

MUSEUMS VALUING MUSEUMS



Impact and innovation among national museums

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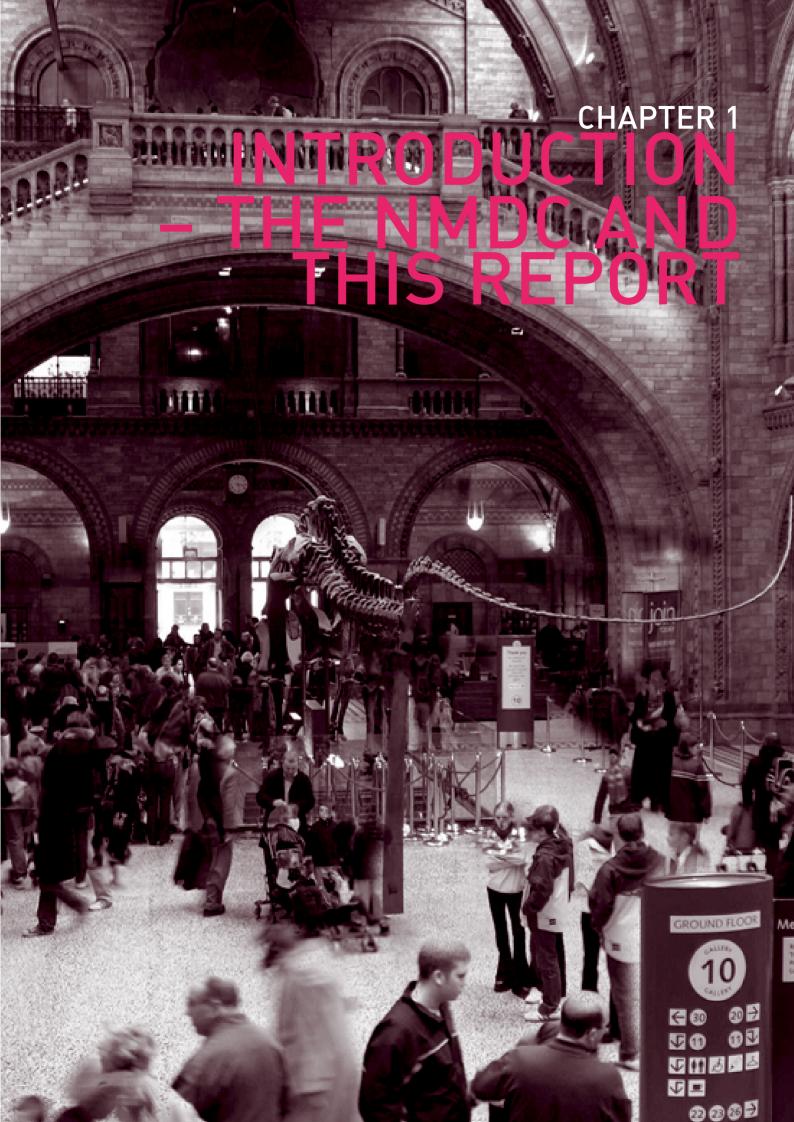
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Contents

1. Introduction – the NMDC and this report	3
- this report, its purpose and method - key findings	4 5
- what is the NMDC?	6
- this report's methodology	6
2. The sector and its objectives	7
- government policy and funding	8
- wider objectives for museums and galleries	12
3. Economic impacts	15
- what NMDC members spend	16
- the wider economic impact of NMDC institutions	17
- exports	19
- England, Wales, Scotland and Northern Ireland	19
- employment and its geographical distribution	20
4. Cultural and wider impacts	21
- rejuvenation and regeneration	22
- touring and exhibitions	24
- creativity and innovation	28
- education	31
5. Good government and civic engagement	35
- why a wider role?	36
- how NMDC members contribute	36
- links between national and local work	38
- widening access	40
6. NMDC institutions and their contribution	41
- what does this add up to?	42
7. Appendix: method used in calculating the	
economic impact of NMDC institutions	45
- references	47
- member of the National Museum Directors' Conference	48



1. Introduction - the NMDC and this report

1.1 This report

Britain's museums and galleries are so much a part of our culture that, paradoxically, it is easy to overlook them. Major national institutions act as curators for the United Kingdom's collections of science, natural history and art. To many people, the institutions that house these collections are imagined as impressive Victorian buildings in city centres, stuffed with historic machinery, dinosaurs or paintings. But to those who visit and know them, these institutions are living entities which take the best from Britain's past and translate it into a message of contemporary relevance.

This report is intended to take stock of the UK's national museums and galleries (those which are members of the National Museums Directors' Conference) and to assess their place within the wider social and economic framework of society. In doing so, efforts are made to address a number of issues, including the Government's approach to museums and galleries; the economic impact of the NMDC institutions; creativity and innovation; civic engagement and, finally, an analysis of the state of the sector. Two other reports are to be published by NMDC, considering other aspects of museum and gallery activity. Collaboration with other institutions and community engagement are the main focus of their studies.

The Government's approach to museums and galleries is, inevitably, an element in its wider policy towards culture, media and sport. At its simplest, the Department of Culture Media and Sport (DCMS) and other sponsoring departments want to see the services for which they have responsibility taking a wider role in society. Similar, though culturally specific, approaches are taken by the devolved governments in Scotland, Wales and Northern Ireland. Beyond the traditional expectations of participation and cultural transfer, the current government wishes to use culture (and media and sport) in an effort to affect personal behaviour, to reduce crime and to increase the self-esteem of individuals who have traditionally been excluded from the benefits of society.

In addition to these social objectives, cultural institutions are expected to provide "value added" within the creative and leisure industries, and also "knock-on benefits for other industries, for example in areas where cultural developments have kick-started economic regeneration" (DCMS, 2003, page 28). Thus, the Government now wants to use its public subsidy of culture to encourage much more than a traditional approach to curatorship and public admissions. Museums and galleries are expected to broaden their educational, outreach and civil society activities, particularly in the regions.

Of course, all the major national institutions have long had such programmes. The Government has (as Section 2 of this report shows) attached targets to the resources allocated to individual institutions. These targets are intended to encourage institutions to adopt the policies put forward by DCMS. The Department is undertaking an assessment of the educational benefits that involvement with museum resources can bring.

The economic impact of NMDC institutions is another of the Government's key concerns. Section 3 of this report examines the data available on the turnover of NMDC museums and galleries, the number of people visiting NMDC institutions, the proportion of these who come from overseas and a cautious estimate of the likely impact of the spending generated by tourists. On the basis of overseas tourism spend, the "exports" of the sector are assessed. The way in which NMDC institutions use resources in Scotland, Wales and Northern Ireland is also considered.

Section 4 examines the way in which NMDC museums and galleries have opened new facilities in recent years in towns and cities throughout the UK. The way in which institutions have toured exhibitions and artefacts to regions of the country and overseas is analysed. One of the ways that national collections can provide access to all citizens in all parts of the country is by ensuring exhibits do not sit forever in their

urban homes. This part of the report also considers how museums and galleries link with industry, schools and individual members of the public in efforts to provide creative solutions to economic, social and personal problems.

Another growing demand facing public and private institutions is the need to take part in a wide range of civil society activities. Cultural institutions cannot be thought of as inward-looking (an accusation that has from time to time been made of cultural institutions) if there is evidence they and their staff are regularly involved in a wider set of public and private institutions. Section 5 examines the way in which NMDC members involve themselves in civil society.

Finally, Section 6 provides an overall summing up of how the NMDC museums and galleries currently fit into the wider social and economic framework set for them. It attempts to assess the performance of the sub-sector against the Government's objectives for it and also to look ahead to ways in which the institutions concerned can more effectively address some of the objectives set for them.

1.2 Key findings

This report's main conclusions are:

- NMDC institutions had an overall turnover of £715 million in 2003-04;
- Spending generated by visitors to NMDC institutions is estimated to be at least £565 million:
- The overall impact of the NMDC "sector", including indirect and induced effects, is in the range £1.83 billion to £2.07 billion;
- The overseas "export" of NMDC institutions is some £320 million a year;
- Between 1997-98 and 2003-04, grant-in-aid to major NMDC institutions generally increased no faster than the Retail Price Index - just under 19 per cent - while average earnings surged by 34 per cent and overall UK public expenditure by 41 per cent;
- Looking ahead to the periods 2003-04 and 2005-06, larger NMDC members will receive grant increases of 5.2 per cent, while government as a whole pushes up its spending by 13.9 per cent;
- Six out of the top ten UK visitor attractions in 2002 were NMDC members Tate Modern, British Museum, National Gallery, Natural History Museum, Victoria & Albert Museum and the Science Museum;
- In 2002 NMDC members received 6.1 million visits by children equivalent to half the UK's entire population of children;
- 3 million people participated in formal learning activities onsite in 2002, with a further 5.6 million learners off site – equivalent to one tenth of the UK population;
- Over the same period, their websites received 53 million hits- almost one per head of the UK population;
- Resources distributed to NMDC institutions are spread broadly on the basis of population - between England, Wales, Scotland and Northern Ireland;
- NMDC institutions face demands on them to fulfil the competing roles of curators and preservers of collections; educators at university, FE and school levels; providers of mass tourist attractions, managers of public spaces and public communicators.

1.3 What is the NMDC?

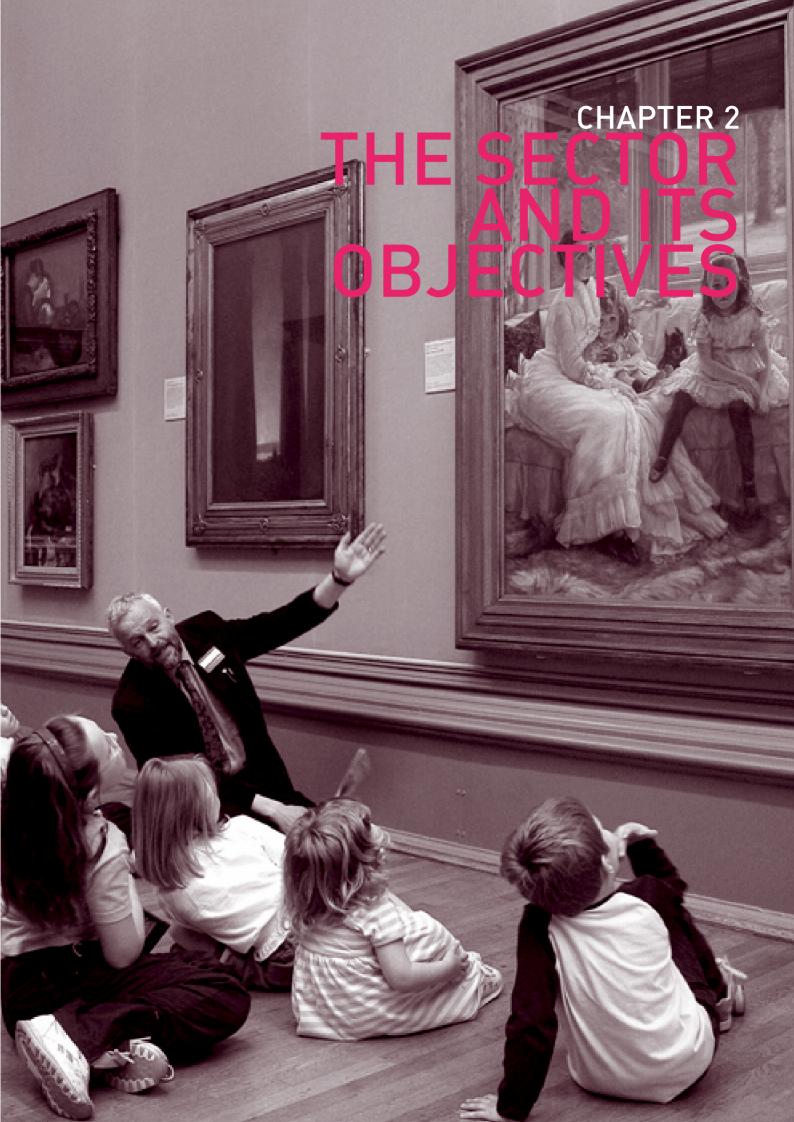
The National Museum Directors' Conference represents the leaders of the UK's national collections. These comprise the national museums in England, Scotland, Wales and Northern Ireland, the three national libraries, and the National Archives. While its members are funded by central government, the NMDC is an independent and non-governmental organisation. The organisation provides its membership with a valuable forum for discussion and debate and an opportunity to share information and work collaboratively.

1.4 The report's methodology

This report is the responsibility of researchers from the London School of Economics and Imperial College. It has used a number of research techniques, including desk studies, a major questionnaire and a number of round table discussions with key NMDC executives and directors. Desk studies have researched existing studies of the kind undertaken here, though no precise analogue was found. A number of economic impact studies have previously been undertaken, some of which have looked at museums. A number of American studies have considered the economic impact of arts and, in particular, of visitors to cultural events. Such studies have been reviewed. Studies of this kind are contentious, and efforts have been made to avoid exaggerated claims.

A questionnaire was distributed to all 29 NMDC members, asking for information about expenditure, income, visitors, education, innovation, creativity and civic engagement. These questionnaires became the basis for a significant part of the factual component of the report, though data has also been taken from other sources. In any factual study, differences in the treatment of particular kinds of budget, or of other indicators, provides challenges for a data-collection exercise of this kind. Every effort has been made to ensure consistency in the use of data and to match figures provided by the questionnaires with those available from other sources. Occasionally, interpretation and estimation has been necessary.

Throughout the report, the researchers have sought to err on the side of caution. If there are disagreements about the data or the use to which they have been put, the results produced here will tend to understate impacts rather than to exaggerate them. Information provided from all sources has been analysed and presented in the pages that follow. In the longer term, there is a clear need for better quality data about all aspects of the museums and galleries sector and its impact. At present, there are few effective official statistics.



2. The sector and its objectives

2.1 Government policy and funding: recent trends and future plans

Museums and galleries depend to a significant extent on government grant-in-aid. This reliance has significantly increased in the years since entry charges were – at the request of the Government – abolished. In the longer term, the extent to which government grant-in-aid rises will be very important. Whereas entry charges could have been raised in line with other leisure expenditure within the economy, it appears likely (on the basis of recent experience) that governments will decide to raise grants at a different – possibly slower – rate.

