Out of School Hours Care
A review of supply and demand in New South Wales

NSW Department of Education
August 2017
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glossary</td>
<td>i</td>
</tr>
<tr>
<td>Executive summary</td>
<td>2</td>
</tr>
<tr>
<td>Key findings</td>
<td>2</td>
</tr>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>Approach</td>
<td>3</td>
</tr>
<tr>
<td>Findings and conclusions</td>
<td>4</td>
</tr>
<tr>
<td>Utilisation</td>
<td>4</td>
</tr>
<tr>
<td>Parent and carer survey</td>
<td>7</td>
</tr>
<tr>
<td>Stakeholder Consultations</td>
<td>8</td>
</tr>
<tr>
<td>Economic trends in NSW</td>
<td>9</td>
</tr>
<tr>
<td>Policy and regulations</td>
<td>10</td>
</tr>
<tr>
<td>Implications for the Before and After School Care Fund</td>
<td>10</td>
</tr>
<tr>
<td>Implications for further research</td>
<td>11</td>
</tr>
<tr>
<td>Conclusions</td>
<td>11</td>
</tr>
<tr>
<td>1. Introduction</td>
<td>12</td>
</tr>
<tr>
<td>1.1 Policy context</td>
<td>12</td>
</tr>
<tr>
<td>1.2 The Before and After School Fund (the Fund)</td>
<td>12</td>
</tr>
<tr>
<td>1.3 Purpose of this study</td>
<td>13</td>
</tr>
<tr>
<td>1.4 Current state of the OSHC market in NSW</td>
<td>14</td>
</tr>
<tr>
<td>1.4.1 Geographical distribution</td>
<td>14</td>
</tr>
<tr>
<td>1.4.2 Management type</td>
<td>15</td>
</tr>
<tr>
<td>1.4.3 Service capacity</td>
<td>15</td>
</tr>
<tr>
<td>1.4.4 Capacity and student age population</td>
<td>16</td>
</tr>
<tr>
<td>1.4.5 Economic and demographic trends impacting on NSW</td>
<td>18</td>
</tr>
<tr>
<td>1.5 The remainder of this report</td>
<td>23</td>
</tr>
<tr>
<td>2. Approach</td>
<td>25</td>
</tr>
<tr>
<td>2.1 Provider Survey</td>
<td>25</td>
</tr>
<tr>
<td>2.1.1 Survey design</td>
<td>25</td>
</tr>
<tr>
<td>2.1.2 Survey response</td>
<td>27</td>
</tr>
<tr>
<td>2.1.3 Empirical considerations</td>
<td>33</td>
</tr>
<tr>
<td>2.2 Drivers of demand and supply</td>
<td>34</td>
</tr>
<tr>
<td>2.2.1 Parent and carer survey</td>
<td>35</td>
</tr>
<tr>
<td>2.2.2 Stakeholder consultations</td>
<td>36</td>
</tr>
<tr>
<td>3. Analysis and findings</td>
<td>39</td>
</tr>
<tr>
<td>3.1 Provider survey</td>
<td>39</td>
</tr>
<tr>
<td>3.1.1 Provider profiles</td>
<td>39</td>
</tr>
<tr>
<td>3.1.2 Aggregate-level utilisation</td>
<td>40</td>
</tr>
<tr>
<td>3.1.3 Service-level utilisation</td>
<td>41</td>
</tr>
</tbody>
</table>
3.1.4 LGA level supply and demand 49
3.1.5 Response to qualitative questions 60
3.2 Drivers of demand and supply 64
3.2.1 Parent and carer survey results 64
3.2.2 Findings from stakeholder consultation 69
3.3 Future demand and supply 77
3.3.1 Population projections 78
3.3.2 OSHC provider expansion 78

4 Conclusions 82
4.1 Policy and regulation 82
4.2 Implications for the Fund 83
4.3 Implications for further research 84
4.4 Conclusions 84

References 85

Appendix A Provider Survey 86
Appendix B Estimation of the inverse probability weights 93
Appendix C Parent and Carer Survey 96
Appendix D Process to identify communities of interest 101
Appendix E Provider Consultation Questionnaire 103
Appendix F Principal Consultation Questionnaire 105
Appendix G Local Council Consultation Questionnaire 107
Appendix H List of services with long waiting lists 108
Appendix I Services intending to apply to the Fund 110
Appendix J Free text response to impediments to applying to the Fund 112
Appendix K Density plot of raw utilisation 114

Limitation of our work 115

General use restriction 115
Tables

Table 0-1 Combination of care types used

Table 1-1 Proportion of NSW family households with all working parent(s)/carer(s)

Table 1-2 Projection of growth in primary school student population (2021 vs 2011, by LGA)

Table 2-1 Distribution of region types in the sample and population for the provider survey

Table 2-2 Provider survey response rate from the top 10 OSHC providers

Table 2-3 Summary of the categories of consultations

Table 2-1 Distribution of respondent services providing different types of OSHC services

Table 2-2 Distribution of years in operation for respondent services

Table 2-3 Age profile of students enrolled in respondent services

Table 2-4 Utilisation level (weighted) by offering type

Table 2-5 List of LGAs with average utilisation measures for before school care services

Table 2-6 List of LGAs with average utilisation measures for after school care services

Table 2-7: LGAs with high demand for after school OSHC services in NSW

Table 2-8 Top LGAs with responses of “agree” or “strongly agree” to capacity constraint upon asking the reason of not operating at full capacity.

Table 2-9 Actions taken by services to attract demand

Table 2-10 Use of OSHC services

Table 2-11 Combination of care types used
Figures

Figure 0-1 Utilisation level (weighted) by offering type, Sample vs Population

Figure 1-1 Geographic distribution of OSHC services, Sydney and Newcastle

Figure 1-2 OSHC services entity and management types heat map

Figure 1-3 Histogram of capacity distribution for OSHC services based on the regulatory data base

Figure 1-4 Relationship between total capacity and student age population at LGA level

Figure 1-5 Historical and projected five-year growth rate of student age population by LGAs in NSW

Table 1-6 Top 20 LGAs with highest/lowest capacity to student ratio in metro and regional/remote areas

Figure 1-7 Proportion of primary caregivers participating in the workforce

Figure 1-8 Projected primary school-aged student population 2011-2041 (2011 as the base year)

Figure 1-9 Projected growth in primary school student populations, Sydney and NSW (2011-2021)

Figure 2-1 Number of submission to the provider survey by date

Figure 2-2 Geographic distribution of participated OSHC services for the provider survey, Sydney and Newcastle

Figure 2-3 Distribution of submitted vs not submitted OSHC services for the provider survey by LGAs

Figure 2-4 Distribution of submitted vs not submitted OSHC services for the provider survey by capacity

Figure 2-5 Distribution of submitted vs not submitted OSHC services for the provider survey by service status effective date

Figure 2-6 Provider survey response rate by entity and management type

Figure 2-7 Distribution of the inverse probability weights

Figure 3-1 Comparison between attendance and capacity in aggregate

Figure 3-2 Individual capacity vs attendance of before and after school care for the week 22-26 May 2017

Figure 3-3 Attendance and waiting list for before/after school care services for the week 22-26 May 2017 (including only services that have kept waiting lists)
Figure 3-4 Count/distribution of average waiting time in the waiting lists, based on the provider survey

Figure 3-5 Relationship between average waiting time and probability of getting an offer for students on the waiting lists, based on the provider survey

Figure 3-6 Distribution of utilisation for before and after school care across services in the sample

Figure 3-7 Scatter plot of fee vs utilisation for before/after school care services

Figure 3-8 Distribution of utilisation for vacation care across services in the sample

Figure 3-9 Scatter plot of fee vs utilisation for before/after school care services

Figure 3-10 Scatter plot of demand/capacity for before and after school care service by students age profile

Figure 3-11 Distribution of utilisation for services with different years in operation

Figure 3-12 Mean and confidence intervals for the average utilisation rate for before school care at top 50 LGAs

Figure 3-13 Mean and confidence intervals for the average utilisation rate for after school care at top 50 LGAs

Figure 3-14 Estimated level of OSHC utilisation (after school care) in NSW

Figure 3-15 Association between projected school age student population and OSHC utilisation in NSW

Figure 3-16 Association between proportion of working caregivers and OSHC utilisation in NSW

Figure 3-17 Map of LGAs in Table 3-7

Figure 3-18 Reasons of services not operating at full capacity

Figure 3-19 Reason for not lowering prices

Figure 3-20 Rankings of factor in setting prices

Figure 3-21 Responses to an inability to secure OSHC requirements

Figure 3-22 Barriers to enrolment

Figure 3-23 Reasons for not seeking additional OSHC provision

Figure 3-24 Historical and projected five-year growth rate of student age population in community of interest LGAs (2016-2036)

Figure 3-25 Reason of maintaining existing capacity in the past 12 months

Figure 3-26 Reason of increasing capacity in the past 12 months

Figure 3-27 Reason of decreasing capacity in the past 12 months
Figure 3-28 Contingency of awareness/application to the Fund and expansion plan

Figure 3-29 Impediment to applying for the Fund
# Glossary

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANOVA</td>
<td>Analysis of variance</td>
</tr>
<tr>
<td>ABS</td>
<td>Australian Bureau of Statistics</td>
</tr>
<tr>
<td>CESE</td>
<td>Centre for Education Statistics and Evaluation</td>
</tr>
<tr>
<td>The Department</td>
<td>NSW Department of Education</td>
</tr>
<tr>
<td>ECEC</td>
<td>Early childhood education and care</td>
</tr>
<tr>
<td>FTE</td>
<td>Full time equivalent</td>
</tr>
<tr>
<td>LGA</td>
<td>Local Government Area</td>
</tr>
<tr>
<td>NCA</td>
<td>The Network of Community Activities</td>
</tr>
<tr>
<td>NSW</td>
<td>New South Wales</td>
</tr>
<tr>
<td>OSHC</td>
<td>Out of school hours care</td>
</tr>
<tr>
<td>SFH</td>
<td>Schools Far Horizon</td>
</tr>
<tr>
<td>The Fund</td>
<td>Before and After School Care Fund</td>
</tr>
</tbody>
</table>
Executive summary

Key findings

This report identifies a range of findings in relation to the supply of and demand for Out of School Hours Care (OSHC) in NSW. The analysis draws on data and information from sector consultations, a parent and carer survey and, most significantly, a survey of NSW OSHC providers. The survey attracted a broadly representative 31% response rate and its data was weighted to ensure that the profile of the sector it produces is a true to the characteristics of the full sector as possible.

The findings highlight that:

- excess capacity exists at an aggregate level across the NSW OSHC sector, however the level of capacity varies by offering type and geographically;
- utilisation of after school and vacation care services far exceeds utilisation of before school care;
- the level of unmet demand is not uniform across the State and is likely to be acute in specific communities; and
- additional supply of OSHC places is largely constrained by factors at the school- and provider-level that limit the ability to expand.

In aggregate terms, the survey data indicates approximately:

- 60% spare capacity within before school care;
- 25% spare capacity within after school care; and
- 24% spare capacity within vacation care.

It also suggests that 83.1% of providers had spare capacity existing in their provision of care. The survey data further suggests that:

- 23% of before school care services or 301 services have utilisation greater than 50%;
- 37% of after school care services or 492 services have utilisation of 80% or greater and that 14% or 180 services have utilisation of 95% or greater; and
- 34% of vacation care services or 446 services have utilisation of 80% of greater and that 20% or 263 services have utilisation of 95% or greater.

At a LGA level, greater than 85% utilisation was reported for after school care in key metropolitan areas including North Sydney, Ashfield, Waverley, Liverpool, Burwood, Hurstville, Willoughby, Lane Cove, Rockdale and Randwick.

Three in four services reported that they had maintained – rather than grown – their capacity (approved places) during the past 12 months, influenced by:

- perceived trade-off between capacity and quality;
- insufficient physical space to enable expansion; and
- insufficient demand from families.

Of those services that have expanded capacity, the primary driver has been greater anticipated demand from families.
To address imbalances in supply and demand, future policy and programs will need to enable unique or bespoke solutions that provide or facilitate new infrastructure or create incentives for alternative non-school provisions. This includes opportunities to refocus existing programs, such as the Before and After School Fund (the Fund), in terms of the focus and quantum of funding provided to address specific barriers.

Introduction

Deloitte Access Economics was engaged by the New South Wales (NSW) Department of Education (the Department) to undertake research into the level of unmet demand associated with Out of School Hours Care (OSHC).

The Department has two distinct roles in relation to the OSHC sector. The first relates the delivery of the Fund and the second is as a regulator of approved services under the Children (Education and Care Services National Law Application) Act 2010 (the Act).

This report refers to these roles separately - references to the Department relate to the administration of the Fund and references to the regulator refer to functions under the Act.

At the time of this research, there were 1,324 services, delivered by 641 approved providers, across NSW which supplied a combination of either before school, after school or vacation care. This includes 216 private-for-profit; 341 not-for-profit providers, which encompasses church and other community-led provisions; 42 state, territory or local government-managed; 35 independent and 7 ‘other’.

OSHC represents an important component of the school and community fabric in NSW. Indeed, it is the availability of a suitable quantity and quality of OSHC services that supports working families to balance the competing priories of employment, family and education.

The NSW Government has identified the expansion of before and after school care as a priority and in response implemented the Fund. The Fund is a $20 million initiative to create up to 45,000 additional OSHC places by March 2019.

In contributing to the development of a stronger evidence-base, this research project is intended to inform planning and future decision making around the most appropriate strategies to meet community requirements.

Approach

This research included three discrete methods for collecting data and information in relation to the NSW OSHC sector. The provider survey was the primary focus for data collection, providing the most detailed and robust insight into the interactions between supply and demand in the OSHC market. The parent and carer survey and consultations with schools, OSHC services and local governments were undertaken as additional activities in order to add anecdotal and contextual information to the analysis. The three collections included:

- **A provider survey** was distributed to all NSW OSHC services to develop a picture of the current demand for and supply of OSHC across NSW. The survey sought to determine whether OSHC services, within a defined reference period, had an undersupply or oversupply of places. The survey also sought information regarding actions taken by services...
in response to the level of demand that they face and gauge the level of engagement with the Fund, as well as future supply of places.

A total of 416 of the 1,324 OSHC services in NSW responded to the provider survey, representing a sample of 31.4%. The sample is considered representative of the total provider population across key characteristics (geographical distribution, approved places, provider management type and service commencement date) with econometric techniques applied to support a whole-of-sector analysis.

- A parent and carer survey was undertaken to gain anecdotal insights into the use of OHSC. Insights drawn include the extent to which current users of OSHC are seeking additional OSHC provision, the barriers that parents and carers face in enrolling their children in OSHC, and the actions they have had to take as a result of not finding a place. A total of 455 parents and carers responded from across NSW during the survey period.

- A stakeholder consultation program was conducted to provide a deeper anecdotal understanding across ten communities of interest regarding the actions of schools, local government authorities and OSHC providers in addressing incidence of under or oversupply in their respective communities. This includes understanding aspects of barriers and the relationship between schools and providers underpinning OSHC provision. A total of 45 consultations were conducted, including 21 with Schools, 19 with OSHC providers and 5 with local government. The Department identified ten communities of interest at the LGA level that framed the focus of these consultations.

Findings and conclusions

This research project aimed to contribute to a better understanding the level of unmet demand across NSW and the contextual issues and barriers facing parents and carers, schools and OSHC providers.

Utilisation

Aggregate, LGA and Service-level results

Utilisation represents a measure of the level of maximum total places available in any given session absorbed through attendance. In this report it is derived from a sample of providers and adjusted using statistical methods to make observations regarding the entire sector.

In aggregate terms, the results indicate that approximately:

- 60% spare capacity exists within before school care across NSW;
- 25% spare capacity exists within after school care across NSW; and
- 24% spare capacity exists within vacation care across NSW.

At a state-wide level, this implies that capacity exists to absorb greater levels of demand. However, the instructiveness of these results is limited by the localised and community level nature of OSHC provision and usage.

Figure 0-1 highlights the profile of utilisation across before school, after school and vacation care. Of providers who responded to the survey, 83.1% indicated spare capacity, however this varied across care type.

The left hand panels show cumulative utilisation in percentage terms for each care type. It shows that:
- only 22.7% of before school services had utilisation greater than 50%;
- 37.1% of after school care services had utilisation of 80% or greater and that 13.6% had utilisation of 95% or greater;
- 33.7% of vacation care services had utilisation of 80% of greater and that 19.9% had utilisation of 95% or greater.

The panels on the right show what this distribution implies in terms of total service numbers.

Figure 0-1 Utilisation level (weighted) by offering type, Sample vs Population

Source: Deloitte Access Economics based on provider survey data

A comprehensive picture in relation to demand and supply imbalances requires an analysis not just of current utilisation but of current levels of excess demand (as evident through waiting lists).

The majority of provider respondents who identified the existence of waiting lists reported that these increased over the past two years. However, the fidelity of these waiting lists is unclear. This may be attributed to parent or carer behaviour and adding students to multiple waiting lists or inconsistent procedures at a service-level.
As a result, waiting lists are likely to be less instructive in terms of developing an understanding of actual unmet demand and more valuable as an indicator of where supply pressure (undersupply) might exist.

Given limitations of the wait list data collected, adjustments to the raw survey data were required to support its inclusion in the analysis (specifically, waiting lists were capped at 20% of service capacity).

Utilisation and future growth

The ability for state-wide capacity to meet the needs of families in any given community is contingent on:

- the scalability of local school infrastructure and the physical footprint of schools relative to regulatory constraints;
- the appetite for OSHC providers to increase provision given concerns regarding perceived degradation of quality; and
- the practicalities of families utilising capacity in locations that are removed from their home, work or transport corridors.

As a result, capacity in areas of oversupply can be redundant as the excess demand in any given community may not be able to be readily utilised.

At a local government area (LGA) level, a greater than 85% utilisation rate was reported for after school care in key metropolitan areas including North Sydney, Ashfield, Waverley, Liverpool, Burwood, Hurstville, Willoughby, Lane Cove, Rockdale and Randwick. These results, although statistically robust, have a high level of variability (as indicated by the confidence level) due to differing response rates in each community.

In the majority of these regions, the proportion of families with working parents and carers is above the NSW average and – notably – where the rate of population growth over the decade to 2021 is projected to be above the NSW average.

This suggests that not only are these LGAs those with the highest levels of utilisation today, but also those which will experience continuing demand growth over the next four years.

Table 3-7 in section 3.1.4 represents the key LGAs for more detailed analysis and consultation with respect to undersupply of OSHC provision. This is based on the overall assessment of weighted average utilisation when compared in conjunction with the key metrics discussed and analysed in this section, namely:

- projected primary school student population; and
- the proportion of primary caregivers’ participation in the workforce.

Approximately three (3) out of four (4) respondents to the provider survey reported that they had maintained pre-existing levels of supply (approved places) during the past 12 months. The factors that underpinned this decision included:

- a desire to maintain the quality of care (59.8% of this subset of respondents), indicating a perceived trade-off between capacity and quality;
- a perception of insufficient physical space to enable expansion (57.8% of these services); and
- insufficient demand from families (46.6% of these services).
Importantly, 1 in 5 services indicated they had increased supply in the past 12 months, largely motivated by greater anticipated demand.

**Parent and carer survey**

The parent and carer survey was undertaken to provide additional insight into the views and behaviours of parents and carers in relation to OSHC.

The results are illustrative, not intended to be definitive or conclusive, and should not be used to make broader inferences or generalisations.

Table 0-1 displays the combinations of service offerings families use to meet their OSHC needs. For example, more than a quarter of survey respondents indicated they are reliant on before school, after school and vacation care simultaneously. Notably, one third of parents and carers accessed multiple OSHC providers to secure the level of service provision they need.

**Table 0-1 Combination of care types used**

<table>
<thead>
<tr>
<th>Combination of care types used</th>
<th>Proportion of parents/carers that use OSHC services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before school care only</td>
<td>5%</td>
</tr>
<tr>
<td>After school care only</td>
<td>16%</td>
</tr>
<tr>
<td>Vacation care only</td>
<td>15%</td>
</tr>
<tr>
<td>Before and after school care</td>
<td>10%</td>
</tr>
<tr>
<td>Before school and vacation care</td>
<td>5%</td>
</tr>
<tr>
<td>After school and vacation care</td>
<td>21%</td>
</tr>
<tr>
<td>All services</td>
<td>28%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*Source: Deloitte Access Economics*

The relationship between family arrangements, workforce participation and access to OSHC is also discussed in the parent and carer survey. 80% (364 of 455) of respondents indicated they would increase their hours of work if their OSHC requirements could be met.

Parents and carers indicated that there is a **range of barriers** associated with accessing OSHC, including affordability (which is felt more so in after school care), inflexible hours of operation; perceived quality; and proximity to school and work.

These barriers highlight the role family, work and community characteristics play in impacting the relationship between supply and demand.

In this survey, 29% (131 of 455) of respondents indicated that they had applied for an OSHC place and been unsuccessful. As a result, for these respondents a high dependency on alternative arrangements such as friends and relatives, reduction or rearranging work was reported.

For many, existing arrangements, such as parental supervision, grandparents, friends or nannies were considered sufficient, while respondents demonstrated a moderate aversion to the financial impost of
care and a desire to use extra-curricular activities as an alternative arrangement.

While there are several areas of concern for families, issues relating to the quality of OSHC providers and their cultural competence were not strong.

In all, the results of this research reinforce the relationship between OSHC service provision and work – while highlighting the important role extended families can play (where available as an alternative) in relieving pressures of affordability and accessibility.

**Stakeholder Consultations**

The stakeholder consultations undertaken in this research project enabled an in-depth exploration of the OSHC service environment in 10 communities of interest across NSW. In terms of providing insights at this geographical level, the consultations found that:

- In **Ashfield**, demand for OSHC services is increasing and particularly high for after school care but existing capacity was considered sufficient to meet current demand.
- In **Botany Bay**, existing OSHC services indicated they were quickly reaching their capacity, with demand expected to continue increasing.
- In **Cessnock**, the historically low demand for OSHC services appears to be shifting in response to new housing developments requiring additional services to meet growing demand.
- In **Dubbo**, while demand for OSHC was indicated as slowly increasing, overall levels of demand appear to remain low, with no expansion of services expected in the near future.
- Similarly, while a free-of-charge OSHC in **Fairfield** was experiencing high levels of demand, it was anticipated that preferences for alternative care arrangements would continue to result in low demand for OSHC.
- In **Marrickville**, demand for OSHC was observed to be steadily increasing. The provision of services offered in the region is meeting demand to a mixed degree. Some after school services reporting capacity constraints and other not so.
- In **North Sydney**, demand for OSHC far outweighs supply. This is evidenced by average year long wait periods to secure places and the continuing extension of waiting lists.
- In **Parramatta** demand for OSHC services was increasing, with non-school based OSHC providers reaching capacity and some families missing out on care.
- In **Port Stephens** it was indicated that demand varies by service with after school care services at capacity in some cases and excess capacity across before, after and vacation care in others.
- In contrast, **Woollahra** OSHC services were at capacity and expecting continued excess demand from families.

