
B Early childhood development data

Workforce strategies and programs need to be regularly monitored and evaluated for their cost effectiveness — whether they are achieving their objectives at the least possible cost. This ongoing monitoring and evaluation requires data on which sound evidence-based decisions can be made. This appendix describes the major data requirements for workforce planning (section B.1) and the existing early childhood development (ECD) data collections (section B.2). It then identifies some of the limits to the existing data collections (section B.3). The appendix then concludes with a discussion of the likely future improvements to ECD data (section B.4).

B.1 Which data to collect?

Under the National Partnership Agreement on the National Quality Agenda for Early Childhood Education and Care (NQA), Australian governments have agreed to develop an early childhood education and care (ECEC) workforce strategy (see chapter 11).

Data that are integral to the development, monitoring and review of an ECEC workforce strategy include:

- the number of workers, their skills and their location in the wider workforce, so that it is possible to understand where there are labour gaps, and why current and prospective ECD workers join, stay and depart from the sector
- the costs of ECD strategies and programs, so that it is possible to assess their cost effectiveness, including costs to government, the private sector and households
- the motivations and capacity of parents to access ECD services, so that it is possible to assess which ECD services households use as a result of a policy change. This in turn allows a more thorough analysis of likely labour requirements
- data to understand the benefits of ECD policies. This is important in identifying which children are most likely to benefit from ECD interventions, thereby helping develop targeted workforce strategies.

B.2 What are the existing data collections?

Workforce planning data

There are several collections relevant that assist in understanding the profile of the ECD workforce. These include the:

- National Early Childhood Education and Care Workforce Census (National Workforce Census)
- Census of Population and Housing
- higher and vocational education and training statistics held by the Department of Education, Employment and Workplace Relations (DEEWR) and the National Centre for Vocational Education and Research (NCVER).

National Early Childhood Education and Care Workforce Census

The National Workforce Census collection covers all services that receive child care benefit (CCB) as well as preschools. The last census was undertaken between June and July 2010, and data are available for approximately 80 per cent of the 16 400 services, 139 200 employees and 989 500 children in the sector.

The National Workforce Census replaces the earlier Australian Government Census of Child Care Services and the Australian Government Child Care Provider Survey collections, though it shares a number of common data elements.

It consists of two collections. The first (part I) describes the characteristics of ECEC establishments, their staff and children. The census form was completed by the ECEC service provider. The second (part II) describes in detail the ECEC workforce and was completed by the ECEC workers themselves.

Part I of collection contains data on:

- the number of places for which the service is licensed
- the maximum number of children, by age group, that attend on each day of the week
- the opening and closing times
- the total number of children that attended the service during the reference week, including children that are Indigenous or from non-English speaking backgrounds, by age group

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- the total number of children that attended the service during the reference week that had a special need (such as additional assistance, communication, mobility or self care)
 - whether the service provided a preschool program, and how many children were offered preschool services
 - whether the centre had a qualified preschool teacher
 - the maximum number of hours that the centre provided a preschool program.

Part I of the collection also includes data on ECEC employees, including:

- their age and gender
- their paid or unpaid status
- their main type of work (primary contact, other contact, management or administration, other work) and their main role (director, group leader or teacher, home carer, assistant or aide, other contact worker, other worker)
- whether the employee was part of a preschool program
- their employment status (employee, self-employed) and actual hours worked
- their years of experience in ECEC, with the service provider, and in their current role
- their highest level of qualification, whether they are currently enrolled in a qualification, and recent professional development experience.

An illustration of the type of data that are available is given in table B.1. It is apparent that the majority of services are located in major cities and comprise long day care (LDC) centres, and to a lesser extent outside school hours care services and preschools.

