



**Economic and Social Impact of Dundee's
Cultural Strategy and Action Plan**

Final Report

July 2018



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1 Introduction

Overview

1.1 With a focus on culture-led regeneration, Dundee has adopted a planned and long term approach to developing its cultural sector over the past 20 years. This has resulted in a strong and unique offer that has supported the diversification of the city's economy. The approach has been underpinned by a series of cultural strategies including the current Dundee Cultural Strategy and Action Plan which covers the period from 2015 to 2025.

1.2 With plans in place for the sector's future development, including the opening of the V&A Dundee in September 2018, it is now an opportune time to reflect on and capture the current impact of cultural operations and activities in Dundee. This includes capturing the increasingly important and diverse role that culture plays in the city's economy, which extends beyond being an employer and key part of the visitor economy, to supporting economic growth; generating social benefits; increasing the attractiveness of the City as a place to live, study and work; and acting as a catalyst for physical regeneration.

1.3 The study has been commissioned by Scottish Enterprise to assess the economic impact of the Dundee Cultural Strategy and Action Plan and the cultural operations and activities that are delivered within the framework. The study considers both the current impact of the activities, as well as the potential for this to change in the future as a result of planned activities. The results will provide a robust evidence base to inform strategic decision making by Scottish Enterprise, Dundee City Council and other relevant partners. It will also provide a baseline position and identify indicators that can be used to measure and track impact on an ongoing basis.

The Dundee Cultural Strategy and Action Plan 2015-2025

1.4 The Dundee Cultural Strategy and Action Plan 2015-2025 looks to build on the work of the three previous cultural strategies to set out a vision and plans for the further development of culture and creativity in the city. The Strategy was developed by the Dundee Partnership in collaboration with a number of different Dundee based cultural agencies in order to capture the views of the city's cultural community.

1.5 The strategy sets out the following objectives, which aim to build on Dundee's already existing strengths in culture-led regeneration:

- Contribute actively to creating a healthy, more equitable, economically successful City
- Make our cultural sector sustainable
- Build the confidence and self-esteem of our individuals and communities in their abilities

1.6 These objectives are part of the wider ambition of the Strategy, that 'Dundee will aim to be recognised as Scotland's leader of culture-led regeneration by 2018'. To support the objectives the Strategy has a number of commitment areas, which are brought forward from the 2009-14 Strategy. These are:

- **Ambitious:** We will cultivate sustainable cultural ambition.

- **Connected:** We will develop the infrastructure and the environment for creativity.
- **Effective:** We will promote collaboration and make the most effective use of Dundee's cultural resources
- **Significant:** We will ensure Dundee makes a significant contribution to the national and international stage.
- **Developmental:** We will turn local talent into jobs.
- **Inclusive:** We will ensure Dundee delivers a culturally rich and creative experience for everyone.
- **Resilient:** Ensure the City's heritage has a place in its future

1.7 From these headline commitment areas, the action plan sets out specific plans and actions to be carried out from 2015-2020. These include, for example, integrating the V&A Museum of Design within the cultural community, under the *Ambitious* commitment and developing and maintaining a range of cultural events within Dundee that have the potential to have national significance under the *Significant* commitment.¹

Study approach

1.8 The study has been undertaken by ekosgen, an independent economic development consultancy, who have worked closely with the client team over the study period. It has involved the following strands of activity:

- Development of a **sector profile for the Creative and Cultural sector** in Dundee providing an overview of the context in which Dundee's Cultural Strategy and Action Plan is being delivered. This is based on Scottish Government's definition of the Creative and Cultural sector and draws on standard datasets that are published at the local and national level.
- The **collation and analysis of data from 14 organisations** that are involved in delivering cultural activity in Dundee to inform the impact assessment. This includes organisations that focus solely on operating and delivering cultural venues and activities, as well as organisations with a wider remit (such as the universities). A standard proforma was issued to each organisation outlining the information required. At a headline level, this included data on the number of people employed; the scale of cultural activity (performances, workshops, exhibitions, events); visit / audience / participant numbers; volunteers and volunteer hours; and the scale of outreach activity with local communities and schools. The proforma was issued to 23 organisations and 14 responses were received (a response rate of 61%). ekosgen has based the impact assessment on these returns².

The organisations that responded were:

- Dundee Contemporary Arts
- Dundee Heritage Trust
- Creative Dundee
- Leisure & Culture Dundee Cultural Services

¹ http://www.dundeecityofdesign.com/downloads/Dundee%20Cultural%20Strategy_online.pdf

² The sample represents the majority of cultural organisations in Dundee, and includes some of the key organisations. The data gathered can therefore be used as an evidence base to assess the impact. In future, it would be useful if this information is routinely gathered and collated from the wider population of organisations.

- Leisure & Culture Dundee Library and Information Services
- Dundee Place Partnership
- Dundee Repertory Theatre
- Scottish Dance Theatre
- Abertay University
- University of Dundee
- V&A at Dundee
- UNESCO City of Design
- Dundee Science Centre
- Dundee & Angus College

Further details of the organisations that returned proformas will be provided at Chapter 3.

- **Consultations with 12 stakeholders and the study Steering Group.** This included representatives from across the City and wider City Region to gather views on Dundee's cultural offer; the impact of the sector; the role and impact of the Strategy and Action Plan; future plans for the sector; and indicators that can be used to measure and capture the sector's impact.
- Conducting an **impact assessment** that draws on the data provided by the organisations and intelligence gathered through the consultations to quantify economic and social impacts and identify the wider qualitative strategic impacts and drivers. This includes grossing up impacts to estimate the overall impact of cultural organisations and activity in Dundee. This provides a baseline against which future growth and impacts can be measured.
- Identifying **indicators** that can be used to track the impact of the sector and the strategy and action plan on an ongoing basis.

Structure of the report

1.9 The report is structured as follows:

- **Chapter 2** presents the profile of the culture and creative sector in Dundee;
- **Chapter 3** sets out and provides a description of the organisations that have contributed to the study and that are captured in the impact assessment;
- **Chapter 4** presents the economic impact assessment, capturing current employment, GVA and visitor spend impacts and the setting out the potential for this to change in future years;
- **Chapter 5** examines the social impacts, including volunteering, health, wellbeing and education benefits that are generated as a result of engaging with cultural activities;
- **Chapter 6** sets out the wider economic and strategic impacts of the sector and the strategy, providing an overview of these impacts and their drivers.
- **Chapter 7** summarises the key findings of the study and sets out recommendations on suitable indicators that can be used to track and measure progress / impact on an ongoing basis.

2 The Creative and Cultural sector in Dundee

Headlines

- 2,800 people are employed in Creative and Cultural industries (CCI) in Dundee City, accounting for almost 4% of total employment in Dundee City and 3% of all CCI employment in Scotland. A high proportion of the jobs are full time.
- Employment in the sector is varied with key sub-sectors including writing and publishing – the largest sub-sector, and computer games, which is highly represented in Dundee City. Other important sub-sectors include software/electronic publishing, performing arts and design.
- There are 255 registered enterprises in the CCI sector in Dundee, accounting for 8% of all registered enterprises in the city. A high proportion are micro businesses employing less than 10 people (86%), and nearly half are sole traders (47%).
- Dundee attracts almost 4 million tourism visits annually. The large majority of visits are accounted for by day trips, although the expenditure also is driven by domestic and inbound overnight visits.
- A high proportion of domestic overnight tourism visits (43%) are for visiting friend and relatives, and just under a third are for holiday purposes.
- History and culture is within the top five motivators for overnight visits to Dundee and Angus, reflecting the importance of these assets and the wider cultural sector to the visitor economy.
- While almost 4 out of five residents from Dundee typically engage in cultural activities and events, there is an opportunity to increase cultural participation levels which could lead to longer term health and educational benefits.

Introduction

2.1 This section presents an analysis of Dundee's employment, business base and GVA within the Creative and Cultural Industries (CCI) sector providing an overview of the context in which Dundee's Cultural Strategy and Action Plan is being delivered. The analysis sets out the scale and significance of the CCI sector and includes an overview of Dundee's key visitor economy statistics that this contributes to.

2.2 The data is based on Scottish Government's definition of the sector which captures cultural elements of the visitor facing economy as well as those who are working creatively to develop content and supporting services for cultural visitor attractions and the wider economy. It should be noted, that the definition does not capture the wider tourism sector (which includes hospitality providers for example).

Employment

2.3 Employment within the Creative and Cultural Industries is a key part of the Dundee Cultural Strategy and Action Plan as it seeks to develop the cultural sector and build on the already existing regeneration through culture. The strategy outlines how growing employment within the Creative and

Cultural Industries can contribute to economic growth and the long-term sustainability of the cultural sector. Some of the commitments within this area include the development of a number of cultural employment pathways and working with universities to develop strategies to retain creative graduates in the city.

2.4 Approximately 2,800 people were employed in the CCI sector in Dundee in 2016. This accounts for approximately 53% of CCI employment in the Dundee City Region³ and 3% of total CCI employment in Scotland.

2.5 A high proportion of the jobs in the sector are full time. As shown at Table 2.1, over four fifths (82%) of CCI employees are in full time employment, above the national average of 78%. This is higher than the proportion of jobs that are full time across all employment sectors (65% in full time employment in Dundee City, 67% in Scotland).

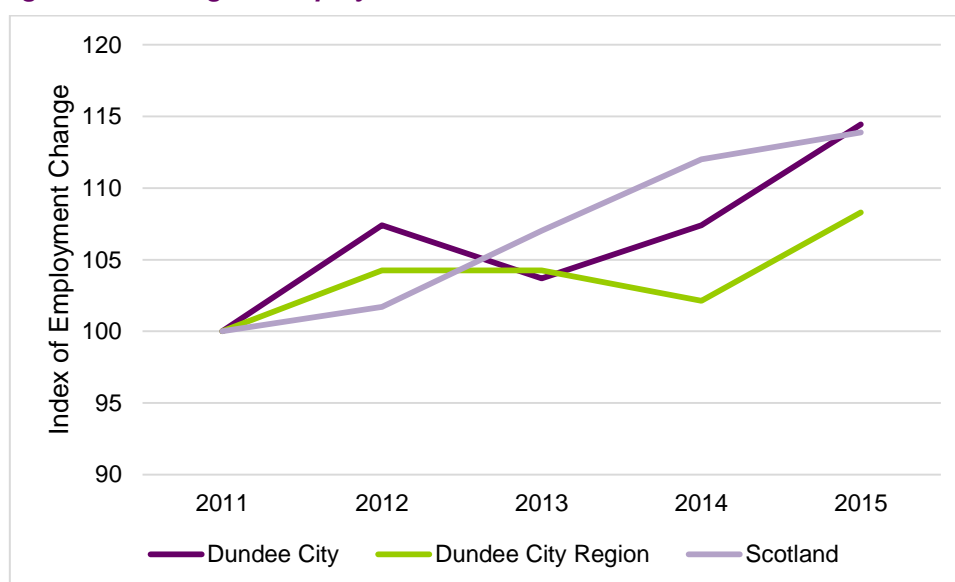
Table 2.1: Creative & Cultural Industries employment, 2016

	CCI employment	Total employment	% FT employment (CCI)
Dundee City	2,800	78,000	82% FT; 18% PT
Dundee City Region	5,300	176,000	77% FT; 23% PT
Scotland	83,600	2,591,000	78% FT; 22% PT

Source: BRES, 2017

2.6 As shown at Figure 2.1, between 2011 and 2015⁴, CCI employment increased by 14% in Dundee City. This was in line with the national increase and greater than the 8% increase across Dundee City Region as a whole.

Figure 2.1: Change in employment in Creative & Cultural Industries 2011-2015



Source: Scottish Government Growth Sector Statistics, 2017; BRES, 2017

2.7 Taken as a whole, the CCI sector is well represented in the Dundee City economy. The sector accounts for 3.6% of all employment in Dundee City, compared to the national average of 3.2%, and

³ The Dundee City Region comprises Dundee, Perth & Kinross and Angus.

⁴ Due to changes (the inclusion of units registered for PAYE only) in data collection, BRES data for 2016 is not comparable with pre-2015 data

Dundee City Region average of 3.0%. This results in a location quotient of 1.12 (i.e. CCI employment levels in Dundee City are equivalent to 112% of the national average).

