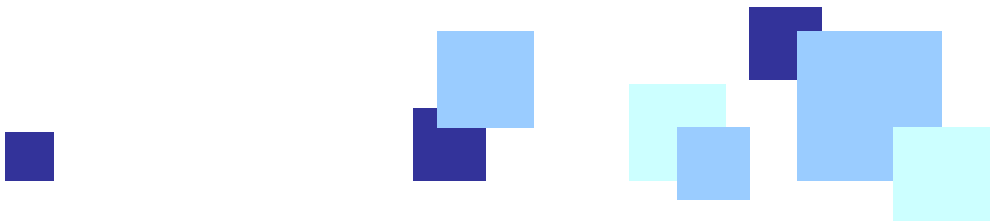
Assessing the Economic Impact of Science Centers on Their Local Communities

Phase 2 of an international study of the impact of science centers, funded by the Association of Science-Technology Centers (ASTC) and thirteen individual science centers



Ilze Groves
Questacon – The National Science and Technology Centre

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Chapter 1 Summary and key findings

Evaluation of the impact of science centers and museums is a growing field of study, because of trends such as increasing competition and financial pressure, demands for greater public accountability and transparency, and government policies that require public institutions to demonstrate their achievements in a variety of areas. As part of this growing focus on impact evaluation, the Association of Science-Technology Centers and a number of individual science centers have jointly funded an international study of the impact of science centers on their local communities. Phase 1 of this study, in 2001–02, resulted in an annotated bibliography of 180 items relating to impact evaluation, and produced a model which divides the impacts of science centers on their communities into four categories: personal impact, societal impact, political impact and economic impact.

This report describes Phase 2 of the international study, focusing on the economic impacts of science centers on their local communities. Project objectives for this phase were to:

- collect and collate financial and other data from science centers round the world, in order to develop a set of baseline data depicting the economic activity of science centers in the regions covered by the science center network organisations supporting the project: ASPAC, ASTC, ASTEN, CASC, ECSITE and ECSITE-UK, NCSM, Red-POP and SAASTEC[1]
- prepare a summary of what an economic impact study involves, and of the types of information that need to be gathered in the course of an economic impact study focusing on a science center
- present a small number of 'case study' descriptions to illustrate projects that have already been carried out by science centers, museums and similar institutions to explore their economic impact on their communities
- develop a brief 'how to' guide for a science center wishing to carry out or commission its own economic impact study.

The project was guided by a steering committee consisting of the ASTC President and the executive directors of four of the regional network organisations: ASPAC, ASTC, ECSITE and Red-POP.

A substantial part of this report is an introduction to the topic of economic impact. It includes definitions of key terms, discussion of how economic impacts can be calculated—including a step-by-step guide to planning and carrying out an economic impact study—and a number of illustrative case studies. Another large part of the report is devoted to presenting and analysing survey-based data from 149 science centers and 50 other institutions about their revenue and expenditure, their employees and their visitors.

Economic activity of science centers around the world

A one-page questionnaire was distributed to some 700 science centers, museums and other science-based institutions around the world during April–June 2004. Data were received relating to 199 of these institutions, from 35 countries in five geographical regions: North America (81 respondents), Latin America & the Caribbean (13), Europe & the Middle East (50), the Asia–Pacific region (54) and Southern Africa (1). For all the survey respondents taken together:

- total operating expenditure for a single year exceeded US$1.1 billion, with 54% of this being for wages and salaries and other staff-related costs
- total capital expenditure for one year was US$308 million
- earned income accounted for 43% of revenue, public funding for 41% and private funding for 15%
- 61% of respondents reported an excess of revenue over expenditure, and a further 13% reported a break-even result
- nearly 77 million visits were reported by respondent institutions for one year—61.8 million on-site visits and over 15 million off-site visits
- a total of 10,756 people were employed in full-time jobs and 6,123 people were employed in part-time jobs (a total of 16,879 employees)
- a further 26,546 people were involved with respondent institutions as volunteers.