Table B.1 Number of CCB-approved childcare services, preschools and children, by remoteness classification, 2010^a

<i>Service type</i>	<i>Major City</i>	<i>Inner regional</i>	<i>Outer regional</i>	<i>Remote and very remote</i>	<i>Remoteness not allocated^b</i>	<i>Aust</i>
<i>Number of services</i>						
LDC	4 259	982	444	96	na	5 781
FDC	na	na	na	na	329	329
IHC	na	na	na	na	53	53
Occasional care	55	23	7	–	na	85
OSHC	2 285	581	245	36	na	3 147
Preschool	2 680	1 012	718	399	na	4 809
Vacation care	1 470	433	225	28	na	2 156
Total responses	10 749	3 031	1 639	559	382	16 360
<i>Number of children</i>						
LDC	399 310	99 771	39 001	5 457	na	543 539
FDC	na	na	na	na	93 738	93 738
IHC	na	na	na	na	3 514	3 514
Occasional care	3 982	1 683	736	–	na	6 401
OSHC	174 438	24 064	11 853	1 158	na	211 514
Preschool	na	na	na	na	na	na
Vacation care	97 883	21 776	10 155	933	na	130 747
Total responses	675 614	147 295	61 744	7 549	97 252	989 453

^a Remoteness classification based on the Australian Standard Geographical Classification. ^b FDC and IHC were not allocated to a remoteness category, as these services can span more than one category. **LDC** Long day care, **FDC** Family day care, **IHC** In-home care, **OSHC** Outside School Hours Care. **na** Not applicable, not collected or not calculated. – Nil or rounded to zero.

Source: Productivity Commission estimates based on unpublished DEEWR data from the 2010 National ECEC Workforce Census.

An illustration of the data available on the ECEC workforce is given in table B.2. Approximately 79 000 workers, or about 58 per cent of the workforce, are qualified to a certificate IV or lower qualification level.

Table B.2 Number of staff by employment role and highest level of early childhood education and care qualification, 2010

	<i>Principal, director, coordinator, teacher in charge</i>	<i>Group leader, teacher</i>	<i>Family day care or in-home care educator</i>	<i>Assistant, aide</i>	<i>Other contact worker</i>	<i>Non-contact worker</i>	<i>Not answered, or not applicable</i>	<i>Australia</i>
Bachelor, 4 years	4 682	6 150	291	1 385	383	124	105	13 120
Bachelor, 3 years	1 969	2 544	162	654	209	61	38	5 638
Advanced diploma, diploma	7 228	16 475	1 514	5 470	1 458	423	97	32 665
Certificate III or IV	1 078	4 775	4 569	22 547	1 686	393	99	35 147
Less than certificate III	199	322	423	1 718	327	230	15	3 235
No ECEC qualification	1 179	1 884	5 152	24 907	3 620	4 169	143	41 054
Attainment not known	195	306	704	2 198	401	235	6	4 045
Total	16 531	32 455	12 816	58 879	8 085	5 636	503	134 905

Source: Productivity Commission estimates based on unpublished DEEWR data from the 2010 National ECEC Workforce Census.

Part II of the collection includes data on:

- whether the individual held an ECEC or other teaching qualification and its level (certificate level I or II through to postgraduate degree)
- the worker's highest completed non-teaching qualification
- the age-group of children that the staff member works with
- the main type of work (primary contact, other contact, management or administration, other work) and main role of employee (director, group leader or teacher, home carer, assist or aide, other contact worker, other worker)
- the worker's years of experience in ECEC, with the service provider, and in their current role
- the worker's employment status (such as employee, self-employed), employment arrangement (such as full- or part-time permanent, fixed-term contract and casual), and actual hours worked (such as paid hours, paid overtime, unpaid overtime)
- a number of responses regarding the worker's level of satisfaction, views on the pay and conditions of working at the job
- whether the worker has more than one job
- future work intentions (seeking to depart) and the reasons for intended departure
- views about the career in the ECEC sector
- recognition of prior learning for obtaining qualifications
- take-home income.

Census of Population and Housing

The Australian Bureau of Statistics (ABS) Census of Population and Housing (cat. no. 2901.0) (the Census) is a rich dataset that covers a range of economic, social and demographic characteristics of Australia's population. The Census is collected every five years, with the most recent available being that collected in 2006.