2.8 Table 2.2 shows employment within each of the 16 CCI sub sectors as defined by the Scottish Government. Writing and Publishing is the largest sub-sector accounting for 28% of CCI employment in Dundee reflecting the presence of DC Thomson. The sub-sector is also highly represented in Dundee with employment levels almost three times as high as the national average.

2.9 Software/electronic publishing is the second largest of the sub-sectors in Dundee. Computers games and performing arts both employ over 300 people in Dundee and are well represented when compared to the rest of Scotland (computer games in particular).

Table 2.2: Creative & Cultural Industries employment by sub-sector, 2016

Industry	Dundee City Employment	Proportion of Total CCI Employment	Equivalent National Proportions	Location Quotient (Scotland = 1)
Writing and Publishing	790	28.1%	11.4%	2.76
Software/electronic publishing	420	14.9%	32.8%	0.51
Computer Games	330	11.7%	1.3%	10.45
Performing arts	330	11.6%	7.9%	1.66
Design	210	7.6%	9.2%	0.91
Fashion and textiles	190	6.8%	3.7%	2.07
Architecture	150	5.3%	7.2%	0.83
Film and video	120	4.3%	4.4%	1.09
Libraries and archives	100	3.6%	4.2%	0.95
Radio and TV	50	1.6%	7.0%	0.28
Music	40	1.4%	0.3%	5.88
Advertising	40	1.2%	4.0%	0.40
Visual art	30	1.1%	2.0%	0.60
Crafts and Antiques	20	0.8%	3.3%	0.24
Photography	0	0.0%	0.7%	0.00
Cultural education	0	0.0%	0.6%	0.00
Total	2,800	100%	100%	1.12

Source: BRES, 2017

Business base

2.10 As with employment, the CCI business base is also of relevance to the Dundee Cultural Strategy and Action Plan. As well as contributing to the creation of CCI jobs, strengthening the business base is of importance to the “make our cultural sector sustainable” objective and “Ambitious: we will cultivate sustainable cultural ambition” commitment area. A strong and growing business base is key to maintaining and growing the cultural sector and ensuring the city has a visible and attractive culture offer. Key commitments related to the business base include strengthening business support services for creative enterprises and providing support for new creative businesses.

2.11 Table 2.3 shows that there were 255 registered enterprises in the CCI sector in Dundee, accounting for 30% of CCI businesses in Dundee City Region and 2% of the total CCI business base nationally. Across the City, CCI businesses account for 8% of all registered enterprises.

Table 2.3: Creative & Cultural Industries business base, 2017

	Number of CCI enterprises	Number of enterprises (all industries)	CCI enterprises as proportion of all industries enterprises
Dundee City	255	3,315	8%
Dundee City Region	845	13,390	6%
Scotland	15,980	174,625	9%

Source: Growth Sector Statistics, Scottish Government 2017; UK Business Counts, NOMIS 2017

2.12 The sector's much higher share of businesses in Dundee (8%) compared to its share of employment (just under 4%), reflects the fact that it is characterised by large number of micro businesses – a trend evident throughout Scotland, though Dundee's share is less than the national average. As shown at Table 2.4, around 86% of Dundee's creative and cultural enterprises are micro, with 0-9 employees. A significant proportion of these are sole traders – nearly half (47%) have no employees. By comparison, for all industries in the Dundee City, 84% are micro businesses (0-9 employees). However, Dundee has a higher proportion of medium and large size CCI businesses – 6%, compared to just 2% nationally.

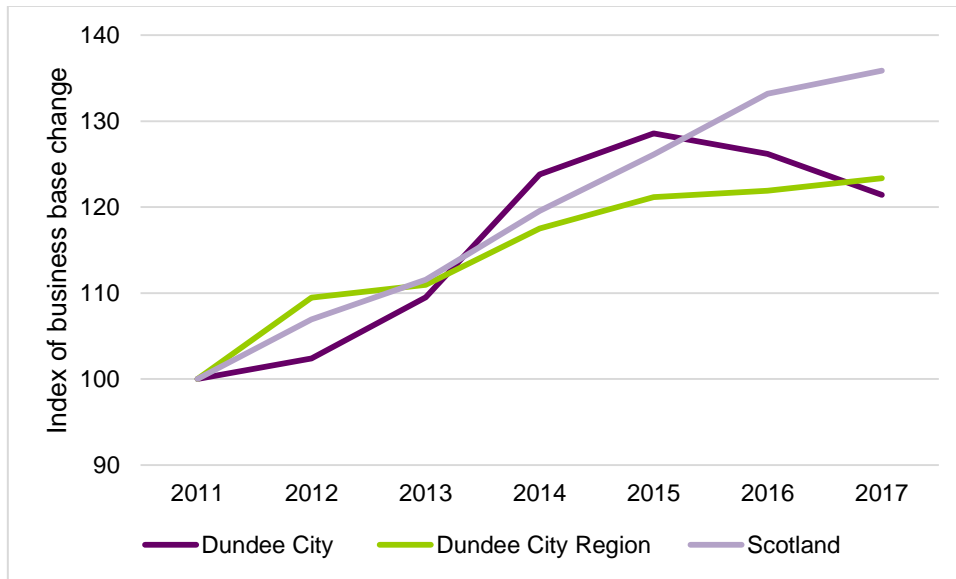
Table 2.4: Creative & Cultural Industries business base by size, 2017

	Micro (0-9 employees)	Small (10-49 employees)	Medium (50-249 employees)	Large (250+ employees)
Dundee City: CCI enterprises	86%	10%	4%	2%
Dundee City: All enterprises	84%	14%	2%	1%
Scotland: CCI enterprises	94%	5%	1%	1%
Scotland: All enterprises	88%	10%	2%	0.4%

Source: UK Business Counts, 2017

2.13 Figure 2.2 shows that between 2011 and 2017, the number of CCI businesses in Dundee City increased by a fifth, a similar increase to the City Region but below Scotland as a whole. There was a fall between 2015 and 2017 (6%) in Dundee City, whilst in Scotland, there has been a steady increase throughout the six year period. The reasons for this fall in Dundee are not clear and the data should be monitored to understand if it is a trend that requires an intervention, or if it is a short-term blip.

Figure 2.2: Change in number of CCI enterprises 2011-2017



Source: Growth Sector Statistics, Scottish Government 2017

GVA

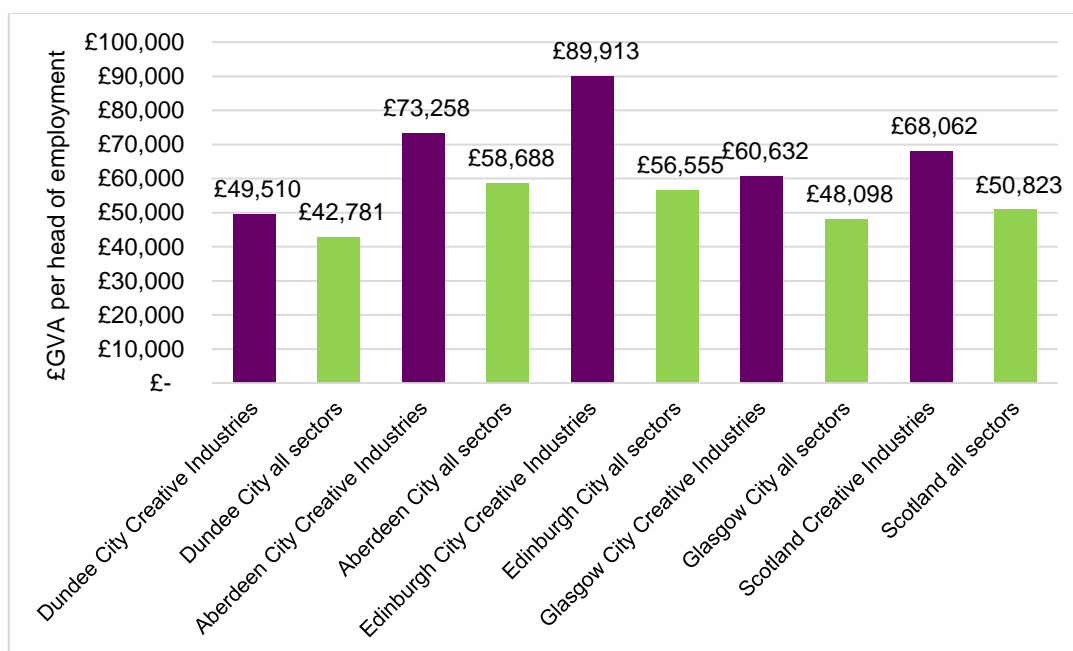
2.14 The CCI sector generates £147m of Gross Value Added (GVA) per annum in Dundee City, accounting for 64% of the CCI GVA in Dundee City Region and 3% of national CCI GVA. Overall, the CCI sector accounts for 5% of Dundee's total GVA.

2.15 The CCI sector is a relatively productive sector in Dundee, generating £49,510 per head of employment equating to an additional £8,000 per head of employment than the city average for all sectors.

2.16 As is the case across the Dundee economy, the sector is however, less productive than nationally. As shown at Figure 2.3, the issue is more pronounced in the CCI sector with the level of GVA per head of employment equivalent to just 73% of the national average (compared to 84% across the overall economy). This reflects the particularly high level of GVA per head of CCI employment nationally, where the sector generates nearly £18,000 additional GVA per head of employment than the overall economy.

2.17 Figure 2.3 also shows that in comparison with some other Scottish cities – Aberdeen, Glasgow and Edinburgh⁵ – Dundee has a lower all sector and Creative Industries sector GVA per head. This is particularly the case for Aberdeen and Edinburgh, where the GVA per head for Creative Industries is far above the national average at £73,000 and £90,000 respectively.

⁵ Comparisons have been made with Edinburgh, Glasgow and Aberdeen as data is available at local authority level and so the local authority and city boundaries are coterminous for these cities.

Figure 2.3: Creative Industries and all sector GVA per head of employment, 2015

Source: Growth Sector Statistics, Scottish Government 2017

Tourism

Tourism numbers and spend

2.18 Culture and tourism have a mutually beneficial relationship which can strengthen the attractiveness and competitiveness of cities, regions and countries. Culture is increasingly an important element of the tourism offer and cultural tourism is one of the largest and fastest-growing global tourism markets. Culture and creative industries are used to promote destinations and many locations are now actively developing their cultural assets to enhance their competitive advantage and develop their local distinctiveness. Together, culture and tourism are major drivers of destination attractiveness, supporting the culture and tourism supply chain and related industries. Whilst culture attracts tourist, tourism provides an important mechanism for supporting and enhancing culture, and generating income.

2.19 Tourism and visitor spend is an important source of revenue for the Dundee City economy. Table 2.5 shows the annual tourism visits and spends in Dundee. The city attracts nearly 4 million tourism visits annually – 3.64 million day visits, 230,000 domestic overnight visits and a share of the 87,000 visits from overseas (inbound) to Dundee and Angus. This generates nearly £190 million of expenditure from day and domestic overnight visitors annually in the city, and a proportion of the £31 million annual spend by overseas tourists in Dundee and Angus. As would be expected, overnight visitors, and particularly international overnight visitors, generate the highest levels of spend per night. For comparison, the total figures for Dundee City Region are shown at Table 2.6.

2.20 In Dundee City, day visitors spend an average of £40.73 per visit – higher than the Scottish average of £34.62 (shown at Table 2.7), although below the 2016 Scottish average for visits to large towns/cities (£43.11). Overnight stays, however, generate a lower average spend per visit than nationally. Domestic overnight stays in Dundee are typically 0.7 nights shorter than the Scottish average, which is proportionate to the difference in average spend per visit (£200 in Dundee compared with £252 nationally). However, there is a significant difference in the average spend of overseas visitors (£363 in Dundee compared to £673 nationally) despite a similar duration of stay.