[1] Asia–Pacific Network of Science and Technology Centres; Association of Science-Technology Centers Incorporated; Australasian Science and Technology Exhibitors' Network; Canadian Association of Science Centres; European Collaborative for Science, Industry and Technology Exhibitions; The Science and Discovery Centre Network of the UK; National Council of Science Museums of India; Red de Popularización de la Ciencia y la Tecnología para América Latina y el Caribe; Southern African Association of Science and Technology Centres.

For the science center industry as a whole, the worldwide totals are considerably larger than those above, as these figures represent only about 25% of the membership of participating regional networks, and not all science centers and museums are members of a regional network.

The data were broken down by region and in some cases also by institution type or institution size. Several of the resulting subgroups were too small to be representative, but some interesting insights did emerge. For example, private funding made up a higher proportion of revenue (24%) in North America than in other regions; and public funding made a much larger contribution (74%) to revenue for institutions in the Asia–Pacific region than elsewhere. Institutions in North America made greater use of part-time staff and of volunteers than institutions in other regions. Outdoor space for public use was more likely to be found attached to institutions in the Asia–Pacific region and in Latin America & the Caribbean than in North America or in Europe & the Middle East.

Performance ratios also offered food for thought: visitors were less crowded in Asia–Pacific institutions than in others (number of on-site visitors per square metre of floor space) but the number of visitors per full-time equivalent employee was much larger in Asia–Pacific institutions than in others. Operating costs per square metre or per visitor varied considerably between regions, although here direct comparisons on a worldwide basis are not meaningful because the economies in different countries are very different from each other.

Respondents also listed many examples of less readily quantifiable economic contributions that science centers make to their local communities. They contribute to neighbourhood development or regeneration; attract tourists; provide an educational resource; promote research and innovation; offer opportunities to various sectors of the community; provide a meeting place; and become a source of pride for their local communities.

Economic impact studies

The activity described above has flow-on impacts on the economy of the region in which the science center operates. A study of the economic impact of a science center traces the flow and level of spending that can be attributed to the activities of the science center—it estimates the economic impact of the science center on a defined economic region over a particular time period.

Total economic impact has several components: the direct impact made up of spending by the science center itself (over US$1.1 billion for respondent institutions) and of the jobs that it provides; the direct impact resulting from spending by people who visit the region in order to go to the science center; the indirect impact resulting from extra business generated for suppliers of goods and services to the science center and its visitors; and the induced impact of increased ‘consumption spending’ in the region as a result of larger wages and increased organisational revenue being returned to the local economy by the science center, its suppliers and their suppliers.

Direct or primary impacts can be calculated from primary data—the science center’s expenditure and employment records, and survey-based data about the science center’s visitors: what proportion of visitors is from outside the local region and had the science center as their primary motivation for visiting the region; how long they stay in the region; what they spend money on while in the region; and how much they spend. For many respondents to this project’s survey, visitor spending is likely to make a significant contribution to overall economic impact, as the reported percentage of out-of-region visitors was in some cases as high as 98% (with a median value of 36%).

However, indirect and induced impacts (together making up what are known as ‘secondary impacts’) can only be estimated on the basis of a good understanding of the local region’s overall economy and the interrelationships among various industries within the economy. Economic models depicting these relationships are increasingly available, but they are region-specific and relate to a particular period of time. This means that results from any given economic impact study are not necessarily transferable to another context.

The case studies presented in this report illustrate a variety of approaches to estimating the economic impact of science centers and museums. Some studies focused only on direct impacts; others used economic models to estimate indirect impacts as well. Some were for individual institutions; others looked at the combined impact of a number of institutions in a region. Two of the studies went beyond readily quantifiable impacts, exploring ways of putting dollar values on things like providing free or reduced-fee admissions to a science center or ‘increasing human capital’. The case studies did not display any consistent pattern in the relationships among operational budget, direct economic impact and total economic impact, with the total economic impact being as high as five times the direct impact in one case but a much smaller multiple in others.