Data in the Census can be used to illustrate aspects of Australia's workforce that includes, but is not limited, to the levels of qualification, fields of study of qualifications, labour force status (employed, unemployed or out of the workforce), and if employed, occupation and industry of employment.

An illustration of the type of data that might be extracted from the Census is shown in table B.3. The table describes the distribution of potential ECEC workers throughout the community. Persons with children's services qualifications appear to have higher rates of unemployment (around 4.9 per cent at the time of the Census) compared to those with primary school teaching qualifications (1.4 per cent) — although this does not make any allowance for the likelihood that some workers might choose to drop out of the labour force altogether.

Furthermore, the Census includes a variety of sociodemographic variables that might assist in describing the workforce participation of individuals, such as income, age, gender, marital status, language spoken at home, location and remoteness classification of usual place of residence. This makes the dataset a potentially very useful tool for analysing an individual's choice to join the ECD workforce.

Table B.3 Number of persons, by field of study of ECEC qualification and labour force characteristics, 2006

<i>Labour force status and industry of employment</i>	<i>Children's services^a</i>	<i>Early childhood education^b</i>	<i>Primary education^c</i>
Employed			
Childcare services ^d	25 190	3 241	1 106
Preschool sector ^e	4 703	4 731	853
Primary school sector ^f	2 155	580	73 463
Employed elsewhere ^g	23 869	10 855	37 630
All employed ^h	55 917	19 407	113 052
Unemployed ⁱ	2 861	429	1 584
Not in labour force	17 781	8 107	41 170
Other ^j	355	131	553
Total	76 914	28 074	156 359
Unemployment rate ^k (per cent)	4.9	2.2	1.4

^a Australian Standard Classification of Education (ASCED) Non-School Qualification: Field of Study (QALFP) 070101. ^b ASCED QALFP 070103. ^c ASCED QALFP 090503. ^d Australian New Zealand Standard Industry Classification (ANZSIC) 8710. ^e ANZSIC 8010. ^f ANZSIC 8021. ^g Includes persons employed in all other industries with qualifications in children's services, early childhood education or primary education. ^h Includes persons employed on a part-time or full-time basis. ⁱ Includes unemployed looking for part-time or full-time work. ^j Includes overseas visitors in Australia on Census night. ^k Defined as the number of unemployed divided by the number of persons in the labour force.

Source: ABS Census 2006 (TableBuilder).

Data on ECD education and training

The two principal data collections that describe the education and training that takes place each year in Australia's tertiary education sector include the higher education

statistics of DEEWR and the vocational education and training (VET) statistics of NCVER.

Both DEEWR and NCVER maintain statistical collections of the number of enrolled students, the student load undertaken in a given year, and the number of courses completed. This includes the number of students studying towards early childhood qualifications. The DEEWR dataset covers Australian universities and the NCVER dataset covers government-funded VET, including privately operated providers (to the extent they are publicly funded) (NCVER 2009).

From these collections, it is possible to obtain time-series data on the number of teachers enrolled and graduating in early childhood education by jurisdiction, Indigenous status and non-English speaking background.

While these collections provide a detailed description of the number of VET and higher education graduates with ECEC, family support or child health qualifications, they do not provide any indication on which sector the graduates eventually find work.

Nursing and Midwifery Labour Force collection

The Nursing and Midwifery Labour Force Collection is a dataset of the demographic and employment characteristics of nurses and midwives who were registered or enrolled in Australia. The data are obtained through an annual survey undertaken in conjunction with professional registration.

Data from the survey are supplemented by higher education data from DEEWR, NCVER, and migration and long-term arrivals and departures data from the ABS (ABS 2009d).

The collection contains data on:

- whether the registered or enrolled nurse is employed in nursing, on extended leave, looking for work in nursing (whether they are employed elsewhere or not employed), or not in the labour force (because they were overseas, employed elsewhere, or not employed)
- demographic characteristics such as age, gender, Indigenous status
- country of first qualification
- average hours of work, and part- and full-time status
- remoteness
- sector of employment (public or private)

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- clinical area of nursing (including family and child health)
 - field of qualification (including family and child health)
 - the extent of nurse training (by commencements and completions)
 - the level of nurse migration (including arrivals and departures, for long-term residents, permanent settlers and long-term visitors).