Access to appropriate infrastructure was identified as the barrier to expanded supply for OSHC services. This included a lack of available space within schools, and in some cases a lack of school willingness to release space to OSHC providers. This resulted in frequent reports of OSHC providers using temporary spaces or spaces that were not ideal for service provision, and that would not support further expansion.

While it was noted that the regulated space requirements for OSHC were demanding and often did not fit easily into non-purpose built environments, OSHC providers generally noted that they appreciated the
regulations as this enabled them to provide a quality service and provided a layer of protection to the service operations.

During consultations, providers identified regulatory barriers to expansion with respect to Part 7.3 Division 6 of the Education and Care Services National Regulations. The current use of **waivers** for services is important as it may deter services from having their capacity for approved places reassessed.

As the previous space requirements were more permissive, these services find themselves in a position in which expansion could result in an approved capacity that is lower than their current entitlement.

**Staffing** was raised as a challenge across many OSHC services. Split shifts, low wages, limited career prospects and thus transience of staff were identified as driving factors which made it difficult to attract and retain qualified staff. Some not-for-profit OSHC services indicated concerns with maintaining standards of quality for students as for-profit services continue to enter the OSHC market.

This was illustrated by cases where OSHC service staff are required to dedicate large proportions of their time supervising and managing students with complex undiagnosed behavioural issues. This presents resourcing and quality challenges for these services aiming to meet objectives associated with inclusion and family support.

Aside from some identified tensions over access to appropriate space on school sites, the vast majority of relationships between schools and providers were described as positive and productive. Similarly, very few reports from school principals regarding low quality service provision were heard.

A number of providers noted there is a significant time lag associated with being able to respond to increased demand through opening a new service, as Department tender process typically took a minimum of six months.

Finally, several providers voiced concern at the prospect of sector consolidation – reflecting recent OSHC provider mergers, and the impact this may have on service diversity (parent and carer choice) and quality.

**Economic trends in NSW**

As at 2011, of all dual-parent/carer or single parent/carer households in NSW, **50% were employed in the workforce in some capacity.**

This is the equivalent of 562,000 households across NSW where all of the primary caregivers were employed in the labour force. The choices made by those caregivers relating to workforce participation are unique to every household with a variety of circumstances and considerations influencing the ultimate decision about seeking employment.

These statistics provide additional contextual considerations:

- areas of NSW where workforce participation of primary caregivers is relatively low present opportunities for investigating whether the

---

1 Family Composition and Labour Force Status of Parent(s), ABS, 2011.
availability of additional OSHC services would impact workforce participation; and

- areas of NSW where workforce participation of primary caregivers is relatively high present opportunities for investigating whether the demand for OSHC services is being met.

The population of primary school-aged students in NSW is forecast to increase from 434,541 students in 2011 to 624,700 students in 2041. This equates to an increase of almost 200,000 students on 2011 levels, or 44%. More than half of this growth on 2011 levels (25%) is expected by 2026.

**Policy and regulations**

The research undertaken in this report, particularly during stakeholder consultation with schools and OSHC providers, suggests that the availability of school infrastructure is an important factor in two ways.

The first is in terms of school footprint and the ability for additional infrastructure to be placed on school sites to enable greater OSHC supply. This is particularly challenging in schools with high enrolments or in those anticipating strong future growth.

The second is in terms of the limitations applied, in an informal way, to the use of school infrastructure (such as school halls or classrooms) that constrain the ability to meet demand in some school communities.

For example, in some non-government schools access to the school site by OSHC providers was not permitted while some government schools preferred classrooms to be available to teaching staff after hours. The existence of other after-school activities competing for the same space also placed constraints on the availability of school infrastructure.

As a result, the role of the schools in addressing these issues will be important, but in some scenarios, limited. This is because schools may have limited short-term responses, and require capital investment or operational solutions (for example, transportation of students) to respond.

In these scenarios, bespoke, non-schooling solutions provided by third parties such as local government or private providers may need to be supported. There is also an opportunity to link planning for OSHC growth with future planning and design of school infrastructure programs.

For those schools with a desire to support or facilitate additional OSHC services and for providers who wish to meet excess demand, consultations identified constraints associated with the *Children (Education and Care Services National Law Application) Act 2010*. These requirements place a higher benchmark on physical space requirements (indoor and outdoor) than is applied in a classroom setting.

A key feature of future policy interventions in the OSHC market will need to focus on reducing the structural barriers, at a local community level, which prevent OSHC providers increasing supply to meet community demand.

**Implications for the Before and After School Care Fund**

There is an opportunity to consider how the Fund can be adapted to meet the challenges of local communities and the specific barriers that are prevalent within school communities. Specifically, it may need to consider options that allow for brokered or facilitated solutions that include a greater
role for local government or other third party provision which can lead to new supply opportunities.

To focus existing investment, the Fund could be repositioned away from a state-wide focus on increasing total places to a more nuanced investment on specific projects in priority regions. This has the potential to improve return on investment for the program and achieve the overall objective of the program in meeting unmet demand.

**Implications for further research**

An important next step is understanding the specific approaches or strategies that could be employed is to conduct a targeted community-level analysis. The ability for the Department to communicate directly with NSW Government schools will also provide an opportunity to better understand the nature of barriers associated with infrastructure and the extent to which school-based solutions are achievable.

In addition, continuing to pursue a more comprehensive dataset will be an important step to fully understanding the nature of supply and demand, particularly in metropolitan Sydney. This project set out to undertake the most comprehensive collection possible and in that regard the Department should continue to pursue the concept of an annual census collection.

The continuing challenge will be the ability for the Department to incentivise or ideally mandate provider responses in the interests of achieving as close to universal coverage as possible. Stronger mechanisms than currently exist will be required to achieve this (e.g. the linking of data provision to funding or regulatory requirements).

**Conclusions**

This research provides insights into the communities currently facing an imbalance between demand and supply in the market for OSHC and, where they exist, the origins and drivers of these imbalances. The structural barriers facing school communities and providers appear the primary contributor to the inability of the sector to expand capacity to meet parent and carer needs.

The Fund will need to focus on unique or bespoke solutions that provide or facilitate new infrastructure or create incentives for alternative provisions. It is likely that a new approach to brokering or facilitating these solutions will be a critical mechanism in alleviating current and future supply constraints.
1 Introduction

1.1 Policy context

The Out of School Hours Care (OSHC) sector includes a range of early childhood education and care (ECEC) services regulated by the New South Wales (NSW) Department of Education under the Children (Education and Care Services National Law Application) Act 2010 (the Act).

The Department has two distinct roles in relation to the OSHC sector. The first relates to the delivery of the Fund, and the second is as regulator of approved services under the Act.

The NSW OSHC sector is highly diversified, with 1,324 services provided by 641 approved providers. The size and sophistication of providers is varied and includes 216 private-for-profit and 341 not-for-profit providers, which includes church and other community provisions.

Fundamentally, the sector provides three service provisions – before school, after school and vacation care – and is framed by a mixture of funding and regulatory levers applied by different levels of government.

OSHC represents an important component of the community fabric in NSW. The availability of a suitable quantity and quality of OSHC services across NSW communities supports working families in balancing the competing priories of employment, family and education by expanding opportunities for workforce participation.

OSHC has the potential to boost total family earning capacity, while providing assurances on the quality, safety and reliability of care experiences for their children. OSHC plays a different role in each community, with the level of dependence placed on it highly variable.

In considering the OSHC market, it is important to understand the range of community or school-level variables that change the relationship between supply and demand.

The NSW Government has identified the expansion of before and after school care as a priority, and in response, implemented the Before and After School Care Fund.

1.2 The Before and After School Fund (the Fund)

The Fund is a $20 million NSW Government election commitment to help establish new out of school hours care services in government and less well-resourced, non-government primary schools with an aim to deliver up to 45,000 additional out of school hours care places in NSW.

The NSW Department of Education (the Department) manages the Fund, guided by a steering committee that includes the Catholic Education Commission NSW and the Association of Independent Schools of NSW.

Under the Fund, schools, local councils, and not-for-profit OSHC providers can apply for a one-off grant of up to $30,000. The grant is intended to
support the establishment of new OSHC services or the expansion of existing services².

Grants are awarded based on the likelihood of success and the appropriateness of the proposed expenditure. The likelihood of success is determined by evidence of unmet demand, progress in identifying a suitable site, and progress in identifying a suitable OSHC provider³.

The delivery of the Fund to date has been undertaken in phases. Under Phase 1 and Phase 2 of the scheme, over $4,800,000 was approved for payment of grants, providing an additional 12,144 OSHC places which equates to 60,720 before and after school care sessions. Phase 3 commenced on 31 May 2017⁴.

1.3 Purpose of this study

Deloitte Access Economics was engaged by the NSW Department of Education (the Department) to undertake a research project into the existing supply of and demand for OSHC throughout NSW. This research project was designed to address the absence of data and information that could contribute towards an evidence-base on the level of unmet demand for OSHC. In contributing to the development of a stronger evidence-base, this research project is intended to inform planning and future decision making around the most appropriate strategies to meet community requirements.

The intention of the research is to support future planning and decision-making in relation to the NSW Government’s $20 million Before and After School Care Fund. As a result, this research project had two objectives:

1. **Collection and preparation of a dataset of NSW OSHC services.**
   Building on existing regulatory information, the intention was to achieve an as-complete-as-possible dataset. The data that was sought included:
   
   - location of the service (electorate, LGA, school name if the service is on school premises or owned by the school);
   - number of filled places per session (Monday to Friday before school care, Monday to Friday after school care); and
   - level of unmet demand per session (Monday to Friday before school care, Monday to Friday after school care).

2. **Collection of qualitative data on the behaviour of schools, local government, service providers (not-for-profit and commercial) and parents.**

   Where there are indications of demand exceeding supply, collect and present data that describes:

---


³ ibid

• reasons why schools or service providers do not establish new services or expand existing services;
• parent and carer behaviour in dealing with the lack of OSHC places. For example, the impacts on workforce participation, placement of students on one or more waiting lists or alternative care arrangements; and
• actions taken by schools, local government and service providers to address the shortfall.

Where there are indications of supply exceeding demand for places, collect and present data that describes:

• reasons for the low take-up of places;
• any action taken by schools, local government and service providers to fill the vacancies; and
• any insight about contributing factors from small services that may not be viable. For example, demographic, socio-economic or regulatory factors that affect viability of the service.

For areas where there are no or very few services, collect and present data that describes:

• how students are supervised before and after school; and
• any interest from service providers to offer services in these areas.

The results of this analysis will form an evidence base to inform future decision making regarding the most efficient allocation of the Fund into the future.

1.4 Current state of the OSHC market in NSW

This section provides an overview of the current OSHC market in NSW, drawing upon summary statistics informed by regulatory data and projections provided to Deloitte Access Economics by the Department of Education. As at May 2017, there were 1,324 OSHC services operated by 641 approved providers across 124 local government areas (LGAs) in NSW.

1.4.1 Geographical distribution

The majority (987 or 74.5%) of OSHC services in NSW are located in metropolitan areas, while the remaining (337 or 25%) of services are located in regional or remote areas. Figure 1-1 presents the geographic distribution of the services in Sydney and Newcastle, which covers 61% of the total provider population in NSW.
1.4.2 Management type

The OSHC sector is highly diversified and this is reinforced by Figure 1-2 which provides a cross tabulation of the distribution of different entity and management types identified in the regulatory database.

The sector is characterised equally by the significant number of private-for-profit companies (33.7%) and private-not-for-profit, community-managed and incorporated entities (30.1%).

1.4.3 Service capacity

Figure 1-3 shows the distribution of approved maximum places across service providers, with the majority (84%) of services holding approval for less than 100 places. Approximately 50% of services accommodate less than 60 places and only 6.5% of the services provide 150 or more places.
1.4.4 Capacity and student age population

At the LGA level, there is a strong relationship between the total student-age population in NSW and the total approved maximum places, or provision of OSHC. Intuitively, metropolitan LGAs have both higher total capacity and higher total number of school-age population than regional or remote areas.

The takeaway from Figure 1-4 are two-fold:

1. Metropolitan LGAs have higher capacity and population (because they sit at the top right corner of the scatter plot); and
2. Metropolitan LGAs have a higher capacity to population ratio (because their circles are larger in size, which can also be seen from the density sub-plots).

The size of the scatter points are scaled by the ratio of OSHC approved maximum places to primary school-age population (5-11 years), highlighting that metropolitan LGAs are associated with not only higher capacity, but also higher capacity per students than most regional/remote areas.

The three subplots on the right of Figure 1-4 show the distribution of approved maximum places to primary-school-age population ratios for metropolitan, regional and remote areas, respectively. In metropolitan LGAs, the capacity to student ratios are centred around 20%; while for regional LGAs, the ratios are concentrated around 10%. This means that in metropolitan areas, on average, there is one approved OSHC place for every five NSW primary-school-aged student compared to one for every ten in regional areas.

The small number of services operating in remote areas makes this same analysis less precise. Walgett LGA has an 80% capacity to student ratio while the remaining remote LGAs tend to have ratios between 5% and 30%.
Figure 1-4 Relationship between total capacity and student age population at LGA level

![Graph showing relationship between total capacity and student age population at LGA level.](image)

Source: Adapted from Department of Education regulatory database, Deloitte Access Economics

Note: Data is presented in log-scale for ease of illustration

Figure 1-5 shows the scatter plots of historical growth from 2011-2016 and projected growth for 2016-2026 by region types. It highlights the relatively strong growth in historical and projected primary-school-aged student populations in metropolitan areas; while the regional and remote LGAs are experiencing relatively weak or even negative growth.

In general, the observed higher capacity and capacity to student ratios for metro LGAs from Figure 1-4 appear consistent with existing market demand and higher expected future growth in demand.

Figure 1-5 Historical and projected five-year growth rate of student age population by LGAs in NSW

![Graph showing historical and projected growth rates by region.](image)

Source: Adapted from Department of Education projection of primary school enrolments regulatory database, Deloitte Access Economics

Table 1-6 provides an estimation of the ratio between total approved maximum places in each LGA to the total population of NSW Government School students associated with that LGA. It presents the top 20 LGAs in metro and regional/remote areas with the highest/lowest such ratios.
### Table 1-6 Top 20 LGAs with highest/lowest capacity to student ratio in metro and regional/remote areas

<table>
<thead>
<tr>
<th>Bottom 20 LGAs</th>
<th>Approved places to primary-school age population ratio</th>
<th>Top 20 LGAs</th>
<th>Approved places to primary-school age population ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cabonne</td>
<td>0.3%</td>
<td>Walgett</td>
<td>63.1%</td>
</tr>
<tr>
<td>Mid-Western Regional</td>
<td>0.4%</td>
<td>Oberon</td>
<td>24.7%</td>
</tr>
<tr>
<td>Singleton</td>
<td>0.7%</td>
<td>Sydney</td>
<td>17.2%</td>
</tr>
<tr>
<td>Griffith</td>
<td>0.9%</td>
<td>Marrickville</td>
<td>15.0%</td>
</tr>
<tr>
<td>Upper Hunter Shire</td>
<td>0.9%</td>
<td>Warren</td>
<td>14.1%</td>
</tr>
<tr>
<td>Albury</td>
<td>1.0%</td>
<td>Dungog</td>
<td>13.5%</td>
</tr>
<tr>
<td>Fairfield</td>
<td>1.0%</td>
<td>North Sydney</td>
<td>11.1%</td>
</tr>
<tr>
<td>Gunnedah</td>
<td>1.1%</td>
<td>Leichhardt</td>
<td>10.7%</td>
</tr>
<tr>
<td>Ballina</td>
<td>1.1%</td>
<td>Gundagai</td>
<td>10.0%</td>
</tr>
<tr>
<td>Inverell</td>
<td>1.1%</td>
<td>Upper Lachlan Shire</td>
<td>10.0%</td>
</tr>
<tr>
<td>Orange</td>
<td>1.2%</td>
<td>Great Lakes</td>
<td>9.8%</td>
</tr>
<tr>
<td>Cooma-Monaro</td>
<td>1.2%</td>
<td>Bland</td>
<td>9.6%</td>
</tr>
<tr>
<td>Broken Hill</td>
<td>1.2%</td>
<td>Harden</td>
<td>8.7%</td>
</tr>
<tr>
<td>Tumut Shire</td>
<td>1.2%</td>
<td>Burwood</td>
<td>8.6%</td>
</tr>
<tr>
<td>Eurobodalla</td>
<td>1.3%</td>
<td>Coolamon</td>
<td>8.4%</td>
</tr>
<tr>
<td>Port Macquarie-Hastings</td>
<td>1.3%</td>
<td>Lockhart</td>
<td>8.0%</td>
</tr>
<tr>
<td>Mosman</td>
<td>1.3%</td>
<td>Cobar</td>
<td>7.5%</td>
</tr>
<tr>
<td>Cessnock</td>
<td>1.4%</td>
<td>Ashfield</td>
<td>7.4%</td>
</tr>
<tr>
<td>Tamworth Regional</td>
<td>1.4%</td>
<td>Hornsby</td>
<td>7.2%</td>
</tr>
<tr>
<td>Wingecarribee</td>
<td>1.5%</td>
<td>Lismore</td>
<td>6.9%</td>
</tr>
</tbody>
</table>

Source: Adapted from Department of Education regulatory database, Deloitte Access Economics

### 1.4.5 Economic and demographic trends impacting on NSW

The availability of OSHC services of a suitable quantity and quality across NSW is critical to supporting working families achieve their personal aspirations and economic goals, whilst simultaneously expanding opportunities for workforce participation.

Decisions made by households regarding workforce participation of working-age adults will be driven by multiple factors, with cost of living expenses such as housing, health and education a large contributor to these decisions.

It is rational to infer that the marginal benefits of workforce participation at the household level (e.g. higher household income) would be compared with the marginal cost of this participation (e.g. childcare costs, less time with family/household, lower levels of government support). Furthermore, these choices would be made in conjunction with family-specific
circumstances or customs, for example cohabitation with grandparents and other extended family members.

1.4.5.1 Working families

As at 2011, of all dual-parent/carer or single-parent/carer households in NSW, 50% were employed. That is, in 562,000 households, all primary caregivers were employed in the labour force. Table 1-1 provides a summary of the top 20 LGAs and bottom 20 LGAs in NSW in terms of proportion of households where this is the case.

<table>
<thead>
<tr>
<th>Bottom 20 LGAs</th>
<th>% families w/working parent(s)/carer(s)</th>
<th>Top 20 LGAs</th>
<th>% families w/working parent(s)/carer(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auburn</td>
<td>32%</td>
<td>Snowy River</td>
<td>67%</td>
</tr>
<tr>
<td>Fairfield</td>
<td>33%</td>
<td>Palerang</td>
<td>64%</td>
</tr>
<tr>
<td>Sutherland Shire</td>
<td>35%</td>
<td>Yass Valley</td>
<td>63%</td>
</tr>
<tr>
<td>Walgett</td>
<td>37%</td>
<td>Queanbeyan</td>
<td>63%</td>
</tr>
<tr>
<td>Canterbury</td>
<td>37%</td>
<td>Camden</td>
<td>62%</td>
</tr>
<tr>
<td>Bankstown</td>
<td>39%</td>
<td>Murray</td>
<td>61%</td>
</tr>
<tr>
<td>Kempsey</td>
<td>42%</td>
<td>Pittwater</td>
<td>61%</td>
</tr>
<tr>
<td>Kyogle</td>
<td>42%</td>
<td>Warringah</td>
<td>60%</td>
</tr>
<tr>
<td>Holroyd</td>
<td>42%</td>
<td>Kiama</td>
<td>59%</td>
</tr>
<tr>
<td>Nambucca</td>
<td>42%</td>
<td>Corowa Shire</td>
<td>59%</td>
</tr>
<tr>
<td>Richmond Valley</td>
<td>43%</td>
<td>The Hills Shire</td>
<td>59%</td>
</tr>
<tr>
<td>Parramatta</td>
<td>43%</td>
<td>Upper Lachlan Shire</td>
<td>58%</td>
</tr>
<tr>
<td>Liverpool</td>
<td>44%</td>
<td>Wollondilly</td>
<td>58%</td>
</tr>
<tr>
<td>Greater Taree</td>
<td>44%</td>
<td>Cabonne</td>
<td>58%</td>
</tr>
<tr>
<td>Tenterfield</td>
<td>45%</td>
<td>Hornsby</td>
<td>58%</td>
</tr>
<tr>
<td>Broken Hill</td>
<td>45%</td>
<td>Lane Cove</td>
<td>58%</td>
</tr>
<tr>
<td>Great Lakes</td>
<td>45%</td>
<td>Hawkesbury</td>
<td>58%</td>
</tr>
<tr>
<td>Clarence Valley</td>
<td>46%</td>
<td>Dubbo</td>
<td>58%</td>
</tr>
<tr>
<td>Cessnock</td>
<td>46%</td>
<td>Blue Mountains</td>
<td>57%</td>
</tr>
<tr>
<td>Rockdale</td>
<td>46%</td>
<td>Coolamon</td>
<td>57%</td>
</tr>
</tbody>
</table>

Source: ABS, 2011
Note: The LGAs shown in bold form part of the ‘communities of interest’ sample.

Several communities of interest, as discussed in Section 2.2.2, fall within these lists.

While decisions made at the household level are unique, Table 1-1 provides some insight as to which LGAs may have:

- relatively high current demand for OSHC services where all caregivers are participating in the workforce, i.e. the Top 20; and
• relatively high current demand for OSHC services but household-level circumstances (e.g. earning potential, choice, custom, proximity to OSHC) are constraining workforce participation, i.e. the *Bottom 20*.

These workforce participation rates are also presented visually in Figure 1-7.

