Income, Expenditure and Fees of Early Childhood Education Providers in New Zealand

newzealand-government

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# 1 Summary

This report presents results from the 2011 Survey of Income, Expenditure and Fees at ECE Services. Following similar surveys in 2005, 2006 and 2008, this survey collected information on the costs of providing early childhood education (ECE) services. In addition to costs, the 2011 survey collected information on income, fees and voluntary work. The survey was run in July 2011, with nearly 1,600 licensed ECE providers participating. The results presented here relate to data for financial years ending between June 2010 and March 2011. The aim of the survey, as with previous ones, was to provide information to assist government in its ongoing role in funding ECE in New Zealand. All figures in this report (including fees) are reported exclusive of GST.

|  |
| --- |
| **Key findings**  What are the average service costs of ECE?  The average cost of providing ECE in 2010 was $8.74 an hour per child. However, costs varied widely even for the same type of ECE. Costs ranged from $4.71 an hour for children aged two years and over at playcentres on the standard funding band to $13.77 an hour for children aged under two at education and care services on the 80%+ funding band. Costs for children under two were, on average, a third higher than costs for children two and over, ranging from 22% higher for playcentres to 58% higher for education and care services [Section 3, pages 6-8].  How much of ECE is publicly funded?  On average, 75% of income received by ECE services came from government sources, 22% from parents and 3% from other sources, such as fundraising and community grants. The publicly funded proportion was higher for kindergartens (90%) and lower for home-based services (51%). Relative to other service types, playcentres received proportionately less from parents and more from other non-government sources [Section 4, page 14-15].  To what extent does the government funding subsidy cover costs? Does it meet the full average costs of *20 Hours ECE*?  Government subsidy funding for *20 Hours ECE* met or exceeded the average costs for all service types and main funding bands except for kindergartens on the sessional funding band. Government funding subsidies covered on average 79% of costs for children under two, and 62% of costs for children two and over (excluding *20 Hours ECE*) [Section 6, pages 25-27].  What are the main cost drivers in ECE?  Teacher salaries made up around two-thirds of costs for teacher-led services, similar to 2008. Teacher salaries made up a higher proportion for home-based services, and a significantly lower proportion for playcentres, with their highest cost being association levies, at 39% of total costs [Section 3, pages 9-11].  How are fees and other parental charges structured in the ECE sector in New Zealand?  A wide range of charging models are used - per hour, per session, per day, per week, and per term - with many services using a combination of these. The most common type of charging was on a per hour basis (43% of services). Charging on a combination of per day and week basis was also common (23% of services). Most services charged fees, with 79% of playcentres and virtually all kindergartens, home-based networks and education and care services charging some kind of fee [Section 5, pages 17-18].  Average parental charges were $4.86 per hour for children under two and $4.41 an hour for children two and over (who were not in *20 Hours ECE*). Charges were highest for education and care and home-based services (between $5.30 and $5.80 an hour), and lowest for playcentres at around $0.40 an hour. Average charges in kindergartens were around $3.13 an hour for children two and over (excluding *20 Hours ECE*). Private home-based service charges were on average 14% higher than those of community-based ones, while private education and care charges were around 20% higher than those of their community-based counterparts [Section 5, pages 19-20, 22].  The distribution of fees varied between service types. Playcentres charges were less than $1 an hour at 95% of services, while 72% of home-based services charged between $5 and $6 an hour. Education and care services and kindergartens had wider distributions, with 68% of education and care services charging between $4 and $ 7 and hours, and 76% of kindergartens' charges between $2 and $4 an hour [Section 5, page 21-22].  For *20 Hours ECE*, which is provided free of compulsory fees for parents, 27% of services had optional charges, averaging around $0.86 an hour. Around 10% of services had optional charges outside of *20 Hours ECE* [Section 5, page 23].  Nearly 40% of services levied additional charges. There was a wide range of additional charges. The most commonly cited charges were: donations or family/ whānau contributions, late pick-up, absence, enrolment or administration fees, late payment fees, casual charges, holidays, holding or retainer fees, meals, nappies and other consumables, trips, transport and events, portfolios, and membership fees. Many services also offered a variety of discounts, for example, discounts for multiple family members or early payment [Section 5, pages 17, 23-24].  What is the difference across regions?  Wellington had higher fees for education and care for both under two and two and over. Fees for Waikato, Canterbury and North Island regions outside of the main urban centres were lower for education and care services. Canterbury had higher fees for kindergartens. Waikato and Wellington had lower fees for kindergartens [Section 5, page 22-23].  What is the relationship between fees, and cost, income and government funding?  There was a moderately strong relationship between the extent that government funding met a service's costs, and the average per hourly income it received from parents. On average, when government income fully met costs, average hourly income from parents was nil, and for each 10% drop in the proportion of costs met by government, average hourly income from parents increased by a dollar.  However, there was a weaker direct relationship between fees and costs. This relationship is influenced by a range of factors including the in mix of *20 Hours ECE*, and other types of provision, ownership models and service provision philosophies [Section 6, page 28].  How much unpaid voluntary staffing contribution is there in ECE?  A significant proportion of ECE services used volunteers, both to help reduce costs and as part of a wider philosophy or culture around the benefits of parental and community involvement in ECE Nearly half (or 46%) of services reported use of volunteers. However, this varied significantly, with no home-based services surveyed reporting volunteers, to 32% of education and care services, 88% of kindergartens and 100% of playcentres [Section 7, page 30-31].  Volunteers, on average, contributed a total of between 1,400 and 1,800 hours per service per year - from 600 to 700 a year at kindergartens and education and care services to nearly 4,000 a year at playcentres. On average, 65% to 70% of voluntary hours were spent on child contact, 25% on administration, and 5 to 10% on maintenance. Education and care services, however, used volunteers for administration and maintenance more than other parts of the sector (55%). While there did not appear to be a strong relationship between costs and the use of volunteers, there did appear to be a relationship between fees and volunteers, with the highest use of volunteers at services with low or no fees [Section 7, pages 31-33]. |

# 2 Background

## Aims of this study

This report presents results from the 2011 Survey of Income, Expenditure and Fees at ECE Services. Following similar surveys in 2005, 2006 and 2008, this survey collected information on the costs of providing early childhood education services. In addition to costs, the 2011 survey collected information on income, assets and liabilities, fees and voluntary work.

Nearly 80% of the results relate to annual data ending between June and December 2010, and 97% to annual data before March 2011. Results in this report therefore largely reflect the situation before the February 2011 change to the top two funding rates.

The objective of the survey, as with previous ones, was to provide information to assist government with its ongoing role in funding ECE in New Zealand. In this report we aim to provide information gathered from the survey in response to the following questions:

1. What are the average costs of providing ECE services, and how do these vary by type of service, for under two and two and over, by qualified-teacher levels, and by region. How have costs changed between 2008 and 2011?
2. What are the main drivers of costs? How do these vary across different types of service, and how have they changed since 2008?
3. What is the average income of ECE services and how does it vary across the sector?
4. How much of ECE is publicly funded and how much is funded privately through households and community sources?
5. How are fees and other parental charges structured in the ECE sector in New Zealand?
6. What are the average parental charges levied by ECE services, and how do these vary across the sector, and by type of charge?
7. What proportion of costs is covered by government subsidy funding: for under two, and for two and over? Do funding subsidies still cover average costs for *20 Hours ECE*?
8. What is the relationship between costs, income, government funding, and fees?
9. What is the level of voluntary personnel contribution across the sector? How does this unpaid contribution impact on costs, income and fees?

This report does not cover the full range of answers possible from the survey, and it does not cover many of the above questions in full depth. There are many other questions that could be explored, some of which will be the subject of future analysis, for example the relationship between assets and liabilities and cash flows, profit and loss, financial efficiency or sustainability.

## Why is this information important?

The evidence is clear that high-quality ECE can be a powerful tool for improving educational outcomes for children. It can also support better health and social outcomes, and labour force outcomes for both parents and children. We know that interventions in the early years of life are more effective than later interventions, especially for disadvantaged children.[[1]](#footnote-1)

Governments have an interest in supporting and enhancing these outcomes, and therefore fund a proportion of these costs, while private sources, parents in the main, pay the rest.

Setting an appropriate level of public funding depends on a wide range of factors, and requires trade-offs and balancing against other, often conflicting, objectives – for example how much funding should be universal, how much should be targeted, the wider public fiscal constraints and competing priorities in other sectors. It depends also on the type of provision, reflecting a range of operating and ownership models, and different core service philosophies – parent and whānau-led, home-based and centre-based, private or community-based. It needs to promote and support participation goals as well as sector and workforce quality and sustainability goals. It requires both a set of clearly defined policy goals and data upon which to incentivise and give effect to these. Funding policy can often have immediate impacts on behaviour, some intended, some unintended. This is why accurate information on cost, income and fees is important.

As part of the implementation of *Pathways to the Future: Ngā Huarahi Arataki*, a new funding system was implemented in 2005. One of the aims was to link funding more explicitly to costs. Specifically, services meeting higher quality standards, for example as measured by the number of registered teachers, would receive higher funding (Ministry of Education, 2004).

The *20 Hours ECE* subsidy, for example, is designed to cover the average full cost of ECE for three to five year-olds, and services receiving this are not allowed to charge fees. They can, however, ask for donations and optional charges to cover costs of provisions not required by regulation. For under two’s and two and over’s not covered by *20 Hours ECE*, where government funding subsidies do not cover the full cost of services, services are free to charge parents fees.

In order to support the 2005 funding reforms, the sector was surveyed in 2005, and information collected on their cost drivers. This survey of operational costs was repeated in 2006 and 2008, and again in 2011. These surveys have provided information on the extent to which funding subsidies have met average costs, particularly in terms of the government's commitment to fully cover the costs of *20 Hours ECE.* These surveys have also provided information to target subsequent subsidy rate adjustments specifically for the teacher and non-teacher components of cost. Comparing these results over time also provides information on the extent in which rate adjustments and other funding changes affect the average financial position of the sector.

While funding needs to be informed by drivers of costs, these should not necessarily explicitly equate to drivers of funding. Costs do not really tell us about efficiency, as the causal direction is not always clear; for example low funding could lead to low costs, or low costs could lead to low funding. In its 2011 report *An Agenda for Amazing Children*, the ECE Taskforce recommended a funding system that amongst other things; would “preserve the idea of universal access, including a subsidy for a core 20 Hours ECE,… include strongly differentiated payments for priority groups… [and] move away from cost drivers, and towards incentives, support and rewards” (ECE Taskforce, 2011).

Regardless of future funding system settings and directions, information on costs will remain important, as governments review and develop funding policy settings that try to provide the best balance between public objectives on participation, equity, quality, sustainability, and affordability for parents.

## The 2011 Survey of Income, Expenditure and Fees

The 2011 Survey of Income, Expenditure and Fees follows on from similar surveys in 2005, 2006 and 2008. This year’s survey has been expanded to include, for the first time, information on income. The 2008 survey included a question on fees which was not able to successfully capture the full diversity of how parental charges were levied. In this year’s survey it has been replaced by the direct collection of fee schedules. The collection of costs, income and fees in one form has also enabled a range of interesting questions to be explored on the relationship between costs, and public and private funding, and on financial sustainability and profitability. The survey also has a significantly improved question on voluntary work, and a question on assets and liabilities to supplement the cash-based questions.

We draw the reader’s attention to a range of technical issues that are important when reading these results. Kōhanga reo did not participate in the 2011 survey, and so the lack of data from this part of the sector will limit the extent to which averages can be generalised to the whole sector. It is important to note in general, that all reported averages are weighted estimates from a sample, and hence confidence intervals are important for interpreting whether differences are significant or not. The methods used to estimate average costs have been improved this time; and this and other improvements in the questionnaire will also influence the extent to which data can be compared with previous years’ results. Readers are encouraged to take note of these issues in the technical section at the end of this report.

# 3 Expenditure

This section analyses the operating expenditure of services as reported in the survey. Services provided details of annual expenditure in a number of categories which covered staff costs, such as teacher salaries, and non-staff costs such as rent and the purchase of educational resources. Services were asked not to include purchase of fixed assets or debt repayments (though payment of interest on debts was included). The main measure used in this section is the average operating expenditure per *child hour*, which is the per service expenditure divided by the total number of child hours attended at the service, independent of whether or not hours were subsidised. In addition to average per child hour costs, this section also reports average total operating expenditure per service per annum.

## What is the average operating expenditure of services?

The average annual operating expenditure per ECE service in 2010 was $375,000, excluding GST[[2]](#footnote-2). Home-based networks had the highest annual expenditure per service, at an average of $528,000. The average expenditure of education and care services was $425,000 and kindergartens’ was $338,000. The annual expenditure of playcentres was much lower at $36,000 on average.

The average cost per child hour in an ECE service in 2010 was $8.74. Education and care services had the highest per hour cost at $9.22, followed by kindergartens at $9.10, and home-based services at $8.48. Playcentres had the lowest average hourly costs at $5.74.

Table 3.1: Average expenditure by service type

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Service type | Average service expenditure per annum ($000s) | | Average cost per child hour  ($) | |
| Midpoint estimate | Confidence interval | Midpoint estimate | Confidence interval |
| Education and care | $425 | $411-$439 | $9.22 | $9.07-$9.38 |
| Kindergarten | $338 | $335-$341 | $9.10 | $9.06-$9.14 |
| Home-based | $528 | $491-$566 | $8.48 | $8.25-$8.71 |
| Playcentre | $36 | $34-$37 | $5.74 | $5.50-$5.98 |
| Total (weighted) | $375 | $366-$384 | $8.74 | $8.65-$8.83 |

1. Categories containing fewer than 10 services responding to the survey, including Kōhanga Reo, have been excluded. See Section 8 for response rates.
2. Values are sample estimates. There is a 95% chance the confidence interval shown contains the true population average.
3. The weighted total adjusts the sample averages for the proportion that each service type makes up of all ECE services.