Because of a succession of policy changes, one-off capital and/or revenue grants and definitional issues, all comparisons are subject to limitations. DCMS collects a number of – only partly published data which seeks to make consistent comparisons over time. The most important change took place in 2001 when, at the Government's suggestion, a number of institutions removed admission charges. Every effort has been made to avoid the statistical distortions – for example, increased grant-in-aid and VAT concessions – associated with this change. Most comparisons before and after 2001 will be affected. As a result, it has not always been possible to provide data over consistent time series, or for the same institutions.

Thus, for example, if grant-in-aid were to increase from year to year in line with general inflation (which might be thought appropriate as a benchmark for such rises) while the costs facing museums and galleries increased more quickly, there would be growing pressure on institutions' cost bases. In order to examine the extent to which recent funding to the DMDC institutions has changed, Table 2.1 below shows the grant-in-aid received by a number of NMDC members in the periods 1997-98 to 2003-04. The institutions have been chosen because they are NMDC members which receive funding from the Department for Culture, Media and Sport. The figures are adjusted, where possible, to remove additional funding paid to compensate for the loss of admission charges. For institutions where such compensating grant-in-aid figures are not known, figures for later years are omitted.

The grant figures received by individual museums and galleries are then compared with all United Kingdom public expenditure (Total Managed Expenditure) over the same period. Although there cannot be an exact read-across between funding of the NMDC members and the whole of public spending, the relative movements from the starting year can reasonably be compared.





Table 2.1			
Grant-in-aid,	, DCMS-funded NMDC institutions,	1997-98 to	2003-04 (£ million)

	1997- 1998	1998- 1999	1999- 2000	2000- 2001	2001- 2002	2002- 2003	2003- 2004	% increase 97-98 to 03-04
British Museum	31.9	33.9	34.7	34.9	36.0	36.9	37.7	18.1
Imperial War Museum	10.6	10.6	10.8	11.9	11.6	11.8	11.9	12.3
Science Museum	21.1	20.3	21.8	22.2	23.4	23.4	23.7	12.3
Natural History Museum	27.7	27.0	29.6	28.5	29.0	31.4	32.9	18.6
National Maritime Museum	10.5	10.2	10.9	11.7	12.5	13.4	13.7	30.5
National Museums Liverpool	13.1	12.7	13.7	14	15.5	16.6	17.3	32.1
National Gallery	18.3	18.7	19.5	19.2	19.9	20.4	20.4	11.5
National Portrait Gallery	4.8	5.0	5.1	5.1	5.5	5.7	5.7	18.8
Tate	18.7	19.2	19.7	24.9	26.8	27.8	30.3	62.0
V&A	29.9	29.1	30.0	30.2	31.4	32.0	32.2	7.7
Museum of London	4.3	4.2	4.4	4.5	5	5.6	6.6	53.4
Sir John Soane's Museum	0.6	0.6	0.6	0.6	0.7	0.7	1.1	83.0
Royal Armouries	5.2	3.7	4.8	4.8	5.1	5.3	5.4	3.8
Wallace Collection	1.9	1.9	2.5	2.1	2.2	2.6	3.0	57.9
UK Public Expenditure (£ billion)	323.6	333.3	343.6	366.8	389.6	421.0	455.7	40.8
Retail Price Index*	156.3	162.6	165.2	170.1	173.1	175.7	181.2	18.8*
Average Earnings Index	85.7	90.7	94.4	98.7	103.9	108.0	110.8	34.2*

*RPI increase from April 2003 to March 2004 assumed to be 2.5 per cent; average earnings from April 2003 to March 2004 assumed to be 4 per cent.

Sources: (i) DCMS data, adjusted – where figures available – to take account of museums' and galleries' own figures for additional grant-in-aid to replace admission charges; Public Expenditure Statistical Analyses 2003-04, Cm 5901, Table 3.1; (iii) Office of National Statistics, All Items RPI, Table RP04, www.statistics.gov.uk; (iv) Office of National Statistics, Labour Market Trends, various, Table E1.

 $There \ are \ no \ official, \ published, \ figures \ which \ provide \ a \ wholly-comparable \ set \ of \ data \ for \ DCMS-sponsored \ NMDC$ institutions, taking account of the extra grant-in-aid given to compensate for the removal of admission charges (in those institutions where this occured). Table 2.1 generally shows figures net of the amount paid to compensate for loss of admission charges. In some cases, e.g. the Natural History Museum, it has not been possible to remove this additional grant. Sir John Soane's Museum figures include funding for a major capital project in 2003-04. Therefore, the figures shown in the table are, if anything, generous to the Government's case. The lack of good comparable data hinders fair analysis.

The increase in NMDC members' funding has varied significantly in the period since 1997-98, with some institutions receiving very modest grant-in-aid increases, compared with even the Retail Price Index. Earnings have increased significantly faster than most institutions' grant than the grant received by many of the larger institutions. Public expenditure as a whole has increased by over 40 per cent since 1997-98, suggesting that a number of larger museums and galleries have been less than a priority over the last six or seven years. Given the growth in earnings across the economy, increasing wage inflation in other parts of the public sector and the removal of admission charges (which could have reflected growth in the economy more generally), the cost squeeze on museums and galleries over this period has been severe.

It is also possible to look ahead - for the periods 2003-04 to 2005-06 - at the funding agreements made by DCMS with individual institutions. Again, the planned spending increases can be compared with the equivalent figures for Whitehall departments over the same years. Table 2.2 shows the resource baseline (for 2003-04) and the proposed levels of grant-in-aid for 2004-05 and 2005-06. The institutions shown are again a selection of NMDC members, based on data immediately available from DCMS.

Table 2.2 Grant-in-aid (resource), to be received by selected NMDC members, (cash, £million)

	2003- 2004	2004- 2005	2005- 2006	% change
British Museum*	36.42	37.50	38.21	+4.7
Imperial War Museum	16.24	16.89	17.09	+5.2
National Gallery	19.45	20.227	20.46	+5.2
Natural History Museum	36.10	37.54	37.98	+5.2
Museum of London*	5.80	6.03*	6.10*	+5.2
National Museums Liverpool	16.28	16.93	17.13	+5.2
National Maritime Museum	13.40	13.93	14.09	+5.2
National Museum of Science & Industry	31.3	31.02	31.38	+2.6
National Portrait Gallery	5.46	6.01	6.06	+11.0
Royal Armouries	6.29	6.54	6.61	+5.2
Sir John Soane's Museum	0.70	0.77	0.78	+11.0
Tate*	27.48	28.58	28.90*	+5.2
V&A	33.84	35.19	35.60	+5.2
Wallace Collection	2.11	2.32	2.35	+11.0
Departmental Expenditure Limit, (cash	, £million)			
DCMS	1,401	1,473	1,545	+10.2
Education & Skills	25,257	27,369	29,908	+18.4
All Whitehall departments	263,800	279,500	300,700	+13.9

^{*} Tate received an additional one-off grant of £2 million in 2003-04.The figures for the British Museum include an additional £500,000 over the funding period for the Africa 2005 project. Also, the Museum of London is to receive one-off grants in 2004-05 and 2005-06 to fund the merger of the Museum of Docklands.

The figures for 2003-04 will generally differ from that in Table 2.1 because those used for Table 2.1 exclude additional grant-in-aid to compensate for loss of admission changes (but not in all cases) while those in Table 2.2 include such extra grant-in-aid.

Sources: (i) DCMS Funding Agreements with individual institutions; (ii) Public Expenditure Statistical Analyses 2003, Cm 5901, Table 1.2);(iii) DCMS DEL provided by DCMS, unpublished figures.

The picture to emerge from the Table above shows most NMDC members receiving 5.2 per cent (in cash) additional revenue grant between 2003-04 and 2005-06. Smaller institutions will receive a bigger uplift. The DCMS's overall expenditure limit will increase by 8.9 per cent in the periods from 2003-04 to 2005-06, while the Department for Education & Skills will enjoy an increase of over 18 per cent.

Although it is possible, within the terms of the funding agreement, that institutions may receive more than the figures shown in Table 2.2, it is very unlikely any such additions would substantially change the picture revealed above for most institutions. The above figures, after all, cover the Chancellor's Spending Review planning period and are intended to provide institutions with a clear view of their future funding. Museums and galleries are planned to decline as a proportion of overall DCMS resource use over the period of the existing spending review settlement.

The position of NMDC institutions looks even less favoured when compared with other sub-sectors within the DCMS budget. Table 2.3 gives spending figures - actual or planned – for each year from 2001-02 to 2005-06, for a number of sub-sectors within the DCMS budget. The equivalent figures for the NMDC institutions covered by the same source are also shown.

Table 2.3 DCMS grant-in-aid allocations, 2001-02 to 2005-06 (£million and %)

	2001- 2002 Outturn	2002- 2003 Provision	2003- 2004 Plans	2004- 2005 Plans	2005- 2006 Plans	% change 2001-02 to 2005-06
Arts	253.15	296.47	336.50	366.50	411.50	+63
Broadcasting & Media	104.60	113.17	116.82	123.82	123.92	+18
Sport	63.90	112.10	127.80	119.10	122.10	+91
Historic Buildings etc.	141.77	153.75	176.51	173.95	184.38	+30
Museums, Galleries & Libraries	352.65	379.82	404.62	421.49	443.29	+26
- of which, NMDC	237.35	262.61	271.27	273.85	276.92	+17
Royal Parks	20.14	27.82	24.16	24.16	24.16	+20
Tourism	66.10	71.76	52.76	54.26	55.76	+16

Source: DCMS Departmental Report 2003, pp 80 to 82

These figures show how the Government's priorities have shifted since the major increase in public expenditure heralded by Spending Review 2000. It is clear the arts have been extraordinarily successful in attracting additional resources, with spending rising by an average of about 15 per cent per year. Sport has been even more effective in winning DCMS cash. Broadcasting & Media, Museums & Galleries, Royal Parks and Tourism have done less well. The NMDC institutions listed in the DCMS Departmental Report (covering virtually all the larger institutions) have received a smaller percentage increase than Museums, Galleries & Libraries as a whole.

It is possible to follow the funding shown in Table 2.4 down to individual arts bodies, including a number of galleries that happen to be funded by the Arts Council as opposed to DCMS. In order to make like-with-like comparisons, the examples quoted below show major national institutions and a small number of key galleries only.

Table 2.4 Arts Council funding, to be received by selected institutions (cash, £million)

	2003- 2004	2004- 2005	2005- 2006	% change
Royal Opera House	21.75	23.11	24.90	+14.3
Royal National Theatre	14.81	16.36	17.26	+16.5
English National Opera	15.10	16.07	16.56	+10.4
Royal Shakespeare Company	13.30	13.60	14.00	+ 5.5
London Symphony Orchestra	1.66	1.74	1.92	+16.0
ICA	1.05	1.13	1.25	+19.0
Serpentine Gallery	0.61	0.66	0.72	+18.2
Whitechapel Art Gallery	0.77	0.80	0.83	+ 7.8

Source: Spending plan 2003/06 for regularly funded organisations, Arts Council, 2003

The difference between the treatment of the theatres and galleries shown in Table 2.4, including both elite and more local ones, is stark when compared with the 5.2 per cent rises for the same years proposed for many larger NMDC institutions. These figures were given in Table 2.2. It is clear there has been – and will continue to be – a major shift in emphasis away from national museums and galleries and towards the performing arts. The comparison between the Table 2.4 institutions and national museums and galleries is even more stark, given that many of the bodies shown in Table 2.4 have box office or other admission charges and can therefore (so long as they are competitive) take advantage of growing leisure spending within the economy.

Tables 2.3 and 2.4 suggest NMDC-type institutions need a champion. Improved productivity and significant tourism-related exports make a convincing case for the sector. Yet, at present, evidence suggests little more than a grant-in-aid standstill in future years. Their average year-on-year grant increase over the full period 2001-02 to 2005-06 of about four per cent represents, at best, zero real terms growth in a period when public sector inflation has been relatively high. Yet, during this period there has been a massive additional demand on many NMDC institutions because of the large increase in visitor numbers following the abolition of admission charges. It is, of course, government policy that institutions should raise more income from selfgenerated sources (other than admission charges). The extent to which this can be done varies from institution to institution.

The treatment of NMDC institutions is, arguably, doubly odd given that the increase in visitors in relation to the modest increase in grant funding will have meant that productivity within most museums and galleries must have hugely increased. Using grant-in-aid per visitor as a proxy, productivity increased by about 5.3 per cent in cash terms between 1997-98 and 2002-03. Subsidy fell from £8.55 per visitor to £8.10 per visitor over this period. The lack of an equivalent rise in attendance at other cultural forms during the same period - when there have been large rises in funding for many bodies - must suggest falling productivity in some areas of the arts. The NMDC institutions may, in most cases, have been too successful and, crucially, have avoided the kind of recurring funding "crises" that force the Government to open its coffers.

2.2 Wider objectives for museums and galleries

There is a view that museums and galleries are conservative institutions and that they are disproportionately metropolitan in their orientation. It is inevitable that organisations charged with preserving and exhibiting the nation's heritage will spend a proportion of their time attending to the needs of the inherited cultural assets. Conservation is, inevitably, conservative.

On the other hand, Britain's museums and galleries are, in virtually all cases, also concerned with capturing the best of contemporary history, culture and nature so as to be able to maintain the integrity of their collections for the future. Thus, for example, the Victoria and Albert Museum has recently run exhibitions which are concerned with Britain's inheritance (a Constable exhibition, run jointly with the Tate, in Sheffield) and also with enduring and contemporary concerns (the Teddy Bear Story, in Liverpool). It is easy to see how such exhibitions connect with both high and popular culture nationally, while also ensuring popular accessibility in particular regions.

Perhaps more problematic in terms of official handling of the national museums and galleries is the very wide range of activities that are demanded of them. At its simplest, Britain's national institutions are expected to be traditional museums or galleries, but also to act as popular cultural attractions and, at the same time, as places of learning. They are, on the basis of recent practice in many major cities, expected to contribute to economic regeneration and to play a part in wider civic

initiatives. Even private companies committed to the highest standards of corporate social responsibility would not be expected to pursue so many exacting objectives. The Government has recently accepted that too many targets have been set for some public services and the number used in culture, media and sport has been reduced. Nevertheless it is important that where targets are removed there is no loss of official interest in the activity concerned.