Community services data

There is no ongoing data collection for the family support workforce. A study commissioned by the Community and Disability Services Ministers' Advisory Council (Martin and Healy 2010) brought data together from a variety of sources into a single report on community services. Family support was classified as part of the general community services workforce, which provides social support and assistance services directly to children and families, except for housing or supported accommodation or crisis services (Martin and Healy 2010).

The broader collection comprises two collections — an employer collection and a workforce collection. The employer collection includes data on:

- sources of funding for the employing service
- vacancy rates and suitability of recent hires (Martin and Healy 2010).

The workforce collection comprises data on:

- the number of workers, in both persons and full-time equivalent terms
- professional status (non-professional, professional, and managers and administrators)
- occupation (carer, referral or information worker, support worker, social worker or case manager, psychologist, counsellor or therapist)
- type of service of employment (not-for-profit or charitable, for-profit private or public)
- contractual arrangement (permanent part-time, permanent full-time, casual or contract)
- whether employed by the service, an agency, sub-contracted or self-employed
- age, gender, birthplace
- hours worked, including unpaid hours of work
- weekly earnings
- level of education and field of qualification

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- motivations to work in the sector, levels of job satisfaction, and future career intentions
 - work experience before entering the sector, and within the sector (Martin and Healy 2010).

Cost data

There are few ongoing collections of the costs of ECEC services. The only publicly available collection is the *ABS Community Services: Australia* (cat. no. 8696.0). The Community Services survey is an irregular collection that has been undertaken every four or five years. In the most recent survey in 2008-09, 10 967 community service organisations were surveyed on various aspects of their financial operations. These services included childcare centres.

Descriptive data collected include the:

- location of the service
- profit, not-for-profit status of the service
- number of employees
- employment status (full-time, part-time, casual), and volunteer status
- gender and age of employees
- role of employees (direct service provision, and indirect service roles)
- qualification of employees
- average hours worked by employees.

Financial data collected include income of the service (including government funding and fees from service provision), labour costs and a range of other expenses.

Household use data

Household data provides the basis for analysing the motivations and capacities of households to pay for ECD services. It also provides the basis for assessing the distributional impacts of ECD policies.

Childhood Education and Care Survey

The Childhood Education and Care Survey (CEaCS) (cat. no. 4402.0) is an ABS collection, most recently undertaken in June 2008. It is an expansion of the earlier Child Care survey that has been undertaken approximately every three years since 1969. There are two attractions to CEaCS. First, it reports on formal and informal child care, where:

- formal care is defined as regulated care away from the child's home, and includes LDC, occasional care, family day care, before and after school care, and preschool
- informal care is defined as any paid or unpaid non-regulated care arranged by a child's parent or guardian, either in the child's home or elsewhere, and includes care provided by grandparents, brothers and sisters (including step brothers and sisters), other relatives (including a non-resident parent), or any other person.

Second, it provides data for all forms of formal care, not just that which is approved for CCB funding. For example, it includes all occasional care services, even though many of these are not CCB funded.

Third, CEaCS describes the motivation of parents to use formal and informal care, as well as some of the background family characteristics. Data collected include the:

- reasons for seeking formal or informal care (such as work-related, personal, beneficial for child, or other reasons)
- labour force status of parents
- number of days per week seeking care
- weekly cost of child care
- weekly family income.

An illustration of the type of data available from CEaCS is given in table B.4. It is evident that the number of children attending formal and informal care increases with age up until school age, and that informal care is relatively more important than formal care in the earlier years.

CEaCS has been used to describe the motivation and capacity of parents to use ECEC services, including to estimate the factors that determine the demand for child care (see Doiron and Kalb 2002; 2005). The dataset provides a rich description of the key determinants of female labour force participation — such as education levels and household incomes.