Around half of home-based services had an average per child hour cost of between $7.55 and $8.48. Kindergartens also had similar average costs with 65% of services having costs between $7.85 and $9.84. Education and care services and playcentres both had wider distributions of costs with more than a $5 per hour difference between the 10th and the 90th percentile.

Table 3.2: Distribution of costs per child hour by service type

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Service type | 10th percentile | 25th percentile | 50th percentile | 75th percentile | 90th percentile |
| Education and care | $6.65 | $7.82 | $9.11 | $10.31 | $11.69 |
| Kindergarten | $7.85 | $7.88 | $8.83 | $9.84 | $10.69 |
| Home-based | $6.31 | $7.55 | $8.08 | $8.48 | $9.98 |
| Playcentre | $3.68 | $4.32 | $5.06 | $6.24 | $8.98 |

1. Categories containing fewer than 10 services responding to the survey have been excluded.

Figure 3.1: Distribution of cost per child hour

## How do costs for children under two compare with children two and over?

Costs are higher for services catering to children who are under the age of two. This is mostly because of the higher teacher-child ratios required for children who are under two, which increases the teacher costs. Teacher costs are the main costs for early childhood education services (see pages 9-11). Government funding is divided into funding for children under two and children two and over.

Regression analysis was used to estimate the average costs per child hour for children under two years old and those two years old and over[[3]](#footnote-3). Table 3.3 compares costs per child hour for children under two and two and over across service types and funding bands. On average, costs per hour for a child under two in an education and care service were nearly 60% higher than costs per hour for a child aged two or more in an education and care service. For home-based services and playcentres, costs per child hour for under two’s were around 20% higher than two and over’s.

Table 3.3: Estimated average cost per child hour by funding group, service type and funding band

|  |  |  |  |
| --- | --- | --- | --- |
| Service type &  funding band | Midpoint estimate | Standard error | Confidence interval |
| **Under two** | | | |
| Education and care | $12.96 | $0.54 | $11.89-$14.02 |
| All-day teacher-led 80%+ | $13.77 | $0.47 | $13.00-$14.53 |
| All-day teacher-led 50-79% | $9.97 | $1.09 | $8.18-$11.76 |
| Home-based- All | $9.47 | $0.98 | $7.86-$11.09 |
| Playcentre- Standard | $5.75 | $0.40 | $5.10-$6.40 |
| **Two and over** | | | |
| Education and care | $8.18 | $0.25 | $7.69-$8.67 |
| All-day teacher-led 80%+ | $8.24 | $0.22 | $7.88-$8.59 |
| All-day teacher-led 50-79% | $7.51 | $0.55 | $6.62-$8.41 |
| Kindergarten | $9.10 | $0.26 | $8.58-$9.61 |
| All-day teacher-led 80%+ | $9.32 | $0.29 | $8.84-$9.80 |
| Sessional teacher-led 100% | $8.15 | $0.38 | $7.53-$8.77 |
| Home-based- All | $7.72 | $0.64 | $6.66-$8.78 |
| Playcentre-Standard | $4.71 | $0.18 | $4.41-$5.01 |

1. Categories containing fewer than 10 services responding to the survey have been excluded.
2. A large number of combined returns for home-based networks contained both quality and standard networks, making it difficult to separate these funding bands. Analysis suggests that the difference in costs between quality and standard is roughly the same as the difference in current funding rates.
3. Values are sample estimates. There is a 95% chance the confidence interval shown contains the true population average.

Education and care services that were all-day and had at least 80% registered teachers had the highest costs per child hour for children under two. For children aged two and over, the type of service with the highest costs per child hour were kindergartens, that were all-day and had at least 80% registered teachers. For both groups, playcentres had the lowest costs per child hour.

Table 3.4 shows average cost estimates from both the 2008 and 2011 surveys, for under two's and two and over's. However, caution is needed when comparing the results as the methodology used to estimate the 2011 results is notably different from that used in 2008[[4]](#footnote-4).

It should also be noted that between 2008 and 2011, the number of services in the all-day teacher-led 50-79% funding band dropped, as services moved to having a higher number of registered teachers. The move of these services could be the reason for the decrease in costs per hour from 2008 to 2011.

There has also been a significant swing in kindergartens. While most kindergartens in 2008 were sessional, the majority now are all-day. Kindergartens returned their forms at an association level rather than at an individual service level, so the 2011 estimate for sessional services is not at robust as in 2008 when the majority of services were sessional.

Table 3.4: A comparison of point estimates of average per child hour costs in 2008 and 2011

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Service type and  funding band | Under two | | | Two and over (incl. *20 Hours ECE*) | |
| 2008 | | 2011 | 2008 | 2011 |
| Education and care |  |  | |  |  |
| All-day teacher-led 80%+ | $14.19 | $13.77 | | $8.35 | $8.24 |
| All-day teacher-led 50-79% | $12.80 | $9.97 | | $7.53 | $7.51 |
| Kindergartens |  |  | |  |  |
| All-day teacher-led 80%+ | - | - | | - | $9.32 |
| Sessional teacher-led 100% | - | - | | $6.25 | $8.15 |
| Home-based |  |  | |  |  |
| All | $10.89 | $9.47 | | $5.31 | $7.72 |
| Playcentre |  |  | |  |  |
| Standard | $8.33 | $5.75 | | $4.58 | $4.71 |

1. Care is needed when comparing 2008 and 2011 figures, as different methods have been used to estimate the split of costs for under two's and two and over's. Refer to section 8 for technical details of these differences.
2. Service types and funding bands with fewer than 10 responses were not included.
3. Rates are nominal and have not been adjusted for CPI.
4. The small number of all-day kindergartens in 2008 means that no estimate was provided for all-day teacher led kindergartens in 2008. The average cost for all kindergartens was $6.28.

## What are the main drivers of costs?

For the majority of services, teacher salaries were the main operating expenditure item, with registered teacher salaries contributing to over half the costs of education and care services and kindergartens, and other teacher salaries (which includes all payments to educators) for home-based services. Playcentres were the exception, being mostly parent-led and therefore having low teacher salary costs. Playcentres’ main expenditure items were association levies.

Table 3.5: Distribution of costs by category, 2011

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Cost categories | Education and care | Kindergarten | Home-based | Playcentre | Total (weighted) |
| Registered teacher salaries | **54%** | **65%** | 14% | 5% | **47%** |
| Other teacher salaries | 12% | 1% | **59%** | 11% | 14% |
| Non-teacher salaries | 8% | 7% | 9% | 3% | 7% |
| Other staff costs | 3% | 3% | 1% | 2% | 3% |
| Utilities | 1% | 1% | 0% | 8% | 2% |
| Vehicle running costs | 0% | 0% | 1% | 0% | 0% |
| Rent, interest and rates | 6% | 1% | 3% | 1% | 4% |
| Repairs and maintenance | 1% | 6% | 0% | 10% | 3% |
| Administration resources | 1% | 2% | 1% | 5% | 2% |
| Educational resources | 2% | 3% | 1% | 7% | 3% |
| Professional services | 3% | 3% | 2% | 2% | 3% |
| Association levies | 0% | 0% | 0% | **39%** | 5% |
| Depreciation | 3% | 4% | 1% | 0% | 2% |
| Other non-staff costs | 5% | 5% | 6% | 8% | 5% |

1. Registered teacher salaries are the gross (before tax) salaries for teachers (including relievers) who are both qualified (ECE and primary) and registered (including provisionally registered).
2. Other teacher salaries are the gross (before tax) salaries for all other teachers (including relievers) used to meet or exceed regulated ratios, including educators in home-based services.
3. Non-teacher salaries are the gross (before tax) salaries and wages for all non-teacher staff employed by services, such as management, office and support staff, teacher aides, cooks and cleaners.
4. Other staff costs are superannuation, KiwiSaver and ACC levies, the costs of professional development (including course fees, transport and accommodation), subscriptions and teacher registration contributions.
5. Utilities are electricity, gas, water, phone, fax and internet.
6. Vehicle running costs are the costs of fuel, repairs, registration and warrant of fitness, insurance, mileage, and reimbursement for travel. It excludes purchase of vehicles.
7. Repairs and maintenance are work done to maintain existing property.
8. Administration resources are stationery supplies, printer consumables, postage, software and computer system licenses. It excludes the purchase of fixed assets such as computers and photocopiers.
9. Education resources are books, puzzles, games, art and craft supplies and play equipment, excluding purchase of fixed assets such as playground equipment.
10. Professional services are IT, accounting, legal, recruitment or payroll services, cooks, cleaners and gardeners provided on contract by a professional services provider.
11. Association levies are levies paid to playcentre and kindergarten associations.
12. Other non-staff costs are all other costs not included such as insurance, advertising, food, bank fees, medical supplies, special events, trips and bad debts, excluding the purchase of fixed assets such as office furniture, fixtures and fittings.
13. Purchases of buildings, vehicles and other major capital items are not included.
14. The weighted total adjusts the sample averages for the proportion that each service type makes up of all ECE services.

Table 3.6 shows the average amount spent on each category per child hour, based on the average costs per child hour in Table 3.1 and the distribution of costs in Table 3.5. All figures are point estimates, and should be interpreted with caution. The average cost per child hour for playcentres is higher per child hour for some categories, such as utilities and educational resources, because playcentres have low total child hours compared to other services.

Table 3.6: Average costs per child hour by category, 2011

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Cost categories | Education and care | Kindergarten | Home-based | Playcentre | Total (weighted) |
| Registered teacher salaries | $5.01 | $5.90 | $1.18 | $0.26 | $4.10 |
| Other teacher salaries | $1.13 | $0.07 | $4.98 | $0.64 | $1.24 |
| Non-teacher salaries | $0.74 | $0.62 | $0.77 | $0.19 | $0.65 |
| Other staff costs | $0.28 | $0.24 | $0.12 | $0.09 | $0.24 |
| Utilities | $0.11 | $0.12 | $0.04 | $0.46 | $0.17 |
| Vehicle running costs | $0.03 | $0.02 | $0.12 | $0.00 | $0.03 |
| Rent, interest and rates | $0.58 | $0.05 | $0.24 | $0.05 | $0.39 |
| Repairs and maintenance | $0.14 | $0.51 | $0.01 | $0.56 | $0.26 |
| Administration resources | $0.11 | $0.14 | $0.12 | $0.30 | $0.15 |
| Educational resources | $0.17 | $0.29 | $0.12 | $0.39 | $0.23 |
| Professional services | $0.23 | $0.31 | $0.21 | $0.10 | $0.22 |
| Association levies | $0.01 | $0.04 | $0.01 | $2.24 | $0.41 |
| Depreciation | $0.25 | $0.35 | $0.09 | $0.00 | $0.21 |
| Other non-staff costs | $0.43 | $0.44 | $0.51 | $0.46 | $0.45 |
| Total | $9.22 | $9.10 | $8.48 | $5.74 | $8.74 |

1. Registered teacher salaries are the gross (before tax) salaries for teachers (including relievers) who are both qualified (ECE and primary) and registered (including provisionally registered).
2. Other teacher salaries are the gross (before tax) salaries for all other teachers (including relievers) used to meet or exceed regulated ratios, including educators in home-based services.
3. Non-teacher salaries are the gross (before tax) salaries and wages for all non-teacher staff employed by services, such as management, office and support staff, teacher aides, cooks and cleaners.
4. Other staff costs are superannuation, KiwiSaver and ACC levies, the costs of professional development (including course fees, transport and accommodation), subscriptions and teacher registration contributions.
5. Utilities are electricity, gas, water, phone, fax and internet.
6. Vehicle running costs are the costs of fuel, repairs, registration, and warrant of fitness, insurance, mileage, and reimbursement for travel. It excludes purchase of vehicles.
7. Repairs and maintenance are work done to maintain existing property.
8. Administration resources are stationery supplies, printer consumables, postage, software and computer system licenses. It excludes the purchase of fixed assets such as computers and photocopiers.
9. Education resources are books, puzzles, games, art and craft supplies and play equipment, excluding purchase of fixed assets such as playground equipment.
10. Professional services are IT, accounting, legal, recruitment or payroll services, cooks, cleaners and gardeners provided on contract by a professional services provider.
11. Association levies are levies paid to playcentre and kindergarten associations.
12. Other non-staff costs are all other costs not included such as insurance, advertising, food, bank fees, medical supplies, special events, trips and bad debts, excluding the purchase of fixed assets such as office furniture, fixtures and fittings.
13. Purchases of buildings, vehicles and other major capital items are not included.
14. The weighted total adjusts the sample averages for the proportion that each service type makes up of all ECE services.

Table 3.7 shows the distribution of costs by category for both 2008 and 2011. For education and care services and kindergartens there was no significant change in the distribution of costs between the main categories. Playcentres appear to have had a relative decrease in teacher salaries, but this could be because a higher proportion of playcentres responded in 2011 than in 2008.

Table 3.7: Distribution of costs by type, 2008 and 2011

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Service type | Teacher salaries | | Non-teacher salaries | | Basic | | Property | | Other | |
| 2008 | 2011 | 2008 | 2011 | 2008 | 2011 | 2008 | 2011 | 2008 | 2011 |
| Education and care | 66% | 67% | 7% | 8% | 4% | 3% | 12% | 12% | 12% | 11% |
| Kindergarten | 67% | 66% | 6% | 7% | 6% | 5% | 11% | 11% | 11% | 12% |
| Home-based | 71% | 73% | 5% | 9% | 2% | 3% | 4% | 4% | 18% | 11% |
| Playcentre | 20% | 16% | 2% | 3% | 10% | 12% | 17% | 19% | 52% | 50% |

1. Categories containing fewer than 10 services responding to the survey have been excluded.
2. Teacher salaries include both registered teacher salaries and other teacher salaries.
3. Basic costs include administration resources and educational resources.
4. Property costs include utilities, rent, interest and rates, repairs and maintenance, and depreciation.
5. Other costs include other staff costs, vehicle running costs, professional services costs, and other non-staff costs.