Figure 1-7 Proportion of primary caregivers participating in the workforce

Source: ABS census 2011, Deloitte Access Economics

Section 3.1.4 presents an association between workforce participation and utilisation, as described above in the Executive Summary.

1.4.5.2 Primary school-aged student population growth

According to projections of primary-school-aged students in NSW, growth in this cohort is forecast to increase from 626,352 in 2011 to 838,861 places
in 2041. This is an increase of around 200,000 students on 2011 levels, or 34%. The average population growth is around 1.2% per annum.

Figure 1-8 Projected primary school-aged student population 2011-2041 (2011 as the base year)

Source: ABS

Table 1-2 provides a summary of the Top 20 LGAs and Bottom 20 LGAs in NSW in terms of primary-school-aged student population growth between 2011 and 2021.
Table 1-2 Projection of growth in primary school student population (2021 vs 2011, by LGA)

<table>
<thead>
<tr>
<th>Bottom 20</th>
<th>Growth in primary school student population (2021 vs 2011)</th>
<th>Top 20</th>
<th>Growth in primary school student population (2021 vs 2011)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hay</td>
<td>-28%</td>
<td>Sydney</td>
<td>78%</td>
</tr>
<tr>
<td>Lockhart</td>
<td>-21%</td>
<td>Camden</td>
<td>74%</td>
</tr>
<tr>
<td>Coolamon</td>
<td>-20%</td>
<td>Auburn</td>
<td>62%</td>
</tr>
<tr>
<td>Gundagai</td>
<td>-20%</td>
<td>Strathfield</td>
<td>53%</td>
</tr>
<tr>
<td>Temora</td>
<td>-18%</td>
<td>Botany Bay</td>
<td>49%</td>
</tr>
<tr>
<td>Carrathool</td>
<td>-18%</td>
<td>Burwood</td>
<td>44%</td>
</tr>
<tr>
<td>Urana</td>
<td>-16%</td>
<td>Parramatta</td>
<td>41%</td>
</tr>
<tr>
<td>Cowra</td>
<td>-15%</td>
<td>Unincorporated NSW</td>
<td>41%</td>
</tr>
<tr>
<td>Jerilderie</td>
<td>-14%</td>
<td>Waverley</td>
<td>39%</td>
</tr>
<tr>
<td>Bombala</td>
<td>-14%</td>
<td>Ryde</td>
<td>34%</td>
</tr>
<tr>
<td>Murrumbidgee</td>
<td>-14%</td>
<td>Holroy</td>
<td>33%</td>
</tr>
<tr>
<td>Lachlan</td>
<td>-13%</td>
<td>North Sydney</td>
<td>33%</td>
</tr>
<tr>
<td>Wakool</td>
<td>-12%</td>
<td>Canada Bay</td>
<td>33%</td>
</tr>
<tr>
<td>Conargo</td>
<td>-11%</td>
<td>Marrickville</td>
<td>32%</td>
</tr>
<tr>
<td>Leeton</td>
<td>-11%</td>
<td>The Hills Shire</td>
<td>31%</td>
</tr>
<tr>
<td>Tumbarumba</td>
<td>-11%</td>
<td>Canterbury</td>
<td>31%</td>
</tr>
<tr>
<td>Narromine</td>
<td>-10%</td>
<td>Lane Cove</td>
<td>31%</td>
</tr>
<tr>
<td>Cootamundra</td>
<td>-10%</td>
<td>Randwick</td>
<td>29%</td>
</tr>
<tr>
<td>Warren</td>
<td>-10%</td>
<td>Rockdale</td>
<td>29%</td>
</tr>
<tr>
<td>Harden</td>
<td>-10%</td>
<td>Blacktown</td>
<td>25%</td>
</tr>
</tbody>
</table>

Source: ABS, Deloitte Access Economics

The summary projections provided in Table 1-2 indicates key LGAs to consider in terms of future need of OSHC services in NSW.
Section 3.1.4 presents an association between primary school population projections and utilisation, as described in the Executive Summary.

1.5 The remainder of this report

Section 2 provides a detailed discussion of the approach taken to execute the data collection activities:

- a state-wide provider survey distributed to all NSW OSHC services;
- a state-wide parent and carer survey seeking insights into decision making regarding the use of OHSC; and
- a stakeholder consultation program including OSHC providers, school principals and local government authorities across targeted communities of interest.

Furthermore, the analytical techniques applied to the provider data are described.

**Section 3** summarises the findings from the respective survey and consultation activities, and provides insight as to potential future demand considerations.

**Section 4** summarises key findings and conclusions.
2 Approach

This research project comprises an analysis of data and information collected from three sources:

- a state-wide provider survey distributed to all NSW OSHC services;
- a state-wide parent and carer survey seeking insights into decision making regarding the use of OSHC; and
- a stakeholder consultation program including OSHC providers, school principals and local government authorities across targeted communities of interest.

This section provides an overview of the methodology used to undertake these collections.

2.1 Provider Survey

2.1.1 Survey design

2.1.1.1 Objectives

The objective of the survey was to engage service providers to develop a picture of the current demand for and supply of OSHC across NSW. The survey sought to determine whether OSHC services, within a defined reference week, had an undersupply or oversupply of places. The survey also sought to elicit actions taken by services in response to the level of demand that they face and gauge the level of engagement with the Fund, as well as intentions for the future supply of places.

Specifically, the survey covered the following issues:

- capacity and attendance;
- staffing composition;
- fees and pricing;
- waiting lists (where applicable);
- service expansion; and
- the Fund.

A copy of the provider survey questions is provided at Appendix A.

The survey was open for a three week window from Monday 19 June to Friday 7 July 2017. This included a component of the school holiday period between terms, in which some services were not in operation.

2.1.1.2 Survey design

The provider survey was designed to maximise the response rate and ensure robustness of the findings. To encourage participation, the length of the survey was kept to a minimum to reduce the impost on service providers. Questions were limited to those which extracted information directly related to the analysis, and which could not be obtained through other sources, such as data provided by the Department.

The design and logic of the survey allowed for the length of the survey to vary depending on the answers provided by the participant. Questions later in the survey were contingent on earlier responses. For example, questions...
on the operation of vacation care were only asked if a service first indicated that they provide these services.

Careful consideration was also given to the wording and ordering of the questions to minimise common biases. Additionally, an appropriate mix of open and close-ended questions were asked to ensure that all relevant information was captured in a concise manner.

2.1.1.3 Survey build

The survey was designed for completion using Qualtrics, an online platform which Deloitte Access Economics uses under licence.

Qualtrics provides responses in real time, saving all data digitally. This allows for the completion status of each participant to be tracked, and for communication strategies to be tailored throughout the survey window. These techniques ensure response rates are maximised.

Qualtrics provides convenience to survey respondents. At any point during the survey, respondents were able to save their progress and exit. This allowed for the survey to be completed over multiple sessions. The survey could also be completed using a variety of devices, including mobile phones, tablets and computers. This maximised ease of access to the survey and encouraged participation.

2.1.1.4 Survey drafting and piloting

A number of stakeholders were engaged throughout the survey development process. The primary objective of these engagements was to ensure that the survey elicited all the information necessary for an in-depth analysis of factors affecting the supply of and demand for OSHC.

A number of iterations of survey drafts were reviewed by the project working group, which included the Department and the Centre for Education Statistics and Evaluation (CESE) within, as well as the Department of Premier and Cabinet.

The purpose of these reviews was to evaluate the logic (flow) of the survey and the appropriateness of the language. In addition, the reviews tested the exhaustiveness of the options that participants might consider when answering each question.

The survey was provided to the Behavioural Insights Unit of the Department of Premier and Cabinet to develop strategies to maximise response rate. This included further advice on logic and any follow-up incentives.

The Network of Community Activities (NCA) was also engaged in the drafting and piloting of the survey instrument. NCA is a not-for-profit peak body in the Australian Children’s Services sector, and supports the development of programs for students within their local community.

NCA provided direct input into survey design, and supported the Department by piloting the survey with a select group of members. This ensured that the format, content and length of the survey were appropriate for typical respondents. It also provided reassurance that the data sought was readily available at the service level. From this, an estimate of completion time was developed.

A further opportunity was provided to the Department project team and CESE to review the final survey once it had been built in Qualtrics.
2.1.1.5 Survey distribution

The survey was distributed via email. This allowed for fast distribution of the survey to a large number of services across NSW. In total, the survey was emailed to 980 addresses.

It should be noted that some providers do not list individual, service-level email contacts in the regulatory database. This prevented direct contact with some services associated with large providers. Providers with multiple services had the option of completing the survey centrally, filling it out once for each service, or distributing the survey to each service for them to complete independently.

2.1.1.6 Survey promotion

A range of promotion initiatives were used to encourage completion of the survey. However given the lack of formal mechanisms in place between the Department and providers to incentivise participation in the survey (e.g. funding agreements), the completion of the survey largely relied on the goodwill of providers.

A number of different methods were adopted by the Department and Deloitte Access Economics to actively promote survey participation:

- Prior to survey distribution
  - the Hon. Sarah Mitchell MP, Minister for Early Childhood Education, wrote to all services on 5 June 2017 contextualising the survey and emphasising the importance of the collection; and
  - Cheryl Best, Executive Director, Learning and Business Systems Department of Education, wrote to all service providers on 19 June 2017
- Following the survey distribution:
  - the 14 largest providers with a single, central email address were contacted to provide options for survey distribution including providing Deloitte Access Economics with individual service-level addresses or being provided a generic survey link to supply on our behalf;
  - providers with more than five services, and with service-level email addresses, were contacted to seek support in encouraging their services to complete the survey;
  - all services that provided emails that failed were called to confirm email addresses or check for firewalls;
  - 202 follow-up calls were made to services;
  - six (6) reminder emails were sent. These emails were individualised and provided updates on the time left to complete before the closure date. The emails distinguished between whether the service had commenced the survey or was still to begin; and
  - the Network of Community Activities (NCA) actively promoted completion of the survey to their members via email in the lead up to, and during, the survey window.

2.1.2 Survey response

2.1.2.1 Overall response rate

A total of 416 OSHC services participated in the provider survey, which equates to a response rate of 31.4%.

Figure 2-1 shows the number of submissions on a daily basis during the three-week survey period. The services contacted by Deloitte Access
Economics are highlighted in green. The vertical dashed line shows the commencement of follow-up calls on 26 June 2017. The overall response rate among the contacted services was 26%, which is higher than the 17% response rate during the first week of the survey window.

Figure 2-1 Number of submission to the provider survey by date

![Graph showing submission by date with follow-up call start date highlighted]

Source: OSHC Provider Survey (2017), Deloitte Access Economics

2.1.2.2 Geographic distribution of responses

Figure 2-2 shows the geographic distribution of OSHC services that participated in the provider survey. Compared with Figure 1-1, which shows the location of all services, it can be seen that the geographic spread of the services in the sample is largely comparable to the population in metropolitan areas.

Figure 2-2 Geographic distribution of participated OSHC services for the provider survey, Sydney and Newcastle

![Map showing geographic distribution with Sydney and Newcastle highlighted]

Source: OSHC Provider Survey (2017), Deloitte Access Economics

The sample collected in the survey is consistent with the distribution of metro and regional services in the overall service population. The response sample contains 74% services from metro areas, 26% from regional areas and 1% from remote areas (see Table 2-1).
The sample collected as a component of the provider survey consists of services from 94 LGAs, which covers all but one of the metropolitan LGAs (Kiama) and 39% of the regional/remote LGAs. Figure 2-3 shows the number of submitted and not submitted services for each LGA. The majority of large LGAs contributed approximately 30% participation (green); while some small LGAs failed to record a submission.

---

**Table 2-1 Distribution of region types in the sample and population for the provider survey**

<table>
<thead>
<tr>
<th>Region Type</th>
<th>Not submitted</th>
<th>Submitted</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metro</td>
<td>682 (75%)</td>
<td>305 (74%)</td>
<td>987 (75%)</td>
</tr>
<tr>
<td>Regional</td>
<td>212 (23%)</td>
<td>106 (26%)</td>
<td>318 (24%)</td>
</tr>
<tr>
<td>Remote</td>
<td>16 (2%)</td>
<td>3 (1%)</td>
<td>19 (1%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>908</strong></td>
<td><strong>416</strong></td>
<td><strong>1324</strong></td>
</tr>
</tbody>
</table>

Source: OSHC Provider Survey (2017), Deloitte Access Economics

5 Two services have not been matched with the regulatory database and their geographic information cannot be verified.
Figure 2-3 Distribution of submitted vs not submitted OSHC services for the provider survey by LGAs

Source: OSHC Provider Survey (2017), Deloitte Access Economics
2.1.2.3 Other characteristics of responses

It is important to gauge the representativeness of the sample against dimensions beyond geographical traits, such as size and duration of the OSHC services' operation.

Figure 2-4 shows the density plot of the distribution of capacity in submitted population (green), non-submitted population (dark blue) and the total population (light blue).

The submitted population curve (green) appears to the right of the blue curves, suggesting a modest over-representation from high capacity services and under-representation of low capacity services. This is further illustrated by the annotated percentage bar chart on the right which shows the proportion of submitted services by different percentile (that is, each bar represents 10% of the population ordered by capacity size).

Figure 2-4 Distribution of submitted vs not submitted OSHC services for the provider survey by capacity

Source: OSHC Provider Survey (2017), Deloitte Access Economics

Similarly, Figure 2-5 demonstrates the distribution of service start date in the submitted population (green), not-submitted population (dark blue) and the total population (light blue). It can be seen that the sample has relatively more services that were established/registered in 2012-13 than those from recent years.

Figure 2-5 Distribution of submitted vs not submitted OSHC services for the provider survey by service status effective date

Source: OSHC Provider Survey (2017), Deloitte Access Economics
The one area where the sample definitively does not meet benchmarks for representativeness is across the entity/management types of the services. Figure 2-6 shows the response rate of services with different entity/management types in a similar tabulation as Figure 1-2. Given the overall response rate is 31.4% for the population, service categories with a lower response rate than 31.4% in Figure 2-6 are under-represented, and vice versa.

Figure 2-6 Provider survey response rate by entity and management type

Source: OSHC Provider Survey (2017), Deloitte Access Economics

The under-representativeness of the sample in terms of entity/management types can partly be attributed to the lack of completions from a number of large OSHC providers.

Table 2-2 shows the response rate from the top 10 (number of services) OSHC providers. Services from the top providers have response rates below the survey average (31.4%), with the exception of the Trustees of The Roman Catholic Church for the Diocese of Parramatta.

Table 2-2 Provider survey response rate from the top 10 OSHC providers

<table>
<thead>
<tr>
<th>Provider Name</th>
<th>Not submitted</th>
<th>Submitted</th>
<th>Total</th>
<th>Response rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camp Australia Pty Limited</td>
<td>134</td>
<td>0</td>
<td>134</td>
<td>0%</td>
</tr>
<tr>
<td>Young Men’s Christian Association of Sydney</td>
<td>50</td>
<td>13</td>
<td>63</td>
<td>21%</td>
</tr>
<tr>
<td>PRIMARY OSHCARE PTY LTD</td>
<td>37</td>
<td>0</td>
<td>37</td>
<td>0%</td>
</tr>
<tr>
<td>OSHCLUB PTY LTD</td>
<td>30</td>
<td>0</td>
<td>30</td>
<td>0%</td>
</tr>
<tr>
<td>The Trustees of The Roman Catholic Church for the Diocese Of Parramatta</td>
<td>4</td>
<td>21</td>
<td>25</td>
<td>84%</td>
</tr>
<tr>
<td>Helping Hands Network Pty Ltd</td>
<td>17</td>
<td>6</td>
<td>23</td>
<td>26%</td>
</tr>
</tbody>
</table>

Sub-categories with less than 1% representation of the population are removed from the chart.
To summarise, the sample from the provider survey appears representative of the population in terms of the distribution of location, capacity and service status effective date, but falls short in terms of the entity and management types. In light of this, statistical methodologies have been adopted to adjust the sample through assigning higher weights to under-represented observations and lower weights to over-represented observations.

The details of the weighting methodology is discussed in section 2.1.3.

2.1.3 Empirical considerations

As outlined in section 2.1.1, the voluntary nature of survey response means that statistical adjustments are required to ensure that the sample provides a reasonable representation of the population.

Section 2.1.2 has compared and contrasted the distribution of key variables across the sample and the population data. Such information has been used to inform the statistical procedures to derive sample weightings, which will be higher for observations with similar characteristics to those that have not participated in the survey. For the purpose of this analysis, an inverse probability weighting method was adopted.

Inverse probability weighting (Robins, 1998) is a statistical procedure that simultaneously accounts for the collection of variables that could affect the participation of the survey. To improve statistical efficiency and attain better coverage of confidence intervals, stabilised weights (Hernan et al. 2000; Cole and Hernan 2008) of the following form were also adopted:

\[
sample\ weight_i = \frac{P(response)}{P(response|control\ factors)}
\]

Where \( P \) stands for probability of responses which takes one of the two possible values – “Submitted” or “Not submitted” – based on whether the service has submitted the provider survey. The numerator is the unconditional mean of the submission/not submission rate in the population; while the denominator is estimated based on the following probit model:

\[
P(response|control\ factors_i) = \phi(\beta_0 + \sum_{k=1}^{K} \beta_k X_{ki})
\]

Where \( \phi(.) \) is the cumulative distribution function of the standard normal distribution, \( X_{ki} \) are the predictors, \( \beta_i \) are the parameters and the dependent variable, \( y \), takes the value of 1 if the service participated in the survey, and 0 if otherwise. In other words, the conditional probability of submission...
is modelled as a linear combination of the predictors. For the purposes of this analysis, the predictor variables were:

- managing region (Gadigal, Guringai, etc.);
- region type (metro, regional, etc.);
- entity type (Company, Sole proprietor, etc.);
- management type (Private for profit, etc.);
- capacity quintile dummies;
- service status effective date;
- dummy variable to indicate whether the service has been contacted during the follow up period; and
- interaction terms of the “contacted” dummy and other predictors.

The capacity quintile dummies were chosen over the log of capacity variable used initially due to the presence of multicollinearity between the contacted dummy and the capacity variable. Details of the estimation outcome can be found in Appendix B. The histogram in Figure 2-7 shows the distribution of the derived weights for the 416 observations in the sample.

![Distribution of the inverse probability weights](source: OSHC Provider Survey (2017), Deloitte Access Economics)

As higher weights are assigned to observations that are under-represented, a significant number of observations with exceptionally high weights would suggest that the sample has under-represented the population to the extent that a weighted adjustment is not appropriate.

However, it can be seen from Figure 2-7 that no observations have been assigned weights greater than 4, and 90% of the weights are below 2. Consequently, the difference between weighted and unweighted calculations are often not material, but are important with respect to the interpretation of unweighted (raw) results and the identification of individual services.

2.2 Drivers of demand and supply

To complement the information and data collected as part of the provider survey, this research project employed two additional data and information collections to provide a deeper exploration of the drivers underpinning demand for and supply of OSHC services. This included:

- a state-wide parent and carer survey (section 2.2.1); and
- a targeted stakeholder consultation program (section 2.2.2).

These collections are largely qualitative instruments designed to provide additional contextual information to the provider survey and are not
designed in a manner that would support cross tabulation of responses across instruments.

### 2.2.1 Parent and carer survey

#### 2.2.1.1 Objectives

The objective of the parent and carer survey was to engage parents and carers across NSW to understand the various factors affecting demand for OSHC and the responses to situations of undersupply and oversupply.

The objectives of the survey were to provide additional insights into:

- the characteristics of families that use OSHC services, particularly the level of workforce participation of parents or carers;
- the extent to which current users of OSHC are seeking additional OSHC sessions; and
- the barriers that parents and carers face in enrolling their children in OSHC, and the actions they have had to take as a result.

A copy of the parent and carer survey is at Appendix C.

#### 2.2.1.2 Survey drafting, piloting and distribution

The survey was drafted and prepared in conjunction with the project working group, which included representatives from the Department of Education, Centre for Education Statistics and Evaluation (CESE) and the Department of Premier and Cabinet. In addition, the survey instrument was provided in draft to the Behavioural Insights Unit of the Department of Premier and Cabinet for further review.

Deloitte Access Economics engaged a third party market research company (Research Now) to execute the parent and carer survey. Research Now leveraged survey panel members and partnerships to secure agreed response quotas.

The survey was designed to target 450 responses from across a variety of NSW LGAs, with a request that the survey ensure some responses from communities of interest that form the focal point of the stakeholder consultation program (section 2.2.2).

The survey was distributed in online format by Research Now. The project working group had a further opportunity to review the survey instrument in the online platform to ensure that the instrument design and flow was appropriate straightforward.

The online survey was piloted with the first 30 respondents before being launched to the broader potential response pool. This was to ensure there were no technical faults or unexpected outcomes arising from completion of the survey.

#### 2.2.1.3 Survey response

In total, the parent and carer survey had **455 respondents** residing in NSW where:

- all respondents had children of primary-school-age living in the household;
- 56% (255) of respondents resided in metropolitan areas and 44% (200) in regional and remote locations;
- 19% (86) of respondents resided in the ‘communities of interest’;
32% (146) of respondents came from diverse cultural backgrounds; 63% (287) of parents identified as dual income working parents; 18% (82) of respondents had 1 child, 52% (237) had 2 children, and 30% (137) had 3 or more children; and 37% (168) of respondents indicated that they were the sole primary carer, while 30% (137) indicated one additional adult contributed to care. 34% (155) indicated 2 or more additional adults contributed to care.

### Stakeholder consultations

#### Objective

The objective of the stakeholder consultation exercise was to provide a deeper understanding of the behaviour of schools (from the perspective of the school principal), local government authorities and OSHC providers in addressing incidences of under or oversupply in their respective communities.

#### Communities of interest

In order to prioritise communities of interest for the stakeholder consultation exercise, the Department sought to identify local government areas, by identifying areas that included potential scenarios of undersupply and oversupply, including regional locations. To support the identification of these communities, Deloitte Access Economics provided preliminary advice to the Department following an analysis of data, including:

- maximum total OSHC places across NSW, by LGA (provided by the Department);
- primary school-aged population projections, by LGA; and
- proportion of families with working parents, by LGA.

The Department identified ten communities of interest for the purposes of this consultation strategy, including:

- Ashfield;
- Botany Bay;
- Cessnock;
- Dubbo;
- Fairfield;
- Marrickville;
- North Sydney;
- Parramatta;
- Port Stephens; and
- Woollahra.