Table B.4 Number of children, by informal and formal care and age of child, 2008^a

Thousands

	<i>Under 1 year</i>	<i>1–2 years</i>	<i>3–5 years</i>	<i>6–8 years</i>	<i>9–12 years</i>	<i>Up to 12 years</i>
Formal care						
Before and/or after school care	0	0	40	124	89	253
Long day care	17	184	205	0	0	408
Family day care	5	29	27	5	6	71
Occasional care	1	14	10	0	0	25
Other formal care	2	9	7	1	2	21
Total children in formal care	25	225	278	131	96	756
Informal care						
Grandparent	54	146	168	132	161	660
Non-resident parent	1	16	29	45	71	162
Other relative	8	20	34	41	71	174
Other person	7	20	35	34	43	141
Total children in informal care	65	181	242	220	300	1 008
Children with no usual child care arrangement	199	213	355	489	726	1 982
All children aged 0–12 years	281	545	785	798	1 089	3 498

^a The total number of children accessing care may not sum to total since children may access more than one type of care during the survey period.

Source: ABS (2009c).

Child Care Management System

DEEWR is responsible for calculating and paying CCB payments. The Child Care Management System (CCMS) is used by the department to administer CCB payments to ECEC services and parents.

There are three collections within the CCMS. The first contains data on every child that used an approved childcare service at least once in a given year. Each child's record contains information on which services the child used, how often the child used the service (hours of use), as well as some demographic characteristics (such as age and gender).

The second collection contains a record for each approved ECEC service. The record includes data on the organisation they are a part of (for example, whether they are part of a chain), the location of the site and the types of services provided (such as whether it provided LDC and occasional care).

The third collection contains information used to calculate CCB payments. As such, it contains a record for each family claiming CCB payments. Each record is linked

to the fees charged by the centre, the parents' income(s), and the amount of CCB paid.

The CCMS is a very useful tool for estimating the revenue of approved childcare services, and the affordability of childcare services to households (since it contains records of both household income and out-of-pocket childcare expenses). The dataset permits a detailed examination of how many hours children attend formal child care, and the different types of child care attended. Moreover, the childcare services in the CCMS can be uniquely matched to those in the National Workforce Census.

Data on benefits from ECD interventions

Although there are numerous datasets that describe aspects of child education and development, there are two datasets that comprehensively measure child development and the factors that contribute to it: the Australian Early Development Index (AEDI) and the Longitudinal Study of Australian Children (LSAC).

Australian Early Development Index

The AEDI is a project coordinated by the Centre for Community Child Health (at the Royal Children's Hospital Melbourne) and the Murdoch Children's Research Institute. The project is funded by DEEWR.

The AEDI is a suite of indexes of child development adapted from the Canadian Early Development Index (CCCH 2007). The data were collected in a one-off survey of over 260 000 (or 96 per cent of) children Australia-wide entering their first year of formal schooling in 2009. The survey was administered by 15 991 teachers from 7 420 schools, who were asked to assess their students in accordance with a checklist of early development indicators.

These factors in the checklist were collated and aggregated into five indexes (domains) of child development and covered:

- physical health and wellbeing
- social competence
- emotional maturity
- language and cognitive skills
- communication skills and general knowledge.

The AEDI was found to have excellent psychometric properties (Andrich and Styles 2004). The teacher-rated outcomes of the AEDI were also found to be highly correlated with the teacher-rated outcomes collected in LSAC (Brinkman and Silburn 2007; Brinkman et al. 2007). This suggests that the index is a reliable measure of early childhood development, and of the readiness of children to take advantage of the learning environments in school (Brinkman and Silburn 2007; CCCH 2007).

The AEDI is available as a confidentialised unit record file (CURF). The CURF includes (among other things) information on each child's student identification number, gender, age, special-needs status, Indigenous status, English as a second language status, place of birth, state of residence, a measure of the socioeconomic status of the child's community of residence (as represented by the ABS Socio-Economic Indexes for Areas), the child's rating against each of the checklist items, and the child's overall summary score against each of the five AEDI domains (AEDI nd).