Because an economic impact study is based on the characteristics of the relevant local economy, there is no universally applicable factor for converting a direct impact figure to a value for the total economic impact of an institution’s activities. In fact, the United Kingdom’s Department of Culture, Media and Sport has ‘confirmed that there is no ready-made and reliable methodology in place for calculating the economic impact of cultural institutions’ (Travers and Glaister 2004, p. 17). Some researchers in the United Kingdom and USA (e.g. Travers and Glaister 2004 for the UK museum sector, Stynes 1997 for tourism in USA) have suggested that multipliers of around 1.5 to 1.7 might be reasonable in these countries; that is, the total economic impact could be about 1.5 to 1.7 times the direct impact. The Australian Bureau of Statistics (2001) has suggested 1.74 as an ‘indicative’ value

for a gross value-added multiplier for the libraries and museums sector in Australia. Other economists are sceptical about the use of multipliers and recommend a focus on direct impacts only. No data were located to indicate whether similar relationships might be valid in other countries.

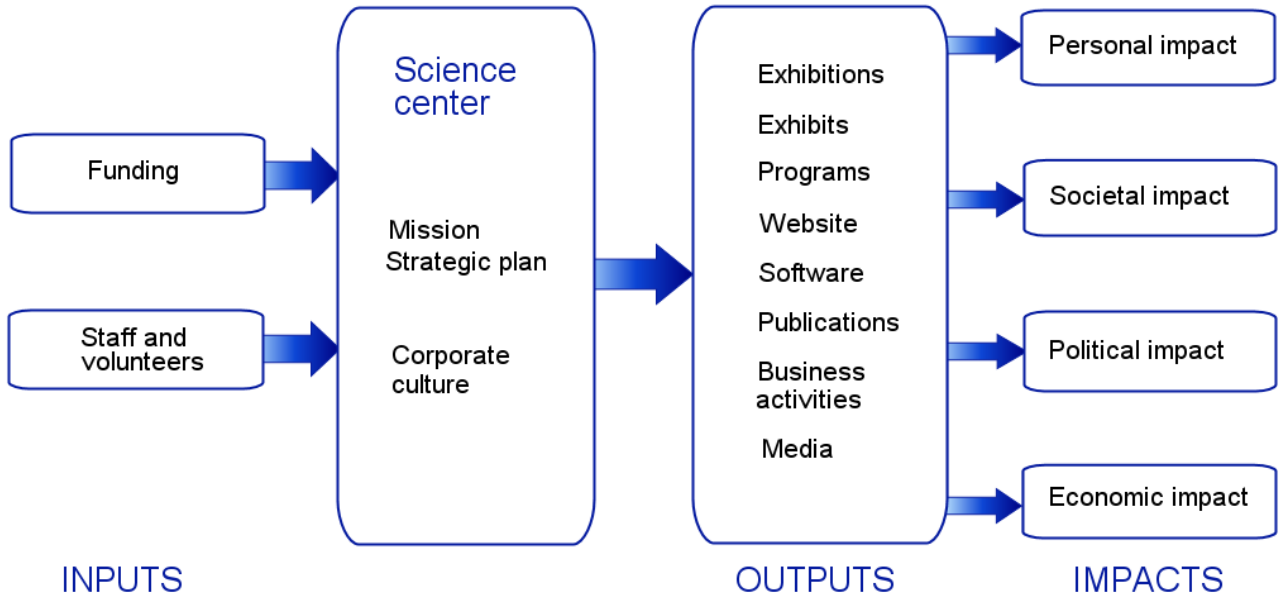
Chapter 2 Introduction

The evaluation of the impact of museums and science centers is a growing field of study. Scott (2003) points out three trends that have contributed to the rise of impact evaluation. Firstly, increasing competition and financial pressure have forced museums to focus more on what they do and how this meets community needs. Secondly, 'greater public accountability and transparency demand evidence of service provision'. And thirdly, government policies require museums to demonstrate their achievements in areas such as social inclusion, access and equity.

As part of this growing focus on impact evaluation, Garnett (2002) carried out Phase 1 of an international study of the impact of science centers during 2001–2002. She surveyed existing work on the impact of science centers and science museums on their communities, collecting and analysing reports on research aimed at exploring such impacts. The study was funded by a group of 13 science centers[2] and was guided by a steering group comprising Dr. Per-Edvin Persson (chair), Dr. John Durant, Dr. Annie Ghisalberti, Dr. Tom Krakauer, Mr. Roy Shafer, Dr. Walter Witschey and, from 2002, Dr. John Falk.