The extent of the Government's demands can be seen in the funding agreements made by the Department for Culture, Media and Sport with individual institutions. As an example of the different objectives set for NMDC institutions, the Table below looks at the targets set for the National Gallery for the three years from 2003-04 to 2005-06. Other institutions face the same kind of requirement.

Table 2.5 National Gallery's projected contribution to DCMS performance targets

	2003-04	2004-05	2005-06	% change
Total number of visitors	4.1m	4.2m	4.5m	+10%
Numbers of children visitors	360,000	370,000	425,000	+18%
Number of venues in England to which objects are loaned	25	30	35	+40%
Number of C2DE visitors	370,000	375,000	405,000	+ 9%
Number of website visit sessions	2.5m	2.5m	2.75m	+10%
Number of children in organised programmes	90,000	90,000	110,000	+22%
Government "resource" grant-in-aid	19.45	20.23	20.46	+5.2%

Source: Department of Culture, Media and Sport, National Gallery Funding Agreement, 2003

The funding agreement for the National Gallery is interesting for two reasons. First, it shows the demands made to be both a mass public attraction, while at the same time achieving government-determined social and educational objectives. The need to maintain its collections and act as a centre of scholarship is dealt with elsewhere in the Funding Agreement. The second key evidence provided by Table 2.5 is the demand that the National Gallery should increase visitor numbers, C2DE visitors and children visitors at a rate well in excess of its revenue funding increase. On top of these demands, educational visits, web-based access and loan activity are also expected to rise sharply.

'Paradise' at Bristol City Museum and Art Gallery, 2002, organised in partnership with the National Gallery .



These targets come in a time of considerable uncertainty for institutions such as the National Gallery which have been particularly exposed to wider impacts on the UK and London economies since 2001. The fall-out from the terrorist attacks in the United States, foot and mouth disease at home, the global SARS scare and a more general slowdown in the economy, have conspired to cut domestic and overseas visitor numbers to the capital. Many institutions have suffered declines in visitor numbers.

Other NMDC institutions face similar expectations for sharply improved productivity over the next two years. British institutions are in a very different position to those in most other countries which are rarely expected to pursue such wide social and educational objectives in exchange for their government funding. However, some of the demands on museums and galleries are not unique to Britain. Institutions in most major countries are now expected to play the roles of cultural guardian, mass tourist attraction, university, school and civic space.

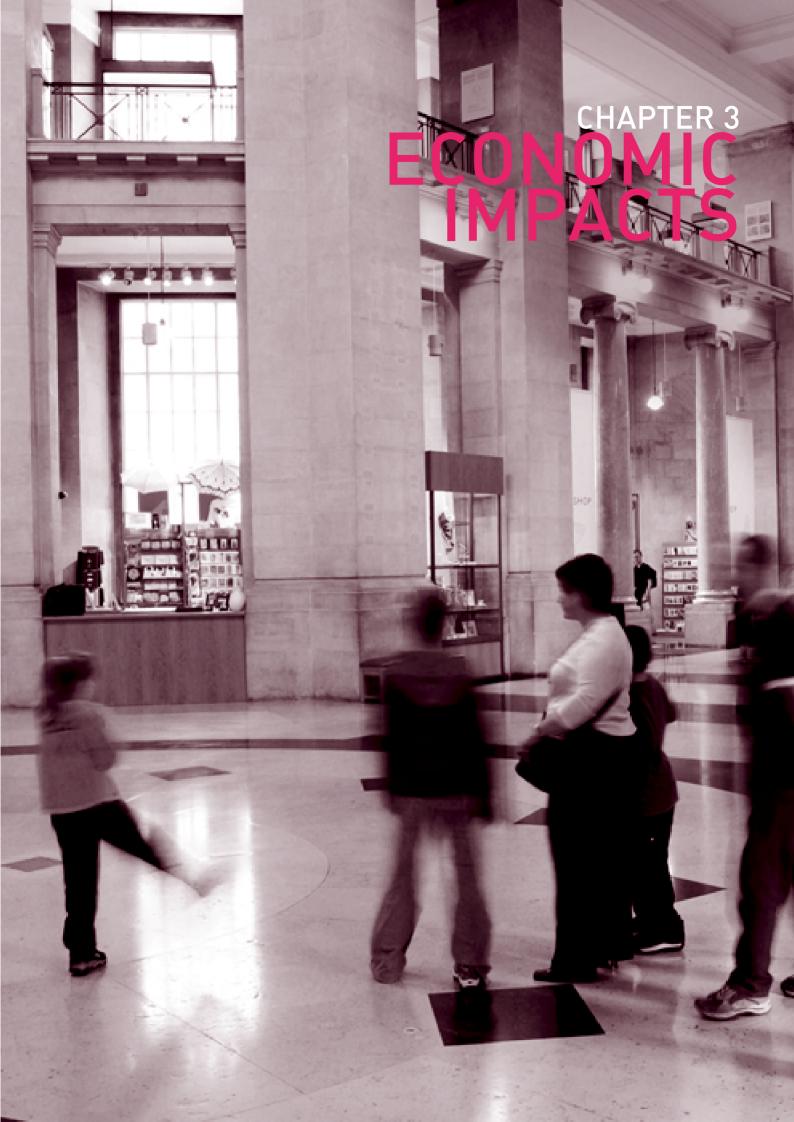
Thus, major museums and galleries find themselves in the position of having to fulfil their traditional role as curator of millions of exhibits and specimens, while at the same time competing with funfairs, waxworks, adventure holidays and a rapidlygrowing leisure industry. Many museums and galleries are, also acting as if they were research universities, publishing papers in learned journals and accommodating overseas scholars.

In the past decade, a new role has been attributed to museums and galleries, particularly in ex-industrial cities that are seeking to modernise and rebuild their economies. Economic regeneration and the creation of attractive city downtowns has, in part, relied on the Tate (Liverpool and St Ives), the Royal Armouries (Leeds) and a large number of touring exhibitions to generate a cultural "buzz". Existing national institutions and new facilities such as the Imperial War Museum North have been seen as essential elements in regeneration.

Imperial War Museum North.



Opposite: Visitors in the Main Hall at National Museum & Gallery, Cardiff.



3. Economic impacts

3.1 What NMDC members spend

NMDC institutions had an over all turnover of £715 million in 2003-4. This is comparable to box office takings of the whole theatre seated in the UK.

The NMDC institutions are in many cases significant centres of economic activity within their local community. The larger museums and galleries each have an annual turnover that dwarfs most locally-based companies. While the institutions themselves undoubtedly think of themselves as businesses, it is less usual for others to view them in this way. Yet, the impact of a museum or gallery within a local economy will generate jobs, spending power and a more general sense of well-being.

The questionnaire conducted as the basis of this study asked NMDC institutions for details about their recent turnover, government funding and the number of staff and contractors employed. There is no existing central source for this kind of information, although some national statistical databases do make it possible to make estimates about the whole sector. However, this particular study is concerned with the NMDC institutions and – in this part of the report – their contribution to local, regional and national economic activity.

The turnover of a museum or gallery is, broadly, the total of all the resources passing through its books within a year. Resources may come from central government grants (generally the bulk of institutions' funding), charges for particular exhibitions, income from shops, restaurants and other retail outlets, sponsorship and, in some cases, regular giving by benefactors. The scale of individual institutions varies significantly (and may change markedly from year to year). But a snapshot of the larger NMDC institutions in 2003-04 is shown in the table below

Table 3.1

Turnover of the 12 largest NMDC institutions, 2003-04

	£m
Tate	69.2
Science Museum	60.0
British Museum	59.5
Natural History Museum	53.4
Victoria & Albert Museum	52.1
National Archives	39.0
National Gallery	36.0
Imperial War Museum	29.5
National Museums Liverpool	24.9
National Museums & Galleries of Wales	24.5
National Museum of Scotland	20.9
National Maritime Museum	17.5

Source: LSE Questionnaire to NMDC Members, July 2003

The size of turnover is not an inherent measure of effectiveness, quality or cultural success. Moreover, the museums and galleries included in the list above include many different kinds of institution: some are single campus entities, while others embrace a number of institutions in different parts of the country. But the scale of the institutions revealed in Table 3.1 does give an indication of the economic importance of each one to its own area and to the country as a whole. Only a small minority of private companies have a turnover in excess of those shown in Table 3.1.

Table 3.2 shows, for comparative purposes, the expenditure of a number of major universities and institutes of a size similar to the NMDC institutions shown above. Data is not yet available for years after 2001-02, though there are unlikely to have been any radical changes since that year.

Table 3.2 Universities and colleges with spending comparable to NMDC institutions 2001-02

£m
71.9
67.0
64.3
61.4
49.5
45.6
44.9
36.2
12.3
11.7

Source: Resources of Higher Education Institutions 2001/02, Table 6), Cheltenham: Higher Education Statistics Agency

This Table shows that the larger NMDC institutions are similar (or in some cases rather bigger) in terms of turnover to a number of Britain's leading universities and colleges. Most local companies and all but the largest professional football teams will have a smaller turnover than the NMDC institutions shown in Table 3.2.

3.2 The wider economic impact of NMDC institutions

The overall turnover of the NMDC institutions in 2003-04 was £715 million. This figure has been calculated from information provided in response to the questionnaire used for this study. This figure is, for comparative purposes, similar to the box office takings of the whole theatre sector in the UK. But, of course, the turnover of museums and galleries is only a part of their overall impact on the economy. Visitors to institutions will spend money on such items as travel, eating out and (particularly in the case of overseas visitors) hotels as a result of their decision to visit a museum or gallery.

Oddly, the UK tourism industry has no reliable data about the motivation of tourists, though DCMS and the tourism promotional bodies are currently undertaking research to reveal more information about why people visit the UK and, just as importantly, why they go to particular kinds of attraction. In the longer term, it is hoped to have a clearer view as to the role that, say, museums and galleries play in generating international and domestic tourism.

At present, a study of the kind being undertaken here must rely on plausible estimates of the economic impact of particular kinds of institution. A very limited number of studies have been undertaken about the impact of, for example, festivals and exhibitions. A study was undertaken within the past two years in the South-West of England about the economic impact of museums there. More recently, there was a study of the economic impact of the Notting Hill Carnival (London Development Agency, 2003). But the DCMS have confirmed that there is no ready-made and reliable methodology in place for calculating the economic impacts of cultural institutions.

Many American institutions have commissioned economic impact studies as part of proposals for fundraising or for more general good government purposes. A comprehensive study entitled 'Arts and Economic Prosperity' was published in 2002 (Americans for the Arts, 2002), based on a major fieldwork exercise during 2000 to 2002. This research suggested that average expenditure by local people attending notfor-profit arts events (excluding ticket and other within-institution spending) in



Up close at the Lady Lever Art Gallery.

smaller towns and cities in the United States amounted to \$21.75 (£13.60) per person per visit. A figure just over half that amount – based on the study undertaken on museums in the South-West of England – has been assumed for those attending museums and galleries outside London. Overseas visitors, according to American studies, spend much more than domestic ones.

In order to assess the likely economic impact of overseas visitors to UK museums and galleries, this study has therefore relied upon existing official data about tourism and tourist expenditure. These figures are reliable and show how much visitors to the UK (with separate figures for London) spend on average for each day of their visit. Using this amount, and an assumption about the amount of time spent on each individual visit to a museum or gallery, it is possible to calculate a plausible value for the amount spent incidentally (i.e. in the wider economy outside the museum) by each overseas visitor to an NMDC institution.

More detail for this calculation is included in Appendix 1. On the basis of our calculations, it is estimated that overseas visitors to NMDC institutions in 2003-04 will spend at least £320 million as a result of their visit to a particular museum or gallery. UK visitors – who spend significantly less per head – are estimated to have spent £245 million. Both these calculations are cautious and are thus likely to underestimate the wider expenditure generated.

By adding together the turnover of the NMDC institutions and this wider economic impact, the overall expenditure generated within the economy will be some £1,220 million. This expenditure by the institutions and their visitors will then produce indirect and induced effects, as those who receive the money spent by the museums and galleries and by their visitors use it to purchase goods and services in the wider economy.

The wider economic impact of the NMDC 'sector' is likely to be in the range of £1.83 billion to £2.07 billion. To estimate this full effect of the sector, it is usual in studies of this kind to apply a "multiplier" to the total of expenditure directly associated with the institutions. This makes it possible to show the full effect of the sector on the wider economy. Using a relatively conservative multiplier - one supported by HM Treasury work on studies of this kind - of 1.5 to 1.7 - it is possible to show that the wider economic impact of the NMDC "sector" is likely to be in the range of £1.83 billion to £2.07 billion.

Even if grant-in-aid given by the Government to NMDC bodies (£486 million in 2003-04) was to be excluded - this money could have been used for some other public purpose - the wider economic benefit would still be between £1.34 billion and £1.58 billion.

The range from £1.83 billion to £2.07 billion reflects the full, wider impact of the NMDC institutions on the UK economy. Such a figure would be equivalent to 0.2% of the GDP. ONS data for 2002 shows the GDP of "recreation and culture" within the economy at £80.235 billion (Office of National Statistics, 2003, Table 1.8). The economic impact of NMDC institutions is equivalent to between 2.3 per cent and 2.6 per cent of this total, though some of the benefit of the impact may be spending on items other than recreation and culture.

3.3 The NMDC sector's export

The "export" (that is, the external trade benefit to the UK economy) of the NMDC museums and galleries will be at least the £320 million generated by overseas visitors. In reality the figure will be higher as a result of further exports generated by scientific, creative and trading activities. At £320 million, exports would be similar to those of music and the visual and performing arts, which on the basis of DCMS data were £290 million in 2001. ONS figures show the overall net export - that is, the excess of exports over imports - of "personal, cultural and recreational" services in 2002 was £769 million. Thus, the likely "export" of the NMDC institutions is a significant contributor to the overall successful performance of this sector.

3.4 England, Wales, Scotland and Northern Ireland

The total expenditure and grant-in-aid of NMDC institutions in England, Scotland, Wales and Northern Ireland is shown in Table 3.3. The share of population is also given. There is a relatively close match between the proportion of overall spending in each country and its population share.