Growing up in Australia: the Longitudinal Study of Australian Children

LSAC is a project undertaken in partnership between the Department of Families, Housing, Community Services and Indigenous Affairs, the Australian Institute of Family Studies, and the ABS.

The study aims to examine the range of social and cultural factors that influence children born in Australia in the late 1990s and early 2000s. Data for the study are collected for two cohorts. The first cohort consists of 5000 children who were up to one year old in 2004, and the second cohort consists of 5000 children who were four to five years old in 2004 (AIFS nd). Data were collected in successive 'waves' of collections, with 'wave 3' being the most recently released dataset.

LSAC is an extremely rich dataset with over 17 000 variables that describe various aspects of a child's life. LSAC Data are available as a CURF. Data items in the CURF include information about the quality of the child's dwelling, family type of the child and the parents' marital status, a range of variables about the child and their parents sociodemographic history (such as language background), medical history, child's developmental behaviour, the number of hours the child attended formal and informal care (including LDC, family day care, occasional care, mobile care unit), the parent's motivations for child care use, the parents' employment status, and so on.

B.3 What are the limits to existing data collections?

There are a number of limitations to the existing datasets that limit their usefulness in workforce planning.

Workforce planning

Workforce studies are often undertaken to examine the factors that influence the decisions of workers and prospective workers to enter and exit a workforce. Such studies have been undertaken for the workforce as a whole and for occupations with a high female representation such as nurses and teachers.¹

The National Workforce Census provides useful information regarding when an ECEC worker joined the sector, for how many years they were absent from the sector, and what their future intentions are for work and study in the sector. Its usefulness is limited, however, in that it only covers those workers currently in the ECEC sector. Questions are not asked of those who have left the sector about their reasons of departure, when they departed, and whether they intend or would consider returning to the ECEC sector.

An alternative collection is the Australian Census of Population and Housing. It provides considerable detail about the Australian population in terms of the labour force status, industry and occupation of employment, income and a variety of sociodemographic descriptors (such as age, gender, residence, and language background). The dataset provides not only data on the number of workers outside the ECEC workforce, but has also been used extensively to undertake sophisticated analyses of various aspects of the workforce generally, such as labor force participation and rates of return to education.²

Costs of ECD services

The costs of ECD services are not well understood. While CEaCS provides some description of the cost structures of childcare centres, there are few other data for

¹ For the female workforce see Dandie and Mercante (2007), and Vella (1993) for younger women. For nurses and teachers, see for example Bradley, Green and Leeves 2006; Brewer 1996; Cunich and Whelan 2010; Doiron and Jones 2006; Dolton and van der Klaauw 1995; Hanushek, Kain and Rivkin 2002; Holmås 2002; Mont and Rees 1996; Parker and Rickman 1995; Russell et al. 2008; Shields 2004; Skåtun et al. 2005.

² See for example Chapman and Mulvey 1986; Chiswick and Miller 1995; Eastough and Miller 2004; Forbes, Barker and Turner 2010; Miller 2005; Preston 1997, 2000; Stromback 1984.

preschools, other ECD services, and for the major cost drivers of ECEC more generally.

The lack of reliable cost data has hampered previous attempts to reliably estimate the cost implications of the agreed ECEC reforms. A number of Australian studies were either unable to quantify the costs, or where costs were obtained, unable to determine in detail the underlying cost drivers of ECEC services (Allen Consulting 2010; Booz and Co. 2008; COAG 2009h; DEECD 2009a; Peak Children’s Services Cross Sectoral Taskforce 2006). As a result, these cost–benefit analyses should be treated with caution.

The lack of comprehensive cost data is not unique to Australia — there are few such collections overseas. However, where rigorous cost data have been collected, it has been possible to statistically analyse the data for the effects of policies on ECEC services. Some notable studies include Blau and Naci Mocan (2002), Naci Mocan (1995, 1997), Mukerjee and Witte (1993), Powell and Cosgrove (1992) and Preston (1993) for the United States, and Ringstad and Løyland (1998) for Norway.

