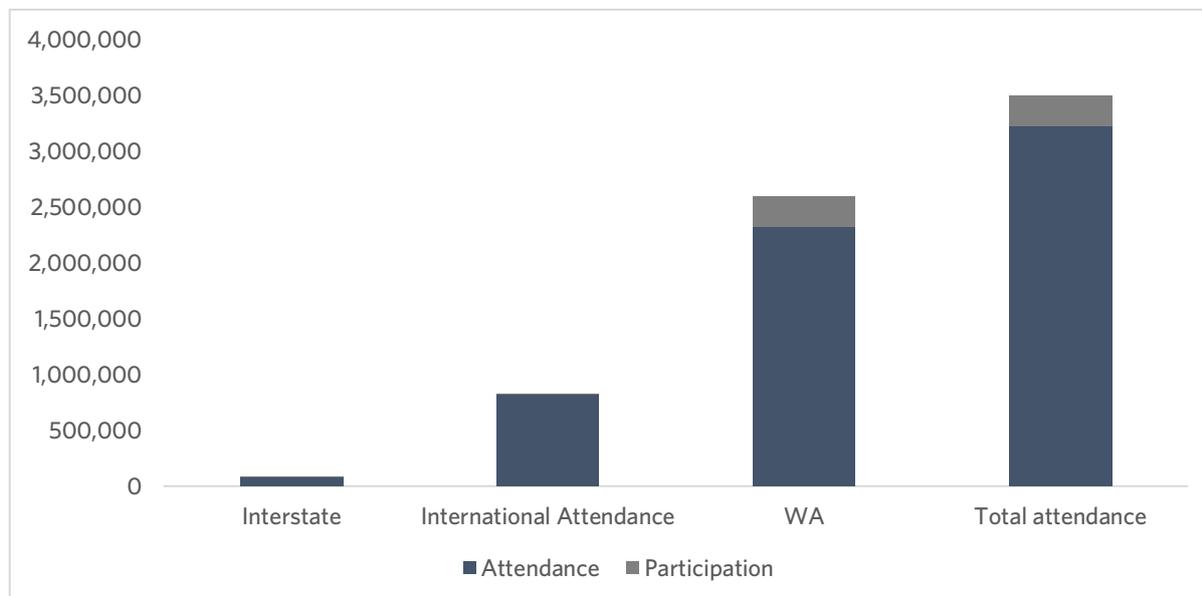
- Develop a demographic breakdown of active and passive participants
- Estimate the base case (contribution of the Department)
- Estimate the dimension scores relevant to the funding amount

7.1 Assumptions

7.1.1 Attendance Breakdown

A series of assumptions was required in order to breakdown participation data in a way that allowed identified impacts to be applied to the relevant population. The Department provided attendance and participation figures for funded organisations for the financial year ending 2016 (Figure 17).