The process undertaken to identify these communities of interest is presented in Appendix D.

#### Consultation instrument drafting

Deloitte Access Economics developed consultation instruments, which framed the nature of each consultation, in conjunction with the Department project team and CESE. The purpose of this collaboration was to ensure that the intent of engagement was met, the nature of the questions was appropriate, and the language used was accessible and meaningful for the consultation target. The consultation instruments used to frame the discussions with OSHC providers, school principals and local councils are included at Appendix E, F and G respectively. These were provided in
advance of the discussion to frame the nature of the conversation and provide participants with context to the study.

2.2.2.4 Consultation approach

OSHC services, schools and local councils within the communities of interest were contacted for phone-based interviews lasting 30-40 minutes in duration. These consultations were held between 14 July 2017 and 28 July 2017.

A total of 45 stakeholder consultations were held as part of this research project. This included 21 schools across Government, Catholic and Independent sectors, 19 OSHC services and 5 local government authorities.

Table 2-3 summarises the categories of consultations secured for this study. For the schools cohort, schools that did not currently have an OSHC service operating on their site were also engaged. This was done to ensure questions could be asked regarding school perception of local community needs, and reasons for not seeking OSHC places on site or supporting services to deliver OSHC places.

Table 2-3 Summary of the categories of consultations

<table>
<thead>
<tr>
<th>OSHC/School/Council</th>
<th>LGA</th>
<th>OSHC on site</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Government</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Sydney</td>
<td>NA</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Parramatta</td>
<td>NA</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Port Stephens</td>
<td>NA</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Cessnock</td>
<td>NA</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Woollahra</td>
<td>NA</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Local Government Total</strong></td>
<td><strong>5</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OSHC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ashfield</td>
<td>Y</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Botany Bay</td>
<td>Y</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Cessnock</td>
<td>Y</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Dubbo</td>
<td>Y</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Fairfield</td>
<td>Y</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Marrickville</td>
<td>Y</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>North Sydney</td>
<td>Y</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Parramatta</td>
<td>Y</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Port Stephens</td>
<td>Y</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Woollahra</td>
<td>Y</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>OSHC Total</strong></td>
<td><strong>19</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School - Catholic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ashfield</td>
<td>Y</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Cessnock</td>
<td>N</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Dubbo</td>
<td>N</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Fairfield</td>
<td>Y</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>North Sydney</td>
<td>Y</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Parramatta</td>
<td>Y</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>----</td>
<td>-----</td>
<td></td>
</tr>
<tr>
<td>Port Stephens</td>
<td>N</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**School - Catholic Total**

<table>
<thead>
<tr>
<th>School - Government</th>
<th>Y</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ashfield</td>
<td>N</td>
<td>1</td>
</tr>
<tr>
<td>Botany Bay</td>
<td>Y</td>
<td>1</td>
</tr>
<tr>
<td>Cessnock</td>
<td>N</td>
<td>1</td>
</tr>
<tr>
<td>Fairfield</td>
<td>Y</td>
<td>1</td>
</tr>
<tr>
<td>Marrickville</td>
<td>Y</td>
<td>2</td>
</tr>
<tr>
<td>North Sydney</td>
<td>Y</td>
<td>1</td>
</tr>
<tr>
<td>Port Stephens</td>
<td>Y</td>
<td>1</td>
</tr>
</tbody>
</table>

**School - Government Total**

<table>
<thead>
<tr>
<th>School - Independent</th>
<th>Y</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marrickville</td>
<td>N</td>
<td>1</td>
</tr>
<tr>
<td>North Sydney</td>
<td>N</td>
<td>1</td>
</tr>
</tbody>
</table>

**School - Independent Total**

**Grand Total**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>45</th>
</tr>
</thead>
</table>

Source: Deloitte Access Economics
3 Analysis and findings

This section details the findings of analysis across each of the data and information collection instruments:

- Section 3.1 presents the findings from the provider survey which focused on the current state of supply and utilisation in the market.
- Section 3.2 identifies the drivers of demand and supply including demographic trends and findings from the parent and carer survey and stakeholder consultation.
- Section 3.3 sheds some light on the future state of the market, taking into account population projections and OSHC provider expansion plans.

3.1 Provider survey

3.1.1 Provider profiles

Section 1.4 presented an overview of OSHC service characteristics, such as management types and approved maximum places, based on the information recorded in the Department’s regulatory database. However, certain service-level information such as whether the service provides before, after school or vacation care was not available.

This section summarises such information based on the responses from the provider survey. All figures reported (for example, proportion) are calculated based on weights derived as outlined in section 2.1.3.

Table 3-1 shows the number and proportion of services providing before/after school care and/or vacation care in the sample. Of those surveyed, there is a greater overall supply in the provision of after school care. A significant proportion (75.2%) of the services are providing both before and after school care services.

Table 3-1 Distribution of respondent services providing different types of OSHC services

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before school care</td>
<td>304</td>
<td>75.4%</td>
</tr>
<tr>
<td>After school care</td>
<td>387</td>
<td>96.0%</td>
</tr>
<tr>
<td></td>
<td>303</td>
<td>75.2%</td>
</tr>
<tr>
<td>Vacation care</td>
<td>297</td>
<td>73.7%</td>
</tr>
<tr>
<td></td>
<td>235</td>
<td>58.3%</td>
</tr>
</tbody>
</table>

Source: OSHC Provider Survey (2017), Deloitte Access Economics

7 Unless otherwise noted, all figures (for example, proportion) reported in the section are calculated based on weights derived from section 2.1.3.
Table 3-2 shows that more than half of the services surveyed have been in operation for more than five years, and only a small fraction (5.9%) of the services represent services opened within the last 12 months.

Table 3-2 Distribution of years in operation for respondent services

<table>
<thead>
<tr>
<th>Number</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 12 months</td>
<td>24</td>
</tr>
<tr>
<td>12 months to 5 years</td>
<td>125</td>
</tr>
<tr>
<td>6 to 10 years</td>
<td>78</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>176</td>
</tr>
</tbody>
</table>

Source: OSHC Provider Survey (2017), Deloitte Access Economics

Just over half of services surveyed reported that the students enrolled in OSHC are evenly distributed across year levels. However, a significant proportion (40.8%) of the services reported that they predominantly cater to students enrolled in years kindergarten to year three; while only a limited number of services are focussed towards students enrolled in years four to six.

Table 3-3 Age profile of students enrolled in respondent services

<table>
<thead>
<tr>
<th>Number</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evenly distributed across year levels</td>
<td>228</td>
</tr>
<tr>
<td>Mainly students in years kindergarten - 3</td>
<td>165</td>
</tr>
<tr>
<td>Mainly students in years 4 - 6</td>
<td>11</td>
</tr>
</tbody>
</table>

Source: OSHC Provider Survey (2017), Deloitte Access Economics

3.1.2 Aggregate-level utilisation

Utilisation represents a measure of the level of approved maximum places absorbed through attendance.

In aggregate terms, the survey data indicates approximately:

- 60% spare capacity within before school care;
- 25% spare capacity within after school care; and
- 24% spare capacity within vacation care.

Figure 3-1 compares the total capacity, estimated as the sum of the capacity from services that provide before or after school care services in the corresponding day of the week (Mon-Fri), with the total attendance reported by these services.

The survey data confirms that utilisation for after school care far exceeds utilisation for before school care, noting that provision of before school is also lower than after school care.

At the system-wide level, this implies that there is capacity to absorb a greater level of demand, however the instructiveness of these results is limited by the nature and location of the provision.
The ability for unmet demand to be absorbed is contingent upon the scalability of school infrastructure and the physical footprint of schools, combined with the practicalities of families utilising capacity in locations that are removed from their home, work or transport corridors.

As a result, excess capacity in areas of oversupply can be redundant as the unmet demand in other school communities cannot be absorbed. This does not imply that instances where utilisation is at or above maximum capacity in specific communities are non-existent.

The supply of both before and after school care services do not vary across different days of the week; while the attendance for the after school care falls significantly on Friday. These findings are consistent with other early childhood education and care settings, such as family day care and long day care, where utilisation is also lower on Friday.

Figure 3-1 Comparison between attendance and capacity in aggregate

Source: OSHC Provider Survey (2017), Deloitte Access Economics

3.1.3 Service-level utilisation

At an individual service level, 83.1% indicated that they had spare capacity existing in their provision of care. However, this varied across provision of before school, after school and vacation care, as tabulated in Table 3-4.
Table 3-4 Utilisation level (weighted) by offering type

<table>
<thead>
<tr>
<th>Utilisation level by offering</th>
<th>Respondents per utilisation level</th>
<th>Total respondents in survey</th>
<th>Proportion of total respondents in survey (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Before School Care</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;80% Utilisation</td>
<td>12</td>
<td>304</td>
<td>4</td>
</tr>
<tr>
<td>&gt;90% Utilisation</td>
<td>6</td>
<td>304</td>
<td>2</td>
</tr>
<tr>
<td>&gt;95% Utilisation</td>
<td>5</td>
<td>304</td>
<td>2</td>
</tr>
<tr>
<td><strong>After School Care</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;80% Utilisation</td>
<td>144</td>
<td>387</td>
<td>37</td>
</tr>
<tr>
<td>&gt;90% Utilisation</td>
<td>79</td>
<td>387</td>
<td>20</td>
</tr>
<tr>
<td>&gt;95% Utilisation</td>
<td>53</td>
<td>387</td>
<td>14</td>
</tr>
<tr>
<td><strong>Vacation Care</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;80% Utilisation</td>
<td>100</td>
<td>297</td>
<td>34</td>
</tr>
<tr>
<td>&gt;90% Utilisation</td>
<td>73</td>
<td>297</td>
<td>25</td>
</tr>
<tr>
<td>&gt;95% Utilisation</td>
<td>59</td>
<td>297</td>
<td>20</td>
</tr>
</tbody>
</table>

Source: OSHC Provider Survey (2017), Deloitte Access Economics

The relationship between attendance and capacity at the individual service level is further investigated in Figure 3-2, where:

- each point represents a service in the sample;
- their attendance is captured on the horizontal axis; and
- capacity is captured on the vertical axis.

Noticeably, many of the green dots (representing after school care) are very close to the 45 degree line, suggesting that the services are operating at close to full capacity. Specifically, and as listed in Table 3-4:

- 23% of before school care services or 301 services surveyed have utilisation greater than 50%;
- 37% of after school care services or 492 services surveyed are operating at above 80% utilisation; and
- 34% of vacation care services or 446 services surveyed are operating at above 80% utilisation (note: vacation care utilisation is not represented in Figure 3-2).
The response rate to waiting list related questions was very low with only 10% of respondents reporting that they currently had a number of students on their waiting lists.

Figure 3-3 retains the services from Figure 3-2, and extends the dots horizontally to the right to indicate the length of their waiting lists. Sessions associated with no students on the respective waiting list are represented by the dots that are not attached to any horizontal lines. Notably, lengthy waiting lists tend to be associated with the after school care (green) sessions.
Figure 3-3 Attendance and waiting list for before/after school care services for the week 22-26 May 2017 (including only services that have kept waiting lists)

Source: OSHC Provider Survey (2017), Deloitte Access Economics
Approximately 83.3% of the services that keep waiting lists reported that their waiting lists have increased over the past two years. Only 15% of services answered the two survey questions regarding how often students on waiting lists are provided with a place. Figure 3-4 shows that, among services that responded, 29.3% indicated students always or often receive an offer; and the average waiting time varies widely from “1 term or less” (12.9% of responses) to “4 terms or more” (33.2% of responses).

Figure 3-4 Count/distribution of average waiting time in the waiting lists, based on the provider survey

![Figure 3-4 Count/distribution of average waiting time in the waiting lists, based on the provider survey](image)

Source: OSHC Provider Survey (2017), Deloitte Access Economics

Intuitively, the longer the average waiting time, the less likely that students on waiting lists receive offers. Figure 3-5 shows this relationship separately for services with students of all ages and those with students mainly in kindergarten to year six.

Figure 3-5 Relationship between average waiting time and probability of getting an offer for students on the waiting lists, based on the provider survey

![Figure 3-5 Relationship between average waiting time and probability of getting an offer for students on the waiting lists, based on the provider survey](image)

Source: OSHC Provider Survey (2017), Deloitte Access Economics

Note: Students in grades 4-6 represent only 3% of this subset.

In some situations parents may add their children to the waiting lists of multiple service providers. OSHC providers, in some instances, only provide care to families within their school catchment. The extent to which this behaviour prevails is unclear.
Therefore, for the purposes of this analysis, taking the full length of the waiting lists would potentially bias the calculation of average utilisation by double counting students. As such, this analysis caps the waiting list figures provided in the survey at 20% of attendance for the purpose of calculating the average utilisation metrics, while including the 23 services that have waiting lists above 20% of their attendance in Appendix H.

Thus, the average utilisation metric is defined as:

\[
\text{Utilisation} = \frac{\text{Average attendance} + \text{adjusted average waiting list (Mon – Fri)}}{\text{Capacity}}
\]

Dividing the sum of attendance and waiting list by capacity makes it possible to compare the level of utilisation across services/LGAs with varying total capacity. The average approach across days is reasonable given there is limited variation between different days of the week (as seen in Figure 3-2).

Figure 3-6 uses two histograms to demonstrate the level of utilisation in the before and after school care markets. It can be seen that the majority of the before school care sessions (dark blue) are utilised at approximately 20% to 60% of their capacity; while the majority of after school sessions are experiencing much higher demand, being utilised at around 80% to 120% of their approved places.

Figure 3-6 Distribution of utilisation for before and after school care across services in the sample

Source: OSHC Provider Survey (2017), Deloitte Access Economics

The contrast in utilisation for before and after school care is also associated with the difference in price. Figure 3-7 shows fees versus utilisation for metropolitan and regional services, respectively. The green dots tend to reside at the top right direction of the blue dots, suggesting higher price and utilisation for the after school services.

---

8 Appendix K has a reproduction of histograms based on a more conservative definition of utilisation ignoring waiting lists (i.e. attendance/capacity).
Demand for vacation care is also strong. Figure 3-8 shows the distribution of utilisation for vacation care across the services in NSW. Notably, 65 (21.5%) services of the 303 services surveyed that provide vacation care programs reported utilisation greater than 95% of their capacity.

The relationship between price and utilisation for vacation care is similar to that observed from before/after school care services. This is shown in Figure 3-9.

---

9 15 observations with utilisation greater than 120% are capped at 120%, Appendix K reproduce the histograms based on a more conservative definition of utilisation ignoring waiting lists (i.e. attendance/capacity).
Additionally, utilisation for before and after school care do not appear to vary significantly across services providing care to students with different age profiles.

Figure 3-10 shows the scatter plot of the ratios for utilisation with after school care on the horizontal axis and before school care on the vertical axis. The points are coloured to indicate the student profile of the service.

There are no obvious patterns associated with this analysis, suggesting that access is not influenced by age group, although cohort management, such as asking older students to exit programs and preference younger students, has been noted in stakeholder consultations as a strategy to manage demand (see section 3.2.2 for more detail).

Conversely, the utilisation rate appears to be slightly positively related to OSHC services’ years in operation. Figure 3-11 shows the distribution of utilisation for services with different years in operation (each point represents a service, and the box shows the medians and quantiles). It is possible that the notion of tenure is important in some school communities.
driven by issues like community awareness and close operations with school leaders.

Figure 3-11 Distribution of utilisation for services with different years in operation

Source: OSHC Provider Survey (2017), Deloitte Access Economics

3.1.4 LGA level supply and demand

The ability to provide analysis at the LGA level is contingent upon:

- the proportion of services who participated in the survey within an LGA;
- the amount of variation in the reported utilisation; and
- the availability of external data sources for information on student enrolment, proportion of single/dual working family.

Table 3-5 provides the list of LGAs alongside the average utilisation estimates for before school care services within the respective LGAs.

Table 3-5 List of LGAs with average utilisation measures for before school care services

<table>
<thead>
<tr>
<th>Region type</th>
<th>LGA</th>
<th>Utilisation (before school care)</th>
<th>Total approved places</th>
<th>Response rate</th>
<th>CI width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional</td>
<td>Port Stephens</td>
<td>74%</td>
<td>506</td>
<td>17%</td>
<td>±71.5%</td>
</tr>
<tr>
<td>Metro</td>
<td>Liverpool</td>
<td>67%</td>
<td>1957</td>
<td>18%</td>
<td>±43%</td>
</tr>
<tr>
<td>Metro</td>
<td>Hawkesbury</td>
<td>62%</td>
<td>549</td>
<td>54%</td>
<td>±13.7%</td>
</tr>
<tr>
<td>Metro</td>
<td>Camden</td>
<td>57%</td>
<td>1262</td>
<td>17%</td>
<td>±33.2%</td>
</tr>
<tr>
<td>Metro</td>
<td>Ku-Ring-Gai</td>
<td>56%</td>
<td>3356</td>
<td>33%</td>
<td>±11.8%</td>
</tr>
<tr>
<td>Metro</td>
<td>Ashfield</td>
<td>56%</td>
<td>878</td>
<td>20%</td>
<td>±6.5%</td>
</tr>
<tr>
<td>Metro</td>
<td>Hornsby</td>
<td>52%</td>
<td>4315</td>
<td>42%</td>
<td>±9.9%</td>
</tr>
<tr>
<td>Metro</td>
<td>Rockdale</td>
<td>47%</td>
<td>965</td>
<td>29%</td>
<td>±3.2%</td>
</tr>
<tr>
<td>Metro</td>
<td>Sutherland Shire</td>
<td>46%</td>
<td>3614</td>
<td>27%</td>
<td>±12%</td>
</tr>
<tr>
<td>Metro</td>
<td>Hurstville</td>
<td>46%</td>
<td>991</td>
<td>40%</td>
<td>±9.1%</td>
</tr>
</tbody>
</table>

10 Excluding 62 LGAs with only no or only one submission to the provider survey.
<table>
<thead>
<tr>
<th>Region type</th>
<th>LGA</th>
<th>Utilisation (before school care)</th>
<th>Total approved places</th>
<th>Response rate</th>
<th>CI width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metro</td>
<td>Willoughby</td>
<td>45%</td>
<td>1143</td>
<td>35%</td>
<td>±24.6%</td>
</tr>
<tr>
<td>Metro</td>
<td>Ryde</td>
<td>45%</td>
<td>2200</td>
<td>48%</td>
<td>±8%</td>
</tr>
<tr>
<td>Metro</td>
<td>Hunters Hill</td>
<td>45%</td>
<td>433</td>
<td>60%</td>
<td>±9.6%</td>
</tr>
<tr>
<td>Regional</td>
<td>Maitland</td>
<td>44%</td>
<td>1106</td>
<td>61%</td>
<td>±7.8%</td>
</tr>
<tr>
<td>Metro</td>
<td>Wollondilly</td>
<td>44%</td>
<td>256</td>
<td>43%</td>
<td>±25.8%</td>
</tr>
<tr>
<td>Metro</td>
<td>Warringah</td>
<td>43%</td>
<td>3335</td>
<td>10%</td>
<td>±8%</td>
</tr>
<tr>
<td>Regional</td>
<td>Wagga Wagga</td>
<td>43%</td>
<td>557</td>
<td>25%</td>
<td>±20.1%</td>
</tr>
<tr>
<td>Metro</td>
<td>Newcastle</td>
<td>41%</td>
<td>2715</td>
<td>36%</td>
<td>±9.4%</td>
</tr>
<tr>
<td>Metro</td>
<td>Leichhardt</td>
<td>41%</td>
<td>1751</td>
<td>39%</td>
<td>±15.1%</td>
</tr>
<tr>
<td>Metro</td>
<td>Kogarah</td>
<td>40%</td>
<td>780</td>
<td>33%</td>
<td>±15.6%</td>
</tr>
<tr>
<td>Metro</td>
<td>Randwick</td>
<td>40%</td>
<td>2630</td>
<td>23%</td>
<td>±14.5%</td>
</tr>
<tr>
<td>Metro</td>
<td>Lane Cove</td>
<td>39%</td>
<td>679</td>
<td>33%</td>
<td>±48.4%</td>
</tr>
<tr>
<td>Metro</td>
<td>Canterbury</td>
<td>38%</td>
<td>1413</td>
<td>24%</td>
<td>±15.2%</td>
</tr>
<tr>
<td>Metro</td>
<td>The Hills Shire</td>
<td>38%</td>
<td>3741</td>
<td>43%</td>
<td>±7.8%</td>
</tr>
<tr>
<td>Metro</td>
<td>Marrickville</td>
<td>38%</td>
<td>1865</td>
<td>41%</td>
<td>±9.7%</td>
</tr>
<tr>
<td>Metro</td>
<td>Waverley</td>
<td>38%</td>
<td>1106</td>
<td>18%</td>
<td>±21.9%</td>
</tr>
<tr>
<td>Metro</td>
<td>Pittwater</td>
<td>37%</td>
<td>895</td>
<td>20%</td>
<td>±17.3%</td>
</tr>
<tr>
<td>Metro</td>
<td>Fairfield</td>
<td>37%</td>
<td>883</td>
<td>22%</td>
<td>±21.2%</td>
</tr>
<tr>
<td>Metro</td>
<td>Blacktown</td>
<td>36%</td>
<td>4717</td>
<td>45%</td>
<td>±4.4%</td>
</tr>
<tr>
<td>Metro</td>
<td>Lake Macquarie</td>
<td>35%</td>
<td>2361</td>
<td>36%</td>
<td>±11.6%</td>
</tr>
<tr>
<td>Metro</td>
<td>Wyong</td>
<td>35%</td>
<td>1686</td>
<td>37%</td>
<td>±6.7%</td>
</tr>
<tr>
<td>Regional</td>
<td>Penrith</td>
<td>34%</td>
<td>2552</td>
<td>24%</td>
<td>±10.1%</td>
</tr>
<tr>
<td>Metro</td>
<td>Campbelltown</td>
<td>34%</td>
<td>1312</td>
<td>29%</td>
<td>±7.6%</td>
</tr>
<tr>
<td>Metro</td>
<td>Bankstown</td>
<td>33%</td>
<td>1929</td>
<td>16%</td>
<td>±9.9%</td>
</tr>
<tr>
<td>Metro</td>
<td>Holroyd</td>
<td>32%</td>
<td>1619</td>
<td>30%</td>
<td>±12.1%</td>
</tr>
<tr>
<td>Regional</td>
<td>Blue Mountains</td>
<td>32%</td>
<td>1016</td>
<td>26%</td>
<td>±11.2%</td>
</tr>
<tr>
<td>Metro</td>
<td>Canada Bay</td>
<td>32%</td>
<td>1199</td>
<td>38%</td>
<td>±12.1%</td>
</tr>
<tr>
<td>Metro</td>
<td>Gosford</td>
<td>31%</td>
<td>1814</td>
<td>37%</td>
<td>±10.7%</td>
</tr>
<tr>
<td>Regional</td>
<td>Tamworth Regional</td>
<td>30%</td>
<td>399</td>
<td>44%</td>
<td>±18.6%</td>
</tr>
<tr>
<td>Metro</td>
<td>Parramatta</td>
<td>30%</td>
<td>2132</td>
<td>41%</td>
<td>±5.6%</td>
</tr>
<tr>
<td>Regional</td>
<td>Port Macquarie-Hastings</td>
<td>28%</td>
<td>660</td>
<td>44%</td>
<td>±16%</td>
</tr>
<tr>
<td>Metro</td>
<td>Botany Bay</td>
<td>27%</td>
<td>662</td>
<td>40%</td>
<td>±6.3%</td>
</tr>
<tr>
<td>Metro</td>
<td>Burwood</td>
<td>26%</td>
<td>644</td>
<td>22%</td>
<td>±3.3%</td>
</tr>
<tr>
<td>Metro</td>
<td>Wollongong</td>
<td>26%</td>
<td>1892</td>
<td>20%</td>
<td>±4.1%</td>
</tr>
<tr>
<td>Regional</td>
<td>Ballina</td>
<td>25%</td>
<td>225</td>
<td>80%</td>
<td>±5.1%</td>
</tr>
</tbody>
</table>
### Table 3-6: Regional LGA Utilisation Rates