Table 3.8 shows the distribution of costs by funding band. The funding bands with higher proportions of qualified teachers have a higher proportion of costs going towards teacher salaries.

Table 3.8: Costs by category and funding band, 2011

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Service type & funding band | Teacher salary | Other salary | Basic | Property | Other |
| Education and care | 67% | 8% | 3% | 12% | 11% |
| All-day teacher-led 80%+ | 67% | 8% | 3% | 12% | 10% |
| All-day teacher-led 50-79% | 65% | 8% | 4% | 11% | 12% |
| Kindergarten | 66% | 7% | 5% | 11% | 12% |
| All-day teacher-led 80%+ | 66% | 7% | 4% | 11% | 12% |
| Sessional teacher-led 100% | 65% | 6% | 6% | 12% | 11% |
| Home-based | 73% | 9% | 3% | 4% | 11% |
| Quality | 74% | 9% | 2% | 4% | 12% |
| Standard | 72% | 9% | 3% | 4% | 11% |
| Playcentre | 16% | 3% | 12% | 19% | 50% |
| Quality | 24% | 0% | 15% | 18% | 43% |
| Standard | 16% | 3% | 12% | 19% | 51% |
| Total (weighted) | 61% | 7% | 4% | 12% | 16% |

1. Categories containing fewer than 10 services responding to the survey have been excluded.
2. Teacher salaries include both registered teacher salaries and other teacher salaries.
3. Basic costs include administration resources and educational resources.
4. Property costs include utilities, rent, interest and rates, repairs and maintenance, and depreciation.
5. Other costs include other staff costs, vehicle running costs, professional services costs, and other non-staff costs.

## How does expenditure vary by region?

Table 3.9 shows that the expenditure of ECE services does vary by region. These costs reflect broad regional averages and do not take account of the different mix of services, sizes of services and survey response rates across the regions.

Table 3.9: Average expenditure by region

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Region | Average service costs per year  ($000s) | | Average cost per child hour  ($) | |
| Midpoint  estimate | Confidence interval | Midpoint estimate | Confidence  interval |
| Auckland | $390 | $373-$408 | $8.40 | $8.19-$8.57 |
| Waikato | $317 | $283-$351 | $8.33 | $7.96-$8.70 |
| Wellington | $397 | $369-$425 | $8.90 | $8.60-$9.19 |
| Other North Island | $329 | $310-$347 | $8.85 | $8.65-$9.06 |
| Canterbury | $325 | $300-$351 | $8.29 | $8.08-$8.51 |
| Otago | $336 | $305-$366 | $8.77 | $8.48-$9.07 |
| Other South Island | $298 | $271-$324 | $8.57 | $8.28-$8.86 |
| Total (weighted) | $375 | $366-$384 | $8.74 | $8.65-$8.83 |

1. Values are sample estimates. There is a 95% chance that the true average is in the confidence interval shown.
2. The weighted total adjusts the sample averages by the proportion that each service type makes up of all ECE services.

Otago, Wellington and other regions in the North Island outside of Waikato and Auckland had the highest costs per child hour, while Canterbury, Auckland and Waikato had the lowest. Auckland and Wellington had the highest average annual expenditure per service, while South Island regions outside of Canterbury and Otago had the lowest. This reflects the tendency for services to be larger within large urban centres. These averages depend significantly on the mix of types of services in each region, and the mix of response rates.

Table 3.10 shows the expenditure of education and care services by region. The annual expenditure per service has less variation than when all service types were considered, though we still see the pattern of regions with large urban centres having higher expenditure than other regions. Wellington had the highest per child hour costs, and Auckland the lowest. Results from the 2008 survey also showed highest per hour costs in Wellington, followed by Otago and the former Auckland and North Shore cities, with the lowest costs per hour in South Auckland and South Island regions outside of Canterbury and Otago.

Table 3.10: Average expenditure for education and care services by region

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Region | Average service costs per year  ($000s) | | Average cost per child hour  ($) | |
| Midpoint  estimate | Confidence interval | Midpoint estimate | Confidence  interval |
| Auckland | $431 | $408-$454 | $8.75 | $8.47-$9.03 |
| Waikato | $409 | $362-$456 | $9.22 | $8.70-$9.75 |
| Wellington | $437 | $404-$470 | $9.98 | $9.60-$10.37 |
| Other North Island | $397 | $363-$431 | $9.01 | $8.61-$9.42 |
| Canterbury | $469 | $428-$509 | $9.51 | $9.20-$9.81 |
| Otago | $411 | $365-$456 | $9.62 | $9.13-$10.11 |
| Other South Island | $407 | $349-$465 | $9.62 | $8.87-$10.37 |
| Total | $425 | $411-$439 | $9.22 | $9.07-$9.38 |

1. Values are sample estimates. There is a 95% chance the confidence interval shown contains the true population average.

Figure 3.2 shows the average costs per child hour by region and service type. While there is variation in the average costs between regions by service type, there does not appear to be a region that has consistently higher or lower costs than the national average. Waikato has significantly higher costs than average for kindergartens. Wellington has significantly lower costs than average for playcentres. Some caution should be used in interpreting these results, as sample size and response rate varied between regions (see Section 8, page 34).

Figure 3.2 Average costs per child hour by region and service type

1. Error bars show the confidence interval around the mid-point estimate for each region.

# 4 Income

This section analyses the income of services as reported in the survey. Services provided data on annual income from the government, parents and other sources. The main measure used in this section is the average income per *child hour*, which is the per service income divided by the total number of child hours attended at the service, regardless of whether the hours were subsidised or not. In addition to per child hour income, the average total annual income per service per annum is also reported.

## What is the average income of services?

The average annual income for an ECE service in 2010 was $412,000. Home-based networks had the highest average annual income per service, at $562,000. Education and care services’ average income was $471,000, and kindergartens’ was $368,000 per annum. The average income for a playcentre was much lower at $40,000 a year.

The average income per child hour for early childhood services was $9.55. Education and care services had the highest per child hour income at $10.13, followed by kindergartens at $9.94 and home-based at $9.08. Playcentres had the lowest income at $6.13 per child hour.

Table 4.1 Average income by service type

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Service type | Average service income per year  ($000s) | | | Average income per child hour  ($) | |
| Midpoint  estimate | Confidence interval | | Midpoint estimate | Confidence interval |
| Education and care | $471 | $455-$486 | $10.13 | | $9.99-$10.27 |
| Kindergarten | $368 | $365-$371 | $9.94 | | $9.89-$9.98 |
| Home-based | $562 | $524-$601 | $9.08 | | $8.86-$9.30 |
| Playcentre | $40 | $37-$42 | $6.13 | | $5.90-$6.36 |
| Total (weighted) | $412 | $402-$422 | $9.55 | | $9.46-$9.64 |

1. Categories containing fewer than 10 services responding to the survey have been excluded.
2. Values are sample estimates. There is a 95% chance the confidence interval shown contains the true population average.
3. The weighted total adjusts the sample averages for the proportion that each service type makes up of all ECE services.

Most kindergartens had similar income per child hour, with 65% of services having an average per child hour income of between $8.98 and $10.84. Home-based services also had similar income, with 65% of services having income between $7.25 and $9.52. Education and care services and playcentres both had wide distributions of income with around a $4.50 difference between the 10th and the 90th percentile.

Table 4.2: Distribution of average service income per child hour by service type

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Service type | 10th percentile | 25th percentile | 50th percentile | 75th percentile | 90th percentile |
| Education and care | $7.76 | $9.04 | $10.08 | $11.17 | $12.30 |
| Kindergarten | $8.98 | $9.28 | $9.92 | $10.84 | $11.70 |
| Home-based | $7.25 | $8.07 | $8.56 | $9.52 | $10.89 |
| Playcentre | $4.29 | $4.77 | $5.60 | $6.59 | $8.69 |

1. Categories containing fewer than 10 services responding to the survey have been excluded.

Figure 4.1 Distribution of income per child hour

## What are services' main sources of income?

Public sources remain the main source of income for all service types. On average, 75% of income came from the government. The secondary source of income for education and care services and home-based networks was parents, while for kindergartens and playcentres it was other sources, predominantly community sources. Kindergartens and playcentres reported that most of their other income came from fundraising and grants.

Table 4.3: Source of income by service type

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Service type | Government | Parents | Other | Total | |
| Education and care | 75% | 22% | 2% | | 100.0% | |
| Kindergarten | 90% | 3% | 7% | | 100.0% | |
| Home-based | 51% | 47% | 2% | | 100.0% | |
| Playcentre | 76% | 7% | 18% | | 100.0% | |
| Total (weighted) | 75% | 22% | 3% | | 100.0% | |

1. Categories containing fewer than 10 services responding to the survey, including all kōhanga reo have been excluded.
2. Income from government is Ministry of Education funding subsidies including *20 Hours ECE*, equity funding, provisionally registered teaches grant and Ministry of Social Development childcare subsidy.
3. Income from parents is fees, optional charges and donations.
4. Income from other sources includes sponsorship, non-parent donations, income from associations and interest earned.
5. A large proportion of income from parents of children attending home-based services has been estimated using fee data and funded child hour data (see technical section for further details).
6. The weighted total adjusts the sample averages for the proportion that each service type makes up of all ECE services.

Figure 4.2: Distribution of income by source

The total proportion of income that came from the government was influenced by the proportion of total child hours that were funded by the government, specifically funding for *20 Hours ECE.* Kindergartens had the highest proportion of income from the government at 90%. Of kindergartens’ total child hours, 99% were funded, 85% at the *20 Hours ECE* rate.

Home-based services had the lowest proportion of income from the government, at 51% of their total income. Of their total hours 80% were funded, with only 25% of total hours funded at the *20 Hours ECE* rate.

Services are eligible for funding of up to six hours a day and 30 hours a week per child place (or per child for children receiving *20 Hours ECE*), which means that services that operated for longer hours would have a lower proportion of their total hours covered by funding.

Table 4.4 shows the distribution of income by source and funding bands. There does not appear to be any obvious relationship between the percentage of teachers that are qualified - as reflected in a service's funding band - and the sources of income.

Table 4.4: Income by source and funding band

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Service type & funding band | Government | | Parents | Other |
| Education and care | 75% | 22% | | 2% |
| All-day teacher-led 80%+ | 75% | 23% | | 3% |
| All-day teacher-led 50-79% | 80% | 18% | | 2% |
| Sessional teacher-led 80%+ | 60% | 35% | | 5% |
| Kindergarten | 90% | 3% | | 7% |
| All-day teacher-led 80%+ | 91% | 3% | | 7% |
| Sessional teacher-led 100% | 88% | 5% | | 7% |
| Home-based | 51% | 47% | | 2% |
| Quality | 56% | 43% | | 2% |
| Standard | 46% | 52% | | 3% |
| Playcentre | 76% | 7% | | 18% |
| Quality | 76% | 10% | | 14% |
| Standard | 76% | 7% | | 18% |
| Total (weighted) | 75% | 22% | | 3% |

1. Services types and funding bands with fewer than ten responses were not included.
2. The weighted total adjusts the sample averages for the proportion that each service type makes up of all ECE services.

## How does income vary by region?

Table 4.5: Average service income by region

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Region | Average income per year ($000s) | | Average income per child hour ($) | | |
| Midpoint  estimate | Confidence interval | Midpoint estimate | Confidence  interval | |
| Auckland | $427 | $407-$446 | $9.09 | | $8.92-$9.27 |
| Waikato | $348 | $306-$390 | $9.03 | | $8.62-$9.43 |
| Wellington | $434 | $406-$462 | $9.82 | | $9.53-$10.11 |
| Other North Island | $355 | $343-$367 | $9.55 | | $9.43-$9.66 |
| Canterbury | $362 | $347-$376 | $9.13 | | $9.01-$9.26 |
| Otago | $375 | $336-$413 | $9.78 | | $9.46-$10.11 |
| Other South Island | $326 | $301-$352 | $9.38 | | $9.11-$9.64 |
| Total (weighted) | $412 | $402-$422 | $9.55 | | $9.46-$9.64 |

1. Values are sample estimates. There is a 95% chance the confidence interval shown contains the true population average.
2. The weighted total adjusts the sample averages by the proportion that each service type makes up of all ECE services.

Table 4.5 shows the income of ECE services by region. The pattern of per hour income mirrors that shown for per hour costs in Table 3.9. Wellington, Otago and other North Island regions outside of Auckland and Waikato had the highest income per hour, while Canterbury, Auckland and Waikato had the lowest. Wellington and Auckland had the highest income per service and other South Island regions outside of Canterbury and Otago the lowest. These averages depend significantly on the mix of types of services in each region, and the mix of response rates.

Figure 4.3 shows the average income per hour by region and service type. While there is variation in the average income between regions there does not seem to be a region that has consistently higher or lower income than the national average. Auckland had significantly lower income per child hour than average for education and care services and kindergartens. Waikato had significantly higher income per child hour than average for kindergartens. Some caution should be used in comparing the results, as sample size and response rate varied between regions (see Section 8, page 34)

Figure 4.3 Average service income per child hour by region and service type

1. Error bars show the 95% confidence interval around the mid-point estimate for each region.

Table 4.6 shows the income of education and care services by region. Canterbury had the highest income per service, while other North Island regions outside of Auckland, Wellington and Waikato had the lowest. Wellington and Canterbury had the highest income per hour, and Auckland and Waikato the lowest.

Table 4.6: Average income by region for education and care services

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Region | Average income per year  ($000s) | | Average income per hour  ($) | |
| Midpoint  estimate | Confidence interval | Midpoint estimate | Confidence  interval |
| Auckland | $483 | $456-$511 | $9.63 | $9.37-$9.89 |
| Waikato | $452 | $396-$508 | $9.83 | $9.43-$10.24 |
| Wellington | $478 | $446-$509 | $10.94 | $10.58-$11.29 |
| Other North Island | $437 | $405-$468 | $9.97 | $9.63-$10.30 |
| Canterbury | $523 | $490-$555 | $10.60 | $10.39-$10.81 |
| Otago | $445 | $390-$500 | $10.52 | $10.11-$10.93 |
| Other South Island | $447 | $383-$510 | $10.37 | $9.75-$10.99 |
| Total (weighted) | $471 | $454-$487 | $10.13 | $9.98-$10.28 |

1. Values are sample estimates. There is a 95% chance the confidence interval shown contains the true population average.
2. The weighted total adjusts the sample averages for the proportion that each service type makes up of all ECE services.