Figure 17. Funded Organisation Attendance and Participation Statistics

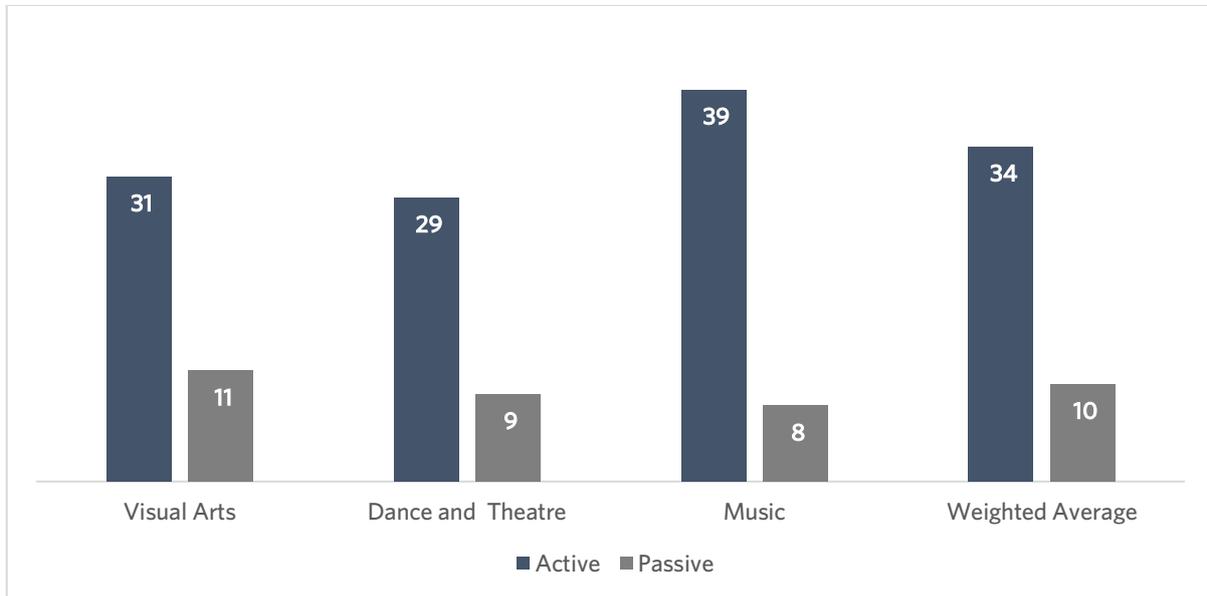


Source: Department of Local Government, Sport and Cultural Industries 2016

The data provided by the Department specify attendance and participation figures, it was assumed that these were representative of passive and active participation, respectively. Interstate and international persons were excluded from the analysis as it is assumed they would not have participated in WA based artistic and cultural activities at an average level over the course of a year.

Australia Council 2014 data was used to estimate the frequency of passive and active participation (Figure 18).

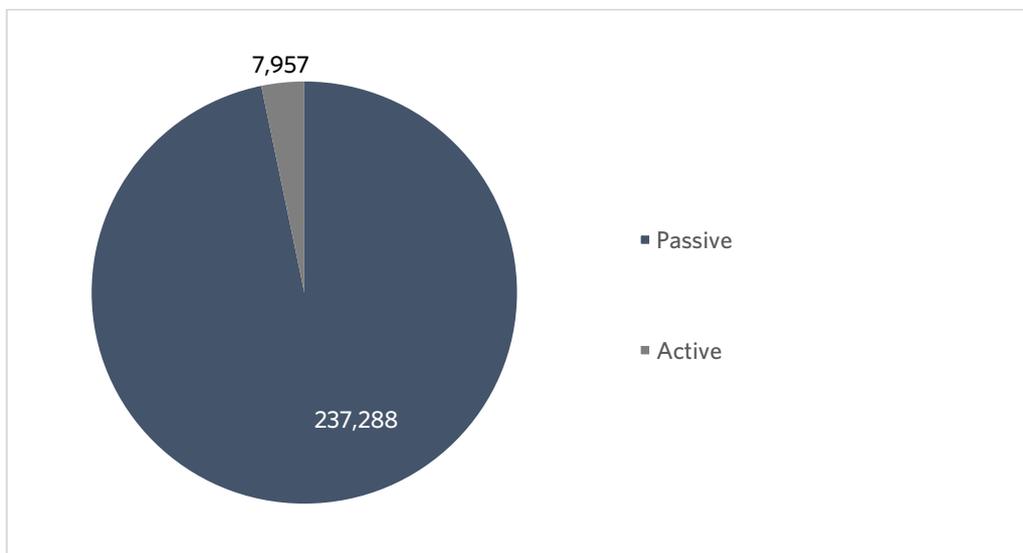
Figure 18. Active and Passive Frequency of Participation per annum (times per year)



Source: Australia Council 2014

The weighted average was applied to arrive at an estimate of the number of unique attendants to funded organisation artistic and cultural activities (Figure 19).