Garnett produced an annotated bibliography of 180 items and a model for the impact of a science center or science museum—a model which is summarised by Figure 2-1.

Figure 2-1 Model of science center impact



By far the majority (87%) of the 180 reports received by Garnett focused on aspects of personal impact. Some studies related to societal impact (9%) and economic impact (4%); there were no published or unpublished studies on the political impact—the influence on policy development—of science centers and museums.

As Garnett pointed out,

> … More economic impact studies would contribute to a stronger public awareness of the positive effects that science centers have on employment and income creation in their local region.

In the last few years, growing numbers of science centers and museums have carried out economic impact assessments, often in conjunction with other types of impact study. For example, Wavell et al (2002) reviewed quantitative data collection systems for museums, archives and libraries in the United Kingdom (UK), to assess the extent to which such data would permit evaluation of the impact made by these services and to identify what indicators of social and economic impact were missing from existing data collections. Travers et al (2003) provided an overview of the impact of London's Natural History Museum, considering 'what others think of [the museum]' as well as assessing the financial value of the museum's activities. Travers and Glaister (2004) have also looked at the group of 29 national museums and galleries in the UK, exploring not only their economic impact but also the government's approach to museums and galleries; creativity and innovation; and civic engagement. Scott's research (2003) sought perspectives on the impact of museums both from those working within museums

[2] At-Bristol, Cité des Sciences et de l'Industrie, Deutsches Museum, Experimentarium, Heureka – The Finnish Science Centre, Museum of Life and Science, newMetropolis Science and Technology Center, Ontario Science Centre, Oregon Museum of Science and Industry, Questacon – The National Science and Technology Centre, St Louis Science Center, Technopolis–FTI Foundation, The Franklin Institute.

and from the general public—including both museum visitors and non-visitors—'with a view to developing a set of impact indicators shared across both sets of stakeholders'; this study identified economic impact as one of five key ways in which museums are perceived to contribute to their communities.

In this study, we focus only on assessing the economic impact of science centers and museums—that is, the impact that an institution's activity has on the flow and level of spending in its local region. We do not look at the broader impacts of science center and museum activity, except to summarise some of the functions that contribute to these broader impacts as well as to the economic health of a community (see Chapter 5.4).

The study is Phase 2 of the international study of the impact of science centers, with funding from the Association of Science-Technology Centers (ASTC) as well as the original 13 individual science centers. It has been carried out at Questacon – The National Science and Technology Centre in Canberra, Australia. Guidance for the conduct of the study was provided by the executive directors of several regional science center networks: the Asia–Pacific Network of Science and Technology Centres (ASPAC); ASTC; the European Collaborative for Science, Industry and Technology Exhibitions (ECSITE); and Red de Popularización de la Ciencia y la Tecnología para América Latina y el Caribe (Red-POP). The Australasian Science and Technology Exhibitors' Network (ASTEN), the Canadian Association of Science Centres (CASC), the Science and Discovery Centre Network of the UK (ECSITE-UK), the National Council of Science Museums in India (NCSM) and the Southern African Association of Science and Technology Centres (SAASTEC) also assisted the project.

The rest of this report uses the term 'science center' to refer to science and technology centers and museums as well as related institutions. The exception is Chapter 8, which distinguishes between 'science centers' (science and technology centers or museums) and 'other institutions' (including aquariums, botanic gardens, children's museums, natural history museums , planetariums, zoos).

Chapter 3 Objectives of the project

The brief for the current project was to follow up the Garnett (2002) study by exploring the economic impact that science centers have on their communities.