Table 3.3 Expenditure and grant-in-aid, NMDC institutions, compared with population, by UK territory, 2003-04

	Expenditure	Grant	Population
	%	%	%
England	83.9	78.9	83.3
Scotland	7.7	9.6	8.3
Wales	6.5	8.5	5.0
Northern Ireland	2.3	3.0	3.3

Source: Analysis of Questionnaire, July 2003

In many larger cities such as Liverpool, Cardiff, Edinburgh, Belfast, Leeds and London, the impact will be relatively greater than average because national institutions are inevitably, to some extent, located in major urban centres. However, institutions in England, Wales, Scotland and Northern Ireland are now consciously spreading access to "national" collections to other parts of their countries.

3.5 Employment and its geographical distribution

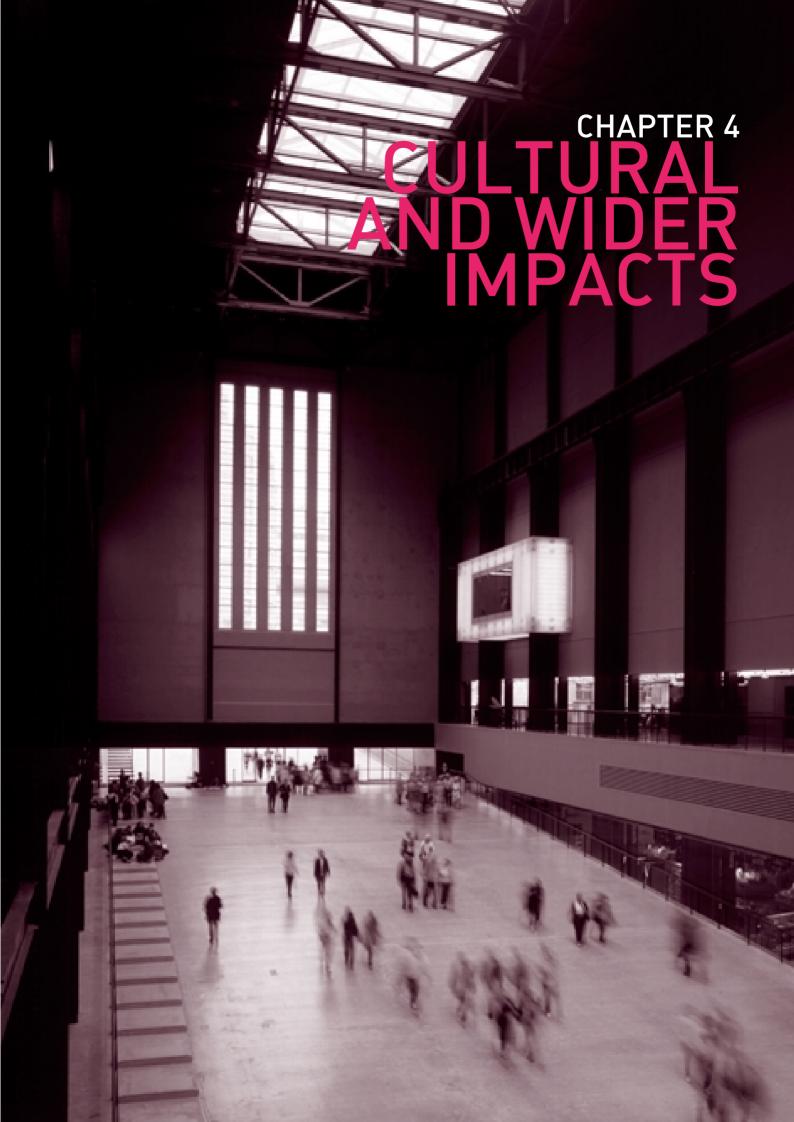
Analysis of the LSE/Imperial Questionnaire shows that NMDC member institutions employed a total of 10,301 full-time and full-time equivalent employees in 2003-04. These are the jobs supported by the direct activities of NMDC museums and galleries, including curators, scientific staff, administrators and everyone else employed. Inevitably, the employees of an institution tend to live reasonably close to their employment. But because of the high cost of living in city centres, notably London, and also because of the location of NMDC institutions in several regions, the distribution of employees' residential addresses – and thus their spending power – is more widely spread than might be expected.

In addition to these direct employment effects, there will be further impacts on employment resulting from the visitor expenditure and the indirect/induced spending that flows from NMDC institutions' activities. Given the calculation above of the ancillary economic impact of NMDC museums and galleries (that is, spending outside the institutions themselves that is generated by their existence) the number of jobs generated is likely to be in the range 13,400 to 21,070. These figures, which are explained in more detail in Appendix 1, assume a job created for every £75,000 to £100,000 of turnover. The equivalent figure for NMDC institutions is £69,400.

If the direct employment of the NMDC institutions is now added to these indirectly-generated jobs totals, the overall number of individuals in the UK employed as a result of the operations of NMDC museums and galleries appears likely to be in the range 23,700 to 31,370.







4. Cultural and wider impacts

4.1 Rejuvenation and regeneration

Britain's major museums and galleries have enjoyed a major rejuvenation in the past decade. Resources provided by the National Lottery, including a number of millennium-related projects – have given many NMDC members significant new buildings or, at the very least, an opportunity to renovate existing facilities. In a world where private sector leisure operators are continuously opening new attractions, the need to innovate is self-evident.

Recent additions to NMDC institutions' facilities have included Tate Modern, created in the old Bankside Power Station on the bank of the Thames. Few museums anywhere in the world have had such an immediate success as the new Tate. Its visitor numbers surpassed the original estimate and there can be little doubt that Britain's tourist industry will have gained significantly in the period since it opened. More importantly, consultants McKinsey estimated that Tate modern generated £100 million's worth of economic activity, creating 3000 full-time jobs. Over half of these effects were enjoyed within the local borough, Southwark.

The results of the McKinsey study are summarised in Box 1. The Tate's experience is by no means unique. Other major museums and galleries, including many NMDC members, have completed major new facilities that will have had impacts not unlike those measured for Tate Modern. The capacity for major museum and gallery projects to contribute to rebuilding the economies of older urban areas is clear at the Tate as in, for example, Bilbao, Liverpool and Manchester.

Box 1

Economic impacts of the Tate Modern development

In July 1994, McKinsey & Company undertook a study for Tate assessing the potential economic impact of the then proposed Tate Gallery of Modern Art at Bankside. To mark the first anniversary of Tate Modern, McKinsey re-evaluated the impact of the gallery in the light of the actual figures for the first year.

In only one year Tate Modern had become the third most visited tourist attraction in Britain and the anchor attraction at Bankside, drawing attention and people to a previously undiscovered and undeveloped area. The economic impact on this area has significantly exceeded expectations. The estimated economic benefit of Tate Modern is around £100 million, of which £50 - £70 million is specific to Southwark. (The projected figure in 1994 was £50 million overall and between £16 to £35 million for Southwark.)

Approximately 3,000 jobs have been created in London, of which just over half are specific to the Southwark area. This figure compares with a projection in 1994 in the region of 1,500. Tate Modern itself has created 467 jobs in addition to 283 during the construction phases. Currently 30 per cent of those employed at Tate Modern come from the local area. The number of hotel and catering businesses in the local area has increased by 23% from 1997 - 2000. This has led to an estimated 1800 new hotel and catering jobs in the Southwark area.

Property prices and commercial investment levels are increasing faster in Southwark than London averages. Commercial development in Southwark has outpaced the London average, as has the increase in the number of new businesses. Tate Modern has been one of the major factors in the regeneration of the South Bank and Bankside. 26 per cent of people questioned in a recent MORI poll associated the area with the gallery.

The Great Court, British Museum.



Other NMDC members to have completed major projects include: the British Museum (Great Court); the Imperial War Museum (IWM North); the National Galleries of Scotland (Royal Scottish Academy); the Natural History Museum (Darwin Centre); the National Maritime Museum (Neptune Court); the National Museums of Liverpool (Museum of Liverpool Life); the National Museums of Scotland (Museum of Scotland); Science Museum (Wellcome Wing); the Tate (Tate St Ives, Tate Britain redevelopment); the National Portrait Gallery (Ondaatje Wing) and the Victoria and Albert Museum (British Galleries).

These major projects and many other, smaller ones are listed in Box 2. A number of the new developments are outside London, suggesting recent efforts to provide more cities with the benefits of the great national collections. The Imperial War Museum North, the Tate St Ives and the National Army Museum North have followed the Tate's Liverpool venture to create new institutions in locations well beyond the capital. In future, it is likely similar objectives will be achieved by increased collaboration between institutions.

Box 2

Major new facilities completed at NMDC institutions, 1993 to 2003

British Museum

18 new galleries completed, 1993 to 2001 Great Court

- plus additional educational, catering facilities

Reading Room restoration

Imperial War Museum

Stage 2 redevelopment IWM London American Air Museum, Duxford Holocaust Exhibition, London Imperial War Museum North, Manchester

National Archives

Family Records Centre (jointly with Office of National Statistics) Museum Cyber Café **Education Room**

National Army Museum

National Army Museum North (Richmondshire)

National Gallery

North Galleries Orange Street Education Centre

National Galleries of Scotland

Paxton House, Berwickshire Duff House, Banff Dean Gallery, Edinburgh Royal Scottish Academy, Edinburgh

Natural History Museum

Darwin Centre

National Portrait Gallery

Ondaatje Wing Weldon Galleries

National Library of Wales

Shop, restaurant, education area Auditorium, gallery

National Maritime Museum

Neptune Court **ROG Astronomy Centre**

National Museums & Galleries, Northern Ireland

Irish Railway Gallery Irish Road Transport Galleries

National Museums Liverpool

Museum of Liverpool Life Conservation Centre

National Museums of Scotland

Museum of Scotland National War Museum of Scotland Museum of Scottish Country Life

Royal Marines Museum

Refurbishment of museum

Royal Navy Museum

Restoration of storehouses Three new galleries

- Victory and Trafalgar
- Nelson the hero and the man
- The Sailing Navy

Science Museum

Wellcome Wing The Dana Centre at the Wellcome Wolfsen Building New Galleries:

- Challenge of Materials
- Making the Modern World
- The Wellcome Trust Temporary **Exhibition Gallery**
- Sparking Reaction (at Sellafield)

National Museum of Photography, Film and Television

- The NMPFT was re-opened as a completely refurbished museum
- The *Insight* Collections and Research Centre
- Wired Worlds new gallery

National Railway Museum

The Works York Rail Academy New Restaurant New Jubilee Garden

Tate

Tate St Ives Tate Modern Tate Store, Southwark Tate Britain redevelopment Hyman Kreitman Research Centre

- Library and Archive Collections at Tate Britain

Victoria & Albert Museum

British Galleries Redevelopment of Museum of Childhood, Bethnal Green Exhibitions partnership with Sheffield Galleries and Museums Trust

Wallace Collection

Centenary Project: reserve gallery; temporary exhibitions galleries; visitors' library; education centre; lecture theatre, restaurant

Looking ahead, Box 3 shows the projects that NMDC members are expecting to complete over the next few years. The number is far smaller than in the past decade. The reduction in the number of new openings is doubtless inevitable, given the major programmes undertaken since 1993. But the slowdown is also as a result of the uncertain financial future that now appears to await national museums and galleries. Lottery-funded capital projects are now much reduced in number, while the removal of admission charges has made it impossible to increase revenue income in line with growth in the wider economy. Moreover, unlike private sector attractions such as theme parks, ecological centres, waxworks and, indeed, most other leisure facilities, the major national cultural facilities face greater obstacles if borrowing to undertake capital expenditure. NMDC members will, it appears, have fewer opportunities to develop new buildings, galleries and public display facilities in the years ahead. The late 1990s and early 2000s may prove to have been a golden era for many parts of the sector.

Box 3

Major new facilities planned for NMDC institutions, 2003 and beyond

British Museum

Ethnographic collection (Wellcome Trust) (2003) Enlightenment exhibition (permanent)

- Restoration of King's Library

Imperial War Museum

Roomsl Air Space (Duxford) Officers Mess Hotel (Duxford) Holocaust Exhibition development Cabinet War Rooms expansion

Churchill Museum (at Cabinet War

National Gallery

East Wing project

Natural History Museum

Darwin Centre Phase 2

National Museums and Galleries of Wales

Big Pit redevelopment National Woollen Museum development National Waterfront Museum National Collection & Archive Centre

Royal Marines Museum

Heritage Centre at Commando Training Centre, Lympstone, Devon

Royal Navy Museum

New facility to celebrate bicentenary of Trafalgar and death of Nelson (2005)

Science Museum

A new Energy Gallery The East Hall The Exhibition Road project - (for completion in 2007)

National Museum of Photography, Film and Television

Lightwave Project (a central urban regeneration partnership) TV Gallery Photography Gallery London presence

National Railway Museum

Shildon Railway Village (south County Durham; opens late 2004) NRM+ project Rapid City (central brownfield redevelopment of 21 acres)

Wroughton

Development of National Collections Centre and Science Museum at Creative Planet

Sir John Soane's Museum

No 14 Lincoln's Inn Fields project (2005)

Victoria & Albert Museum

Theatre Museum redevelopment (2007) Museum of Childhood Phase 2 (2005) Medieval and Renaissance Galleries at South Kensington (2007) The Spiral (Landmark Building for contemporary collections) (2008)

Views of the proposed Churchill Museum.



4.2 Touring and exhibitions

NMDC members are, by their nature, national institutions containing items of the highest quality. Some are "national" for Wales, Scotland or Northern Ireland. Others again are national institutions that have a remit that is geographically-specific within England. Collections are inevitably held centrally in these national repositories of art, cultural artefacts and natural history. There are clearly benefits of concentrating collections in particular locations. This issue is revisited below.

But there are also disbenefits as a result of holding national resources in just one or a (small) number of locations. London's position as the UK's capital, its scale and history have, in particular, led to a heavy concentration of national museums and galleries in one place. But, there are also concentrations in other major cities around the UK. On the other hand, the East and West Midlands are notably bereft of fixed national museum and gallery presence. One way of addressing inevitable - and understandable – complaints from people who live in places which are not the home of a national museum or gallery is to tour special exhibitions or individual exhibits. There is evidence from our survey of NMDC members that such touring is an important part of the work of national institutions.

Touring is also important as part of the UK's cultural outreach to the rest of the world, in a similar way to, say, the BBC World Service or the British Council. As one of the world's leading centres of culture and science, Britain will inevitably be called upon to loan items for exhibitions in other countries. Many Britons, visiting blockbuster exhibitions in New York, Paris, Madrid or Tokyo, will have seen paintings or other items from NMDC collections. Box 4 shows all the countries where NMDC institutions have mounted exhibitions or loaned one or more items in the last three years.