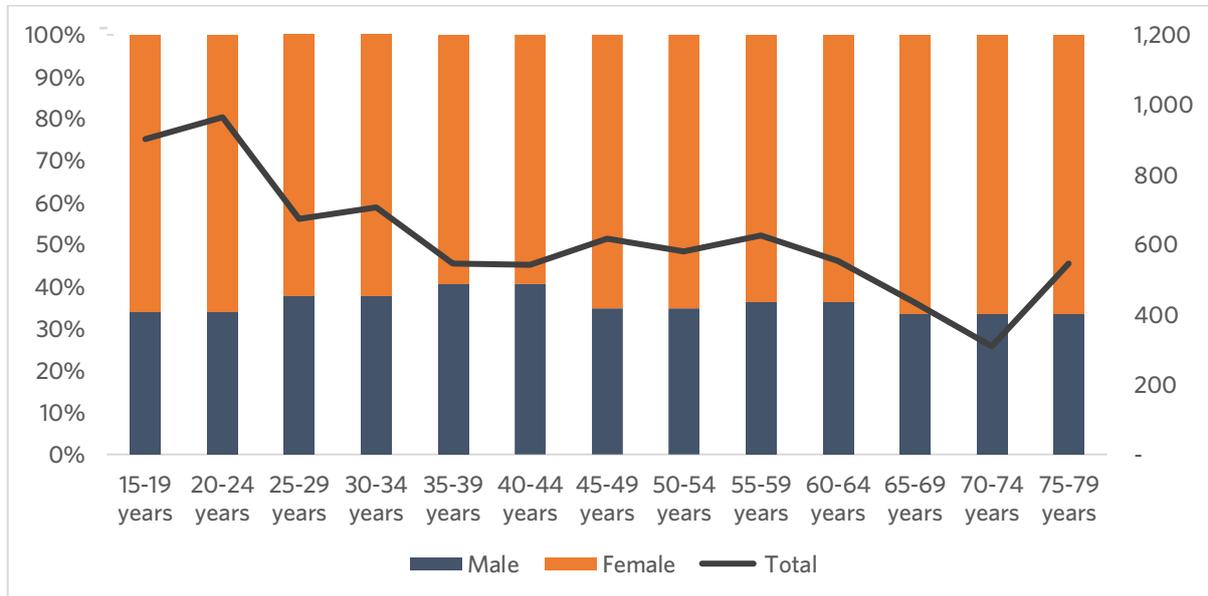
Figure 19. Unique Participants per annum



Sources: Australia Council 2014, Department of Local Government, Sport and Cultural Industries 2016

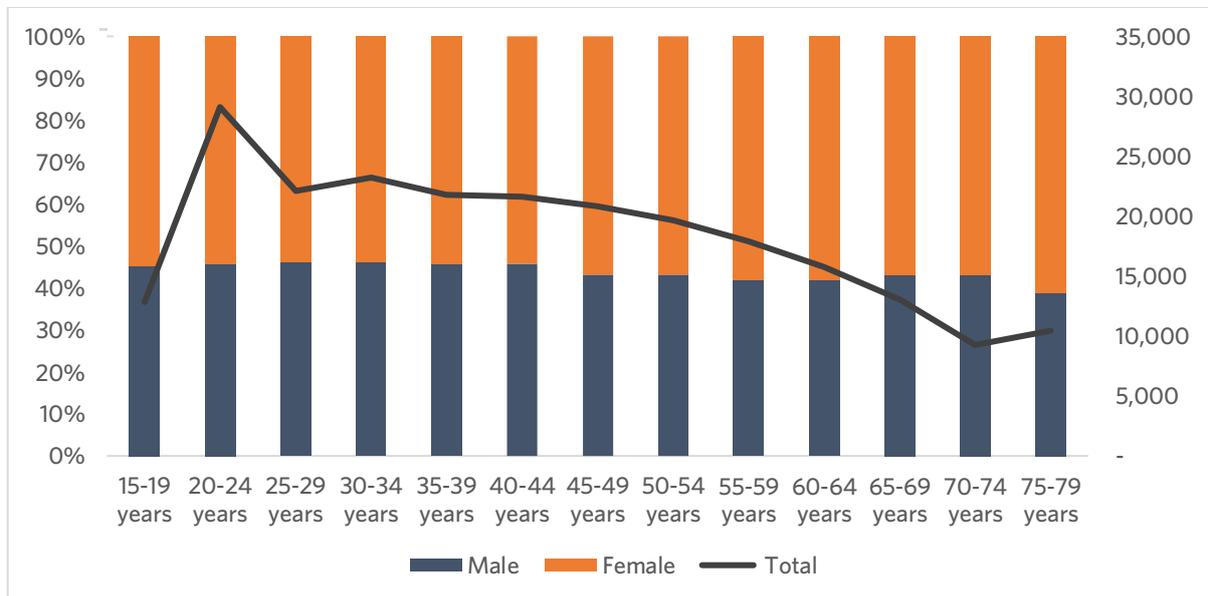
ABS data for active and passive participation in artistic and cultural activities was used to develop estimates of the demographics of participants (Figure 20 and Figure 21).