The objectives of the project were to:

- collect and collate financial and other data from science centers round the world, in order to develop a set of baseline data depicting the economic activity of science centers in the regions covered by the science center network organisations supporting the project: ASPAC, ASTC, ASTEN, CASC, ECSITE and ECSITE-UK, NCSM, Red-POP and SAASTEC
- prepare a summary of what an economic impact study involves, and of the types of information that need to be gathered in the course of an economic impact study focusing on a science center
- present a small number of 'case study' descriptions to illustrate projects that have already been carried out by science centers, museums and similar institutions to explore their economic impact on their communities
- develop a brief 'how to' guide for a science center wishing to carry out or commission its own economic impact study.

Chapter 4 Project stages

The project was carried out in nine stages:

1. Carry out and document preliminary research and develop a preliminary draft of the survey questionnaire, and seek feedback on this from (a) representatives of science center networks and (b) the project adviser—a researcher working in the field of educational tourism, with experience in economic impact studies in this field. Draft an accompanying covering letter, also for approval by the steering committee. This stage included early work on the database for collating and analysing the data, to ensure that the questionnaire responses could be effectively handled, leading to the desired aggregations of data.
2. Revise the questionnaire on the basis of feedback obtained in stage 1. The final version of the questionnaire is at Appendix 3, and notes on the approach approved at stage 1(a) are at Appendix 4.
3. Distribute the questionnaire, with the assistance of the executive directors of the regional science center networks.
4. Contact science centers known to have carried out economic impact studies, to seek permission to use them as case studies in this project, and to obtain more information if necessary.
5. Collate the survey-based data about the economic activities of science centers.
6. Draft a report to summarise the survey findings, outline the case studies, and summarise key issues in carrying out actual economic impact studies.
7. Develop a 'how to carry out an economic impact study' guide for inclusion in the report.
8. Seek feedback from the steering committee on the draft report.
9. Produce and publish the final report.

The Director of the University of Canberra's Centre for Tourism Research was commissioned to provide advice and critical feedback at stages 1, 6 and 7 above, and to assist with the statistical analysis of the data collected.

The questionnaire (see Appendix 3) was sent to about 700 institutions by the executive directors of the regional science center network organisations. As some institutions are members of more than one network organisation, it was not possible to establish the exact number of survey recipients.

In total, 199 institutions are represented in the data reported in Chapter 8:

- Survey responses were received from 103 institutions, with one of these responses providing aggregated data for 28 science centers in India.
- Data for 20 UK-based science centers and museums were obtained from ECSITE-UK, on the understanding that this data would be published in aggregated form only (a few of these institutions had provided direct responses, which were used for the analysis in Chapter 8).
- In addition, data were sought from ASTC, for institutions that responded to the 2004 ASTC member survey (ASTC 2004a) but not to this project's survey. Of these institutions, 49 responded and gave permission for their data to be used in the current study.

Chapter 5 What is 'the economic impact of a science center'?

5.1 Overview

Our focus is on the readily quantifiable economic impacts of a science center: the flow and level of spending, in the local economic region, which can be attributed to the activity of the science center.

Economic impact studies have most often been used in situations where a change is being planned—for example, expansion in an industry, or a new construction project, or shutting down a military base. They have also been used in assessing the economic impact of sporting and cultural events, which can be considered as changes to the economic activity of a region. Increasingly, institutions with an ongoing presence and year-round activities in a region are also carrying out economic impact studies to assess and demonstrate the contribution that their activities make to their local economies. This contribution can be described in the way that Americans for the Arts (2004a) describe the impact of arts organisations on their communities: these organisations

> … pay their employees, purchase supplies, contract for services, and acquire assets within the local community. These actions, in turn, support local jobs, create household income, and generate revenue to the local, state and federal governments.

The choice of 'local region' can make a significant difference to how much economic impact an institution makes. The institution's impact on the immediate neighbourhood may be large, but this could be at the expense of other, neighbouring regions. On a broader scale, for example a whole country instead of a city or county, the impact may well be insignificant because resources are merely being shifted within the region.