Netherlands

Box 4 Countries where NMDC members have put on exhibitions or loaned items

Irag

Abu Dhabi Algeria Angola Argentina Australia Austria Bangladesh Barbados Belarus Belgium Belize Benin Bolivia Botswana Brazil Brunei Bulgaria Burma Canada Canary Islands Ceylon Chile China (PRC) Taiwan Colombia Iran

Costa Rica Croatia Cuba Czech Republic Denmark Dubai Ecuador Egypt Estonia Ethiopia Falkland Islands Fiji Finland France Germany Ghana Greece Guyana Honduras Hong Kong Hungary Iceland India Indonesia

Ireland Israel Italy Ivory Coast Japan Kazakhstan Kenya Korea Latvia Lebanon Lithuania Macedonia Madagascar Malawi Malaysia Mali Malta Mauritius Mexico Moldova Monaco Morocco Namibia

Nepal

New Zealand Nigeria Northern Ireland Norway Pakistan Palestine Panama Papua New Guinea Paraguay Peru Philippines Poland Portugal Puerto Rico Romania Russia Saudi Arabia Serbia Sicily Singapore Slovakia Slovenia Solomon Islands

South Africa

South Korea Spain Sri Lanka Sudan Suriname Sweden Switzerland Taiwan Tanzania Thailand Tunisia Turkey United Arab Emirates United States of America

Ukraine Uruguay Venezuela Vietnam Zaire Zambia Zimbabwe

The LSE/Imperial survey suggested that NMDC member institutions had, in total, undertaken at least 101 touring exhibitions (some to more than one location) during the period starting in 2000-01. To give a full idea of the extent of touring, Box 5 lists all the UK locations which have shown NMDC exhibits during the past three years. In many cases, for example Birmingham, several exhibitions or exhibits toured to the city. Places in all parts of the UK have been able to see exhibitions put on by NMDC institutions or items from collections. There has been a wide geographical spread, with no region missed out.

Box 5 UK cities, towns and counties where NMDC members have put on exhibitions or loaned items

Leeds

Aberdare Aberdeen Abergavenny Aberystwyth Banff Bangor Barry Bath Batley **Belfast** Berkeley Beverlev Birmingham Blackwood Blaenavon Bodelwyddan Bradford Brecon Brighton Bristol Caerleon Caernarfon

Cambridge Gateshead Canterbury Glasgow Cardiff Goodwick Cardigan Guernsey Carmarthen Halifax Cheltenham Hampshire Chichester Haverford West Cinderford Hengoed Conwy Coventry Hereford Cowbridge Hertfordshire Criccieth Holvhead Cumbria Holywell Cwmbran Hove Denbigh Hull Derby **Ipswich** Dinefwr Isle of Wight Dorset Kendal Durham Kilmarnock Edinburgh Kingston-upon-**Thames** Exeter Falmouth Lancaster

Leicester Lincoln Liverpool Llanberis Llandeilo Llandovery Llandudno Henley-on-Thames Llanelli Llangefni London Ludlow Lymington Manchester Merthyr Tydfil Milford Haven Mold Monmouth Nantgarw Neath Newcastle-upon-Tvne

Newmarket Newport Newtown Norwich Nottingham Oxford Pembrokeshire Pencoed Plymouth Pontypool Pontypridd Porthcawl Porthmadog Portsmouth Port Talbot Presteigne Pwllheli Sheffield Shrewsbury Shropshire Southhampton Stirling

Stoke-on-Trent Swansea Taff's Well Tenby Truro Welshpool Wolverhampton Wrexham York

Taking exhibitions or artefacts overseas presents even greater difficulties than touring them within Britain. Nevertheless, there were tours to the United States and to all the larger European countries. In most cases, there were several visits to the country concerned. A better flavour of the kind of touring undertaken in Britain and overseas can be seen in Box 6.

Dinobirds Exhibition. Natural History Museum.



Box 6

Touring by the Natural History Museum, 2000 to 2003

1. Dino-Birds: The Feathered Dinosaurs of China

Unravelling the mystery of the origins of birds using some of the world's rarest fossils, this exhibition explores the fascinating new discoveries made as recently as 2000. Who were the real pioneers of feathered flight?

Dino-Birds: The Feathered Dinosaurs of China opened at The Natural History Museum in July 2002 where it remained until May 2003. Press reaction to the exhibition was very positive with coverage in all the major national newspapers, BBC television and Cable TV. Visitors were particularly impressed with the level of science in the exhibition and the rare chance to see the real fossils on display. These extraordinary specimens, on loan from The Geological Museum of China, offered the opportunity to put current research into an exhibition - one of the specimens was only discovered in

Following its success at the Museum, Dino-Birds will be toured around Europe until 2006, after which these rare fossils will be returned to China. This exhibition has also been on display at the Royal Museum, Edinburgh.

2. Dinosaurs - Carnivores

Combining animatronic dinosaur models with fossil replicas and casts, Carnivores looks at the ever-popular subject of meat-eating terrors such as Tyrannosaurus rex and Deinonychus.

This idea came about nearly 12 years ago when The Natural History Museum had its first robotic dinosaur exhibition which led to demand for travelling exhibitions all over Europe. Since then, Carnivores has been in and out of some extraordinary locations; one of the most bizarre was a Fifteenth century church in Milan, which was the temporary home for our enormous Tyrannosaurus rex, among others.

Over the years, the consistently high visitor figures for dinosaur exhibitions demonstrate it is a highly successful theme. Carnivores has returned to many museums for a second success after the first. More recent visitor figures include: 320,000 visitors to Carnivores in Paris in 1999, 120,000 visitors in three months in Tel Aviv in 2001 and a record-breaking second dinosaur exhibition in Copenhagen which attracted 245,000 visitors in its first five months in 2002.

3. Dinosaurs - Eggs & Babies

Featuring a large number of robotic models and dinosaur replicas, Eggs & Babies illustrates the theme of family behaviour and nesting, bringing to life the dinosaurs of 65-100 million years ago.

The exhibition travelled to 11 European cities including a one-year tour of İtaly including Rome, Catania and Milan. The Prime Minister of Finland, Mr Paavo Lipponen, opened Eggs & Babies in Heureka, Helsinki on 17 February 2001. The exhibition was shown alongside some of the world's most spectacular fossils from the Gobi Desert provided by the Palaeontology Centre of the Mongolian Academy of Sciences, and attracted 366,629 visitors in one year.

4. Eating Creepy Crawlies

From deep-fried silk worm pupae to love bug salads, this exhibition provides a fascinating insight into the world of entomophagy (eating insects) with a stimulating mix of specimens, photographs and two animatronic models.

Eating Creepy Crawlies has been developed from an exhibition originally held at The Walter Rothschild Zoological Museum, part of The Natural History Museum just outside London. Eating Creepy Crawlies gained international press coverage when it opened in July 2000 since when the exhibition has been re-developed to tour Museums and Science Centres in the United Kingdom.

5. Myths & Monsters

Unravelling the truth behind some of history's greatest myths, this exhibition combines animatronic models and replica specimens to explore the stories behind the myths, how they came to be and their possible origins in the natural world.

Myths & Monsters opened at The Natural History Museum, London, in March 1998. where it attracted a record-breaking 12,000 visitors in a single day. Since then it has travelled throughout the UK, Sweden, Norway and the Netherlands, gaining both rave reviews and consistently high visitor numbers - including 115,000 over five months in Stockholm.

6. Predators

A focus on nature's evolutionary arms race, this exhibition explores the dynamic between predator and prey through animatronic models, competitive interactive displays and real specimens. For prey, each encounter is life or death, but for predators, only a single meal is at stake.

Predators opened at The Natural History Museum in July 2001 where it attracted strong press and television coverage and pulled in over 570,000 visitors before its close in May 2002.

The exhibition opened in October 2002 at El Parque de las Ciencias, Granada, Spain, for seven months before going onto The Manchester Museum of Science & Industry from June 2003 until September 2003.

7. Turbulent Landscapes

Blending art and science to illuminate the underlying order in the chaotic patterns and forces of nature, this highly interactive exhibition explores the complex systems surrounding us.

This exhibition was developed in partnership with The Exploratorium, San Francisco, and was shown at The Natural History Museum in 2002.

8. Voyages of Discovery

Charting the contribution of British voyages to the development of the natural sciences, this exhibition brings together precious specimens and artworks to show how naturalists such as Darwin changed our view of the world.

Voyages of Discovery was originally shown at The Natural History Museum from July 1999 to May 2000, where it attracted around 425,000 visitors. Since then it has travelled exclusively to a limited number of museums in the United Sates, Houston Museum of Natural Science, The Smithsonian Natural History Museum, Denver Museum of Nature and Science and the Natural History Museum of Los Angeles County. A short extension of three additional venues was granted, after which the exhibition will be brought to a close.

9. Wildlife Photographer of the Year A spectacular celebration of the world's best wildlife photography, this annual exhibition features the award-winning images from the Wildlife Photographer

of the Year Competition.

This exhibition has been held at The Natural History Museum annually since 1984. Since 1996 it has toured internationally and has now visited over 35 countries, including the USA, Brazil, Spain, Australia, Japan, India and Morocco. The international tour now attracts over 600,000 visitors annually across an average of 40 venues in 15 countries

The Natural History Museum has taken a number of popular, educational exhibitions from its South Kensington headquarters to a number of places in Britain and overseas. By combining popular themes with scholarship and unique access to some of the world's most important natural history exhibits, the NHM has been able to give British and international visitors access to serious science. Britain's overseas reputation as a centre of learning and creativity will, undoubtedly, have been

The issue of concentrations of museum and gallery holdings in particular cities was referred to above. There is no doubt that in Britain, as in France and Spain, there are significant concentrations of cultural assets in the capital city and a small number of other centres. Even in the United States - a federal country with a highly decentralised system of government - New York City contains an unparalleled concentration of institutions. Despite the existence of major collections in Washington, Boston and around Los Angeles, New York contains museum and gallery concentrations that dwarf those of any other US city. Paris is in a similar position within France. If Britain is to continue to compete as a globally accessible centre a major concentration in London appears an inevitable requirement.

There are good reasons for concentrations of this kind. Indeed, there is significant economic literature on the subject. By having a number of institutions together in one place, it is possible for people to visit them in large numbers. A visit to Paris or New York makes it possible to see a number of institutions. For domestic and overseas visitors, this is an advantage. Sir Nicholas Serota, in explaining why Tate Modern would be located in London, stated, "Because more British people will visit it there than if it were located anywhere else in the UK." The West End theatre, pre-eminently, shows how a concentration of artistic units can create an output far greater than the sum of its parts (Society of London Theatre, 1998).

This is not to say all major collections should be housed in one place. But there are benefits - both to tourism and to accessibility for Britons - to having concentrations of the kind found in London, Cardiff, Edinburgh and Belfast. Touring is another element in ensuring national collections are truly national. Access to all UK residents therefore requires a judicious balance of urban concentrations and touring.

4.3 Creativity and innovation

Museums and galleries are part of what is now often described as the "creative" part of the economy. The term "creative industries" is used to denote a range of sectors, including the performing arts, architecture, video, film & photography, radio & television, design, music and advertising. In fact, museums and galleries are not included within DCMS' sectoral definition of the creative industries, which is predominantly concerned with measuring the outputs of private sector activities.

Making model planes, Fleet Air Arm Museum.



Radical Fashion Alexander McQueen. V&A Museum.



However, the creative industries and the nation's museums and galleries have overlapping workforces, for example, an individual may work in a private gallery and then move into a museum, or vice versa. An expert in design within a museum or gallery may from time to time work in the theatre, television or, indeed, in manufacturing. Conventional economic classifications do not always tell the full story of how creativity can move from one sector to another.

Museums and galleries are generally thought of as repositories of exhibits, or as attractions, or as centres of study. But their holdings and activities also have another impact: they encourage people to think differently, to take and transmit ideas, and to generate new things based on the creativity of the past. Thus, a student visiting a fine art gallery may find inspiration for a stage design or a fabric. A scientist at a natural history museum may work on the museum's holdings in ways that advance modern scientific understanding. A child visiting a science museum may find inspiration for school that would otherwise be missing. These kinds of spontaneous use of museum and gallery holdings can together be seen as "creativity" and "innovation".

But such words are sufficiently abstract that they are frequently used in such a way as to undermine their meaning. In undertaking this research, all the NMDC members were asked to suggest examples of how their holdings or activities generated the kind of creativity and innovation discussed above. It has proved rather easier, using such examples, to pin down the kind of creativity it is believed museums and galleries stimulate.

Some of the examples of what NMDC members can achieve in terms of creativity and innovation can only be captured in the form of comments made by individuals who have articulated how they have benefited from the kind of stimulus provided by individual museums and galleries. There can be no doubt that such testimonies are important in providing evidence of the thousands of episodes of creative transfer that take place each year during visits to NMDC institutions.

Three different sets of creative result are shown in Boxes 7, 8 and 9. Box 7 outlines the ways in which the V&A has worked with the fine art, design, clothing and toy sectors, and also with television and radio, to use the Museum's collection to improve the innovative quality of fine art, industry and broadcasting. Such links are not immediately obvious to any traditional analysis of a gallery or museum. Moreover, it is impossible to measure the value added by such output, though it is equally clear that the links between museums and galleries and other economic sectors enrich the outputs of those sectors.

Box 7

The V&A working with the creative industries

Curatorial staff frequently assist people from the creative industries in research that informs - directly or indirectly - products, artworks, or services. Examples include:

- home furnishing products, e.g. fabrics for Designers Guild, wallpaper;
- children's clothing manufacturer, Dewhirst, which supplies many high-street shops, researched embroidery and smocking at MOC;
- product testing of a prototype range of 'Little Tikes' toys at the Museum of Childhood (MOC);
- advice on film and stage productions, e.g. Sense & Sensibility (film directed by Ang Lee), Harry Potter films, the Globe Theatre and the Royal Opera House;
- participation in, and advice to, TV programme makers, e.g. programme on William Morris (forthcoming) for the BBC, What the Tudors Did For Us for the BBC, programme for Chinese television on British interior design, made by LWT for the British Council;
- radio programme about conservation, mainly at the V&A, broadcast November 2001 on Radio 4;
- MOC was the inspiration for the re-branding of Mothercare, developed by Interbrand;
- artists Rubinder and Amrit Singh and photographers, Zarina Bhimji and Chris Bucklow have used the V&A's Collections as inspiration for their work:
- forthcoming biography of Sir Michael Redgrave by Alan Strachan (Spring 2004) is based on research using the Theatre Museum's Redgrave Archive;

 Tord Boontje has translated designs from V&A objects into furniture and lighting, e.g. the Garland light sold by Habitat. With Alexander McQueen he co-designed the V&A Christmas tree 2003.