Figure 20. Active Participation by Age and Gender



Source: ABS 2014 Catalogue 4921

Figure 21. Passive Participation by Age and Gender



Source: ABS 2014 Catalogue 4114

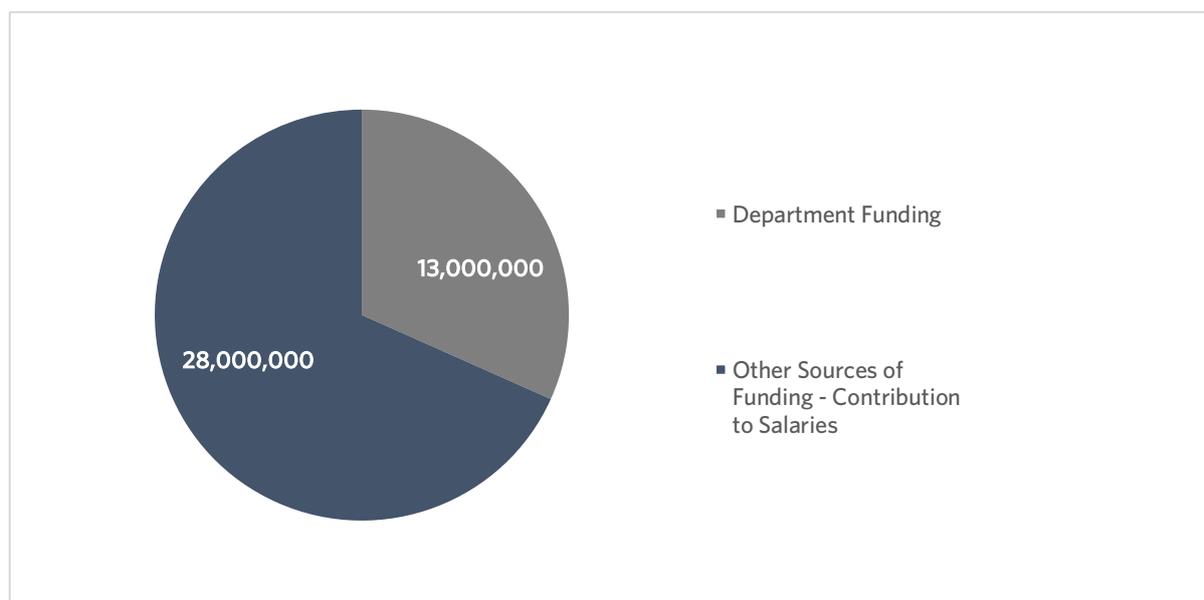
ABS data provides a breakdown of age and gender by artform; the more detailed breakdown has been used for more accurate results in the model. There was some difficulty in applying impacts related to passive participation as there was a high proportion of persons that attend events in multiple art forms. It was assumed that the impact of attending multiple artforms would be equal to that of the artform with the highest impact; in other words, there is not a cumulative benefit from attending multiple artforms. This is seen as a

conservative estimate and future data collection should aim to alleviate this predicament through a more precise breakdown of attendance and participation by artforms.

7.1.2 Base Case

A base case for the analysis was established through consultation with the Department and discussions with key stakeholders, which identified that Department funding is generally used to pay for a large portion of the funded organisations' fixed costs. The share of value attributable to the Department was based on the ratio of its funding to the salaries paid to employees of funded organisations. This is considered a reasonable representation of the Department's contribution to the activities organised by the funded organisations (Figure 22).

Figure 22. Department Funding as a Component of Funded Organisation Salaries Paid



Source: Department of Local Government, Sport and Cultural Industries 2016

Based on this assumption the Department's funding would account for approximately 33% of the benefits achieved through the sum of activities that are delivered by the funded organisations.

7.2 Aligned Dimension Scores

Culture Counts dimensions provide a link between the intrinsic value delivered by the funded organisations' schedule of activities and the instrumental impacts that are measured by the Social Impact model. Using historical Culture Counts data for funded organisations it was possible to extract average dimension scores for most of the current dimensions that are aligned with the identified instrumental impacts (Figure 23).