Table 2.5: Tourism visits & spend: Dundee City

	Annual Visits	Annual Nights	Annual Spend	Average Spend Per Visit
Day Visitors (2014-2016)	3.64m	-	£148m	£40.73
Domestic Overnight (2013-2015)	0.23m	0.61m	£46m	£200
Inbound (Dundee and Angus) (2016)	0.09m	0.67m	£31m	£363

Source: GB Day Visits Survey 2016; GB Tourism Survey 2015, Visit Britain; International Passenger Survey 2016, ONS, 2017

Table 2.6: Tourism visits & spend: Dundee City Region

	Annual Visits	Annual Nights	Annual Spend	Average Spend Per Visit
Day Visitors (2014-2016)	11.52m	-	£401m	£34.78
Domestic Overnight (2013-2015)	1.09m	3.36m	£227m	£208
Inbound (2016)	0.219m	1.07m	£69m	£313

Source: GB Day Visits Survey 2016; GB Tourism Survey 2015, Visit Britain; International Passenger Survey 2016, ONS, 2017

Table 2.7: Tourism visits & spend: Scotland 2016

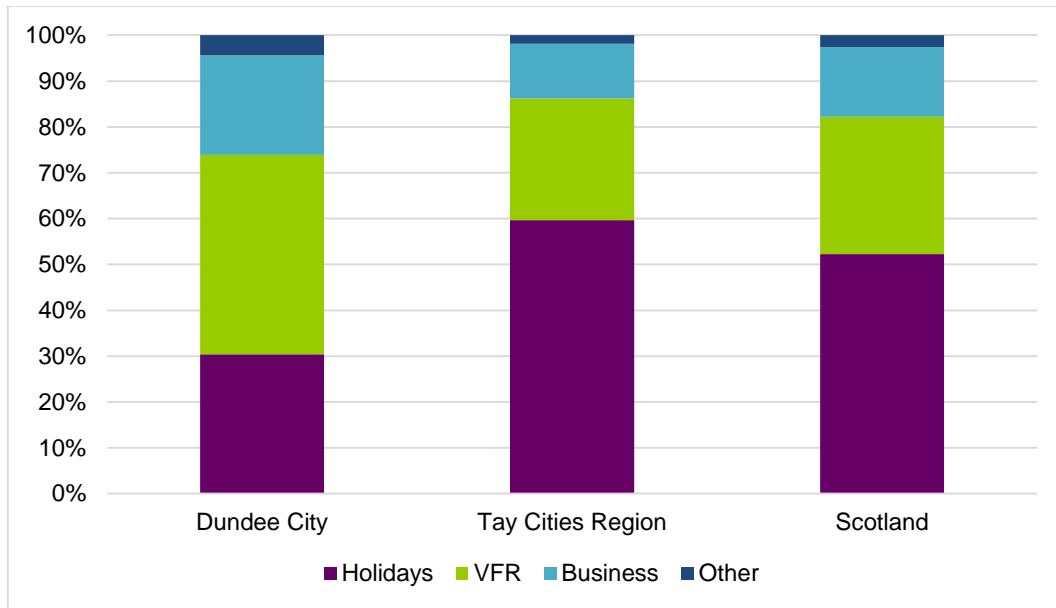
	Annual Visits	Annual Nights	Annual Spend	Average Spend Per Visit
Day Visitors, 2016	142m	-	£4,916m	£34.62
Domestic Overnight, 2016	11.51m	38.88m	£2,897m	£252
Inbound, 2016	2.75m	21.23m	£1.85bn	£673

Source: Scotland's Tourism Performance 2016, Visit Scotland, 2017

Purpose of trip

2.21 As shown at Figure 2.4, a relatively high proportion of both domestic overnight trips to Dundee are to visit friends and relatives, 43% compared to the City Region and national averages. – 27% and 30% respectively. Just 30% of domestic overnight trips to Dundee are for holiday purposes, compared to 52% in Scotland as a whole.

Figure 2.4: Domestic overnight trips: purpose of visit (2013-2015)

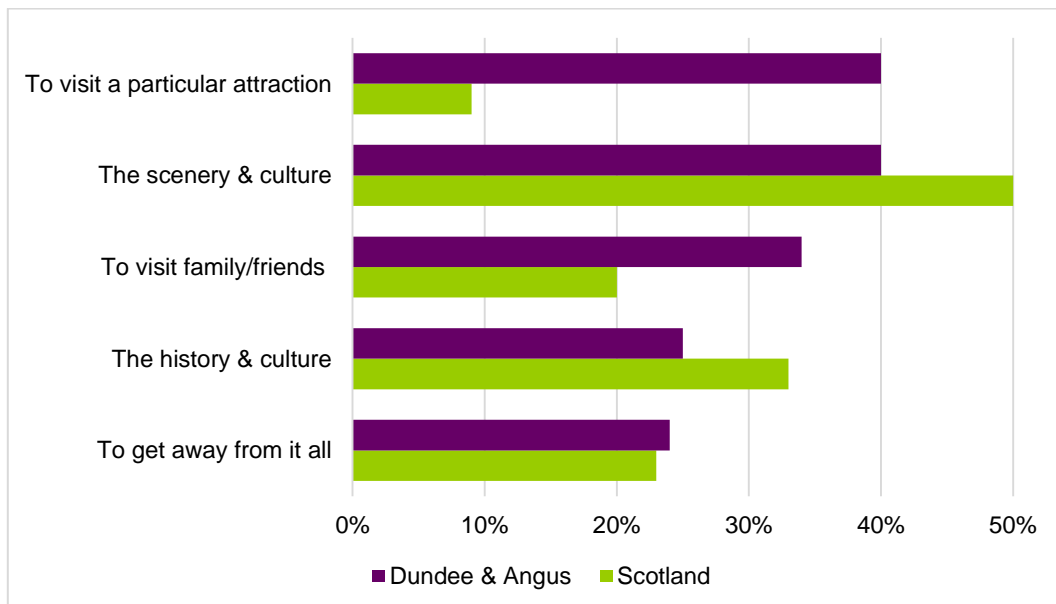


Source: GB Tourism Survey 2013-2015 averages, Visit Britain, 2017

Trip motivators

2.22 Figure 2.5 shows the trip motivators for visitors to Dundee and Angus, compared with the Scottish average. Visit Scotland's 'Scotland Visitor Survey, 2015 & 2016' found that 'history and culture' was one of the top five motivators for overnight leisure visits to Dundee and Angus. Twenty-five percent of respondents said that this was what attracted them to come to the region, although this is lower than the average for Scotland as a whole (33%).

Figure 2.5: Trip motivators



Source: Scotland Visitor Survey 2015 & 2016, Visit Scotland, 2017

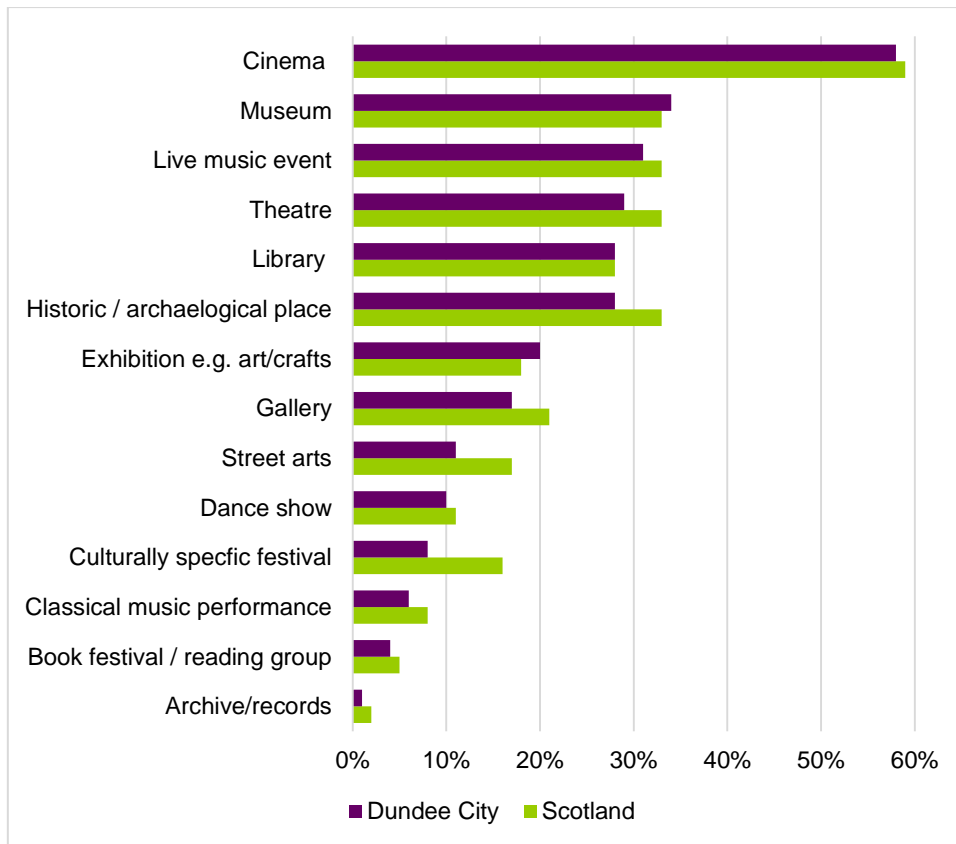
Cultural participation

2.23 The Scottish Household Survey collects data on participation in cultural events and places of culture. As shown at Figure 2.6, results from the 2016 survey show that almost four out of five Dundee

residents (79%) attended cultural events or visited a place of culture in the past year. This is up six percentage points from 73% in 2012, and is a bigger increase than the five percentage points nationally. However, despite this increase, the share of Dundee residents attending cultural events or visiting a place of culture remains slightly lower than the national average of 83%.⁶

2.24 The majority (58%) of Dundee City residents visited the cinema in the previous 12 months – the most popular cultural activity. Thirty-four percent visited a museum and 20% engaged with an exhibition – a slightly higher proportion than that for Scotland as a whole (33% and 17% respectively). The proportion engaging in all other activities captured is below the national average. There was a particular difference in the attendance of culturally specific festivals (with just 8% of Dundee residents visiting such events compared to the national average of 16%).

Figure 2.6: Cultural participation



Source: Scotland Household Survey, 2016 (Dundee sample 230; Scotland sample 9,640)

⁶ <http://www.gov.scot/Topics/Statistics/16002>

3 Key cultural organisations covered by the impact assessment

Headlines

- The chapter provides an overview of the fourteen organisations that returned proformas.
- These included: a theatre; a contemporary arts venue; a leisure and culture trust delivering library services and other venues such as museums and galleries; a dance company; a cultural partnership; and a trust running two museums within the city.
- The V&A Dundee is not yet open but its proforma outlined the major impact it will have on the Cultural sector in Dundee, with projected annual visitors of 375,000.
- Abertay University, University of Dundee and Dundee and Angus College are not specifically dedicated to cultural activity, but returned information around their cultural activity including outreach programme delivery and the Gardyne Theatre at Dundee and Angus College.
- Leisure and Culture Dundee – Library & Information Services has the largest number of annual visitors at 1,157,000.

Introduction

3.1 This chapter offers a brief description of the fourteen organisations that returned proformas and are included within the impact assessment. In particular it offers detail on the cultural area(s) within which the organisations work, their premises, activity and annual visitor numbers.

Cultural organisations

Leisure and Culture Dundee – Library & Information Services

Leisure and Culture Dundee – Library & Information Services delivers library services throughout Dundee. This involves a network of 14 libraries across the city sited in local communities, together with a mobile vehicle and at home service. As well as book loans activities include exhibitions, outreach services to those unable to reach library services, connection services to those experiencing exclusion and schemes for schools and young people.

Annual visitors: 1,157,000



Leisure and Culture Dundee- Cultural Services

Leisure & Culture Dundee is a registered charity which delivers leisure, sport and cultural venues and services as well as the library services detailed above. Key cultural venues are: The McManus: Dundee's Art Gallery & Museum, Mills Observatory, Broughty Castle, Caird Hall and Dundee City Box Office. Through such venues Leisure & Culture Dundee offers a wide variety events and exhibitions across music, drama and visual arts.