.....and with the fine art market

The Museum also has good relations with dealers and auction houses, where expertise and services flow in both directions. The Museum may provide expert opinion, catalogue entries and essays, or lectures that add kudos to sales. In return they are able to access the expertise that resides in the commercial sector, they see objects that they might not otherwise encounter and are kept in touch with market news. Staff may move between the public and commercial sector during their careers. There are many examples including:

- Portrait miniatures the V&A holds the national collection and leads the world in scholarship and conservation in this field. The specialist at Bonhams began their career as a volunteer at the Museum and regularly consults with the V&A's curator and conservationists.
- Giltwood furniture V&A Curator wrote an article on maker James Moore the Elder for The Burlington Magazine (June 2003) and gave a lecture at Sotheby's before a furniture sale that included pieces by Moore. This led to an invitation to lecture for Malletts in New York as they have conspicuous pieces attributed to Moore as the centrepiece of their new premises in Madison Avenue.

The V&A's links with sectors that can benefit from the fine art, fabrics, glass and other items in its collection can be found - though offering different kinds of creativity or innovation - in other museums and galleries. The Natural History Museum, for example, has scientists who work with their counterparts in universities and industry to produce medical and other scientific advances. The British Museum, like the NHM, has a strong research base from which to work with scientists and experts in other sectors. The creative links between NMDC members and the tourist industry, notably one-off blockbuster exhibitions, are considered elsewhere in this report.

A very different example of the kind of work undertaken by virtually all NMDC members is shown by the Tate's work with children in its Visual Paths programme. Box 8 outlines Visual Paths, which is designed to give school children an opportunity to learn to develop verbal skills by the appreciation of the Tate's exhibits. This programme involves the Tate working with London University's Institute of Education and thus exemplifies the many links between leading galleries and museums and their counterparts in higher education. While this alliance is one that brings together what are traditionally seen as "elite" institutions, the children who benefit are drawn from a wide range of backgrounds.

Box 8

The Tate and the promotion of visual literacy in children

Visual Paths

Visual Paths, supported by Morgan Stanley, is a three-year literacy project created to explore the teaching of literacy in the gallery. It consists of a curriculum development project, based at Tate Britain, and a research project based at the Institute of Education, University of London. This partnership enables teachers, researchers and gallery educators to work together and facilitate children's confidence and enjoyment in the use of words and in the interpretation of visual images.

The project invites educators to consider how literacy might be taught in settings outside the classroom. Through engagement with visual images, the project aims to improve the development of language of children from different cultural backgrounds. The research project, based at the Institute of Education, aims to understand how primary school children experience the gallery as an environment for writing. Visual Paths uses art and visual images, experienced at first-hand in galleries and subsequently with artists and writers in schools, as a stimulus to interest children in words.

A third example of NMDC members working creatively to benefit society and the economy is shown in Box 9. Staff at the Royal Armouries (based partly in Leeds and partly at the Tower of London) have worked with the police to use the benefits of research into traditional British armoury to develop materials that will be of use to contemporary law officers. This is an unusual, though revealing example of how things that many people would think were merely exhibits in a museum can be given up-todate relevance.

Box 9

The Royal Armouries use historical research to protect today's police

Royal Armouries curatorial staff have worked with staff of the National Police Equipment Development Board on the development of body armour and anti-stab armour, from academic research into historical armour. A similar process occurred in the early-mid 20th century when museum curators from the Metropolitan Museum of Art assisted US military with creation of modern armour.

Other examples of creativity include the efforts of the maritime museums - via the UK Maritime Collections Strategy – to rationalise their collections policy in such a way as to create a programme that deals with collections and expertise nation-wide. This initiative also has efficiency and productivity elements. Both NMDC's other reports, Creative Engagement and National Dimensions currently being published provide a wealth of detail with respect to the extent and innovative nature of NMDC's members across the nation, the scale of which many will find surprising.

By its very nature, creativity is a difficult concept to demonstrate with words. Too much effort to describe it might be thought to over-analyse a concept that, like humour, is best left to practitioners. But the demands of accountability and the need to demonstrate relevance have put pressure on NMDC members - and other museums and galleries - to find ways of translating the magic of creativity and innovation into a comprehensible analysis. The evidence provided by NMDC institutions about their links to other economic sectors (a tiny part of which is shown here) and the stimulus provided by these links is suggestive of a unique contribution made by museums and galleries to the wider economy.

4.4 Academic excellence and education

NMDC museums and galleries have links with schools, further education colleges and universities. Schools bring groups of pupils to virtually all NMDC member institutions on a daily basis. Institutions will not know until the end of 2003-04 how many children are involved in on- and off-site educational activities, but on the basis of data collected for this study, NMDC members are responsible for well over a million educational episodes per year. In addition, between six and seven million children visit institutions outside educational trips. Thus, for example, the Imperial War Museum undertakes 243,000 onor off-site educational sessions - equivalent to 30 classes of pupils per school day. In effect, the IWM is providing the equivalent of perhaps five full-time equivalent primary schools. The Tate (211,257) and the V&A (220,000 estimate) are in a similar position. Sir John Soane's Museum has started workshops for local primary schoolchildren, teaching building construction and the environment against the backdrop of their unique collection. Such links have enhanced importance because of DCMS' target to increase the number of young people participating in cultural activities.

Handling session at Museum of Liverpool Life.



Many NMDC institutions are involved in initiatives that create formal links between a museum or gallery and a university so as to benefit particular groups of disadvantaged children. Because museums offer an interesting and out-of-classroom way of introducing children to ideas and learning, there are huge potential advantages to such initiatives. As an example of the kind of links that exist between institutions, higher education and schools, Box 10 shows how the Royal Armouries have worked with an American university to benefit disadvantaged pupils from East London.

Box 10

Museums, universities and schools

Students from Worcester Polytechnic Institute, Worcester Massachusetts, under the supervision of their lecturers, undertook an assignment at the Tower Education Centre as part of their B.Eng. Their brief was to investigate demand for the involvement of the under fives, either in nursery or family groups, in the Tower of London and with its collections. Their research looked at learning needs and how under fives learn. The students were asked to consider how the Education Department could develop easy-assemble materials for outreach and for use in the new space on Tower Hill.

The results included the presentation of an analysis of the issue, comparing groups in Massachusetts with those in London and showing similarities and differences. Practical results included a 'White Tower' tent and a velcro Henry VIII. These outputs have been used experimentally with young children and they will make up part of the equipment for local groups in the Tower Hill Vaults education and community space.

Contacts with universities and further education colleges occur on an almost daily basis and involve virtually all NMDC institutions. In response to the LSE/Imperial questionnaire, 244 established links with UK universities were recorded, plus another 81 with overseas universities. In addition, at least 52 further education colleges were also closely involved in joint arrangements with NMDC institutions. The exchange of ideas and activity between museums and galleries and higher education is very highly developed.

A number of NMDC members have staff who undertake academic research which is then published in refereed journals - a gold-standard test of intellectual excellence recognised throughout the world. Table 4.1 shows the number of journal articles published during 2002-03 by those employed at NMDC institutions that published over 40 such pieces.

Table 4.1 Refereed journal articles published, 2002-03, NMDC institutions (where total is 40+)

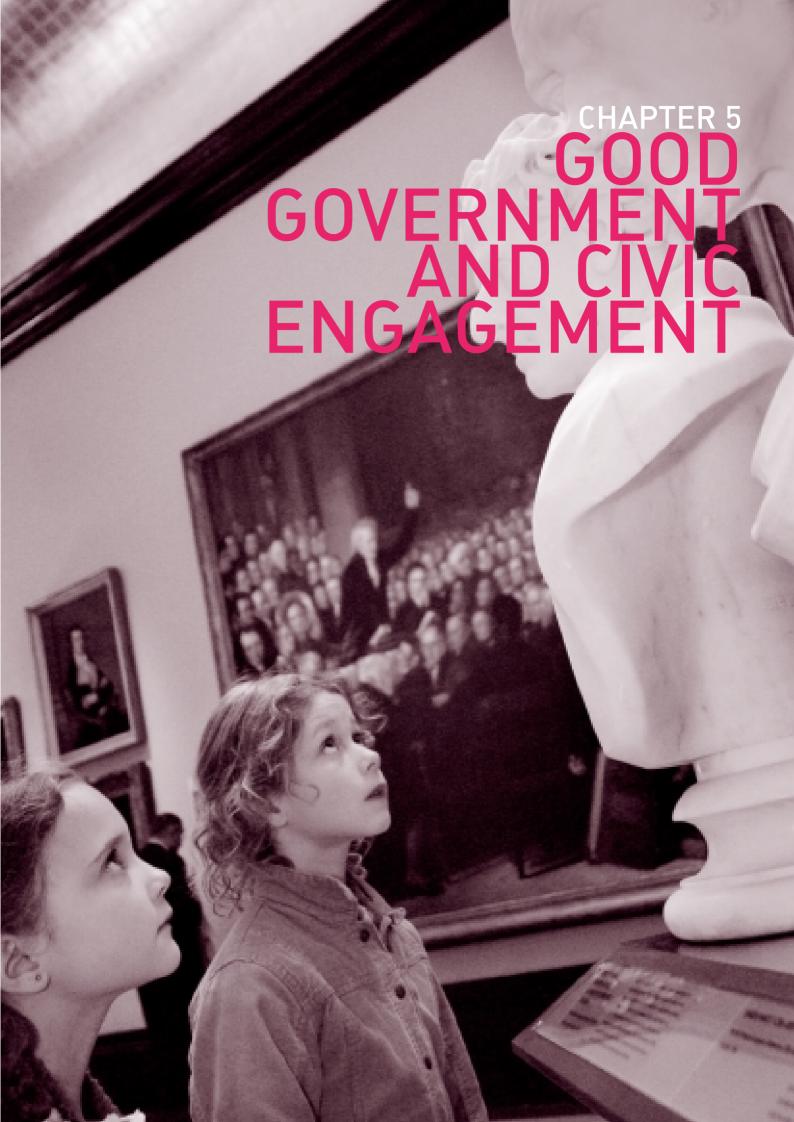
Natural History Museum	535
British Museum	350
Victoria & Albert Museum	146
National Museums of Scotland	96
National Maritime Museum	81
National Museums & Galleries, Wales	71
National Gallery	62
Science Museum	48
All others (total)	134

The grand total for all NMDC institutions was 1173, which would be an impressive total for a number of universities. Competition for placement in journals is fierce, so it is clear NMDC members have been successful in a way that would be recognised by the universities' research quality measurement process, the Research Assessment Exercise. Interest shown in research findings has the effect of attracting significant media attention to a number of individuals. This interest, in turn, has the beneficial effect of promoting NMDC institutions as repositories of objective information and analysis. The prominence of some scientists and experts, of course, has to continue alongside other educational outreach and, more generally, the visitor attraction and social access functions of museums and galleries.

Museums and galleries are concerned with the transmission of culture and facts. This is an objective shared with universities, colleges and schools. Another aspect of this attribute is the loan of items for research purposes. This section has captured the way such objectives are achieved jointly in both a quantitative and (to a lesser extent) qualitative way.

Adult education at Sir John Soumes' Museum.





5. Good government and civic engagement

5.1 Why a wider role?

Recent years have seen larger private companies increasingly concerned with "corporate social responsibility". Companies are now expected to take steps to involve themselves in the wider world in which they operate. Good neighbourliness, involvement in civic institutions and demonstrating a concern with the public's local concerns, are among the ways in which the private sector is measured. NMDC members, as major institutions, have long found themselves involved in what has latterly been styled corporate social responsibility.

It would be surprising if major public (or not-for-profit) institutions such as museums and galleries were not actively involved with a wide range of national and local cultural institutions. But in any region or city there is also an active civic community, including regional development agencies, local authorities, the media, universities, further education colleges, schools and charities.

5.2 How NMDC members contribute

An NMDC member such as the National Maritime Museum (NMM) can identify 17 continuing connections with maritime heritage bodies; 38 with academic institutions, 13 with organisations where there are outreach links and a total of 42 others. This adds up to a total of 110 bodies with a close and continuing link to the NMM. The V&A has closely-developed links with the Department for Culture, Media and Sport, six other government departments, Sussex University and Sheffield Museums and Galleries Trust. In addition, there are also developed relationships with the Royal Institute of British Architects, Channel 4, the BBC, Anglia Polytechnic University, the Campaign for Drawing, the Crafts Council, the Royal Mint and Resource (the national organisation for museums and galleries). Beyond these national organisations, a number of individual local authorities and a total of 92 other organisations have been identified as regular contacts. The Royal Armouries has 12 formal relationships and continuing links to 152 other museums and galleries.

Smaller, regionally-based NMDC members generally have between 25 and 60 regular links with other organisations. The National Museums and Galleries of Wales identified 61 such contacts, the National Galleries, Scotland 53 and the National Museums and Galleries, Northern Ireland 32. Inevitably, crude efforts to count the number of links to other institutions can only give a partial sense of the spider's web of links between NMDC members and other cultural or civic bodies. There is a difference between quantity and quality. What is beyond doubt, however, is the very active role that leading museums and galleries play working alongside local authority and private institutions. An example of the richness of the links between NMDC members and other bodies is shown in Box 11 which shows a full list of all the organisations on whose boards British Museum staff sit.

In some cases, the director of museums or galleries may sit on the board of a number of national and international institutions, while other staff members provide links into professional bodies and many locally-based charities and civic partnerships. Many recent major developments in museums and galleries (dealt with elsewhere in this report) have actively sought and received local involvement. The local and regional regeneration benefits of a project such as the National Museums Liverpool's major developments, the Royal Armouries move to Leeds, or the success of the Tate in reclaiming Southwark's Bankside, are widely recognised. Each project has been a key element in the improvement and economic reconstruction of their neighbourhood.