<table>
<thead>
<tr>
<th>Region</th>
<th>LGA</th>
<th>Utilisation (before school care)</th>
<th>Total approved places</th>
<th>Response rate</th>
<th>CI width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional</td>
<td>Lismore</td>
<td>23%</td>
<td>732</td>
<td>25%</td>
<td>±14.4%</td>
</tr>
<tr>
<td>Metro</td>
<td>Sydney</td>
<td>22%</td>
<td>2206</td>
<td>31%</td>
<td>±6.2%</td>
</tr>
<tr>
<td>Regional</td>
<td>Kempsey</td>
<td>19%</td>
<td>194</td>
<td>67%</td>
<td>±2.5%</td>
</tr>
<tr>
<td>Regional</td>
<td>Albury</td>
<td>18%</td>
<td>378</td>
<td>43%</td>
<td>±2.1%</td>
</tr>
<tr>
<td>Regional</td>
<td>Coffs Harbour</td>
<td>17%</td>
<td>693</td>
<td>63%</td>
<td>±3.9%</td>
</tr>
<tr>
<td>Regional</td>
<td>Goulburn Mulwaree</td>
<td>17%</td>
<td>207</td>
<td>50%</td>
<td>±6%</td>
</tr>
<tr>
<td>Regional</td>
<td>Shoalhaven</td>
<td>12%</td>
<td>837</td>
<td>28%</td>
<td>±6.5%</td>
</tr>
<tr>
<td>Regional</td>
<td>Tweed</td>
<td>12%</td>
<td>843</td>
<td>35%</td>
<td>±2.5%</td>
</tr>
</tbody>
</table>

Source: OSHC Provider Survey (2017), Deloitte Access Economics

Table 3-6 provides the average utilisation estimates for **after school care services** within the respective LGAs with survey responses were available from the provider survey.

Table 3-6 List of LGAs with average utilisation measures for after school care services\(^{11}\)

<table>
<thead>
<tr>
<th>Region</th>
<th>LGA</th>
<th>Utilisation (after school care)</th>
<th>Total approved places</th>
<th>Response rate</th>
<th>CI width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metro</td>
<td>North Sydney</td>
<td>107%</td>
<td>1347</td>
<td>19%</td>
<td>±14.7%</td>
</tr>
<tr>
<td>Metro</td>
<td>Ashfield</td>
<td>106%</td>
<td>878</td>
<td>20%</td>
<td>±12.2%</td>
</tr>
<tr>
<td>Metro</td>
<td>Waverley</td>
<td>104%</td>
<td>1106</td>
<td>18%</td>
<td>±28.2%</td>
</tr>
<tr>
<td>Metro</td>
<td>Liverpool</td>
<td>102%</td>
<td>1957</td>
<td>18%</td>
<td>±17.9%</td>
</tr>
<tr>
<td>Metro</td>
<td>Burwood</td>
<td>94%</td>
<td>644</td>
<td>22%</td>
<td>±10.4%</td>
</tr>
<tr>
<td>Metro</td>
<td>Hurstville</td>
<td>93%</td>
<td>991</td>
<td>40%</td>
<td>±21%</td>
</tr>
<tr>
<td>Metro</td>
<td>Willoughby</td>
<td>93%</td>
<td>1143</td>
<td>35%</td>
<td>±6.7%</td>
</tr>
<tr>
<td>Metro</td>
<td>Lane Cove</td>
<td>92%</td>
<td>679</td>
<td>33%</td>
<td>±8.5%</td>
</tr>
<tr>
<td>Metro</td>
<td>Rockdale</td>
<td>87%</td>
<td>965</td>
<td>29%</td>
<td>±10.3%</td>
</tr>
<tr>
<td>Metro</td>
<td>Randwick</td>
<td>86%</td>
<td>2630</td>
<td>23%</td>
<td>±12.8%</td>
</tr>
<tr>
<td>Metro</td>
<td>Ku-Ring-Gai</td>
<td>82%</td>
<td>3356</td>
<td>33%</td>
<td>±11.4%</td>
</tr>
<tr>
<td>Metro</td>
<td>Leichhardt</td>
<td>82%</td>
<td>1751</td>
<td>39%</td>
<td>±25.5%</td>
</tr>
<tr>
<td>Regional</td>
<td>Narrabri</td>
<td>82%</td>
<td>70</td>
<td>67%</td>
<td>±19.9%</td>
</tr>
<tr>
<td>Metro</td>
<td>The Hills Shire</td>
<td>82%</td>
<td>3741</td>
<td>43%</td>
<td>±7.5%</td>
</tr>
<tr>
<td>Regional</td>
<td>Albury</td>
<td>80%</td>
<td>378</td>
<td>43%</td>
<td>±1.7%</td>
</tr>
<tr>
<td>Metro</td>
<td>Warringah</td>
<td>80%</td>
<td>3335</td>
<td>10%</td>
<td>±16.5%</td>
</tr>
</tbody>
</table>

\(^{11}\) Excluding 62 LGAs with only no or only one submission to the provider survey.
<table>
<thead>
<tr>
<th>Region type</th>
<th>LGA</th>
<th>Utilisation (after school care)</th>
<th>Total approved places</th>
<th>Response rate</th>
<th>CI width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metro</td>
<td>Ryde</td>
<td>79%</td>
<td>2200</td>
<td>48%</td>
<td>±7.1%</td>
</tr>
<tr>
<td>Regional</td>
<td>Wagga Wagga</td>
<td>78%</td>
<td>557</td>
<td>25%</td>
<td>±28.1%</td>
</tr>
<tr>
<td>Metro</td>
<td>Canterbury</td>
<td>78%</td>
<td>1413</td>
<td>24%</td>
<td>±13.8%</td>
</tr>
<tr>
<td>Metro</td>
<td>Hunters Hill</td>
<td>77%</td>
<td>433</td>
<td>60%</td>
<td>±7.4%</td>
</tr>
<tr>
<td>Metro</td>
<td>Blacktown</td>
<td>76%</td>
<td>4717</td>
<td>45%</td>
<td>±7%</td>
</tr>
<tr>
<td>Metro</td>
<td>Camden</td>
<td>75%</td>
<td>1262</td>
<td>17%</td>
<td>±5%</td>
</tr>
<tr>
<td>Metro</td>
<td>Parramatta</td>
<td>75%</td>
<td>2132</td>
<td>41%</td>
<td>±9.5%</td>
</tr>
<tr>
<td>Metro</td>
<td>Marrickville</td>
<td>75%</td>
<td>1865</td>
<td>41%</td>
<td>±5.8%</td>
</tr>
<tr>
<td>Metro</td>
<td>Kogarah</td>
<td>74%</td>
<td>780</td>
<td>33%</td>
<td>±12.1%</td>
</tr>
<tr>
<td>Metro</td>
<td>Holroyd</td>
<td>74%</td>
<td>1619</td>
<td>30%</td>
<td>±28.7%</td>
</tr>
<tr>
<td>Metro</td>
<td>Hornsby</td>
<td>74%</td>
<td>4315</td>
<td>42%</td>
<td>±11.8%</td>
</tr>
<tr>
<td>Metro</td>
<td>Pittwater</td>
<td>72%</td>
<td>895</td>
<td>20%</td>
<td>±4%</td>
</tr>
<tr>
<td>Metro</td>
<td>Campbelltown</td>
<td>72%</td>
<td>1312</td>
<td>29%</td>
<td>±10.4%</td>
</tr>
<tr>
<td>Metro</td>
<td>Lake Macquarie</td>
<td>71%</td>
<td>2361</td>
<td>36%</td>
<td>±10.4%</td>
</tr>
<tr>
<td>Metro</td>
<td>Hawkesbury</td>
<td>69%</td>
<td>549</td>
<td>54%</td>
<td>±12.9%</td>
</tr>
<tr>
<td>Metro</td>
<td>Bankstown</td>
<td>69%</td>
<td>1929</td>
<td>16%</td>
<td>±8.3%</td>
</tr>
<tr>
<td>Metro</td>
<td>Wyong</td>
<td>69%</td>
<td>1686</td>
<td>37%</td>
<td>±8%</td>
</tr>
<tr>
<td>Regional</td>
<td>Port Stephens</td>
<td>67%</td>
<td>506</td>
<td>17%</td>
<td>±70.4%</td>
</tr>
<tr>
<td>Metro</td>
<td>Sydney</td>
<td>67%</td>
<td>2206</td>
<td>31%</td>
<td>±17.1%</td>
</tr>
<tr>
<td>Metro</td>
<td>Canada Bay</td>
<td>66%</td>
<td>1199</td>
<td>38%</td>
<td>±23.5%</td>
</tr>
<tr>
<td>Metro</td>
<td>Sutherland Shire</td>
<td>65%</td>
<td>3614</td>
<td>27%</td>
<td>±13.9%</td>
</tr>
<tr>
<td>Regional</td>
<td>Queanbeyan</td>
<td>65%</td>
<td>840</td>
<td>50%</td>
<td>±2%</td>
</tr>
<tr>
<td>Regional</td>
<td>Maitland</td>
<td>65%</td>
<td>1106</td>
<td>61%</td>
<td>±8%</td>
</tr>
<tr>
<td>Metro</td>
<td>Newcastle</td>
<td>64%</td>
<td>2715</td>
<td>36%</td>
<td>±17.6%</td>
</tr>
<tr>
<td>Regional</td>
<td>Coffs Harbour</td>
<td>64%</td>
<td>693</td>
<td>63%</td>
<td>±13.2%</td>
</tr>
<tr>
<td>Metro</td>
<td>Wollongong</td>
<td>63%</td>
<td>1892</td>
<td>20%</td>
<td>±14.8%</td>
</tr>
<tr>
<td>Metro</td>
<td>Gosford</td>
<td>61%</td>
<td>1814</td>
<td>37%</td>
<td>±10.7%</td>
</tr>
<tr>
<td>Metro</td>
<td>Botany Bay</td>
<td>60%</td>
<td>662</td>
<td>40%</td>
<td>±17.5%</td>
</tr>
<tr>
<td>Regional</td>
<td>Great Lakes</td>
<td>59%</td>
<td>386</td>
<td>33%</td>
<td>±17.1%</td>
</tr>
<tr>
<td>Regional</td>
<td>Penrith</td>
<td>58%</td>
<td>2552</td>
<td>24%</td>
<td>±10.2%</td>
</tr>
<tr>
<td>Regional</td>
<td>Port Macq’-Hastings</td>
<td>56%</td>
<td>660</td>
<td>44%</td>
<td>±29.9%</td>
</tr>
<tr>
<td>Regional</td>
<td>Blue Mountains</td>
<td>54%</td>
<td>1016</td>
<td>26%</td>
<td>±7.9%</td>
</tr>
<tr>
<td>Regional</td>
<td>Tamworth Regional</td>
<td>53%</td>
<td>399</td>
<td>44%</td>
<td>±16.3%</td>
</tr>
<tr>
<td>Regional</td>
<td>Ballina</td>
<td>53%</td>
<td>225</td>
<td>80%</td>
<td>±10.8%</td>
</tr>
<tr>
<td>Metro</td>
<td>Fairfield</td>
<td>53%</td>
<td>883</td>
<td>22%</td>
<td>±23.5%</td>
</tr>
<tr>
<td>Region type</td>
<td>LGA</td>
<td>Utilisation (after school care)</td>
<td>Total approved places</td>
<td>Response rate</td>
<td>CI width</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------</td>
<td>---------------------------------</td>
<td>-----------------------</td>
<td>---------------</td>
<td>----------</td>
</tr>
<tr>
<td>Metro</td>
<td>Wollondilly</td>
<td>52%</td>
<td>256</td>
<td>43%</td>
<td>±36.3%</td>
</tr>
<tr>
<td>Regional</td>
<td>Kempsey</td>
<td>48%</td>
<td>194</td>
<td>67%</td>
<td>±21.2%</td>
</tr>
<tr>
<td>Regional</td>
<td>Lismore</td>
<td>46%</td>
<td>732</td>
<td>25%</td>
<td>±13.8%</td>
</tr>
<tr>
<td>Regional</td>
<td>Tweed</td>
<td>43%</td>
<td>843</td>
<td>35%</td>
<td>±7.2%</td>
</tr>
<tr>
<td>Regional</td>
<td>Shoalhaven</td>
<td>34%</td>
<td>837</td>
<td>28%</td>
<td>±11.9%</td>
</tr>
<tr>
<td>Regional</td>
<td>Wingecarribee</td>
<td>33%</td>
<td>264</td>
<td>33%</td>
<td>±29.7%</td>
</tr>
<tr>
<td>Regional</td>
<td>Goulburn Mulwaree</td>
<td>19%</td>
<td>207</td>
<td>50%</td>
<td>±3.4%</td>
</tr>
<tr>
<td>Regional</td>
<td>Nambucca</td>
<td>19%</td>
<td>139</td>
<td>100%</td>
<td>±0%</td>
</tr>
</tbody>
</table>

Source: OSHC Provider Survey (2017), Deloitte Access Economics

Figure 3-12 and Figure 3-13 show the mean and 95% confidence intervals for the average utilisation rate for before and after school care services in the sample. 31 LGAs have only one observation in the sample thus cannot be used to derive the confidence interval (excluded in Table 3-6). These are represented by a single dot (i.e. no error bars) in the figures below. The mean and confidence intervals have been adjusted for the weights and the finite sample correction at LGA levels.

Figure 3-12 Mean and confidence intervals for the average utilisation rate for before school care at top 50 LGAs

Source: OSHC Provider Survey (2017), Deloitte Access Economics

12 31 LGAs have no representation in the sample are not displayed in these charts.
Figure 3-13 Mean and confidence intervals for the average utilisation rate for after school care at top 50 LGAs

![Average utilisation (After School Care)](image)

Source: OSHC Provider Survey (2017), Deloitte Access Economics

Utilisation across NSW LGAs for after school care is also presented visually in Figure 3-14.

Figure 3-14 Estimated level of OSHC utilisation (after school care) in NSW

![Estimated level of OSHC utilisation (after school care)](image)

Source: OSHC Provider Survey (2017), Deloitte Access Economics

By combining the utilisation information from Table 3-15 and Table 3-6 with the primary school student population projection data it is possible to

---

13 LGAs that are grey in colour have missing data
highlight the relationship between average utilisation at an LGA level and projected future demand. This may assist in future decision making regarding the priority areas of interest for the Fund.

Figure 3-15 demonstrates the positive association between the projected growth of primary school enrolments and utilisation of after school care services by LGA. Similarly, Figure 3-16 shows that certain LGAs with higher proportion of families with working parent(s) tend to associated with higher utilisation.
Figure 3-15 Association between projected school age student population and OSHC utilisation in NSW

Figure 3-16 Association between proportion of working caregivers and OSHC utilisation in NSW

Table 3-7 represents key LGAs for more detailed analysis and consultation with respect to undersupply of OSHC provision. This is based on the overall assessment of weighted average utilisation when compared in conjunction with the key metrics discussed and analysed in this section, namely:

- projected primary school student population; and
- the proportion of primary caregivers’ participation in the workforce.

The LGAs are ranked according to the following logic:

- utilisation (after school care) > 70% (median); and
  - projection of primary students enrolment > 40%; or
  - proportion of working families > 60%.

LGAs with no utilisation estimates represent incidences of no or very low response rates, however are still presented here due to high projected growth and/or workforce participation.

Table 3-7: LGAs with high demand for after school OSHC services in NSW

<table>
<thead>
<tr>
<th>LGA</th>
<th>Approved Places</th>
<th>Utilisation (after school care)</th>
<th>Projection of Primary School Students by LGA (% growth 2021 vs 2011)</th>
<th>Proportion of families with working parent(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Sydney</td>
<td>1347</td>
<td>107%</td>
<td>33%</td>
<td>53%</td>
</tr>
<tr>
<td>Ashfield</td>
<td>878</td>
<td>106%</td>
<td>24%</td>
<td>51%</td>
</tr>
<tr>
<td>Waverley</td>
<td>1106</td>
<td>104%</td>
<td>39%</td>
<td>55%</td>
</tr>
<tr>
<td>Liverpool</td>
<td>1957</td>
<td>102%</td>
<td>24%</td>
<td>44%</td>
</tr>
<tr>
<td>Burwood</td>
<td>644</td>
<td>94%</td>
<td>44%</td>
<td>47%</td>
</tr>
<tr>
<td>Hurstville</td>
<td>991</td>
<td>93%</td>
<td>23%</td>
<td>50%</td>
</tr>
<tr>
<td>Willoughby</td>
<td>1143</td>
<td>93%</td>
<td>12%</td>
<td>51%</td>
</tr>
<tr>
<td>Lane Cove</td>
<td>679</td>
<td>92%</td>
<td>31%</td>
<td>58%</td>
</tr>
<tr>
<td>Rockdale</td>
<td>965</td>
<td>87%</td>
<td>29%</td>
<td>46%</td>
</tr>
<tr>
<td>Randwick</td>
<td>2630</td>
<td>86%</td>
<td>29%</td>
<td>54%</td>
</tr>
<tr>
<td>Ku-Ring-Gai</td>
<td>3356</td>
<td>82%</td>
<td>17%</td>
<td>54%</td>
</tr>
<tr>
<td>Leichhardt</td>
<td>1751</td>
<td>82%</td>
<td>24%</td>
<td>57%</td>
</tr>
<tr>
<td>Narrabri</td>
<td>70</td>
<td>82%</td>
<td>4%</td>
<td>52%</td>
</tr>
<tr>
<td>The Hills Shire</td>
<td>3741</td>
<td>82%</td>
<td>31%</td>
<td>59%</td>
</tr>
<tr>
<td>Albury</td>
<td>378</td>
<td>80%</td>
<td>0%</td>
<td>56%</td>
</tr>
<tr>
<td>Warringah</td>
<td>3335</td>
<td>80%</td>
<td>10%</td>
<td>60%</td>
</tr>
<tr>
<td>Ryde</td>
<td>2200</td>
<td>79%</td>
<td>34%</td>
<td>54%</td>
</tr>
<tr>
<td>Wagga Wagga</td>
<td>557</td>
<td>78%</td>
<td>8%</td>
<td>57%</td>
</tr>
<tr>
<td>Canterbury</td>
<td>1413</td>
<td>78%</td>
<td>31%</td>
<td>37%</td>
</tr>
<tr>
<td>Hunters Hill</td>
<td>433</td>
<td>77%</td>
<td>-3%</td>
<td>54%</td>
</tr>
<tr>
<td>Blacktown</td>
<td>4717</td>
<td>76%</td>
<td>25%</td>
<td>48%</td>
</tr>
<tr>
<td>Location</td>
<td>Population</td>
<td>75%</td>
<td>74%</td>
<td>62%</td>
</tr>
<tr>
<td>--------------</td>
<td>------------</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Camden</td>
<td>1262</td>
<td>75%</td>
<td>74%</td>
<td>62%</td>
</tr>
<tr>
<td>Parramatta</td>
<td>2132</td>
<td>75%</td>
<td>41%</td>
<td>43%</td>
</tr>
<tr>
<td>Marrickville</td>
<td>1865</td>
<td>75%</td>
<td>32%</td>
<td>51%</td>
</tr>
<tr>
<td>Kogarah</td>
<td>780</td>
<td>74%</td>
<td>15%</td>
<td>52%</td>
</tr>
<tr>
<td>Holroyd</td>
<td>1619</td>
<td>74%</td>
<td>33%</td>
<td>42%</td>
</tr>
<tr>
<td>Hornsby</td>
<td>4315</td>
<td>74%</td>
<td>14%</td>
<td>58%</td>
</tr>
<tr>
<td>Pittwater</td>
<td>895</td>
<td>72%</td>
<td>11%</td>
<td>61%</td>
</tr>
<tr>
<td>Campbelltown</td>
<td>1312</td>
<td>72%</td>
<td>22%</td>
<td>47%</td>
</tr>
<tr>
<td>Lake Macquarie</td>
<td>2361</td>
<td>71%</td>
<td>5%</td>
<td>54%</td>
</tr>
</tbody>
</table>

3.1.5 Response to qualitative questions

This section provides further analysis of responses on the qualitative issues that impact supply and demand beyond capacity and attendance metrics.

**83.1% of the survey respondents indicated that they currently have capacity to enrol additional students.** The follow up question in the survey sought their level of agreement with a number of potential reasons for the spare capacity existing.

Figure 3-18 identifies availability of alternative care/activities as the main driver for spare capacity highlighting that the market is characterised by
non-market solutions (grandparents and share care) as well as substitutes, including extra-circular activities.

Figure 3-18 Reasons of services not operating at full capacity

Source: OSHC Provider Survey (2017), Deloitte Access Economics

The responses to the options in Figure 3-18 do not vary significantly across services with different capacity levels.