Benefits of ECD policies and programs

The AEDI and LSAC have complementary strengths and weaknesses. A strength of the AEDI is that it is collected nationally. Another is the robustness of its indicators. This makes the AEDI a reliable indicator of the extent of child development among the population of Australia’s children.

Its weakness is that it has only been collected for a single year — 2009. Moreover, the collection does not contain sufficient background variables that would be expected to explain the patterns of child development — such as parental education and income levels, and experience of preschool and child care.

LSAC provides a rich dataset of the various factors that are thought to contribute to child development, such as the education attainment of the child’s parents, the parent’s employment status, experience in child care, and so on. The dataset can be used to assess the extent to which ECD policies and programs have contributed to improvements in child development, after accounting for all other considerations.

LSAC is not a national collection, thereby limiting its predictive capabilities for smaller groups of children. Moreover, LSAC does not collect data on the AEDI.³

³ Even though the AEDI was collected in the first wave of LSAC, it was only done so for the purpose of testing the suitability of AEDI as a predictor of child outcomes against the variables established in LSAC.

The Commission understands that there is a commitment by the Australian Government to continue funding the collection of the AEDI, and that there are ongoing initiatives to link the AEDI and LSAC datasets.

B.4 What data improvements might be made?

In looking at possible improvements to the data that could facilitate a more comprehensive ECD workforce strategy, the costs of providing those data improvements need to be considered.

The collection and dissemination of data is expensive. It includes not only the financial cost to the collecting agency, but also the financial and other costs imposed on those persons responsible for providing data. Individuals can be burdened by administrative requirements that ultimately take them away from their core and most valued tasks, and while the burden of complying with the requirements of any one collection might seem trivial, the combination of multiple data requests can lead to a substantial burden on individuals.

Recommendations about additional data that might be considered to help in developing the ECD workforce strategy are summarised in chapter 11. Further details in relation to those additional data follow.

Improving workforce planning data

The quality of ECEC workforce planning could be improved by improving access to the Australian Census of Population and Housing. The Census is currently available to the public in two CURFs — covering one and five per cent samples of the Census respectively. Neither of these samples provide a sufficient level of detail regarding occupation and industry classifications to permit a detailed analysis of the ECEC workforce.

The benefit of preparing a more detailed CURF is that it would improve the evidence base around which to prepare an ECEC workforce strategy. It would provide Australian governments with an insight into the relative rates of return to education in ECEC, and allow a detailed examination of the reasons for entering and exiting the ECEC workforce.

Providing a more detailed CURF would involve some cost to the ABS. Providing access to a suitably sized CURF (provided confidentiality requirements can be met) is likely to be less expensive over the long run than trying to get similar data another way, because it involves a one-off investment in assembling data that has already

been collected. Not only would the costs of future ongoing access be lower than the initial start-up costs, but they would also be lower than the alternative of establishing an ABS data laboratory — that is, assembling a fully identified unit record file every time that data is to be analysed.

Improving data on the costs of ECEC policies and programs

There is a case for improving the data on ECEC service costs. The understanding of the cost impacts of a workforce strategy could be improved by expanding the scope of the National Workforce Census.

The advantage of expanding the National Workforce Census is that it collects a range of other data that are often important in determining the cost drivers of an ECEC service — such as the workforce arrangements, and the characteristics of the children being cared for (such as their age, language status, and additional needs). It would also enable costs to be linked directly with the characteristics of the centre (such as the number of staff, their qualifications, and the profile of the children) to determine the main cost drivers of the service.

Given that collecting financial data can be potentially costly, there is a case for ensuring that any future cost collection would comply with the Australian Government's Standard Business Reporting (SBR) initiative. The aim of the SBR initiative is to reduce the business-to-government reporting burden through the use of SBR-enabled accounting and payroll software (SBR nd).