Figure 23. Dimension Scores by Instrumental Impact

Social Impact	Dimension Statements	Average Score
Health	Activity - It made me more physically active	84%
	Wellbeing - It had a positive impact on my physical health and mental wellbeing	78%
Education	Creativity - It inspired my own creativity	74%
	Curiosity - It sparked my curiosity and made me want to find out more	68%
	Imagination - It opened my mind to new possibilities	65%
	Insight - It helped me gain new insight or knowledge	67%
	Learning - I learned something new	77%
	Challenge - It challenged me to think in a different way	63%
	Challenge - It challenged my preconceptions or assumptions	63%
	Responsibility - I feel a greater sense of responsibility for younger generations	77%
Social Capital	Bond - It helped me connect to others like me	45%
	New People - I got to know people who are different to me	75%
	Leadership - It inspired me to play a leadership role in the community	68%
	Responsibility - I feel a greater sense of responsibility to the community and environment	77%
	Decision-making - It enabled me to get involved in community decision-making	67%
	Membership - It encouraged me to join a local group	65%

Source: Culture Counts 2018

These scores have been aggregated and used to provide a weighting for the three social instrumental impacts.

7.3 Benefit Estimates

The Value Calculation Methodology (see Section 5.2) is used to estimate the total social instrumental impact generated by the Department's funded organisations:

- Impacts that were identified in the literature review are applied to the relevant demographic groups
- Proxies are used to monetise the impacts (Different value estimates are provided depending on the applicable financial proxy; some proxies provide a present value benefit and others an annual benefit)
- Culture Counts dimension scores are used to weight the instrumental impacts
- The base case of 33% is applied to estimate the benefit supported by the Department's funding for funded organisations

Figure 24. Total Impact from Funded Organisations

Instrumental Impacts	Instrumental Sub Impacts	Total Value (\$) (Before dimension score weighting)	Comment
Health	Mental Health	107,900,000	Annual Benefit
	Physical Health	400,000	Annual Benefit
Education	Education	152,500,000	Annual Benefit (derived from Present Value Estimate)
Social Capital	Volunteering	20,500,000	Annual Benefit
	Charitable Giving	4,800,000	Annual Benefit

Education impacts are the most significant based on the identified research. Total value generated by funded organisation artistic and cultural activities is estimated to be in the order of \$207 million for the financial year ending 2016, after being weighted by dimension scores (Figure 24). The best interpretation of the total value estimate is that it is the total value attributable to one year based on the funded organisations' continued delivery of artistic and cultural activities.

Figure 25. Impact Associated with Department Funding

Instrumental Impacts	Total Benefits: Funded Organisation Activity	Average Dimension Scores	Base Case Estimate	Department Generated Value by Impact	Total Department Generated Value
Health	108,400,000	78%	33%	27,600,000	67,500,000
Education	152,500,000	69%		34,400,000	
Social Capital	25,300,000	66%		5,500,000	

Source: Culture Counts 2018, Pracsys 2018 (Note: differences in totals are due to rounding error)

The total instrumental impact generated by the Department was approximately \$67 million for the financial year ending 2016. It is important to note that this benefit is predicated on the continued funding of the Department's funded organisations. Comparing the Department's funding contribution to its associated

benefits provides an estimated benefit to funding ratio of 5 to 1. This indicates that for every dollar of funding there are approximately \$5 worth of social instrumental benefits achieved in the broader community.

7.4 Advantages of the Model

The Social Impact model applies a combination of methods to estimate the instrumental impact of artistic and cultural activities. Through international research and the use of appropriate financial proxies, the model provides a conservative estimate of the benefit generated by the Department through the funding of artistic and cultural organisations. The use of multiple methods and financial proxies provides the flexibility to measure multiple benefit types including health, education and volunteering benefits. The use of intrinsic measures collected by Culture Counts provides the ability to adjust the value estimate based on the actual experiences of users and attendees. The model has the following strengths:

- **Innovative** – model is one of the first attempts allowing for impacts induced by the cultural organisations to be translated into monetary benefits
- **Evidence based** – it is designed using only selected pieces of scientific research that provide a causal link (or strongly correlated relationship) between attending/participating in artistic and cultural activities and instrumental impacts
- **Clear link from activity to outcome** – the model is based on researched impact pathways that link attendance/participation in artistic and cultural activities to instrumental outcomes
- **Flexibility** – financial proxies were identified for each impact measure through the literature review. New impact measures can be added with their own bespoke financial proxies
- **Quality control** – the integration of the PVMF and intrinsic dimensions allows for the value generated by through artistic and cultural activities to be weighted by the actual experiences of attendants and participants, providing a conservative and potentially more accurate measure of total instrumental impact by accounting of the quality of the performance