Notably, approximately 20% of the services agreed that they "do not have the physical capacity to care for more students", highlighting the potential structural barrier in absorbing unmet demand. Logically, if an oversupply is prevalent and excess capacity exists then structural barriers such as infrastructure (physical capacity) will be largely irrelevant.

Table 3-8 identifies the LGAs where responses for agree and strongly agree are recorded.

Table 3-8 Top LGAs with responses of “agree” or “strongly agree” to capacity constraint upon asking the reason of not operating at full capacity.

<table>
<thead>
<tr>
<th>LGA</th>
<th>Number of responses of “agree” or “strongly agree”</th>
<th>Total sample size by LGA</th>
<th>Proportion in sample by LGA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warringah</td>
<td>3</td>
<td>4</td>
<td>75%</td>
</tr>
<tr>
<td>Randwick</td>
<td>3</td>
<td>7</td>
<td>43%</td>
</tr>
<tr>
<td>Marrickville</td>
<td>3</td>
<td>9</td>
<td>33%</td>
</tr>
<tr>
<td>Hornsby</td>
<td>6</td>
<td>19</td>
<td>32%</td>
</tr>
<tr>
<td>Wyong</td>
<td>3</td>
<td>10</td>
<td>30%</td>
</tr>
<tr>
<td>Newcastle</td>
<td>4</td>
<td>14</td>
<td>29%</td>
</tr>
<tr>
<td>Gosford</td>
<td>3</td>
<td>11</td>
<td>27%</td>
</tr>
<tr>
<td>Parramatta</td>
<td>3</td>
<td>11</td>
<td>27%</td>
</tr>
</tbody>
</table>
Table 3-9 shows that close to half of the services indicated that they have increased advertising to attract new demand. However, only 2% of the services have lowered their price. In fact, 67.6% of the services said they had increased their price in the past two years.

**Table 3-9 Actions taken by services to attract demand**

<table>
<thead>
<tr>
<th>Actions taken</th>
<th>Number</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>No action</td>
<td>87</td>
<td>21.5%</td>
</tr>
<tr>
<td>We have advertised more</td>
<td>195</td>
<td>48.3%</td>
</tr>
<tr>
<td>We have lowered our price</td>
<td>1</td>
<td>0.2%</td>
</tr>
<tr>
<td>We have advertised more and we have lowered our price</td>
<td>8</td>
<td>1.9%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>43</td>
<td>10.6%</td>
</tr>
<tr>
<td>Not answered</td>
<td>70</td>
<td>17.3%</td>
</tr>
</tbody>
</table>

Source: OSHC Provider Survey (2017), Deloitte Access Economics
Figure 3-19 shows the responses to why services have not lowered their price with financial viability the most strongly agreed concern. It is also widely perceived that lowering price would not increase demand.

**Figure 3-19 Reason for not lowering prices**

Source: OSHC Provider Survey (2017), Deloitte Access Economics

Financial viability is central to determining prices. Figure 3-20 shows the ranking of factors in setting price. The two factors related to cost (wages, and others) have attracted highest rankings. The ability for parents and carers to pay also appears an important consideration. Conversely, competitor prices are not highly regarded, echoing the mixed responses to “there are other OSHC services in the area” depicted in Figure 3-18.

**Figure 3-20 Rankings of factor in setting prices**

Source: OSHC Provider Survey (2017), Deloitte Access Economics
3.2 Drivers of demand and supply

3.2.1 Parent and carer survey results

Understanding the factors that influence family need for OSHC services is key to informing any analysis of demand and supply for OSHC services. The parent and carer survey was designed with this in mind, and provides valuable contextual information for this purpose. The survey results paint a telling picture of:

- how families are using OSHC services;
- what may prevent families from enrolling children into services;
- employment and work arrangement implications for families; and
- instances of multi-generational household arrangements.

These themes and survey results are ultimately not definitive, and cannot be used to make broader population inferences. However, they do represent valuable insights into the significance families place on different considerations regarding OSHC services and how they respond when they have an inability to secure their desired level of OSHC service provision.

3.2.1.1 Overview

The parent and carer survey results highlight the combinations of service offerings families use to meet their OSHC needs. More than a quarter of survey respondents indicated they are reliant on before school, after school and vacation care simultaneously. Further, one third of parents and carers accessed multiple OSHC providers to secure the level of service provision they need – indicating a mismatch of need and availability.

Notably, the relationship between family arrangements, workforce participation and access to OSHC is made clear. More than 80% of respondents indicated they would increase their hours of work if their OSHC requirements could be met.

Across the 455 parents and carers who responded, a range of barriers exist to accessing OSHC were identified, including:

- 78% (355) flagged affordability, with this being felt more so in after school care;
- 46% (209) indicating the hours of OSHC service operation being incongruent with family needs;
- 42% (191) indicating the quality of the OSHC service offering as not meeting family expectations; and
- 34% (155) and 35% (159) indicating proximity to schools and work respectively as constraining factors.

The significance of these barriers highlight the role family, work and community characteristics play in impacting the relationship between supply and demand of OSHC.

Almost 30% of parents and carers who responded indicated that they had applied for an OSHC place and been unsuccessful. These respondents were dependent on sourcing alternative arrangements such as friends and relatives, reducing hours of work and/or rearranging work hours.

For 52% (237) of respondents, parental supervision, grandparents, friends or nannies were considered sufficient for their needs. 34% (155) of respondents indicated an aversion to the financial impost of OSHC and 25%
(114) of respondents use extra-curricular activities as alternative arrangements.

In all, these results reinforce the relationship between OSHC service provision and workforce participation – while highlighting the important role extended families play in relieving pressures of affordability and accessibility when it comes to OSHC.

3.2.1.2 OSHC service usage

The parent and carer survey results indicate that of the 455 respondents across NSW:

- 34% (155) use multiple OSHC services;
- 45% (205) did not currently use any form of OSHC service; and
- 80% (364) indicated they would increase their hours of work if OSHC requirements could be met.

Further, the survey reveals that 56% of respondents who were unable to secure the level of OSHC provision they require typically place their children on two or more waiting lists. This suggests that waiting lists may fail to paint an accurate picture of demand and could, in some situations, overstate the extent to which additional places are required in some communities.

Table 3-10 provides the current care types used by parents and carers, including before school, after school and vacation care. The use of after school and vacation care was most prevalent with 41% and 38% of respondents indicating usage of each, respectively. Before school care was the least utilised service with only 26% of respondents indicating current usage. These results are broadly consistent with the aggregate trend demand estimations and pricing trends derived from the service provider survey results.

Table 3-10 Use of OSHC services

<table>
<thead>
<tr>
<th></th>
<th>Before school care</th>
<th>After school care</th>
<th>Vacation care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>120</td>
<td>188</td>
<td>173</td>
</tr>
<tr>
<td></td>
<td>26%</td>
<td>41%</td>
<td>38%</td>
</tr>
<tr>
<td>No</td>
<td>335</td>
<td>267</td>
<td>282</td>
</tr>
<tr>
<td></td>
<td>74%</td>
<td>59%</td>
<td>62%</td>
</tr>
<tr>
<td>Total</td>
<td><strong>455</strong></td>
<td><strong>455</strong></td>
<td><strong>455</strong></td>
</tr>
<tr>
<td></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: Parent and carer survey, Deloitte Access Economics
Note: 205 (45% of) respondents use no OSHC service.

Additionally, these results indicate that the use of services is not uniform and ultimately the use of OSHC services is unique to various family settings, and work and lifestyle commitments. For example, 16% of parents/carers enrolled their children in all – before school care, after school care and vacation care – options. Table 3-11 provides a profile of the combinations of services utilised by families.
Table 3-11 Combination of care types used

<table>
<thead>
<tr>
<th>Combination of care</th>
<th>Number of parents/carers that use OSHC services</th>
<th>Proportion of parents/carers % that use OSHC services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before school care only</td>
<td>12</td>
<td>3%</td>
</tr>
<tr>
<td>After school care only</td>
<td>41</td>
<td>9%</td>
</tr>
<tr>
<td>Vacation care only</td>
<td>37</td>
<td>8%</td>
</tr>
<tr>
<td>Before school and after school care</td>
<td>24</td>
<td>5%</td>
</tr>
<tr>
<td>Before school and vacation care</td>
<td>13</td>
<td>3%</td>
</tr>
<tr>
<td>After school and vacation care</td>
<td>52</td>
<td>11%</td>
</tr>
<tr>
<td>All services</td>
<td>71</td>
<td>16%</td>
</tr>
<tr>
<td>No services</td>
<td>205</td>
<td>45%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>455</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: Parent and carer survey, Deloitte Access Economics

It should be noted that the current level of service use does not reflect the extent of demand for OSHC. That is, nearly half of respondents (48% or 218) indicated a desire to enrol their children in additional OSHC sessions. However, 29% (131) of respondents indicated that they had applied for an OSHC place and been unsuccessful.

Figure 3-21 highlights the implications for 131 respondents who were unable to secure OSHC services that met their requirements.

Of these 131 respondents:

- all indicated they would participate in a greater level of work if they were able to enrol their children in additional OSHC sessions;
- 83% (109) indicated a reliance on friends (share care) and relatives in lieu other forms of care;
- 66% (86) indicated that they gave up work; and
- 65% (85) reduced their hours of work or rearranged work hours to look after their children instead of other forms of care.
Figure 3-21 Responses to an inability to secure OSHC requirements

Source: Parent and carer survey, Deloitte Access Economics

Figure 3-22 highlights the barriers faced by 218 respondents when attempting to secure additional OSHC services. Key findings with respect to barriers from the respondents were:

- 78% (170) indicated affordability of OSHC is a key concern, particularly for after school care; and
- A lack of available services for 60% (131) is also highlighted as a significant concern for families, particularly those who use after school care services.

Other barriers to families engaging in OSHC services identified by the respondents were hours of operation (46%), quality of the service (42%) and proximity to school (34%) and work (35%).

---

14 (N=X) shows the number of respondents which selected the option for at least one type of care (i.e. before, after or vacation care). The columns show the number that selected the option for a particular type of care as a percentage of the total respondents to the question (i.e. ‘Responses to an inability to secure OSHC requirements’).
Figure 3-22 Barriers to enrolment

Source: Parent and carer survey, Deloitte Access Economics

Figure 3-23 highlights the reasons that 237 respondents gave for not seeking additional OSHC services over and above current usage.

Of these respondents:

- 67% (158) indicated that they did not require additional OSHC service provision;
- 52% (123) stated that their existing arrangements suffice, such as parental supervision, grandparents, friends or nannies meeting their care needs;
- 34% (81) stated the financial impost of care was preventing further uptake of OSHC;
- 25% (59) have their children attend extra-curricular activities instead;
- 11% (27) indicated issues relating to the quality of services dissuaded seeking additional OSHC service provision; and
- 11% (26) indicated OSHC services were unable to meet their cultural needs.

\[\text{(N=X)}\] shows the number of respondents which selected the option for at least one type of care (i.e. before, after or vacation care). The columns show the number that selected the option for a particular type of care as a percentage of the total respondents to the question (i.e. ‘Barriers to enrolment’).
3.2.2 Findings from stakeholder consultation

3.2.2.1 Supply and demand observations at an area level

Ashfield

There were mixed perspectives across schools within Ashfield as to where current supply of OSHC services was sufficient to meet the needs of the community. Several schools felt they had already met existing capacity while others cited that the recent opening of new services had reduced pressure within the system.

All schools agreed that in the context of increasing population density in the area, further expansions to service provision would be required to meet future demand. It was noted that the area was becoming increasingly populated with young working families. However, it was also observed that the area was quite transient, with families renting in the area and then buying a property further from the city – making it difficult to predict demand.

Surveying of parents and carers, undertaken by services and schools, in the area indicated that demand for OSHC would continue to grow. Observations were also made that parental perceptions of the quality of services in the area had increased, which may also have flow on impacts for demand. All principals reiterated that parents/carers were not yet alerting schools that there was a lack of OSHC places in the area.

Existing providers stated that expansion of their services was challenging due to infrastructure limitations. Overall, observations across schools and providers were that Ashfield is beginning to reach capacity for OSHC services but is not yet at crisis point.

16 \( N=X \) shows the number of respondents which selected the option for at least one type of care (i.e. before, after or vacation care). The columns show the number that selected the option for a particular type of care as a percentage of the total respondents to the question (i.e. 'Reasons for not seeking additional OSHC provision').
**Botany Bay**

Demand for OSCH in Botany Bay was observed to be increasing, driven by significant construction activity in the region and rising housing density. Providers in the area noted that they were quickly reaching capacity, with services operating at between 90 and 97%, and they felt this was consistent across the region.

Providers stated that they expected the trend in increasing demand to continue, noting they were already maintaining waiting lists for up to two years away. It was suggested that families could typically be guaranteed a place if they applied 12 months in advance.

One school noted that restrictions on preschool students using school based services caused difficulties for families. By not allowing preschool students to access the OSHC service, families were left with one year between child care and schooling in which alternative arrangements must be sought.

**Cessnock**

Schools in Cessnock noted that demand for OSHC services have historically been low, with between 5% and 20% of school families using the services available. Paired with the low population growth in the area, this has resulted in steady and consistent availability of services.

However, with 1,000 new dwellings currently being developed in the area, demand for services is expected to significantly increase in the short term. One service is already operating at capacity. It was also noted by both schools consulted that their facilities available to provide OSHC services on site were either below standard or non-existent and wouldn’t be able to support any future expansion. This will potentially drive an impending risk of under-supply in the region.

It was noted that demand in the region was dependent on industry trends, particularly mining. Currently, approximately 50% of school families had working parents/carers and required care. Families and neighbours were observed to be providing some level of alternative care.

Schools noted that in the near future, additional OSHC services in the area would be welcome. One provider stated they felt they could open a new service that would service three additional school communities across the region that would be sustainable, but required a transport solution.

Transport was noted as one potential barrier to expansion in Cessnock, with the services and schools located some distance apart and no operating bus service that could support the expansion for OSHC.

**Dubbo**

Demand for OSHC in Dubbo was observed to be slowly increasing, but overall, remaining at very low levels. A provider offered that it had taken 4-5 years to build their service from one place to ten places. Similarly, a school principal noted that ‘there is no culture of after school care in this region’ despite estimating that 70-80% of families had working parents/carers.

It was suggested that alternative care arrangements – particularly other families, after school classes or grandparents – would remain the primary form of care in the region. This was not understood as a reflection of cost
aversion to OSHC or quality concerns, but rather community preference and culture.

Providers noted that there were also an increasing number of services being provided – with four schools in the area now offering OSHC on site. Schools consulted were not anticipating expansion in the near future.

**Fairfield**

There were slightly mixed observations relating to the demand for OSHC services in Fairfield across the schools consulted. One school, which offered free after school care, was at capacity and maintained a waiting list which was increasing over time. However, this school observed that the free of charge model, which was serviced by school teachers, was unsustainable and risked overworking their staff. They were unsure if demand would remain if they began to charge a fee.

The other two schools had observed decreasing demand for services, with one school's service ceasing operation last year. While there was recognition that families had been put out when the service had folded, leaving them with only three weeks to find alternative care arrangements, it was also acknowledged that the capacity had been found relatively easily in other services.

Given this, there were no expectations for expansion in the near future. Interestingly, one school observed that they would like to offer OSHC at their site as they felt this would increase their offering to the community. However, they could not yet garner sufficient demand for the service and ‘prove their case’ to the Department. This school was not promoting alternative OSHC arrangements in efforts to increase demand at their school.

In regards to general demographic trends, it was observed by schools that catering for a growing refugee population and providing appropriate wrap around services would be increasingly important. It was also noted that cost may be a prohibitive factor for families in this region – also supporting the popularity of the free of charge service currently offered. Reliance on family support for alternative care was noted as the most common occurrence, including more formal Family Day Care arrangements.

**Marrickville**

The perception across Marrickville was that there is capacity across existing services to cater for current demand. However, with increasing population in the area – and particularly an influx of young families – it is expected that over the next two to five years an expansion of services may be required.

There was relatively low demand for OSHC generally, with between 7% and 20% of school families currently utilising the service. Schools consulted with noted that services were not currently operating at capacity, but that demand for services were steadily increasing. It was also noted that families had been voicing demand for increased access to vacation care.

Providers consulted with were slightly more concerned with the pace of current population growth, indicating that they would be at capacity by next year. In particular, it was stated that demand for kindergarten places had increased significantly – requiring a waiting list to be used for the first time. However, it was noted that there were a lot of services offered in the area so there was flexibility for families.
North Sydney

North Sydney was found, universally across those consulted with, to be an area in which excess demand and limited supply was causing families to be excluded from OSHC services. This undersupply was consistent across after school care, before school care and vacation care.

The high demand for OSHC services was stated to be driven by increasing population growth in the region, as well as a high proportion of working parents/carers. The demand was expected to continue to increase over time, with waiting lists continuing to grow.

All schools noted that the primary constraint to their expansion was space – with limited opportunity to extend either within schools or into the broader community. The North Sydney Council agreed with the perspective that space is the constraining factor within schools and went further to indicate that space in the community itself is also constrained. The current density of North Sydney LGA means there is limited land or sites available for constructing new OSHC services. Once example cited indicated that a recently proposed OSHC development was rejected by members of the local community residing close to the proposed site due to existing traffic congestion in the area and a lack of parking facilities.

One provider noted that enrolments at their school had grown from 350 to 900 places over the past 12 years, providing increased pressure on the service to cater for this growing demand. Their waiting list was currently at 40, and the service was expecting this to increase by an additional 25 places next year. There is typically a 12-18 month wait for a place.

North Sydney Council has provided access to OSHC services on sites owned by the Council to assist with accommodating the demand in the local community.

Schools and providers observed that families had to find alternative care in many circumstances. Given the high SES population in the area, private in-home care arrangements were popular, as well as after school classes. However, it was also observed that some parents and carers chose not to return to work due to a lack of care options.

Parramatta

Demand for OSHC services within Parramatta was observed to be increasing. Interestingly, schools felt there was existing capacity, even if this was rapidly decreasing. However, providers consulted with stated that they were already reaching the threshold limit and some families were unable to access care. The Cumberland City Council supports these views regarding increasing population projections and likely demand for OSHC services in this community.

It was also noted that higher density housing projects were in development, but not yet completed. Once these developments are operational, demand is expected to increase further.

Within Parramatta, there was a number of private OSHC providers operating off school sites. These providers catered for families working in the city or at large Parramatta employers. The services used privately chartered buses to transfer students from schools. Several of these services
were operating at capacity and were turning away families each day. Physical infrastructure was the main barrier to expansion.

The vast majority of families in the area were expected to have working parents/careers. However, only approximately one third of school families were stated to be using OSHC services, with grandparents and other families also used as alternative care arrangements by a high number of families.

Cumberland City Council, peripheral to the Parramatta City Council, operates seven before and after school services and five vacation programs across a combination of school and council-owned sites. Infrastructure constraints are prevalent on school sites where OSHC services are sharing facilities used by schools during the day. This is operationally burdensome with supervisors needing to pack and unpack room contents each day to ensure room is in working order for the school class the following day.

Cumberland City Council has also identified increasing lease costs likely to impact viability of operating some OSHC services on school sites. This will have a direct impact on the availability of places in this OSHC community. Furthermore, any design for current and future school developments must include space for dedicated OSHC places given the difference in regulatory requirements between school and OSHC.

**Port Stephens**

Of the two schools consulted in Port Stephens, there was a general perception that there was existing capacity for OSHC places within the region, resulting in sufficient service provision. One provider had recently opened and was approved to accommodate for 35 places but was only receiving 3-5 permanent enrolments and 3.5 casual enrolments on average.

One provider in the area noted that they reached capacity on some afternoons, and kept waiting lists for this case. This provider indicated that they were not aware of other providers in the area so did not refer families to the other services with capacity.

However, both schools expected demand for places to increase in the near future, particularly as affordable housing and jobs in the area increased. It was noted that before school care may become an increasing priority for families as it is not currently offered at all services. Despite this expected growth in demand, it was not expected that new services would be required.

Across the area, demand for places within schools was relatively low, with an average of 10% school families expected to use OSHC services. It was observed that this may be a function of the high level of community cohesion, with families often relying on each other for care rather than using formal care arrangements. Neither school had received any complaints from parents and carers regarding service accessibility.

The Port Stephens Council operates OSHC services in this LGA and indicated after school care and vacation care services were experiencing capacity constraints relative to demand. The Royal Australian Air Force (RAAF) base at Williamtown is a large employer in this LGA increasing the demand for OSHC due to many families not having extended family support living close by.
Woollahra

Current OSHC service provision across Woollahra was found to be at capacity, with local OSHC providers constrained by space. Priority of access considerations were being utilised by all providers consulted with in the region to ensure access was given to students with particular needs. It was noted that an increase in students with additional needs had been observed within the area in recent years.

Woollahra providers also noted that high quality staff were difficult to attract in the area, particularly given the split shift requirements and low wages. However, the largest barrier to expansion is space, especially on school grounds. It was predicted that families would increasingly be unable to access services over time unless new providers were established or schools found ways to better utilise their space.

3.2.2.2 Primary drivers of demand

As an overarching finding, demand was typically reported as higher on Tuesdays, Wednesdays and Thursdays. Consistently, after school care was more likely to be operating at capacity than before school care or vacation care. These consultation findings are in alignment with the provider survey findings outlined in section 3.1

Reflections on preferences of parents and carers

At a high level, the factors identified by both principals and providers that influenced the nature of demand for OSHC services included:

- a community culture of sharing after school care responsibilities between families as opposed to using formal care arrangements;
- employment rates within the area;
- population of the immediate area; and
- proximity to schools, workplaces (such as hospitals, army bases, large employment complexes) or transit points (train lines).

Language barriers were noted by several providers as a barrier to engaging properly with families and supporting demand.

Strategies for increasing demand

Providers noted various methods that allowed them to offer a differentiated service to increase demand included:

- offering a high quality service;
- offering a tailored service – including gardening, mentoring, environmental programs, especially for older students;
- offering a service in a convenient location (such as on a school site or at a workplace);
- offering discounts for certain student types (i.e. siblings); and
- offering flexible pricing (such as charging by the hour).