Annual Visitors: 333,600



Dundee Contemporary Arts

Dundee Contemporary Arts (DCA) is a centre for contemporary arts featuring two large-scale gallery spaces, two cinema screens, a shop and a print studio. It aims to be an inclusive venue, providing public education in contemporary arts and culture that is of benefit to the wider community. Its areas of work include visual arts, film, video, sound recording, crafts, performance, broadcasting, publishing, literature, music, dance and song. It promotes these art forms via commissioning, galleries, printmaking, workshops, displays, talks, research, discussion groups and various exhibitions.



Annual visitors: 126,000 audience, 6,000 participants

Dundee Heritage Trust

Dundee Heritage Trust operates two five-star rated museums within Dundee – Discovery Point and Verdant Works. The museums have exhibitions of national significance, focused on Dundee's industrial past. The Discover Point museum is based around the Discovery ship, which visitors can climb aboard, and a series of temporary and permanent exhibitions. Verdant Works tell the story of the textile industry in Dundee and is based within a refurbished mill. There are also a number of schools and outreach programmes run through both museums.



Annual Visitors: 93,400 (52,700 Discovery Point, 17,900 Verdant Works, 20,000 additional gallery engagements)

Dundee Rep

Dundee Rep is a major cultural centre within Dundee, home to Scottish Dance Theatre and Dundee Rep Theatre. Dundee Rep Ensemble was established in 1999 as the only full-time company of actors in Scotland. In 2016/17 the Rep delivered 134 performances of eight new productions, the theatre also held 188 performances of shows from 54 visiting companies. The Rep's production of Death of a Salesman was received six nominations and won three awards (the most of any production) at the 2017 Critics' Awards for Theatre in Scotland. The Rep also delivers a creative learning programme through two strands: education and participation and community, health and wellbeing. Activities within the health and wellbeing strand include the provision of drama therapy for people suffering from mental health conditions in the local area. Within the education and participation strand activities include the Creative Pathways programme of placements to assist people looking into a career in the Creative Industries.



Annual Visitors: 35,500 at Rep Ensemble performances, 27,800 at visiting company performances, 74,000 visit venue for any reason

Place Partnership

The Dundee Place Partnership is a three year (2015 to 2018) collaboration between Creative Scotland, Dundee City Council, Leisure and Culture Dundee, the University of Dundee and Abertay University. The project aims to support Dundee's cultural sector by driving forward Dundee's Cultural Strategy and delivering on a number of the strategy actions. In doing so the partnership has supported and delivered a number of cultural events and projects, including its music stages at the Flower and Food Festival and Light Nights event.

Annual Visitors: 52,500

Scottish Dance Theatre

Scottish Dance Theatre is Scotland's principal dance company. The company is based at the Dundee Rep and celebrated its 30th anniversary in 2016. Scottish Dance Theatre is a touring company of renowned reputation with production produced for local, national and international performances. As well as performances the company also looks to engage with the community and develop audiences through its creative learning strand. Creative learning activities include workshops, running the DD4 youth dance company and delivering the Outreach Dance Programme. In 2016/17 Scottish Dance Theatre delivered 33 performances and 345 creative learning events internationally.



Annual Visitors: 8,900 audience members and 7,100 participants (internationally)

Creative Dundee

Creative Dundee works to support the growth of the city's creative organisations and talent through delivering development projects. Examples of Creative Dundee's work include marketing Dundee's creative scene; delivering creative events; providing opportunities through projects to develop Dundee's creative sector such as the development of Dundee's Creative Industries Strategy; and taking part in collaboration groups such as the UNESCO City of Design Partnership and the European Creative Hubs Network Project.



UNESCO City of Design

Dundee was awarded UNESCO City of Design status in 2014. It was the first city in the UK to receive the accolade, which has previously been awarded to 12 other cities including Berlin and Montreal. In receiving the award Dundee was also added to UNESCO's Creative Cities Network alongside global cities such as Seoul, Buenos Aires and Bilbao. In Dundee UNESCO City of Design looks to promote Dundee as one of UNESCO's creative cities and its work includes the annual delivery of the Dundee Design Festival, which features various design based workshops, exhibitions and performances.



Annual Visitors: 7,500 at Dundee Design Festival

Dundee Science Centre

Dundee science centre is a major visitor attraction in Dundee centre, offering interactive exhibition space, a learning suite, a café and a gift shop. As well as the centre, the Dundee science centre also delivers an outreach service running festivals and events within the Dundee and Perth & Kinross area. The centre aims to support lifelong learning within the community through making science more accessible and promoting 'a culture of curiosity, confidence and engagement with science, for the whole community'. The science centre was first opened in July 2000 as one of the Millennium commission projects and it is currently undergoing a redevelopment of facilities which will include the opening of a new science learning suite and interactive Medical Marvels exhibition.



Annual Visitors: 67,000 to the science centre

The V&A Dundee – a new venue

The V&A Dundee

The V&A Dundee is opening in September 2018. It will be Scotland's first design museum and the only V&A museum outside of London. There has been much anticipation around the opening of the V&A given the scale of the development and its potential to boost tourism in the city. In terms of activity, the V&A will have permanent galleries displaying around 300 exhibits of Scottish design. It will also host international touring exhibitions. In addition the museum will have a programme of design-focused events, activities and projects aimed at groups from across the community, including families, young people and people working and studying within the Creative Industries.



Annual visitors: projected to be approx. 375,000

Organisations involved in cultural delivery

Abertay University

Abertay is one of two universities in Dundee. As well as the provision of Higher Education courses across a number of creative and cultural areas, the university also has an outreach programme of cultural activity, including events across Dundee – Weave. Examples of events include the Abertay Digital Graduate Show, showcasing the work of graduates from the School of Design and Informatics to the public, and the Festival of Improbable Instruments, which involved building and performing with digital musical instruments.



Annual visitors: 8,700

University of Dundee

Alongside Abertay University, University of Dundee is one of the two universities in Dundee. As well as its educational provision within creative and cultural areas, the university delivers cultural events such as degree shows and other public events. The university also has year round cultural activity through its botanical garden and museum service, which includes collections covering art and design, medicine, natural history and science.



University
of Dundee

Annual visitors: 194,523

Dundee and Angus College

Dundee and Angus College is a regional college providing Further and Higher Education courses within Dundee and Angus. The college contributes to cultural delivery through its provision of cultural courses in areas such as creative writing, dance, music, performing arts and art and design. The college also hosts the Gardyne theatre and recording studio within its Gardyne campus. A variety of shows are performed at the theatre, attracting over 26,000 audience members annually.



Annual visitors: 26,500 to Gardyne theatre

4 Economic impact

Headlines

- Over 2016/17 the thirteen operational organisations that returned the proforma delivered 6,287 events, 267 performances, 2,547 workshops and 3,647 exhibition days to 2,366,081 audience members and 33,242 workshop participants.
- Leisure and Culture Dundee – Library and Information Services delivered the most activity, accounting for over 1 million visitors and over 90% of events.
- The thirteen organisations directly employed 510.5 FTEs, generating £11.3 million in GVA.
- Including indirect and induced employment, the thirteen organisations delivered an employment impact of 715.1 FTEs, generating £19.8 million in GVA.
- In total it was estimated that £32.7 million in gross additional expenditure was generated from visitors to the thirteen organisations.
- It was calculated that additional visitor expenditure supports over 204 additional FTEs, generating £7.9 million in GVA.
- Overall, from direct, indirect and induced and visitor impacts, it was calculated that the thirteen organisations delivered employment impacts of over 919 FTEs, generating £27.7 million in GVA.
- From the data provided a grossed up figure of approximately **1,011.6 FTEs** and **£30.5m GVA** has been calculated to capture total impacts across the whole cultural sector.

Introduction

4.1 This chapter sets out the economic impact of 13 key cultural organisations that are involved in delivering Dundee's Cultural Strategy and Action Plan. It also sets out an estimated impact for the wider cultural sector in Dundee and the future impact of the V&A Dundee. This provides a baseline against which future activity and impact can be measured. It is based on data provided by the organisations for the most recent full financial (2016/17) or calendar (2017) year. Where an organisation has a remit which extends beyond culture (e.g. Abertay and Dundee Universities and Dundee and Angus College), the data is based on their cultural activities only.

4.2 The direct impacts will be accrued in Dundee, and the indirect and induced impacts will be in the wider Dundee City Region and other parts of Scotland.

The scale of activity

4.3 Of the thirteen operational organisations that returned proformas, eleven provided data on the number of events they delivered in 2016/17 and all thirteen provided data on audience members and participants. In total they delivered over 6,200 events, over 250 performances, over 2,500 workshops and over 3,600 exhibition days. These events were delivered to over 2,350,000 audience members and over 33,000 workshop participants.



4.4 Table 4.1 shows the scale of activity in 2016/17, broken down by organisation. Leisure and Culture Dundee – Library and Information Services delivered the most activity, accounting for over 90% of events delivered across all 11 organisations that provided data on event delivery. Given its focus on theatre and creative learning, Dundee Rep delivered the largest number of performances (242) and workshops (1,283) of all the organisations. Leisure and Culture Dundee operates a number of galleries and museums and, reflecting this, it delivered the largest number of exhibition days, accounting for over half (52%) of total exhibition days.

Table 4.1: Scale of activity by organisation, 2016/17⁷

Organisation	Events	Performances	Workshops	Exhibition Days	Other
Leisure and Culture Dundee – Library and Information Services	5,722	-	-	377	-
Leisure and Culture Dundee	344	-	-	1,905	
Dundee Contemporary Arts	124	6	737	308	3,097
Dundee Heritage Trust	59	9	21	673	-
Abertay University	20	2	8	16	-
Creative Dundee	17	-	5	-	-
UNESCO City of Design	1	5	12	5	-
Place Partnership	-	-	-	-	-
Dundee Rep	-	242	1,283	-	-
Dundee Science Centre	-	-	363	363	-
Scottish Dance Theatre	-	3	119	-	-
Total	6,287	267	2,547	3,647	3,097

Source: ekosgen analysis based on organisation data

4.5 As shown at Table 4.2, reflecting its higher number of events and large number of premises, Leisure & Culture Dundee - Library & Information Services, had the largest total audience at just over 1,150,000. The Library and Information Services had the largest audience by a significant margin; it was followed by Dundee Contemporary Arts and the wider Leisure and Culture Dundee Trust, which had total audiences of just under 383,000 and 335,000 respectively. Dundee Rep delivered the largest number of workshop participants at just under 8,600. Across all the organisations, Scottish Dance Theatre was the only organisation that had more workshop participants than audience members. This is likely due to the fact that many of Scottish Dance Theatre's performances are outside of Dundee, whilst its workshops are more concentrated within the city.