Economic impact is made up of primary and secondary impacts:

- Primary or direct economic impact refers to expenditure by the science center itself, as in the first part of the statement cited above, plus expenditure by those visitors to the science center who come from outside the local region in order to visit the center.
- Secondary economic impact is a combination of indirect and induced impacts.
    - Indirect economic impact refers to the fact that spending by the science center and its audiences injects new money into the economy and stimulates the purchasing of goods and services to satisfy the needs of the science center and its audiences. These are the 'supplier' effects.
    - Induced economic impact is the flow-on created by the combined effect of direct and indirect economic impacts. Larger total wages and increased organisational revenues are, in part, returned to the local economy through further 'consumption' spending.

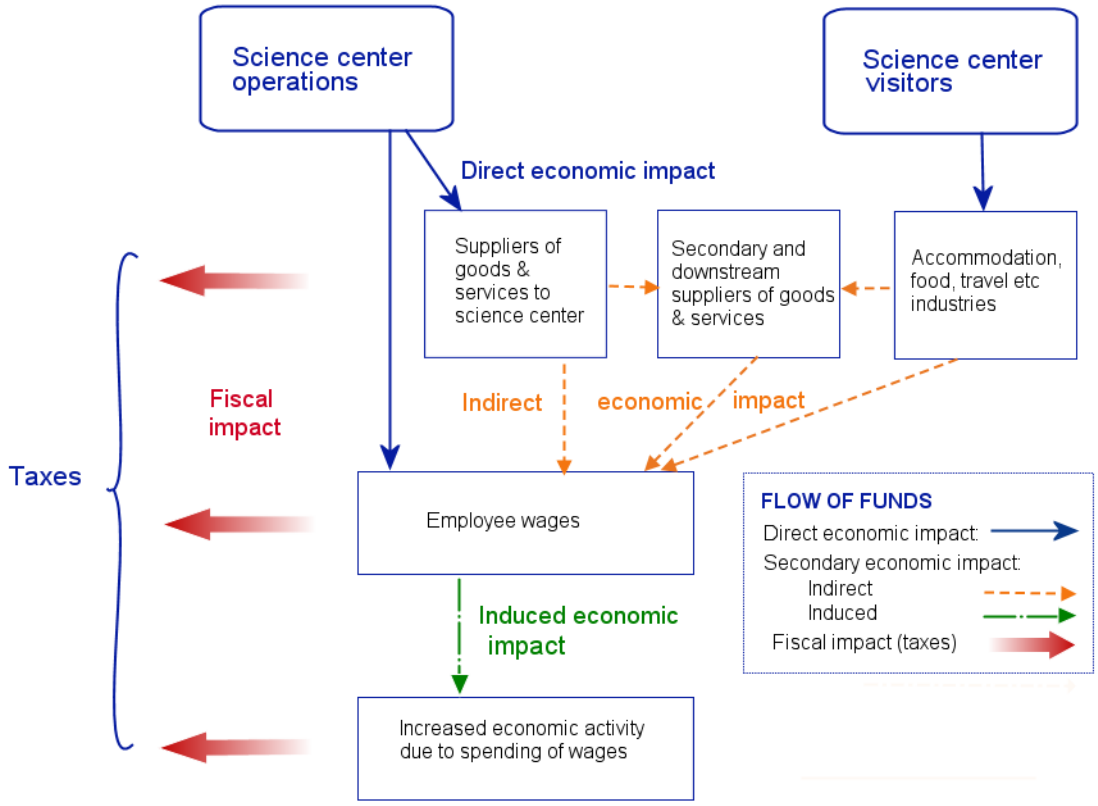
Indirect and induced impacts can only be quantified on the basis of a good understanding of the overall economy and inter-industry relationships in the region concerned.

Fiscal impact on the local (or wider) economy refers to changes in government revenues and expenditures—including changes in tax payments and changes in demand for public services—resulting from an institution's activities. This is related to but separate from the economic impact.

Figure 5-1 illustrates economic impact by showing the flow of funds from the science center and its visitors into the community. It also shows the tax-related components of the fiscal impacts.

Note that different kinds of economic analysis are often confused. Appendix 2 provides descriptions of seven types of analysis, drawn from Stynes (1997).

Figure 5-1 **Direct, indirect and induced economic impact: expenditure by the institution, its visitors, employees and suppliers**



5.2 Direct economic impact

An institution's direct economic impact occurs as a result of its own spending and spending by some of its out-of-region visitors. It also includes the jobs provided directly by the institution.