Box 11

The British Museum: board memberships, journal editorships, societies and other activities

British Museum staff serve on the governing bodies, committees and publication boards of the following societies, organisations and publications:

American Indian Art Magazine

Ancient Persia Fund

Anglo-Israel Archaeological Society

Anna Plowden Trust

Antiquity

Archaeological Leather Group

Artsline

Archaeology Abroad

Archaeometry

Asia House

Association of Archaeological

Illustrators and Surveyors

Association for the History of Glass

British Academy

British Archaeological Association

British Archaeological Awards

British Art Medal Society

British Association of Chinese Studies

British Association of Korean Studies

British Association of Near Eastern

Archaeology

British Automated Seal Catalogue

British Council

British-Egyptian Society

British Institute of Persian Studies

British Numismatic Society

British School at Athens

British Standards

Cambridge Schools Classics Project

Canterbury Archaeological Trust

Cecil Higgins Art Gallery

Centre for Maritime Archaeology

Ceramic Petrology Group

CHArt: Computers and the History of Art

Chartered Institute of Building Services Engineers

Council for British Archaeology Portable **Antiquities Working Group**

Decorative Arts Society

Department for Culture, Media and

Sport

Advisory Panel on Illicit Trade

Advisory Council on the Export of

Works of Art

Sponsored Bodies Education Network

Ditchling Museum

Dr Johnson's House Trust

East Anglian Kingdom Survey

Education in Museums Group

Egypt Exploration Society

English Heritage

FIDEM (International Federation for the

Medal)

French Porcelain Society

Friends of the Petrie Museum

Freud Museum, London

German Archaeological Institute Gurkha Museum, Winchester Hahn Museum Foundation. Seoul Historical Metallurgy Society Institute of Conservation Science Institute of Field Archaeologists Institute of Paper Conservation Institute of Tourist Guiding ICOM Conservation Committee

International Exhibition Organisers Group

International Institute for Conservation of Historic and Artistic Works International Numismatic Commission

International Scientific Committee for the Congress on the Deterioration and Preservation of Stone

International Time Capsule Society International Ukiyo-e Society, Overseas

Directorate Jewellery Studies

Journal of Archaeological Science Journal of the Decorative Arts Society Journal of the History of Collecting

LAADE

Leigh Douglas Memorial Fund

London Library

London Topographical Society

MAGDA

MAGIC

Master Drawings

Medieval Ceramics

Medieval Pottery Research Group Medieval Dress and Textile Society Museum Documentation Association

Museums Ethnographers Group

NADES

National Art Collections Fund

National Museum Directors Conference

National Trust

National Gallery, Scientific Advisory

Committee

Network on Ultra-long-term Cryogenic Preservation of Biological and

Environmental Specimens Numismatic Chronicle

Oriental Ceramic Society Oriental Numismatic Society

Pacific Islands Society of UK and Ireland

Palestine Exploration Fund Percival David Foundation

Photographic Materials Conservation

Group Pilgrim Trust

Powell-Cotton Museum

Portable Antiquities Scheme

Restaurator

Rijksmuseum, Amsterdam Royal Anthropological Institute Royal Archaeological Institute

Royal Asiatic Society

Royal Numismatic Society Royal Scottish Academy Samual Courtauld Trust Sassoon Ivories Trust Seminar for Arabian Studies Silk Road Art and Archaeology Society for Medieval Archaeology Society for South Asian Studies

Society for the Promotion of Byzantine Studies

Society of Antiquaries of London Society of Jewellery Historians Society of Museum Archaeologists

Sports Council Standing Conference on Portable

Antiquities

State Hermitage Museum International Advisory Committee

Sudan Archaeological Research Society Sutton Hoo Research Trust

Textile Conservation Centre

UK Foundation for the South Pacific **UK Institute of Conservation**

Ukiyo-e Society of America

UK Numismatic Trust Waddeston Academic Committee

Woodlands Trust

Woman's Library Council

Universities, Colleges

Bodleian Library, Asian Documents

Advisory Group

Camberwell College DeMontfort University at Lincoln

Florida State University

Queen's University, Belfast

Reinwardt Academy, Amsterdam

Royal College of Art Université de Paris

University of Cambridge

University of East Anglia

University of East London

University of Edinburgh

University of Leicester

University of London Birkbeck College

Courtauld Institute of Art

Institute of Education

King's College

School of Oriental and African Studies

University College:

Bartlett School of Architecture

Institute of Archaeology

University of Manchester

University of North Carolina, Chapel Hill University of Oxford

Ashmolean Museum

School of Archaeology University of Reading, Ure Museum

University of Sussex

West Dean College, Sussex

5.3 Links between national and local work

NMDC bodies do other work - as part of their day-to-day activities - that imply a close link between what can be characterised as "national" and "elite" institutions and the more locally-based concerns of people throughout the United Kingdom. Thus, for example, while the British Museum holds its collection in a big building in Bloomsbury, it also works with officers outside London to allow the public to be involved in the recording of archaeological discoveries. Indeed, the role of the public in such discoveries will be essential if new finds are to be handled sensitively and appropriately. See Box 12.

Box 12

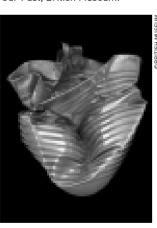
Helping the public to get involved in the past (The British Museum)

The Portable Antiquities Scheme for England and Wales provides a national network of locally-based finds liaison officers, four finds specialists and a central support team based at the Museum. The scheme ensures that archaeological discoveries made by the public are properly recorded to national standards. Material which is declared Treasure is identified, documented and conserved by the British Museum in support of the Treasure Act 1996. In 2001-2002, staff from the five Museum departments involved worked on 397 cases.

In autumn 2003 the Museum opened the special exhibition Treasure: Finding our past celebrating the role of the public in the discovery of major archaeological finds: Star attractions include the Ringlemere Bronze Age gold cup, the Winchester hoard of Iron Age jewellery and Roman treasures from Mildenhall and Hoxne, all discovered by amateurs. Many finds are on show for the first time, including the extraordinary discovery of Iron Age coin hoards in Leicestershire. There are several other new finds (recorded under the Portable Antiquities Scheme) which have helped us to put together a fuller picture of everyday life in the past, ranging from pewter toys to Tudor dress fittings. Visitors are invited to handle objects, including replicas of major treasure finds.

The Treasure: Finding our Past exhibition has been designed jointly with colleagues from Cardiff, Manchester, Newcastle and Norwich, where it will tour next year. Linked with the exhibition will be an eight-programme BBC series about discoveries of British treasures strongly featuring the work of the BM on the Treasure Act and the Portable Antiquities Scheme.

The Ringlemere gold cup. Early Bronze Age, 1700-1500 BC. Found in East Kent, November 2001, Buried Treasure: Finding Our Past, British Museum.



Two further examples of how NMDC bodies can help the public get involved in history and local issues are provided in Boxes 13 and 14. The National Archives have - jointly with the Office of National Statistics - made it possible for people to research their family backgrounds. The National Museums Liverpool have opened the Museum of Liverpool Life which, as its name suggests, celebrates the city and its achievements. The latter museum played a role in Liverpool's Capital of Culture success.

Box 13

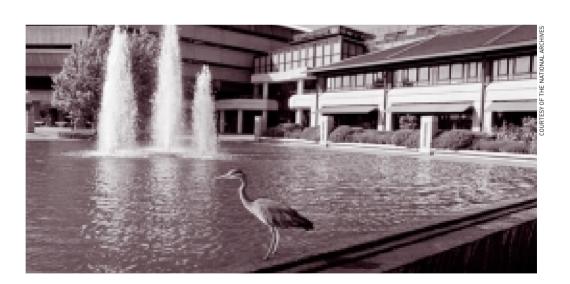
Helping the public research family trees (The National Archives)

The Family Records Centre opened in April 1997. It is jointly run by the Office for National Statistics and The National Archives and provides public access to the main government resources for family history research. These include indexes to births, marriages and deaths in England & Wales from 1837; census returns for England and Wales from 1841-1901; wills and administrations from the PCC from 1383-1858; death duty registers 1796-1858 and indexes 1796-1903. The FRC also provides free access to online and other electronic resources for family historians.

The National Archives is tasked with providing leadership, guidance and support to other government departments on implementing Electronic Records Management (ERM) throughout Government by 2004. The National Archives has set out a clear route map to help other departments achieve this goal. It has also developed a process for monitoring their progress, on a rolling basis, every six months. The National Achives continue to provide case by case support, as well as guidance, standards and toolkits, and are leading the development of the ERM infrastructure in the UK government, for example by influencing the development of appropriate ERM software products by commercial suppliers.

The National Achives are now beginning to champion the cause of records management in local authorities and wider public sector and have established a new Records Management Advisory Service, which will take forward a series of initiatives in this area. This service was launched at a conference at the Queen Elizabeth Centre on 30 May attended by senior officers in local government.





Box 14

Telling the story of a city to its people (National Museums Liverpool)

Museum of Liverpool Life, phase 1 opened in 1993. The museum and its collections celebrate the people of Liverpool, their culture, achievements and contribution to national life, and give a unique insight into a remarkable city and its inhabitants. Museum of Liverpool Life, phase 2 opened in 2000 (comprising three new galleries: City Lives, City Soldiers and The River Room. These galleries were created as part of Into the Future, National Museums Liverpool's current major capital development programme, with major funding from the Heritage Lottery Fund.

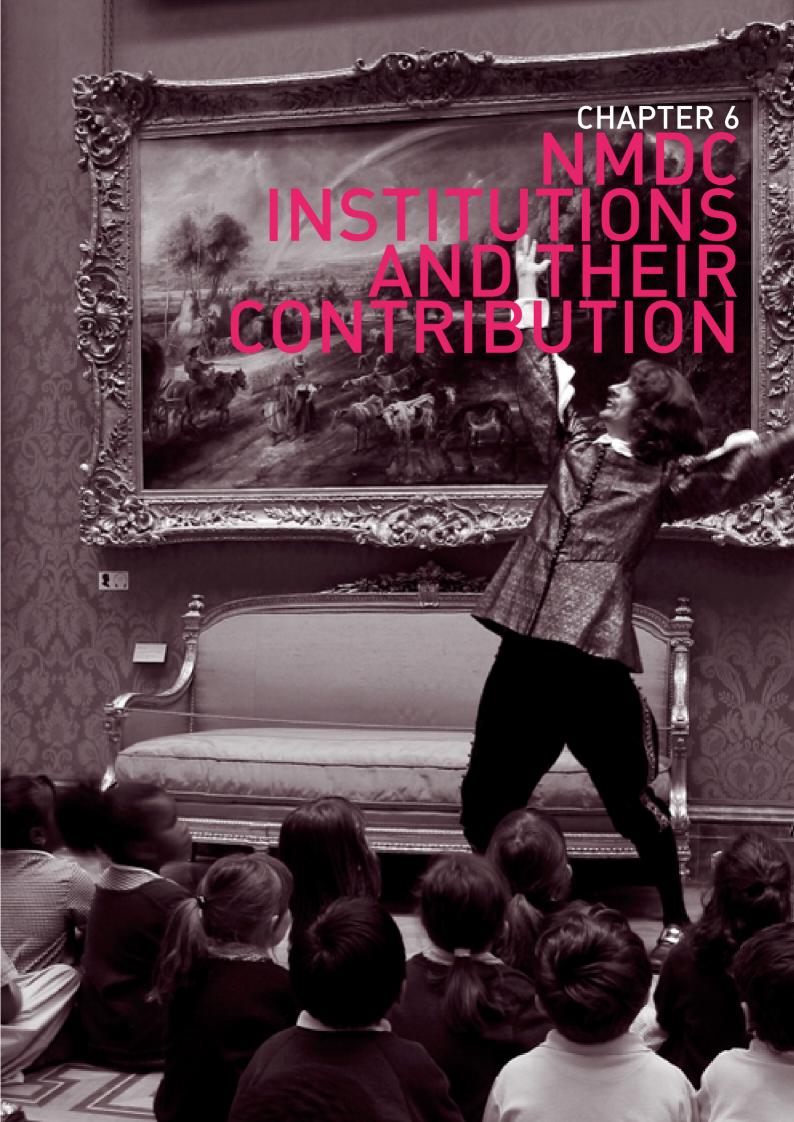
5.4 Widening access

Another aspect of good citizenship is the extent to which institutions can reach out to audiences who, in the past, have been under-represented within visitor totals. Museums and galleries are increasingly expected to improve their appeal to ethnic minority and poorer members of the population. The Science Museum reported the largest proportion of non-white visitors (17 per cent), followed by the V&A (11 per cent) and the British Museum (7 per cent). Inevitably, some of the institutions outside London – where ethnic minority populations are generally proportionally and absolutely smaller than in the capital – had few ethnic minority visitors. Visitors in social and economic groups C2DE typically represented 13 to 17 per cent of the overall total, with the Imperial War Museum managing 22 per cent.

The success of NMDC members in achieving the many good government or civil society objectives expected of them will be limited by the resources available. In common with all cultural institutions that depend heavily on state funding, there is a risk that demands for new initiatives or to reach new audience groups will be seen as a free good that can easily be tacked on to existing activities. This might be possible if there were access to buoyant income sources. But since the removal of entry charges for national institutions, it has been necessary for NMDC museums and galleries to rely very heavily on government resources. As suggested earlier in this report, such resources appear, in effect, to be index-linked to retail price inflation, though this is not a formal linkage. There must be a risk that a number of laudable initiatives and developments of the kind discussed in this section will become difficult to continue as resources are squeezed in the years ahead. Put the other way, access to buoyant revenue streams would make social justice and corporate responsibility easier to achieve.

Somali Intergenerational Reminiscence Project, Museum of Childhood, 2003.





6. NMDC institutions and their contribution

What does this add up to?

- a sector of international scale and standing
- a significant economic sector
- an innovative cultural transmission system
- a sector whose success has led to a surprising lack of concern/funding
- the lack of buoyant income and the admission charges issue
- a sector with potential
- tourism, overseas earnings, Britain's place in the world
- cultural understanding, development of society
- research innovation

This report has sought to examine the NMDC institutions as a contributor to national social and economic life in Britain. The earlier sections of the work have drawn together facts, figures and wider information about a sector that makes a significant contribution to national life. There is no doubt that the Government, commentators and the wider public hold NMDC museums and galleries in high esteem. Many of the institutions are seen as being of the highest international quality. Yet, there remain unresolved issues concerning the breadth of focus of museums and galleries, their funding and their long-term need for investment.