Table 4.2: Audience numbers and participant engagements by organisation, 2016/17

Organisation	Total audience / visitors	Workshop Participants
Leisure & Culture Dundee - Library & Information Services,	1,156,819	-

⁷ Information was not provided by the University of Dundee and Dundee and Angus College

Leisure & Culture Dundee	333,594	-
Dundee Contemporary Arts	382,799	5,561
University of Dundee	189,937	4,586
Dundee Heritage Trust	92,916	488
Dundee Science Centre	58,630	8,000
Dundee Rep	54,616	8,573
Place Partnership	52,500	-
Dundee and Angus College	26,500*	
Abertay University	8,584	-
UNESCO City of Design	6,500	1,000
Creative Dundee	1,800	140
Scottish Dance Theatre	886**	4,741
Total	2,366,081	33,242

Source: ekosgen analysis based on organisation data

**Based on July 2017 to June 2018 audience figures*

*** Represents 10% of reported audience, based on statement that 90% of performances are outside Dundee.*

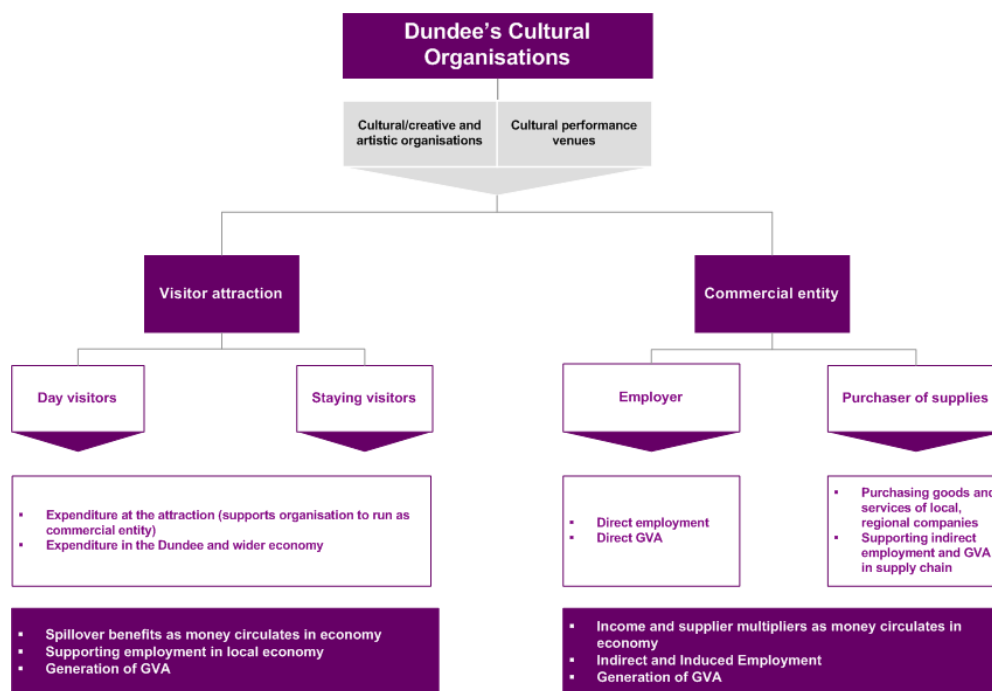
Determining economic impacts

4.6 To capture the economic impact of the organisations, there are two main strands of activity that need to be considered:

- The roles of organisations as employers and purchasers of goods and services in the economy; and
- The organisations' roles as visitor attractions and the additional expenditure that this generates.

4.7 The approach taken to capture these impacts is set out in Figure 4.1. It is intended to be a simple, consistent and robust methodology that can be used to measure the collective impact of Dundee's organisations on an ongoing basis.

Figure 4.1: Assessing impacts of supported cultural organisations in Dundee



The organisations as commercial entities

Direct impacts – Employment and GVA

4.8 As shown at Table 4.3, the data provided within the proforma indicates that 510.45 FTEs were employed by the thirteen organisations within 2016/17. The direct employment across the organisations generated £11.3 million GVA in 2016/17. The GVA impact is based on an average level of GVA per FTE in the Creative, arts and entertainment activities sector in Scotland of £25,055.⁸

Table 4.3: Direct Employment and GVA

	2016/17
Employment (FTEs)	510.45
GVA	£11,316,525.09

Source: ekosgen analysis based on organisation data

Indirect and induced impacts – Employment and GVA

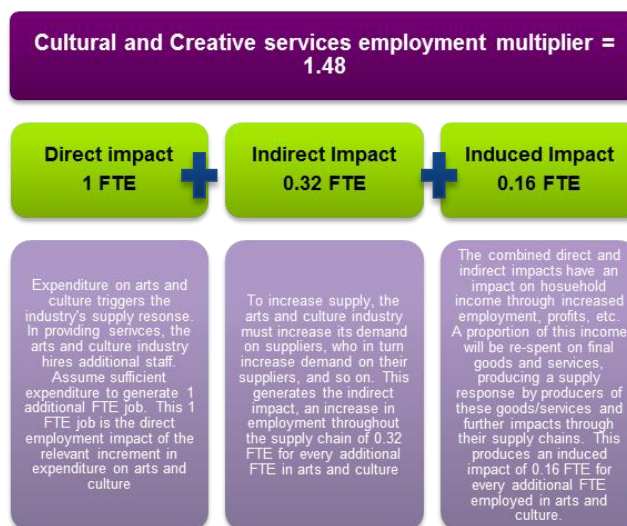
4.9 The organisations' direct impact will multiply through induced and indirect impacts generated through their significant annual expenditure on wages and suppliers, a large proportion of which will be captured in Dundee, the wider City Region (reflecting the catchment area for employees and location of suppliers) and/or in Scotland. Indirect impacts relate to the spend of supported organisations on suppliers, whilst induced impacts relate to the effects of additional spend in the economy by those employed by supported organisations. The wages received by employees and supply chain expenditure will re-circulate in the economy as result of expenditure by employees and supply chain companies, supporting further jobs. These jobs will also generate GVA.

⁸ For Abertay University, University of Dundee and for Dundee and Angus College, GVA impact is based on an average level of GVA per FTE in the Education sector in Scotland of £16,660, reflecting their primary activity.

Indirect and induced employment impacts

4.10 The approach taken to capturing indirect and induced employment impacts is set out in Figure 4.2. Indirect and induced employment impacts can be estimated using appropriate multipliers. The latest Scottish Input-Output tables provide sector specific employment multipliers at the Scotland level. Using these, it is estimated that for every FTE in cultural organisations, an additional 0.48 FTEs are supported in the wider economy.⁹ The employment multiplier is therefore 1.48.¹⁰

Figure 4.2: GVA multiplier for Creative and Cultural services



Source: Scottish Input-Output tables, 2017

4.11 As shown at Table 4.4, when including the indirect and induced impacts, the total employment impact of the thirteen organisations amounted to 715.1 FTEs in 2016/17, increasing the direct employment impact by over 200 FTEs.

Table 4.4: Overall employment impact, 2016/17

Employment Impact (FTEs)	2016/17
Direct	510.5
Indirect	126.4
Induced	78.2
Total	715.1

Source: ekosgen analysis based on organisation data

Indirect and induced GVA

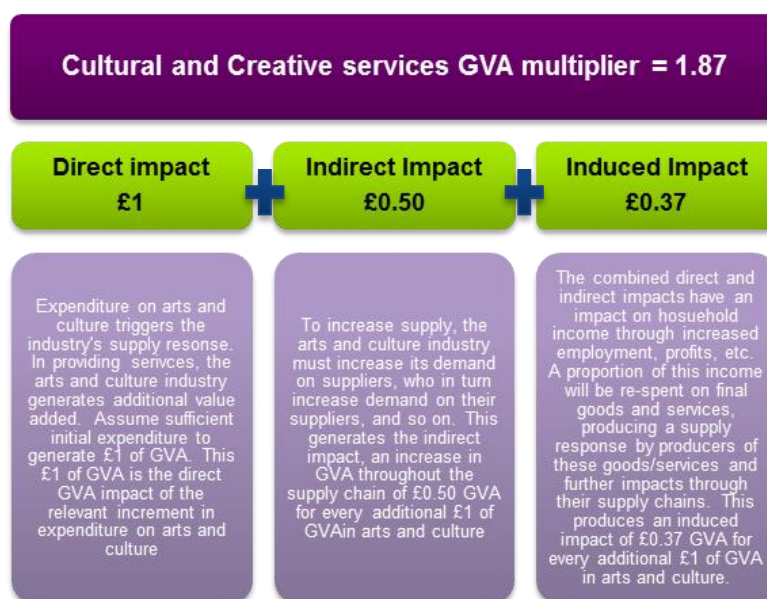
4.12 Indirect and induced GVA impacts can be estimated using appropriate multipliers. The latest Scottish Input-Output tables provide sector specific GVA multipliers at the Scotland level. Using these, it is estimated that for every £1 of GVA directly generated by cultural organisations, an additional £0.87

⁹ It is assumed that whilst direct impacts are realised in Dundee, indirect and induced impacts are realised across the City Region, and to a degree in the wider Scottish economy.

¹⁰ For Education, the employment multiplier is approximately 1.25, and is used for Abertay University, University of Dundee and for Dundee and Angus College.

is generated in the wider economy.¹¹ The resulting multiplier is 1.87.¹² The approach taken to capturing indirect and induced GVA impacts is set out in Figure 4.3.

Figure 4.3: GVA multiplier for Creative and Cultural services



Source: Scottish Input-Output tables, 2017

4.13 On this basis, as shown at Table 4.5, the total GVA impact of the 13 organisations was just over £19.8 million in 2016/17. Including the indirect and induced impacts increased the overall GVA impact by almost £8.5 million.

Table 4.5: Overall GVA impact, 2016/17

GVA Impact (£m)	2016/17
Direct	£11,316,525.09
Indirect	£4,501,671.79
Induced	£3,983,385.15
Total	£19,801,582.03

Source: ekosgen analysis based on organisation data

The Organisations as visitor attractions

4.14 The visitor impact of the cultural organisations is based on the level of additional expenditure that visits to venues and events delivered by the organisations generate in the wider economy and the employment and GVA that this supports.

4.15 Table 4.6 shows the total audience members / visitors for each organisation in 2016/17. Leisure Culture Dundee – Library and Information Services had by far the highest number of visitors at just over 1,150,000. Reflecting its focus on national and international touring, Scottish Dance Theatre had the smallest number of audience members in Dundee at 886.

¹¹ It is assumed that whilst direct impacts are realised in Dundee, indirect and induced impacts are realised across the City Region, and to a degree in the wider Scottish economy

¹² For Education, the GVA multiplier is approximately 1.41, and is used for Abertay University, University of Dundee and for Dundee and Angus College.

Table 4.6: Total audience / visits

Organisation	2016/17
Leisure & Culture Dundee - Library & Information Services	1,156,819
Dundee Contemporary Arts	382,799
Leisure & Culture Dundee	333,594
University of Dundee	189,937
Dundee Heritage Trust	92,916
Dundee Science Centre*	58,630
Dundee Rep	54,616
Place Partnership	52,500
Dundee & Angus College	26,500*
Abertay University	8,584
UNESCO City of Design	6,500
Creative Dundee	1,800
Scottish Dance Theatre**	886**
Total	2,366,081

Source: *ekosgen analysis based on organisation data*

**Based on July 2017 to June 2018 audience figures*

*** Represents 10% of reported audience, based on statement that 90% of performances are outside Dundee.*

4.16 Ideally, the estimates provided here would be based on information from each organisation regarding:

- The total number of visitors they attract each year;
- The split between day visitors and those staying overnight (as overnight visits are associated with higher levels of expenditure);
- The origin of their visitors – the number who are resident within the local economy (about whom it can therefore be assumed that they would spend their money within the local economy anyway, and their expenditure is therefore not 'additional') and the number who have travelled into Dundee from elsewhere to attend the cultural venue (whose expenditure is therefore additional to the local economy); and
- Levels of expenditure by visitors to each venue.

4.17 However, whilst all the organisations that returned the proforma were able to provide an estimate of visitor numbers, very few monitor where their visitors are from or how long they are staying and only two capture any data on visitor spend (other than with the organisation itself).

4.18 The following section therefore uses national benchmarks from Visit Scotland¹³ to estimate the proportion of day and overnight visitors, and average visitor & spend. These benchmarks have been applied cautiously and adjusted where it is thought that they are unlikely to reflect the position in Dundee. The following two paragraphs outline the benchmarks that have been used and the ways in which these have been applied.

4.19 To estimate total visitor spend associated with the organisations which returned the proformas, an average spend per day and overnight visitor has been applied to the estimated number in each category. Only University of Dundee and Dundee Science Centre were able to provide an estimate of

¹³ Visit Scotland, 2016, Key Tourism Facts http://www.visitscotland.org/pdf/2016_Stats_Summary_v2.pdf_page_2. The Visit Scotland data comes from the Great Britain Tourism Survey and Great Britain Day Visit Survey.

day and overnight visitors.¹⁴ Therefore for the remaining twelve organisations a Scotland-wide benchmark has been applied. Data from Visit Scotland suggests that 91% of all tourist visitors are day visitors. This proportion has been applied across the organisations, with the exception of Libraries and Information Services, which it is assumed serves a much more local market. This organisation was able to provide data on the source of its visitors, with 98% coming from within the city or wider city region. It has been assumed that all of these are day visitors, with only 2% of visitors stopping overnight.

4.20 Where organisations were able to provide an estimate of visitor expenditure in their proformas, this has been used to produce the estimate in Table 4.7¹⁵. For those organisations that were not aware of visitor expenditure levels, a Scotland-wide benchmark has been used for day and overnight visitors. These have been adjusted down so that expenditure on tickets / within the venue is not double counted. This results in an estimate of c. £25 of spend per day visitor and nearly £70 per night for overnight visitors, with an average stay duration of 4.2 nights.