The *direct impact resulting from the institution's own spending*, on both employee wages and payments to suppliers of goods and services, is readily determined from the institution's salary and expenditure records.

To estimate the *direct impact due to spending by visitors*, data are needed on:

(a) the number of visitors from outside the local region—to isolate only that expenditure which would not otherwise occur in the region

(b) the proportion of these 'external' visitors for whom a visit to the institution was the key reason for travelling to the local region (it is only these visitors whose spending can be attributed to the institution being studied)

(c) a breakdown of external visitors between day visitors and those staying one or more nights in the local region, and—for the latter—the length of their stay in the region

(d) spending patterns for day visitors and holidaying visitors while in the region—what they spend money on (for example travel, food, accommodation, retail purchases and visits to other attractions) and how much they spend.

Data on item (a) are often collected in the form of postcode surveys by science centers at ticket sales points, but can be obtained as a part of wider-ranging surveys of visitors; these can also include questions on items (b)–(d). Local tourism organisations often collect data on items (b)–(d) for visitors to the region; such information can be used together with data collected by the institution itself.

5.3 Secondary economic impact

Secondary economic impacts include flow-on effects to other businesses and industries in the region—the extra turnover generated for suppliers and the resulting growth in employment and local spending power, and successive waves of such impacts among downstream suppliers and service providers. These flow-on effects are sometimes called multiplier effects.

Calculation of these secondary economic impacts is often done using an 'input–output model', which shows 'which goods and services are produced by each industry and how they are used' (ACT Auditor-General's Office 2002). Brand et al (2000) comment:

> Input–output tables provide a detailed map of financial interactions within an economy for a particular time period, typically a specified year, and identify the flow of goods and services between industries, consumers and government … The input–output approach is the most comprehensive and most widely used for economic contribution studies of this type.

Use of input–output models

The input–output model used and the resulting multiplier factors must be tailored for the local region—a customised or at least locally relevant model is critical to obtaining any meaningful secondary economic impact estimate. For example, the introduction to the RIMS II User Handbook (US Department of Commerce 1986), referring to the input–output model used in the Chicago study described in Appendix 7 (Case study 3), states that:

> Using RIMS II, multipliers can be estimated for any region composed of one or more counties and for any industry [listed] in the national I–O [input–output] table …
>
> Effective use of the multipliers for impact analysis required proper interpretation of the I–O relationships … users must provide information on the geographic and industrial patterns of the project or program expenditures under study or on the direct earnings and employment changes associated with the project or program.

This need for a locally based approach is reinforced by the caveats accompanying the *Arts & Economic Prosperity* calculator (Appendix 7, Case study 11), and by the fact that each of the 91 communities covered by the *Arts and Economic Prosperity* study had a customised input–output model.

Commonly used multipliers

While input–output tables depict the detailed inter-industry relationships in a region at a particular time, economic impact studies often use a variety of 'global' multipliers to portray the impact of the project, event or institution being studied. Terminology varies by country, and also among researchers, depending on the focus of their study.

- The *(total) output multiplier* measures the total output produced in the region's economy—including direct, indirect and induced—that results from the expenditure of one dollar (or other currency unit) by the institution. That is, it estimates the total spending that occurs: direct spending by the institution and its visitors plus successive rounds of re-spending as the dollars are traded for other goods and services in the economy. This is also referred to as the *sales multiplier* or the *consumption multiplier*.
- The *employee income multiplier* measures the total employee income in the region's economy that results from every dollar paid in salary or wages to the institution's employees. This is also called the *earnings or wages multiplier* or the *household income multiplier* and refers to the extra funds that are available for households in the region to spend.
- The *employment multiplier* measures the total number of jobs created in the region's economy as a result of one job created directly by the institution, or as a result of a given level of expenditure by the institution.
- The *(gross) value-added multiplier* refers to the economic value left in the community after leakages (e.g. payments to out-of-region suppliers) and taxes have been accounted for.[3]

Cautions about the use of secondary economic impact figures

Some economists (e.g. ACT Auditor-General 2002, Rosentraub 2003) express considerable scepticism about the use of multipliers or simple input–output models, and some suggest that more accurate, realistic and useful results are obtained through a standard benefit–cost analysis (see Appendix 2 for a description of different types of economic analyses). They point out that treasury officials are increasingly sceptical about economic impact claims, as these are often inflated as part of a 'sales pitch', tend to ignore costs of providing extra goods or services, and take little or no account of possible negative impacts.