NMDC institutions spend £715 million per year (grant-in-aid and self-generated income) and are responsible for a far wider economic impact. Museums and galleries are major generators of exports for the UK economy. They have tens of thousands of links to educational, cultural and governmental institutions, which together help to strengthen the way civil society functions. They produce creative links to industry, schools, colleges and, importantly, to individuals. Institutions often provide a gateway between "high" culture and people's day-to-day lives. A physical presence of art, science and natural history in major cities in most parts of the country allows people of all means to get within inches of some of the most important objects produced or discovered during the years of human civilisation.

Museums and galleries have, in recent years, been required to fulfil a number of very different roles within society. Not all of the roles are new, though far greater intensity and accountability now attends many functions and offical demands. First, they must continue to hold and display the collections that they were originally created to preserve. This, for many people, is the pre-eminent role of such institutions. Second, they must now use these collections to educate, at all levels from university to school. Third, they undertake research of the kind found in private companies and university departments. Fourth, they must now act as mass visitor attractions, on a par with

and self-generated income) and are responsible for a far wider economic impact.

NMDC institutions

spend £715 million

per year (grant-in-aid

Digitopolis, Wellcome Wing, Science Museum.



If the present pattern of funding were to continue for more than another year or two, it would become imperative for NMDC institutions to start to prepare for more orderly management of decline.

theme parks and other modern leisure facilities. Fifthly, they provide public space, for organisations and individuals to meet and communicate. Sixth, they often have to preserve their built heritage on historic sites. To all of these objectives, the Government now requires a greater involvement in making good failures within society, including efforts to reduce crime and regenerate areas of economic decline.

NMDC appear to embrace these varied activities with enthusiasm. However, it is important to observe that the widening scale of demands on institutions is matched for most of them – by funding which is only rising at the rate of retail price inflation and where the capacity to raise additional resources is limited. The year-on-year funding allocations to larger institutions (shown in Section 2) reveal relatively modest rises in the period up to 2005-06. Other major cultural institutions, notably those that fall within the Government's arts budget, appear to have been very much more generously funded over the same years.

There is inevitably a limit to what can be achieved against a background of continuing productivity gains. The rise in visitor numbers since the removal of admission charges has significantly increased the already heavy footfall within museums and galleries. New targets for greater access by particular groups require institutions to use their resources even more thinly. Turnover per staff member in NMDC bodies is relatively low when compared with other parts of the public or not-for-profit sector.

Many of the Government's objectives, in terms of rising visitor numbers, increasing numbers of children's visits, web access, involvement in urban regeneration and efforts to increase access by those traditionally excluded from many cultural forms, have been - or continue to be - achieved. The question inevitably begged by the multimillion attendance totals, pressures for international competitiveness, demands for more accessible expertise and, in parallel, the wider social objectives now being pursued is: how far can NMDC members continue to deliver effectively against a background of static or falling real incomes?

The decision to abolish admissions charges, whatever the social merits of the policy, had the effect of making many museums and galleries more dependent on government grant-in-aid. Although there was a once-and-for-all rise in such grants to accommodate the loss of admission income, overall grant has not subsequently increased - certainly for larger institutions - by much more than the rate of retail price index (RPI) inflation. Indeed, there is some evidence that the longer-term trend in grant support is (whether deliberately or not) linked to retail prices. The capacity of institutions to raise income from other sources is limited.

Contrast this position with that of major national and regional theatres. There has been a significant jump in the resources available for the performing arts in recent years. Importantly, many performing arts institutions can also raise money from the box office and thus raise income in line with society's increasing leisure spending. That is, many theatres and other arts institutions now enjoy two buoyant income sources while major museums and galleries have neither.

This state of affairs cannot be sustained for very long. If the present pattern of funding were to continue for more than another year or two, it would become imperative for NMDC institutions to start to prepare for an orderly management of decline, possibly planning to cut back on galleries or access to exhibits. Institutions which are heavily grant-dependent would find, if they faced a number of years in which grant-in-aid rose at or about the level of retail prices, that wages and other costs would significantly outstrip such increases. Thus, while the RPI rose by 15.4 per cent between 1997 and 2002, average earnings over broadly the same period increased by 28.4 per cent. Other costs also rose faster than retail prices or the GDP deflator. Museums and galleries cannot resist market pressures (such as pay increases) in the wider

A single minded effort to develop and improve the use of the national cultural holdings would pav economic and social dividends.

economy for very long. It is virtually certain that if average earnings are increasing elsewhere in the public and private sectors there will have to be broad comparability within arts and cultural institutions.

As a result of this pressure on institutions, there is evidence that leading UK institutions are losing expertise as compared with their equivalent institutions in the United States, France and Germany. Our work suggests there is no desire within museums and galleries to be forced down such a path. But, planned decline could become the wisest course of action.

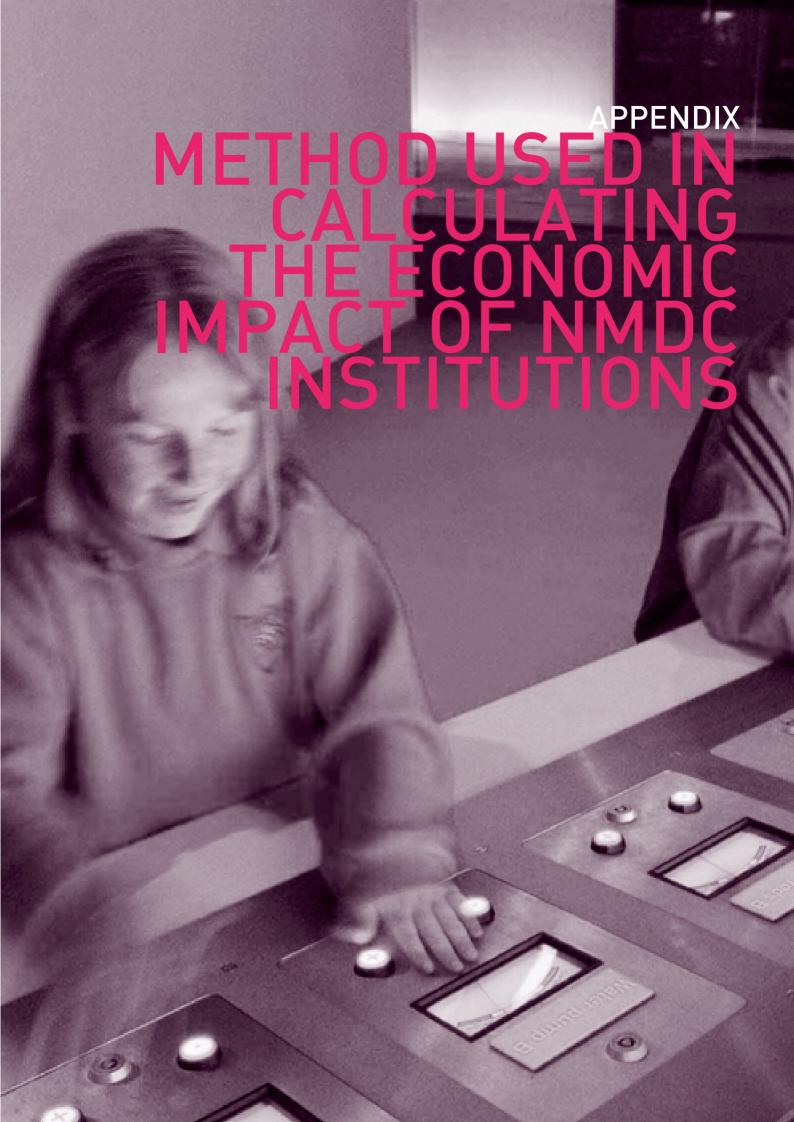
An alternative path would involve national museums and galleries receiving at least sufficient resources to increase their grant-in-aid income in line with average earnings or, for example, with the average level of cultural and recreational expenditure throughout the economy. Linking grant to the retail price index will lead to a gradual long-term decline in the resources available to museums and galleries in relation to the economy as a whole. A quarantee of buoyant income (assuming value for money requirements are achieved) would make it far more likely that the Government's many aims and objectives will be achieved in the longer term. It would also allow much information held by institutions to be re-stored digitally, a single minded effort to develop and improve the use of the national cultural holdings would pay economic and social dividends to sustain the credibility and accessibility of collections.

Tourism, in particular, could be boosted by greater investment in national museums and galleries. Research being undertaken within government is currently seeking to assess the way in which particular aspects of Britain's culture and heritage attract overseas visitors. This work is immensely important, given the relative decline in Britain's tourism balance – and its loss of share of world tourism – in recent years. Museums and galleries are both a part of the traditional UK tourism offer and also an element in the more modern image of the country. Individual galleries may cater to both markets. Predictable investment in this particular tourism driver would be good for the economy and good for the balance of payments.

Museums and galleries in the UK appear to have been the victim of their own quiet success. By almost entirely avoiding the kind of funding "crises" that have become a regular feature in other parts of culture, and by broadly delivering on the many objectives set for them, museums and galleries have perhaps left themselves in the position of weak supplicants. Other arts and cultural sectors, with more effectivelystated problems, have been far more successful in harvesting public resources.

There is a developing interest in the knowledge-based industries. Only by using its massive holdings of art, science and natural history can a technologically-developed society like the UK hope to advance further. National museums and galleries provide an accessible repository for use by scientists, designers, ecologists, institutions of learning and individual citizens. Many parts of the economy which rely on increasing their value added to maintain the country's competitiveness are ones that gain advantages from their links with museums and galleries. Such institutions are of the future as much as of the past.

But there is no quarantee. The fragile nature of many museum and gallery holdings, coupled with the need for complex expertise to explain them, makes their long-term position potentially perilous. Any sustained failure to protect and re-invest would risk an irreparable loss. On the other hand, a single-minded effort to develop and improve the use of the national cultural holdings would pay economic and social dividends. Because of the nature of funding, the choice between these alternatives falls very largely to the Government. Such a choice will have to be made very soon.



Appendix: method used in calculating the economic impact of NMDC institutions

As far as UK visitors are concerned, there have been a number of studies, undertaken within London and outside, about the additional spend generated by visits to leisure facilities and festivals. A recent study undertaken of museums in the South-West of England suggested expenditure per museum visitor as a result of each museum trip (beyond any entrance payment) was £7.50 for larger museums (Culture South West, 2000). A 2003 economic impact study of the Notting Hill Carnival suggested figures of between £29.81 and £58.47 per day, based on a survey of those attending the event. A study undertaken about the West End theatre in 1998 estimated – on the basis of a survey – that for every £1 spent at the box office, about £1.75 was spent on transport, hotels, restaurants and other ancillary items (Society of London Theatre, 1998).

Visits to a London museum are likely to generate higher spending on travel, eating out and other ancillary activities than would be the case in the South-West of England. On the other hand, the figures for the Carnival would appear very high in relation to a museum visit. Thus, a figure 50 per cent above the spending figure calculated for the South-West of England museums has been used for UK visitors' expenditure. This assumption produces a figure of £11.25 per visit, which is plausible given travel costs plus the cost of spending on food and drink or other related spending. It is less than half of the lowest daily spending figure calculated for the Notting Hill Carnival.

For UK visitors who come from outside London, it is likely the figure of £11.25 will be an underestimate. The cost of public transport, coach hire or private vehicle costs are unlikely to be less than £5 to £10 per person, even for visitors from the South-East of England. There is a far greater chance that meals or even hotel stays would be required by visitors from beyond the London area. It is almost certain that some UK visitors to the NHM will have spent as much as those from overseas. But it is impossible to calculate these figures without a survey of visitors. Thus, the £11.25 figure will inevitably be an underestimate of the full economic impact per UK visitor.

For overseas visitors, the method adopted for this study is relatively straightforward. To attribute a monetary value to each visit to an NMDC institution, the starting point used is the average daily expenditure per visitor figure published by the Office of National Statistics in its volume Travel Trends. The most recent figures available, for 2001, suggest the average expenditure per day by a visitor to London was £77 (Travel Trends, Figure 4.16) with a lower one for those visiting institutions outside the capital. This is based on an overall average spend within the UK (ie, excluding fares to and from the country) per visit figure of just under £500 for London and a lower figure outside. The overall and daily expenditure figures represent the value visitors place on their visit to the UK – the amount they are prepared to spend on their trip.

Starting with this figure per day, it is then possible to attribute part of it to different activities, including museum visits. On the assumption that an average visit to museums and galleries would take between two and three hours, plus perhaps an hour to travel to and from the institution, it would be reasonable to assume that perhaps four hours would, in total, be given over to such a visit. Time devoted to eating, drinking and so on might extend the time further. Overall, it would appear that at least one third of a "visitor day" could be attributed to an institution such as the NHM. Thus, the proportion of the daily London visitor spend (£77) that could be attributed to an NHM visit would be £25.67, with a lower figure elsewhere. This is a cautious estimate.

In fact, among visitors to NMDC institutions there will be a proportion who will have travelled to Britain wholly or significantly because of museums and galleries or, in a small minority of cases, solely because of a particular institution. It is not known what these proportions might be, though research commissioned for tourism promotional agencies show museums and galleries as a major pull factor for the UK. For these

visitors, it would be appropriate to attribute a rather larger amount than the amounts suggested above. In order to represent this factor, we have assumed that for between 5 and 15 per cent of visitors, their NMDC-related spend is double the central estimate figure.

Economic impact studies of this kind seek to estimate the multiplier effect of the direct expenditure related to the institution concerned (in this case of NMDC institutions) on the wider economy. That is, what effect will the businesses, traders and others receiving income as a result of NMDC-related direct or indirect expenditures have on the wider economy? Given the resources reasonably available for this study, it is necessary to rely on earlier studies or on recommendations from official publications.

A report prepared for the British Arts Festival Association in 2002 suggested a multiplier of 1.99 be used. In 1995, the Treasury suggested a multiplier of 1.7 should be used for sectors with strong local supply linkages. The Wyndham Report produced for the Society of London Theatre in 1998 used a more cautious multiplier of 1.5. This study will again err on the side of caution and use multipliers of 1.5 to 1.7 to generate a range of plausible indirect and induced effects.

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