3.2.2.3 Barriers and enablers to supply

Infrastructure

When asked what was prohibiting services expanding to cater for excess demand, the vast majority of responses were centred on infrastructure and access to an appropriate space that would meet regulatory requirements. This was common across both principals and providers.
There was some level of frustration that OSHC services were often expected to make do with buildings that were not purpose built. Several providers identified a cultural issue in that schools did not consider OSHC an essential component of their service offering and as such, did not consider the service in planning.

Services operating on school grounds often reported difficulties in finding appropriate space for the service, particularly if there was not a dedicated OSHC location. Before and after school extra-curricular activities (such as music or dance lessons) were indicated in a small number of instances (3) as preventing access to school spaces for OSHC.

Services operating outside school grounds noted that while onsite provision was in most cases preferable due to the convenience for families, there were tensions with space on school grounds being used for extra-curricular activities or simply not being available. It was also observed that the regulatory requirements for OSHC space made this particularly difficult – for instance, one school could accommodate 750 students during the day, but only 150 students for OSHC.

A number of providers noted that the space they were allocated was not suitable for OSHC – lacking kitchen space or facilities to store resources. One school stated that using the preschool as a dual-purpose OSHC service was less than ideal as the toilets were not appropriate for school aged students.

One principal noted that they wished to apply for the Fund to support an upgrade of facilities (i.e. adding a kitchen) but was not confident in a positive outcome as they were currently under-capacity. This highlights the potential circular nature of demand and supply, in that better facilities or quality of service may drive increased demand for services.

**Regulation**

Regulation was often noted as a protective device for the OSHC provider, allowing them to retain quality service provision and was not framed as a prohibitive factor. However, many providers did note that the regulated space requirements, paired with a lack of available infrastructure, was the key impediment to expansion.

Various principals suggested that even when funding was not a barrier to expanding infrastructure, finding the space into which to expand usually was. Schools that did not yet offer an OSHC service also noted that while the Fund was useful to support expansion of existing services, it was not sufficient to enable a new purpose built space to be developed.

Several principals and providers observed that the current waiver to the OSHC space regulations that was established for existing services when the NQF was introduced is a major barrier to expansion. The prior regulatory requirements were more permissive, and are retained until the service modifies its infrastructure in any way. As such, some services found themselves in a position that even if they expanded their space they would actually see a reduction in their approved maximum places, as they would lose their waiver.

There were also some concerns raised about the advantages given to NFP providers through only having to pay half the licensing fee. This was raised by small for profit community providers.
Staffing

Access to staff was not frequently cited as a barrier to expansion. However, several providers did state they found it difficult to attract and retain appropriately qualified staff. It was noted that the limited hours of operation, split shifts, earning and career development potential made it particularly difficult to retain good staff.

Only one metropolitan school cited issues with staffing constraints. This school operated the service from a co-located preschool and used the same staff to deliver OSCH. Staffing constraints required the school to consistently operate under full capacity (30 students, as opposed to their approved places of 55) despite increasing demand.

Other factors

Two schools – in different areas – noted that they had deliberately decided not to offer OSHC at their school as this would reduce demand for existing services in the immediate area and potentially render them unviable, which would have a negative community impact.

Several providers also voiced concerns about the impact of sector consolidation – stating that the recent merging of large OSHC providers in NSW posed risks to the quality and diversity of the sector.

3.2.2.4 Managing excess demand

All providers that were at capacity kept waiting lists for places. The majority of providers utilised some form of priority of access in offering places first to certain cohorts – in particular for (though in different orders):

- siblings;
- younger students;
- single parent/carer families;
- students with disability;
- students enrolled at the school site; and
- working families

Following the priority of access list, places were typically allocated on a ‘first in, best dressed’ basis. It was noted that in areas of high demand, waiting lists were often not accurate reflections of demand as families applied at multiple services and for every session with hopes this would help them secure a place more quickly. This resulted in a high degree of movement on the waiting lists.

Once offered a place, common practice was for services to require payment for the place before it was guaranteed. The time period to make this decision varied between two days and two weeks.

It was unusual for providers to report that they co-ordinated waiting lists and enrolments with other providers. The exception here was a number of providers that co-located with alternative services on the same school site.

3.2.2.5 Relationships between providers and schools

Relationships between principals and providers were predominately characterised as positive but informal. Schools were typically responsible for providing space for the OSHC provider and marketing. Space was either provided free of charge or through a lease or a license.
The vast majority of principals noted that there was frequent communication with the OSHC provider but that this was most often through incidental means rather than scheduled formal catch ups. While a small number of principals noted that they have no relationship with providers servicing their students, the majority noted that the following information was typically shared:

- information regarding anticipated enrolments;
- any incidents with students; and
- shared information regarding child health issues or safety issues.

A small number of schools and providers reported a more active relationship in which the OSCH service implemented school wide behavioural or learning models, creating a consistent experience for students across school and OSCH.

The primary ways in which providers engaged with the broader school community included sponsoring and volunteering and community and school events. The majority of providers operating on school sites also noted that they regularly attend parent and carer committee meetings.

Both principals and providers noted that space was sometimes a complicating factor in the relationship, particularly if competing priorities arose (such as the school requiring the school hall for an alternate activity, resulting in a shift of OSCH for the night).

There were very limited observations from principals of low quality OSCH service providers, or needing to navigate parent and carer complaints.

3.2.2.6 Observations on role of Department

One provider noted that funding was not sufficient for services in low SES areas where it is difficult to charge fees, and funding rates should reflect this constraint. Another suggested that a dedicated liaison officer to support the relationship between providers and schools would be beneficial.

One Catholic school noted that the ability to offer a high quality OSCH service was part of their value offering for families, and important in supporting enrolments at their school. However, they noted that despite this, they had very little control over the level and nature of OSCH available.

Principals that had applied for the Fund indicated that the Department was responsive to questions, supporting a smooth experience for schools. However, two schools (in different areas) stated that while they had found the grant useful it had not allowed them to change anything significantly and perhaps more advice on how to maximise the effectiveness of the funding would have been useful.

A number of schools and providers noted that the process for tendering and establishing and OSCH service on a school site was slow, taking an average of six months. This resulted in an inability of the sector to be agile in responding to identified areas of excess demand.

3.3 Future demand and supply

This section considers population growth trends and the expansion plans of services to provide insights into the future demand and supply profile of OSHC provision in NSW.
3.3.1 Population projections

Drawing on Australian Bureau of Statistics (ABS) data, this section explores how demand for OSHC is expected to shift over time.

Figure 3-24 shows the historical and projected growth rate of primary school enrolments in the communities of interest LGAs (including Sydney and Blacktown) provided by the Department.

The high expected growth in the current decade will constitute the most likely source for the increase in demand for OSHC services.

3.3.2 OSHC provider expansion

Drawing on the provider survey, this section provides an overview of expansion plans for providers and underlying barriers or enablers. This will include consideration of how the Fund is supporting expansion.

The provider survey revealed that 75% of the services surveyed maintained their existing level of capacity during the past 12 months while 21% expanded and 3.7% contracted or reduced their provision.

The reasoning associated with maintaining the existing level of provision is outlined in Figure 3-25.

- 57.8% (167) of the services agreed or strongly agreed that they did not have sufficient physical space to expand while 28.6% sighted financial barriers as a reason for limiting expansion;
4.2% (12 services) indicated that profitability and demand were not constraining factors but space/infrastructure was, when deciding not to expand; and among those who could not afford to expand, 61% were aware of the Fund and 53% (37 services) intend to apply, indicating strong interest in the financial incentives provided by the Fund.

A list of services with an intention to expand is provided at Appendix I.

Figure 3-25 Reason of maintaining existing capacity in the past 12 months

Source: OSHC Provider Survey (2017), Deloitte Access Economics

A significant number of the services that maintained their capacity also agreed that there is a lack of demand (46.6%) from parents and carers.

In contrast, the dominant reason for the 21% of the services that expanded is that they anticipated more demand in their area, demonstrating a responsive market if structural barriers are removed or not present.

The availability of physical space to expand appears to be crucial, consistent with consultations conducted with school principals and OSHC providers.
Only 15 services have decreased their capacity in the past 12 months. For these services, there appears to be a mixture of reasons including cost, competition, physical space constraint and control of quality. This is shown in Figure 3-27.

Figure 3-27 Reason of decreasing capacity in the past 12 months

Source: OSHC Provider Survey (2017), Deloitte Access Economics
Figure 3-28 shows the contingency of awareness/application of the Fund and the expansion plan of the services. It can be seen that around half of the services that have expansion plan are aware of the Fund (green), while some services that are unsure about expansion also intend to apply to the Fund.

For services that did not intend to apply to the Fund, the survey tested their perceived impediments. While only a limited number of services responded to this question, a significant proportion raised issues regarding eligibility. The free text answers are detailed in Appendix J.

Source: OSHC Provider Survey (2017), Deloitte Access Economics
4 Conclusions

This section draws together the key insights emerging from the analysis – and any implications for the Department. This research project sought to contribute to a better understanding of the level of unmet demand across NSW, and the contextual issues and barriers facing parents and carers, schools and other OSHC providers.

It reinforces the important role OSHC plays in supporting working families throughout NSW. The underlying drivers of market failure, where supply fails to meet demand, are a combination of systematic and program-level limitations combined with place-based and community characteristics.

4.1 Policy and regulation

This report highlights a range of policy and regulatory issues that impact the relationship between supply and demand in the OSHC market.

The availability of school infrastructure for use by OSHC providers, either in terms of footprint or the limitations applied to its use (for example, classrooms), constrains the ability to meet unmet demand in some communities. It is likely that this is related to schools with small footprints and high enrolments. Specifically, infrastructure constraints that inhibit the expansion of OSHC include:

- physical limitations of existing school infrastructure and footprint;
- use of facilities – localised approaches; and
- capacity limitations due to regulations.

The information gathered in this report regarding school infrastructure constraints is not differentiated between Government and non-Government sectors.

The existing limitations on school infrastructure and footprint are at three levels. The first is the physical ability to construct additional infrastructure on the existing footprint. The second is that where additional footprint is available for new infrastructure, there is insufficient resources (either within existing budget or from dedicated grant funding) to provide the additional requirements. The third is the conflicting choices with respect to expansion of OSHC provision and the associated implications for teaching infrastructure. These implications are likely to be broader than OSHC and extend into future school infrastructure planning policy frameworks.

A key feature of future policy as it relates to OSHC should be a judicious focus on reducing barriers to the use of school facilities (i.e. a focus that has due regard to other school infrastructure priorities).

In some situations, limitations have been placed on the use of available space due to usage conflicts (e.g. school halls used for extra-curricular activities after hours or a desire to maintain classroom format) and policies or preferences that exclude the use of classrooms (for example, due to operational, workforce or parent/carer-related issues).

For those schools with a desire to support or facilitate additional services, and for providers who sought to meet excess demand, consultations identified constraints associated with the Children (Education and Care Services National Law Application) Act 2010 that place a higher benchmark...
on physical space requirements (indoor and outdoor) than is applied in a classroom setting.

OSHC providers, however, noted that they appreciate the regulations as they enable them to provide a quality service and a layer of protection to the service operations.

The role of schools in addressing the availability of infrastructure is important, but in some scenarios, limited, as school communities that face increasing school enrolment growth may have limited short-term responses and require capital investment or operational solutions (for example, transportation of students off-site) to respond. In these scenarios, bespoke, non-schooling solutions, provided by third parties, such as local government or private providers may need to be supported beyond the existing policy responses. It may also be necessary to cross-reference responses under the Fund with future school infrastructure programs.

An additional regulatory issue, in the form of service waivers, inadvertently poses a disincentive to OSHC expansion. The space requirements under former regulations were more permissive and any application which triggers a revision of their service approval is perceived as a risk to existing OSHC providers as it may result in a lower approved maximum places than their current entitlement, impacting on viability.

Staffing was raised as a challenge across many OSHC services. Split shifts, low wages, limited career prospects and thus transience of staff were identified as driving factors which made it difficult to attract and retain qualified staff. In addition, OSHC service staff are required to dedicate large proportions of their time supervising and managing students with complex undiagnosed behavioural issues. This presents resourcing and quality challenges for these services aiming to meet objectives associated with inclusion and family support.

A number of providers noted that responsiveness to the market is dampened as there is a significant time lag associated with opening a new service, as Department tender process typically took a minimum of six months.

4.2 Implications for the Fund

While this project has not reviewed the Fund or its operations, the findings of this research nevertheless have implications for the Fund and its future role and application. With this in mind, there is an opportunity to consider how the Fund can be adapted to meet the challenges of local community and the specific barriers that are prevalent within school communities. Specifically, it may need to consider options that allow for brokered or facilitated solutions that include a greater role for local government or other third party provision to create new supply opportunities.

To focus existing investment, the Fund could be repositioned away from a state-wide focus on increasing total places to a more nuanced approach focused on specific initiatives in priority regions. This has the potential to improve return on investment for the program and achieve the overall objective of the program in meeting unmet demand.

The parent and carer survey identified that the combinations of service offerings families use to meet their OSHC requirements are variable, however demand is likely stronger in after school and vacation care programs. There may be opportunities to incentivise greater delivery at the
program or offering type level, rather than a total service and signal this to the market.

4.3 Implications for further research

An important next step is understanding the specific approaches or strategies that could be employed. This bespoke approach may require a community consultation program to unpack the range of solutions that may be required in each community of interest.

The ability for the Department to communicate directly with NSW Government schools will also provide an opportunity to better understand the nature of barriers associated with infrastructure and the extent to which school-based solutions are achievable. This could take the form of an infrastructure audit (or stocktake) or further consultation on the Use of School Facilities policy.

In addition, continuing to pursue a more comprehensive dataset will be an important step to fully understanding the nature of supply and demand, particularly in metropolitan Sydney. This project set out to undertake the most comprehensive collection as possible and in that regard the Department should continue to pursue the concept of an annual census collection.

The continuing challenge will be the ability for the Department to incentivise or ideally mandate provider responses in the interests of achieving as close to universal coverage as possible. Stronger mechanisms than currently exist will be required to achieve this (e.g. the linking of data provision to funding or regulatory requirements).

In the longer term, the ability to identify the trends in utilisation will increase the analytical capability to align policy interventions with an evidence-base that can support public debate.

4.4 Conclusions

This research provides insights into the communities currently facing an imbalance between demand and supply for OSHC and, where they exist, the origins and drivers of these imbalances. The infrastructure constraints faced by schools and providers appears to be the primary reason why the sector cannot expand to meet parent and carer needs.

The Fund will need to focus on bespoke solutions that provide or facilitate new infrastructure, or create incentives for alternative provisions. It is likely that a new approach to brokering or facilitating these solutions will be a critical mechanism in alleviating current and future supply constraints.

In conclusion, the role OSHC can play in supporting workforce participation relies on ensuring barriers to utilisation are sufficiently low. Importantly, the school will continue to play a leadership role in working with OSHC providers to meet the needs of working families in NSW. The diversity of providers in the market, and their responsiveness to areas of need, will continue to be contingent on the ability to avoid the barriers that prevent a greater supply.
References


Appendix A Provider Survey

1. What is the name of your service?
   <Search Field>
   
   If your service could not be located in the search above, please enter your service name here:

   This question is for all respondents

2. What is the postcode of this service?
   _______________________

   Questions 3 is only for services that manually enter a service name

3. What setting is your service provided in?
   
   o Government school
   o Catholic or independent school
   o Local council
   o Other (please specify)

   This question is for all respondents

4. Is your service?
   
   o Not-for-profit
   o For-profit

   Questions 5-8 are for all respondents

5. Please specify your maximum approved places (that is, the maximum number of children that you are approved to care for in any one session):
   ________ children

6. Please indicate which sessions your service provides:
   
   □ Before School Care
   □ After School Care
   □ Vacation Care

7. How long has your service been operating?
   
   □ Less than 12 months
   □ 12 months to 5 years
   □ 6 to 10 years
   □ More than 10 years

   This question is for all respondents

8. Which of the following best describes the age of children enrolled in your service?
   
   o evenly distributed across year levels
   o mainly children in years kindy – 3
mainly children in years 4 – 6

Question 9 is for service providers that selected Vacation Care in question 6.

9. For the week 22-26 May 2017, how many children attended each session of care that you offer?

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before School Care</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
</tr>
<tr>
<td>After School Care</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
</tr>
</tbody>
</table>

10. During your last vacation care program:
   a. How many places were available for vacation care: ________
   b. How many places were filled: ________

Question 11 is for service providers that selected before school in question 6.

11. What is the standard fee per session per child for before school care at your service?
    $_______

Question 12 is for service providers that selected after school in question 6

12. What is the standard fee per session per child for after school care at your service?
    $_______

Question 13 is for service providers that selected Vacation Care in question 6.

13. What is the standard fee per session per child for vacation care at your service?
    $_______

Questions 14-17 are for all respondents

14. In the past 2 years, have you increased the fees charged to families?
   o Yes
   o No

15. Please rank the following in order in which they impact or influence how you set your fees where 1 is the most important factor and 5 is the least important factor:
   o The ability for parents to pay the fee you charge
   o The strength of the economy
   o The price competitors charge for the same service
   o The cost of wages
   o The other costs of running your business

16. Please specify the number of OSHC educators (in terms of headcount and full time equivalent - FTE) employed by your service during the week 22-26 May 2017. To calculate FTE you will need to know the total number of hours worked in the week and divide this by 38 hours. For example, if you had 380 hours of wages paid, then:

   Total number of FTE = 380 ÷ 38 = 10
17. Do you currently have spare capacity to enrol additional children in your service?
   - Yes
   - No

_Logic_: If ‘yes’ move to Question 26. If no, answer Q18.

The question below is for service providers that answered no to Question 17.

18. Do you keep a waiting list for children requiring before and after school care that you do not have capacity to cater for?
   - Yes
   - No

_Logic_: If “yes’ move to Question 19. If ‘no’ move to Question 24/25 if applicable (related to Question 6 and the selection of vac care) or otherwise to Question 29.

_Questions 19-23 are for service providers that answered Yes to Question 18._

19. How many children were on your waiting list during the week 22-26 May 2017?

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>______</td>
</tr>
</tbody>
</table>

Before School Care

After School Care _______ _______ _______ _______ _______

20. In the past two years, what has happened to your waiting lists?
   - They have increased
   - They have decreased
   - They have remained at the same level

21. What is the average waiting time for a child on a waiting list for before or after school care? Please estimate.
   - 1 term or less
   - 2 terms
   - 3 terms
   - 4 terms or more

22. How often do children on waiting lists for before and after school care get offered a place at your service?
   - Always
23. How often do families on the waiting lists accept these offers for before and after school care?
   - Always
   - Often
   - Sometimes
   - Rarely

24. Do you have a waiting list for your next vacation care program?
   - Yes, how many <enter number>
   - No

25. How often do children on waiting lists for vacation care get offered a place?
   - Always
   - Often
   - Sometimes
   - Rarely

26. My service is not at full capacity because:

<table>
<thead>
<tr>
<th>Reason</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is not enough demand for places</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>There are other OSHC services in area</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>There are alternative before or after school activities available to children (eg dance, sports, language classes etc)</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Many parents use alternative care arrangements (eg grandparents, other family)</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>We do not have the physical capacity to care for more children</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>
We have difficulty finding suitable educators to employ

The care is too expensive for parents in this area

27. What actions, if any, have you taken to attract more families to your service?

- No action
- We have advertised more
- We have lowered our price
- Other (please specify) ____________________________

The following question is for service providers that did not tick “we have lowered our price” in Question 27 and said yes to question 17.

28. We did not lower our price because:

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It would not increase the number of families

It would not be financially viable for our service

The current level of children is sufficient to meet our needs

Attracting more families would lower the quality of our care we can provide

Other ____________________________

All respondents to answer question 29

29. In the last 12 months have you:

- Increased your maximum number of places
- Decreased your maximum number of places
- Maintained your maximum number of places

The following question is for service providers who answered increased your maximum number of places in Question 29

30. We increased our maximum number of places because:

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
We expected it to be profitable or financially sustainable

We had the physical space to expand

Our school or local council received a grant from the Before and After Care School Fund

We anticipated more demand from families in our area

Other

Question 31 is for service providers who answered that they “maintained” in question 29.

31. We have maintained our maximum number of places because:

<table>
<thead>
<tr>
<th>Reason</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expansion was unlikely to be profitable</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>We cannot afford to expand</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>There is a lack of demand from parents</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>There is lots of competition in the market</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>We are unable to find suitable staff</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>We do not have sufficient physical space to expand</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fees charged for premises (schools or other sites) are too high</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Expansion would change my service approval (for example if the service is operating under transitional arrangements)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>It would lower the quality of our care</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Other

The following question is for all respondents

32. Are you aware of the Before and After School Care Fund?

   Yes
The following question is for not-for-profit service providers identified in question 4

33. Now that you are eligible for the Before and After School Care Fund, do you intend to apply?
   - Yes
   - No

The following question is for not-for-profit providers who answered no to question 33

34. What would prevent you from applying for the Before and After School Care Fund?
   - We are still determining our priorities
   - We are waiting on infrastructure approval
   - We do not have any need for the grant
   - The grant is not enough
   - The administration involved in applying is too complex
   - There is uncertainty around the future demand for our services
   - Other (Please specify) _____________________________

This question is for all respondents

35. In the next 12 months are you anticipating that you will:
   - Open a new service
   - Expand your current service
   - Close your current service
   - Unsure

Question 36 is for providers who answered “open a new service“ in Question 35

36. Where will you open a new service

   Postcode __________

The following question is for all respondents

37. Would you be interested in speaking further with us in relation to this study?
   - Yes
   - No

Contact details _____________________________

Please note that all information you provide is confidential and will only be used to make contact with you for the purposes of this study.

End
Appendix B Estimation of the inverse probability weights

This section summarises the result from the probit regression that are used to derive the inverse probability weights for the provider survey. As explained in section 2.1.3, we have modelled the conditional probability of submission as a linear combination of the following predictors (control factors):

- Managing region (Gadigal, Guringai, etc.);
- Region type (metro, regional, etc.);
- Entity type (Company, Sole proprietor, etc.);
- Management type (Private for profit, etc.);
- Capacity quintile dummies;
- Service status effective date;
- Dummy variable to indicate whether the service has been contacted during the follow ups;
- Interaction of the “contacted” dummy and other predictors.