# 5 Fees

This section analyses parental charges including fees and additional charges, optional or otherwise. Information on income from parents was collected in two different ways in the survey. First, services were asked their total annual income from parents. By relating this to the total number of child hours attended, estimates could be made of the average income services received per hour of child attendance. As in the costs section, this per hour figure is independent of whether the hour was subsidised or not. Secondly, the survey asked services to provide information on their actual parental charges and fees schedules. Both sources are analysed in this section.

The analysis in this section looks at fees and charges on a per hour basis. However many services do not charge on an hourly basis, but per session, per day, per week or per term. Many services also used a combination, for example having a per day charge and per week charge, a weekly charge depending on how many days a week a child attends or more than one per day charge depending on what hours the child attended. Per hour charges were estimated from the data provided by the services.

## How are parental charges structured?

Government subsidises the cost of ECE by paying services a proportion of their costs. The *20 Hours ECE* subsidy is designed to cover the average full cost of ECE for three to five year olds, and services are not allowed to charge compulsory fees for hours attested to *20 Hours ECE*. They can ask for donations and optional charges to cover costs of provisions not required by regulation. For children and hours not covered by *20 Hours ECE*, government funding subsidies are not designed to cover the full cost of services, and services can charge compulsory fees.

Most services charged fees as shown in Table 5.1 below. Nearly 40% levied additional charges, including 10% with optional charges. These additional charges include donations, late fees, enrolment fees and other charges which are discussed later in this section.

Table 5.1: Percent of services with fees and additional charges

|  |  |  |
| --- | --- | --- |
| Service type and funding band | Fees | Additional charges |
| Education and care | 99% | 42% |
| Kindergarten | 100% | 45% |
| Home-based | 100% | 17% |
| Playcentre | 72% | 11% |
| Total (weighted) | 96% | 37% |

1. The weighted total adjusts the sample averages for the proportion that each service type makes up of all ECE services.

While, nearly all services (96%) charged fees, this does not mean that 96% of parents were charged fees. Services that offered *20 Hours ECE* still had a fee schedule for parents who did not attest to *20 Hours ECE,* but may not have collected fees from all parents. Parents who received the Ministry of Social Development’s childcare subsidy may also have no, or very low, fees. According to the Childcare Survey, 29.5% of parents accessed early childhood education free of charge in 2009. Most services that reported not charging any fees were playcentres, that are parent-led and so have significantly lower costs than teacher-led services (Statistics New Zealand, 2012).

Kindergartens and playcentres both had a standard way of charging fees. All kindergartens charged on a per session or hourly basis for hours not covered by *20 Hours ECE*. Of playcentres that had fees, 94% charged a set fee per term, though for some playcentres the term fee was affected by the number of sessions the family attended a week, and the number of children per family. A small number of playcentres charged per hour, session or week.

Table 5.2: Distribution of how services charge parents

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Service type | Hour | | Day/  session | | Week | | Term | | Day and week | | Other | |
| Education and care | 30% | 9% | | 7% | | 1% | | 36% | | 17% | |
| Kindergarten | 100% | 0% | | 0% | | 0% | | 0% | | 0% | |
| Home-based | 91% | 1% | | 0% | | 0% | | 1% | | 7% | |
| Playcentre | 1% | 2% | | 1% | | 94% | | 0% | | 2% | |
| Total (weighted) | 43% | 6% | | 5% | | 12% | | 23% | | 12% | |

1. The weighted total adjusts the sample averages for the proportion that each service type makes up of all ECE services.

For home-based services, 91% of services reported charges on a per hourly basis, and 8% of services used a more complicated fee schedule; the most common combination was having both an hour and a weekly rate. The high percentage of home-based services with an hourly rate could be distorted by a large percentage of services needing to provide a per hour estimate of what educators charged parents. However, it is likely that most educators charged parents on a per hour basis.

Figure 5.1: Breakdown of charges for education and care services

There was a large variation in how education and care services charged parents. While 30% of services charged at a per hour or per session rate, 53% of services had more than one type of rate. In fact, the most common type of fee schedule had both day rates and week rates, or weekly rates that were affected by the number of days a week a child attended. For the small number of services that charged per term, the charge was a requested donation.

For services that offered more than one rate, weekly rates had a lower per hour cost than the daily or hourly rate, creating a discount for parents who had their children at the service full-time. Also, for the 7% of services that charged a weekly rate, parents often faced the same charge regardless of the hours of attendance. This meant that the hourly charge for parents would be lower for children attending longer hours.

## How much are average parental charges in ECE?

Table 5.3 shows the average income services received from parents. Income from parents per hour is highest for home-based networks at $3.37 an hour, followed by education and care at $2.10. Kindergartens and playcentres received much lower income from parents at 30 cents and 37 cents per hour respectively.

Table 5.3: Average income from parents by service type (based on income question)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Service type | Average service income from parents per year ($000s) | | | Average service income from parent per child hour ($) | |
| Midpoint  estimate | Confidence interval | | Midpoint estimate | Confidence interval |
| Education and care | $104 | $98-$111 | $2.10 | | $1.99-$2.20 |
| Kindergarten | $11 | $11-$12 | $0.30 | | $0.29-$0.31 |
| Home-based | $265 | $241-$290 | $3.88 | | $3.66-$4.09 |
| Playcentre | $3 | $2-$3 | $0.37 | | $0.34-$0.40 |
| Total (weighted) | $91 | $86-$96 | $1.76 | | $1.69-$1.83 |

1. Categories containing fewer than 10 services responding to the survey have been excluded.
2. Values are sample estimates. There is a 95% chance the confidence interval shown contains the true population average.
3. The weighted total adjusts the sample averages for the proportion that each service type makes up of all ECE services.

Table 5.4 shows the average per hour parental charge estimated from the fee schedules the services provided. Parental charges include compulsory fees, recommended donations and optional charges for care, but not optional charges for discrete items and extra activities. Parental charges were highest for education and care services and home-based networks. Home-based networks had a similar charge for all age groups, while education and care centres charged, on average, 30 cents more an hour for children aged under two than for those aged two and over.

Average income from parents as shown in Table 5.3 was significantly lower than the average parental charges shown in Table 5.4, except for playcentres. This difference can be explained by two factors. First, the per hour fee in Table 5.4 does not include any discount for parents receiving the childcare subsidy, while the figure shown in Table 5.3 would include any discount for parents receiving the childcare subsidy. Second, centres can only charge the fees in Table 5.4 for hours outside of *20 Hours ECE,* while the figure in Table 5.3 is the average parents pay for all hours including *20 Hours ECE*.

Table 5.4: Standard parental charges per child hour by service type (based on fees schedules)

|  |  |  |  |
| --- | --- | --- | --- |
| Service type | Midpoint estimate | Standard error | Confidence interval |
| Under two | | | |
| Education and care | $5.55 | $0.08 | $5.39-$5.70 |
| Home-based | $5.83 | $0.08 | $5.68-$5.98 |
| Playcentre | $0.37 | $0.03 | $0.30-$0.44 |
| Total (weighted) | $4.86 | $0.10 | $4.67-$5.06 |
| Two and over (excl. *20 Hours ECE*) | | | |
| Education and care | $5.26 | $0.06 | $5.14-$5.38 |
| Kindergarten | $3.13 | $0.03 | $3.08-$3.19 |
| Home-based | $5.81 | $0.08 | $5.66-$5.96 |
| Playcentre | $0.44 | $0.03 | $0.37-$0.51 |
| Total (weighted) | $4.41 | $0.05 | $4.31-$4.51 |

1. Categories containing fewer than 10 services responding to the survey have been excluded.
2. Values are sample estimates. There is a 95% chance the confidence interval shown contains the true population average.
3. The weighted total adjusts the sample averages for the proportion that each service type makes up of all ECE services.
4. Parental charges include compulsory fees for attendance, recommended donations and optional charges for care, but do not include optional charges for discrete items and one-off activities.

Table 5.5 shows the charges for children attending *20 Hours ECE.* Services are not allowed to charge compulsory fees for the hours covered by the *20 Hours ECE* subsidy, although 27% of services reported charging optional charges. Table 5.6 shows the average optional charge parents were asked to pay for *20 Hours ECE* over all services.

Children attesting to *20 Hours ECE* but attending for longer than six hours a day or 20 hours a week could be charged compulsory fees for these extra hours. ‘*20 Hours ECE* – fee for non-subsidised hours’gives this fee. For home-based networks this fee is not statistically different from the standard fee home-based services charge. For kindergartens this charge was on average $2.95 per hour, lower than their standard charge of $3.13 per hour. Some kindergartens[[5]](#footnote-5) did not charge additional fees for children attesting to *20 Hours ECE*, and others offered discounted rates for additional hours.

Table 5.5: *20 Hours ECE* parental charges per child hour by service type (based on fee schedules)

|  |  |  |  |
| --- | --- | --- | --- |
| Service type | Midpoint estimate | Standard error | Confidence interval |
| *20 Hours ECE* – optional charges | | | |
| Education and care | $0.34 | $0.04 | $0.27-$0.41 |
| Kindergarten | $0.13 | $0.01 | $0.12-$0.14 |
| Home-based | $0.18 | $0.03 | $0.12-$0.24 |
| Total (weighted) | $0.26 | $0.02 | $0.23-$0.29 |
| *20 Hours ECE* – parental charges for non-subsidised hours | | | |
| Education and care | $6.06 | $0.12 | $5.82-$6.31 |
| Kindergarten | $2.95 | $0.03 | $2.89-$3.01 |
| Home-based | $5.83 | $0.08 | $5.67-$5.99 |
| Total (weighted) | $4.88 | $0.07 | $4.74-$5.02 |

1. Categories containing fewer than 10 services responding to the survey have been excluded.
2. Values are sample estimates. There is a 95% chance the confidence interval shown contains the true population average.
3. The weighted total adjusts the sample averages for the proportion that each service type makes up of all ECE services.
4. Parental charges include compulsory fees for attendance, recommended donations and optional charges for care, but do not include optional charges for discrete items and one-off activities. Parental charges for *20 Hours ECE* only include optional charges for care, but not for discrete items and one-off activities.

For education and care services the average charge for hours above *20 Hours ECE* was $5.83, higher than the standard charge of $5.26 per hour. Many services did charge the same as their standard fee for parents not attesting to *20 Hours ECE*; however, the way some services structured their fee schedule meant that parents were charged a different amount for the hours above 20 hours a week depending on whether or not they were attesting to *20 Hours ECE.* Some services required children to be enrolled full-time in their service, with two weekly rates depending on whether or not the child attested *20 Hours ECE*. Other services had a weekly rate that offered a lower per hour rate than their normal per hour rate; and parents attesting to *20 Hours ECE* were charged at the normal per hour rate for their additional time at the centre.

Table 5.6 shows the results from the Childcare Survey 2009. Parents were asked how much they paid a week for formal ECE care. This table gives an indication of how much parents actually pay for early childhood, compared with how much early childhood services charge. No adjustment was made to these figures to account for average hours per week or the type of service attended. At the average rate estimated for education and care and home-based services, children attending for at least 20 hours a week (excluding hours in *20 Hours ECE*) would be paying more than $100 a week (Statistics New Zealand, 2012).

Table 5.6: Childcare Survey 2009, percentage of children attending formal ECE-cost to parent per week

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Cost to parent per week | Age of child (years) | | | | | | | | | | Total | |
| 0 | | 1 | | 2 | | 3 | | 4 | |
| 1998 | 2009 | 1998 | 2009 | 1998 | 2009 | 1998 | 2009 | 1998 | 2009 | 1998 | 2009 |
| No cost | 35.9 | 32.0 | 22.5 | 20.2 | 14.7 | 18.5 | 10.3 | 33.1 | 8.1 | 39.4 | 13.5 | 29.5 |
| $20 or less | 25.3 | 31.5 | 40.4 | 26.4 | 46.0 | 21.4 | 61.6 | 26.2 | 70.4 | 25.2 | 56.5 | 25.1 |
| $21-$50 | S | S | 11.0 | 12.9 | 22.5 | 18.6 | 14.8 | 10.6 | 6.9 | 11.4 | 12.9 | 12.7 |
| $51-$100 | S | S | 11.8 | 15.9 | 8.6 | 17.1 | 9.3 | 12.8 | 8.6 | 15.5 | 9.1 | 15.0 |
| $101 or more | 25.7 | 21.1 | 14.3 | 24.6 | 8.2 | 24.4 | 4.0 | 17.3 | 6.0 | 8.4 | 8.0 | 17.7 |

1. Not-specified responses were excluded from the calculation of percentages.
2. 1998 costs were inflated by a factor of 1.304 based on estimated inflation using the consumers’ price index.

Source: Statistics New Zealand.

Tables 5.7 and 5.8 and Figures 5.2 and 5.3 show how the range of parental charges is distributed across the sector. Playcentres and home-based have a relatively tighter range of fees, with between 60% and 70% of per hour charges within a dollar range. Education and care services and kindergartens have a much wider range of fee values.

Table 5.7: Distribution of parental charges by service type

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Service type | 10th percentile | 25th percentile | 50th percentile | 75th percentile | 90th percentile |
| Under two | | | | | |
| Education and care | $3.84 | $4.71 | $5.53 | $6.42 | $7.36 |
| Home-based | $4.90 | $5.35 | $6.00 | $6.00 | $6.35 |
| Playcentre | $0.00 | $0.01 | $0.27 | $0.50 | $0.73 |
| Two and over | | | | | |
| Education and care | $3.61 | $4.37 | $5.30 | $6.12 | $7.17 |
| Kindergarten | $1.46 | $2.05 | $4.00 | $4.50 | $4.70 |
| Home-based | $4.90 | $5.35 | $6.00 | $6.00 | $6.35 |
| Playcentre | $0.00 | $0.17 | $0.33 | $0.59 | $0.82 |

1. Parental charges include compulsory fees for attendance, recommended donations and optional charges for care, but do not include optional charges for discrete items and one-off activities.