4.21 Using these benchmarks suggests that visitors to the organisations that returned the proforma generated over £61m of gross expenditure in the Dundee economy in 2016/17.

Table 4.7: Estimated gross visitor expenditure

Expenditure (£m)	2016/17
Day	26.5
Overnight	35.3
Total	61.8

Source: ekosgen estimate based on proforma information and national benchmarks

4.22 It is important to recognise that not all of this expenditure is additional to the Dundee economy. Rather, some is generated by displacing expenditure that would have occurred elsewhere in the economy anyway.

4.23 The most common approach to estimating additional expenditure that can be directly attributed to the audiences / visitors of the organisations completing the proforma is to remove expenditure that is made by those living within the local area. In the case of this study, this is those living within Dundee. This allows a more refined estimate to be produced, looking specifically at the expenditure which has been brought into the area by the cultural organisations attracting visitors in from elsewhere.

4.24 Four of the organisations that completed the proformas were able to state where their audience / visitors originated. The proportion that were from within the city ranged from 35% to 83%, and between 58% and 98% were from the wider City Region as a whole. For the other organisations, a benchmark figure of 35% of day visitors being non-local has been used¹⁶, and it has been assumed that 50% of overnight visitors are from outside the area.

4.25 Discounting on this basis reduces the level of expenditure attributable to visitors considerably, although the level of additional expenditure continues to be substantial. Table 4.8 shows that around £32.7m of additional expenditure is estimated to have been generated in 2016/17.

¹⁴ Dundee Science Centre estimated that 100% of visitors were day visitors, University of Dundee estimated that 4% of visitors are overnight visitors and 96% are day visitors.

¹⁵ This applies to Dundee Heritage Trust, Dundee Science Centre and Libraries and Information Services (where visitor expenditure was estimated to be zero).

¹⁶ Taken from The Great Britain Day Visitor 2016 annual report, figures for the East of Scotland

Table 4.8: Estimated additional gross visitor expenditure

Expenditure (£m)	2016/17
Day	14.5
Overnight	18.2
Total	32.7

Source: *ekosgen estimate based on proforma information and national benchmarks*

4.26 In order to estimate the net impact of organisations, it needs to be considered that some of the tourist trips will involve a visit to more than one venue. There are two adjustment factors which need to be taken into account. The first is to account for potential double counting of audience numbers, with a number likely to go to two or more attractions. This is likely to be high given the relatively compact nature of Dundee City Centre, and the close proximity of some of the organisations and venues. The second is the members of the audience who are in Dundee primarily for another purpose, such as a musical or sports events or a business conference and then partake in a cultural activity whilst there.

4.27 It is assumed that overall expenditure will be reduced by some 50% when multiple visits to cultural attractions are taken into account. Further, it is assumed that expenditure will be reduced by a further 30% when account is taken of another primary reason or purpose for the visit. As shown at Table 4.9, this gives a total net expenditure on primarily culture-related visits of £11.4 million. From this net expenditure figure, benchmarks from Scottish Annual Business Statistics and Scottish Input-Output Tables were used to estimate the additional FTEs supported and additional GVA generated through additional visitor expenditure. This estimated that the spend supports over 204 additional FTEs and just under £8 million in additional GVA.

Table 4.9: Net expenditure attributable to Dundee's cultural organisations

	2016/17
Total gross additional visitor expenditure (£m)	32.7
Discounting to account for multiple visits (£m)	16.3
Discounting to take account of visits for another primary purpose (£m)	4.9
Net expenditure on primarily culture-related visits (£m)	11.4
Additional FTEs supported	204.5
Additional GVA (£m)	7.9

Source: *ekosgen estimate based on proforma information and national benchmarks*

Overall impact

4.28 Overall, the organisations that returned the proformas employ over 510 full-time equivalent employees, generating £11.3 million of GVA, and this increases to 715 FTEs generating £19.8 million of GVA when the indirect and induced effects are included. As shown at Table 4.10, the additional boost through visitor expenditure takes the total number of jobs supported on an annual basis up to over 919 FTEs generating £27.7 million of GVA per annum.

Table 4.10: Annual employment and GVA impacts of Dundee's cultural organisations, 2016/17

	FTEs	GVA (£m)
Direct	510.5	11.3
Indirect and Induced	204.6	8.5
Visitor Impact	204.5	7.9
Total Impact	919.6	£27.7

Source: *ekosgen calculations based on organisation data*

Grossing up the economic impact results

4.29 As discussed the results gathered through the proformas reflect the majority of cultural organisations and activity in Dundee; however, they do not capture the full extent. Following discussion with the Scottish Enterprise client project team and stakeholders in the Dundee Partnership Cultural Development Group, we have applied a set of assumptions regarding the data provided and impacts:

- Data provided represents around 80% of all of the arts and culture organisations currently operating in Dundee; and
- It represents around 90% of total activity and therefore economic and social impacts realised.

4.30 This includes venues and attractions such as the Whitehall Theatre, HMS Unicorn and a variety of smaller social and charitable enterprises.

4.31 Based on this, it is possible to gross up the results by a further 10% to estimate the impacts realised by organisations that did not provide data for the study. In the absence of any other evidence, we have assumed that this additional 10% of activity and impacts is realised uniformly across the sector, and we have grossed up on a pro rata basis.

4.32 This is an accepted and credible approach. However, though the grossing up has been undertaken based on the majority of cultural activity, the organisations themselves represent the larger organisations in Dundee. Though estimates of the scale of activity that these organisations account for are reasonably well-informed, the resulting impacts should nevertheless be used with some caution.

4.33 Grossing up the results by a further 10% generates the following impacts set out in Table 4.11 as the base scenario to capture the whole cultural sector. As this is based on an estimate, we have also provided a lower scenario with 5% less impact and an upper scenario with 5% more impact.

Table 4.11: Grossed-up annual employment and GVA impacts of Dundee's cultural organisations, 2016/17

	Base scenario		Lower scenario (-5%)		Upper scenario (+5%)	
	FTEs	GVA (£m)	FTEs	GVA (£m)	FTEs	GVA (£m)
Direct	561.6	12.4	533.5	11.8	589.6	13.1
Indirect and Induced	225.1	9.4	213.8	8.9	236.3	9.8
Visitor Impact	225.0	8.7	213.7	8.3	236.2	9.1
Total Impact	1011.6	30.5	961.0	28.9	1062.1	32.0

Source: *ekosgen calculations based on organisation data*

Future impact

4.34 The V&A Dundee is going to be a very important cultural asset for Dundee. It will be Scotland's first dedicated museum of design and the only V&A museum outside of London. Its impact is not captured in the above assessment as it covers 2016/17 and the museum is not due to open until September 2018. However, the V&A Dundee provided a proforma covering their prospective impact, which suggests the museum will have 41 direct employees, calculated to equal approximately 37 FTEs, and approximately 375,000 annual visitors. Using the same method as for the impact assessment, this would amount to a total direct, indirect and induced visitor impact of 103 FTEs generating £3.5 million in GVA. The opening of the V&A may also have wider impact in changing the profile of tourism in Dundee and attracting more overnight visitors.

Table 4.12: Annual employment and GVA impacts of V&A Dundee

	FTEs	GVA (£m)
Direct	37	0.9
Indirect and Induced	20	0.8
Visitor Impact	46	1.8
Total Impact	103	£3.5

Source: ekosgen calculations based on organisation data

4.35 Both the DCA and Dundee Heritage trust indicated that they expect future growth in activity and visitor numbers and this is in part driven by the opening of the V&A and its attracting a larger number of tourists to Dundee. Abertay University and Place Partnership also indicated that they expected a growth in activity (depending on the securing of funds for Place Partnership). For the two arms of Dundee Leisure and Culture, contracting budgets may have some impact on activity levels though it is projected that the opening of the V&A will boost visitor numbers to the Caird Hall. Having become a regularly funded organisation within Creative Scotland, Creative Dundee is also projecting that its activity levels will grow. Dundee Science Centre is anticipating an increase in visitors in 2018 following the opening of its mezzanine extension and potentially in 2021 following a possible ground floor extension.

5 Social impacts

Headlines

- Engagements with the thirteen organisations resulted in a potential wellbeing saving of over **£13.7 million**.
- Participation also resulted in an annualised education benefit of over **£807,000** in wages and over **£268,000** in tax receipts.
- From the data provided grossed up figures of approximately **£15 million** in participant wellbeing savings, over **£888,000** in annualised wage benefit and over **£294,000** in annualised tax receipts have been calculated to capture impacts across the whole cultural sector.
- The economic value generated by volunteers across the thirteen organisations in 2016/17 amounted to over £668,000, whilst wellbeing benefits were calculated to be over £2 million.
- Local residents engaged with the organisations over one million times in 2016/17.
- There are high levels of engagement with women, young people and older people.

Introduction

5.1 This chapter explores the social impacts generated by Dundee's cultural organisations. It is based on the responses provide by the 13 operational participating organisations. The breadth of supported activities and number of engagements facilitated has delivered wide ranging opportunities for the capture of social impacts across a wide range and large number of the city's residents. For example, workshops covering topics including skills development and routes into employment within the Creative and Cultural sectors engaged over 30,000 participants. Participants (whether artists, attendees at events or participants in workshops, as examples) have had opportunities to gain personally from their experiences.

5.2 Reflecting the nature of activities supported and evidence of impacts identified, consideration is given to:

- The value of volunteering, both as a generator of economic value for the City and its ability to generate benefits for volunteers themselves;
- Success in engaging specific groups from the community, including those who may not otherwise engage in cultural activities; and
- Wellbeing and education impacts arising from engagement in culture and the arts.

5.3 Social impact is of particular importance to the Dundee Cultural Strategy and Action Plan as it seeks to further develop regeneration through culture. This is highlighted within the objectives to "contribute to creating a healthy, more equitable and economically successful city" and "build the confidence and self-esteem of our individuals and communities in their abilities". Social impact is also reflected within the "Inclusive: We will ensure Dundee delivers a culturally rich and creative experiences for everyone" commitment area. Commitments within the action plan related to social impact include supporting community organisations to develop cultural programmes, maintaining the accessibility of

the library service and the continued development of the ASPIRE, Dundee arts programme, which is aimed at working with some of the most deprived communities in Dundee and children living in poverty.

Volunteering impacts

5.4 The economic value generated by volunteering has been calculated by estimating the economic value/wages that volunteers would generate if they were employees¹⁷. As shown at Table 5.1, across the thirteen organisations, 551 volunteers worked 52,011 hours¹⁸, resulting in a total economic value of over £668,000 in 2016/17.

Table 5.1: Volunteering impact, 2016/17

	2016/17
Volunteers	551
Volunteer hours	52,011
Economic value	£668,855.68

Source: ekosgen analysis based on organisation data

5.5 An alternative valuation approach considers the impact of volunteering on the individual in terms of their wellbeing. For regular volunteers at the organisations, their volunteering may be worth up to £7,490 per annum for each individual, representing an income increase as a result of increased wellbeing and confidence through volunteering. Assuming that 50% of supported volunteers work regularly, this benefit could be worth up to £2,063,495.¹⁹

Securing wide ranging engagement

5.6 Across the thirteen organisations, twelve were able to provide information on their engagement with local residents, schools and community organisations. As shown at Table 5.2, this amounted to engagement with over 1 million visits from local residents, over 250 school visits, over 26,000 school pupil visits and 20 community group engagements. The engagement with local residents mostly arose from the activity of Leisure & Culture Dundee - Library & Information Services, which engaged with local residents over 960,000 times in 2016/17. Dundee Science Centre had the highest level of engagement with school pupils, with over 8,000 school pupils visiting the science centre and over 5,400 engaging in school outreach sessions. University of Dundee could not provide data on school pupils, but estimated that all 45 schools in Dundee had been engaged with and that there is further engagement with schools in Fife, Perth and Kinross and Angus. University of Dundee also accounted for engagement with ten out of twenty community groups.