The stabilised inverse probability weights (Hernan et al. 2000; Cole and Hernan 2008) takes the following functional form:

\[
sample\ weight_i = \frac{P(response)}{P(response|control\ factors)}
\]

Where \( P \) stands for probability and response takes one of the two possible values – "Submitted" or "Not submitted" – based on whether the service has submitted to the provider survey. The numerator is the unconditional mean of the submission/not submission rate in the population; while the denominator is estimated based on the following probit model:

\[
P(response|control\ factors) = \phi(\beta_0 + \sum_{k=1}^{K} \beta_k X_{ki})
\]

Where \( \phi(.) \) is the cumulative distribution function of the standard normal distribution, \( X_{ki} \) are the predictors, \( \beta_i \) are the parameters and the dependent variable, \( y \), takes the value of 1 if the service have participated in the survey, and 0 otherwise.

The figure below displays the value of the coefficients (points) along with their 95% confidence intervals (error bars).
Most of the predictors are not significant individually, but the significant collectively. This is shown in the Analysis of Variance (ANOVA) table below.

Table A-1 ANOVA table for the probit model

<table>
<thead>
<tr>
<th>Term</th>
<th>Degree of freDeviance</th>
<th>Residual Degre</th>
<th>Residual Deviance</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing Region</td>
<td>5</td>
<td>20.33</td>
<td>1318</td>
<td>1624.7</td>
</tr>
<tr>
<td>Region type</td>
<td>2</td>
<td>0.55</td>
<td>1316</td>
<td>1624.16</td>
</tr>
<tr>
<td>Entity type</td>
<td>7</td>
<td>121.61</td>
<td>1309</td>
<td>1502.55</td>
</tr>
<tr>
<td>Management type</td>
<td>5</td>
<td>17.58</td>
<td>1304</td>
<td>1484.97</td>
</tr>
<tr>
<td>Capacity quintile</td>
<td>4</td>
<td>18.34</td>
<td>1300</td>
<td>1466.63</td>
</tr>
<tr>
<td>Service Status Effective Date</td>
<td>1</td>
<td>1.25</td>
<td>1299</td>
<td>1465.38</td>
</tr>
<tr>
<td>contacted</td>
<td>1</td>
<td>12.73</td>
<td>1298</td>
<td>1452.64</td>
</tr>
<tr>
<td>Entity type: contacted</td>
<td>4</td>
<td>26.04</td>
<td>1294</td>
<td>1426.61</td>
</tr>
<tr>
<td>Management_type: contacted</td>
<td>1</td>
<td>0</td>
<td>1293</td>
<td>1426.6</td>
</tr>
<tr>
<td>cap_tile: contacted</td>
<td>4</td>
<td>5.56</td>
<td>1289</td>
<td>1421.04</td>
</tr>
<tr>
<td>Service Status Effective Date: contacted</td>
<td>0.24</td>
<td>1288</td>
<td>1420.8</td>
<td>0.62</td>
</tr>
</tbody>
</table>

Source: Deloitte Access Economics
For the purpose of the analysis, certain levels of the entity and management types with limited observations have been collapsed into the “other” category due to the inability of the probit model to estimate coefficients for control variables that perfectly predicts the response type (log likelihood function will be maximized at + or - infinity).

The contacted dummy and its interaction terms are included to account for the statistical bias introduced by the follow up process. Notably, it is observed that sole proprietor/partner services with lower capacity are more likely to complete the survey upon contacted; while many of the contacted but not submitted services are incorporated entities. The figure below shows the comparison of the weights derived from models with and without taking into account the contacted dummy and its interaction terms. It can been seen from the right panel of the chart that contacted partnership/sole proprietor services are often associated with lower weight (red & yellow dots sit below the dashed 45 degree line) to account for their higher probability of submission; while the incorporated entities (green dots) mostly reside above the line, meaning higher weights to compensate their lower probability of submission.

Figure A-2 Comparison of weights derived from models with and without taking into account the effect of follow ups

Source: Deloitte Access Economics

We note that including the contacted dummy and its interaction terms in the probit regression is merely an approximation of the true functional form of the conditional probability function. However, deriving the true functional form from a theoretical perspective is beyond the scope of the analysis and are unlikely to have a significant impact on the result.
Appendix C Parent and Carer Survey

[ALL respondents]
1. What suburb do you live in? ______________

2. What is the postcode for your location? ______________
[Those outside of NSW should not be in the survey]

[ALL respondents]
3. Are you...
   ○ Male
   ○ Female
   ○ Other
4. Are you a parent or primary carer of primary school-aged children?
   ○ Yes
   ○ No
[Those answering NO to Q2 should not be in the survey]

5. What is the employment status of you and your partner (where applicable)?

<table>
<thead>
<tr>
<th></th>
<th>Me</th>
<th>My Partner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full time</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Part time</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Temporary</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Casual</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Self-employed</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Stay-at-home parent</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Unemployed</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Full-time-student</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Retired</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

[ALL respondents]
6. How many primary school-age children are in your care?
   ○ 1
   ○ 2
   ○ 3
   ○ 4
   ○ 5 or more
7. Please select the age group(s) of the school child(ren) in your household.
   - □ 1 to 3 years
   - □ 4 to 8 years
   - □ 9 to 12 years
   - □ 13 to 15 years
   - □ 16 years or above

[Those which did not select option 2 or 3 should not be in the survey]

8. How many adults contribute to the care of your dependent primary school-aged children outside of school hours, including during holiday periods? This refers to unpaid care only – i.e. other parents, guardians or grandparents.
   - □ 1
   - □ 2
   - □ 3 or more

9. What is the employment status of the adults identified in the previous question?

<table>
<thead>
<tr>
<th></th>
<th>Adult 1</th>
<th>Adult 2</th>
<th>Adult 3</th>
<th>Adult 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full time</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Part time</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Temporary</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Casual</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Self-employed</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Stay-at-home parent</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Unemployed</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Full-time-student</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Retired</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. For how many of these children do you require formal care arrangements outside of school hours, including during holiday periods?
   - □ None
   - □ 1
   - □ 2
   - □ 3
   - □ 4
   - □ 5 or more
11. Do you currently use any of the following outside school hours care (OSHC) services?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before School Care</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>After School Care</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Vacation Care</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

[ALL respondents]

12. Have you applied for outside school hours care (OHSC) for your child/children and not been successful in obtaining a place?
   - Yes
   - No

[For YES to Q12]

13. What provision did you make for the care of your child/children in these circumstances?

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Before School Care</th>
<th>After School Care</th>
<th>Vacation Care</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>I relied on grandparents, friends, relatives to provide care</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Gave up work/ chose not to work in order to care for child/children</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>My partner/I reduced our hours of work to accommodate the need to care for our children before and after school</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>We rearranged work hours so that someone could be there before school and someone could be there after school</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>We enrolled our children in extra-curricular activities during these times, e.g. sport, music, dance, coding club, language training, church or community group, etc.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[ALL respondents]

14. Would you like to enrol the child/children in your care in more OSHC sessions beyond what they currently attend?
   - Yes
   - No

[For YES to Q14]

15. What is preventing you from enrolling your child/children in these additional OSHC sessions, i.e. what are the barriers to access?
<table>
<thead>
<tr>
<th>Barriers to accessing out of school hours care services</th>
<th>Before School Care</th>
<th>After School Care</th>
<th>Vacation Care</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are insufficient services in my local area</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>The services are too expensive</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>The operating hours of services do not meet our family needs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>There are no places available at our local services</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>I am concerned about the quality of local services</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>The service does not meet our cultural needs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Services are too far away from my child’s school</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Services are too far away from mine and/or my partner’s place of work</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[For NO to Q14]

16. What reason(s) are there for you not wanting to enrol your child/children in more OSHC sessions than they currently attend?

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Before School Care</th>
<th>After School Care</th>
<th>Vacation Care</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have existing care arrangements (parental supervision, grandparents, friends, nanny etc.) that are sufficient for our needs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>I do not require additional care</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Children in my care prefer not to attend OSHC services</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>I would prefer not to pay for outside school hours care</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Children in my care have extra-curricular commitments during these times, e.g. sport, music, dance, coding club, language training, church or community group, etc.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>The OSHC services do not meet my expectations in terms of quality</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>The OSHC service does not meet our cultural needs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
17. Do you use more than one OSHC service to provide the care that you need? *For example, one OSHC service for 2 days per week and a separate OSHC service for the remaining 3 days in a week? Or a different OSHC service for vacation care?*
   - Yes
   - No

[ALL respondents]

18. Are the children in your care on any waiting lists for OSHC services, including vacation care?
   - Yes
   - No

[For YES to Q18]

19. How many waiting lists have you placed your child/children on?
   - 1
   - 2
   - 3
   - or more

[For YES to Q12]

20. If you were able to enrol your child/children in more OSHC sessions than they currently attend, would you increase the hours you work now and into the near future (0-24 months)?
   - Yes
   - No

[ALL respondents]

21. Is there anything else you would like to contribute to this subject?
   - Yes__________________________
   - No

22. Which of the following best matches your gross annual household income?
   - Less than $15,000
   - $15,000 to $29,999
   - $30,000 to $44,999
   - $45,000 to $59,999
   - $60,000 to $74,999
   - $75,000 to $99,999
   - $100,000 to $149,999
   - $150,000 to $199,999
   - $200,000 to $499,999
   - $500,000 to $999,999
   - $1 million plus
   - Prefer not to answer

23. Please select your cultural background from below.
   - Aboriginal
   - African
   - Australian
   - New Zealander
   - New Zealand Maori
   - North African & Middle Eastern
   - North American
   - North-East Asian (Chinese)
   - North-West European
   - Other Oceanian
   - Pacific Island people
   - South American
   - South East Asian (e.g. Vietnamese, Filipino, Indonesian)
   - Southern and Eastern European
   - Southern and Central Asian (e.g. Indian)
   - Torres Strait Islander
   - Other
   - Prefer not to answer
Appendix D Process to identify communities of interest

To identify communities of interest, a series of metrics have been defined at a LGA level. The metrics used in this analysis are a combination of direct data provided by the Department and metrics defined between the Department and Deloitte Access Economics. These are described in Table D-1 below:

Table D-1 Metrics used to identify Priority LGAs

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Total Place Numbers (by LGA)</td>
<td>Number of approved OSHC places at a particular service location</td>
<td>NSW Department of Education</td>
</tr>
<tr>
<td>Projection of Growth in Primary School Students (% growth 2021 vs 2011, by LGA)</td>
<td>Growth rate under ‘likely’ scenario of primary school aged cohort, by LGA between 2011 (base year) and 2021</td>
<td>Schools Far Horizon (SFH) Enrolment projections, NSW Department of Education</td>
</tr>
<tr>
<td>Coverage of Service Provision (%)</td>
<td>Maximum Total Place Numbers (by LGA) / Projected ‘Likely’ Primary Population (by LGA, 2021)</td>
<td>Deloitte Access Economics</td>
</tr>
<tr>
<td>Proportion of families with working parent(s)</td>
<td>[Couple with children (both working) + Single working parent with children] / Total Families with Children</td>
<td>Australian Bureau of Statistics</td>
</tr>
<tr>
<td>% schools with OSHC Service</td>
<td>Schools with OSHC / All schools</td>
<td>NSW Department of Education</td>
</tr>
</tbody>
</table>

Source: Deloitte Access Economics

Coverage of Service Provision is the lead indicator with Projections of Growth in Primary School Students and Proportion of Families with Working Parents acting as secondary supportive metrics.

Rankings were allocated to each of the indicators, the allocation of which can be found in Table D-2.
Table D-2 Rankings applied to indicators

<table>
<thead>
<tr>
<th>Metric</th>
<th>Range</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projection of Growth in Primary School Students</td>
<td>x% &gt; 20% OR x% &lt; -5%</td>
<td>RED</td>
</tr>
<tr>
<td></td>
<td>10% &gt; x% &gt;= 20%</td>
<td>AMBER</td>
</tr>
<tr>
<td></td>
<td>-5% &gt;= x% &gt;= 10%</td>
<td>GREEN</td>
</tr>
<tr>
<td>Coverage of Service Provision</td>
<td>x% &lt;= 25%</td>
<td>RED</td>
</tr>
<tr>
<td></td>
<td>25% &lt; x% &lt;= 75%</td>
<td>AMBER</td>
</tr>
<tr>
<td></td>
<td>75% &lt; x% &lt;= 100%</td>
<td>GREEN</td>
</tr>
<tr>
<td>Proportion of families with working parent(s)</td>
<td>x% &gt;= 50%</td>
<td>RED</td>
</tr>
<tr>
<td></td>
<td>42% &lt; x% &lt; 50%</td>
<td>AMBER</td>
</tr>
<tr>
<td></td>
<td>32% &lt; x% &lt;= 42%</td>
<td>GREEN</td>
</tr>
</tbody>
</table>

Source: Deloitte Access Economics

Each of these ratings was applied at the LGA level. To determine the LGAs of the highest priority, the below matrix of rankings was used depending on the combination of results across the metrics identified.

Figure D-1: Matrix of rankings used to determine LGAs of the highest priority

<table>
<thead>
<tr>
<th>METRIC</th>
<th>HIGH</th>
<th>MODERATE</th>
<th>LOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>COVERAGE</td>
<td>RED</td>
<td>AMBER</td>
<td>AMBER</td>
</tr>
<tr>
<td>PROJECTION</td>
<td>RED</td>
<td>AMBER</td>
<td>AMBER</td>
</tr>
<tr>
<td>WORKING FAMILY</td>
<td>RED</td>
<td>AMBER</td>
<td>AMBER</td>
</tr>
</tbody>
</table>

Source: Deloitte Access Economics

This approach identified 95 HIGH Priority LGAs, 28 MODERATE LGAs and 1 LOW Priority LGA of a total 128 LGAs in NSW where OSHC services are currently approved to operate. As noted, the Department identified ten (10) Priority LGAs for the purposes of this consultation strategy.
Appendix E Provider Consultation Questionnaire

Supply and Demand

1. Based on your service’s maximum capacity (per the records we have access to) do you currently have spare capacity for outside school hours care (OSHC) places at your service? Yes/No
2. As far as you are aware, is this true for all services in your area? 
   For Q1 answered 'No', this implies an Undersupply scenario where the demand for placing a child in an OSHC service exceeds the supply available in the local community.
3. Is the demand for OSHC services consistent across all sessions?
   For example, do you have equivalent/equal demand for before and after school care on all days?
4. In your opinion, what are the reasons that providers do not respond to demand by increasing the number of places?
   For example, regulatory constraints, insufficient infrastructure, schools will not support growth, staff attraction and retention

Waiting lists

5. Do you keep a waiting list for children that you do not have capacity to cater for?
6. Do you consider your waiting list to be an accurate representation of the demand for OSHC in your community?
7. Do you have a consistent process that is communicated to parents/carers to fill vacancies?
8. How often do you contact families on your waiting list?
9. Over the past 12 months, what has happened to your waiting list?
10. What has driven the changes in your waiting list over the past 12 months?
11. Are families required to pay a deposit or make a financial commitment (for example, pay a fee) to secure a place on a waiting list?
   For Q1 answered ‘Yes’, this implies an Oversupply scenario the supply of OSHC service places exceeds the demand in the local community.

1. In your opinion, what are the reasons that there are regular vacancies at your OSHC?
   a. Lack of demand
   b. Other OSHC services in the area
   c. Alternative activities during these hours
   d. Alternative care arrangements are utilised (grandparents etc)
   e. Affordability
   f. Cultural factors
   g. Location of the OSHC
   h. Hours of operation
2. How do you differentiate your service from other services?
3. What action has been the most effective to attract more families?
   For example, advertising, word-of-mouth, promotion through the school community, discounting.
4. Does your local community have any unique characteristics that impact on your service? What actions/steps do you take to meet their needs?

Relationship with Schools (ALL where relevant)
1. What is the nature of your relationship with the school system and the institution within which your operation is based?
   
   For example, are you operated by the school, you lease premises from the school, children from local schools come to your service.

2. If your service is located at a school site, how often do you meet with the school leadership/How often does the school leadership engage with your service?

3. How would you describe, in your own words, the relationship between your service and the school, for example:
   a. The school is our partner in meeting the needs of families in our local community.
   b. The school is supportive of our service.
   c. The school has limited involvement with our service, unless there is a problem.

4. How would you rate the professional relationship between your service and the school?
   a. Positive
   b. Neutral
   c. Negative

5. Are there are barriers that prevent your service from meeting the needs of parents/carers?

6. What additional support do you need from your school and/or the Department of Education?
   For example, infrastructure (space), resources, communication with families.

7. To what extent are you involved in the school community?

**Service operations**

1. How do each of the following factors influence the ability of your service to meet demand and provide services needed in your community? What is their level of significance?
   a. physical space (infrastructure)
   b. availability of appropriate staff
   c. funding
   d. regulations and licensing
   e. affordability of your services
   f. quality of service
   g. community characteristics (cultural background, family composition, appropriateness)
   h. competition in the area
   i. convenience of the service location (proximity to school, work, home)

2. What do you anticipate will happen to the supply of OSHC services in your community? What is the most important issue for the next 12-24 months?

   End
Appendix F Principal Consultation Questionnaire

Issues with respect to supply and demand

Knowledge and understanding of the factors that are impacting supply and demand in the local community

1. What is the trend of enrolments during the past two years and projecting to the next three years at your school?
   a. Increasing
   b. Decreasing
   c. Remaining constant
2. What will the needs of the school community look like in five years' time? How will it change?
3. Do you feel there is a sufficient level of OSHC services available in the community to meet
   a. Current demand
   b. Future demand
4. What is the approximate number of families within the school that use the OSHC? Has there been a significant increase or decrease in the last 24 months?
5. Do parents at the school provide you with any feedback about the accessibility of OSHC in the community?
   For example, do families in your school community report an undersupply or oversupply of OSHC places?
6. In your view, are there any reasons for a lower/greater than expected uptake of places with OSHC services?
   For example, alternative OSHC activities provided by the school, alternative care arrangements of families

If there is no OSHC on-site

What are the reasons that an OSCH is not provided at your school?
   a. Availability of physical space
   b. There is no demand for services from families
   c. It is an administrative burden for my school
   d. It is beyond the scope of my role
   e. OSHC providers have not expressed an interest in delivery in this community
   f. The costs of supporting the service (e.g. maintenance) are greater than the fees I can recover from the OSHC provider.
   g. School and parent/carers have made other effective arrangements.
   h. Other
7. Do families in your school community use alternative school sites for OSHC services?
8. If the demand existed, and providers wished to supply a service on your school site, are there any additional barriers that would prevent this from happening?

Understanding of the local community

1. Do you believe the context of your local community has any impact on parental decisions to use OSHC services, e.g. working parents, extended family support and/or co-habitation?
2. What approximate number of the families at the school are working parents?
3. What feedback have parents and carers provided about the OSHC services in your local community.
   Aspects could include:
   a. Accessibility and proximity
   b. Quality of offerings
   c. Cost of fees paid by parents and carers
   d. Barriers to greater participation
   e. Cultural appropriateness
   f. Waiting lists are used equitably to fill vacancies.

4. Other than OSHC, are there alternative options for families that exist in the school community?

If there is an OSHC service on-site

Relationship with OSHC provider(s)

1. What is the nature of the relationship between the school and the OSHC? For example/discussion, do you:
   a. Provide facilities and resources
   b. Actively promote the OSHC provider to families
   c. Shared decision making
   d. Scheduled, regular communication meetings.

2. How would you describe the relationship between you and the OSHC provider (please describe in your own words, suggestions only below)
   a. The OSHC provider is our partner in meeting the needs of families in our local community.
   b. Our school is supportive of our OSHC partner.
   c. The school has limited involvement with our OSHC, unless there is a problem.

3. Does the school have any influence over the OSHC service, either operationally or strategically?

4. Are there any practical challenges with the existing arrangement?

5. How often to you engage with your OSHC provider? Do you have regular meetings or discussions?

6. Do you find the OSHC service is responsive to the needs of your school community? Are they responsive to your concerns or feedback?

7. Has the OSHC service expanded recently or indicated any plans to expand?

8. If the OSHC provider wanted to expand, would any of the following factors limit your ability to support them?
   a. Infrastructure and available facilities
   b. Quality of service
   c. Community Use of Facilities Policy and the tender process
   d. Regulations including the National Quality Framework
   e. Staffing
   f. Other

9. Do share any responsibility with the OSHC provider when it comes to addressing these issues?

10. What support do you need from the Department of Education to resolve these issues/work with your OSHC provider to achieve a better outcome?

11. Who/what part of the Department of Education would be best placed to assist you?

12. Have you accessed the Before and After School Care Fund to establish or expand places at the OSHC at your school? If so what aspects of the process were most useful for you? What aspects were least helpful?

13. Are there any further insights or contributions you would like to make to this issue?

End
Appendix G Local Council Consultation Questionnaire

1. What is the breadth of OSHC service your local government provides?
2. Are there any barriers to meeting the current level of demand for OSHC services in your community, for example:
   a. Infrastructure constraints
   b. Regulatory constraints
   c. Capacity
   d. Capability and expertise
3. Is there appetite to expand that service offering over the next 2-3 years?
4. What are the barriers to expanding from current level of OSHC services?
5. Why do you think private or not-for-profit providers aren’t responding to the incentives in the market?
6. What feedback are you receiving from residents regarding the availability and accessibility of OSHC services?
7. What are the perceptions of need over the next 5 years? How is the community changing?

End
Appendix H List of services with long waiting lists

Table H-1 List of services that have kept more than 20% of their existing attendances on their waiting lists

<table>
<thead>
<tr>
<th>Service Provider</th>
<th>Waiting List Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Redacted</td>
<td>Redacted</td>
</tr>
<tr>
<td>Redacted</td>
<td>Redacted</td>
</tr>
<tr>
<td>Redacted</td>
<td>Redacted</td>
</tr>
<tr>
<td>Redacted</td>
<td>Redacted</td>
</tr>
</tbody>
</table>
Appendix I Services intending to apply to the Fund

Table I-1 List of services with financial difficulty and an intention to apply to the Fund

Table entries pertaining to individual service providers have been redacted.
Appendix J Free text response to impediments to applying to the Fund

Table J-1 List of free text responses to impediments to applying to the Fund
Appendix K Density plot of raw utilisation

Before school care

After school care

Vacation care
Limitation of our work

General use restriction

This report is prepared solely for the internal use of NSW Department of Education. This report is not intended to and should not be used or relied upon by anyone else and we accept no duty of care to any other person or entity. The report has been prepared for the purpose of set out in our contract dated 26 May 2017. You should not refer to or use our name or the advice for any other purpose.