Figure 5.2: Distribution of parental charges for under two

1. Parental charges include compulsory fees for attendance, recommended donations and optional charges for care, but do not include optional charges for discrete items and one-off activities.

Figure 5.3: Distribution of parental charges for two and over

1. Parental charges include compulsory fees for attendance, recommended donations and optional charges for care, but do not include optional charges for discrete items and one-off activities.

Table 5.8: Distribution of parental charges by service type

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Service type | No charges | Up to $1 | >$1 - <= $2 | >$2 - <= $3 | >$3 - <= $4 | >$4 - <= $5 | >$5 - <= $6 | >$6 - <= $7 | >$7- <= $8 | >$8 |
| Under two | | | | | | | | | | |
| Education and care | 1% | 1% | 1% | 3% | 9% | 19% | 31% | 19% | 11% | 4% |
| Home-based | 0% | 0% | 0% | 0% | 5% | 11% | 73% | 7% | 3% | 1% |
| Playcentre | 25% | 70% | 2% | 0% | 3% | 0% | 0% | 0% | 0% | 0% |
| Two and over (excl. *20 Hours ECE*) | | | | | | | | | | |
| Education and care | 1% | 1% | 2% | 4% | 14% | 23% | 29% | 16% | 8% | 4% |
| Kindergarten | 0% | 6% | 18% | 21% | 26% | 29% | 0% | 0% | 0% | 0% |
| Home-based | 0% | 0% | 0% | 0% | 5% | 11% | 72% | 7% | 4% | 1% |
| Playcentre | 21% | 75% | 2% | 1% | 1% | 0% | 0% | 0% | 0% | 0% |
| *20 Hours ECE* | | | | | | | | | | |
| Education and care | 74% | 18% | 5% | 3% | 2% | 0% | 0% | 0% | 0% | 0% |
| Kindergarten | 72% | 28% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Home-based | 78% | 20% | 0% | 2% | 0% | 0% | 0% | 0% | 0% | 0% |

1. Parental charges include compulsory fees for attendance, recommended donations and optional charges for care, but do not include optional charges for discrete items and one-off activities.

## How do fees vary by type of ownership?

Around 57% of ECE services are 'community-based', with most operating as trusts with profits distributed back into the trust for the development of the service and the community. Table 5.9 compares parental charges for these types of providers with other privately owned for-profit providers. Private home-based service charges were on average 14% higher than those of community-based ones, while charges in private education and care services were around 20% higher than those of their community-based counterparts.

Table 5.9: Average parental charge by service type and ownership

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Service type | Community-based | Private | All | Community-based | Private | All |
| Under two | | | Two and over (excl. *20 Hours ECE*) | | |
| Education and care | $5.27 | $6.09 | $5.55 | $4.87 | $6.02 | $5.26 |
| Kindergarten |  |  |  | $3.13 |  | $3.13 |
| Home-based | $4.68 | $5.94 | $5.83 | $4.68 | $5.92 | $5.81 |
| Playcentre | $0.37 |  | $0.37 | $0.44 |  | $0.44 |

1. Parental charges include compulsory fees for attendance, recommended donations and optional charges for care, but do not include optional charges for discrete items and one-off activities.

## How do fees vary by region?

Table 5.10: Average parental charges by region and service type

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Region | Ed and care (under two) | Ed and care (two and over) | Kindergarten | Ed and care (under two) | Ed and care (two and over) | Kindergarten |
| Midpoint average | | | 95% confidence interval | | |
| Auckland | $5.72 | $5.30 | $2.90 | $5.43-$6.02 | $5.06-$5.54 | $2.68-$3.12 |
| Waikato | $5.23 | $4.87 | $2.23 | $4.76-$5.70 | $4.52-$5.21 | $1.98-$2.48 |
| Wellington | $6.49 | $6.20 | $2.80 | $5.99-$6.99 | $5.79-$6.61 | $2.55-$3.05 |
| Other North Island | $4.92 | $4.77 | $2.91 | $4.60-$5.25 | $4.51-$5.02 | $2.63-$3.19 |
| Canterbury | $5.23 | $5.20 | $3.80 | $4.86-$5.59 | $4.83-$5.58 | $3.46-$4.14 |
| Otago | $5.61 | $4.80 | $3.12 | $5.04-$6.17 | $4.12-$5.47 | $2.82-$3.43 |
| Other South Island | $5.85 | $5.97 | $4.06 | $5.21-$6.50 | $5.42-$6.51 | $3.91-$4.21 |
| Total | $5.55 | $5.26 | $3.13 | $5.40-$5.73 | $5.13-$5.41 | $3.02-$3.25 |

1. Values are sample estimates. There is a 95% chance the confidence interval shown contains the true population average.
2. Parental charges include compulsory fees for attendance, recommended donations and optional charges for care, but do not include optional charges for discrete items and one-off activities.
3. Home-based services and playcentres have not been included because some regions had fewer than 10 responses with valid fee data, and there were concerns about sample bias for some regions.

Table 5.10 shows the average parental charge by region. Wellington had higher fees for education and care for both under two's and two and over's, which were statistically significant at the 95% confidence level. There were statistically significant lower parental charges for education and care services at Waikato, Canterbury and North Island regions outside of Auckland and Wellington.

Canterbury had higher fees for kindergartens, which were statistically significant at the 95% confidence level. Waikato and Wellington had statistically significant lower fees for kindergartens.

South Island regions outside of Canterbury and Otago also had high fees for both education and care and kindergartens, but there was large variation across regions, and these differences were not statistically significant due to the small sample sizes.

## Additional charges

Some services have additional charges on top of hourly fees, some of which are optional and some compulsory. An optional charge is a request for payment from parents for a specific purpose which the parent may chose whether or not to pay. Optional charges are meant to help pay for extras that parents might want for their child. While some optional charges are charged on an hourly, daily or weekly basis, some optional charges are for discrete items, such as food and nappies, or are a one-off, such as for a school trip. It is therefore difficult to quantify these into a per hour charge, and optional charges for discrete items were not included in the fees analysis above.[[6]](#footnote-6)

Table 5.11 shows the percentage of services that have optional charges. The percentage of services who charge optional charges for under two and two and over is similar for all service types. However a much higher percentage of services charge optional charges for *20 Hours ECE.* Optional charges for under two’s and two and over’s were more likely to be for an optional extra that parents could provide for themselves, such as food and nappies, or for trips and extra classes. *20 Hours ECE* also had additional optional charges to help pay for providing a service above the regulations, such as having more than 80%+ registered teachers.

Table 5.11: Per cent of services who have optional charges

|  |  |  |  |
| --- | --- | --- | --- |
| Service type | Under two | Two and over | *20 Hours ECE* |
| Education and care | 10% | 10% | 28% |
| Kindergartens | - | 4% | 28% |
| Home-based | 10% | 9% | 22% |
| Playcentre | 11% | 11% | - |
| Total (weighted) | 10% | 8% | 27% |

1. The weighted total adjusts the sample averages for the proportion that each service type makes up of all ECE services.

Table 5.12 shows the average optional charges per hour for 20 Hours ECE at the 27% of services that had optional charges.

Table 5.12: Optional charges for *20 Hours ECE* by service type

|  |  |  |  |
| --- | --- | --- | --- |
| Service type | Midpoint estimate | Standard error | Confidence interval |
| Education and care | $1.23 | $0.10 | $1.03-$1.43 |
| Kindergartens | $0.45 | $0.01 | $0.43-$0.46 |
| Home-based | $0.83 | $0.09 | $0.65-$1.02 |
| Total (weighted) | $0.86 | $0.05 | $0.76-$0.96 |

1. Values are sample estimates. There is a 95% chance the confidence interval shown contains the true population average.
2. The weighted total adjusts the sample averages for the proportion that each service type makes up of all ECE services.

Table 5.13 shows the most common types of additional charges that services reported in their fee schedule.

Table 5.13: Most popular types of additional charges

|  |  |  |  |
| --- | --- | --- | --- |
| Donations | Casual | Holidays | Association/ Membership |
| Family/ whānau contributions | Enrolment fees | Meals | Early drop-off/late pick-up |
| Late payment fees | Admin fees | Nappies | Portfolios |
| Absence | Holding/Retainer fee | Trips/ Transport | Consumables |

Table 5.14 shows the percentage of services that charged three common types of fees that were compulsory for parents to pay if a service decided to charge them.

Table 5.14: Percent of services with selected additional charges

|  |  |  |  |
| --- | --- | --- | --- |
| Service type | Enrolment/Admin | Late pick up | Absence |
| Education and care | 11% | 20% | 12% |
| Kindergartens | 1% | 14% | 3% |
| Home-based | 1% | 7% | 11% |
| Playcentre | 0% | 0% | 0% |
| Total (weighted) | 8% | 16% | 9% |

1. The weighted total adjusts the sample averages for the proportion that each service type makes up of all ECE services.

Enrolment and administration charges were a one-off charge parents were asked to pay when enrolling their child. While these charges would have little impact on per hour costs, they could provide a barrier for some families wanting to enrol in an early childhood centre.

Late pick-up fees (and early drop-off fees) were charges for parents leaving their child at the centre outside of usual hours. These were often high compared with hourly fees. Late fees provide an incentive for parents to collect their children on time and also help cover the costs of teachers working overtime to care for the child.

Absence fees were charges for hours a child was enrolled but did not attend. Absence fees were either the standard fee of attending or a discount on the standard fee. Discounts often depended on the reason for the absence and the amount of notification a service received before the absence. It is likely that the data underestimates the number of services that charge for hours enrolled but not attended.

## Fee discounts

Many services also offered discounts to parents who met certain requirements. A common discount was for families who had more than one child at the service. Many playcentres charged a per term fee per family, not per child. Some services offered discounts to parents who paid their fees before a certain date (alternatively, some services charged a late payment fee if parents paid fees after a certain date). Some playcentres offered discounts for parents who held or were studying for a certificate that was part of the Playcentre Education Diploma Curriculum 2000. Some kindergartens offered discounted rates or did not charge fees to parents of children who were two years old and who agreed to attest to *20 Hours ECE* once the child turned three years old.

Discounts were not included in the analysis of hourly fees.

# 6 Relationship between costs, income and fees

Government subsidises the cost of ECE by paying services a proportion of their costs. The ECE funding subsidy has a range of funding rates depending on the type of service, the percent of teachers who are registered, the age of the child and whether the service offers *20 Hours ECE*. The ECE funding subsidy rates are intended to subsidise the cost of ECE and split the cost between the government and parents. The *20 Hours ECE* fundingrates are intended to meet the full average cost of providing ECE for each service type, to enable these services to provide up to 20 hours of service per week for free to children aged three to five years.

## How much does government funding cover costs?

Figure 6.1 shows that the ECE funding subsidy, on average, covered 79% of total costs for education and care services, 98% of costs for kindergartens, 85% of costs for playcentres and 57% of costs for home-based networks. Overall, the ECE funding subsidy covered 80% of average operational costs faced by early childhood education services.

Figure 6.1: Percentage of services costs covered by the funding subsidy

1. The weighted total adjusts the sample averages for the proportion that each service type makes up of all ECE services.

The total proportion of operational costs covered by government funding was influenced by the proportion of total child hours that were funded by the government, specifically funding for *20 Hours ECE.* Kindergartens had the highest proportion of costs covered by government funding at 98%. Of kindergartens’ total child hours, 99% were funded, 85% at the *20 Hours ECE* rate.

Home-based services had the lowest proportion of costs covered by government funding, at 57% of their total costs. Of their total hours, 80% were funded, with only 25% at the *20 Hours ECE* rate.

Services are eligible for funding for up to six hours a day and 30 hours a week per child place (or per child for children receiving *20 Hours ECE*), which means that services that operated for longer hours would have a lower proportion of their total hours covered by funding.

Table 6.1 shows that the ECE funding subsidy covered 79% of the average costs for under two’s, and 62% of the costs for two and over (excluding those receiving *20 Hours ECE).* The *20 Hours ECE* funding on average met or exceeded the average costs for two and over's, which is a close proxy for three to five year olds. The exception to this was sessional teacher-led 100% kindergartens, for which *20 Hours ECE* covered approximately 78% of costs.