7.5 Limitations

The model provides an estimate of the benefit derived from Department funded organisations through evidence provided by selected research papers and assumptions that are intentionally conservative. The model is limited however by the lack of research studies that can demonstrate causal relationships between various types of involvement in the arts and positive impacts. Key limitations with the model include (Arvidson 2010):

- **Limited data** – the approach is limited where there is a lack of existing quantitative data.
- **Causality** – Some of the impacts that were used in the model were based on multi-variate statistical analysis of large household survey data sets, that identified significant relationships between attendance and participation in artistic and cultural activities. The results of the analysis suggest that there is a causal relationship between artistic and cultural activities and the positive impacts identified but does not provide conclusive evidence. Essentially, it means that a variable other than someone's participation in the activities could have caused the measured impact (i.e. improved health). This limitation is common when using secondary data research.
- **International Research** – all the impact estimates that have been applied in the Social Impact model are based on research undertaken in other countries. While it is reasonable to assume that

instrumental impacts of artistic and cultural activities would be relatively consistent between countries there is still likely to be some minor discrepancy.

- **Judgement and assumptions** – while the model is based on an extensive literature review, some judgement was required in developing impact pathways and assumptions to measure impact in certain areas. There can be a diverse range of views and preferences in establishing methodologies for the purpose of benefit measurements. The methodology developed in this study has been reported with full transparency in order to account for any potential disagreements with the choice of indicators and other assumptions used
- **Unique participants** – there was a lack of information regarding the number of unique participants. Assumptions were developed using ABS data and Australia Council data regarding the frequency of participation. Data regarding the frequency of attendance should be collected in future to provide a more accurate understanding of the number of individuals that participate in funded organisation activities
- **Demographic Data** – females tend to respond to more PVMF surveys than men. While this does not pose a problem for dimension analysis due to sample sizes, it does pose a challenge if the data is to be used for demographic information in the Social Impact model. In this instance, national statistics were used to overcome this challenge
- **Competing Activities** – focus on collecting quantitative data measures can present a risk of affecting the activities that are carried out. Some activities that are hard to quantify might potentially provide greater benefit, therefore care needs to be taken in applying the results of the model
- **Quantification challenges** – challenges in attributing monetary values on outcomes and impacts include:
 - Measuring outcomes that are vague to identify and quantify (i.e. thought provocation) but nevertheless are key goals of an intervention
 - Capturing the improvement of personal utility (i.e. improved quality of life)
 - Averaged financial proxies that likely represent a long-term cost saving
- **Valuing volunteering** – goods and services offered by volunteers are not commonly sold on the market making their quantification difficult
- **Attribution and opportunity cost** – the model takes into account some potential deadweight loss (i.e. what might have happened without artistic and cultural activities/ impacts from other activities) through the use of research that has identified a causal relationship between artistic and cultural activities. It has not attempted to quantify benefits that could have come from funding alternative programs (opportunity cost)
- **Apportioning** – the model can be used to estimate impact attributed by individual organisations at a high level but has limited ability to make comparisons due to lack of more precise evidence/information
- **High cost of Improving Evidence** – it would be very expensive to develop new evidence based on the Department’s funded organisations to improve the model or fill in gaps that are present within the model

8 POTENTIAL IMPROVEMENTS AND IMPLEMENTATION

The research undertaken to develop the model was extensive and the application of findings is unique in the artistic and cultural industry. The bespoke model has been designed in such a way that it can grow as new research is undertaken and more positive outcomes are linked to artistic and cultural activities. There are several ways in which the model can be improved in future, including but not limited to:

- The Department participating in research into the causal relationship between artistic and cultural activities and positive impacts for people and the community as a whole.
- Statistical analysis of Australian panel data to recreate the analysis that has been done in other countries and potentially identify instrumental impacts that are more relevant to an Australian context
- Annual reviews of the most current research into the relationship between artistic and cultural activities and positive impacts. This would be used to update the model.
- Further investigation into valuation methods such as contingent valuation and wellbeing valuation can be explored. The wellbeing method has many benefits and could be included in the model however it would take significant resources to develop