Table 5.2: Engagement with local groups

Group	2016/17
Residents	1,156,638
Schools	252
School pupils	26,705
Community groups	20

Source: ekosgen analysis based on organisation data

¹⁷ The calculation applied an average value of hourly pay in Dundee from the Annual Survey of Hours and Earnings

¹⁸ Dundee Science Centre and UNESCO City of Design did not provide figures for volunteer hours worked, therefore this has been calculated based on the average number of hours worked by each volunteer across the other organisations.

¹⁹ Based on an SROI well-being valuation for the average value of volunteering for individuals by the Social Value Lab, from: <http://www.globalvaluexchange.org/valuations/8279e41d9e5e0bd8499f5aaf> (Creative Commons Licence CC-BY-NC)

5.7 Eight organisations were able to provide information regarding their engagement with groups with protected characteristics. All eight indicated high levels of engagement with young people, all except Dundee Science Centre had a high level of engagement with women, five out of eight gave a rating of seven or higher out of ten for their engagement with older people and four gave a rating of seven or higher for their engagement with disabled people. Engagement with other groups with protected characteristics was generally rated at five or below, although there were some exceptions for individual organisations. For example, Leisure & Culture Dundee - Library & Information Services rated its engagement with all groups with protected characteristics as seven or higher, apart from people from different faith groups. University of Dundee also rated its engagement highly across all groups with a rating of nine for each group. Whilst Dundee Place Partnership and Dundee Science Centre rated their engagement with people from deprived areas as seven and ten out of ten respectively. Creative Dundee rated its engagement with people born outside of the UK as six out of ten.

Participant wellbeing and education impacts

5.8 By helping people to engage in culture and arts, the organisations in Dundee are contributing to the realisation of considerable wellbeing and education benefits.

5.9 Research conducted on behalf of the Department for Culture, Media and Sport (DCMS)²⁰ has determined that engagement in culture and the arts can bring a range of health and education benefits, which in turn generate a financial return in terms of savings to the public purse and personal financial gains. These benefits may be realised through:

- A reduction in accessing health services such as GPs or mental health support; and/or
- Increased likelihood of attending further/higher education.

5.10 These benefits are translated into a set of benchmarks, as follows:

- Estimated per person annual NHS cost savings
 - £5.07 for those who engage with the arts as an audience member, due to predicted reductions in GP visits
 - £6.84 for those who engage with the arts as an audience member, due to predicted reductions in psychotherapy usage
- Estimated per person lifetime benefits as a result of increased likelihood of attending further/higher education as a result of actively participating in arts (distinct from being an audience member)
 - £2,380 private benefit, in terms of increased wages for the individual
 - £791 public benefit, in terms of increased tax receipts

5.11 These benchmarks can be applied to known audience and participation figures across the 13 organisations' activities. In doing so, we have made the following assumptions:

- 'Engagement' translates to two visits as an audience member, or two instances of participation, to realise a benefit;
- A lifetime benefit assumes an average working life of 49 years, and assumes two instances of participation per year to realise a benefit; and

²⁰ DCMS/SIMETRICA (2015) Further analysis to value the health and educational benefits of sport and culture

- Only half of audience members and participants will realise benefits.

5.12 As shown at Table 5.3, on this basis, it is estimated that the activity delivered by the thirteen organisations in 2016/17 resulted in an estimated potential wellbeing saving of £13.7 million per annum, as well as potential benefits of over £800,000 per annum in increased wages, and over £268,000 per annum in increased tax receipts.

Table 5.3: Summary of social impacts

	Impact
Volunteer economic value	£668,855.68
Volunteer wellbeing benefit	£2,063,495
Participant wellbeing benefit	£13,724,129.96
Participant education benefit: Wages (annualised)	£807,366.80
Participant education benefit: Tax receipts (annualised)	£268,174.74

Source: *ekosgen calculations based on organisation data*

Grossing up social impacts

5.13 We have taken the same approach to grossing up the social impacts as we did with the economic impacts as we have increased results by a further 10% to estimate the impacts realised by organisations that did not provide data for the study. We have also provided a lower scenario, which is 5% below this base, and an upper scenario which is 5% above this base scenario. Based on this we can estimate that the following social impacts have been realised by Dundee's cultural sector (Table 5.4). As with the grossed up economic impacts, though a credible estimate of impacts these figures should also be read with some caution.

Table 5.4: Grossed-up social impacts

	Base scenario	Lower scenario (-5%)	Upper scenario (+5%)
Volunteer economic value	£735,741.24	£698,954.18	£772,528.31
Volunteer wellbeing benefit	£2,269,844.50	£2,156,352.28	£2,383,336.73
Participant wellbeing benefit	£15,096,542.96	£14,341,715.81	£15,851,370.11
Participant education benefit: Wages (annualised)	£888,103.48	£843,698.30	£932,508.65
Participant education benefit: Tax receipts (annualised)	£294,992.22	£280,242.61	£309,741.83

Source: *ekosgen calculations based on organisation data*

6 Wider economic and strategic impacts

Headlines

- Dundee has an exceptionally strong and diverse cultural offer, particularly for a city of its size
- The opening of the V&A as well as other opportunities, such as Dundee's UNESCO status, means that there is potential for further development of the cultural sector
- As shown in the Dundee Cultural Strategy, there is a strategic and long-term approach to the development of Dundee's cultural sector. This has also helped to drive partnership working.
- The development of the cultural sector in Dundee has played an important role in economic development and regeneration in the city.
- The cultural sector delivers a number of important benefits for residents and participants, including both wellbeing benefits and employment opportunities. This can be further enhanced through regional collaboration.

Introduction

6.1 In addition to significant economic and social impacts, it is widely recognised that Dundee's cultural organisations and Dundee's Cultural Strategy and Action Plan, generate strategic impacts for the sector and the overall economy. This chapter provides an overview of these impacts and their drivers, as reported by the organisations and consultees who participated in the study.

A strong and unique cultural offer...

6.2 Dundee's cultural offer is highly regarded, reflecting its strength and diversity. It is recognised as being remarkable for a city of its size, in terms of scale and diversity. Within individual venues and across the city as a whole, the offer is diverse covering all forms of art and culture. This is demonstrated by the range of organisations involved in this study which include performance and exhibition venues (such as theatres, galleries, museums and cinemas), events and networks that provide access to traditional, fine and contemporary culture and arts and collections of national significance.

6.3 There are also elements of Dundee's cultural offer which are arguably unique, including:

- The City's publishing history, centred around the role of Dundee based DC Thomson which is one of the UK's leading media organisations;
- Its strengths in design, as reflected by the city's designation as the UK's only UNESCO City of Design; and
- The links between culture, science and innovation which are being developed and showcased through the city's collections, performances, events and workshops.

...with potential for development

6.4 The offer engages residents and attracts visitors from across Scotland, the rest of the UK and overseas. Stakeholders are in agreement that there is potential to increase the number of cultural visitors that originate from outside Dundee and extend the average duration of visits. This will in turn increase visitor expenditure and the sector's impact on the city's economy.

6.5 The opening of the V&A Dundee in September 2018 is recognised as a key opportunity with expectations that it will attract and establish a new visitor market within Dundee that other organisations can seek to attract and build upon. While there are also potential risks associated with the opening of the V&A, such as the possibility of a new external product affecting the ecology of Dundee's cultural and creative sector and temporarily disrupting activity at existing venues, there is widespread support for its establishment and ensuring that the city-wide benefits are maximised.

6.6 There are a range of other opportunities that can help to ensure that there is not an over-reliance on the V&A as driver of growth and change. For example, Dundee's UNESCO status provides ongoing opportunities to promote the city as a visitor destination to the other 29 cities across the world that are part of the Design Network. Other opportunities (many of which require investment) include the potential re-development/modernisation of existing venues (such as Dundee Contemporary Arts), further development of the events programme (including growth of the existing Design Festival, the launch of the University's Festival of the Future and the potential World Festival of Creativity) and the delivery of creative and cultural projects that have been put forward for Tay Cities Deal investment. Partners also highlighted the need for an ongoing refresh and update of the offer to ensure that it is continuously improved and remains competitive. Examples of improvements that could be introduced include additional interpretation facilities for international visitors across a number of venues, multi-venue ticketing and transport links and signposting between venues.

The role of Creative Industries

6.7 The growth sector definition adopted by Scottish Government collectively captures both Creative and Cultural Industries. This reflects the strong connections and interplay between Creative Industries (which tend to focus on the creation of cultural and artistic content) and cultural activities (which tend to focus on the venues, attractions and events that residents and visitors attend and engage with).

6.8 The vibrancy of Dundee's cultural sector is supported by the city's Creative Industries, which are underpinned by important infrastructure including creative workplaces and a strong creative educational offer at the city's schools and universities. Ensuring that the offer to attract and retain creative talent within the city continues to develop alongside the cultural sector and is effective in developing a critical mass of Creative Industries will be important part of developing the overall Dundee offer going forward.

A long-term commitment to culture and collaboration

6.9 Dundee has maintained a long-term planned and strategic approach to developing the city's cultural sector over the past 20 years. There has been strong leadership and while the current Strategy and Action Plan was published in 2015 and sets out objectives to 2020, there have been several iterations of cultural strategies that have preceded this. This joined-up, long-term, strategic approach has helped to ensure that culture remains firmly on the city's agenda and that there is continuity in the activities to develop and expand the sector. This commitment and coherence is one of the factors that

sets Dundee apart from other cities and cultural destinations that are now keen to learn from Dundee's approach and experience.

6.10 A further key benefit of the Strategy, and the strategic leadership that has driven the Strategy's development, is the widespread partnership working that it promotes. It regularly brings together organisations from across the city through, for example, regular Dundee Partnership Cultural Development Group meetings. It also promotes and supports the bilateral relationships of organisations within the partnership that are working together, for example, Creative Dundee working with DCA.

6.11 This helps drive and facilitate the commitment for the sector to work together collaboratively and proactively adopt a 'can do' approach to deliver plans and actions and maximise the impact and growth of the sector. This is particularly important when considering the significant levels of investment that are made in culture in Dundee each year, as captured by the Dundee European City of Culture (ECoC) 2023 bid.

6.12 It is no longer possible for a UK city to secure the ECoC status and with the bid process now cancelled, partners in Dundee are keen to highlight the collaborative and considerable effort, along with resources, that went into preparing the initial bid. Partners are also committed to working together to achieve and deliver elements of the programme that were under included as part of the sector's future development. Feedback from one consultee suggested that the focused bidding process had helped to accelerate planned activity by approximately three years.

Supporting regeneration in the city

6.13 With a focus on culture-led regeneration across the city, the development of the Creative and Cultural sector has played an important role in supporting the wider economic development and regeneration of the Dundee and its economy. As one consultee commented:

'Investment in culture is a vital part of regenerating the city and internal and external perceptions of it'

6.14 This culture-led regeneration reflects the multifaceted role that the sector plays, which includes:

- Providing jobs, encouraging entrepreneurship and new business development, and generating economic output;
- Attracting visitors and supporting the visitor economy;
- Using engagement in arts and culture to generate social and regeneration benefits which can support inclusive growth and contribute to other agendas such as health and education;
- Increasing the attractiveness of the city as place to live, study and work, especially amongst younger, highly skilled workers; and
- Acting as a catalyst for physical regeneration (e.g. at Dundee waterfront).

6.15 In particular, partners have highlighted that the development of the cultural sector has helped to change perceptions of Dundee as a place to visit and live, increasing residents' pride and confidence in the city and adding to the quality of life and visitor experience that the city is able to offer. It has also raised the city's profile as a cultural destination, generating demand for other sectors such as education and the wider visitor economy. All of these roles have and are continuing to contribute towards the diversification of the city's economy.

Generating benefits for the Dundee City Region

6.16 There are a number of ways in which the cultural sector in Dundee benefits the wider City Region. These primarily relate to the engagement of the City Region's residents in Dundee's cultural offer for example as audience members and as participants in outreach programmes and activities.

6.17 As detailed in the economic impact chapter, the cultural sector in Dundee also provides and supports supply chain and employment opportunities for residents and businesses outside the city through the multiplier effect.

6.18 Partners have identified that there is further potential for partners from across the City Region to work together collaboratively to develop the regional cultural offer, particularly in cases where there are complementary plans to develop certain arts forms for example. This aligns with work to develop a regional wide approach to tourism and destination marketing that captures the value of the diverse culture, leisure and tourism assets.