Table 6.1: Per hour funding rates versus cost per child hour (excl GST)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Service type and  funding band | Feb 2011 funding rates | Cost per hour | | Proportion of costs covered by funding | |
| Confidence interval | Midpoint estimate | Confidence interval | Midpoint estimate |
| Under two | | | | | |
| Education and care |  |  |  |  |  |
| All-day teacher-led 80%+ | $10.04 | $13.00-$14.53 | $13.77 | 69%-77% | 73% |
| All-day teacher-led 50-79% | $9.10 | $8.18-$11.76 | $ 9.97 | 77%-111% | 91% |
| Home-based – All4 | $6.47 | $7.87-$11.08 | $ 9.47 | 58%-82% | 68% |
| Playcentre- Standard | $6.43 | $5.10-$6.40 | $ 5.75 | 101%-126% | 112% |
| Total (weighted) | $8.50 | $10.42-$11.22 | $10.82 | 76%-82% | 79% |
| *20 Hours ECE* | | | | | |
| Education and care |  |  |  |  |  |
| All-day teacher-led 80%+ | $9.46 | $7.88-$8.59 | $ 8.24 | 110%-120% | 115% |
| All-day teacher-led 50-79% | $8.63 | $6.62-$8.41 | $ 7.51 | 103%-130% | 115% |
| Kindergarten |  |  |  |  |  |
| All-day teacher-led 80%+ | $9.46 | $8.84-$9.80 | $ 9.32 | 97%-107% | 102% |
| Sessional teacher-led 100% | $6.37 | $7.53-$8.77 | $ 8.15 | 73%-85% | 78% |
| Home-based – All4 | $7.50 | $6.67-$8.78 | $ 7.72 | 85%-112% | 97% |
| Total (weighted) | $8.89 | $8.27 $8.65 | $8.46 | 103%-107% | 105% |
| Two and over | | | | | |
| Education and care |  |  |  |  |  |
| All-day teacher-led 80%+ | $5.56 | $7.88-$8.59 | $ 8.24 | 65%-71% | 67% |
| All-day teacher-led 50-79% | $4.79 | $6.62-$8.41 | $ 7.51 | 57%-72% | 64% |
| Kindergarten |  |  |  |  |  |
| All-day teacher-led 80%+ | $5.56 | $8.84-$9.80 | $ 9.32 | 57%-63% | 60% |
| Sessional teacher-led 100% | $5.32 | $7.53-$8.77 | $ 8.15 | 61%-71% | 65% |
| Home-based- All4 | $3.48 | $6.67-$8.78 | $ 7.72 | 40%-52% | 45% |
| Playcentre- Standard | $3.23 | $4.41-$5.01 | $ 4.71 | 65%-73% | 69% |
| Total (Weighted) | $4.91 | $7.72-$8.10 | $ 7.91 | 61%-64% | 62% |

1. Service types and funding bands with less than 10 responses were not included.
2. February 2011 rates were chosen as this is the closest to the current rate structure, while still being close to the financial period reported by services.
3. Values are sample estimates. There is a 95% chance the confidence interval shown contains the true population average.
4. Due to quality issues home-based services results were not broken down by funding band. The home-based rates are a weighted average of the rates for the two funding bands.

Table 6.2: Midpoint estimates of the percentage funding rates covered costs in 2008 and 2011

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Service type  and funding band | Under two | | *20 Hours ECE* | | Two and over  (excl. *20 Hours ECE*) | |
| 2008 | 2011 | 2008 | 2011 | 2008 | 2011 |
| Education and care |  |  |  |  |  |  |
| All-day teacher-led 80%+ | 64% | 73% | 111% | 115% | 64% | 67% |
| All-day teacher-led 50-79% | 63% | 91% | 108% | 115% | 56% | 64% |
| Kindergartens |  |  |  |  |  |  |
| All-day teacher-led 80%+ | - | - | - | 102% | 64% | 60% |
| Sessional teacher-led 100% | - | - | 93% | 78% | 76% | 65% |
| Home-based |  |  |  |  |  |  |
| Quality | 53% | 68%3 | 109% | 97% | 51% | 45% |
| Standard | 62% | 68%3 | 136% | 97% | 60% | 45% |
| Playcentre |  |  |  |  |  |  |
| Standard | 70% | 112% | - | - | 60% | 69% |

1. Service types and funding bands with less than 10 responses were not included.
2. Because of the small number of kindergartens that were all-day teacher-led in 2008 no estimate was provided for this category in 2008.
3. Due to quality issues home-based services results were not broken down by funding band. The home-based figures are a weighted average of the figures for the two funding bands.

Table 6.2 shows the midpoint estimates of the percentage funding rates cover costs, estimated for 2008 and 2011. Caution needs to be used when comparing the results as the methodology used to estimate average costs for 2011 has changed from that used in 2008[[7]](#footnote-7). Assumptions used for the 2008 survey mean that the percentage of costs covered by the under two rates were possibly underestimates, especially for home-based services and playcentres. Kindergartens returned their forms at an association level rather than at an individual level, so the 2011 estimate for sessional services is likely not at robust as in 2008 when the majority of services were sessional.

## What is the relationship between income, costs, government funding, and fees?

There is a strong positive relationship between costs and income at ECE services. Table 6.3 shows the average expenditure and income per service. For all service types average income was higher than average expenditure. It is important to note that expenditure only includes annual operating expenditure, and does not include any expenditure on purchasing capital or on debt repayments.

Table 6.3: Average expenditure and income per annum by service type

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Service type | Average annual cost per service (000s) | | Average annual income per service (000s) | |
| Midpoint estimate | Confidence interval | Midpoint estimate | Confidence interval |
| Education and care | $425 | $411-$439 | $471 | $455-$486 |
| Kindergarten | $338 | $335-$341 | $368 | $365-$371 |
| Home-based | $528 | $491-$566 | $562 | $524-$601 |
| Playcentre | $36 | $34-$37 | $40 | $37-$42 |
| Total (weighted) | $375 | $366-$384 | $412 | $402-$422 |

1. Values are sample estimates. There is a 95% chance the confidence interval shown contains the true population average.
2. The weighted total adjusts the sample averages for the proportion that each service type makes up of all ECE services.

Figure 6.2: Fees versus costs and income per hour

1. Average fee per hour for each service is the average of the service’s under two fee and two and over fee weighted by the proportion of total hours which are under two and two and over. It is the average fee for hours not covered by *20 Hours ECE.*
2. Cost per child hour is the total cost of each service divided by the total number of child hours per service.
3. Income per child hour is the total income of each service divided by the total number of child hours per service.

Figure 6.2 shows a weaker relationship between the average fee charged at services and the cost and income per child hour at services. The variability of the scatter-plot indicates that while there is a relationship between costs and fees, other factors also influence fees. These factors could include the level of funding from the government, different operating and ownership structures, different provision philosophies, difference in parents socio-economic status, and profit-margins services desire.

However, figure 6.3 shows more strongly a price-response relationship between costs and fees. In this graph, the extent to which government funding meets costs is plotted against income from parents per child hour. There is a moderately strong negative linear relationship, as might be expected, as services offset costs not met by public income with private income.

Figure 6.3: Costs covered by government compared to income from parents per hour

1. Income from government per child hour is the Ministry of Education funding subsidy including 20 hours ECE, equity funding, provisionally registered teachers grant and Ministry of Social Development childcare subsidy, divided by the total number of child hours, whether or not subsidised.
2. Income from parents per child hour is fees, optional charges and donations divided by the total number of child hours.

The model line of best fit shows two things: when government income fully meets costs, fees are on average nil, and for each 10% drop in the proportion of costs met by government, fees on average, increase by a dollar.

Figure 6.3, however, does not take into account absolute differences in costs and government funding when relating with fee changes. There is a weaker but still moderate negative relationship when income per hour from government in dollar terms is compared directly with income per hour from parents. Figure 6.4 shows the relationship between income from government per hour compared to income from parents per hour for education and care services on the 80%+ funding band.

Figure 6.3 and 6.4 suggest that there is, at least to some extent, a substitution effect between income from the government and income from parents, with services that receive less income from the government, receiving more income from parents. However, there is substantial variation across the sector, and the relationship is confounded by a range of factors such as operating and ownership structure, provision philosophies, mix of age groups, the socio-economic area of services, and the hours of operation. It is difficult to quantify from this data by how much an individual service would respond on average to a change in funding rates.

Figure 6.4: Income from government compared to income from parents, education and care

1. Income from government per child hour is the Ministry of Education funding subsidy including 20 hours ECE, equity funding, provisionally registered teachers grant and Ministry of Social Development childcare subsidy, divided by the total number of child hours, whether or not subsidised.
2. Income from parents per child hour is fees, optional charges and donations divided by the total number of child hours.

A good indication of responsiveness to funding changes is to see if past funding changes have had an impact on fees. As part of the consumer price index (CPI) monitoring, Statistics New Zealand collects a sample of fees at ECE services and calculates the CPI of childcare every quarter. The Ministry of Education reports on this series in its affordability indicator report.

According to these statistics, the cost of childcare fell by 34.8% in the year that the *20 Hours ECE* funding rate was introduced and affordability (fees relative to earnings) increased by 37.4%. Also, in the March 2011 quarter, when the top two funding rates were replaced with a lower funding rate, average fees increased by 5.3%. At other times, where there has been no change to funding rates or small changes in line with inflation, there have been correspondingly similar small changes in fees, and fees in relation to earnings have largely been maintained. In time periods where there was no change in funding increases in fees were small and were similar to changes in earnings (Ministry of Education, 2012).

# 7 Voluntary work

A significant proportion of early childhood education services receive assistance from volunteers. This not only helps to reduce the service’s costs, but is also part of the philosophy and culture of some services, for example, playcentres. The recognition of the role of parents and community in ECE is embedded in the national ECE curriculum, Te Whāriki.

The 2011 Survey of Income, Expenditure and Fees at ECE Services, included a question on whether or not services received assistance from volunteers. If they did, they were asked to estimate the number of hours and the number of people who assisted in three categories:

1. contact time with children
2. administration, governance, organisation (including fundraising and events)
3. maintenance.

The majority of services do not keep precise records on the number of volunteers or the hours volunteered at their service. Services were asked to estimate the number of volunteer hours at their service, so the results of this section should be interpreted with caution.

One potential issue with the data is the interpretation of the definition of ‘volunteer’, especially for playcentres. There was large variation in the results for playcentres, with little correlation seen between the number of volunteer hours at playcentres and other factors that might be expected to either influence, or be influenced by the number of volunteers. Playcentres are parent-led, with parents taking the lead to supervise sessions. However, parents are also encouraged to attend the session with their children. It is possible that some playcentres only counted parents who were actively leading a session as volunteers on child contact, while others counted all parents who were at the centre as volunteers.

## How many services use volunteers?

Table 7.1: Number of services that reported receiving assistance from volunteers

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Service type | Services with volunteers | Services without volunteers | Services – volunteers unknown | Percentage of services with volunteers | Number of services responding | Total number of services |
| Education and care | 187 | 390 | 22 | 32% | 599 | 2,559 |
| Kindergarten | 362 | 48 | 113 | 88% | 523 | 632 |
| Home-based | 0 | 169 | 5 | 0% | 174 | 329 |
| Playcentre | 201 | 0 | 22 | 100% | 223 | 460 |
| Total (unweighted) | 750 | 607 | 162 | 55% | 1,544 | 3,980 |
| Total (weighted) | 1,840 | 2,140 | 0 | 46% | - | 3,980 |

1. The weighted total adjusts the sample averages for the proportion that each service type makes up of all ECE services.

Table 7.1 shows that around half of services (46%) received assistance from volunteers. All playcentres received volunteer assistance. Kindergartens were the second highest at 88%, while 32% of education and services reported use of volunteers. Home-based networks did not report receiving any assistance from volunteers.

Figure 7.1: Percentage of services receiving assistance from volunteers

Table 7.2: Percentage of services with volunteers, by volunteer type

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Service type | Child contact | Administration | Maintenance | Total |
| Education and care | 21% | 24% | 21% | 32% |
| Kindergarten | 67% | 70% | 63% | 88% |
| Home-based | 0% | 0% | 0% | 0% |
| Playcentre | 100% | 97% | 95% | 100% |
| Total (weighted) | 35% | 38% | 34% | 46% |

1. The weighted total adjusts the sample averages for the proportion that each service type makes up of all ECE services.

The number of volunteers can be further broken down by type of volunteer work. Slightly more services reported volunteers in administration, governance and organisation, but most services had volunteers in more than one category.

Table 7.3: Number of services with volunteers, by type of ownership

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Ownership type | Services with volunteers | Services without volunteers | Services –volunteers unknown | Percentage of services with volunteers | Number of services |
| Community-based | 725 | 325 | 148 | 69% | 1,198 |
| Private | 24 | 308 | 14 | 7% | 346 |

Of the services who received assistance from volunteers, 97% were community-based services. Altogether 69% of community-based services reported having volunteers, compared with 7% of privately owned services. All kindergartens and playcentres are community-based.

## Volunteer numbers

Table 7.4: Average number of volunteers at services that reported volunteers

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Service type | Child contact | Administration | Maintenance | Total |
| Education and care | 4-8 | 6-10 | 4-7 | 15- 23 |
| Kindergartens | 9-11 | 8-9 | 3-4 | 19-22 |
| Playcentre | 19- 22 | 12-15 | 10-13 | 41-49 |
| Total | 11-13 | 9-11 | 5-7 | 25-29 |

1. Values are sample estimates. There is a 95% chance the confidence interval shown contains the true population average.

Table 7.4 shows the estimated number of people who volunteered over a one year period at the services who responded to the survey. Playcentres had significantly more volunteers per service than other service types. It is possible that a person could volunteer in more than one category or at more than one service, so the total number of volunteers shown in the table is an upper limit of the average number of volunteers for these services.

Figure 7.2: Distribution of volunteers by volunteer type

The highest proportion of volunteers was on child contact, except in education and care services, where more volunteers were on administration and governance. Maintenance had the smallest number of volunteers for all service types.

## Volunteer hours

Table 7.5: Average volunteer hours per annum at services which reported volunteers

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Service type | Child contact | Administration | Maintenance | Total |
| Education and care | 240–380 | 170–380 | 30–200 | 540–860 |
| Kindergartens | 390–480 | 160–190 | 50–60 | 630–710 |
| Playcentre | 2,440–3,130 | 660–1,000 | 140–210 | 3,330–4,300 |
| Total | 970–1,220 | 340– 470 | 80–130 | 1,430–1,780 |

1. Values are sample estimates. There is a 95% chance the confidence interval shown contains the true population average.

Table 7.5 shows the estimated number of volunteer hours received over one year by services that responded to the survey. Playcentres had higher volunteer hours on average than other services, showing the extent to which playcentres rely on volunteers.

Figure 7.3: Distribution of volunteer hours by volunteer type

The majority of volunteer hours were used for children contact. Volunteers who worked in children contact spent more hours volunteering than volunteers for maintenance or administration.

When adjusted by measures of size, Table 7.6 shows playcentres have a much higher contribution of volunteer hours relative to their size, since they are parent-led services. This is because they have both higher numbers of volunteers and lower funded child hours than education and care services, and kindergartens. The number of hours per volunteer is similar among the service types at around 70 to 80 hours per year.