8.1.1 Improving Model Inputs

The Social Impact study has developed a model that can be used for annual measurement of the impact achieved through the Department’s funding of artistic and cultural activities. The estimated impact in this report required retrospective use of 2016 data from funded organisations and the Culture Counts platform. The data from funded organisations is currently aggregated in such a way that other data sources were required in order to breakdown attendance and participation figures for use in the model. Culture Counts data was available for certain dimensions that aligned with instrumental outcomes; new dimensions could not be included in the model. In future, the collection of data should be tailored to the model to allow for more accurate results. The following steps are recommended to facilitate the implementation of the model in future:

Figure 26. Data Requirements for Future Implementation

Data Source	Requirement	Current State	Justification
Data from funded organisation	Estimate the contribution of DoLGSCI funding towards funded organisations’ activities (i.e. proportion of the planned program which would not go ahead without the Department funding) This would be done by asking the organisations what proportion of their schedule they would be able to run should Department funding not be available.	From preliminary discussions with the Department and stakeholders it has been determined that the funding provided by the Department to funded organisations is required for a large portion of their fixed costs. For the purpose of measuring the impact of the Department in this report, the judgement was made that the ratio of Department funding compared to salaries paid by the funded organisations	It is possible that some of the funded organisations would manage to secure funding to run a reduced set of activities without Department funding, this should be considered in the Social Impact model in future

Data Source	Requirement	Current State	Justification
		was an acceptable measure of the contribution made by the Department's funding	
	Breakdown of participation data by artform ¹⁰ (i.e. music, dance, theatre, etc.)	Breakdown by activity type (event, workshop) without an indication of artform	The literature review identified research that demonstrated causal relationships between different artforms and their potential instrumental impacts
	Breakdown of attendance and participation (active and passive participation ¹¹) data by artform	Attendance and participation are broken down by area (metropolitan, regional, etc.) and not artform.	The literature review identified different impacts linked to artform and whether participation was active or passive. This detail was included in the model. Data from funded organisation is needed at this level of detail in order to provide more accurate estimates of the Department's impact
Data from Culture Counts	New dimensions to be included into the PVMF	Not available	The literature review identified multiple new dimensions that relate intrinsic dimensions (PVMF) to instrumental outcomes
	Potential to establish sets of core dimensions for funded organisations. Multiple combinations should be established to suit the type of art form and the type of participation (active/passive)	Currently, core dimensions are not guided towards the measurement of instrumental impacts	Setting a specific set of dimension questions will ensure that there is reliable data that can be incorporated into the model
	Establish frequency metrics in culture counts to develop a more accurate estimate of unique visitation. Needs to include number of different artforms attended/participated in and frequency	Currently use a combination of ABS 2009/10 frequency of participation and Australia Council data to estimate average frequency of attendance	Frequency of attendance is required to estimate the number of unique attendants to funded organisation activities

¹⁰ In the case of painting, sculpting and other artforms that are exhibited, the place where the art is viewed needs to be included (i.e. art gallery, exhibition, museum, etc)

¹¹ **Active participation** refers to arts activities that require a person to actively perform that art (i.e. painting classes, dance classes, etc). **Passive participation** refers to arts activities where a person observes the performance of the art (i.e. going to watch the ballet, attending a museum, etc)

8.2 Implementation

The implementation of the Social Impact model will require continued improvement of model inputs and a structured plan for introducing the quantified measurements into the WA cultural sector. This will be achieved through the Culture Counts platform as the primary public data collection tool providing information to the PVMF. It is key that the Department have a clear understanding of the purposes for which the model's output can be applied and how this output should be communicated. The two primary applications of the model's output are:

- Providing a strong evidence base of instrumental impacts to complement the PVMF framework's intrinsic value measures and support the Department in maintaining and potentially growing the cultural sector's allocation of State funding
- Assist funded organisations in leveraging funding through qualitative statements linking their intrinsic impacts (measured through the PVMF framework) to the total instrumental value estimates from the model

Funded organisation will require support in developing an understanding of instrumental value statements, how the statements are related to the current measures of intrinsic value and how to relate the statements to artistic and cultural activities. It will be necessary to ensure that funded organisations use consistent terminology when describing the model's outputs. It would be beneficial for the Department to establish a guide that provides funded organisations with a template for using the model and estimating their individual contribution to the broader instrumental impact of all funded organisations. The guide would help establish a consistent message for funded organisations, ensuring the model contributes to growing the cultural sector as a whole. The model is not designed for, and should not be used for, inter artform or inter organisational comparisons; this needs to be clearly communicated to the funded organisations.