Rosentraub (2003) comments:

> … many economic impact studies include multiplier effects that include as economic value the re-spending or recirculation of dollars in an economy. Multipliers as high as 2 or 3 have been used in some analyses … Across the past several years, however, a great deal of statistical work has challenged the validity of multiplier effects. It is now agreed that direct spending alone is a far more accurate measure of the economic value of an activity.

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[3] This description of these commonly used multipliers is based on those in Ahmadi (2003; p. 4) and MCIC (2001; p. 8).

While there is substantial political value in reporting the highest possible number, it is more prudent to note the direct spending produced and leave this figure unaltered by any multiplier.

Another view (Brent Ritchie, University of Canberra, pers. comm., October 2004) is that the use of multipliers may in fact be less problematical for the ongoing activity of institutions such as science centers than for one-off events. Changes in the economy that are attributed to events are often delayed or do not last, so that secondary impact figures can be misleading. However, the secondary impacts of the ongoing activity of a science center may be more consistent and long-lasting.

5.4 Other economic contributions to the community

Brand et al (2000) and Witschey (2001) are among those suggesting a broader base for considering 'economic impact', even though these broader impacts often cannot be readily quantified. A number of institutions responding to the current project's survey also listed hard-to-quantify ways in which they contribute to their local economies. These roles, and the activities detailed in Appendix 6, tend to fall into a number of broad categories, as illustrated by the following examples.

Contributing to neighbourhood (re)development

- a redevelopment engine, with museum site rehabilitation encouraging other property owners to 'fix-up' projects of their own (attracting federal funding to the region)
- a preservationist, caring for historic properties
- a leader in upgrading buildings and their operations to improve their performance—to reduce their energy use and their overall impact on the environment

Attracting tourists

- a tourist attraction in its own right
- a tourism partner, linking up with other attractions in the region
- a partner with local hotels in packaging tourism offers

Providing an educational resource

- a resource for science education, vocational guidance and training—providing, for example, student experiences both at the museum and in the classroom, teacher development programs and materials, distance learning opportunities, virtual exhibits on the internet
- a partner with other organisations, including schools, to bring the museum curriculum into the classroom or to organise innovative educational programs
- a producer and retailer of educational kits
- a reliable and trustworthy source of information

Promoting research and innovation

- a community asset for economic development, signalling that the community values science and mathematics
- a player in the transition from an industry-based economy to a knowledge-based economy
- the host of an incubator for new companies in the fields of information and computer technology, and the environment
- a facilitator of the transfer of innovation from research to new business activities
- a facilitator of technology transfer; for example, for the production of educational kits
- a supporter of teams of scientists involved in cutting-edge research, and a facilitator of interactions between the scientists and members of the public
- a link between universities and members of the public

Offering opportunities to various sectors of the community

- a provider of employment opportunities, particularly for students and other young people, including internships, vocational training, job guidance and start-up projects
- a provider of free or reduced-fee admission; for example, for all local residents with a public library card, or for low-income families
- a conduit for corporate philanthropy; for example, by creating inner-city school programs funded by corporate giving initiatives

- a provider of travelling exhibitions and outreach programs to other venues or to other communities, generating income for those as well
- a source of opportunities for local businesses to promote their products and services through association with the science center

Providing a meeting place

- a meeting place, particularly at weekends, for people in a wide range of age groups
- an organiser and host of cultural and educational events for the public, often in partnership with other community organisations
- a conference and events venue
- a community store

Being a source of pride for the local community

- a focus for generating pride in their region for local residents, resulting from the success and reputation of the science center.