Table 7.6: Average volunteer hours per annum per service, volunteer and funded child hour

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Service type | Average volunteer hours at services with volunteers | | | Percentage of services with volunteers | Voluntary hours as a percentage of funded child hours |
| Hours per service | Hours per volunteer | Hours per 1,000 funded child hours |
| Education and care | 550–1,100 | 70-120 | 20-40 | 32% | 1% |
| Kindergarten | 630–710 | 50-60 | 18-22 | 88% | 4% |
| Home-based | - | - | - | 0% | 0% |
| Playcentre | 3,330–4,300 | 80-100 | 510-630 | 100% | 61% |
| Total | 1,450–1,820 | 70-80 | 160-210 | 46% | 4% |

1. Values are sample estimates. There is a 95% chance the confidence interval shown contains the true population average.

## Relationship between volunteer contribution, costs, and fees

Figure 7.4: Relationship between volunteer hours and costs

There does not appear to be a relationship between costs and volunteer hours, apart from playcentres having both low costs and high volunteer hours. It is possible that a relationship does exist, but that other factors have a bigger influence on costs.

There does appear to be a relationship between volunteer hours and fees, with services with volunteers having lower fees on average than services with no volunteers.

Figure 7.5 Relationship between volunteer hours and fees

# 8 Technical section

## Reporting dates

The 2011 survey was sent out toward the end of July 2011. Services were able to report annual data for financial year 2010, if their balance date was between 1 April and 31 December, or for financial year 2011, if their balance date was between 1 January and 31 March.

Table 8.5: Balance dates of services with valid data

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Dates | Education and care | Kindergarten | Home-based | Playcentre | Total |
| Pre 06/2010 | 7% | 1% | 0% | 0% | 3% |
| 30/06/2010 | 12% | 31% | 20% | 2% | 16% |
| 31/08/2010 | 1% | 0% | 0% | 91% | 14% |
| 31/12/2010 | 38% | 36% | 75% | 0% | 45% |
| 31/03/2011 | 35% | 21% | 0% | 0% | 16% |
| Other | 7% | 11% | 4% | 7% | 7% |
| Total | 100% | 100% | 100% | 100% | 100% |

Table 8.5 shows the distribution of balance dates and hence periods covered by the data. Around 45% of the balance periods related to the year ended December 2010, 16% to June 2010, 14% to October 2010, 16% to March 2011 and 10% to other dates. Around 77% of responses related to 2010 data only 3% related to balance dates after 31 March 2011.

Most results are therefore based on the year 2010, and largely reflect the situation before the February 2011 change to the top two funding rates. Only a quarter of services responding had balance dates after February 2011, with 10 or 11 months of their reported annual data pre-dating the change. Similarly, the timing of the survey was such that playcentres are excluded from analysis relating to 20 hours ECE.

Note that where data on government subsidy funding has been used to relate subsidy funding to costs, the data for each service was selected to match the balance period the service reported on.

## Response rates

Overall, 36% of licensed services responded to the survey, which was 12 percentage points lower than the response rate in 2008. The decrease in the response rate was mostly a result of non-participation from Te Kōhanga Reo (TKR) services. Excluding TKR, the response rate 40% compared with 42% in 2008. The highest response rate was from kindergartens, at 84%, with many kindergarten associations completing the survey collectively for their members. This rate was six percentage points lower than in 2008. Home-based networks and playcentres both had a significant increase in responses, of 20 percentage points and 16 percentage points respectively. While education and care services had a percentage decrease in the response rate, the actual number of responses increased compared with 2008.

Table 8.1: Response rate by ECE service type

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Service type | Number of responses | | Number of services | Response rate | |
| 2008 | 2011 |
| Education and care | 630 | 2,559 | | 29% | 25% |
| Kindergarten | 530 | 632 | | 90% | 84% |
| Home-based | 202 | 329 | | 40% | 60% |
| Playcentre | 228 | 460 | | 34% | 50% |
| Kōhanga Reo | 1 | 462 | | 95% | 0% |
| Total | 1,591 | 4,442 | | 48% | 36% |
| Total excl. TKR | 1,590 | 3,980 | | 42% | 40% |

Before analysis was conducted on the data, the survey information was put through a data validation process. The information on cost and incomes was checked for internal consistency between fields. After this validation was complete, a small number of records were excluded because of their poor data quality. A smaller percentage of responses needed to be removed due to quality issues, making the response rate, excluding TKR, for 2011 only one percentage point lower than in previous years at 38%.

Table 8.2: Response rate by ECE service type with valid data

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Service type | Number of responses | Number of services | Response rate | |
| 2008 | 2011 |
| Education and care | 603 | 2,559 | 26% | 24% |
| Kindergarten | 523 | 632 | 91% | 83% |
| Home-based | 174 | 329 | 40% | 53% |
| Playcentre | 223 | 460 | 32% | 49% |
| Kōhanga Reo | 0 | 462 | 95% | 0% |
| Total | 1,519 | 4,442 | 46% | 34% |
| Total excl. TKR | 1,519 | 3,980 | 39% | 38% |

Table 8.3: Response rate by funding band with valid data

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Service type and  funding band | Number of responses | Number of ECEs | Response rate | Funded child hours | Total child hours |
| Education and care | 599 | 2,559 | 23% | 23,628,000 | 28,581,000 |
| All-day teacher-led 80%+ | 483 | 2,069 | 23% | 18,969,000 | 23,065,000 |
| All-day teacher-led 50-79% | 99 | 405 | 24% | 4,088,000 | 4,847,000 |
| All-day teacher-led 25-49% | 6 | 29 | 21% | 300,000 | 357,000 |
| All-day teacher-led 0-24% | 3 | 8 | 38% | 88,000 | 129,000 |
| Sessional teacher-led 80%+ | 8 | 37 | 22% | 182,000 | 182,000 |
| Sessional teacher-led 50-79% | 0 | 10 | 0% | 0 | 0 |
| Kindergarten | 523 | 632 | 83% | 19,255,000 | 19,427,000 |
| All-day teacher-led 80%+ | 419 | 525 | 80% | 14,966,000 | 15,137,000 |
| All-day teacher-led 50-79% | 4 | 4 | 100% | 129,000 | 129,000 |
| All-day teacher-led 0-24% | 0 | 1 | 0% | 0 | 0 |
| Sessional teacher-led 100% | 100 | 102 | 98% | 4,160,000 | 4,160,000 |
| Home-based | 174 | 329 | 53% | 8,816,000 | 11,043,000 |
| Quality | 79 | 115 | 69% | 4,356,000 | 5,432,000 |
| Standard | 95 | 214 | 44% | 4,460,000 | 5,611,000 |
| Playcentre | 223 | 460 | 48% | 1,539,000 | 1,573,000 |
| Quality | 5 | 11 | 45% | 36,000 | 36,000 |
| Standard | 218 | 449 | 49% | 1,503,000 | 1,537,000 |
| Total | 1,519 | 3,980 | 38% | 53,238,000 | 60,624,000 |

Table 8.3 shows the response rate with valid data by service type and funding band. The low number of services in certain funding bands may result in a sample bias, as one service may unduly influence the average. Analysis at funding band level was not conducted for funding bands with fewer than ten responses.

Table 8.4: Response rate by region with valid data

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Region | Education and care | Kindergarten | Home-based | Playcentre | Total |
| Auckland | 21% | 100% | 66% | 37% | 34% |
| Waikato | 27% | 53% | 37% | 57% | 37% |
| Wellington | 33% | 39% | 76% | 50% | 39% |
| Other North Island | 21% | 85% | 59% | 44% | 40% |
| Canterbury | 23% | 97% | 46% | 72% | 42% |
| Otago | 37% | 100% | 35% | 25% | 45% |
| Other South Island | 26% | 100% | 69% | 59% | 51% |
| Total | 24% | 83% | 59% | 49% | 48% |

## Sample selection bias

Services were not required to respond to the survey, and instead they themselves decided whether or not to respond. This means that it is possible the data is subject to sample selection bias.

We know that the response rates by service type were quite different, ranging from no response for Kōhanga Reo, to 84% of kindergartens responding. We tried to reduce sample selection bias in totals for the sector by weighting the totals (see section 8.5).

Within each service type the possible presence of sample bias depends on whether or not there is a difference between services that chose to respond and those that did not. For kindergartens and playcentres, associations completed the returns on behalf of their members. Associations are usually regionally based and so this could have a large impact on the regional analysis. Whether or not an association returned the surveys for its members could have a big impact on the results for their region.

When individual services were deciding whether or not to complete the form they had to weigh up the costs of completing the form versus their perceived benefit. It is therefore likely that services that would have had higher costs to complete the survey decided not to return the survey.

Private for profit services completed at a much lower rate than community-based ones. This is likely to affect cost and income structures, to the extent that private services are more likely to charge higher fees.

Finally, as discussed below, due to distinct differences in Kōhanga Reo services, all totals and averages for all service types should be interpreted as the average excluding Kōhanga Reo services.

## Impact of no Kōhanga Reo data

Kōhanga Reo services make up 10% of all services. The lack of data from this sizeable and distinct part of the sector will limit the extent to which generalisations can be made to wider sector, or to which sector averages really reflective of true averages.

Kōhanga Reo services have a philosophy distinct from other service types, with an emphasis on preserving Te Reo Māori. The majority of Kōhanga Reo services are situated in low decile areas.

Like playcentres, Kōhanga Reo services encourage parents and whānau to participate in the daily programme, but they also employ at least one staff member with relevant Te Reo Māori qualifications to work with the children. In 2008, teacher costs made up 74% of total costs for Kōhanga Reo services. Another difference between playcentres and Kōhanga Reo is that many playcentres are open only a couple of days a week, for a few hours, while Kōhanga Reo services are usually open every day.

The distinct differences between Kōhanga Reo services and other service providers mean that it would be inappropriate to assume that their results would be similar to another service type or the average of all service types reported in this survey. Therefore all totals and averages for all service types must be interpreted as the average excluding Kōhanga Reo services.

## Home-based services data

Different home-based services have different operating structures, especially around how payments from parents are collected, and how educators are paid. Some services collect fees directly from parents and employ the educators. At other services however, educators charge parents directly[[8]](#footnote-8), with some services charging an additional fee on top of the educator’s fee. This means that while some home-based services were able to provide us with exact data on income from parents and expenditure on educator ‘salaries’ others were not.

For this reason an additional question was included in the survey for home-based services asking if payments made by parents directly to educators were included in the responses on income and expenditure. The question also asked for an estimate of the average per hourly rate parents paid home-based educators.

For services who indicated that their data did not include parental payments to educators, we used the hourly rates provided and multiplied them by the total number of child hours where fees were payable (That is the total number of child hours minus the number of child hours for which they received *20 Hours ECE* funding). This information was then added to the ‘all other teacher salaries’ category in the expenditure section, and ‘income from parents’ in the income section.

For this reason, the accuracy of the home-based data relies on the accuracy of the estimates services provided of average hourly rates. If the services on average overestimated the average fee, the percentage of expenditure on teacher salaries, the percentage of income from parents and the average fee for parents will all be too high, and vice versa.

## Single and combined responses

Services associated with a wider group were permitted to return a single survey reflecting the combined financial data of their members. While individual service level data is ideal and provides the most accurate information, this was a pragmatic consideration recognising that for many associations (in particular, kindergartens) financial accounts are done on a consolidated basis, and that requiring this data to be split back into individual service responses would be impractical or even impossible with sufficient precision.

Table 8.6: Single versus combined returns

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Service type | Number of single returns | Number of combined returns | Number of services in combined returns | Total number of services responding | Percentage of services covered from single returns | Percentage of services covered from combined returns | Average number of services per combined return |
| Education and care | 418 | 71 | 186 | 604 | 69% | 31% | 2.6 |
| Kindergartens | 5 | 25 | 518 | 523 | 1% | 99% | 20.7 |
| Home-based | 24 | 32 | 171 | 195 | 12% | 88% | 5.3 |
| Playcentre | 223 | 0 | 0 | 223 | 100% | 0% | n/a |
| Total | 670 | 128 | 875 | 1,545 | 43% | 67% | 6.8 |

The majority of multiple returns were for three or fewer services, but a few returns covered a very large number of services, with the median number of 2.6 and a mean of 6.8. This could be a concern to the data quality as the individual services had to be estimated from this data.

## Weighted Totals

Totals in this report are weighted by service type unless stated otherwise. Weighting the results is important because the response rates for different service types are different, ranging between 25% and 86%. If an unweighted total was given, then the results would be biased towards the service types with higher response rates.

Services are weighted by multiplying the results for each service type by the proportion that service type makes up of all services in the sector (excluding Kōhanga Reo services). This provides an estimate for the results if all services had responded (excluding Kōhanga Reo).

## Confidence intervals

This report contains both midpoint estimates and 95% confidence intervals.

Confidence intervals have been used to provide a range within which we are 95% confident the true average lies. As we only have a sample of all services, the midpoint estimate of the average is unlikely to be the true average of the whole sector, and should instead be considered a best guess. Further, confidence intervals also assume a representative sample, which may not be strictly true in this case. However, the true average should be close to the midpoint estimate and the confidence interval provides the range in which we are 95% confident the true average lies.

The size of the confidence interval is influenced both by the size of the sample and by the amount of variation within the data. We can increase the accuracy of our estimates both by increasing the size of the sample and by improving the quality of the data.

## Modelling average costs

### Funded child hours and total child hours

Exact data on the total hours of operation at services for the entire year was not available. The government collects data on funded child hours for the entire year through the RS7, but for many services total child hours are higher than funded child hours[[9]](#footnote-9). Every year in June, services complete the RS61 survey, which collects information on total child hours during one week. By comparing the RS61 total child hours with the RS7 funded child hours for the same week we have an indication of how much higher total child hours are to funded child hours.