A suggested implementation plan would include:

- Identifying a short list of funded organisations (potentially those in the pilot) for initial communication of the model
- Culture Counts presentation of the model to key Department stakeholders and selected funded organisations; workshop questions and feedback
- Culture Counts works with department to develop Social Impact guide based on model and workshop findings, components could include but are not limited to:
 - Templates to assist funded organisations in selecting appropriate intrinsic measures for evaluations
 - Directions for estimating a funded organisation's contribution to social instrumental impact
 - Directions to help funded organisations communicate instrumental impact estimates in a consistent and meaningful way
- Communicate guide to all funded organisations and request feedback and questions regarding application of the model
- Provide final Social Impact guide and Social Impact model

- Department and Culture Counts to provide support for organisations through initial use of the model in seeking funding

The implementation process should be used to refine the model and ensure that funded organisations are equipped with the knowledge required to make use of the Social Impact model.

8.2.1 Expanding the Social Impact Model's Capability

The Social Impact model has been developed as a flexible platform within the PVMF framework that can be expanded and improved as new research and additional applications are identified. Future development of the model should include:

- Its application in a regional context – the current model has been applied to artistic and cultural activities in the Metropolitan area.
(Artistic and cultural activities can contribute positively to economic and social development in regional WA (Throsby 2016). Chamber of Culture and the Arts and Country Arts WA (2017) found that regional WA requires greater collection of data regarding artistic and cultural outputs and outcomes. Increased support of regional and remote artistic and cultural activities should be supported with suitable measurement systems. The broader application of the PVMF framework in regional and remote areas should be investigated in conjunction with regionalisation of the Social Impact model)
- Developing the capability to estimate artform specific value statements
- Developing the capability to estimate organisation specific value statements
- Implementing the Willingness to Pay question to establish an estimate of the intrinsic value generated through artistic and cultural activities (this would provide a value estimate for organisations, artforms and the Department)
- Research into the relationship between dimensions and intrinsic value to be able to further refine model outputs based on participant experience
- Long term potential to expand the application of the model to the broader WA cultural sector
- Replicate the model for other functions governed by the Department

The inclusion of the WTP metric and artform and organisation value estimation will enable arts organisations to use quantified evidence to support funding applications at the federal level and potentially in seeking funding from private sources. This evidence will provide funded organisations in WA with an edge over those in other States and potentially increase the State's relatively low share of federal funding (Chamber of the Arts and Culture 2017). In the long-term the model has the potential to be a tool that the broader cultural community can use for funding applications. This could even include providing an evidence base for the Department and/or Local Government associations seeking to fund arts infrastructure projects.

While the model has been developed specifically for artistic and cultural activities, the methodology used could be replicated in other areas. Particularly relevant to the Department is the potential to apply the model to the sports sector.

9 CONCLUSION

The Social Impact of Culture and the Arts WA project set out to establish a methodology to measure the social instrumental impact associated with the Department's funding of artistic and cultural activities. A set of social instrumental impact areas were identified through an extensive literature review, including: health, education and social capital. These impact areas were then linked to the intrinsic dimensions that form the Public Value Measurement Framework to provide a direct link between arts and culture related outcomes and instrumental outcomes. Measurable instrumental outcomes were identified with a high level of evidence to support potential quantified impacts. A value calculation methodology was established and financial proxies were developed and included in a model to monetise the measurable instrumental outcomes.

A pilot confirmed that the dimensions which are aligned with the instrumental outcomes are acceptable for the purpose of estimating instrumental value. The pilot also identified a viable Willingness to Pay question that could be delivered through the Culture Counts platform with the potential to provide useful information regarding intrinsic value. Department data was included into the Social Impact model and it was estimated that the Department generates approximately \$67 million in total social instrumental value with a benefit to funding ratio of approximately 5 to 1. The model has certain limitations; these have been clearly acknowledged and steps have been identified to continuously improve the information and assumptions used in the model. Implementation of the model will require communication and support platforms for stakeholders to ensure the outputs can be successfully leveraged to secure funding. In future the model could be used to estimate instrumental and intrinsic value for Department, individual artforms and artistic and cultural organisations. The model also has the potential to support the development of arts related infrastructure and could be replicated to estimate instrumental impact for other sectors such as sport.

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