The benefits of measuring the impact of culture

6.19 The benefits of measuring the impact of the cultural sector and of the Dundee Strategy and Action Plan are widely recognised by partners, as is the need for a set of consistent indicators that allow progress and change to be measured over time. Partners also recognise that this will involve an ongoing commitment to collecting and sharing data and monitoring information on cultural operations and activity.

7 Key findings

Culture-led regeneration

7.1 It is clear that Dundee is committed to culture-led regeneration and has taken a long-term, strategic approach to delivering benefits to businesses and people who live and work in the city. It has a diverse range of cultural assets and programme of activities. As well as the range, the scale of what is provided is impressive, particularly for a city of its size. The V&A will undoubtedly add to this offer and has been described as a 'game-changer'. However, it's important to recognise that culture in the city has been a strategic priority over many years and a great deal has been achieved already, that the V&A is now set to build on. Perhaps reflecting the focus on culture-led regeneration in Dundee, local residents are more likely to visit a museum or an exhibition than in Scotland as a whole.

7.2 Dundee's success in this area is an example of good and innovative practice which has given it an international profile. It engages residents and attracts visitors from outside the region, with its blend of cultural assets, although there is scope to attract more cultural visitors and extend the duration of their stay.

7.3 There is a strong inter-relationship between Dundee's cultural offering and its strength in Creative Industries. The support that is provided to both achieves a synergy and helps to develop and attract creative talent and entrepreneurship. The combination is continuing to build the City's reputation as a vibrant, innovative and attractive place to live, work and learn. It is also building its reputation as a good place to set up and grow a business, reflected in the Dundee City Region Deal.

Generating economic impact

7.4 Creative and Cultural industries (CCI) is an important source of employment in Dundee, accounting for around 4% of total employment. Employment in CCI in Dundee has been rising in line with the national rate and stakeholders anticipate that this growth trend will continue. Writing and publishing, along with computer games, are significant employers but there is also a diverse range of opportunities for example in performing arts and design. The 13 operational participating organisations directly employ **510.5 FTE** employees and indirectly (including induced), account for a further **204.6 FTE** jobs.

7.5 In terms of the business base, CCI businesses account for 8% of all enterprises so it is clear that it is characterised by micro businesses, given the relative proportions in terms of employment (4%) and enterprises (8%).

7.6 **CCI generates £147m annual GVA** and has a good level of productivity in the Dundee context, reflecting the relatively higher value added activities of some industries within it. However, there is scope for it to become more productive and move closer to the national average. The analysis of the organisations participating in the study showed that direct employment generated **£11.3m in GVA** in 2016/17 and, including induced and indirect impacts, they deliver around **£19.8m GVA**.

7.7 Tourism makes an important contribution to the economy in Dundee but there is an opportunity to significantly increase the number of visitors staying overnight, and the length of stay. History and culture are important drivers for overnight tourist visits to Dundee and this could be enhanced. There is anecdotal evidence to suggest that the evening and night time offer in Dundee needs to develop to provide a more rounded offer and encourage people to stay for longer, and increase their spend. The majority of organisations in the impact assessment were not able to provide visitor spend data but using

benchmarks, it is estimated that the thirteen operational organisations generate over **£61m** of gross expenditure.

7.8 Looking across employment and visitor spend, the thirteen supported organisations are estimated to **generate £27.7m in GVA for the Dundee economy** each year. This is a significant contribution and indicates the importance of the sector to the city. The grossed up impacts calculated to estimate the impact of Dundee's entire cultural sector are set out below.



Delivering social and community benefits

7.9 Arguably, the CCI sector has the potential to deliver a higher degree of social and community benefits than many others. It can offer important volunteering opportunities, reach in to local communities, engage with particular groups and deliver education and learning opportunities, often using innovative and participatory approaches.

7.10 The 13 supported organisations provide volunteering opportunities to over 550 people. Volunteering can be an important step for people moving into employment and contributes to the employability pipeline. It also supports skills and knowledge development. In terms of economic value, the work undertaken by these volunteers and the well-being benefits is estimated to be approximately £669,000 and £2.1m respectively.

7.11 The twelve organisations that provided information on local and community engagement have engaged with over one million residents demonstrating the reach of culture and arts and the role they can play in providing opportunities to local people, including schools. Taking part in culture and arts is recognised as bringing range of health and education benefits which is very valuable in itself. However, it is also possible to attribute a monetary value to these benefits through savings to the public purse and tax revenues. Based on the evidence from the study sample, they have delivered **well-being and education benefits worth approximately £13.7m and £1.1m (annualised wage increase and annualised tax receipt increase) respectively**. Grossed up to estimate the impact of the whole cultural sector in Dundee, **this could be as much as £15.1m in wellbeing benefits and £1.2m in education benefits (+/-5%)**. This is a very valuable contribution in monetary terms but it is also important to remember that this is about individuals and their own sense of well-being, health, and knowledge development.

7.12 Qualitatively, there is a perception amongst the organisations that engagement with people with protected characteristics could be enhanced. It would be useful in future to aim to monitor this more quantitatively.

Adding strategic value

7.13 The culture offer in Dundee adds value to the CCI sector as well as to Dundee and its economy. Dundee has built a reputation as having a high quality range of arts and culture opportunities across traditional and contemporary arts. The city has collections of national significance and this will be

enhanced by the V&A Dundee. Its historical and cultural offering in publishing, design and the strong links between culture, science and innovation are unique, and combined, have provided substantial strategic added value. Dundee's profile has benefited enormously from the achievements of the Culture Strategy and Action Plan, from collaboration and partnership working and from the long term commitment to culture.

7.14 Dundee is perceived as a very positive, vibrant city and this has boosted residents' sense of it being a good place to live and enhanced their sense of confidence in the city. Stakeholders report that people from other parts of Scotland, the UK and beyond have a more positive perception of Dundee now than they would have done 20 years ago and that the development of culture coupled with Creative Industries, has been key to this change.

Points for consideration

7.15 In the study, most organisations were unable to comment or provide data on visitor spend or the origin of visitors. Therefore this impact assessment is based on national benchmarks that have been selected and adjusted to be most relevant. Going forward, if the partners' aspiration is to provide more precise data for Dundee, then consideration must be given as to how this can be achieved. There is potential for a collaborative approach where organisations in the city agree to collect email addresses of visitors and undertake a follow up on-line survey. We understand that the V&A is establishing a Monitoring and Evaluation Framework in order to assess its impact over time. This will include market research with visitors and is a model that could be rolled out to other organisations.

7.16 Regeneration is as much about people as it is about place and so it would also be useful to gather data that can demonstrate engagement with key groups in Dundee. This would allow strategic partners, and individual organisations to better target priority groups and increase their participation.

7.17 Dundee has a proven track record of setting its sights on stretching ambitions, achieving them, then setting and achieving further goals. The most recent example is of course the V&A. There is a strong sense that this willingness to be aspirational and determination to succeed must and indeed will continue. There are already project proposals around major new cultural developments and works which will further enhance the richness of Dundee's cultural sector. These are bound up in the strength of the city's creative talent and activities and it will be important that future assessments capture baseline, progress and impacts of these new projects.

Data for future impact assessments

Economic impact

7.18 Assessing the economic impact of the Culture Strategy and Action Plan going forward should consider five strands which lead to the estimate of the total FTE jobs and GVA. These are:

- **Direct permanent employment impact:** Year-round permanent employment at delivery organisations supported by the Strategy, and the GVA that this generates.
- **Induced and indirect impact of direct operations:** The multiplier effects of the organisations' expenditure on wages and suppliers. Indirect impacts relate to the spend of supported organisations on suppliers, whilst induced impacts relate to the effects of additional spend in the economy by those employed by supported organisations. The wages received by employees and supply chain expenditure will re-circulate in the economy as a result of

expenditure by employees and supply chain companies, supporting further jobs. These jobs will also generate GVA.

- **Temporary employment impact:** The temporary employment of artists and operational staff for event delivery (if *not* captured in the supply chain expenditure above) and the GVA this generates.
- **Visitor spend impact:** Jobs and GVA supported in the visitor economy as a result of additional visitor spend *outside* of events.
- **Indirect and induced impact of visitor spend:** The multiplier effects of the jobs and GVA supported by the visitor spend, e.g. spend in local hotels, shops and restaurants.

7.19 Table 7.1 sets out the data that will require to be collated in order to assess the economic impact going forward.

Table 7.1: Economic impacts: indicators and data required

Data	Source
Headcount of permanent employees, or FTEs where available	Organisation, event or project reporting
Headcount of temporary employees	Organisation, event or project reporting
Total audience at supported events	Organisation, event or project reporting
Total unique attendees at supported events	Organisation, event or project reporting
Proportion of day/overnight visitors	Organisation, event or project reporting, or benchmark from evaluations of similar activity
Average spend per day visit	Organisations, event or project reporting, or benchmark from evaluations of similar activity
Average spend per overnight visit	Organisation, event or project reporting, or benchmark from evaluations of similar activity
Average duration of overnight visit	Organisation, event or project reporting, or benchmark from evaluations of similar activity
Proportion of non-local day visitors	Organisation, event or project reporting, or benchmark from evaluations of similar activity
Proportion of non-local overnight visitors	Organisation, event or projects reporting, or benchmark from evaluations of similar activity

7.20 Additional data to monitor and add detail to the economic impact will include: inward investment; accelerated or new spend on infrastructure and cultural facilities and programmes; and profile of the sector in terms of business, jobs, education provision, and sector growth.

Social impact

7.21 There are three main types of social impact to consider, which lead to quantifiable estimated impacts. These are:

- **Volunteer impacts:** Two types of volunteer impact are identifiable:
 - An economic equivalent impact, which estimates the equivalent value of work carried out by volunteers, based on average earnings in the area; **or**
 - A wellbeing impact, which considers the value to volunteers in terms of their increased wellbeing and confidence gained through volunteering

- **Participation wellbeing impacts:** health and wellbeing benefits that result from engagement in the arts and culture, which generate a financial return in terms of savings to the public purse; and
- **Participation education impacts:** education benefits that arise from actively participating in the arts and culture, resulting in personal financial gain for participants as well as savings to the public purse.

Table 7.2 sets out the data that will require to be collated in order to assess the social impacts of the Culture Strategy and Action Plan.

Table 7.2: Social impact: indicators and data required

Data	Source
Total volunteer numbers	Organisation, event or project reporting
Total volunteer hours	Organisation, event or project reporting
Total audience	Organisation, event or project reporting
Total active participants	Organisation, event or project reporting

7.22 Other indicators that could be considered to add detail to the assessment are: participation from key groups, e.g. those with protected characteristics and any specific training or skills development provided.

7.23 The methods and timing for collecting the data for the future impact assessment must fit with the resources available to the individual organisations and as a whole to ensure it is not over-onerous but that this is balanced with the need for impact and management information. Undertaking the calculations and reporting could be undertaken annually, adopting a light touch approach, with a fuller impact assessment at the end of three years. This should be discussed with the Strategy and Action Plan partners.

Appendix 1: Stakeholder consultee list

Name	Job Title	Organisation
John Alexander	Council Leader	Dundee City Council
Beth Bates	Director	Dundee Contemporary Arts
Bryan Beattie	Director	Creative Services Scotland
Kate Boyson	Principal Accountant	Dundee City Council
Anna Day	Senior Cultural Engagement Officer	University of Dundee
Gillian Easson	Director	Creative Dundee
Bill Gartley	Head of Cultural Services	Leisure and Culture Dundee
Phillip Long	Director	V&A Dundee
Andy Lothian	CEO	Insights
Sarah Loveday	Head of Operations	Dundee Rep Theatre
Stewart Murdoch	Director, Leisure and Culture	Dundee City Council
Ellis Watson	Executive Chairman	DC Thomson

Appendix 2: Steering committee list

Name	Job Title	Organisation
Jamie Bell	Team Leader – Partnerships	Scottish Enterprise
Stewart Murdoch	Director, Leisure and Culture	Dundee City Council
Gillian Simpson	Engagement Partner - Partnerships	Scottish Enterprise