For every service surveyed we compared their RS61 and RS7 data for the last week of June 2010 for under two and two and over, and assigned each service a number between 1 and 2, where 1 indicated that funded child hours and total child hours were the same and 2 indicated that total child hours were double funded child hours. This ratio was then applied to funded child hours to estimate total child hours. This method assumes the RS61 and RS7 data for the week of June 2010 is accurate, and that this week was a good representation for the entire year.

Table 8.7 shows the average ratio by service type. For education and care services, and home-based services, total child hours were usually higher than funded child hours, but for kindergartens and playcentres total child hours were closer to funded child hours.

Table 8.7 Average ratio of total child hours to funded child hours

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Service type | Average ratio under two | | Average ratio two and over | Funded child hours | Estimated total child hours |
| Education and care | 1.15 | 1.18 | | 23,628,000 | 28,581,000 |
| Kindergarten | - | 1.01 | | 19,255,000 | 19,427,000 |
| Home-based | 1.24 | 1.21 | | 8,816,000 | 11,043,000 |
| Playcentre | 1.04 | 1.04 | | 1,539,000 | 1,573,000 |
| Total | 1.09 | 1.10 | | 53,258,000 | 60,624,000 |

### Regression analysis

While we were able to divide total annual costs by total child hours to estimate average cost per child hour, the survey does not distinguish what proportion of the costs related to each of the two main funding groups, under two and two and over (with *20 Hours ECE* being a subsidiary of two and over). Hence, as in previous surveys, these had to be estimated.

Figure 8.4 shows that there is a strong relationship between total costs and total hours for each service type. The R-squared values are high, which indicates that the main factor which influences total costs for each service type is the number of hours. The relationship is not as strong for kindergartens, for which a large amount of the data came from combined returns, but it is still clear that a relationship does exist.

Figure 8.1: Total annual cost versus total hours by service type

|  |  |
| --- | --- |
|  |  |
|  |  |

This strong relationship between costs and hours supports the use of a multiple linear regression model to estimate costs per hour.

We modelled total annual costs (as the dependant variable) against total child hours for under twos and total child hours for two and over (as the independent variables), using ordinary least squares, with separate models for each combination of service type and funding band. The resulting fits were all highly statistically significant, and the resulting coefficients were able to be used to estimate the average costs.

### 2008 methodology

In 2008, the methodology used to calculate the difference in costs for children under the age of two and those two years and older was different from the above regression methodology used for the 2011 analysis. Based on teacher-child ratios, it was assumed that children under the age of two years were more expensive than children above the age of two by a factor of between 1.7 and 2.0.

Analysis was carried out twice using 1.7 and then 2.0 as the factor. For each service, total child hours for under two’s were multiplied by the factor (1.7 or 2.0) and then combined with the total child hours for two and over’s. This new ‘total child hours’ was then used to estimate the per hour costs of children aged two and over for each service. The cost per child hour for children under two years old was then estimated by multiplying this value by the factor.

The results from this year, which made no prior assumptions about how much more expensive under two were to two and over. From the results we can estimate that the factor for education and care services was about 1.7, while for playcentres and home-based services it was about 1.2.

## Completing the questionnaire

A copy of the questionnaire is attached in Appendix 1. A new question was added in this survey to measure time to complete. Analysis has been done for all responses, whether or not the data was used, and making sure surveys that covered multiple centres were only counted once.

The majority of services reported that it took less than 90 minutes to complete the survey. However, a few services reported that it took a lot longer, with several services adding comments that it took a long time.

Table 8.8: Time taken to complete the survey (hours and minutes)

|  |  |  |  |
| --- | --- | --- | --- |
| Percentile | All services | Returns covering single services | Returns covering multiple services |
| 10th | 25 m | 23 m | 45 m |
| 50th (Median) | 1 h 25 m | 1 h 15 m | 2 h 0 m |
| 90th | 3 h 41 m | 3 h 30 m | 4 h 0 m |
| Mean | 1 h 48 m | 1 h 41 m | 2 h 17 m |

The mean was 110 minutes which reflects that some services required a long time to complete. The length of time to complete the survey would depend on how services collect data. Some collect it throughout the year, so completing the survey would only be copying data into a spreadsheet. The time taken to input data throughout the year was most likely not included in the figure, though some services did make comments about it.

The average survey completion time was longer for surveys that covered multiple services than for those that covered a single service, which is what would be expected.

# References

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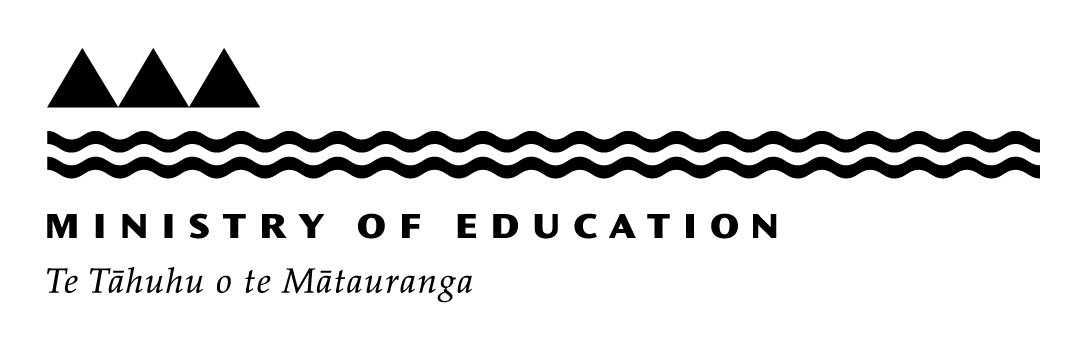
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# Appendix 1: Survey of Income, Expenditure and Fees at ECE Services (2011) Questionnaire

There were two forms of the survey available for services to complete, an electronic version which services could email to the ministry, and a paper-based version which services could mail to the ministry. This appendix contains a copy of the paper-based form.

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RS71: Survey of Income, Expenditure and Fees at ECE Services (2011)

|  |  |
| --- | --- |
| Early Childhood Service Number: |  |
| Name: |  |

|  |  |
| --- | --- |
|  | Management Contact |
|  | Management Group |
|  | Street / PO Box |
|  | Suburb |
|  | Town/City Postcode |

|  |  |  |
| --- | --- | --- |
| **Please provide for queries**  Contact Person: |  |  |
| Contact Phone Number: |  |  |

**Purpose of this Survey:** This survey collects information on the costs of providing early childhood education (ECE) services. The funding system for ECE reflects the cost of providing ECE. The funding rates provide a subsidy to contribute to the average cost per hour of providing ECE for each type of service. Good information on costs and income is important for informing government funding for ECE.

**Information Privacy:** All financial data collected through this survey will be aggregated for analysis. Financial data related to individual services will remain confidential to the Ministry of Education.

**Please return this completed form by 24 August 2011**

**1 BALANCE DATE**

|  |  |
| --- | --- |
| Please use the balance date of 30 June 2010 if possible. Otherwise if your balance date is:   * Between 1 Apr and 31 Dec, use financial year data for year ending 2010 * Between 1 Jan and 31 Mar, use financial year data for year ending 2011   What is the balance date (last day of financial year) for the financial data provided in this survey? |  |
| / /  ***Day/Month/Year*** |
| 2 ANNUAL ACCOUNTS Does the financial data which you will use cover a 12 month period?  Yes Go to question **3**  No The period covered is **/ /**  to **/ /** (***Day/Month/Year)***  Please mark reason why it is not a 12 month period.  new business ceased during year other please specify  3 TREATMENT OF GST Please supply GST exclusive amounts if possible.  The amounts given in this survey will: exclude GST  include GST |  |
|  |  |

## 4 ANNUAL OPERATING EXPENDITURE

## STAFF COSTS (Employees)

|  |  |
| --- | --- |
| Teacher salaries (qualified **and** registered) - gross (before tax) salaries for teachers (including relievers) who are both qualified (ECE and primary) and registered (including provisionally registered) | $ |
| All other teacher salaries- gross (before tax) salaries for all other teachers (including relievers) used to meet or exceed your regulated ratios including educators in home-based services | $ |
| Non-teacher salaries – gross (before tax) salaries and wages for all staff employed by this service, such as management, office and support staff, teacher aides, cooks, cleaners | $ |
| Staff overheads – superannuation, Kiwisaver and ACC levy only | $ |
| All other staff costs – professional development (including course fees, transport, and accommodation), subscriptions, teacher registration contributions | $ |
| *For home-based services only* – payments/ reimbursements to co-ordinators for travel | $ |

## NON-STAFF COSTS

|  |  |  |
| --- | --- | --- |
| Utilities – electricity, gas, water | $ | |
| – phone, fax and internet | $ | |
| Vehicle running costs – fuel, repairs, registration, WOF, insurance, mileage reimbursement (excluding purchase of vehicles) | $ | |
| Rent for leased property | $ | |
| Interest paid | $ | |
| Property rates to local and regional councils | $ | |
| Repairs and maintenance – work done to maintain existing property | $ | |
| Administration resources – stationery supplies, printer consumables, postage, software and computer system licenses (excluding purchase of fixed assets such as computers, photocopiers) | $ | |
| Educational resources – books, puzzles, games, art and craft supplies, play equipment (excluding purchase of fixed assets such as playground equipment) | $ | |
| Professional services – IT, accounting, legal, recruitment or payroll services, cooks, cleaners, gardeners ***provided on contract*** by a professional service provider | $ | |
| Association levies – eg thosepaid to playcentre and kindergartenassociations | $ | |
| Depreciation | $ | |
| Other non-staff costs - all other costs not included above such as insurance, advertising, food, bank fees, medical supplies, special events, trips, bad debts (excluding purchase of fixed assets such as office furniture, fixtures and fittings)  Please list the main types of **Other non-staff costs** | $ | |
|  | |
| **TOTAL OF STAFF AND NON-STAFF COSTS ABOVE** | | $ |

## 5 INCOME

|  |  |
| --- | --- |
| Income from Government – Ministry of Education funding subsidy including 20 hours ECE, equity funding, provisionally registered teachers grant and Ministry of Social Development childcare subsidy | $ |
| Income from parents – fees, optional charges and donations | $ |
| Income from other sources – sponsorship, non-parent donations, income from associations and interest earned  Please list the main type(s) of **income**  **from other sources** | $ |
|  |
| Please tick if the income in this question: excludes GST  includes GST |  |

## 6 ASSETS and LIABILITIES

**EXPENDITURE**

|  |  |
| --- | --- |
| How much was spent on purchasing, replacing or improving new or existing fixed assets? | $ |
| How much was spent on debt repayments, such as mortgage payments (excluding interest)? | $ |

**VALUE**

|  |  |
| --- | --- |
| What is the value of your **current assets** – including cash, cash equivalents, short-term investments and accounts receivable? | $ |
| What is the value of your **fixed or non-current assets** – including purchase of fixed assets such as land, buildings, vehicles, computers, photocopiers, fixed playground equipment, office furniture, fixtures and fittings? | $ |
| What are your **total liabilities** – including mortgages, accounts payable? | $ |

## MC900441311[1]7 FEES

Please attach the latest fee schedule for your service, listing fees and optional charges.

## 8 VOLUNTARY HOURS

*Does your service receive assistance from volunteers?*

## No Go to question 9

Yes Please **estimate** the number of voluntary hours provided and the number of volunteers who helped at this service during the last financial year and enter in the table below:

No. of hours No. of people

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Contact time with children |  |  |
| Administration, governance, organisation (including fundraising and events) |  |  |
| Maintenance |  |  |

## 9 EDUCATOR CHARGES (For home-based services only)

*Is your service home-based?*

**No** Go to question **10**

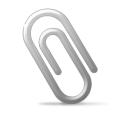
## Yes Complete the questions below

|  |  |
| --- | --- |
| Do parents/caregivers make payments directly to educators? | no go to question 10  yes complete the questions below |
| Does the expenditure in question 4 include payments made directly byparents/caregivers of children to the home-based educator? | no  yes |
| Does the income in question 5 include payments made directly by parents/caregivers of children to the home-based educator? | no  yes |
| Please provide a best estimate of an average hourly rate that parents/caregivers paid for a home-based educator | $ |

**10 How long did it take you to complete this survey?**

|  |
| --- |
| Include time spent reading the instructions, working on responses and obtaining information **AND** time spent by all employees collecting and providing this information.  hrs mins |

**Thank you for completing the survey**



Have you attached the fee schedule?

**For all queries:**

***Phone 04 463 0915 or email ece.statistics@minedu.govt.nz***

**RETURN email address for survey:**

ece.statistics@minedu.govt.nz

**RETURN Postal Address:**

FreePost Authority Number 159045

Data Collection Unit Survey

Ministry of Education

PO Box 1666

Wellington 6011

**FOR MINISTRY OFFICE USE ONLY**

**Received: Check: Input: Follow-up:**

1. See, for example, Mitchell, et al, 2008; OECD, 2011; and ECE Taskforce, 2011. [↑](#footnote-ref-1)
2. All figures in this report exclude GST. [↑](#footnote-ref-2)
3. See Section 8 for further information on the methods used to estimate average costs. [↑](#footnote-ref-3)
4. See Section 8 for further discussion of the methods used. [↑](#footnote-ref-4)
5. These kindergartens usually had sessions that were four to five hours long, so children attending every day would attend for between 20 and 25 hours a week. [↑](#footnote-ref-5)
6. This report is based on information as reported at the time of the survey. In July 2012, advice was given to the sector clarifying the use of optional charges as a component of *20 Hours E*CE, so the results in this section may differ from the current picture. [↑](#footnote-ref-6)
7. See Section 8 for further discussion of the methods used. [↑](#footnote-ref-7)
8. Home-based services are responsible for making sure parents are reimbursed for hours that are covered by the *20 Hours ECE* funding rate*.* [↑](#footnote-ref-8)
9. Funded child hours cover a maximum of 6 hours a day and 30 hours a week per child place, except for 20 Hours ECE, which covers a maximum of 6 hours a day or 20 hours a week per child, plus the ECE supplement which covers up to an extra 10 hours a week per child (though still at the maximum 6 hours a day). [↑](#footnote-ref-9)